



Dialogue **on** Globalization

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Can the NPT Regime be fixed or should it be abandoned?

Dialogue on Globalization

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Foreword

Nuclear issues are back on the global political agenda. Hardly a day goes by without a reference to the ongoing crisis in Iran, the prospect of a nuclear power renaissance triggered by record oil prices, the intricacies of the US-India nuclear deal, and the alleged threat of terrorist groups gaining access to weapons grade nuclear materials. Apart from the day-to-day firefighting, a more wide-ranging debate on how to tackle nuclear challenges has emerged. In two remarkable *Wall Street Journal* articles, former US secretaries of state and defense George Shultz, William Perry, Henry Kissinger and Senator Sam Nunn have argued for a “world free of nuclear weapons”—a call that both Barack Obama and John McCain have echoed during recent speeches.

With this occasional paper written by Professors Ramesh Thakur, Jane Boulden, and Thomas G. Weiss, the Friedrich-Ebert-Stiftung wishes to contribute to this debate. The primary focus and starting point of this formidable trio of authors is the United Nations. It was under the auspices of the UN that the world community agreed to a “global nuclear deal” when in 1968 the Non-Proliferation Treaty (NPT) was signed. Exactly four decades later, the authors of this occasional paper provocatively come to the conclusion that the NPT has passed its use-by date in world politics, creating a situation of “nuclear apartheid” which confronts the world with a highly precarious and unsustainable balance.

A preliminary version of this paper was presented before a small group of experts on 22-23 May 2008, at a workshop co-sponsored by the New York Office of the Friedrich-Ebert-Stiftung, the Ralph Bunche Institute for International Studies, the Academic Council on the United Nations System, and the UN University. This paper draws on the opening and concluding chapters from an important edited book, *The United Nations and Nuclear Orders*, which will be published in 2009.

The workshop was the second in a series of two gatherings (the first in December 2007) tasked with examining the role of the United Nations in addressing the order and disorder of nuclear weapons. The contributors to the workshops and the book are a distinguished team of scholars and practitioners of international relations, organization, and law (see Annex 1).

Contributors analyzed the actors, tools, and looming threats and challenges involved in the question of UN engagement with nuclear issues. Our discussions were intense, and in many ways they provided a blueprint for establishing the nature of the environment in which the United Nations is operating on these issues; the ways in which it has and might respond to them; and the questions and difficulties that arise for the world organization as a result of those factors. I urge readers to examine the full argument in the book. The organizers are also grateful to a small and distinguished set of discussants who critiqued and assessed the arguments, valuably helping to improve the final publication (see Annex 2).

We trust that this publication will stimulate further discussion concerning the possibilities for UN action in tackling the increasing challenges of a nuclear world.

Jürgen Stetten
Director, New York Office

2. Introduction

Tackling the problem of nuclear weapons is central to the UN's core agenda. Yet, for better or worse, the world body has not in fact been the central forum in which nuclear milestones have been reached.

The establishment of the United Nations coincided with the dawn of the atomic age. On the one side, the primary purpose of the world organization is the maintenance of international peace and security. On the other side, nuclear weapons are the most destructive weapons of war ever invented. Were the United Nations to be the forum or authority that brings about the elimination of all existing nuclear weapons and the prohibition of their acquisition and use in a new international legal instrument, it would mark a stunning validation of the world organization's primary rationale. Conversely, were there to be an outbreak of war in which nuclear weapons were deployed, it would be an equally stunning repudiation of the UN's chief justification for existence.

In this sense, tackling the problem of nuclear weapons is central to the UN's core agenda. Yet, for better or worse, the world body has not in fact been the central forum in which nuclear milestones have been reached. The end of the Cold War did not materially alter this judgment even though the status of nuclear weapons has been in constant flux during this period. In this occasional paper, we argue that the intensifying pressures toward the proliferation of nuclear weapons to new state and nonstate actors increases the urgency for a worldwide ban under credible international auspices. The UN's political legitimacy and moral authority could be usefully leveraged to this end, which is the central conclusion from our forthcoming edited volume, *The United Nations and Nuclear Orders*.¹

This paper proceeds in seven parts. First, we provide the context behind the current crisis over nuclear weapons and the Non-Proliferation Treaty (NPT) regime. The next two sections discuss more specifically the dimensions of the contemporary crisis that reflect renewed demands for nuclear energy as well as the attendant security threats of nuclear weapons. The fourth and fifth sections analyze the regime's weaknesses and accumulating anomalies, respectively. The sixth section anticipates a post-NPT world of multiplying nuclear weapons states (NWS) or one without nuclear weapons, and the concluding section returns to our starting point with a brief overview of the role of the United Nations in underpinning, shaping, and transforming nuclear orders.

¹ Jane Boulden, Ramesh Thakur, and Thomas G. Weiss, eds., *The United Nations and Nuclear Orders* (Tokyo: UN University Press, 2009 forthcoming). This occasional paper draws on the first chapter by the co-editors and especially on chapter 14 by Thakur. Printed with permission. The authors wish to acknowledge the exceptional research and editorial assistance of Michael Busch, who applied his energy, insight, and managerial skills to this occasional paper as well as to the book.

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The Context

How do we know that the status of nuclear weapons is in such constant flux? A few examples help to provide the context for this generalization and the argument in this occasional paper. To begin with, three former Soviet republics became NWS on achieving independence and then relinquished that status. South Africa announced its renunciation of a nuclear weapons program that few knew had existed. India and Pakistan arrived and consolidated themselves as NWS a decade ago. Libya pursued nuclear weapons programs only to pull back from the brink. Its reversal and re-entry into the international community contributed to the revelation that the “father” of Pakistan’s nuclear bomb, Abdul Qadeer Khan, had been selling nuclear weapons information and technology to a variety of clients over a considerable period of time. North Korea has pursued a policy of nuclear brinkmanship, including testing, for a decade or two, while Iran continues to test the limits of its credibility and the world’s patience by arguing that it is pursuing peaceful uses of potentially fissile materials.

The Non-Proliferation Treaty was signed in 1968 and came into force in 1970 as the centerpiece of the global non-proliferation regime that codified the international political norm of non-nuclear-weapons status.² It attempts to curb proliferation through a mix of incentives and disincentives. In return for intrusive end-use control over imported nuclear and nuclear-related technology and material, non-nuclear-weapon-states were granted access to nuclear technology, components and material on a most-favored-nation basis.

The Non-Proliferation Treaty as the centerpiece of the global non-proliferation regime that codified the international political norm of non-nuclear-weapons status.

The NPT regime also includes a number of treaties restricting nuclear testing. The Partial Test Ban Treaty (1963) outlawed atmospheric, space, and underwater nuclear testing. The Threshold Test Ban Treaty (1974) outlawed underground tests of more than 150 kilotons yield. The elusive goal of a total ban on nuclear testing was seemingly realized in 1996 with the endorsement by the UN General Assembly of the Comprehensive Test Ban Treaty (CTBT). But, in part due to the rigid entry-into-force provisions of the CTBT,³ and in part due to changed administrations in Washington and the changed climate of arms control after “9/11,” the CTBT is unlikely to enter into force in the foreseeable future.

In 1995, the NPT was made permanent, but in 2005 the five-year review conference ended without an agreement. Nor has the world been any more successful in the pursuit of a non-discriminatory, multilateral, and verifiable convention

² We use the term “regime” to refer to norms, rules, procedures, and behavior around which actor expectations converge in the issue-area of non-proliferation even in the absence of formal international organization. The non-proliferation regime includes the norms of international nuclear behavior and the network of international treaties, institutions, export controls and nuclear trade agreements.

³ China joined the NPT regime in March 1992, followed by France in August, thereby bringing all five known NWS within the NPT fold. Thus if analogous clauses had been written into the NPT, that treaty would never have entered into force.

A major proliferation challenge is the globalization of the arms industry, the flooding of the global arms market, and a resultant loosening of supplier constraints.

banning the production of fissile material for weapons purposes that would greatly strengthen the non-proliferation regime. On top of these developments, the United States removed one of the cornerstones supporting the strategic nuclear arms control edifice by withdrawing from the bilateral Russia-US Anti-Ballistic Missile (ABM) treaty.

Meanwhile, globalization gathers momentum, fuelled by accelerating technological capabilities and instantaneous communication. On the supply side, a major proliferation challenge is the globalization of the arms industry, the flooding of the global arms market, and a resultant loosening of supplier constraints. These changes have increased the potential number of states that may have the capability to develop a nuclear weapons program should they choose to pursue one. Leaving aside weapons aspirations, the number of states that might be able or may choose to pursue peaceful nuclear energy programs is now considerably larger than ever. Along with increased pressure for cleaner and less expensive energy sources, the combined effects of these trends undoubtedly will increase the level of trade in nuclear material and equipment and the number of nuclear-capable powers.

A further factor compounding the complexity of the situation is the rise of terrorism and the associated fear that a terrorist group might succeed in obtaining some form of nuclear material. Many see the advent of al Qaeda, especially post-9/11, as an indication that a particularly lethal new form of terrorism is in the works. In addition to its willingness to commit suicide as part of an attack, this newest generation of terrorists seeks not just to make a political statement through violent acts but also to do so while maximizing the level of destruction and mayhem. Access to nuclear materials of any kind, but especially weapons-grade, is assumed to be an important goal.

Since the end of the Cold War, the risk of a total nuclear war between the major powers has diminished, yet the prospect of nuclear weapons being used is more plausible. There were two great pillars of the normative edifice for containing the nuclear horror: the doctrines of strategic deterrence which prevented their use among those who had nuclear weapons; and the nonproliferation regime, centered around the NPT that both outlawed their spread to others and imposed a legal obligation on the nuclear-weapons-states to eliminate their own nuclear arsenals through negotiations. As their only explicit multilateral disarmament commitment, this provision remains largely unrealized.

Today both pillars are crumbling. Some commentators fear that arms control is at an impasse, and disarmament could be reversed. Tellingly, there are neither ongoing discussions between the nuclear powers for reducing their nuclear stockpiles nor the intensity of concerns and demands from non-nuclear states from earlier decades. Treaties already negotiated and signed could unravel through non-ratification or breakouts. The testing of nuclear weapons could be resumed. The lengthening list of proliferation-sensitive concerns include North Korea's

nuclear weapons capability and its nuclear test of 2006;⁴ worries expressed by the International Atomic Energy Agency (IAEA) about Iran's nuclear program;⁵ reports that Saudi Arabia may be contemplating an off-the-shelf purchase of nuclear weapons;⁶ reports of misdeeds by South Korea,⁷ Taiwan,⁸ and Egypt;⁹ apprehensions of a new uranium enrichment plant that would give Brazil a nuclear breakout capability;¹⁰ disappointment at the under-funding of the Nunn-Lugar Cooperative Threat Reduction program; dismay at Russia's retreat, beginning in the 1990s, from its historical commitment to a no-first-use policy; anxieties about the 27,000 nuclear warheads with a total yield of 5,000 megatons held by the five nuclear powers (with Russia and the United States accounting for more than 26,000); fears that Washington is lowering the threshold of normative barriers to the use of a new generation of nuclear weapons; evidence of an extensive multinational nuclear black market that demonstrated the inadequacy of the existing export controls system; and the prospect of terrorists' acquiring nuclear weapons. Pakistan is often dubbed the most dangerous place on earth because of the lethal nexus of an unstable military dictatorship, Islamist groups bitterly hostile to the West, terrorists, and nuclear weapons.¹¹

Washington announced its commitment to negotiate a legally binding fissile material cut-off treaty but without verification provisions. Space talks remain blocked. The Six Party Talks make but fitful progress in keeping North Korea from establishing a fully functioning nuclear weapons program. Iran sends conflicting messages on compliance with NPT commitments and its pursuit of a nuclear energy program for peaceful purposes. For four decades, the world has lived with five, then eight and now nine nuclear powers. Can we live with a tenth, if that be Iran? Can we live with a tenth if it increases the likelihood of an eleventh, twelfth, or more?

For four decades, the world has lived with five, then eight and now nine nuclear powers. Can we live with a tenth, if that be Iran? Can we live with a tenth if it increases the likelihood of an eleventh, twelfth, or more?

4 See International Institute for Strategic Studies, *North Korea's Weapons Programmes: A Net Assessment* (London: Palgrave Macmillan, 2004); Wade Huntley, "Ostrich Engagement: The Bush Administration and the North Korean Nuclear Crisis," *Nonproliferation Review* 11, no. 2 (2004): 1–35; and International Crisis Group, *North Korea: Where Next for the Nuclear Talks?* (Brussels: ICG, 2004), Asia Report No. 87.

5 See International Crisis Group, *Iran: Where Next on the Nuclear Standoff?* (Brussels: ICG, 2004).

6 Jonathan Power, "Turning a Blind Eye to Nukes: The U.S. and Saudi Arabia?" *International Herald Tribune*, 4 August 2004.

7 "South Korea Says It Enriched Uranium Four Years Ago," *Japan Times*, 3 September 2004; "Top Scientist Acknowledges Uranium Tests," *Japan Times*, 5 September 2004; "ROK Enrichment Tests Conducted '3 Times'," *Daily Yomiuri*, 5 September 2004; "Seoul Admits Scientists Extracted Plutonium in '82 Experiments," *Japan Times*, 10 September 2004; James Brooke, "Report Details South Korean Cover-up," *International Herald Tribune*, 25 November 2004; "S Korea Chided for Nuclear Tests," *BBC News* (<http://news.bbc.co.uk>), 11 November 2004.

8 "Taipei Held Nuke Experiments as Late as Mid-1980s," *Japan Times*, 14 October 2004 and "Concern over Taiwan Nuclear Ambitions," *Japan Times*, 17 October 2004.

9 "Egyptian Scientists Produced Nuclear Material: Diplomats," *Japan Times*, 6 January 2005.

10 Larry Rohter, "If Brazil Wants to Scare the World, It's Succeeding," *New York Times*, 31 October 2004.

11 A tongue-very-firmly-in-cheek press conference by a Pakistani military spokesman pointed to: US command and control being lax relative to Pakistan, the history of nuclear accidents in the United States, the record of US proliferation to allies Britain and France, a commander-in-chief who confessed to having been an alcoholic, and the fundamentalism and religious fervor of the American people and administration. See Hugh Gusterson, "A Pakistani View of U.S. Nuclear Weapons," *Bulletin of the Atomic Scientists*, 5 February 2008 (The Bulletin Online, www.thebulletin.org/columns/hugh-gusterson/20080205.html). The Pakistani general even offered technical advice and assistance to the US to improve its nuclear weapons handling procedures, to which Pentagon officials responded stiffly that the US role was to give, not receive, advice on nuclear weapons safety and security issues.

The disquieting trend of a widening circle of NPT-licit and extra-NPT nuclear weapons powers in turn has a self-generating effect in drawing other countries into the game of nuclear brinkmanship. Concerns persist about the potential leakage of “loose nukes” from Russia to terrorists. Worst-case scenarios see terrorists using nuclear or radiological weapons to kill hundreds of thousands of people. As far as we know, however, no terrorist group has the competence to build nuclear weapons. Nor is there any firm evidence to suggest that nuclear weapons have been transferred to terrorist organizations. The only good news stories are that Libya walked away from that path in December 2003,¹² Iraq does not have such weapons, and North Korea shut down its plutonium production in July 2007 under international inspection and destroyed the cooling tower at its nuclear weapons plant in June 2008.¹³

The global governance mechanisms for non-proliferation and disarmament are in a sorry state. The Conference on Disarmament has been immobilized, unable even to agree on an agenda for a decade. In a speech in January 2008, Secretary-General Ban Ki-moon could only declare helplessly that he was “deeply troubled” by its “impasse over priorities” and warned that it was “in danger of losing its way.”¹⁴ The World Summit in 2005 failed to agree on a single sentence on the hot and essential subject. Reliance on the Security Council as the forum of choice for enforcing compliance is deeply problematical for three reasons. China, France, Russia, the United Kingdom and the United States, the council’s five permanent members (P-5), are the five NPT-licit nuclear powers (N5); the council is severely unrepresentative and unaccountable; and the P-5/N5 have been among the most arms-exporting and war-prone countries since 1945.

While consciousness of the risks of nuclear weapons falling into the hands of terrorists, militant fanatics, and other nonstate groups has grown enormously, the collective memories of the horrors of Hiroshima and Nagasaki have begun to fade beyond Japan.

The normative barriers to the acquisition and use of nuclear weapons appear lowered. While consciousness of the risks of nuclear weapons falling into the hands of terrorists, militant fanatics, and other nonstate groups has grown enormously, the collective memories of the horrors of Hiroshima and Nagasaki have begun to fade beyond Japan (where the memory remains intensely painful and powerful). In January 2007, the doomsday clock of the *Bulletin of Atomic Scientists* was set at 11.55—the closest to doomsday since the end of the Cold War¹⁵—where it remains today.

12 The Bush administration was quick to claim the Libyan renunciation of the nuclear option as a tangible success of its Iraq war policy. It is just as plausible to link the Libyan decision to domestic political compulsions, the adverse impact of the international sanctions imposed on it in the 1980s, and the trend line for a negotiated end to the stalemate visible since the Clinton administration. See Thomas E. McNamara, “Why Qaddafi Turned His Back on Terror,” *International Herald Tribune*, 5 May 2004; Flynt Leverett, “Why Libya Gave Up the Bomb,” *New York Times*, 23 January 2004; Geoff D. Porter, “The Faulty Premise of Pre-emption,” *New York Times*, 31 July 2004; and Thomas E. McNamara, “Unilateral and Multilateral Strategies against State Sponsors of Terror: A Case Study of Libya 1979–2003,” in *Uniting Against Terror: Cooperative Nonmilitary Responses to the Global Terrorist Threat*, ed. David Cortright and George A. Lopez (Cambridge, Mass: MIT Press, 2007). Many Arabs believe that as a result of the difficult insurgency in Iraq after the war, it is Washington that became more receptive to long-standing Libyan overtures and signals for an end to the confrontation. Thus both versions agree on the war being the deal maker, but for opposite reasons. In truth, the Libyan case is a good example of an integrated strategy of diplomacy, economic engagement, and security assurances. The crisis with North Korea was exacerbated by the Bush administration’s abandonment of just such a strategy that had been followed by the Clinton administration.

13 Having said that, on 19 September 2008 North Korea said it had stopped disabling the Yongbyon nuclear reactor and was making “thorough preparations” to restart it. Foreign ministry official Hyun Hak-bong said that Pyongyang had suspended work to put the plant out of action because the US had not fulfilled its part of a disarmament-for-aid deal. <http://news.bbc.co.uk/2/hi/asia-pacific/7624601.stm>, downloaded on 29 September 2008.

14 “Statement to the Conference on Disarmament in Geneva,” *UN News Centre*, www.un.org/apps/news/in-focus/speeches/statements_full.asp?statID=174.

15 Mark Strauss, “Editor’s Note: Time Out?” *Bulletin of the Atomic Scientists*, 63, no. 1 (2007): 4.

The rising anxieties about nuclear weapons are rooted in two major and parallel developments: the so-called renaissance of nuclear power and a resurgence of old-fashioned national security threats that supposedly had ebbed with the end of the Cold War. Between them, they highlight how all three legs of the NPT stool—nuclear power for civilian use, nuclear non-proliferation, and nuclear disarmament—are straining the regime, perhaps close to the breaking point. The widening circle of NPT-licit, extra-NPT, and NPT-noncompliant nuclear weapons powers indicates the extent to which the contradictions and tensions inherent to the NPT have ripened and the regime's weaknesses have become increasingly apparent. When the regime's many weaknesses and anomalies are factored in, we begin to understand why its fabric seems so frayed. Can it be repaired and continue to form the centerpiece of global nuclear arms control policy? Or would it be better to abandon the NPT and look to a new nuclear weapons convention as the chief cure for the world's nuclear ailment?

All three legs of the NPT stool— nuclear power for civilian use, nuclear non-proliferation, and nuclear disarmament—are straining the regime, perhaps close to the breaking point.

4. A Nuclear Renaissance?

With the spike in demand from booming economies in China, India, and elsewhere along with disruptions to supply because of conflicts in the Middle East, the economics of even risk-discounted nuclear power have changed.

According to the International Energy Agency (IEA), the world's energy consumption will increase by more than 50 percent from 2005 to 2030, with China and India alone accounting for 45 percent of the extra growth in demand.¹⁶ Recent fluctuations in the price of oil in 2008 indicates that the IEA may have seriously under-estimated the speed with which the world will experience a supply-side crunch and abrupt escalation in oil prices.

Hence, governments are increasingly likely to reexamine their exposure to nuclear sources in their total energy portfolio. After the well publicized accidents at Three Mile Island (United States, 1979) and Chernobyl (Ukraine, at the time of the former Soviet Union, 1986), public and political opposition to nuclear power was so strong that many existing reactor plants were shut down, plans for new ones were cancelled, and virtually no new reactor was built over the last decade. Indeed, in the United States no new reactors have been built in three decades. With the spike in demand from booming economies in China, India, and elsewhere along with disruptions to supply because of conflicts in the Middle East, the economics of even risk-discounted nuclear power have changed. With the accelerating threat of global warming caused by greenhouse gas emissions, the balance of public anxiety between energy sourced in nuclear power and coal and fossil fuel is changing dramatically. Combined with technological developments, the changed financial and environmental equations have also altered the politics of constructing and operating nuclear power reactors.

The net result is witnessed in plans for building several new reactors in Asia, Australia, the Middle East, and Europe which would add to the 435 reactors in 30 countries that are providing 15 percent of the world's total electricity at present. According to the latest IAEA forecast, this particular renaissance is being led by Asia, with 18 of the 31 planned new reactors to be located there.¹⁷ While nuclear power currently accounts for 2 and 3 percent of China's and India's electricity, it will jump by a factor of five and eight respectively by 2022. While the spike in their demand is a function of booming economic growth and population, in Japan and South Korea interest in nuclear power arises from lack of indigenous oil and gas resources and the desire for energy security and reducing greenhouse gas emissions. Other Asian countries planning or considering nuclear power reactors include Indonesia, Malaysia, Pakistan, Thailand, and Vietnam.

The long lead times and high capital costs for nuclear construction mean that governments want to be assured that nuclear energy and plants are safe, secure, reliable, and cost-effective.

At the same time, the long lead times and high capital costs for nuclear construction mean that governments want to be assured that nuclear energy and plants are safe, secure, reliable, and cost-effective. All this throws up several clusters of concern:¹⁸

¹⁶ *World Energy Outlook 2007* (Paris: IEA, 2007).

¹⁷ *Energy, Electricity and Nuclear Power Estimates for the Period up to 2030* (Vienna: IAEA, 2007), Reference Data Series No. 1.

¹⁸ See *20/20 Vision for the Future: Background Report by the Director General for the Commission of Eminent Persons* (Vienna: IAEA, 2008).

- How do we ensure that the plants are operated with complete safety, so that the chances of accidents are minimized and mechanisms and procedures are put in place so that accidents are discovered immediately, their effects are mitigated and firewalls are constructed to prevent wider damage?
- How do we secure the plants against theft and leakage of weapons-sensitive material, skills and knowledge? After all, the now notorious Abdul Qadeer Khan simply stole designs and material from places in the West he was working in, then returned to Pakistan and established a very effective global nuclear arms bazaar.¹⁹
- How do we build firewalls between civilian and weapons-related use of nuclear power?
- How do we establish multinational regimes for the assurance of fuel supply, the management of spent fuel, the disposal of radioactive wastes, and the decommissioning of old reactors?

These concerns relate not just to the countries in which the reactors are located but also to the international trade in nuclear material, skills, and equipment. Mohamed ElBaradei, IAEA director-general, has noted that “Nuclear components designed in one country could be manufactured in another, shipped through a third, and assembled in a fourth for use in a fifth.”²⁰

Nuclear components designed in one country could be manufactured in another, shipped through a third, and assembled in a fourth for use in a fifth.

¹⁹ See Christopher Clary, “Dr. Khan’s Nuclear WalMart,” *Disarmament Diplomacy* 76 (March/April 2004) 31–35; and Douglas Frantz and Catherine Collins, “Those Nuclear Flashpoints Are Made in Pakistan,” *Washington Post*, 11 November 2007.

²⁰ Mohamed ElBaradei, “Preserving the Non-Proliferation Treaty,” *Disarmament Forum* 4 (2005): 5.

5. Security Threats

The control of access to nuclear-weapons technology and material has grown vastly more complex and challenging.

We would be foolish to believe that the renaissance of nuclear power is explained solely by the interest in nuclear energy for civilian uses. Nuclear weapons can be sought for one or more of six reasons:²¹ deterrence of enemy attack; defense against attack; compellence of the enemy to one's preferred course of action; leveraging adversary and great-power behavior;²² status; and emulation. Specific causes of proliferation are diverse and usually rooted in a local security complex. Under modern conditions of globalized trade, instantaneous and voluminous electronic information exchanges, interlinked financial systems and the sheer diversity of technology, the control of access to nuclear-weapons technology and material has grown vastly more complex and challenging.

Proliferation refers to the dispersion of weapons, capabilities and technologies. There are eight categories of proliferation-sensitive actors:

- Vertically proliferating NWS: Those who increased their nuclear stockpiles and upgraded their nuclear lethality from inside the NPT regime, and by doing so undermined the nonproliferation regime and institutionalized international "nuclear apartheid";
- NPT-irresponsible NWS: those who export nuclear-missile materials, technology and expertise in violation of international treaties, regimes and commitments;
- Fragmenting NWS or NPT splinters: When the old Soviet Union broke up, for instance, an additional three NWS (Belarus, Kazakhstan, Ukraine) appeared. Fortunately, they were persuaded to forego the nuclear option;
- NPT cheats: those who have signed the NPT but are engaged in activities in violation of their obligations;
- Threshold NWS: those who do not claim possession of nuclear weapons, have not forsworn the nuclear weapons option, produce significant amounts of nuclear material or equipment, and refuse to accept international control over their material and equipment. With India and Pakistan coming out of the nuclear closet in 1998, and few left to deny Israel's nuclear weapons capability, the threshold status is effectively obsolete;
- Nuclear terrorists: It defies credulity that nuclear weapons and materials can be kept secure in government inventories and never be obtained by terrorists. While a government's nuclear capability can be seized and destroyed, it is impossible to capture or kill every single terrorist and his/her last piece of dynamite, semtex or timing mechanism;

21 This is developed more fully in Ramesh Thakur, "Arms Control, Disarmament, and Non-Proliferation: A Political Perspective," in *Arms Control in the Asia-Pacific Region*, ed. Jeffrey A. Larsen and Thomas D. Miller (Colorado Springs: USAF Institute for National Security Studies, US Air Force Academy, 1999), 39–61.

22 Many of the newer proliferating materials and processes are "leveraging" technologies that allow poorer countries to offset high-technology advantages. By demonstrating the acquisition of just a few key capabilities, developing countries can affect the perceptions and alter the decision calculus of diplomacy and war of the advanced military powers.

- “Virtual” NWS: The flow of enabling technologies, material and expertise in the nuclear power industry can be used, through strategic prepositioning of materials and personnel, to build a “surge” capacity to upgrade to nuclear weapons within the timeframe of a crisis degenerating into conflict. Thus Ichiro Ozawa of Japan’s Liberal Party warned China not to forget that Japan could easily make 3,000–4,000 nuclear weapons;²³
- Missile proliferators: Missiles are an acutely destabilizing form of weaponry because little defense is available against them. Armed with biological, chemical or nuclear warheads, they can be lethal.

The challenge on the international security front is thus fourfold. First, the five NPT-licit nuclear powers have simply disregarded their NPT Article 6 obligation to disarm. China continues to modernize its arsenal and in January 2007 demonstrated its space-war capabilities by shooting down a satellite in a controlled test. The United States has retreated from several arms control and disarmament agreements, including the ABM, NPT (the 2005 Review Conference outcome documents), and CTBT treaties. It is asserting the right to develop new generations of earth-penetrating, bunker-busting nuclear weapons and battlefield “mini-nukes” and refining the doctrines underpinning the deployment and possible use of nuclear weapons. As the United States plans to install a new missile shield along Russia’s borders, Moscow has warned of a new Cuba-type missile crisis. Britain has decided to upgrade its Trident strategic nuclear force to give it nuclear-weapons capability beyond 2020. The new nuclear doctrines indicate that retention and expanded use of these weapons have been contemplated for several decades. To would-be proliferators the lesson is clear: nuclear weapons are indispensable in today’s world and becoming more useful, not less, for dealing with tomorrow’s threats.

Second, three states lie outside the NPT and have gone down the weapons path: India, Israel, and Pakistan. Even though it is not an NPT signatory, Israel will not openly admit to its nuclear weapons stockpiles. India and Pakistan have been accepted, more or less, as de facto nuclear weapons powers. The stop-start, India-US civil-nuclear cooperation deal has proven to be extremely contentious in India, the United States, and the wider international community of states. Supporters argued that it serves the strategic goals of both countries while also advancing the global non-proliferation agenda more realistically than any conceivable alternative. Yet it caused despondency among the arms control community for its breach of the NPT regime even as it made some Indians uncomfortable for drawing India into the American strategic embrace and others for constricting Delhi’s future nuclear options.²⁴ The constitutional and political crisis in Pakistan in 2007–8 spread alarm in many sectors about how safe and secure its nuclear arsenal was from Islamists within and *jihadists* outside the military.

Third, the NPT is an inter-governmental agreement and therefore does not cover non-state groups, including terrorists, that may be trying to secure nuclear weapons. It is unclear how or even whether the international normative architecture can be extended to cover them on legislative, operational, and compliance dimen-

The five NPT-licit nuclear powers have simply disregarded their NPT Article 6 obligation to disarm.

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The NPT is an inter-governmental agreement and therefore does not cover non-state groups, including terrorists, that may be trying to secure nuclear weapons.

²³ As reported in the *Japan Times* 6 April 2002.

²⁴ See Ramesh Thakur, “U.S.-India Nuclear Accord a Win-Win Outcome for All,” *Daily Yomiuri*, 27 November 2005 and “Don’t Let the India-U.S. Nuclear Deal Unravel,” *Globe and Mail*, 27 April 2007.

sions. The Security Council's response to terrorism might provide some guidance here. The council has used the state as the mechanism through which it addresses the nonstate actor threat by establishing minimum requirements for state action in dealing with nonstate actors. As its efforts indicate, however, the approach is based on establishing minimum standards, and on state compliance. This leaves plenty of room for time lags, obfuscation, and outright evasion. While this approach may be helpful, it certainly is not an answer to the burgeoning threats from terrorists to rogue government employees to industry.

Some NPT members may be trying to cheat on their non-proliferation obligations and pursuing these weapons by stealth.

And fourth, some NPT members may be trying to cheat on their non-proliferation obligations and be pursuing these weapons by stealth. Because of the robust international norm against nuclear weapons and the legal obligations of the NPT that has been signed by all countries other than India, Israel, and Pakistan, those planning to cross the line from civilian to weapons programs do so clandestinely.

A striking example is the Iran case. Few believe the current regime's professions of peaceful intent in their uranium-enrichment drive. Yet the consequences of using military force to try to stop the drive may be worse than learning to live with the new reality. For far too many, the drumbeats of warnings and threats being sounded in Washington on Iran were all too hyperbolic and familiar—US President George W. Bush even spoke of World War III. During the Democratic presidential primary campaign, Hillary Clinton sought to further her unsuccessful candidacy by threatening to “obliterate” Iran if it dared to attack Israel with nuclear weapons.²⁵ This is an all-too-familiar story. Most did not like the ending the first time around in Iraq and are unlikely to like it any better the next time. In the same vein, there is the familiar discrepancy between the assessments of the IAEA and of some Western countries regarding the gravity and urgency of the threat.

25 Ewen MacAskill, “‘Obliteration’ Threat to Iran in Case of Nuclear Attack,” *Guardian*, 23 April 2008. See also Norman Podhoretz, “The Case for Bombing Iran,” *Commentary* 123, no. 6: 17–23.

6

NPT Weaknesses

There are several major gaps in the arms control and disarmament NPT regime:²⁶

- The lack of universality.
- The continuing existence of stockpiles of nuclear weapons.
- The lack of a nuclear weapons convention outlawing the possession and use of nuclear weapons by all actors.
- The lack of verification machinery and compliance mechanisms for the disarmament obligations (Article 6).
- The lack of a credible and binding inspections regime for non-proliferation.
- The lack of agreed criteria to assess proliferation threats.
- The lack of a basis in international law to enforce non-proliferation norms for states outside the treaty regimes.
- The inapplicability of norms and regimes to nonstate actors.

Some NPT weaknesses were intentional. For example, the wording of Articles 1 and 2 deliberately permits the NWS to transfer nuclear weapons to other countries (Cold War allies at the time)—that is, engage in geographical proliferation—as long as control of the weapons remained in NWS hands. The subsequent popularity of regional nuclear-weapon-free zones (NWFZs) owed much to the desire to plug this loophole. Such zones cover virtually the entire Southern Hemisphere but are conspicuously scarce North of the equator.²⁷ The desire to marry two possibly incompatible goals—US President Dwight Eisenhower’s vision of “atoms for peace” and non-proliferation—produced the odd juxtaposition of Articles 3 and 4, which eventually opened the door for developments in North Korea and Iran. Nuclear energy for peaceful purposes can be pursued legitimately to the point of being perhaps a screwdriver turn away from a weapons capability.

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Other NPT weaknesses became apparent with the benefit of hindsight. By failing to include a clear timetable with legally binding, verifiable, and enforceable disarmament commitments, it temporarily legitimized N5 arsenals. The imbalance of reporting, verification, and compliance mechanisms between non-proliferation and disarmament in the NPT regime has also, over time, eroded seriously the legitimacy of this centerpiece of global arms control. By relying on the promise of signatories to use nuclear materials, facilities, and technology for peaceful purposes only, it empowered them to operate dangerously close to a nuclear-weapons capability. It proscribed non-nuclear states from acquiring nuclear weapons, but it failed to design a strategy for dealing with non-signatory states. It permits with-

²⁶ See Natasha Bajema, *Weapons of Mass Destruction and the United Nations: Diverse Threats and Collective Responses* (New York: International Peace Academy, 2004).

²⁷ See Ramesh Thakur, ed., *Nuclear Weapons-Free Zones* (London: Macmillan, 1998).

Because there is no standing agency or secretariat, the NPT depends on five-year review conferences for resolving implementation problems.

drawals much too easily: North Korea joined the NPT in 1985, but in January 2003 announced its intention to withdraw. Because there is no standing agency or secretariat, the NPT depends on five-year review conferences for resolving implementation problems. These operate by consensus, which does not make for decisive resolution of contentious issues. Verification and enforcement are one step removed to the extent that the IAEA acts as a buffer between the NPT and the Security Council.

The Iraq experience shows the enormous difficulty of ensuring compliance with international norms and commitments,²⁸ even with respect to one of the world's most odious regimes pursuing the world's most destructive weapons. The failure to find WMDs since the war cannot eradicate the known historical record of Saddam Hussein's past pursuit of them and his will to use them against outsiders as well as Iraqis. Moreover, there is an inherent tension between the IAEA's mandate for promoting peaceful nuclear energy use and the overall strategic goal of non-proliferation. This is best illustrated by the fact that India and Pakistan, outside the NPT regime, are on the IAEA Board of Governors. It is also increasingly a problem because more and more of nuclear technology, materials, and equipment are dual use. When the chief distinction between peaceful and offensive use rests on intent, there is a problem.

Strengthening treaty regimes means national legislation and measures on criminalization of proliferation; effective protection of proliferation-sensitive personnel, materials, and equipment; control and accounting systems for monitoring materials and stocks; and regulation and surveillance of dual-use transfers. The NPT could be strengthened by making the IAEA Additional Protocol mandatory for all states parties, toughening up or even eliminating the exit clause and making clear that withdrawal from the NPT will be treated as a threat to international peace and security. But these cannot be done without also addressing gaps on the disarmament side of the NPT and reform of the composition and procedures of the Security Council. A body that is itself seen as increasingly illegitimate by many states will have difficulty in enforcing global norms in the name of that very same community of states.

The IAEA's reluctance to cite Iran for noncompliance with the NPT may indicate weaknesses in the treaty structure and procedures, which reflect the world of 1968 rather than 2008. Moreover, Tehran joins Pyongyang in throwing down the gauntlet, yet again, to a basic inconsistency in the definition of the problem. Is it the very destructiveness of nuclear weapons that somehow makes them so evil that they should be proscribed for all? Or is it rogue states, whose behavior is so bad they cannot be trusted with weapons which are tolerable, if not desirable, in more mature and responsible hands?

28 See Waheguru Pal Singh Sidhu and Ramesh Thakur, eds., *Arms Control After Iraq: Normative and Operational Challenges* (Tokyo: United Nations University Press, 2006).

7

NPT Anomalies

Many internal inconsistencies and tensions notwithstanding, the NPT has been the symbol of the dominant arms control, disarmament, and non-proliferation paradigm. Over the course of four decades, however, six significant anomalies have accumulated and now weigh it down close to the point of rupture. We use the term “anomalies,” which two of us have applied usefully to our analysis of global governance.²⁹ “Gaps”—or alternatively what some might call the “disconnects” or Thomas Kuhn the “pockets of apparent disorder”³⁰—exist between concrete global problems and feeble global solutions. The disparities between the challenges staring us in the face and the solutions presently seen as plausible could hardly be greater than they are for nuclear orders.

First, even the definition of a nuclear weapon state is feeble, being purely chronological—a country that manufactured and exploded a nuclear device before 1 January 1967. India, Pakistan, Israel, North Korea—even Iran—could test, deploy and even use nuclear weapons but cannot be described as “nuclear powers” according to the NPT. Conversely, Britain and France could dismantle their nuclear edifice and destroy their nuclear arsenals, but they would still be labeled “nuclear powers.” This Alice-in-Wonderland approach to affairs of deadly seriousness leads us to ask: can the NPT definition be opened up for revision through a formal amendment of the treaty with all the unpredictable consequences?³¹

Second, even as the threat from nonstate actors has grown frighteningly real, multilateral treaties like the NPT can regulate and monitor the activities only of states. A. Q. Khan’s underground nuclear bazaar that merrily sold nuclear technology, components, and weapons designs to Iran, Libya, and North Korea showed how porous is the border between private and state rogues. Protestations of innocence by the Pakistan government are not credible. They were either actively complicit, connived in and facilitated, or at the very least knew about and tolerated the existence and activities of the network. The “hero of the nation” was placed under a comfortable version of house arrest by his “friend,” General Pervez Musharraf. Moreover, it is at least arguable that the Khan network still exists and is active and that Pakistan’s nuclear weapons are unsafe.³² A robust and credible normative architecture to control the actions of terrorist groups who can acquire and use nuclear weapons is required outside the NPT.

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29 Thomas G. Weiss and Ramesh Thakur, *The UN and Global Governance: An Unfinished Journey* (Bloomington: Indiana University Press, 2009 forthcoming).

30 Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970), 2nd ed., 42.

31 See Jenny Nielsen, “Engaging India, Israel and Pakistan in the Nuclear Non-Proliferation Regime,” *Disarmament Diplomacy* 86 (2007): 13–28.

32 See Adrian Levy and Catherine Scott-Clark, *Deception: Pakistan, the United States, and the Secret Trade in Nuclear Weapons* (New York: Walker, 2007); David Armstrong and Joseph J. Trento, *America and the Islamic Bomb: The Deadly Compromise* (Hanover, NH: Steerforth, 2007); International Institute for Strategic Studies, *Nuclear Black Markets: Pakistan, A.Q. Khan and the Rise of Proliferation Networks—A Net Assessment* (London: IISS Strategic Dossier, May 2007); and Selig S. Harrison, “What A. Q. Khan Knows,” *Washington Post*, 31 January 2008.

The problem of non-parties and nonstate actors could be addressed by accepting that the fruitless search for universal membership should be replaced by “universal compliance” with the terms of arms control regimes. The Carnegie Endowment for International Peace lists a set of six obligations to make this suggestion a reality: making non-proliferation irreversible; devaluing the political and military currency of nuclear weapons, which would have to include the steady, verified dismantlement of nuclear arsenals; securing all nuclear materials through robust standards for monitoring and accounting for fissile materials in any form; enforceable prohibitions against efforts by individuals, corporations, and states to assist others in secretly acquiring the technology, material, and know-how for nuclear weapons; a commitment to conflict resolution; and persuading India, Israel, and Pakistan to accept the same non-proliferation obligations as the NWS signatories to the NPT.³³

North Korea’s open defiance shows that decades after a problem arises, an appropriate response remains elusive inside the NPT framework.

Third, North Korea’s open defiance shows that decades after a problem arises, an appropriate response remains elusive inside the NPT framework. It becomes increasingly difficult to defang tyrants the day after they acquire nuclear weapons. Yet the UN seems incapable of doing so the day before. If international institutions cannot cope, states will try to do so themselves, either unilaterally or in company with like-minded allies. If prevention is strategically necessary and morally justified but legally not permitted, then the existing framework of laws and rules—not preventive military action—is defective.

Lumping biological, chemical, and nuclear weapons in one conceptual and policy basket also is anomalous.

Fourth, lumping biological, chemical, and nuclear weapons in one conceptual and policy basket also is anomalous. They differ in their technical features, in the ease with which they can be acquired and developed, and in their capacity to cause mass destruction. Treating them as one category can distort analyses and produce flawed responses. There is also the danger of mission creep. Justifying nuclear weapons as a useful tool in countering biological and chemical weapons may be one step too far. If nuclear weapons are accepted as having a role to counter biochemical warfare, then how can we deny a nuclear-weapons capability to Iran which actually suffered chemical weapons attacks from Saddam Hussein?

Not a single country that had nuclear weapons when the NPT was signed in 1968 has given them up.

Fifth, not a single country that had nuclear weapons when the NPT was signed in 1968 has given them up. Their behavior fuels grievance and resentment. Can the country with the world’s most powerful nuclear weapons rightfully use military force to prevent their acquisition by others? From where do the president and prime minister of nuclear-armed France and the United Kingdom derive the moral authority to declare that a nuclear Iran is unacceptable and must be stopped by force, if necessary?

Sixth, a final anomaly concerns the central doctrine underpinning the contemporary Westphalian system, which holds that sovereign states are equal in status and legitimacy. States are not of equal worth and significance, neither militarily, economically, politically, nor morally. It seems unlikely that in the eyes of most

³³ George Perkovich, Jessica Tuchman Mathews, Joseph Cirincione, Rose Gottemoeller and Jon Wolfsthal, *Universal Compliance: A Strategy for Universal Compliance* (Washington DC: Carnegie Endowment for International Peace, March 2005).

people and countries, nuclear weapons in the hands of Britain and North Korea are equally dangerous. This is why US President George W. Bush warned of the threat of the world's most destructive weapons falling into the hands of the world's worst regimes: it is the conjunction of the two that is especially dangerous. Granted, the Iraq war has been a disaster richly foretold.³⁴ But there was no moral equivalence between Saddam Hussein, on the one hand, and George W. Bush, Tony Blair, and John Howard—leaders of the three countries that waged the war—on the other hand.

Similarly, how reasonable or logical is it to lump together India, Iran, Israel, North Korea, and Pakistan without discriminating between their respective records, yet continue to distinguish between non-proliferation and disarmament? Even with regard to the latter, it is already a decade since India and Pakistan gate-crashed the nuclear club. Any effort to roll back their nuclear weapons capability amounts to nuclear disarmament, not nonproliferation. Analyzing the problem within a non-proliferation conceptual lens is inappropriate.

The logical policy implication is either to condemn nuclear weapons for everyone, or to distinguish between rogue and responsible behaviors by opposing regimes, not the weapons. But that threatens the core assumption of the NPT, that nuclear weapons are immoral for everyone. This has been the central bone of contention between proponents and opponents of the India-US civil nuclear cooperation deal: that it acknowledges India's responsible nuclear stewardship or that it threatens the integrity of the NPT.

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³⁴ See Ramesh Thakur, *War in Our Time: Reflections on Iraq, Terrorism and Weapons of Mass Destruction* (Tokyo: United Nations University Press, 2007).

8

The NPT Is History

It is truly remarkable how those who worship at the altar of nuclear weapons threaten to excommunicate for heresy others wishing to join their sect.

Maybe it is time to return with some seriousness and urgency to the dream of a nuclear-weapon-free world.

In practice, we face four nuclear choices: the status quo, proliferation, nuclear rearmament, or abolition.³⁵ India's, Pakistan's and North Korea's tests confirmed the folly of believing—in defiance of common sense, logic, and history—that a self-selecting group of five powers could indefinitely retain their monopoly on the world's most destructive weaponry.

It is truly remarkable how those who worship at the altar of nuclear weapons threaten to excommunicate for heresy others wishing to join their sect. The first country to engage in nuclear breakout in 1998, India then deplored North Korea's test in 2006 as a threat to regional peace and stability that highlighted the dangers of clandestine proliferation. Thus did India, quickly followed by Pakistan, join the ranks of the nuclear powers' preaching nuclear abstinence for others while engaged in consenting deterrence themselves. Other members of the nuclear club condemned North Korea's test as "brazen," "grave," "provocative," and "intolerable." That test and Iran's ongoing defiance are symptoms, not the cause, of the NPT's disrepair. Maybe it is time to return with some seriousness and urgency to the dream of a nuclear-weapon-free world.

In a major foreign policy speech at DePaul University in Chicago in October 2007, Democratic presidential hopeful Senator Barack Obama declared: "America seeks a world in which there are no nuclear weapons." In this he followed in the footsteps of an eminent panel of former US secretaries of defence and state—George Shultz, William Perry, Henry Kissinger—and Senator Sam Nunn, former chairman of the Senate Armed Services Committee. They published an op-ed that electrified disarmament activists by calling on Washington to take the lead in the abolition of nuclear weapons.³⁶ They did not dispute that nuclear weapons confer many national security benefits. Rather, they argued that these were subordinate to the threats posed to US security by the uncontrolled proliferation of such weapons. As startling as their conversion—on the road to Tehran rather than Damascus—was the newspaper in which it was published, the very bastion of US conservatism. They followed a year later by publishing a second article, also in the *Wall Street Journal*, noting the worldwide positive response that their call had evoked. In particular, they highlighted the serious and substantive work that it had produced among a coalition of Americans aiming to marry the vision of a nuclear-weapon-free world to a series of progressive steps to pull the world back from the nuclear precipice, such as reducing warhead numbers and limiting the role of nuclear weapons in security policy.³⁷

35 Ramesh Thakur, "The Desirability of a Nuclear Weapon Free World," in *Canberra Commission on the Elimination of Nuclear Weapons, Background Papers* (Canberra: Department of Foreign Affairs and Trade, 1996), 74–88.

36 George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, 4 January 2007.

37 Shultz, Perry, Kissinger and Nunn, "Toward a Nuclear-Free World," *Wall Street Journal*, 15 January 2008. They were joined by Madeleine Albright, James Baker, Zbigniew Brzezinski, Frank Carlucci, Warren Christopher, Melvin Laird and Colin Powell as well as a number of scholars in a project housed at Stanford University's Hoover Institute. The two factors different from their time in office that might explain their conversion to the abolitionist cause is the fear of terrorists acquiring nuclear weapons and the far bigger gap between the conventional capabilities of the United States and any other single power or coalition of states.

Ironically, therefore, sections of the admittedly retired national security elite are coming round to embracing and championing the nuclear-weapons-free cause during a decade in which the formerly energized popular movement has been dormant. At the same time, such views are not universally shared. A group of retired NATO generals argued recently for an alliance “policy of deterrence by proactive denial” that includes both pre-emption and prevention. They put forward the concept of “interactive escalation” based on “escalation dominance” that can use “all instruments of soft and hard power, ranging from the diplomatic protest to nuclear weapons.” In their view, “nuclear weapons—and with them the option of first use—are indispensable... and nuclear escalation continues to remain an element of any modern strategy.”³⁸

In this context, it is worth recalling three further pointers from post-1945 history that contrast starkly with received wisdom. First, the most spectacular Soviet territorial and political advances in Europe came during the period of American atomic monopoly. Second, the implosion, collapse, and disappearance of the Soviet Union occurred after the achievement of strategic parity with the United States. And third, the dramatic reductions in nuclear arsenals in the first half of the 1990s resulted from unilateral initiatives (reinforced by the power of positive reciprocity) by Mikhail Gorbachev and George H. W. Bush, not from verifiable agreements signed after protracted negotiations. They reflected and in turn contributed to improved political trust and the dismantling of “the vast apparatus of ideological hostility that had been built up” over four decades.³⁹

The NPT can fairly be judged to have been the most brilliant, half-successful, arms-control agreement in history. The number of countries to sign embraced virtually the entire family of nations. Yet at the same time, the nuclear arsenals of the N5 (of which France and China signed the NPT only much later) expanded enormously. The global total of nuclear warheads climbed steadily after 1945, peaked in the mid-1980s, fell dramatically for about a decade, and then stabilized in the new millennium.⁴⁰ With four decades having elapsed since 1968, the N5 should surely be held guilty of violating their solemn obligation to disarm. This harsh judgment is reinforced by the 1996 advisory opinion of the World Court, made at the request of the General Assembly, that Article 6 requires them to engage in and bring to a conclusion negotiations for nuclear abolition⁴¹ (see Table 1).

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Despite this history and background, a surprising number of arms control experts focus solely on non-proliferation to demand denial of technology and materiel to all who refuse to sign and abide by the NPT, and punishment of any who cross the threshold. The term “non-proliferation ayatollahs” could well be applied to them.

38 Klaus Naumann, John Shalikashvili, Lord Inge, Jacques Lanxade, and Henk van den Breemen, *Towards a Grand Strategy for an Uncertain World: Renewing Transatlantic Partnership* (Lunteren, Germany: Noaber Foundation, 2007), 96–97. For a contrary view of what NATO should be doing with nuclear weapons, see *Visible Intent: NATO's Responsibility to Nuclear Disarmament* (New York: Middle Powers Initiative Briefing Paper, 2008).

39 David Cortright, “Overcoming Nuclear Dangers,” *Policy Analysis Brief* (Muscatine, Iowa: Stanley Foundation, 2007), 10.

40 The two parts of the story are told well in Richard Rhodes, *Arsenals of Folly: The Making of the Nuclear Arms Race* (New York: Knopf, 2007), and Jonathan Schell, *The Seventh Decade: The New Shape of Nuclear Danger* (New York: Metropolitan, 2007). See also Paul Lettow, *Ronald Reagan and His Quest to Abolish Nuclear Weapons* (New York: Random House, 2005).

41 *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, July 8, 1996, ICJ Reports 1996.

The symbiotic link between non-proliferation and disarmament is integral to the NPT. Most countries gave up the weapons option in return for a promise by the N5 to engage in good faith negotiations to eliminate nuclear weapons.

The symbiotic link between non-proliferation and disarmament is integral to the NPT. Most countries gave up the weapons option in return for a promise by the N5 to engage in good faith negotiations to eliminate nuclear weapons. It was expected that nuclear disarmament could take some time. Accordingly, unlike non-proliferation obligations, the Article 6 disarmament obligation was not brought under international monitoring and enforcement.

The logics of nuclear disarmament and nonproliferation are inseparable. The most powerful stimulus to nuclear proliferation by others is the continuing possession of nuclear weapons by some. After all, Iraq was attacked when it did not have nuclear weapons (having been disarmed not by American bombs but by UN inspectors) while North Korea, which had nuclear weapons but not oil, was spared.⁴² The unintended but entirely predictable consequence for any regime that feared US attacks was clear: if a thug wishes to avoid Saddam Hussein's fate, cooperation in efforts to disarm should be instead replaced by a strategy of getting the bomb as soon as possible. By worsening regional and global insecurities, the Iraq war increased the attractiveness of the nuclear option and strengthened the motivation to get them by any means necessary. The threat to use nuclear weapons, according to this logic, not just to deter their use by others but to prevent others from acquiring them in the first place as part of a counter-proliferation strategy,⁴³ legitimizes their possession and use.

Hence the axiom of non-proliferation: as long as any one country has them, others, including terrorist groups, will try their best (or worst) to get them.

Hence the axiom of non-proliferation: as long as any one country has them, others, including terrorist groups, will try their best (or worst) to get them. There is a marked contradiction between rhetoric and example. Nuclear weapons were invented to cope with Germany, used to defeat Japan, and deployed most extensively against the Soviet Union. As their primary strategic rationale disappeared with the end of the Cold War, Washington's evolving nuclear policies acquired greater regional specificity. In East Asia, for example, continued US attachment to nuclear weapons and doctrines was seen as proof of a shift in stance—from deterrence to compellence and coercion—and provoked more assertive Chinese nuclear policies and brinkmanship by North Korea, which in turn produced self-vindication in Washington.⁴⁴ Conversely, even a cursory probing by an amateur observer of the sources of instability that impel countries toward nuclear acquisition confirms the link between the denuclearization of individual states, the regions in which they are located, and universal disarmament. Iran, for example, has hostile and potentially hostile nuclear weapons and troops of nuclear-armed powers all around it. With India and Pakistan to its east, Russia to the north, and US forces patrolling its southern shores and occupying its immediate neighbours in Iraq and Afghanistan, the reason why Iran's national security strategy cannot be de-linked from regional and global dynamics is obvious.

⁴² The hindsight verdict on Israel's attack on the Iraqi reactor at Osirak in June 1981 is kinder than the contemporary condemnations. Yet as a counterpoint, it is worth noting the judgment of a retired senior Egyptian ambassador that Egypt's ratification of the NPT in February 1981 would have been seriously imperiled if the attack on Iraq had preceded it. Mohamed I. Shaker, "An Egyptian Perspective," in *Arms Control After Iraq*, 257.

⁴³ George W. Bush, *The National Security Strategy of the United States of America* (Washington DC: 2002).

⁴⁴ See Wade L. Huntley, "Nuclear Threat Reliance in East Asia," in *Arms Control After Iraq*, 181–99.

The Bush administration has justified new weapons and uses by shifting US nuclear posture from deterrence to use, redefining their mission from a nuclear stalemate with a superpower peer to waging and winning wars against countries that cannot fight back in kind. To paraphrase Donald Rumsfeld, apropos of coalitions, the existence, numbers and lethality of nuclear weapons will determine missions, not the other way round.⁴⁵ It is not possible to convince others of the futility of nuclear weapons when the facts of continued possession and doctrines and threats of use prove their utility. Refining and miniaturizing nuclear weapons, developing new doctrines and justifications for their use, and lowering the threshold of their use weaken the taboo against them and erode the normative barriers to nuclear proliferation.

The problem is not nuclear proliferation per se, but rather nuclear weapons themselves. They could not proliferate if they did not exist. Because they do exist, they will proliferate. The policy implication of this logic is that the best guarantee of nuclear non-proliferation is nuclear disarmament through a universal, non-discriminatory, verifiable, and enforceable nuclear weapons convention that bans the possession, acquisition, deployment, testing, transfer and use of nuclear weapons. This would solve the problem of non-proliferation as well as disarmament. The focus on the former to the detriment of the latter ensures that we get neither. If we truly seek non-proliferation, we should prepare for disarmament.

If we truly seek non-proliferation, we should prepare for disarmament.

How do we move from analysis and prescription to action and nuclear abolition? To begin with, some practical and concrete measures are long overdue: to start by bringing the CTBT into force, negotiating a verifiable fissile materials treaty, retrenching from launch-on-warning postures, and standing down nuclear forces.⁴⁶ That is, reviving, implementing, and building on existing agreements for reducing the role, readiness, and numbers of nuclear weapons as well as introducing further degrees of separation between the possession and launch of nuclear weapons by modifying the doctrines and practices of deployment.

But these amount to tinkering with the present system, not moving forward with a bold and comprehensive vision. What we need are rules-based regimes that are based on the principles of reciprocity of obligations, participatory decision making, and independent verification procedures and compliance mechanisms. In the words of a former US deputy secretary of defense, "America is sleepwalking through history, armed with nuclear weapons. The Cold War left us with a massive inventory of weapons we no longer need, an infrastructure we can no longer use or maintain, and no thought of where our future lies."⁴⁷ The three policy imperatives are to encourage the reduction of nuclear inventories among the NWS, strengthen controls over nuclear stockpiles and material among them and minimize the attraction of the nuclear option to those who do not have these weapons.

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⁴⁵ Quoted in *Reader's Digest*, May 2002. Discussing the idea of "floating coalitions," Rumsfeld asserted that "we'll end up with an awful lot more support if we let the mission determine the coalition than we would if we forced the coalition to determine the mission."

⁴⁶ See "LockDown, CleanOut, Fissban," *Policy Dialogue Brief* (Muscatine, Iowa: Stanley Foundation, 2007).

⁴⁷ John J. Hamre, "Toward a Nuclear Strategy," *Washington Post* 2 May 2005.

9. Conclusion: Has the United Nations been Missing in Action?

The global consensus underpinning the normative architecture of arms control is under severe stress. The 2004 High-level Panel on Threats, Challenges and Change warned bluntly: “We are approaching a point at which the erosion of the non-proliferation regime could become irreversible and result in a cascade of proliferation.”⁴⁸

Examining the UN’s role reveals a paradox for nuclear orders. On the one hand, the unique legitimacy of the world organization, deriving from its universal membership, makes it the normative center of gravity either for reaffirming the existing consensus or refashioning a new one. On the other hand, the UN’s balance sheet of actual performance is unimpressive in this regard—not least because the very same universality of membership makes it a highly inefficient forum for making collective decisions.

It is not self-evident that the United Nations has a natural role to play because there is little tradition of the UN as a key actor on nuclear weapons.

Nor is the idea self-evident that the United Nations has a natural role to play because there is little tradition of the UN as a key actor on nuclear weapons. The Charter was developed before the potential of atomic weapons was understood or demonstrated, and thus it has no provisions directly geared to dealing with them. Early UN-based efforts to develop and negotiate controls on atomic material and weapons were almost instantly stymied by the politics of the Cold War. Their failure was symptomatic of the long struggle to come between East and West. The decades-long superpower stalemate was accompanied by the attendant argument that nuclear weapons-based strategic deterrence was key to the “long peace” until 1989.⁴⁹ A number of arms control and disarmament agreements and actions, resulting from negotiations conducted outside the United Nations, both resulted from, and in turn contributed to, the ending of the Cold War. One of the best examples is the Intermediate Range Nuclear Forces (INF) agreement between Moscow and Washington.

On the other side of the equation, however, the UN has played a significant and varied role in this area from its inception. Of course, it has not been the central forum for decisions relating to nuclear weapons. Nonetheless, the Security Council has been a setting for discussions about crises over nuclear weapons (e.g., in Cuba and Iraq), the source of decisions relating to how states respond to other potential nuclear states (e.g., the Israeli bombing of the Osirak reactor), and a standard setter in member state efforts to secure nuclear weapons and materiel (e.g., Security Council resolution 1540). Perhaps even more pertinently, the strong, if unsuccessful, efforts made in early 2003 to secure a second Security Council resolution explicitly authorizing war in Iraq demonstrated just how powerful the

⁴⁸ *A More Secure World: Our Shared Responsibility*. Report of the High-Level Panel on Threats, Challenges and Change (New York: United Nations, 2004), UN document A/59/565, para. 111.

⁴⁹ John Lewis Gaddis, *The Long Peace: Inquiries into the History of the Cold War* (Oxford: Oxford University Press, 1989).

UN's legitimizing role remains.⁵⁰ Then, as the war was waged anyway, the desperate but unrequited search for the nonexistent WMDs proved conclusively, albeit only after the fact, the success of UN inspections in having disarmed Saddam Hussein.

Critics often overlook the fact that the General Assembly's very first resolution on 24 January 1946 established a commission to deal with "the problems raised by the discovery of atomic energy." Since then, the assembly has passed scores of resolutions on nuclear weapons and has held three special sessions on disarmament. At the centre of, and in many ways the most consistent actor in, the UN family is the International Atomic Energy Agency. Formed in 1957, the IAEA's role has evolved and expanded since then in response to the changing environment and its requirements. Its mandate involves monitoring, verifying, and reporting on the nuclear programs in a large number of states, making it the central UN actor in an increasingly complex and politicized environment as recent experience with Iraq, North Korea, and Iran have demonstrated.

Kofi Annan argued that logically the unique status of the NWS "also entails a unique responsibility," and that they must do more, including further and irreversible reductions in non-strategic nuclear arsenals, reaffirmation of negative security assurances, swift negotiation of a fissile materials cutoff treaty, and the maintenance of the moratorium on nuclear testing until the entry into force of the CTBT. He strongly urged states to agree on these measures at the 2005 NPT Review Conference. On the non-proliferation side, he urged a strengthening of the IAEA's verification machinery through universal adoption of the Model Additional Protocol and the creation of incentives for states to forego uranium enrichment and plutonium separation capacities. The IAEA was to act as a guarantor for the supply of fissile material to civilian nuclear users at market rates.⁵¹

In the end, the Seventh NPT Review Conference in May 2005 completely collapsed. It failed to address vital challenges or offer practical ideas for preventing the use, acquisition, and spread of nuclear weapons. The first half of the conference was dogged by procedural wrangling, the second half was equally rancorous, and the exercise ended in acrimony and recriminations over where the primary blame lay for the lost opportunity. Washington, which has historically led international efforts to reinforce the NPT regime, faulted the international community of states, yet again, for failure to confront the reality of the threat of proliferation by countries like Iran and North Korea. Arms control advocates countered that the US delegation had come intent on focusing on the proliferation side of the equation and was totally intransigent with regard to previously agreed N5 commitments on arms control and disarmament. In an echo of communist systems, the information booklet produced by Washington during the conference blanked out milestones no longer popular with the current administration, including the 1996 CTBT and the 2000 NPT Review Conference. Joseph Cirincione commented that "official disdain for these agreements seems to have turned into denial that they existed."⁵²

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The Seventh NPT Review Conference in May 2005 completely collapsed. It failed to address vital challenges or offer practical ideas for preventing the use, acquisition, and spread of nuclear weapons.

50 For the charge of irrelevance, see for example Richard Perle, "Thank God for the Death of the UN," *The Guardian* 13 March 2003. For a response, see Ramesh Thakur and Andrew Mack, "More Relevant than Ever," *Japan Times*, 23 March 2003.

51 Kofi Annan, *In Larger Freedom: Towards Security, Development, and Human Rights For All*, UN Document A/59/2005, paras. 97–100. See also Mohamed ElBaradei, "Seven Steps to Raise World Security," *Financial Times*, 2 February 2005.

52 "U.S. 'Rewrites History' of Arms-control Deals in Conference Brochure," *Japan Times*, 26 May 2005.

Most countries concluded that the nuclear powers had no intention of fulfilling their NPT-based disarmament commitments from the 1995 and 2000 conferences.

Most countries concluded that the nuclear powers had no intention of fulfilling their NPT-based disarmament commitments from the 1995 and 2000 conferences. This had a triple negative effect: it eroded support for US proposals for strengthening the non-proliferation elements of the treaty, weakened support for strong action against possible Iranian and North Korean transgressions, and may have softened adherence to NPT obligations over the long run.

In September 2005, on the occasion of the UN's 60th anniversary, over 150 presidents, prime ministers, and princes gathered to consider the proposals of the Secretary-General's High-level Panel. Billed correctly as the "World Summit"—the largest gathering ever of heads of state and government—the meeting sought to establish a new post-9/11 path for the world organization. The final outcome document addressed issues ranging from terrorism to human rights to UN reform, but reactions were mixed. While many critics were underwhelmed by its impact,⁵³ Secretary-General Kofi Annan called it a glass half-full.⁵⁴ Yet even he agreed that the total absence of a reference to arms control and disarmament was "inexcusable" and a "disgrace."⁵⁵ Posturing definitely got in the way of results.

Some senior diplomats blamed Washington for the 2005 summit's failure to tackle the nuclear threat. The US refusal to countenance any form of disarmament blocked attempts to adopt measures that would prevent regimes seeking to develop a nuclear capability. One diplomat remarked that Washington refused to accept the "logical premise" that it must engage in disarmament if it wants to discourage a "new nuclear arms race."⁵⁶

More countries are bumping against the nuclear weapons ceiling as the world energy crisis is encouraging a move to nuclear energy.

The NPT may be creaking beyond repair even with respect to its nuclear energy bargain as the nexus of security, economic, energy, and environmental imperatives can no longer be adequately nested within that one old regime. More countries are bumping against the nuclear weapons ceiling as the world energy crisis is encouraging a move to nuclear energy. The bulk of the international market is controlled by the P-5/N5 and such allies as Australia, Canada, Germany, and Japan. As western as well as eastern Europeans have discovered, Russia is an unreliable supplier of energy, not averse to using it as a political weapon. But so too is Washington prone to imposing sanctions on regimes it dislikes, which pose a threat to security of nuclear supplies. There is therefore growing interest in creating a new international market under the auspices of multilateral nuclear arrangements. The continued supply of nuclear fuel and services even without ownership would raise suspicions about motives and complications about civilian-military firewalls.⁵⁷ Internationalizing the nuclear fuel cycle and entrusting supply to a body like the IAEA would simultaneously ensure security of supply divorced

53 See, for instance, Thomas G. Weiss and Barbara Crossette, "The United Nations: The Post-Summit Outlook," *Great Decisions 2006* (New York: Foreign Policy Association, 2006), 9-20.

54 Kofi A. Annan, "A Glass At Least Half Full," *Wall Street Journal*, 19 September 2005.

55 Kofi Annan, Press conference at United Nations Headquarter, 13 September 2005, available at <http://www.un.org/News/Press/docs/2005/sgsm10089.doc.htm>

56 Mark Townsend, "Summit Failure Blamed on U.S.," *Observer* (London), 18 September 2005.

57 Downstream agenda would include also the conversion of existing national facilities to international control while ensuring that new facilities being constructed are multinational from the start.

from political hostilities and reduce-cum-eliminate the need for enrichment and reprocessing plants in countries interested in acquiring nuclear power for civilian use.⁵⁸

Too many proponents have paid lip service to the slogan of a nuclear-weapons-free world but not formulated or pursued a serious program of action. The elegant theorems, cogent logic, and fluent reasoning of many authoritative international commissions have made no discernible dent on the old, new, and aspiring nuclear powers. A coalition between nuclear-armed and non-nuclear countries—for example India, which has crossed the threshold from a disarmament leader to a hypocritical nuclear power, and Japan, the only country to have suffered an atomic attack—might break the stalemate and dispel looming nuclear clouds. Critical introspection and self-reflection is required also on the part of civil society and arms-control NGOs: Does the focus on the NPT play into the hands of the non-proliferation hawks, divert attention and effort from nuclear disarmament, and in effect thereby undermine the pursuit of nuclear abolition? Has the good—non-proliferation via the NPT—become the enemy of the best, nuclear abolition?

A cross-national survey of public attitudes in the three Western nuclear-armed countries (see Table 2) shows some interesting and surprising features. First, people are clearly convinced of the failure of the NPT regime. Second, they are just as firmly persuaded that nuclear weapons make the world more dangerous rather than safer. And third, they are willing to see this belief translated into policy by supporting with almost equal conviction the twin goals of preventing further proliferation and eliminating nuclear weapons entirely through an enforceable agreement.

The articles by respected members of previous administrations gave “street credibility” to the goal of nuclear disarmament within the US political process and political legitimacy worldwide. In the meantime, scientific and technological advancements since the NPT was signed in 1968 have greatly expanded the technical toolkit for monitoring and verifying weapons reduction and elimination. It is time to supplement and then supplant the sword-and-shield nuclear diplomacy of the United States with the diplomacy of a multilaterally negotiated, non-discriminatory, and universal nuclear weapons convention.

Time is running out for the contradictions, hypocrisy, and accumulated anomalies of global nuclear apartheid. Either we will achieve nuclear abolition or live with nuclear proliferation followed by nuclear war. If the non-proliferation end of the NPT bargain collapses, the regime will become obsolete. If the disarmament goal of the NPT is realized, the regime is completed but also becomes redundant. Either way, the NPT regime as we have known it has passed its use-by date. Better the soft glow of satisfaction from the noble goal realized of nuclear weapons banned, than the harsh glare the morning after these weapons are used.

Has the good—non-proliferation via the NPT—become the enemy of the best, nuclear abolition?

It is time to supplement and then supplant the sword-and-shield nuclear diplomacy of the United States with the diplomacy of a multilaterally negotiated, non-discriminatory, and universal nuclear weapons convention.

⁵⁸ See John Thomson and Geoffrey Forden, “Multilateralism as a Dual-Use Technique: Encouraging Nuclear Energy and Avoiding Proliferation,” *Policy Analysis Brief* (Muscatine, Iowa: Stanley Foundation, 2008).

Table 1: **Number of Nuclear Warheads in the Inventory of the Five NPT Nuclear Weapons States, 1945–2005**

Year	United States	USSR/Russia	Britain	France	China	Total
1945	6					6
1950	369	5				374
1955	3,057	200	10			3,267
1960	20,434	1,605	30			22,069
1965	31,982	6,129	310	32	5	38,458
1970	26,662	11,643	280	36	75	38,696
1975	27,826	19,055	350	188	185	47,604
1980	24,304	30,062	350	250	280	55,246
1986	24,401	45,000	300	355	425	70,481*
1990	21,004	37,000	300	505	430	59,239
1995	12,144	27,000	300	500	400	40,344
2000	10,577	21,000	185	470	400	32,632
2005	10,295**	17,000**	200	350	400	28,245

* Peak Year

** Slightly less than half the US and Russian stockpiles are considered operational, with the balance in reserve, retired, or awaiting dismantlement.

Source: Hans M. Kristensen and Robert S. Norris, "Nuclear Notebook," *Bulletin of Atomic Sciences* 62, no. 4 (2006): 64–67, using data from the Natural Resources Defense Council. Of the non-NPT nuclear weapons states, Israel is estimated to have 60-85 warheads, India and Pakistan about 110 between them, and North Korea could have around 10. Altogether, more than 128,000 nuclear warheads are estimated to have been built since 1945, with the United States and former Soviet Union/Russia accounting for 55 and 43 percent of them, respectively.

Table 2: **Public Opinion on Nuclear Weapons (percentages)**

	France	UK	USA
NPT has been effective	22.0	25.0	15.9
NPT has been ineffective	47.6	40.4	46.3
Strongly/moderately agree that non-nuclear states should be prevented from developing them	88.3	84.9	82.3
Eliminate NW worldwide	39.0	50.9	48.7
Reduce global numbers of NW	44.6	39.7	33.6
Maintain current number/develop new weapons	13.5	5.8	8.9
Eliminate nuclear testing worldwide	58.8	60.8	52.8
Nuclear weapons make world safer	11.6	18.2	10.2
Nuclear weapons make world more dangerous	76.9	73.4	79.3
Support eliminating NW through enforceable agreement	86.6	84.5	73.5
Oppose eliminating NW through enforceable agreement	6.5	8.5	16.7

Source: *Global Public Opinion on Nuclear Weapons* (Vancouver: The Simons Foundation in partnership with Angus Read Strategies, 2007). The other countries included in the survey, which asked a total of 15 questions, were Germany, Israel, and Italy.

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(Tokyo: United Nations University Press, 2009 forthcoming)

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