IV. Defining Diplomacy's Task

IF NEITHER THE military instrument, nor denial policies, nor ballistic missile defenses are likely to be completely effective in blocking or rolling back nuclear weapons proliferation, other diplomatic tools will have to carry a heavy load, appropriately backed up by military force. Before examining how other diplomatic tools could be sharpened and deployed in new ways, the strategic task these tools should seek to accomplish must be defined.

In the nightmare world depicted earlier in this book, nuclear weapons proliferation accelerated, owing to a complete breakdown of the restraints that were effectively used during most of the last half century. It is certainly possible to do better than that—but only if the patient practice of diplomacy is employed, in view of the limited utility of direct military means and of denial policies. The consequences of the nightmare world are so grave that the United States and its friends must dedicate themselves to preventing it.

There are two general outcomes that the United States should consider. They are as follows:

- *Rollback*. Nascent nuclear weapons capabilities, as in North Korea and Iran, should be dismantled. Nuclear weapons programs of other nations that are undeclared or de facto nuclear weapon states should be scaled back and ultimately dismantled. This would

also be the ultimate, if distant, goal for all declared nuclear weapon states with no exception, as required by the Non-Proliferation Treaty.

- *Hold the line.* The present declared, undeclared, or de facto nuclear weapon states (United States, Russia, China, United Kingdom, France, Israel, India, Pakistan) would be the only nations to be included in that category. All other national nuclear weapons programs would be blocked and dismantled. The eight nuclear weapon states would make every effort to prevent nuclear arms competitions among themselves.

There is a third outcome, gradual proliferation, which some analysts think of as inevitable, and maybe even desirable in some cases. The issue of gradual proliferation has not been raised by the Bush administration as one of its concerns as regards friendly states. But this outcome should be described in terms of a policy goal so that its full implications can be discerned:

- *Gradual proliferation.* The goal would be to slow down nuclear weapons proliferation rather than to block it all together. The means utilized would generally be the traditional ones of denial, alliances, and global norms. The purpose, referring to the writings of Kenneth Waltz, would be to give the international system time to absorb new power relationships, including possible beneficial changes in leadership, and to adjust to them. It would be understood that exceptions to this policy might include the elimination of nuclear weapons programs in the hands of leaders known for their aggressive tendencies. In addition, the United States could

provide to certain friends or allies the necessary nuclear means to balance a nuclear-armed rival (for example, help South Korea with a two-key nuclear system if North Korea becomes a de facto nuclear weapon state).

Rollback policies should be the preferred option for the United States from a narrowly self-interested point of view. The U.S. military advantage in modern, advanced-technology weapons would be heightened if nuclear weapons were less salient or, preferably, diminished substantially as a factor in interstate military relations. From a more disinterested, global standpoint, nuclear weapons present a serious threat to the safety and well-being of humanity and human civilization.

Holding the line at eight states would be a minimally acceptable outcome for the United States for the foreseeable future. This conclusion is based on the same logic that caused Article VI to be written into the nuclear Non-Proliferation Treaty. It is impossible for non–nuclear weapon states to accept that their sovereignties will be forever limited while those of a privileged few will not be. Anti-proliferation policies that are selective in excluding all current nuclear states cannot, in the long term, be successful. In today's world, as can be seen from almost daily events, simply holding the line has not contributed to a global anti-proliferation environment. And to many it is an incentive to proliferation.

The Bush administration's "National Strategy to Combat Weapons of Mass Destruction" (December 2002) declared that for some states "these are not weapons of last resort, but militarily useful weapons of choice." That is evidently true and so it is very much in the U.S. interest

to make such nations pariahs by delegitimizing nuclear weapons as weapons of choice. To accomplish this, it should be U.S. policy that the purpose of such weapons so long as they exist, which will be for a very long time, should be solely to deter the use of nuclear weapons by other nations that continue to hold them, or to retaliate against states that use them, if it comes to that. U.S. policy should seek, through all means available, to make nuclear weapons less usable—for example, less reliance on prompt launch procedures, deactivation, separate storage of warheads, cooperation in early warning, reductions in holdings, and an obvious and unmistakable intention on the part of the United States to limit its reliance on nuclear weapons to absolutely last-resort conditions.

A gradual increase in nuclear weapon states, although better than the alternative of accelerated proliferation, will increase the hazards of deliberate or accidental nuclear weapons use. In this era, it will increase the chance of a terrorist-delivered nuclear weapon being detonated in an American city. The United States should declare its opposition to such an outcome, which would inevitably contribute to legitimizing nuclear weapons. They would come to be seen as an acceptable and necessary part of any serious nation's arsenal of weapons. And it should be understood that, although political relations can change and enemies can become friends, nuclear weapons are a permanent threat to humanity, no matter where they reside.

The Power of U.S. Example

There is a fallacy often heard in debates on the subject of nuclear weapons to the effect that American actions, policies, and behavior have little or no influence on the deci-

sions of other nations to acquire nuclear weapons. Some put it this way: What has American restraint ever done for us? It would be simplistic and incorrect to claim that the United States is the prime consideration in every nation's conduct of its security policies. It would be equally foolish to suppose that what the most powerful nation in the world, economically as well as militarily, is doing never enters the mind of a leader trying to calculate his own or his nation's best interests.

It is difficult to calculate the effect of specific American actions on specific countries, and U.S. national policies cannot be calibrated to produce a particular programmed response. But does anyone doubt that raising tariffs or tolerating a fall in the value of the dollar causes some reaction overseas? Can there be any doubt that had the United States decided forty years ago to encourage rather than discourage the spread of nuclear weapons there would be today far more nuclear weapon states than the eight that in fact exist? As to the argument that force, or the threat of its use, is the only language that other nations understand, which is what the question about restraint boils down to: Can anyone doubt that had successive American presidents not shown restraint in the use of America's unparalleled nuclear firepower, other cities would by now have been added to the list that started with Hiroshima and Nagasaki? To all these questions the answer is "No"! U.S. national policies affecting nuclear weapons, including those that guide American actions at home, are as important as international arrangements in influencing the environment of nuclear proliferation.

The military and strategic doctrines of the United States, first of all, should de-emphasize the role of nuclear

weapons, limiting it to deterring the use of nuclear weapons by others. There is no real need to declare explicitly (rather than leaving it as implicit) that nuclear weapons could be used against a nation that used biological or chemical weapons against the United States, its forces, or its allies, which was stated in National Security Presidential Directive 17 of September 14, 2002, as quoted in the press:

> The United States will continue to make clear that it reserves the right to respond with overwhelming force—including potentially nuclear weapons—to the use of [weapons of mass destruction] against the United States, our forces abroad and friends and allies.

The United States is powerful enough to retaliate in a devastating way without resorting to nuclear weapons. To threaten their use may enhance the deterrent effect of a determined U.S. military response but it is not a given. Former secretary of state James Baker records in his memoir (*The Politics of Diplomacy*, 1995) that former president George H. W. Bush had decided not to use nuclear weapons in 1991 even if Saddam Hussein had used the chemical weapons he was known to possess. He thought that a threat to remove Hussein from office would deter him from using those weapons of mass destruction. That deterrent did not exist during the 2003 Iraq war because the present Bush administration made Hussein's removal a war aim. But the administration, quite correctly, made clear that any Iraqi officer who authorized the use of chemical or biological weapons would face a war crimes tribunal. This, plus the painfully high cost to the Iraqi leadership and nation that a decision to use these

weapons was sure to inflict was a powerful deterrent. In fact, as of this writing, it appears that there were no biological, chemical, or nuclear weapons readily available to Saddam Hussein.

Mixed Signals Regarding Nuclear Weapons

The future role of nuclear weapons has, regrettably, been considerably clouded in the Bush administration's Nuclear Posture Review, which was transmitted with a cover letter from Secretary of Defense Donald Rumsfeld. The text of Rumsfeld's letter speaks of reduced reliance on nuclear weapons and includes the notion of "a credible deterrent at the lowest level of nuclear weapons consistent with the U.S. and allied security." These sentiments are very much in tune with the rollback policy advocated in this book. But the Review sends an ambiguous message about the administration's interpretation of a rollback policy by its endorsement of a need for new designs in the nuclear arsenal:

> Need may arise to modify, upgrade, or replace portions of the extant nuclear force or develop concepts for follow-on nuclear weapons better suited to the nation's needs. It is unlikely that a reduced version of the Cold War nuclear arsenal will be precisely the nuclear force that the United States will require in 2012 and beyond.

A specific need highlighted in the Nuclear Posture Review is for a class of low-yield earth-penetrating nuclear weapons "to defeat emerging threats such as hard and deeply buried targets (HDBT)" of military interest being built in many countries. Among the targets of most concern are very hardened structures—for storing weapons

and protecting top-echelon command functions—that are built at depths of 1,000 feet or so with reinforced concrete capable of withstanding up to 1,000 atmospheres overpressure. The actions taken by the United States to address such newly emerging military challenges can, and most likely will, have a major impact on the future of the Non-Proliferation Treaty.

A key technical challenge to destroying such underground targets—in addition to being able to discover exactly where they are located, based on good intelligence information, and to deliver a warhead with precision—is to develop new nuclear weapons that are built strong enough to be able to penetrate into the earth to depths of ten to twenty feet or more without damage before detonating. Detonation at such depths increases the energy of the explosion that is delivered into the ground, instead of into the atmosphere, by a factor of 10 to 20 relative to a surface burst. The warhead therefore hits the target with a much stronger shock, and is more effective as a "bunker buster" than an identical warhead that is detonated on or above the surface. The implication of this is that such penetrating warheads would require much less explosive power to destroy their targets and would therefore cause substantially less collateral damage by reducing the effects of radioactivity and blast. As a consequence it is alleged that these so-called bunker busters would be more acceptable politically and hence more "usable" for attacking buried targets—even in or near urban settings, which are generally preferred locales for such military targets.

It is important to recognize, however, that there are severe limitations on the effectiveness of nuclear bunker busters against HDBTs, and that, unavoidably, they would

produce considerable radioactive debris. These limitations have been determined from extensive experimental work measuring the depths to which a warhead dropped from the air and rammed into the earth at a high speed can maintain its integrity before being detonated; from known limits on material strengths; and from measurements and calculations of the strength of an explosion that is required to physically destroy hardened targets of military concern that may be buried at shallow depths, or as deep as a thousand feet or more. To cite one example, consider a small nuclear warhead with a yield of one kiloton that is detonated at a depth of fifty feet, which is a practical limit on penetration into dry hard rock. An explosion of that strength could destroy hardened targets constructed no deeper than two hundred feet below the surface of the earth. But it would also eject more than one million cubic feet of radioactive debris from the crater it would create, about the size of ground zero at the World Trade Center—bigger than a football field. In order to avoid creating any crater so as not to disperse fallout into the atmosphere, such a one-kiloton warhead would itself need to penetrate to a depth of close to two hundred feet before exploding. That is physically impossible.

Nuclear weapons are also of limited value against biological and chemical weapons. When detonated underground their effective range in destroying the deadly effects of pathogens and gases is limited by the fact that their blast effects extend beyond the area of very high temperatures and radiation they create for destroying such agents. Therefore they would be more likely to spread these agents widely, rather than to destroy them com-

pletely. As an alternative to destroying such localized HDBTs, the United States should pursue effective means to put them out of business—that is, to functionally defeat them—using conventional forces and tactics. This would require improving the ability to locate and seal off their points of access and exit for equipment, resources, and personnel; and, when possible, to establish area control and denial around them.

A decision by the world's only superpower to develop and test new, and presumably "more usable," nuclear weapons for new missions as bunker busters would send a clear and negative signal about the non-proliferation regime to the non-nuclear states. The United States could thereby be dealing a fatal blow to the regime in order to provide itself with a capability of questionable military value.

Moreover, on technical grounds alone, there is no need for the United States to resume testing to develop new nuclear designs for bunker busters. In close to a half century during which it carried out more than 1,000 explosive tests of nuclear devices, the United States has already developed and tested nuclear warheads with a full range of yields from small fractions of a kiloton up to many megatons. The United States can make improvements in their delivery, both in accuracy—using terminal guidance via global positioning satellites (GPS) or laser illumination—and earth penetration—using structurally strengthened warheads. Over many years, the United States has also accumulated an extensive body of data and experience on earth-penetrating munitions. This is an important technology to pursue for many conventional military missions.

The Corrosive Effect of a Strategy of Unilateral Action

One of the reasons that the United States is not enjoying the broad international support it should have for the campaign against terrorism and proliferation of weapons of mass destruction (nuclear) and terror (biological and chemical) is the perception that unilateral preventive war has become the dominant strain in American thinking about military strategy. The administration can and should change that perception by emphasizing that a continuum of means, of which force and coercion are important components, must be used to deal with the threats posed by such weapons against the security of the United States and its allies. It has begun to do this by pointing out that each case is different and that a policy appropriate for Iraq is not necessarily suitable for North Korea. Multilateral diplomacy, it is saying, is the best medicine for Northeast Asia. In so doing the administration is giving a more balanced emphasis to deterrence and diplomacy as valid tools also to employ in the struggle. Scars remain, however, from the cut and thrust of the campaign to gain support for the Iraq war and it will be important for the White House, as it conducts its anti-proliferation policies, to restore worldwide confidence in the U.S. commitment to cooperation, when that is possible, as its instrument of choice.