Introduction: The Nuclear Danger

"THE CROSSROADS OF radicalism and technology," said President George W. Bush, is the locus of "the gravest danger our nation faces." He was speaking of the acquisition of weapons of mass destruction—nuclear, chemical, biological, and radiological—by rogue states or terrorist groups. Any of these types of weapons would be a serious threat in the hands of those bent on causing enormous damage to achieve their ends. But nuclear weapons, as measured by their destructive potential, surely present the gravest danger.

Biological agents may ultimately come to rival nuclear weapons as a threat to the whole population but for now they should be feared primarily for their potential for creating havoc and terror. Chemical weapons already can kill on a large scale, but "mass destruction" is not the term that accurately describes their lethality. Civil defense and advanced medical techniques could potentially become very effective in mitigating the consequences of chemical and biological agents. Nuclear weapons, on the other hand, are so destructive that there is no practical way to make the consequences of their use more bearable for civilian populations.

These weapons are unique in their terrifying potential for massive destruction on an unprecedented and unimaginable scale. With them, for the first time in history mankind has the capacity to threaten human survival.

Father Bryan Hehir, former dean of Harvard Divinity School, observed in a keynote address on "Ethical Considerations of Living in the Nuclear Age" at a Stanford University conference in 1987:

> For millennia people believed that if anyone had the right to call the ultimate moment of truth, one must name that person God. Since the dawn of the nuclear age we have progressively acquired the capacity to call the ultimate moment of truth and we are not gods. But we must live with what we have created.

To avoid nuclear war and to contain and gradually to diminish the potential for nuclear devastation: these are the most compelling imperatives of our time. George Tenet, Director of Central Intelligence, has cautioned, however, that we are seeing "the continuing weakening of the international non-proliferation consensus," and "the domino theory of the 21st century may well be nuclear." Absent a vigorous diplomatic effort to prevent it, that prediction may turn out to be on the mark. India and Pakistan with help from abroad have developed and tested nuclear weapons but each is now regarded as a partner of the United States in the fight against terrorism. North Korea has withdrawn from the non-proliferation treaty and evicted inspectors from the International Atomic Energy Agency. The administration has rightly said that North Korea is a regional problem which it is now addressing as events move to a critical stage. Iran is proceeding to build the infrastructure for a nuclear weapons program. The treaty that would ban all tests of nuclear weapons remains unratified. A protocol that would strengthen the inspection authority of the International Atomic Energy Agency has

yet to be acted upon by many nations. Israel's undeclared nuclear weapons arsenal is untouched by any anti-proliferation effort in the Middle East.

The top priority of the United States, and of other leading nations, should be to strengthen the international non-proliferation consensus. Preventing nuclear proliferation is far preferable to dealing with its consequences. Some of the weakening of the global consensus is U.S.-inspired. Not only is the reluctance of the United States to ratify the Comprehensive Test Ban Treaty a serious blow to the nuclear Non-Proliferation Treaty, but strategic doctrines issued by the administration in 2002 have also raised serious questions and concerns. Much of the weakening, however, stems from a perception in several countries, particularly in Asia after the end of the bipolar order of the Cold War, that in a dangerous world nuclear weapons are essential for national security, and in addition contribute to prestige. The United States needs to reinvigorate its anti-proliferation policy, now increasingly viewed as selective in its application and as overly reliant on military force, an instrument that is mostly unusable, and only temporarily effective at best.

The nuclear genie cannot be put back in the bottle. It is a noble thing to strive for a world that achieves such human perfection that the complete elimination of nuclear weapons would be more than a distant dream, but that will not happen until a day that is far beyond the horizon of the most ambitious plans of the world's visionaries. For the foreseeable future the most urgent task is to successfully manage, contain, and reduce this gravest danger that our nation faces—nuclear weapons, whether in the hands of adversaries or of friendly states.

Good progress was being made until recently. With sustained effort, creative diplomacy, some wisdom, and a good measure of luck, the community of nations has, over the fifty-eight years since Hiroshima and Nagasaki, imprinted powerful traditions of non-use and non-possession of nuclear weapons on national behavior. Those norms have been challenged recently by India, Pakistan, Iraq, Iran, and North Korea. Others may not be far behind. The use of nuclear weapons in combat is becoming a plausible near-term possibility. The non-proliferation regime has also been threatened by the spread of weapons technology to more and more parts of the world. These advances are empowering people of evil intent, of which there is no shortage, by giving them ever more devastating means for destruction. Some of these people may be suicidal terrorists who view their cause as justifying any and all means, no matter how deadly and repugnant.

Governments that are responsible and well-intentioned by any fair standard also are being forced to consider something that previously had been unthinkable: whether to acquire nuclear weapons. This is particularly a problem in Asia, where the telltale signs of an incipient nuclear arms race already can be seen. If the international anti-proliferation consensus becomes seriously eroded, some nations that have relied on the U.S. nuclear umbrella may have to consider acquiring their own nuclear weapons. Even though such developments might not affect U.S. national security directly, they would doom the efforts of anti-proliferation policies to prevent the spread of nuclear weapons, to discourage the use of these weapons, and to roll back current programs. Ultimately, the Non-Proliferation Treaty would become a dead letter.

Recent events are discouraging and troubling, but there is still room for hope if the United States exerts its leadership with wisdom and patience.

Amidst the new challenges posed by terrorism and by the nexus of radicalism and technology, it is all too easy to forget the major successes achieved in containing the nuclear danger through patient diplomacy, including the coercive use of diplomacy. Preventive war was suggested in the 1950s when the Soviet Union, and in the 1960s when China, began to build their nuclear arsenals. But by the early years of the twenty-first century committed statecraft had created a world where most nations were overwhelmingly united in the quest to prevent proliferation of nuclear weapons.

Today, as shown in Figure 1, only eight nations are confirmed nuclear weapon states: the United States, the United Kingdom, Russia, China, and France, who have signed the Non-Proliferation Treaty; India and Pakistan who tested nuclear weapons designs five years ago; and Israel, a non-declared nuclear weapon state. The evidence is unclear as regards North Korea, even though North Korea's government wishes the world to believe it has them. This number is far smaller than was anticipated when the Non-Proliferation Treaty entered into force in 1970.

This slow pace of proliferation during the decades since Hiroshima and Nagasaki is all the more impressive when one adds up the number of nations that contemplated and, in some cases, actually started down the path to building nuclear weapons before abandoning them. And there are a number of other nations who, after flirting with the idea of acquiring nuclear weapons, realized that

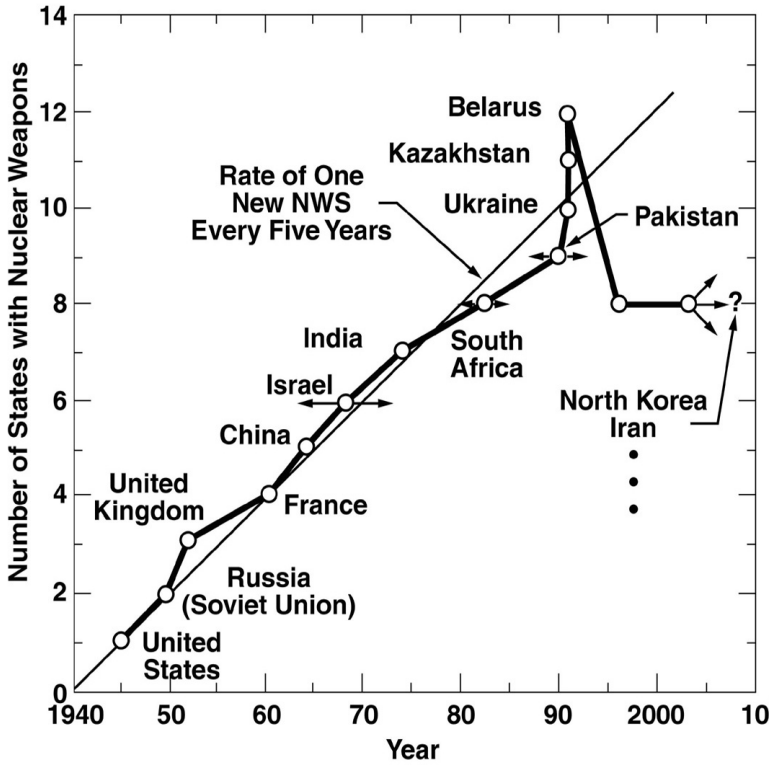

Figure 1 Number of states with nuclear weapons, by year, from 1945 to the present. South Africa, Belarus, Kazakhstan, and Ukraine disposed of their in the 1990s.

their security and the stability of the world were better served by their joining in developing a non-proliferation regime rather than a national nuclear force.

At present, all but four of the world's nations—India, Israel, Pakistan, plus North Korea which recently withdrew—have signed on to the indefinite extension of the nuclear Non-Proliferation Treaty. This record provides a strong basis for being optimistic about the continued success of patient diplomacy, creatively and aggressively

applied by the United States in partnership with like-minded nations.

The recent efforts of North Korea, Iran, and Iraq to build the basis for nuclear weapons programs have also taught us two lessons. One is that covert efforts may be successful temporarily in hiding the full extent of these programs, as in Iraq in the 1980s, and more recently in Iran and North Korea with respect to their uranium enrichment programs. But these programs did not evade detection for long. The same holds true for Israel, India, and Pakistan. The other lesson is that unless nuclear proliferation issues are addressed as integral parts of the broad security context in which these issues arise, proliferant countries sooner or later will try to slip out of any constraints that temporarily limit their nuclear ambitions. That was the case in North Korea and probably in Iraq as well. It is likely to be the case in Iran.

This book addresses actions and policies that the community of nations—with American leadership—should take to confront and turn back the nuclear danger that imperils humanity. Some of the actions and policies that will be presented and defended in this book are as follows:

- Waging a long-term campaign against nuclear proliferation is essential for the security of the United States and other nations. Losing that struggle would change the daily lives of ordinary citizens and accentuate the kinds of instabilities that were felt in the aftermath of 9/11. The use of nuclear weapons in war might become commonplace and endanger civilization.
- So far, the battle to contain and roll back the number of nuclear weapon states has been successful. Several

nations have renounced nuclear weapons and only eight now possess them. The prospects are good that we can do at least as well in the next fifty years if the United States, in partnership with other major powers, adopts comprehensive rollback policies.

- Pre-emption to destroy an impending strike with nuclear weapons is an entirely justifiable action, but it requires exquisite intelligence and public understanding.
- Preventive war to forestall a nuclear threat that is potential but not yet imminent is the policy that the administration has adopted and used as a major factor in the case of Iraq. The occasions for exercising that policy are likely to be quite limited.
- A range of policies and programs designed to deny access to nuclear weapons to nations and sub-state entities have been employed and, to a degree, have worked. These include export controls, which need to be more uniformly applied. Cooperative threat reduction (the Nunn-Lugar program) has been successful but needs much more resources and improved cooperation in efforts to remove impediments to progress. Ballistic missile defense, designed to dissuade states from acquiring nuclear weapons or to blunt an attack if dissuasion fails, is expected to be of limited value. Intelligence is critical, and needs to be strengthened.
- International organizations can help in the campaign, especially the International Atomic Energy Agency (IAEA), and the United Nations Security Council (UNSC) in an enforcement role. The inspection mandate of the IAEA needs to be strengthened as soon as

possible. The UNSC also needs greater help from the IAEA in combating nuclear terrorism.

- The two states possessing more than 90 percent of the nuclear weapons of the world—the United States and Russia—have unfinished business left over from the Cold War. The Bush-Putin Declaration of Moscow in May 2002 had an excellent agenda for completing that business but it is languishing, unimplemented. That situation must be changed.
- China and the United States need to engage more systematically on nuclear issues. One tool that would help would be a bilateral Consultative Commission at the ministerial level.
- The administration favors a "targeted strategy" to deal with specific nations considered potential proliferants. The idea is sound but should encompass cooperation, as well as confrontation, and should view the problem in the context of the strategic circumstances that motivated decisions to develop nuclear weapons.
- Although some Americans expect other nations to follow the U.S. lead in matters of war and peace (and are surprised if they do not), these same Americans argue that what Washington says and does about nuclear weapons has no effect on other countries. Of course, the dynamics of military interaction works today as it has in the past: If the United States places more reliance on nuclear weapons, other nations will too. U.S. policies need to be carefully reviewed for their potential impact abroad.
- Since 1945 restraint in nuclear affairs has played an

important role in preventing the use of nuclear weapons in war. It has helped to limit the number of nuclear weapon states to eight. The Non-Proliferation Treaty must be bolstered with other actions. These include U.S. reductions in nuclear weapons; continuing the non-use tradition; reducing the salience of nuclear weapons in the U.S. military strategy; continuing the moratorium on underground tests of nuclear weapons and ratifying the Comprehensive Test Ban Treaty (CTBT).

- The threat posed by nuclear proliferation requires new forms of defense cooperation on a multilateral basis. A multilateral ballistic missile early warning system and a cooperative effort to develop a ballistic missile defense would help to build a stronger anti-proliferation coalition. Cooperative threat reduction also should be made a global program.