Chapter 1

The Specter of Nuclear, Biological, and Chemical Weapons Proliferation

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In the past decade, the United States and other responsible nations have become increasingly concerned that growing numbers of states and even sub-state organizations will obtain nuclear, biological, or chemical (NBC) weapons capable of causing massive destruction. These types of weapons are spreading.\(^1\) India and Pakistan have both recently carried out multiple nuclear weapons tests. The agreement under which North Korea suspended its nuclear weapons program appears to be unraveling.\(^2\) And a number of antagonistic states, such as Iraq, North Korea, Iran, and Libya are trying to obtain NBC weapons.\(^3\)

The public’s awareness of the harm these weapons could cause is being heightened. For example, retired military officers who once commanded nuclear arsenals have highlighted the dangers of maintaining these forces.\(^4\) The chemical attacks by Japanese terrorists that caused

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3. Beyond the five declared nuclear powers, “at least 25 countries already have or may be developing nuclear, biological, or chemical weapons, or their missile delivery systems.” Report on Activities and Programs for Countering Proliferation and NBC Terrorism, Counterproliferation Program Review Committee (Washington, D.C.: United States Department of Defense, May 1998), p. 3-1.

nearly 20 deaths and 6,000 injuries captured public attention worldwide.\footnote{The Continuing Threat from Weapons of Mass Destruction (Nonproliferation Center, Office of the Director of U.S. Central Intelligence, March 1996), p. 5.}

And the horrors of biological weapons have been publicized in a variety of recent literary works and television programs.\footnote{For example, see Richard Preston, The Cobra Event (New York: Random House, 1997); and John F. Case, The First Horseman (Fawcett, 1998); in addition, television series such as Seven Days and The X-Files have dealt with the concept of biological warfare. Finally, numerous nonfictional documentaries and reports have been filed by the news media in relation to domestic anthrax scares, the Iraqi biological weapons program, and revelations that Russia continues to work on biological weapons.}

The U.S. government is sufficiently concerned about the potential for use of biological weapons on the battlefield to take action. During the Gulf War, it vaccinated as many troops as possible against anthrax. And the Department of Defense has begun a program that will ultimately provide vaccinations against anthrax to all active-duty military service members and reservists.\footnote{“Total Force Anthrax Vaccinations To Begin,” DefenseLINK Release No. 430-98, August 14, 1998 (http://www.defenselink.mil/news/Aug1998/b08141998_b430-98.html).}

Most importantly, policymakers and the public sense that the proliferation of NBC weapons may lead the nation to a most difficult dilemma: If important U.S. overseas interests are challenged by states newly armed with such weapons, the United States must choose between running the sharply increased risks of defending its interests, or compromising those interests, together with its reputation for military preeminence and a willingness to protect allies and friends.

These concerns have led to new initiatives aimed at slowing or reversing the proliferation of NBC weapons. In recent years, the U.S. government has brokered agreements that have led three newly independent states to give up the nuclear arsenals they had inherited from the Soviet Union. Multiyear legislation sponsored by Senators Sam Nunn, Richard Lugar, and Pete Domenici has provided funds to reduce Soviet and now Russian nuclear forces and to minimize the prospects that the materials and expertise necessary for creating nuclear weapons will leak out of the former Soviet Union.

In addition, the United States continues to support a sputtering and still incomplete United Nations (UN) program to root out Iraq’s NBC programs. The United States was also instrumental in winning the indefinite extension of the Nuclear Non-Proliferation Treaty (NPT) in 1995. And, together with the other declared nuclear powers, the United States has suspended its nuclear testing program with the expectation that all
nuclear and nuclear-capable states will eventually join the Comprehensive Test Ban Treaty.

In recent years, the United States has also taken new steps to counter the capabilities of proliferators to effectively threaten or actually use NBC weapons. These steps include a multiyear Counter-Proliferation Initiative (CPI) to develop new technologies that can allow these weapons to be attacked and destroyed before they can be used, or intercepted after they have been launched but before they reach their targets.8 The CPI is also improving the protection of U.S. forces against chemical and biological agents that do arrive in their vicinities. In addition, U.S. military planners are developing operational concepts and plans for employing forces so that they can perform their missions with minimal risks of defeat or of suffering historically unprecedented losses from NBC attacks. Finally, some initial steps have been taken toward cooperative counterproliferation efforts with key allies.9

Impressive as these various nonproliferation and counterproliferation actions may be, they are only a start toward the goal of denying proliferators the potential destructive and coercive power of NBC weapons. Among the larger efforts that lie ahead, three efforts stand out. First, the creation of an effective defense against the kinds of NBC capabilities that proliferators might aspire to—especially considering the many different forms that these weapons and their means of delivery might take—is a task with substantial technical difficulties and costs.

Second, for political as well as practical reasons, the United States cannot bear all the burdens of countering NBC weapons. Other states that can be threatened by these weapons, or that are relatively capable of contributing to efforts to counter them, must be convinced to participate and to take the necessary actions, including cooperative efforts to protect against NBC attacks. In addition, partners will need to be visibly involved if they are to share adequately the responsibility for military actions that might be required against an NBC-armed regional challenger. Such involvement requires cooperative efforts to prepare other states’ forces to fight effectively alongside those of the United States. It also means involving prospective partners in the key decisions regarding military objectives and the possible retaliatory use of nuclear weapons, should that prove necessary.


Third, the United States and other cooperating governments must develop a better public awareness of the need to prevent and counter the proliferation of NBC weapons. In particular, publics must be prepared to face the possibility of challenges to important interests by NBC-armed regional aggressors and to support the necessary political and military preparations. Waiting until such a challenge materializes to clarify the potential stakes and risks and the pros and cons of alternative courses of action increases the chances of political confusion and devastating mistakes, and the chances that such challenges would arise in the first place.

Clearly, the overall political and technical effort required to halt, roll back, and counter the continued proliferation of NBC weapons is very substantial. Will the United States prove willing over the long haul to bear the costs and other burdens involved?

The answer is far from clear. Rather than defend against the Soviet Union’s nuclear capabilities in any significant way, for decades the United States accepted a mutual nuclear deterrence relationship. Its willingness to compromise its policy of punishing Pakistan and India for pursuing nuclear weapons and to overlook Israel’s nuclear weapons program demonstrates that nonproliferation is not always the highest priority for the United States. In addition, while the frightening specters of NBC attacks on U.S. forces or cities are disturbing, they are hard for the U.S. public to take too seriously—the public tolerated such fears for the decades of the Cold War. Moreover, it is even easier to discount the possibility of such attacks by renegade states that have not been seen as major powers in the past, and whose military capabilities are so modest compared to those of the United States and its allies.

But the possibility of such attacks cannot be discounted—and the preparations that the United States makes to meet such challenges will strongly affect the outcome of such an attack. Rather than wait until an NBC-armed state challenges an important regional interest, rather than wait until the discomforts of accommodating to a world in which NBC proliferation gives otherwise minor powers influence disproportionate to their populations, productivity, or moral considerations, we must find the motivation now to face the problem of proliferation more seriously. A deeper and broader appreciation of the eventual implications of continued proliferation of NBC weapons will allow the United States and its allies to trade the risks and discomforts of dangerous confrontations and twisted world orders for the burdens of preparation and avoidance.

The goal of this book is to help develop such an appreciation. It is an attempt to anticipate some of the ways in which continued proliferation of NBC weapons is likely to pose challenges to the United States and other supporters of a gracefully evolving liberal world order. It is also a
hard look at the kinds of painful dilemmas and actions that will likely be forced on the responsible world community if strong measures to counter proliferation are not taken. In this book, six academics join with several analysts at the Institute for Defense Analyses to explore some of the implications of continued and uncountered proliferation of NBC weapons. I invited the authors to address any of the following list of questions, or any alternative question my list suggested:

• What changes might continuing proliferation of NBC weapons be expected to have in the long run on the nature of international relations? How would such changes affect the interests of the United States and the larger global community? What could be done to mitigate these effects if proliferation cannot be halted?
• What political-military problems are involved in creating and maintaining international coalitions for intervening against an NBC-armed regional challenger?
• How must a war against a regional challenger that threatens or employs NBC weapons end?
• What can be learned about a nation’s biases toward the acquisition and use of NBC weapons from studying its “strategic personality”?

Every prospective explorer approached accepted this invitation with alacrity. Their explorations, presented in the following eight chapters, provide many arguments and insights that are contrary to the conventional wisdom in this area.

While all the chapters were drafted independently, some have influenced others. This resulted from a two-day meeting of the authors at the Institute for Defense Analyses to present their drafts to a small group of experts.

The first part of the book looks at some of the different motivations states see for acquiring nuclear weapons, and how proliferation is creating the potential for dangerous crises in which nuclear weapons might get used. The second part explores other potential consequences of continued nuclear proliferation, and in particular, how a crisis in which a nuclear-armed aggressor challenges the United States might evolve. In order of presentation, then, the main arguments of the chapters are as follows.

Pressures for Nuclear Proliferation and Crises

In Chapter 2, “Rethinking the Causes of Nuclear Proliferation: Three Models in Search of a Bomb,” Scott D. Sagan notes the scant attention paid to the question of why states build nuclear weapons. Sagan argues
that this lack of attention follows from a near consensus that nuclear weapons are only built to meet security threats that cannot be met by other means (the security model). Sagan challenges this assumption, presenting evidence that nuclear weapons also serve other less obvious, parochial purposes. Nuclear weapons are important objects in bureaucratic struggles and internal debates (the domestic politics model), and they can serve as important symbols of a state’s modernity and identity (the norms model).

Sagan points out that the most appropriate nonproliferation policies for a state depend upon the model that best explains why it might seek nuclear weapons, and that some of the policies called for by different models can be contradictory. For example, while the security model calls for extending nuclear deterrence assurances to states facing threats that might otherwise lead them to build their own weapons, the norms model argues against giving nuclear weapons the importance that such a role would suggest. Similarly, the perceived value of nuclear weapons is raised if the United States, with its great conventional military power, feels it must deter chemical and biological attacks with the threat of nuclear retaliation. Finally, Sagan argues that the United States is going to have to choose either to “wean” its allies away from extended nuclear deterrent guarantees or accept the equally difficult task of maintaining a norm against nuclear proliferation that it does not honor itself.

In Chapter 3, “Universal Deterrence or Conceptual Collapse? Liberal Pessimism and Utopian Realism,” Richard K. Betts argues that while the “utopian realists,” who see the spread of nuclear weapons as leading to universal mutual deterrence and military restraint, may correctly predict the effect of continued proliferation in nearly all cases, the “liberal pessimists,” who view the spread of nuclear weapons with alarm, are probably also right in assuming that increased numbers of nuclear-armed states means an increased likelihood that nuclear weapons eventually will be used.

Betts further argues that the ramifications of a breakdown in the taboo on nuclear use are too unpredictable for anyone to want to run this experiment. He describes a variety of ways in which the taboo could break down. For example, while most states would want nuclear weapons for strictly defensive reasons, a few might become emboldened to try aggression and end up in a dangerous confrontation with a nuclear-armed superpower accustomed to intervening in areas of vital interest. Betts points out that the United States and the Soviet Union took approximately fifteen years to work out ways to avoid dangerous confrontations and had some very tense moments along the way. He also notes that the logic of deterrence theory may not be obvious to individuals in countries.
for whom these questions are new, and that madness and irrationality do sometimes occur in the behavior of political leaders.

Finally, Betts argues that while the shock of the next use of nuclear weapons could lead either to faster proliferation or to far stronger efforts to roll it back, it seems improbable that the willingness of the United States and others to rely on nuclear deterrence would remain unshaken.

In Chapter 4, “The National Myth and Strategic Personality of Iran: A Counterproliferation Perspective,” Caroline F. Ziemke argues that every nation has a strategic personality that defines how it is disposed to behave toward other nations. Ziemke states that this personality can be discerned by studying a nation’s public myth, the stories and themes it uses to illuminate for itself its social and ethical norms and its collective identity. Thus, an understanding of a proliferator’s national myth may provide important insights into why it might want nuclear weapons and the purposes to which it might put such weapons.

Ziemke’s reading of Iran’s national myth indicates that Iran is supremely confident of the superiority of its culture. It sees its troubled history since the glory of the Persian Empire solely as the result of invasions and evil influences from the outside world. Consistent with this, the United States, with its corrupting material culture and its decades of meddling in Iranian affairs, is seen as the embodiment of foreign evil, the “Great Satan.”

Ziemke employs Iran’s national myth to interpret its foreign policy and intentions for nuclear weapons. She argues that Iran wants most of all to win the respect that its superior culture deserves. It also wants hegemonic influence over the Persian Gulf region, which requires that the United States leave, and it wants to be safe from potential enemies, particularly Iraq. However, it is not interested in actually conquering its neighbors. Thus, Ziemke sees Iran wanting nuclear weapons to inspire respect and fear, and as insurance against invasion, but not as backing for conventional aggression.

Ziemke also argues that Iran is very unlikely to risk the first use of nuclear weapons against the United States or its allies unless it were about to be overwhelmed. Iran “knows” the “Great Satan” is perfectly willing to annihilate it in response to any first use of nuclear weapons against the United States. Its national myth also points to a ruling elite that will not risk the survival of the Iranian faithful, to whom it sees itself accountable.

Ziemke points out the contradictory natures of U.S. and Iranian foreign policies toward each other. Iran wants the United States out of the Persian Gulf, but threatens its neighbors in ways that increase their
interest in U.S. protection. The United States wants Iran to stop supporting terrorism and to halt its nuclear program, but reinforces Iranian paranoia with the dual containment policy, and gives Iran the psychological victories it craves with every protest against Iranian actions and every successful penetration of the U.S. arms embargo. Rationalizing these contradictory policies will take a great deal of time and effort on both sides, but seems worthwhile given the substantial interests the two sides actually have in common. Clearly, a good understanding of each other’s interests and values will become even more important should Iran create significant capabilities to threaten and use NBC weapons.

These three chapters constituting Part I of the book lead me to three related conclusions. Sagan’s chapter suggests that effective policies for stopping nuclear proliferation are going to be even more difficult to find and implement than the nonproliferation community has supposed. Betts’s chapter then tells us that there are many ways for dangerous crises to emerge that would threaten the use of nuclear weapons both as proliferation continues and even in a fully proliferated world. Third, Ziemke’s chapter suggests that nuclear challenges may be less likely to emerge from some members of the current rogues’ gallery, in this case Iran, than is commonly supposed. Ziemke’s chapter is also interesting for its use of the concept of strategic personality to discern a state’s likely behavior. I employ this concept extensively in the concluding chapter.

Collectively, these three chapters suggest that a complete halt to nuclear proliferation may be even more difficult to achieve than has been commonly supposed. They also highlight the importance of tailoring nonproliferation policies to the specific countries and regions in question.

Potential Evolution and Consequences of a Nuclear Crisis with the United States

In Chapter 5, “Nuclear Proliferation and Alliance Relations,” Stephen Peter Rosen argues that with the end of the Cold War, nuclear proliferation will now weaken alliances rather than strengthen them. He reasons that the risks of becoming involved in a crisis with a nuclear-armed regional aggressor have always seemed high, but that the incentives to become involved are now much weaker. In particular, staying on the sidelines no longer threatens some disadvantage in a long-term geopolitical competition for the highest stakes, nor that the unattended crisis might somehow catalyze a global nuclear war.

Rosen explores the risks of intervention against a nuclear-armed regional power by reasoning through a scenario in which Iraq had half a dozen nuclear weapons when it invaded Kuwait in 1990. Rosen sees
the aggressor as able to employ nuclear weapons to prevent or collapse support from allies that the United States would need, or to destroy the ports necessary for a timely intervention before the United States could reach them. He sees few opportunities for the United States to threaten or use its nuclear weapons with both comparable military effect and destruction. Rosen also sees the United States as greatly concerned about the large numbers of forces it could lose to a nuclear strike against a crowded port.

Rosen argues that his assessment applies generally to interventions against nuclear-armed regional states, and believes that it is likely to be widely understood and appreciated both by regional allies and opponents. Thus, regional nuclear proliferation will devalue and erode U.S. alliances. This would happen particularly quickly should a crisis reveal that the United States is unwilling to intervene against a nuclear-armed regional aggressor.

In Chapter 6, “U.S. Security Policy in a Nuclear-Armed World, or What If Iraq Had Had Nuclear Weapons?” Barry R. Posen also assesses a counterfactual 1990–91 scenario in which Iraq had half a dozen survivable and deliverable nuclear weapons. Posen sees this scenario (and thus its prospective future analogue) as a defining moment for the future of nuclear weapons, U.S. credibility as a reliable protector, and the nature of world order.

Posen argues that if the United States had accepted Kuwait’s conquest by a nuclear-armed Iraq, nuclear weapons would have been redefined as effective offensive weapons: they would have deterred a far stronger United States from rolling back a conquest made with conventional forces. Nuclear weapons would no longer be strictly defenders of the status quo, as they have been since World War II. Posen argues that this changed role for nuclear weapons would lead to a “hellishly competitive world” as aggressors rush to get nuclear weapons and potential victims, including shaken long-term U.S. allies, scramble to beat them to it. Incentives would rise for wars to prevent neighbors from getting nuclear weapons, or to capitalize on military advantages before they are offset. The world might ultimately settle into equilibrium of many mutual deterrence relationships, but the long transition would be “very exciting.” Posen sees this world as forcing the United States into an uncomfortable isolation or into adopting very difficult and burdensome policies to counter the effects of having balked in the first place.

Thus, Posen argues in favor of intervening. To help minimize the prospects that Iraq would use its presumed nuclear weapons, he suggests making “ferocious threats” of nuclear retaliation, and clearly limiting U.S. military goals well short of threatening Iraq’s total defeat. Posen admits
that this reemphasis of nuclear deterrence would do some damage to U.S. nonproliferation policy, but argues that failure to intervene and to minimize the prospects of nuclear use by the opponent would do even more. Finally, Posen suggests a campaign to clarify to all states involved in the crisis the unacceptable long-term consequences for the United States of failing to roll back Iraq’s gains.

Posen’s analysis of the official strategy debates during the actual 1990–91 Persian Gulf War suggests that had Iraq actually been nuclear-armed, his recommendations would have gotten a sympathetic hearing. Finally, Posen argues the United States will eventually face a defining moment of this kind and should think it through in advance.

In Chapter 7, “Containing Rogues and Renegades: Coalition Strategies and Counterproliferation,” Stephen M. Walt argues that history does not support the pessimism of many strategic planners about prospects for containing rogue regimes, or their warnings that the spread of nuclear weapons would have corrosive effects on important U.S. commitments. Walt says that states have usually been willing to ally with a strong power to balance threats posed by neighbors having powerful offensive forces and obvious aggressive intent.

Walt points out that such willingness to confront even powers armed with nuclear weapons has been well demonstrated by history. He also points out that great power allies, and particularly the United States, will be available, given their strong interest in preventing nuclear weapons from being used for coercion or as a shield for conventional aggression.

Walt argues that defensive coalitions for containing aggressive states are far easier to form and maintain than offensive coalitions. Defensive coalitions should prove willing to force an aggressor to relinquish any conquests, though not to try to overthrow the rogue government. To facilitate the formation of coalitions for containment, Walt recommends aggressive collection of intelligence that would reveal the intentions and capabilities of rogue states. He recommends arrangements to share the costs and risks in a reasonably equitable manner. He further recommends assuring potential aggressors that the United States will not seek their overthrow if they remain peaceful, but will oust them if they attack their neighbors with nuclear weapons. Walt also highlights the need to maintain the strong defensive capabilities required to assure threatened states that an alliance with the United States can protect them.

In Chapter 8, “The Response to Renegade Use of Weapons of Mass Destruction,” George H. Quester argues that if a renegade state were to use weapons of mass destruction against the United States and its allies, the U.S. response is more likely to be guided by the norms of the U.S. law enforcement system and the historical precedents of World War II
than by the Cold War theory that unconditional surrender can never be sought from a state possessing such weapons.

Quester points out that domestic criminals are jailed for a combination of four purposes: to disarm them, to make them an example to others, to impose revenge on behalf of victims, and to reform them. Similarly, in World War II, criminal regimes in Germany and Japan that destroyed massive numbers of other states’ civilians and soldiers were disarmed. Both states were subjected to very destructive mass bombing that satisfied discernible urges for revenge and the creation of examples for the future. Finally, the political systems of both states were fundamentally reformed. In contrast, had the Soviet Union used nuclear weapons against the United States and its allies, any realistic pursuit of all four of these goals would have been unthinkable. A massive attack by the Soviet Union would have left the United States capable of little more than an angry and apocalyptic revenge. Limited use might have led to retaliation aimed more at disarmament, setting an example for the future, and a lesser revenge. However, pursuit of unconditional surrender and political reform of the Soviet Union would have risked escalation of the war and the annihilation of both sides.

Quester argues that renegade states with small to modest capabilities for mass destruction will be seen as too dangerous to live with once they use these weapons, but not too dangerous to defeat. Quester notes that counterproliferation programs that reduce the destruction a renegade could do would make it even clearer that the United States will not be bound by Cold War nuclear theory, but will follow its sense that seeking unconditional surrender of such a renegade is the “right thing to do.”

Finally, in Chapter 9, “Rethinking How Wars Must End: NBC War Termination Issues in the Post–Cold War Era,” Brad Roberts argues that in wars against NBC-armed regional challengers, the enormous advantages in power and overall survivability of the United States and its allies would allow them to choose how these conflicts will end. Roberts goes on to argue that stalemate would likely seem unacceptable, and that unconditional surrender and political reform of the opponent would seem necessary, if the opponent does substantial damage with NBC weapons. Perhaps most important, he argues that the United States will have to choose a course of action that addresses both the immediate problems posed by the war and the longer-term U.S. interests in the peace that follows.

Thus, the United States must not be seen as a “nuclear bully” that was overcome by rage and fear and used its weapons in impulsive, imperious, and excessively destructive ways. Such actions could lead to a widespread view that U.S. military power is too dangerous and needs
to be counterbalanced, and could encourage further proliferation of NBC weapons. Alternatively, the United States must not be seen as a “nuclear wimp” whose fears of staying the course led it to appease an NBC-armed aggressor. This could encourage tests of U.S. willingness to defend other interests, undermine U.S. security guarantees, and thus spur further proliferation of NBC weapons by allies. It could also lead to a political backlash against those who had caused such a U.S. decline.

Instead, Roberts argues that the United States should seek to be seen as a responsible and just steward of the collective good. This requires ending the conflict in ways that resolve its underlying cause, that remove the threat posed by the aggressor, and that use nuclear weapons only to the extent that they appear needed to end the war and to save lives. Finally, Roberts argues that emerging from such a war as a just and responsible steward will be easier if the United States does three things. First, it must reduce its own and help to reduce its allies’ vulnerabilities to NBC attack. Second, it must work with allies, the Congress, and the public to shape the political context for regional conflict involving NBC weapons. And, third, it is especially important to let potential aggressors understand how the United States would likely see its alternatives in such a conflict.

The main conclusion I draw from Part II of the book is that the United States seems likely to prove more resolute than much of the community that is expert on nuclear proliferation and its potential consequences seems to believe. Rosen argues that the United States would not see a net advantage in opposing regional aggression backed by nuclear weapons and thus that potential allies would not trust alliance with the United States to save them: all the following chapters argue the opposite.

In closing this introductory chapter, let me emphasize that I have presented only a few of the points made by each of my colleagues, and even fewer of the strong justifications they present in defense of their points. Moreover, my selections and renditions of their arguments are surely colored by my own views. Thus, I delay any further comments or interpretations of their work until Chapter 10, when the reader will have had a chance to read their work and to form his or her own opinions.

Chapter 10, which notes the different perspectives that the authors have brought to their analyses, argues that projections of the likely behavior of the United States and other nations can profit from bringing more consciously balanced mixtures of perspectives to bear. It then adds a strong measure of the strategic personality perspective to those of the other authors in an attempt to project likely U.S. behavior in response to
several of the more important questions that would be posed when confronting nuclear-backed aggression.

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