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Part II

Nuclear Strategy

Strategy is the art of matching the instruments of national power—in this case nuclear weapons and related doctrines—to the goals of national policy. Any comprehensive discussion of U.S. nuclear policy must examine the role of nuclear weapons in achieving U.S. foreign policy and defense policy goals.

Opinion about the appropriate role of nuclear weapons is sharply divided. Some observers see them as valuable instruments of statecraft, the foundation of global stability, useful for deterring a wide range of threats to U.S. interests. Indeed, the United States still reserves the right to use nuclear weapons first, although the logical basis for that policy evaporated with the end of the cold war. Even the promise not to use nuclear weapons against countries that do not possess them has been severely eroded in recent years as nuclear forces have been considered for deterring or responding to attacks by chemical or biological weapons. Finally, and most important to our deep cuts and de-alerting proposals, official U.S. policy clings to cold war concepts that emphasize the importance of constantly standing ready to deliver a quick and massive attack against opposing nuclear forces.

We believe that such policies are fundamentally misguided. The overriding goal of U.S. policy should be to prevent the use, threat of use, or further spread of nuclear weapons. In the long term this can be accomplished only if the United States demonstrates by its own actions and policies that nuclear weapons are not useful instruments of military power. The United States should make clear in both its declared policy and operational doctrine that it possesses nuclear weapons only to deter the use of nuclear weapons by other states. Accordingly, it should promise never to initiate the use of nuclear weapons. Rather than plan and practice massive rapid attacks against Russian nuclear forces, the United States should strengthen its ability to delay retaliation and to design responses that are tailored to unique and unforeseeable circumstances.

This discussion focuses on the United States, not because other states are unimportant but because the United States is best placed to take the lead in developing and presenting a vision for the role of nuclear weapons in the post—cold war world. As the first country to develop and the only country to use nuclear weapons, and as the country with the most secure and sophisticated nuclear arsenal, the United States has a unique responsibility to take the lead. The U.S. government is more open and responsive to pressure for change in this area than are the governments of most of the other nuclear weapon states. These other states will, of course, make their own judgments about how nuclear weapons serve their interests, but their reasoning and conclusions should be similar to those given here for the United States.

Chapter 3 focuses on the overall question of what nuclear weapons are for. Chapter 4 explores nuclear strategy and targeting doctrine for strategic nuclear weapons.

Chapter 3

Limiting the Role of Nuclear Weapons

At the risk of oversimplification, U.S. foreign policy goals are to foster an international environment that protects and improves the welfare and prosperity of U.S. citizens and to promote the spread of democracy, respect for human rights, the rule of law, and other basic American values. To achieve these goals, the United States has entered into alliances with important countries in western Europe, East Asia, and the Middle East. Protecting the security of these states has also become a goal of U.S. foreign policy.

During the cold war, nuclear weapons were viewed as useful, and perhaps essential, tools for achieving U.S. foreign and defense policy goals. The Soviet Union and China were considered potent threats to U.S. interests, with large armies that were thought to be ready, willing, and able to subjugate most of Eurasia. The United States believed that the independence of states in this region, particularly industrial powers such as Japan, Germany, France, Italy, and the United Kingdom, was vital to its security and prosperity. Initially, policymakers believed that the atomic bomb would serve as the ultimate trump card that would force Soviet leaders to bend to U.S. desires in Europe and Asia.¹ But they came to realize that the utility of nuclear threats was very limited, both because of the enormously destructive nature of the threat and because the Soviet Union quickly developed a nuclear arsenal of its own.

After the United States lost its nuclear monopoly, nuclear weapons nevertheless remained central in its foreign policy as a deterrent to overwhelming attacks on allies who, it was argued, could not be defended by conventional means alone. However, because of the inherent difficulty in convincing the Soviet Union and U.S. allies that the United States would risk its own destruction by using nuclear weapons to defend its allies, the United States searched constantly for options that would improve the credibility of its nuclear umbrella.²

U.S. reliance on nuclear weapons helped spur massive growth in the Soviet nuclear arsenal, and for the first time in more than a century America became vulnerable to devastating attacks by a foreign power. It sought to deter this threat with a strategy that would deny any advantage to the Soviet Union in a nuclear war of any size or duration. To this end, new warheads, missiles, and bombers were deployed and maintained at high states of readiness. The resulting situation, in which both superpowers continuously maintained forces capable of instant and immense destruction, was considered by many Western policymakers an unavoidable, albeit regrettable, price of preserving a favorable world order.

The foundation of U.S. nuclear policy crumbled with the breakup of the Warsaw Pact and the Soviet Union. Russia and China are no longer considered immediate threats to U.S. interests, and nuclear weapons are no longer needed to deter attacks by hostile countries with superior armies. The military and economic strength of the United States and its allies far exceeds that of all potential adversaries.³ Most U.S. allies can defend themselves against any plausible nonnuclear

external threat, and those that cannot can rely on the conventional military strength of the United States and other allies.

Although the benefits once attributed to nuclear weapons have waned, the weapons continue to pose a real and present danger to U.S. security. Nations armed with a few tens of nuclear weapons can destroy the United States. Nuclear weapons are the great equalizer. They allow small and otherwise weak countries to threaten much larger and more powerful countries. This observation led former U.S. Secretary of Defense Les Aspin to conclude that the United States would be better off if nuclear weapons did not exist.⁴

Nuclear weapons cannot be disinvented, of course, but the taboo on their use can be strengthened. They have not been used since the bombings of Hiroshima and Nagasaki more than fifty years ago. On those increasingly rare occasions when U.S. officials have made threats, they have been vague and oblique and have omitted the word “nuclear,” referring instead to “the strongest possible response,” “devastating force,” or “any capability available to us.”⁵ An international norm has developed against the use or explicit threat of use of nuclear weapons. The United States is a primary beneficiary of this taboo, and it compromises the taboo at its own peril.

A related but weaker norm has developed against the spread of nuclear weapons. The five nuclear weapon states, the only countries that admit to deploying the weapons, first acquired them between 1945 and 1964. The four countries that subsequently developed nuclear weapons—Israel, India, Pakistan, and South Africa—did so in secret, partly because they feared international sanctions if they announced their nuclear status.⁶ A number of states considered but abandoned the nuclear option, including Sweden, South Korea, and Taiwan. The nonproliferation norm was strengthened greatly during the 1990s as Iraq, North Korea, South Africa, Brazil, Argentina, Ukraine, Kazakhstan, and Belarus were impelled, were induced, or volunteered to forsake a nuclear weapon capability.

The centerpiece of efforts to stop the spread of nuclear weapons is the Non-Proliferation Treaty (NPT) in which the five nuclear weapon states agree not to help countries acquire nuclear weapons and all other parties promise not acquire such weapons. To secure support for the treaty and its indefinite extension in 1995, the nuclear weapon states made three important promises. First, they promised not to use nuclear weapons against nonnuclear weapon states that are parties to the NPT.⁷ Second, they pledged to act immediately to provide assistance to such states if they are the victim of, or are threatened with, aggression involving nuclear weapons.⁸ Third, they agreed to pursue nuclear arms control and disarmament.⁹ Partly as a result of these assurances, the NPT has been a remarkable success: only four countries—Cuba, India, Israel, and Pakistan—have not signed the treaty. In addition to their NPT-related pledges, the nuclear weapon states have agreed to respect nuclear weapon-free zones in Latin America, Africa, the South Pacific, and Southeast Asia, in which they may not deploy, use, or threaten to use nuclear weapons.

The international norms that have developed against the use or the further spread of nuclear weapons are extremely valuable to U.S. security. Strengthening these norms should be the central goal of U.S. nuclear policy. Whatever benefits one might imagine could be derived from using, threatening to use, or reserving the right to use nuclear weapons in a particular situation

must be weighed against the long-term costs of weakening the taboos on the use or the spread of nuclear weapons.

To maintain and strengthen these norms, U.S. nuclear weapons should be strictly limited to what the U.S. National Academy of Sciences refers to as the “core function” of nuclear weapons: deterring their use against the United States and its allies.¹⁰ Accordingly, the United States should promise never to use nuclear weapons first. Even this function may atrophy if U.S. relations with Russia and China continue to improve. The mere existence of nuclear weapons inevitably introduces an element of caution into all possible military interactions, but explicit posturing of nuclear forces to deter other than nuclear threats is unnecessary and detrimental to U.S. security and international stability.

But other roles for nuclear weapons have not been advanced in the post—cold-war world.¹¹ The most recent official reviews of U.S. nuclear policy, the Nuclear Posture Review and presidential decision directive 60, concluded that the targeting and declaratory doctrines developed during the cold war, which emphasize early and large attacks against nuclear forces and permit the first use of nuclear weapons, continue to be valuable in deterring threats to U.S. interests.¹² Others have argued that the role of nuclear weapons should be expanded to include deterring and responding to the use of chemical or biological weapons, and high officials have hinted that U.S. policy has indeed moved in that direction.¹³ In the rest of this chapter we examine, and reject, potential roles for U.S. nuclear weapons beyond that of deterring the use of nuclear weapons by others.

Deterring Chemical and Biological Weapons

Prominent in post—cold war discussions is the perceived need to deter the use of chemical and biological weapons (CBW), which according to current fashion are lumped together with nuclear weapons as “weapons of mass destruction.” Some analysts argue that because of their great destructive potential, the use of chemical and biological weapons cannot be deterred by the threat of conventional retaliation alone.¹⁴ Because the United States, as a signatory to the Chemical Weapons Convention and the Biological Weapons Convention, has forsworn such weapons, the analysts argue that nuclear weapons should be used to deter and, if necessary, respond to CBW attacks. They often cite the apparent success of veiled nuclear threats in deterring Iraqi CBW use during the Persian Gulf War. However, these arguments seem unconvincing.

First, they are based on the mistaken notion that the effects of chemical and biological weapons are morally, militarily, and politically equivalent to those of nuclear weapons. It is extremely difficult to protect people against nuclear weapons, but defenses against CBW (shelters, protective gear, vaccines, antidotes) can be highly effective. In fact, U.S. and NATO troops are equipped and trained to operate effectively under CBW attack. Even against unprotected people, a well-executed chemical attack would, under most circumstances, be about as lethal as a well-placed truck bomb.¹⁵ An attack with biological weapons could kill far more—perhaps as many as a nuclear weapon—if the deadliest agents were distributed with high efficiency against unprotected urban populations during periods of extreme atmospheric stability.

Fortunately, it would be technically and operationally difficult to achieve such high numbers of casualties with biological weapons, and no nation is known to possess weapons so effective. Unlike nuclear weapons, CBW leave roads, airports, hospitals, sewers, telephones, and supplies of water, electricity, and natural gas intact, making it easier to cope with the effects of attacks. In most contingencies, threats of nuclear retaliation would appear disproportionate and would lack credibility.

Second, there are strong moral and legal arguments against using or threatening to use nuclear weapons in response to CBW attacks. It would shatter the taboo against the use of nuclear weapons and the pledge not to use or threaten to use nuclear weapons against states without nuclear weapons.¹⁶ It would, moreover, probably violate generally accepted laws and humanitarian principles governing the use of force.¹⁷ According to these laws and principles, any threat or use of nuclear weapons must be limited to, and necessary for, self-defense; must not be directed at civilians and must be capable of distinguishing between civilian and military targets; and must not cause unnecessary suffering to combatants or harm greater than that unavoidable to achieve legitimate military objectives. Attacks in which the purpose is pure retribution or vengeance are not permitted. If a country launches a biological weapons attack against a U.S. city and kills a hundred thousand civilians, this would not give the United States the right to retaliate with nuclear weapons against one of the attacker's cities. Populations should not be punished for the deeds of their leaders.

It is difficult to imagine effective uses of nuclear weapons that would not violate the laws and principles governing the use of force. Nuclear attacks against military targets would be difficult to justify unless it could be demonstrated that they were necessary to achieve legitimate military objectives, that they would not cause unnecessary suffering, and that the objectives could not be achieved by conventional means. Nuclear weapons might be capable of destroying deeply buried shelters containing the leaders who are ordering or directing chemical or biological weapons attacks, but it would be difficult to justify nuclear attacks if these shelters were located in or near large cities, or if the entrances to the shelters could be destroyed with conventional weapons. Nuclear weapons could incinerate and render harmless stockpiles of chemical and biological agents, but it is unlikely that the effects of nuclear explosions would be, and would be seen as, less hazardous than the chemical or biological contamination that might result from conventional attacks. Moreover, conventional attacks can be designed to minimize the dispersal of agents, and U.S. troops could protect themselves against such contamination.

There are also practical political reasons for not using nuclear weapons to respond to chemical or biological weapons attacks. Domestic pressure for revenge might be strong in the wake of an attack, but a wise leadership would weigh this against the damage nuclear reprisal would do to U.S. security. In the short term, nuclear attacks could turn world opinion against the United States rather than against the country that had initiated the chemical or biological attack. This could make a collective response against the offender difficult or impossible. The long-term effects would be more profound. Nuclear strikes could damage U.S. leadership and its alliances with other countries. Such attacks would certainly undermine the nonproliferation regime, legitimizing the acquisition of nuclear weapons by states that face threats from chemical or biological weapons. If the United States must resort to nuclear weapons to deter or respond to such attacks, weaker states might easily conclude that they have even more need of nuclear

weapons. Nuclear use or threats of use to counter chemical or biological weapons also could encourage countries to consider them a poor man's nuclear bomb, thereby stimulating their spread. Although it is sometimes claimed that a nuclear response would set a useful precedent by demonstrating that CBW attacks would not be tolerated, a successful response without nuclear weapons would set a more valuable precedent about the inutility of these weapons.

Even if the use of nuclear weapons might under certain extreme circumstances be morally, legally, militarily, and politically justifiable, explicit nuclear threats, or policy statements that reserve the right to use nuclear weapons, add little to the deterrence of chemical or biological attacks and undermine nonproliferation goals. Adversaries would be aware of the strong arguments that would weigh against a nuclear response by the United States. More fundamentally, it is doubtful that any statement or policy could substantially bolster or detract from the existential deterrence that derives from the mere possession of nuclear weapons. Even if the United States had announced that it would not retaliate with nuclear weapons, adversaries would be deterred by the possibility that attacks resulting in great loss of American lives might trigger nuclear retribution. A decision to use nuclear weapons would be so momentous that what had been said about it in advance would be of secondary importance. In any case, most adversaries are unlikely to put much stock in public pronouncements or official promises about the circumstances under which the United States would or would not use nuclear weapons.

Some believe that the risk of attack from chemical or biological weapons is so great that it would be unwise to forgo the "sharp deterrence" provided by explicit threats to use nuclear weapons in response.¹⁸ Rather than promise never to use nuclear weapons first, they advocate a pledge not to initiate the use of weapons of mass destruction. Few can argue with the desire to deter CBW attacks, but it would be foolish to issue threats that, if carried out, would be counter to one's own interests. Threats have a way of becoming self-fulfilling prophecies. Although policymakers might be content with ambiguity, military organizations would develop detailed contingency plans and standard operating procedures that would dominate their thinking about how to respond in a crisis. Having issued the threat of a nuclear response, policymakers would worry that U.S. credibility and resolve would be called into question if they did not follow through, even if they believed that doing so would be unnecessary or imprudent. The marginal value of explicit threats is so small, and the wisdom of carrying out such threats is so dubious, that it makes no sense to change U.S. policy in this way.

Contrary to common belief, it is not clear that U.S. nuclear threats deterred the use of chemical or biological weapons during the Persian Gulf War.¹⁹ Although Iraq's foreign minister, Tariq Aziz, told Rolf Ekeus, the UN official in charge of dismantling Iraqi chemical and biological weapons, that Iraq refrained from using them because it feared U.S. nuclear retaliation, Ekeus believed that such statements were self-serving, since they depicted Iraq as the victim of U.S. nuclear coercion.²⁰ There is evidence that Iraq was unable, rather than unwilling, to use its chemical weapons. Just before the start of the war, it moved chemical and biological bombs to airfields and filled warheads with chemical and biological agents, but the rapid and widespread destruction of Iraqi airfields, command and control systems, and lines of communication by the allied bombing campaign would have prevented Iraq from mounting an attack.

It is worth noting that President Bush's threat of "the strongest possible response" (which many understood to be nuclear) if Iraq used its chemical weapons applied equally to the destruction of Kuwait's oilfields, which Iraq did with impunity.²¹ U.S. officials threatened more privately to escalate the war in ways that did not involve nuclear weapons, and these threats may have been more important than the implicit nuclear threat.²² We do not know why Iraq did not use chemical or biological weapons, but the balance of evidence does not support the conclusion that it was solely or even largely because of veiled U.S. threats to use nuclear weapons.

Relying on the threat or use of nuclear weapons to deter or respond to CBW use is a policy of weakness, not of strength, an unnecessary crutch that interferes with a serious effort to deal with the possibility of their use. A better policy would begin by pressing for the widest possible adherence to, and enforcement of, the Chemical Weapons and Biological Weapons Conventions. If countries violate these conventions and produce such weapons, they should be sanctioned by the UN Security Council, which has ruled that possession of them is a threat to international peace and security. Sanctions could include military action to destroy CBW production and storage sites. If these steps fail and the United States becomes embroiled in a conflict with a country having the weapons, production and storage sites and delivery vehicles could be destroyed preemptively in the first phase of the war. The use of any surviving chemical and biological weapons could be deterred through the threat of expanded conventional attacks, culminating with the occupation of the country, removal of the government, and trial of the authorities responsible for ordering the attacks.²³ If deterrence fails, massive conventional assaults against military targets could limit the scope of CBW attacks, while civil defenses could reduce casualties dramatically.

Military and political objectives should be achieved without using nuclear weapons if at all possible. In some cases the use of nuclear weapons might be expected to reduce U.S. casualties and end the war more quickly. It would be wrong, however, to think of nuclear weapons simply as a more efficient way of winning a war. It may seem callous, but the first use of nuclear weapons would over the long term damage U.S. security far more than the loss of thousands of American lives, unless, as seems highly unlikely, international opinion would consider nuclear use justified in those circumstances.

Nuclear Weapons in Conventional Conflicts

A central role of U.S. nuclear weapons during the cold war was to deter and, if necessary, defeat conventional attacks against U.S. allies in Western Europe and Northeast Asia. Although such attacks did not occur, it is impossible to say to what extent "extended" nuclear deterrence was responsible.²⁴ The propensity of the Soviet Union to have launched such attacks is not known, and many factors other than nuclear deterrence were at work in preventing war between the major powers.²⁵ Even if one discounts these other factors, the active practice of extended deterrence—stationing nuclear weapons in Europe, developing plans for their use to counter a Soviet invasion, and the associated public pronouncements designed to make their use seem credible—probably was less important than the deterrence provided by the mere existence of the U.S., British, and French nuclear arsenals and their indestructible capacity to destroy the Soviet Union. It is important to note, however, that nuclear weapons did not deter a great number of

smaller conflicts, largely because the use of nuclear weapons would not have been credible or militarily effective in those circumstances.²⁶

Regardless of the value of nuclear weapons in deterring major conventional war in the past, this value has diminished greatly in importance. During the cold war, nuclear weapons were thought to be an essential counterweight to superior Soviet conventional forces; now the United States has conventional superiority. No threat to the territorial integrity of the United States and its close allies exists that could not be countered effectively by their combined conventional military strength, nor is such a threat likely to emerge. In short, nuclear weapons are not needed to deter or respond to conventional attacks on vital U.S. interests.

Nevertheless, some analysts have suggested that nuclear weapons might be useful in future conventional conflicts.²⁷ For example, only nuclear weapons would be capable of destroying deeply buried hardened bunkers. Alternatively, U.S. or allied forces may find themselves in a situation in which defeat is imminent or victory is impossible using conventional forces. To give a frequently cited example from the Persian Gulf War, if the Iraqi army had invaded Saudi Arabia before sufficient allied forces had been deployed on the ground, Iraq may have been able to capture Saudi oil fields and inflict heavy casualties on U.S. troops. In such situations, it is claimed, the use of nuclear weapons might be the only way to prevent a military defeat.

The arguments against using nuclear weapons in a conventional conflict are similar to those outlined in the previous section. Using them in response to conventional military attacks would raise very difficult moral, legal, political, and diplomatic problems. To adversaries familiar with American political culture, nuclear threats would not be credible unless truly vital U.S. interests were threatened or unless the loss of American lives had been (or promised to be) massive. In such circumstances the deterrence provided by the mere existence of nuclear weapons is sufficient. Any attempt to improve deterrence by making explicit threats to respond to conventional attacks with nuclear weapons would damage the nonproliferation regime, and the actual use of nuclear weapons could destroy it.

Furthermore, from a purely military point of view the battlefield utility of nuclear weapons is limited, and it is unlikely that situations would arise in which nuclear weapons could achieve military goals that could not be realized through conventional means. The key difficulty in destroying chemical or biological weapons or political and military leaders is not being able to destroy the bunkers (the entrances can be destroyed with conventional weapons), but knowing the location of the bunker they are in. Concentrations of heavy armor can be destroyed with conventional airpower and precision-guided weapons, but “to do serious damage to just one armored division dispersed in the desert would require a considerable number of small tactical nuclear weapons.”²⁸ The most obvious way to avoid heavy casualties without resort to nuclear weapons is not to put troops into situations in which the only hope is to use nuclear weapons. But even if U.S. troops were in grave danger, we cannot foresee any circumstances in which the short-term benefits of using nuclear weapons would outweigh the long-term costs. As in the case of CBW use, heavy conventional losses could be deterred or responded to by intensifying conventional strikes and expanding war aims.

That said, the existence of nuclear arsenals moderates the behavior of states. The arsenals engender fear that a crisis or conflict might spin out of control and lead to the use of the weapons. States therefore tend to avoid war and to limit their means and aims in war, particularly when the vital interests of a nuclear weapon state might be threatened. This moderating effect derives from the mere existence of survivable nuclear weapons, not from particular force deployments, war plans, doctrines, or explicit threats to use these weapons under certain circumstances. Our argument is not that nuclear weapons are irrelevant to the prevention or moderation of conventional conflicts, but that declaratory doctrines and operational plans that permit the use of the weapons in such conflicts are unnecessary and counterproductive.

Deterring the Use of Nuclear Weapons

The principal purpose for U.S. nuclear weapons is to deter and, if necessary, respond to the use of nuclear weapons against the United States or its allies. Fortunately, only a handful of potentially hostile countries have nuclear weapons, and few if any additional countries are likely to acquire them in the future. Thus the potential for challenges to vital U.S. interests by nuclear-armed countries is limited.

Besides the United States, only four countries admit to deploying nuclear weapons: Russia, China, the United Kingdom, and France. Britain and France are, of course, close allies of the United States, and U.S. relations with Russia and China are better than at any time since World War II. If Russia or China should again become overtly hostile, it should be easy to deter direct nuclear attacks on the United States because no strategic nuclear exchange could benefit the country that initiated it. Based on the cold war experience, it also should be possible to deter nuclear attacks on countries in which the United States has much stronger interests than Russia or China. This would include those having U.S. security guarantees (the NATO countries, Japan, and South Korea), most other industrial democracies, and other countries in the Western Hemisphere. The United States should not, however, extend nuclear guarantees to areas where they would not be credible or reliable. It would be difficult, for example, to deter the use of nuclear weapons in situations where nuclear-armed adversaries believed that their vital interests were threatened much more than those of the United States—by Russia in the case of former republics of the Soviet Union, for example, or by China in the case of Taiwan. In such a situation nuclear threats would either be empty or would contain the seeds for Armageddon.²⁹ This is one reason why it is unwise to expand NATO to Russia's border.

Looking beyond the five declared nuclear powers, the three additional states thought to have nuclear weapons—Israel, India, and Pakistan—do not challenge vital U.S. interests. Rather than engage in any confrontation with the United States, it is far more likely that they might become embroiled in a conflict with their neighbors, leading to the threat of use or actual use of nuclear weapons. For Israel this might involve Syria, Iraq, or Iran; for India and Pakistan it could involve each other and perhaps China. U.S. motives for intervening in such conflicts would be mostly humanitarian, together with a desire to preserve the nonproliferation regime and the taboo on the use of nuclear weapons. U.S. nuclear weapons are not likely to be instrumental in accomplishing these objectives. It seems extremely unlikely that the United States would use its nuclear arsenal to deter or respond to Israeli, Indian, or Pakistani nuclear strikes.

All other countries (except Cuba) are members of the Nuclear Non-Proliferation Treaty. Chances are reasonably good that no additional countries will join the nuclear club. Today's list of potential proliferators is short: North Korea, Iraq, and Iran. Major shifts in the political and technical environment may cause this list to grow, but it is difficult to see a positive role for U.S. nuclear weapons beyond the relatively straightforward one of deterring direct attacks on the United States or its close allies.³⁰ In fact, the deterrence relationship between the United States and potentially hostile proliferators most likely would run stronger in the opposite direction: new nuclear nations would use their arsenals to deter U.S. intervention in regional affairs.

Summary: The Role of Nuclear Weapons

The overriding goal of U.S. nuclear policy is to prevent the use or threat of use of nuclear weapons against the United States and its allies and to prevent the further spread of the weapons. Over the long term this will be possible only if the United States demonstrates by its own actions and policies that nuclear weapons are not useful or usable. U.S. nuclear weapons should be deployed only to deter or respond to the use of nuclear weapons by other states, and the United States should promise never to initiate the use of nuclear weapons. The threat or use of nuclear weapons in other situations or against nonnuclear weapon states, including those that may be armed with chemical or biological weapons, is not necessary to achieve short-term political and military objectives and would harm long-term U.S. interests in nonproliferation and the stability of the international order. The existence of U.S. nuclear weapons undoubtedly will serve to deter nonnuclear attacks on vital U.S. interests, but this effect need not and should not be bolstered by explicit threats or plans to use the weapons in response to such attacks.

1. See, for example, Gregg Herken, *The Winning Weapon: The Atomic Bomb in the Cold War, 1945–1950* (Vintage Books, 1981).

2. See Lawrence Freedman, *The Evolution of Nuclear Strategy* (London: Macmillan, 1989).

3. OECD countries, most of which are in security alliances with the United States, account for more than 60 percent of world military spending and 80 percent of world economic output. Potential adversaries—Algeria, China, Cuba, Iran, Iraq, Libya, North Korea, Russia, and Syria—together account for less than 25 percent of world military spending and 5 percent of economic output. If other U.S. allies are included (Poland, Hungary, Israel, Taiwan, Saudi Arabia, and others), the balance is even more overwhelming. *Military Balance 1996* (London: International Institute for Strategic Studies, 1996).

4. “The United States has undergone a fundamental shift in its interest regarding nuclear weapons. In fact, it is a complete reversal. The United States has relied on nuclear weapons to offset numerical inferiority in conventional warfare. But we are now the only conventional superpower and our interests in this regard are dramatically reversed. . . . Suppose, somehow, that we had been offered a magic wand that would wipe out all nuclear weapons and the knowledge of their construction. . . . we’d wave it in a nanosecond. A world without nuclear weapons would not be disadvantageous to the United States. In fact, a world without nuclear weapons would actually be better.

Nuclear weapons are still the big equalizer, but now the United States is not the equalizer but the equalizee.” Les Aspin, “Three Propositions for a New Era Nuclear Policy,” commencement address delivered at the Massachusetts Institute of Technology, June 1, 1992.

5. These phrases were used by U.S. officials in response to questions about whether the United States would use nuclear weapons against Iraq and were widely interpreted as meaning that the United States might use nuclear weapons.

6. India conducted a nuclear test in May 1974. Publicly, however, it referred to the test as a “peaceful” explosion, denied any interest in deploying nuclear weapons, and insisted that it favored nuclear disarmament. In May 1998 India and Pakistan conducted several nuclear tests, but both countries continue to maintain that they have no plans to deploy nuclear weapons. The strong and widespread international reaction against the Indian and Pakistani tests, even though it was widely believed that both countries had long before acquired the capability to build nuclear weapons, is further evidence of strength of the nonproliferation norm.

7. This “negative security assurance” was first offered by the United States, the United Kingdom, France, and the Soviet Union in 1978. These four states (with the Soviet Union succeeded by Russia) issued nearly identical statements in connection with UN Security Council resolution 984 (April 11, 1995). The only exception to the nonuse pledge is for attacks carried out or sustained by a nonnuclear weapon state in association or alliance with a nuclear weapon state. China has maintained an even stronger commitment that it would not “be the first to use nuclear weapons at any time or under any circumstances” and that it “undertakes not to use or threaten to use nuclear weapons against nonnuclear weapon states or nuclear weapon free zones at any time or under any circumstances.”

8. This “positive security assurance” was first offered in UN Security Council resolution 255 (June 19, 1968), and was restated in resolution 984 (April 11, 1995) as follows: “The Security Council, and above all its nuclear-weapon State permanent members, will act immediately . . . in the event that [nonnuclear weapon states that are parties to the NPT] are the victim of an act of, or object of a threat of, aggression in which nuclear weapons are used,” and will seek “to provide, in accordance with the Charter, the necessary assistance to the State victim.”

9. Article VI of the NPT states that “each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control.” This commitment was reiterated by the five nuclear weapon states in 1995.

10. Committee on International Security and Arms Control, National Academy of Sciences, *The Future of U.S. Nuclear*

Weapons Policy (Washington: National Academy Press, 1997), pp. 3, 15, 26.

11. See, for example, Thomas C. Reed and Michael O. Wheeler, "The Role of Nuclear Weapons in the New World Order," study prepared for the Joint Strategic Target Planning Staff of the Strategic Air Command, 1992; and J. J. Martin, "U.S. Nuclear Targeting: A Historical Inquiry into Lessons for the Future," study prepared for U.S. Strategic Command, December 13, 1995.

12. William M. Arkin and Hans Kristensen, "Dangerous Directions," *Bulletin of the Atomic Scientists*, vol. 54 (March-April 1998).

13. See Stephen I. Schwartz, "Miscalculated Ambiguity: U.S. Policy on the Use and Threat of Use of Nuclear Weapons," *Disarmament Diplomacy* (February 1998).

14. See, for example, David C. Gompert, "Rethinking the Role of Nuclear Weapons," *Strategic Review*, no. 140 (May 1998), pp. 1–5.

15. For a discussion of the effects of CBW, see Steve Fetter, "Ballistic Missiles and Weapons of Mass Destruction: What *International Security*, vol. 16 (Summer 1991), pp. 5–42.

16. Under the doctrine of "belligerent reprisal," normally illegal actions (for example, the use of nuclear weapons against non-nuclear weapons states) can be rendered legal by a prior illegal act such as the use of CBW by the state against which the reprisal is directed. Even then, any use or threat of use of nuclear weapons would be subject to generally accepted laws and principles governing the use of force. See George Bunn, "Expanding Nuclear Options: Is the U.S. Negating Its Non-Use *Arms Control Today* (May-June 1996), pp. 7–10.

17. The International Court of Justice, in an advisory opinion, unanimously agreed that the threat or use of nuclear weapons is subject to these generally accepted laws and principles. "International Court of Justice: Advisory Opinion on the Legality *International Legal Materials*, vol. 35 (1996), p. 831.

18. Gompert, "Rethinking the Role of Nuclear Weapons," p. 4.

19. For a more complete discussion of this issue, see William M. Arkin, "Calculated Ambiguity: Nuclear Weapons and the *Washington Quarterly*, vol. 19 (Autumn 1996).

20. Schwartz, "Miscalculated Ambiguity."

21. The last paragraph of a letter from President Bush to President Saddam, delivered by Secretary of State James Baker to Iraqi Foreign Minister Tariq Aziz on the eve of the Persian Gulf War, stated, "the United States will not tolerate the use of chemical or biological weapons, support of any terrorist actions, or the destruction of Kuwait's oilfields and installations. The American people would demand the strongest possible response. You and your country will pay a terrible price if you order unconscionable action of this sort." "Confrontation in the Gulf: Text of Letter from Bush to Hussein," *New York Times*, January 13, 1991.

22. On the eve of the Persian Gulf War, General Colin Powell drafted the following warning to Saddam Hussein: "Only conventional weapons will be used in strict accordance with the Geneva Convention and commonly accepted rules of warfare. If you, however, use chemical or biological weapons in violation of treaty obligations we will: destroy your merchant fleet, destroy your railroad infrastructure, destroy your port facilities, destroy your highway system, destroy your oil facilities, destroy your airline infrastructure." He added that, if driven to it, "we would destroy the dams on the Tigris and Euphrates rivers and flood Baghdad, with horrendous consequences." Note that Powell believed that even this last action would be preferable to using nuclear weapons. Colin L. Powell, *My American Journey* (Random House, 1995), p. 504.

In addition, U.S. Secretary of State James Baker delivered the following threat to Tariq Aziz on the eve of the Persian Gulf War: "If the conflict starts, God forbid, and chemical or biological weapons are used against our forces, the American

people would demand revenge, and we have the means to implement this. This is not a threat, but a pledge that if there is any use of such weapons, our objective would not be only the liberation of Kuwait, but also the toppling of the present regime. Any person who is responsible for the use of these weapons would be held accountable in the future.” Lawrence Freedman and Efraim Karsh, *The Gulf Conflict: 1990–1991* (London: Faber and Faber, 1993), p. 257.

23. See, for example, the statements by General Powell and Secretary of State Baker in note 22.

24. As the term is used here, “extended deterrence” signifies an extension of the deterrent threat both in geography (from using nuclear weapons to deter attacks on the United States to using them to deter attacks on allies) and in the type of behavior that is deterred (from deterring nuclear attacks to deterring conventional attacks).

25. These included the memory of the devastation wrought by two world wars, the substantial and qualitatively superior conventional military capabilities of the United States and its allies, the development of collective security arrangements, such as NATO, and of shared political and economic institutions that helped cement and sustain these alliances, the advent of modern intelligence and surveillance systems that facilitate accurate assessments of military capabilities and make surprise attacks less likely to succeed, and the growth of information-based economic systems that do not depend on or benefit from territorial conquest.

26. U.S. nuclear weapons did not deter North Korea and China from attacking South Korea (with Soviet assistance), North Vietnam from attacking South Vietnam (with Soviet assistance), Soviet suppression of revolts in Hungary and Czechoslovakia, or Iraq from attacking Kuwait. Similarly, British nuclear weapons did not deter Argentina from occupying the Falkland Islands, Soviet nuclear weapons did not deter attacks by China or Afghan rebels, and Chinese nuclear weapons did not deter attacks by Vietnam. Nuclear weapons may have been important in deterring the United States and Russia from challenging each other’s vital interests in Europe, the Middle East, and Cuba, but it is much easier to identify situations in which deterrence failed than those in which it succeeded. For a more complete discussion of the efficacy of U.S. nuclear threats in cold war crises, see Richard K. Betts, *Nuclear Blackmail and Nuclear Balance* (Brookings, 1987).

27. See Thomas W. Dowler and Joseph S. Howard III, “Countering the Threat of the Well-armed Tyrant: A Modest Proposal” *Strategic Review* (Fall 1991), pp. 34–40; and Thomas F. Ramos, “The Future of Theater” *Strategic Review* (Fall 1991), pp. 41–47.

28. Powell, *My American Journey*, p. 486. “I told Tom Kelly to gather a handful of people in the most secure cell in the building to work out nuclear strike options. The results unnerved me. . . . I showed this analysis to [Secretary of Defense] Cheney and then had it destroyed. If I had any doubts before about the practicality of nukes on the field of battle, this report clinched them.”

29. Some analysts reject this line of reasoning, which they believe would consign such areas to Russia’s or China’s sphere of influence and invite domination by them. But the United States cannot guarantee the security, backed with the threat to use nuclear weapons, of every state. It is important not to create situations in which hostile nuclear weapon states promise to use, or believe that they should or could use, nuclear weapons to defend their interests. This does not mean that the United States must simply acquiesce if Russia or China violates the sovereignty of its neighbors. Such actions can be opposed by a variety of diplomatic, economic, political, and nonnuclear military means.

30. Scenarios that could add significantly to the number of potential proliferators include a breakdown of civil and military authority in Russia or China, leading to the widespread theft or sale of nuclear weapons and fissile materials, or the emergence of serious conventional or nuclear threats to Germany, Japan, or South Korea, coupled with the real or imagined collapse of credible U.S. security guarantees to these countries. The probability of either scenario coming to pass can be reduced substantially through intelligent U.S. policy.