

Rebuilding an Unraveled Consensus for Sustainable Nonproliferation

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REBUILDING AN UNRAVELED CONSENSUS FOR SUSTAINABLE NONPROLIFERATION

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SOME INCONVENIENT TRUTHS

Inconvenient truths must sometimes wait their moment. Al Gore may not have won the United States presidential election with his message in 2000, but his recent Oscar for *An Inconvenient Truth* offers some encouragement.

There are many “inconvenient truths” in the international peace and security area that we must confront honestly. The Chicago-based *Bulletin of the Atomic Scientists* recently moved its Doomsday Clock forward two minutes, placing it now at five minutes to midnight. The rationale was that, in addition to the threat of nuclear danger, the world faces another catastrophic danger from climate change.

Last year, a high-level report by a team in the United Kingdom headed by Sir Nicholas Stern reviewed the economic consequences of climate change and foresaw a major global economic downturn comparable to the Great Depression of 1929.² This was followed by the report of the Intergovernmental Panel on Climate Change (IPCC), which asserted that global change would most likely lead to a temperature rise of between 1.8°C and 4°C by the end of the century; a sea level rise by 28–43 centimeters; a disappearance of Arctic summer sea ice in the second half of this century; and an increase in heat waves and in tropical storm intensity.³ The report found these consequences as incontrovertible, and described them as “very likely” to be caused by human actions, and in particular by greenhouse gas emissions.

The forces of globalization and the feverish pursuit of industrialization have led to a vast demand for energy. With environmental concerns already being cited to justify an increasing reliance on nuclear power as an energy source, we must resolve the concerns that wider use of nuclear energy may lead to a proliferation of nuclear weapons. Thus are the two greatest threats to human security, as identified by the *Bulletin of the Atomic Scientists*, inextricably intertwined.

Another inconvenient truth is that we live in a world of escalating military budgets, despite the absence of antagonisms between major states. According to the Stockholm International Peace Research Institute (SIPRI), global military expenditure is at \$1,118 billion (\$1.1 trillion) per annum, with the United States accounting for 48 percent of the total. In a world where over one billion human beings live below the poverty line of one dollar a day, weapons spending amounts to \$173 per year for every man, woman, and child on the planet. Among the world's eight known nuclear-armed states—five of them parties to the Nuclear Non-Proliferation Treaty (NPT)—there remain an estimated 27,000 nuclear weapons, of which 12,000 are actively deployed.⁴

Nuclear weapons are designed to cause terror and destruction on a vastly greater scale than any conventional weapon, killing thousands in a single attack and leaving behind ecological and genetic effects that can persist indefinitely. The risk that these nuclear weapons will be used—by states or terrorists, by accident or design—has actually increased in recent years. This threat, combined with the certainty of climate change, presents an ominous dual challenge to humanity.

But exhorting against complacency is not a counsel to despair. From Jared Diamond's impressive book, *Collapse*,⁵ I draw the lesson that, throughout history, not all societies facing imminent danger have failed. With long-term planning and a willingness to reconsider core values, even societies at extreme risk are able to avert collapse.

Globalization and the information and technological revolution have made our challenges more complex, but also offer us tools to assess and mitigate the problems we have created. Along with our scientific advances, our advances in governance—embodied in international institutions and international law—provide us mechanisms to coordinate the collective action that is needed to rid the world of

weapons of mass destruction and take corrective action on climate change.

I believe that, at least in the security field, the disastrous policies that have brought us to this point of crisis have run their course. The recent agreement to take collective action in the Security Council to roll back the nuclear program of the Democratic People's Republic of Korea (DPRK), and the Koreans' ultimate accommodation, is a signal that, in politics, practical diplomacy can and does yield results. So too was the Libya case, in which diplomacy and engagement helped end a decades-long weapon program. These results were long overdue, but they point to what can be achieved in other areas—an especially important reminder when military strikes are still contemplated as an approach to fighting proliferation, notwithstanding the lessons of Iraq.

THE UNRAVELING OF THE CONSENSUS

In 1995 I was privileged to preside over the NPT Review and Extension Conference. The NPT contained a provision for its extension twenty-five years after it came into force and required a majority decision of the states parties to decide on the length of the extension.

The conference was expected to be contentious and complex, and in the post-Cold War climate many states had heightened expectations of far-reaching results. The nuclear weapon states made it clear that they wanted an indefinite extension of the NPT and argued, as we now know disingenuously, that it was an essential prerequisite for nuclear disarmament. They were supported by the Western Group (from North America, Europe, Japan, and Australia) and the Eastern Group (eastern European countries, including the Russian Federation). Once these groups made unconditional extension a high-priority foreign policy goal, the arguments advanced for this outcome became curiously less important than the gathering of the necessary votes.

While a large majority of states represented at the conference favored indefinite extension of the treaty, delegations were nevertheless emphatic that extension was not a *carte blanche* for nuclear weapons states and insisted that concrete steps be specified in the final document. About halfway through the conference, support

began to coalesce around a South African proposal that called for both a strengthened review process and a Declaration of Principles on Nuclear Non-proliferation and Disarmament as a “yardstick” to measure substantive progress. Late in the consultations, a coalition of Arab states successfully advocated a specific resolution calling for respect of the treaty in the Middle East and acceptance of International Atomic Energy Agency (IAEA) safeguards on nuclear facilities in the region.

Ultimately, the package of three inter-related decisions—indefinite extension, strengthened review process, and the “yardsticks” of the Principles and Objectives—together with a resolution on the Middle East was adopted as a package without a vote by the states parties. (I discuss the details of these negotiations in more detail in a separate account.⁶)

The adoption of this package had the effect of extending the NPT indefinitely, with clear guidelines for introducing a strengthened review process and with Principles and Objectives to serve as benchmarks for the performance of states parties. Successes in the period immediately following the extension—notably the signature of the Comprehensive Nuclear Test Ban Treaty (CTBT) in 1996 and the expansion of the NPT’s membership to 187—seemed to vindicate the decision. The nuclear weapon tests of China and France in the mid-1990s, which were widely condemned, were followed by signature of the CTBT by these two countries and, in the case of France, by its ratification as well.

The indefinite extension was achieved largely because the long-stalled comprehensive test ban—generally seen as the litmus test of nuclear disarmament—seemed at last certain of adoption, and because of the promise by the nuclear weapon states that negotiations would follow for a convention banning the production of fissile material and for a program of nuclear disarmament leading to the elimination of nuclear weapons. In particular, as the *Washington Post* documented in a six-part series in April 1995, the U.S. decision to end nuclear tests and to negotiate a comprehensive test ban, steps that had been advocated by the Non-Aligned Movement (NAM) in previous review conferences, was crucial to the success of the 1995 extension. For this reason, the United States Senate’s rejection of CTBT ratification in 1998 struck a blow at the heart of the pact for indefinite extension and triggered the process of unraveling the

consensus achieved in 1995. Though the consensus was formally reiterated at the next review conference in 2000, it was already under strain before the change of personnel and attitudes in the U.S. executive branch early the next year.

Developments outside the NPT also would contribute to this unraveling. In May 1998 India announced the conduct of tests of nuclear devices and was followed soon after by Pakistan. Although neither country was a member of the NPT or the CTBT,⁷ these tests were clearly a setback to the prevailing nuclear nonproliferation and disarmament norms, were widely condemned, most notably in UN Security Council Resolution 1172, and triggered limited sanctions by the United States and other Western countries. Today, one may note the contrast between the strong language in that resolution and the terms of the 2006 U.S.-India nuclear cooperation deal—a disparity that vividly illustrates the inconsistent application of nonproliferation norms. George Perkovic has cogently argued that the “democratic bomb” strategy—approval of nuclear weapons in the hands of countries with assertedly democratic government, and disapproval when possessed by other “regimes”—is inherently contradictory and cannot succeed; when the central problem is the weapons themselves, any distinction between “good proliferators” and “bad proliferators” cannot be sustained.⁸ Henry Kissinger, recently discussing the case of Iran, wrote that “it is the fact not the provenance of further proliferation that needs to be resisted. . . . We should oppose nuclear proliferation even to a democratic Iran.”⁹

A further contrast is the differential punishment meted out in instances of proven proliferation—despite the stringent conditions of UN Security Council Resolution 1540, which was adopted to prevent nonstate actors and terrorist groups from acquiring weapons of mass destruction. The 1540 Committee, which is comprised of all Security Council members, was tasked with monitoring member states’ compliance with Resolution 1540. Enforcement, however, has been inconsistent. Recent revelations into the workings of A. Q. Khan’s illicit trafficking network—which were well known to Western intelligence agencies for some time—resulted in a mere three convictions and relatively light jail sentences. Numerous other instances of the theft, illegal trafficking, and smuggling of nuclear material have been detected in the post-September 11 atmosphere of heightened concern over international terrorism. Yet in many countries the punishment

for these violators is no greater than that for corrupt businessmen or prolific Internet “spammers.”

Despite the setbacks to the NPT regime after 1995, the Review Conference of 2000 was a remarkable success due largely to the energetic efforts of a group of countries drawn from different regional groups that called themselves “The New Agenda Coalition.” Their firm pressure, and the aversion of the nuclear powers to an open rupture, resulted in the adoption of a final document that contained thirteen specific and practical steps for nuclear disarmament. These steps have become the centerpiece for those committed to the success of the NPT. Subsequent failure by nuclear states to achieve them, despite commitments made at the 2000 Review Conference, has led to the further unraveling of the consensus and a mood of disillusionment.

In fact, instead of implementing the promised thirteen steps, leading nuclear-armed states have reversed the progress of earlier years. Arms control agreements, such as the 1972 Anti-Ballistic Missile treaty (ABM), were abrogated. The Strategic Offensive Reductions Treaty (SORT) between the United States and the Russian Federation, while a gesture toward nuclear disarmament, was deliberately silent on issues of verification and on actual destruction of weapons.

Moreover, the de-emphasis on nuclear weapons in the security doctrines of the major powers after the Cold War has now been replaced by a fresh salience. This was evident in the 2002 Nuclear Posture Review by the United States, and in the reversal by the Russian Federation of its policy of no first use of nuclear weapons against non-nuclear weapon states. Thus a taboo even during the Cold War was now being pronounced as policy. Reviving the prospect of nuclear escalation violates commitments made in 1995 and 2000, and ignores principles of proportional response enshrined in international law and expressly affirmed in the Advisory Opinion of the International Court of Justice in 1996.¹⁰ Meanwhile, concepts of deterrence have spread to South Asia and are invoked by both India and Pakistan to justify their nuclear arsenals as militarily necessary.

The United States, with its planned “bunker buster” weapons and the Reliable Replacement Warhead, reflects this new reliance on nuclear weapons as an active element of military strategy, a development that dangerously lowers the threshold for nuclear use. Russia’s President Putin, in a speech in Munich on February 10, 2007, hinted at withdrawal from the Intermediate Range Nuclear Forces Treaty

(INF) and the Treaty on Conventional Armed Forces in Europe (CFE), two important achievements after the Cold War, citing threats to the security of his country. Thus, by words and by deeds, is manifest a fraying relationship between the two powers that possess the majority of nuclear weapons in the world.

Although talks between the two nations are said to have begun in order to prepare for the expiration of disarmament agreements between them in 2009 and 2012, success in these negotiations should not be a foregone conclusion. U.S. plans to deploy components of a missile defense system in Poland and the Czech Republic are seen as a provocation and a break from prior promises. Together with China's launch of an anti-satellite weapon in space, these are ominous signs of a fresh arms race.

In the United Kingdom, a Labour government won parliamentary approval to replace the Trident nuclear submarine system at a cost of \$40 billion, up to 3 percent of its annual defense budget for thirty years. Meanwhile the Geneva-based Conference on Disarmament (CD) remains deadlocked and is unable to move on vital issues such as the Fissile Material Cutoff Treaty, negative security assurances, and the prevention of an arms race in outer space—let alone on eliminating nuclear weapons. The failure of the Western nuclear weapon states to ratify the protocols of certain nuclear weapon-free zones is another drawback—it is to the credit of the five Central Asian states that they concluded the Central Asia Nuclear Weapon-free Zone (CANWFZ) in September 2006 in defiance of heavy pressure from the United States, the United Kingdom, and France.

While these setbacks to the process of nuclear disarmament continued, there have been setbacks in the nonproliferation field as well, of which Iraq represents the central case. Iraq's clandestine development of a nuclear weapons program effectively was destroyed after the first Gulf war under Security Council Resolutions 687 and others, and through actions implemented by the IAEA, UNSCOM, and UNMOVIC. Yet this success, painstakingly achieved through a decade of multilateral action, was not apparent; faulty intelligence and allegations that the program still existed led, *inter alia*, to the ruinous invasion of Iraq, despite the failure to find evidence to prove these allegations. The war's results have exposed the limitations of counter-proliferation measures.

The DPRK case is more difficult to assess. When first brought to the attention of the Security Council, it was deflected to a negotiation

process that ended in the Agreed Framework in 1994. That agreement was inadequately implemented, and as the Bush administration adopted a truculent attitude to the DPRK, the situation worsened until North Korea, which had announced its withdrawal from the NPT, tested a nuclear weapon in 2006.

That act of proliferation created a sense of urgency and triggered Security Council sanctions. The six-nation talks convened by China finally reached an agreement, announced on February 13, 2007. However, the implementation of the agreement requires regular supervision so that it does not go the way of the earlier Agreed Framework.

Finally there is the continuing case of Iran, whose violation of the IAEA safeguards agreement has led to deep suspicions that its plans for nuclear power may lead to a nuclear weapons program. This has been compounded by Iran's noncompliance with UN Security Council Resolution 1737, barring its enrichment of uranium. There is no doubt that the problem cannot be resolved unilaterally and requires a political and diplomatic process in which all sides must cooperate and compromise.

Dismal as the current global situation may be, it is useful to remind ourselves that we have not arrived at the nightmare scenario envisioned by the late president John F. Kennedy, who foresaw a situation of twenty to twenty-five nuclear armed states. The overwhelming majority of countries that are in the NPT genuinely believe that nuclear weapon possession is not in their security interest. However, as recent events have shown, the existence of a two-tier world of nuclear haves and have-nots cannot be sustained.

Still, there have been some positive nonproliferation developments as well. Libya announced that it was abandoning its own programs of developing weapons of mass destruction, a remarkable success of quiet diplomacy. A number of steps have been taken to tackle the problem of nuclear proliferation, such as the Co-operative Threat Reduction Initiative pioneered by U.S. Senators Dick Lugar and Sam Nunn, the Global Threat Reduction Initiative, the Proliferation Security Initiative, and the Additional Protocols of the IAEA. While these steps can contribute to security, they cannot, separately or together, stem the tide of nuclear proliferation that arises from the continuing political and military value attached to nuclear weapons.

The incontrovertible fact is that nuclear disarmament and nuclear nonproliferation have a symbiotic relationship. They are mutually reinforcing. We cannot have progress in one without progress in the other. The NPT must be viewed in its totality. No one aspect can be singled out for implementation without upsetting the fundamental equilibrium that exists among the nonproliferation, disarmament, and peaceful uses of nuclear energy components of the treaty.

THE WEAPONS OF MASS DESTRUCTION COMMISSION

The accumulation of the setbacks mentioned above made inevitable the failure of the NPT Review Conference of 2005 to achieve an agreed Final Document. Perhaps worse was the failure in September 2005 of the sixtieth anniversary UN General Assembly session to agree on mentioning *any* disarmament issue in its Outcome Document. This surely represents the nadir in the unraveling of the consensus.

It is in response to these intractable challenges that, in my final year as UN under-secretary-general, I proposed an international commission on weapons of mass destruction. Secretary-General Kofi Annan was not ready to have such a commission function under the aegis of the United Nations at a time when relations with its largest member state over such security issues were particularly tense. Sweden, thanks to its courageous foreign minister, the late Anna Lindh, accepted the challenge and set up the commission, with Dr. Hans Blix as chairman.

The members of the commission—fourteen of us, drawn from different countries, including nuclear weapon states—began our work early in 2004. We met in different capitals and exchanged ideas with scholars, researchers, and diplomats from a wide range of countries over a period of more than two years. Finally, in June 2006, we presented the final report to Secretary-General Annan, and it was tabled as a document of the United Nations. Blix also spoke to the First Committee of the United Nations in October 2006 and has tirelessly traveled the globe addressing audiences and media conferences.

Our commission felt that the time for action on weapons of mass destruction, and especially on nuclear weapons, has come. We see them as inhumane weapons of terror—weapons in fact

intended most of all to intimidate those who do not possess them. As the Canberra Commission, upon which I also served, said in 1996, “Nuclear weapons are held by a handful of states which insist that these weapons provide unique security benefits and yet reserve uniquely to themselves the right to own them. This situation is highly discriminatory and thus unstable; it cannot be sustained. The possession of nuclear weapons by any state is a constant stimulus to other states to acquire them.”¹¹ The WMD Commission reiterates this, adding that “So long as any such weapons remain in any state’s arsenal, there is a high risk that they will one day be used, by design or accident. Any such use would be catastrophic.”¹²

Nuclear weapons must be devalued as the ultimate currency of power. That can be achieved only by their elimination. A cooperative rule-based world order requires us to have a nuclear ban negotiated and administered through a multilateral institution. For this purpose we must convene a World Summit that will discuss WMD and agree on a program of action.

A total of sixty recommendations have been made in the WMD Commission Report. They include:

- gaining agreement on general principles, with action on disarmament and nonproliferation through multilateral institutions in a rule-based international order where the UN Security Council is the ultimate authority;
- reviving disarmament negotiations and affirming policies that give states the confidence that they have no need to acquire WMD;
- reducing the danger of existing arsenals by making deep reductions in them; the need to take weapons off their alert status;
- securing weapons and nuclear material from theft, especially by terrorist groups;
- preventing proliferation through the entry into force of the CTBT; the implementation of commitments of the nuclear-weapon states under the NPT; encouraging nuclear weapon-free zones, especially in the Middle East;
- continuing negotiations with DPRK and Iran to ensure their non-nuclear weapon status while assuring them of their security and their right to the peaceful uses of nuclear energy; developing international arrangements for the supply of enriched uranium fuel and disposal of spent fuel;

- working purposefully for a ban on nuclear weapons within a reasonable time frame; prohibiting the production of fissionable material; gaining no-first-use pledges by those who have nuclear weapons; and
- achieving the universalization of the Chemical Weapons Convention and the Biological Weapons Convention, and a legal framework to prevent an arms race in outer space.

NEW OPPORTUNITIES TO REBUILD THE NPT CONSENSUS

A global consensus on disarmament, utopian and elusive as it may seem, has in fact been achieved many times in the past. On January 24, 1946, the UN General Assembly adopted its first resolution calling for the elimination of all atomic weapons and “all other major weapons adaptable to mass destruction.” Later, in 1978, the First Special Session of the UN General Assembly devoted to disarmament (SSOD I) agreed on a consensus Final Document that represents what is still the highest watermark of agreement on the entire range of disarmament issues and has never been surpassed. In 1996, with the sole exception of India, a consensus was also achieved on the CTBT. A bilateral consensus that “nuclear war cannot be won and must never be fought” was reached between Presidents Reagan and Gorbachev as a prelude to agreements on nuclear disarmament.

To be sure, such consensus has depended on a convergent political will among the leaders of the most powerful states, which all have elements of their security establishment that are deeply invested in nuclear arms. There are signs that, given the seriousness of the challenges confronting the international community, we may be able to go back to restoring this consensus as a step toward negotiating nuclear disarmament agreements and buttressing the NPT.

On January 4 the *Wall Street Journal* published a remarkable op-ed piece written by George Shultz, William Perry, Henry Kissinger, and Sam Nunn—all former holders of high office in the United States, all highly influential today. They called for “reversing reliance on nuclear weapons globally” and viewed the doctrine of nuclear deterrence as obsolete, increasingly hazardous, and decreasingly effective.¹³ Recalling past efforts to rid the world of nuclear weapons, they called for a rekindling of the Reagan-Gorbachev vision and the

achievement of a nuclear-weapon-free world as a “joint enterprise.” Identifying a series of agreed and urgent steps, the four included many of the measures featured in the thirteen steps of the 2000 NPT Review Conference and the sixty recommendations of the WMD Commission. The article was followed a few days later in the same newspaper by an article by former Soviet president Gorbachev endorsing the four Americans’ views and also calling for a dialogue between the nuclear weapon states and non-nuclear weapon states within the framework of the NPT on the elimination of nuclear weapons.

A breakthrough in reconstructing the fractured consensus must come through the political leadership of key countries. Public opinion—especially in democracies—can force policy changes through the electoral process, and civil society organizations must work relentlessly to achieve this.

In the next twenty months, four of the five nuclear weapon states in the NPT are due to change their longstanding political leadership. This provides a unique opportunity for a change of policy on nuclear weapons. First, the presidential election in France this spring (although the nuclear issue was not among the subjects being debated in the campaign); in the United Kingdom, Prime Minister Blair will step down in the course of this year; in 2008, both the Russian Federation and the United States will have elections for a new president. This virtually simultaneous change in the political leadership of key countries will provide an opportunity in the post-Cold War world to make fundamental changes that can pull the world back from the brink.

This new setting could be perfect for pursuing Recommendation 59 of the WMD Commission, which urges the convening of a world summit on the disarmament, nonproliferation, and terrorist use of weapons of mass destruction. The date for such a summit should be in 2009, providing thorough preparation and an opportunity for new leaders to take their seats. Such a summit would represent a historic moment for the world to prove that in this era of globalization we recognize the dangers to our global society and will take the right decisions at the right moment so that the world we live in can be a world future generations can live with.

CHAPTER 2

1. Jayantha Dhanapala, in “Weapons Threats and International Security: Rebuilding an Unraveled Consensus,” *Transcript*, February 26, 2007, available online at <http://www.tcf.org/list.asp?type=EV&pubid=176>.
2. Ibid.
3. Kofi Annan, “In Larger Freedom: Decision Time at the UN,” *Foreign Affairs*, May/June 2005.
4. Michael Krepon, in “Weapons Threats and International Security: Rebuilding an Unraveled Consensus.”
5. Filippo Formica, in “Weapons Threats and International Security: Rebuilding an Unraveled Consensus.”
6. Hans Blix, in “Weapons Threats and International Security: Rebuilding an Unraveled Consensus.”
7. James Leach, in “Weapons Threats and International Security: Rebuilding an Unraveled Consensus.”
8. *Weapons of Terror: Freeing the World of Nuclear, Biological and Chemical Arms* (Stockholm: Weapons of Mass Destruction Commission, 2006), available online at http://www.wmdcommission.org/files/Weapons_of_Terror.pdf.

CHAPTER 3

1. Jayantha Dhanapala was the UN under-secretary-general for disarmament affairs from 1998 to 2003 and is a former ambassador of Sri Lanka to the United States. The views expressed here are his own.
2. Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge: Cambridge University Press, 2007).
3. *IPCC Fourth Assessment Report: Climate Change 2007* (Geneva: Intergovernmental Panel on Climate Change, 2007).
4. In addition to these eight, the Democratic People’s Republic of Korea has conducted a nuclear weapons test and purportedly has assembled a handful of nuclear weapons, but has recently agreed to roll back its weapons development program.
5. Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed* (New York: Viking, 2004).
6. See Jayantha Dhanapala, *Multilateral Diplomacy and the NPT—An Insider’s Account* (Geneva: UNIDIR, 2005).

7. While India and Pakistan are not parties to the CTBT, as two of the forty-four countries with significant nuclear programs mentioned in an annex, the CTBT will require their signature and ratification to enter into force.

8. George Perkovich, “‘Democratic Bomb’: Failed Strategy,” Carnegie Endowment for International Peace Policy Brief no. 49, November 2006.

9. Henry A. Kissinger, “Diplomacy and Iran’s Nuclear Weapons,” *San Diego Union-Tribune*, February 13, 2005.

10. *Legality of the Threat or Use of Nuclear Weapons*, International Court of Justice (ICJ) advisory opinion, July 8, 1996. On the necessity of proportionality in deterrence, see Judgment Paragraphs 37–50.

11. *Report of the Canberra Commission on the Elimination of Nuclear Weapons* (Canberra: Australia Department of Foreign Affairs and Trade, August 1996), available online at <http://disarm.igc.org/oldwebpages/icjtext.html>.

12. *Weapons of Terror: Freeing the World of Nuclear, Biological and Chemical Arms* (Stockholm: Weapons of Mass Destruction Commission, 2006), available online at http://www.wmdcommission.org/files/Weapons_of_Terror.pdf.

13. George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, “A World Free of Nuclear Weapons,” *Wall Street Journal*, January 4, 2007, p. A15.

CHAPTER 4

1. Strobe Talbott, *The Master of the Game: Paul Nitze and the Nuclear Peace* (New York: Alfred A. Knopf, 1988), p. 15.

2. *The National Security Strategy of the United States of America* (Washington: The White House, September 2002), p. 1.

CHAPTER 5

1. The Commission for Conventional Armaments of the United Nations Security Council in 1948 defined WMD to be “atomic explosive weapons, radio-active material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb.” See