

CHAPTER 4

NUCLEAR NONPROLIFERATION: WHERE HAS THE UNITED STATES WON—AND WHY?

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Introduction.

Only a few short years ago, nonproliferation experts were congratulating themselves on a job well done. A number of actual and potential nuclear weapons states had renounced, or at least tempered, their nuclear ambitions. Argentina and Brazil asserted civilian control over military-run nuclear weapons programs, agreed to place United Nations (U.N.) International Atomic Energy Agency (IAEA) safeguards on all their nuclear activities, and join the nuclear Nonproliferation Treaty (NPT). Ukraine, Kazakhstan, and Belarus decided to return to Russia the nuclear warheads they inherited with the demise of the Soviet Union. India and Pakistan had shown some signs of muting their nuclear competition, with each preferring to strike an undeclared nuclear posture. Iraq's nuclear aspirations appeared to have been dealt a fatal blow by Operation DESERT STORM and the rigorous verification measures undertaken by the United Nations Special Commission (UNSCOM). South Africa revealed that it had assembled six nuclear bombs, but then had disassembled them before the transition to majority rule. North Korea had signed the Agreed Framework, which, while less than perfect, held out the promise over time of bringing Pyongyang into full compliance with its IAEA and NPT obligations.

At the normative level, the nuclear weapons states agreed to join a Comprehensive Test Ban Treaty (CTBT),

which gathered political momentum and signatures. The United States pushed the idea of a fissile material cutoff treaty (FMCT) to try to cap the growth of nuclear arsenals worldwide. The IAEA promoted a more intrusive safeguards regime called 93+2 that promised better and earlier detection of countries violating their safeguards commitments. The capstone to these efforts was the indefinite extension of the NPT in 1995. With the end of the Cold War, it was clear that nonproliferation had become the hot new topic, with arms control experts retooling their resumes to change career focus and with nonproliferation projects getting high-level government attention and funding. Nonproliferation was on a roll. It was, dare we say, sexy.

All the more surprising, then, that the last few years have been ones of setbacks and great disappointment for the international nonproliferation regime, marked by lost chances and unsettling developments. In May 1998, India and then Pakistan engaged in muscle-flexing by each detonating nuclear devices. Iraq has played a catch-me-if-you-can game with UNSCOM, which has lost momentum and political support in the Security Council, although the United States believes that Baghdad may still be hiding nuclear-related assets (as well as chemical and biological weapons and ballistic missile technology). Russia has emerged as the main supplier for Iran's civilian nuclear program, but many observers believe that this relationship also serves as a conduit for the transfer of technology and other assistance useful for nuclear weapons. North Korea has refused to cooperate with the IAEA in preserving its nuclear history for the day when Pyongyang will come into full compliance, thereby increasing the possibility that the IAEA will be unable to give the North a clean bill of health and that the Agreed Framework nuclear deal will come to a halt.

At the international level, the United States, Russia, and China have not ratified the CTBT. The FMCT languishes in Geneva, being nibbled to death by the

Conference on Disarmament. The IAEA's ambitious 93+2 safeguards program got off to a good start, but requires additional resources and political support to become a reality. And the NPT is under strain by non-nuclear weapons states that believe the nuclear weapons states have largely failed to fulfill their 1995 pledge to take tangible steps towards halting the vertical spread of nuclear weapons.

A Glass Half Full or Half Empty?

So where do U.S. efforts to halt the spread of nuclear weapons stand today? Is the glass half full or half empty? The traditional way of measuring nonproliferation success has been to tally the number of states party to the NPT—the more the better. This bean-counting approach is misleading, and both more and less impressive than it seems. It is more impressive because the notion of 170+ countries party to the NPT is wildly at odds with the fears prevalent during the early years of the nuclear age, when it was thought by many sober observers that every country that could acquire nuclear weapons would not only do so, but would do so as quickly as possible. President Kennedy's famous nightmare vision of a world with 30-35 nuclear weapons states by the 1970s is the best example of this apocalyptic thinking. But counting the number of NPT parties is also less impressive than it seems because it overstates the importance of raw numbers of countries acceding to non-nuclear status. Expressed differently, not all countries count the same. Some states, like Vanuatu, have neither the capability nor the desire. Others have desire but no capability; they may be termed the "Viagra" states. Some, like Japan, have the capability but exhibit no desire. Only a handful have both the capability and the desire, and even among this relatively small group not all give full expression to their aspirations by demonstrating nuclear prowess through testing, developing and deploying a nuclear arsenal. Consequently, a pure bean-counting

approach masks some important failures as well as some important nonproliferation victories.

How, then, do we determine nonproliferation success? Specifically, where has the United States been successful in halting or retarding the spread of nuclear weapons? And what tactics and strategies has it employed to do so?

Defining Nonproliferation Success: The Rules of the Game.

Defining success and recognizing failure are essential ingredients of a competitive strategy. What constitutes a win for nonproliferation? Proliferation, after all, comes in many shapes and sizes, not all of which are equally threatening to U.S. security. One definition of winning is the complete elimination of proliferation activity or dismantlement of proliferated systems.¹ Although winning (and losing) can be difficult to distinguish when political rhetoric is used to claim success where none has occurred, or to put a positive spin on ambiguous situations, this definition has the merit of providing a clear standard for judgment. So what makes winning possible?

Nonproliferation is played on the field of international politics, in which states use power—in all its many forms—to pursue their interests. A winning strategy combines political, military, and economic power to prevent or rollback proliferation. It identifies potential avenues of influence and applies American strengths where they can most effectively alter proliferation behavior. A first step toward a winning strategy, therefore, is to identify the major factors that may shape the decision to acquire nuclear weapons, as well as the major constraints working against such a decision. This type of taxonomy, in turn, suggests avenues of possible nonproliferation influence for the United States.

Domestic Political Incentives. Former Speaker of the House of Representatives Tip O'Neill's observation that "All

politics are local" also applies to nuclear proliferation. Countries contemplate the acquisition of nuclear bombs for reasons that are, to varying degrees, domestic in nature. Domestic politics, history, culture, and other factors such as geography and economics are major influences on national decisions to acquire nuclear weapons. India, for example, puts a high value on its self-perception as a great nation; nuclear weapons are enshrined by nationalistic politicians as symbols of national greatness. Japan, on the other hand, holds close to its pacifist constitution. Other countries, such as Iraq, probably view nuclear weapons as important tools of national self-aggrandizement consonant with its (inflated) historical view of the country's (or the leader's) destiny. Still others may be tempted to satisfy important domestic constituencies, such as the military or the scientific community, that often exercise political influence on nuclear decisionmaking.

These domestic factors influence how far a state will go—part way (Taiwan, Sweden, South Korea), approaching or up to the line (Iraq, North Korea), or all the way like the five *de jure* weapon states plus India and Pakistan.

Regional Power Dynamics. A major motivation for a country to consider a nuclear option is the neighborhood in which it lives. Aggressive neighbors inspire defensive measures to deter or repel attack. Some countries may acquire a nuclear arsenal to conquer or dominate neighboring states and achieve regional hegemony. Iran, for example, may view nuclear weapons as a means to establish a predominant position in the Persian Gulf and Central Asia. India clearly sees itself as the dominant power in South Asia. Although regional dynamics can be a root cause for states to acquire nuclear weapons, such changes in a region's power dynamics seldom go unanswered. Perceptions of a neighbor's intentions and capabilities may spur a counterreaction leading to a nuclear weapons program, as illustrated in the Middle East and South Asia.

The International Nonproliferation Regime. The international nonproliferation regime consists of treaties, laws, organizations, and institutions that establish and uphold norms of international behavior. The rules are often lightly policed and weakly implemented, but remain an important barrier against casual, as opposed to dedicated, proliferators. The centerpiece of the regime, the NPT, uses inducements such as access to civil nuclear technology and verification to deter and detect cheating by the nonweapons states on their pledge not to use civil nuclear technology for military purposes. Technology control regimes (Nuclear Suppliers Group, Australia Group, Missile Technology Control Regime) and arms control agreements such as the CTBT and nuclear weapon-free zone treaties bolster the international nonproliferation norm.

While these constraints are insufficient to block a dedicated proliferator, they help cull out the casual proliferators who might be tempted to harbor nuclear options if it would not be viewed as a challenge to international order, or if they could carry out such a program at little or no political cost. When cheating is discovered, however, the global regime depends on the Great Powers to enforce the norms and punish noncompliance.

Expected U.S. Response To Proliferation. A proliferator's perception about how the United States will respond to its nuclear weapons program remains a powerful consideration for nearly all governments. The U.S. response to new nuclear states has ranged from resignation, as with the four other declared weapons states, to acceptance, as with Israel, to alarm, as in South Asia and Iran, to accommodation leading (hopefully) to long-term compliance, as in the case of North Korea. Obviously, none of these examples would satisfy our definition of winning. Notwithstanding frequent rhetoric about nonproliferation being a top priority of the United States, in practice other priorities often take precedence over nonproliferation and

detract from pursuing unambiguous nonproliferation victories.

Competing priorities, such as trade (China, India, Pakistan), domestic constituencies (Israel, and to a lesser extent, India), and bilateral relations (Russia, Europe) often determine whether the United States will oppose or accommodate new nuclear nations. The costs of opposing proliferation, most significantly the risk of starting a war (as in North Korea), have also been an unarticulated but compelling reason for U.S. policymakers to retreat from enforcing U.S. nonproliferation policies through military means.

In theory, the level of effort the United States devotes to stopping a particular nuclear weapons program is roughly commensurate with the threat that such weapons pose to the United States and its allies. Thus, instead of pursuing a winning strategy, the United States learned to live with a “bomb in the basement” in New Delhi, Tel Aviv, and Islamabad because those programs did not directly threaten the United States. Some bomb programs, however, could radically alter the global security architecture, and decisions were made to halt these nuclear weapons programs at all costs, perhaps even including the risk of war. For example, a nuclear-armed Germany or Japan would have produced a global balance of power very different from the one that exists today. In these two cases, the United States was willing to back up its nonproliferation policy with the full weight of its military and economic influence.

Multilateral Diplomacy. In some, perhaps most, cases, the United States cannot unilaterally impose its wishes on a potential proliferator, but seeks to enlist the support of coalitions of countries or multilateral mechanisms to block or roll back nuclear weapons programs. Such international diplomacy is possible when enough countries are sufficiently threatened by a particular nuclear program to engage in collective action. Unilateral military action to

eliminate a nuclear weapons capability, such as the June 1981 Israeli attack on Iraq's Osirak reactor, is rare. Like other collective security endeavors, United Nations Security Council enforcement of nonproliferation norms depends on coalitions (as well as unanimous consent by all five permanent members). The United States led a strong coalition against Iraq, a weaker coalition to restrain North Korea, and a yet weaker one still to restrain Iran. Strong coalitions increase the likelihood of success, while weak coalitions put more of the burden on their most motivated members.

Matching Ends and Means: Playing the Game.

A winning competitive strategy matches resources with goals, selecting actions that have a high probability of achieving specific nonproliferation objectives within the context of other, sometimes competing U.S. objectives. Possible options cover a wide range from cooperation and engagement to war. Between the extremes of embracing proliferation and using force against it, however, diplomacy in its various manifestations has been, and will continue to be, the primary tool for realizing U.S. nonproliferation success.

Unilateral Influence on the Internal Arrangements of a Proliferator. Understanding the internal politics of a proliferator provides insights into the leverage points that can make or break a foreign nuclear program. Leverage makes use of comparative advantages to reverse, delay or otherwise rescind decisions to acquire nuclear weapons. Examples of positive leverage include economic and military assistance, prestigious meetings with top officials, military exchanges, technology transfers, development aid projects, inclusion in regimes, and more generally, good relations with the United States, which can bolster the status and enhance the legitimacy of a government.

Examples of negative leverage short of war include economic sanctions, nonrecognition, targeted export

controls, trade restrictions, aid cutoff, improved relations with adversaries, military assistance to adversaries, covert actions, and poor relations with the United States. It is worth noting that military equities are key to most positive and negative incentives.

Regional Dynamics. The United States can influence regional dynamics in many ways. Foremost, of course, is through defensive alliances. For example, NATO has been arguably the most effective nonproliferation tool ever employed by codifying the American commitment to come to the defense of Western Europe. Arms transfers can also shift a regional balance of power in ways that either reduce or accentuate the motivation for nuclear weapons. It is important to note that collective defense arrangements can encompass a wide range of military-political-economic relations, and are not limited to strictly military operations. Joint research, development, production and deployment of weapon systems, such as missile defenses, involve a wide array of civilian and military relationships. Stationing, training, and funding troops and supplies to support an alliance normally have socio-political consequences that extend beyond the military sphere. Economic ties, or the provision of access to high-technology items, have also been used effectively by Washington to persuade countries that they have more to gain by abstaining from nuclear weapons than by possessing them.

Multilateral Influences: Regimes and Institutions. While optimistic expectations that international institutions, especially the U.N., could control proliferation have not been met, the U.N. and other international bodies can make a difference. Proliferation, like conflict, has its roots in problems that defy purely legalistic or moralistic pronouncements.

The U.N. began its involvement in nuclear nonproliferation efforts with the Baruch Plan, in 1946, and sustained a role through the establishment of the IAEA in 1957, entry into force of the NPT in 1970, and creation of the

United Nations Special Commission on Iraq (UNSCOM) in 1991. These American-inspired initiatives have helped to shape global preferences against nuclear weapons. Other important multilateral institutions include the Chemical Weapons Convention, the Biological Weapons Convention, and the export control regimes such as the Nuclear Suppliers Group, the Australia Group, the Missile Technology Control Regime, and the Wassenaar Arrangement.

To varying degrees, these regimes limit access to weapons of mass destruction (WMD) technology and reinforce international standards for transferring technology that can be used to make WMD. They all contribute to a norm that ostracizes the development, possession and use of WMD. Despite the limitations and liabilities inherent in international institutions, they can make critical contributions to a winning nonproliferation policy. The U.N. and the IAEA, for example, lend legitimacy to verification and enforcement of nonproliferation obligations—even if they are not capable of enforcing those obligations without Great Power consent and support. In other words, they are analogous to fire alarms, not firemen. Institutions such as the IAEA and KEDO provide a means to influence the nuclear policies of sovereign states, but must be part of a more comprehensive strategy to be effective. Technology control regimes can force proliferators to resort to smuggling to get what they want, thereby increasing time and cost, and they, too, are a useful part of a more comprehensive winning strategy.

Deterrence, Defense, and Counterproliferation. Deterrence, of course, is a key component of competitive strategy. Credible deterrence capabilities, both conventional and unconventional, inform hostile proliferators that attacks against the United States or its allies would be self-defeating. Extended deterrence can reduce threats to allies, thereby obviating the need for independent nuclear forces. Defensive measures, both active and passive, enhance deterrence and mitigate

attacks if they occur. And, in extremis, counterproliferation capabilities enable the United States to conduct military operations against WMD-wielding adversaries.²

Where the United States Has Won: The Importance of Security Commitments.

Under the definition of winning used to describe nonproliferation successes in this chapter—the complete elimination of proliferation activity or dismantlement of proliferated systems—where has the United States, either by acting unilaterally or in conjunction with others, scored victories?

There are several examples that stand out as nonproliferation success stories. The common denominator for each of the countries in this first category is the establishment of a *de facto* or *de jure* security alliance with the United States.

The Federal Republic of Germany and NATO. Although ultimately unsuccessful, Germany's wartime nuclear bomb project had advanced far enough to give credence to the possibility that it would someday reemerge. Having wisely rejected the post-World War I model of subjugating and punishing Germany, the Allies were faced with two options for dealing with a divided Germany: allow it to drift towards closer ties with the East, or expend the resources to integrate Bonn with the West. The second option held the best prospects for consolidating a democratic, market-driven Western Europe, and not least, preventing a revival of Germany's atomic bomb program.

Over the next 4 decades, Washington used the full weight of its military, economic, and political influence to shape West Germany's domestic, regional, and international environment. By the early 1950s, a number of West European countries had emerged from the ashes of World War II and were already developing nascent nuclear programs. Although the primary purpose of NATO was "to

keep the Russians out," it was also designed, as the aphorism went, to "keep the Americans in" and the Germans down. Keeping the Germans down meant, among other things, ensuring that Bonn never developed an independent nuclear weapons capability. The first international legal barrier to Bonn's acquisition of nuclear weapons was the 1954 London and Paris accords, under which the Federal Republic of Germany pledged:

not to manufacture in its territory any atomic weapons . . . defined as any weapon which contains . . . nuclear fuel . . . and which, by . . . uncontrolled nuclear transformation of the nuclear fuel . . . is capable of mass destruction...[or] any part, device, assembly, or material especially designed for . . . any [such] weapon.³

In May 1955, the occupation regime ended, and the Federal Republic became a full member of NATO.

But this "first nonproliferation promise," as Bonn characterized it, was actually less than airtight; Germany could import nuclear weapons, it could engage in bilateral or multilateral control of these weapons, and it could develop these weapons extraterritorially.⁴

Even without these potential loopholes, the question of Germany's nuclear future at this time remained potent, given the country's history and essential role in a postwar European recovery; in Catherine Kelleher's phrase, the dilemma for the Atlantic Alliance was how to handle a country "with a suspect past and a major mortgage on an uncertain political future."⁵ The larger challenge for Washington was how to reassure its European allies that it was committed to Europe's defense, including, if necessary, the use of nuclear weapons.

The creation of NATO in 1949 went some way towards reassuring Germany and the other members of the Atlantic Alliance that they could rely on collective security, buttressed by the direct and visible involvement of U.S. forces in their defense. (This factor was crucial in

dissuading not only West Germany, but also Italy and Switzerland, from proceeding very far down a path towards nuclear weapons acquisition. Although Sweden was not a formal member of NATO, Stockholm understood that it nonetheless received the security benefits of membership—the NATO overhang—because of its geographical proximity to the likely military theater in which war would be waged with the Soviet Union.)⁶

Economic recovery and greater political self-confidence under Konrad Adenauer during the latter part of the 1950s and early 1960s brought with it a greater assertiveness by Bonn on nuclear issues. For many Germans, a chronic fear of abandonment and the desire for full political rehabilitation (to avoid “second-class” status) meant that the country needed the same degree of control over nuclear weapons in Europe as its allies in planning, decisionmaking and most sensitively, on operational control. Independently, influential U.S. policymakers believed that if Bonn was not fully integrated into NATO’s nuclear command, Germany would inevitably decide to build a national nuclear force, thereby creating perhaps irreparable tensions in NATO as well as undermining Washington’s broader nonproliferation goals. Bonn was not averse to playing on these fears to gain diplomatic advantage.⁷ These trends, German anxiety over the U.S. security guarantee exacerbated by the Kennedy administration’s handling of the 1961-62 Berlin negotiations, and U.S. fears of a nuclear-armed Federal Republic, culminated in Washington starting discussions in 1960 with Bonn over the possibility of some form of joint control over a NATO strategic nuclear force. The attractions to Bonn of this multilateral force (MLF) option were several: it would further solidify the American commitment to European defense, it would acknowledge Bonn’s contribution to NATO, it would permit German access to some form of shared nuclear control (with details to be worked out later), and it would minimize chances of discrimination against Germany within the alliance by the

nuclear-armed British and French.⁸ But as the prospect of an MLF became more thinkable, it became less likely, falling victim to its internal contradictions (what, exactly, did shared nuclear control mean?), clashing with Bonn's other foreign policy objectives of eventual German reunification and the preservation of close relations with France, and coming up against the opposition of a new American president, Lyndon Johnson, who was focused on prosecuting the war in Vietnam, a policy that had the unintended effect of reassuring Bonn of U.S. credibility as an ally.

In the aftermath of the MLF drama, any residual chance that the Federal Republic would acquire nuclear weapons, or even keep open its nuclear option, terminated with the U.S.-led diplomatic offensive concerning the NPT. Questions of American credibility, while never totally absent from Bonn's considerations, faded into the background and the Federal Republic concentrated on domestic issues and *Ostpolitik*.⁹ Bonn signed the NPT in November 1969 and with little fanfare formally ratified it in May 1975.

Japan. A central U.S. objective following the end of World War II was to ensure that Japan would never again threaten peace and stability in the Pacific. Japan, too, had had a wartime nuclear weapons development program that the U.S. and Japan's neighbors did not want revived.¹⁰ The cornerstone of this policy was Japan's peace constitution, drafted by the U.S. occupation forces, and American willingness to shoulder the burden of Japan's defense.

The understandable Japanese abhorrence of nuclear weapons after Hiroshima and Nagasaki was reinforced further by a security treaty with the United States in April 1952. Under the terms of the agreement, Washington conditionally pledged its forces to contribute to the security of Japan against armed attack from without. This relationship was strengthened in 1960 by the Treaty of Mutual Cooperation and Security, which eliminated some of

the more onerous provisions of the 1952 agreement. The extension of a U.S. nuclear umbrella over Japan, initially to protect the country against the former Soviet Union and after 1964 to protect it against a nuclear-armed China, has undoubtedly played a major role in preserving Japan's non-nuclear status.¹¹

In the wake of the U.S. retreat from Vietnam in the 1970s, Tokyo and Washington recognized the need to reinforce their security ties. The Guidelines for Japan-United States Defense Cooperation outlined a plan for comprehensive military cooperation between the two countries. In the past few years, an uncertain regional security environment has again compelled Tokyo and Washington to strengthen defense planning under a new and invigorated set of defense guidelines.¹²

In addition to the security alliance, the United States promoted Japan's economic prosperity and its full integration into the full range of international institutions. With U.S. help, Japan became a world leader in nuclear energy as a means to cope with its lack of indigenous energy resources. NPT membership and full integration into the IAEA safeguards system have eased, but not eliminated, suspicions that Japan has preserved a nuclear option. Tokyo's interest in using plutonium fuel for civil reactors has, nevertheless, raised eyebrows.¹³

At important times in its postwar history, whenever Japan has felt itself threatened by external forces, it has moved closer to the United States rather than adopting a more independent defense posture through the acquisition of nuclear weapons. The U.S.-Japan defense relationship, however, is being tested by North Korean missiles and by the growing power of China.

South Korea. Few countries in the world are located in tougher neighborhoods than South Korea, yet the United States has successfully dissuaded Seoul from pursuing an independent nuclear force.¹⁴ As with Japan, Washington structured a bilateral security alliance which included the

stationing in South Korea of U.S. troops, backed by nuclear weapons, to face the serious military threat posed by the belligerent and aggressive North.

In the mid-1970s, when the U.S. commitment to Asia was being questioned in the wake of its retreat from Vietnam, Washington addressed Seoul's anxiety by stepping up the level of military assistance and eventually reversing plans to draw down U.S. forces. The United States has also demonstrated its ongoing commitment to South Korea by generous economic assistance programs and terms of trade for South Korean-made goods. Like Germany and Japan, South Korea was encouraged to pursue nuclear energy and gained access to advanced nuclear reactor technology so long as Seoul remained fully faithful to its NPT-IAEA obligations. Unlike Germany and Japan, South Korea appeared at times to hedge on its non-weapons pledge, but stopped all suspicious activity when faced with U.S. pressure.

In the early 1990s, when North Korea's nuclear weapons program threatened the South, the United States worked closely with South Korea to bolster defense cooperation and to craft a regional and multilateral approach to denuclearize the North through the October 1994 Agreed Framework. The status of nuclear programs in a reunified Korea, like the status of U.S. military commitments, remains unknown.

Taiwan. A complete accounting of Taiwan's interest in acquiring nuclear weapons and the U.S. role in preventing that from happening has yet to be told, but the general contours are well-known.¹⁵ As a small country threatened by a much larger nuclear-armed neighbor, and dubious about U.S. commitments after Nixon's rapprochement with Beijing and the U.S. retreat from Vietnam, Taipei in the mid-1970s demonstrated an interest in developing clandestine means to separate plutonium from spent fuel.

In this case, a full-blown bilateral security arrangement was out of the question for fear of upsetting Washington's

more important overtures toward Beijing. Economic assistance was unnecessary for a prosperous Taiwan, but preserving Taipei's access to international markets was key to its survival. A mix of arms sales, good relations with the United States, inclusion in international regimes such as the IAEA and the Asia-Pacific Economic Council (APEC), and support for Taiwan's international economic ventures enabled Washington to insist that the plutonium separation plant be dismantled and shipped to the United States.

Success Without Alliances: Case Studies.

There is a second category of states where the United States, working with or supporting other countries, has also scored nonproliferation success. In these cases, security alliances were not offered. Here, economic, developmental, and regional factors helped tip the balance away from nuclear weapons.

South Africa. In March 1993, South African President F.W. de Klerk announced to a surprised world South Africa had constructed six nuclear bombs during the 1980s; moreover, Pretoria had voluntarily dismantled all six weapons in 1990-91.¹⁶ Reasons for Pretoria's abrupt *volte-face* are many, but must include the recognition by de Klerk first, and only later by other members of his government, that the country's nuclear arsenal was unnecessary to meet the imagined threat of a total onslaught by world communism. Further, it was inconsistent with the country's larger foreign policy objectives of reintegrating itself into the global community (and especially the United States) and of normalizing relations with its African neighbors. The American role here is less direct than in other cases. During the latter half of the 1980s, Pretoria's security situation improved markedly. In August 1988, a cease-fire on the country's northern border with Namibia was signed; and a tripartite agreement with South Africa, Angola, and Cuba was initiated in December 1988 that called for the phased withdrawal of all Cuban

troops in Angola. By this time, it was clear that the influence of the Soviet Union and its regional proxies had lessened considerably, a fact brought home concretely by the fall of the Berlin Wall in October 1989. American victory in the Cold War eliminated the threat of onslaught to South Africa, which paved the way for de Klerk's denuclearization decision.

In addition, many South African officials understood that the country's nuclear stance prevented improved relations with the West generally and the United States in particular. It stood as a barrier to joining the NPT, which would legitimize Pretoria's access to peaceful nuclear technology and open the door to international cooperation on nuclear matters. South Africa realized that it could not gain access to sensitive technologies and fully integrate itself into the economic mainstream of the developed world. For Pretoria, the United States barred the door to its international political and economic rehabilitation unless it eliminated its nuclear weapons program.

Ukraine. With the disintegration of the Soviet Union, managing the far-flung nuclear inheritance became an immediate foreign policy priority for the United States. Washington initially calculated that persuading Ukraine to return the tactical and strategic nuclear weapons based on its territory would be fairly easy to achieve.¹⁷ The April 1986 Chernobyl disaster had created a widespread nuclear allergy that grew only more virulent when the negligent engineering, haphazard evacuation, and shoddy cleanup gradually became known. In July 1990, the Rada, the Ukrainian parliament, had passed a declaration of state sovereignty that stated, *inter alia*, that the country's position was not to accept, not to produce, and not to acquire nuclear weapons. The Rada reiterated this non-nuclear pledge 2 months later, after the August coup attempt in Moscow.

This non-nuclear momentum continued after Ukraine voted for independence in December 1991. On December 21,

the newly established Commonwealth of Independent States (CIS), which Ukraine had joined, declared that Ukraine (along with Belarus and Kazakhstan) would help withdraw the tactical nuclear weapons from its territory by July 1, 1992. The momentum, however, slowed considerably, and new efforts were required to keep Ukraine on the road to nuclear disarmament.

In March 1992, Ukrainian President Leonid Kravchuk announced that Kiev was suspending the withdrawal of the tactical nuclear weapons. This prompted an angry U.S. Secretary of State James Baker to warn Ukraine that U.S. aid would be cut off and Kravchuk's upcoming meeting with President Bush canceled if Kiev did not fulfill its commitment on the tactical nuclear weapons. Ukraine immediately changed its course and re-pledged its support for complete withdrawal. Kravchuk visited Washington in May as planned. The United States also needed Ukraine's full cooperation before it could move forward with the Strategic Arms Reduction Treaty (START) negotiations. The demise of the Soviet Union had thrown a legal monkey wrench into the strategic arms reduction talks, because Russia, Ukraine, Kazakhstan, and Belarus had not been signatories to START. In late April 1992, the United States formally accepted that these countries succeeded the Soviet Union for START purposes. Washington drafted a new protocol recognizing this legal fact. One of the protocol's provisions obligated Ukraine, Kazakhstan, and Belarus to join the NPT as non-nuclear weapon states "in the shortest possible time." In addition, because not all of the strategic nuclear weapons located in Ukraine were covered by START, Washington drafted side letters under which Ukraine, Kazakhstan, and Belarus would return all the nuclear weapons of their territories to Russia. During Kravchuk's May 1992 visit to Washington, President Bush finalized the details with the Ukrainian leader.

The stage was set for the formal signing of what became known as the Lisbon Protocol. But at the last minute, Ukraine balked at setting a firm deadline for returning all

the nuclear weapons and joining the NPT. Ukraine had realized that it could hold hostage important arms control agreements and that the nuclear material in the warheads might have some commercial value. This sentiment manifested itself in calls for financial compensation for returning the nuclear weapons.

In late 1991, the U.S. Congress passed the Soviet Nuclear Threat Reduction Act, also known as the Nunn-Lugar Act after its two Senate champions. This legislation authorized the Defense Department to transfer \$400 million from other programs to assist in the safe dismantlement and storage of nuclear weapons in the former Soviet Union; Congress has allocated additional funds in subsequent years.¹⁸ It was made clear to Kiev that it would receive some of these funds if it cooperated, but how much? Ukrainian demands escalated, topping out at \$3 billion.

The Clinton administration initially continued the Bush administration approach towards Ukraine: diplomatic pressure and isolation until Kiev fulfilled its disarmament pledges. Facing Ukrainian obstinance the administration stressed cooperative threat reduction as a means to persuade Ukraine that its security would be enhanced by a combination of denuclearization and closer ties with the West. The “three pillars” of this policy were dismantlement assistance, economic aid, and security assurances.

Despite this U.S. diplomatic effort, the Rada still refused to formalize the Lisbon Protocol. This led to another U.S. push, with Washington deciding to play a much more active role in mediating the dispute between Ukraine and Russia on divisive security issues, such as the future of the Black Sea Fleet and Russian energy supplies. Kravchuk was also informed that Clinton would not visit Kiev during his scheduled January trip to the region unless there was more progress in the nuclear sphere.

The breakthrough came with the signing of the Trilateral Agreement which included security assurances

from Washington and Moscow. Once START I entered into force and Ukraine became a non-nuclear weapon state party to the NPT, Washington and Moscow would reaffirm their support for Ukraine's territorial integrity, their obligation not to use or threaten to use military force or economic coercion against Ukraine, their commitment to seek immediate U.N. Security Council action if Ukraine became subject to a nuclear threat, and their promise not to use nuclear weapons against Ukraine. Under the U.S.-brokered agreement, Russia agreed to forgive the cost of the oil and gas supplies previously shipped from Russia to Ukraine and to provide Ukraine with 100 tons of low-enriched uranium fuel rods for its nuclear power reactors.

The following month, in February 1994, the Rada approved ratification of START and the Lisbon Protocol. In late January, the United States promised to double its financial assistance to \$310 million if the Rada endorsed the Trilateral Agreement. After the United States promised that Ukraine would soon receive \$700 million in Nunn-Lugar funding, in November 1994, the Rada overwhelmingly approved Ukraine's joining the NPT as a non-nuclear weapon state. At each step, economic aid, good relations with the United States, and security assurances moved Ukraine in the direction of denuclearization. Against great odds, the Clinton administration achieved a momentous nonproliferation success, one that remains largely underappreciated.

Belarus. Washington played an important supporting role to Moscow's lead in persuading Belarus to return the tactical and strategic nuclear warheads on its territory to Russia.¹⁹ As the country that suffered most from the Chernobyl nuclear disaster, strong sentiment already existed that the country should be non-nuclear. Belorussian leaders understood that maintaining these weapons was expensive, that they required 35,000 members of the Strategic Rocket Forces (who were overwhelmingly Russian) on their territory to maintain and safeguard, that their presence made the country less, not more, secure, and

that they were in no position to haggle with Moscow, which was demanding their return.

Here, the United States provided additional incentives for Belarus to return these weapons to Russia, ratify the START I agreement and join the NPT. Adding the cost of other technical assistance programs, by January 1993 Washington had committed over \$7.5 million to denuclearization efforts and defense conversion in Belarus. These rather limited sums nonetheless whetted Minsk's appetite for additional aid pending ratification of START, the Lisbon Protocol and the NPT. The following month, the Belorussian Supreme Soviet ratified all three documents. Following through on its earlier promise, and wanting to send a signal to Ukraine and Kazakhstan that denuclearization would bring tangible benefits, the United States pledged an additional \$65 million in denuclearization assistance and offered a formal meeting between the Belorussian president and President Clinton. Here again, economic aid, security assurances, and good relations were sufficient to produce an optimal nonproliferation outcome.

Kazakhstan. With the end of the Soviet Union, Kazakhstan inherited 104 SS-18 intercontinental ballistic missiles (ICBMs), each carrying ten 550-kiloton warheads, 40 nuclear-capable "Bear" H long-range bombers, and an unspecified number of tactical nuclear weapons. Unlike Ukraine and Belarus, Kazakhstan had not suffered from the Chernobyl disaster. But it had developed its own sensitivity to nuclear weapons due to the estimated 500 nuclear tests, 200 of them above ground, that Moscow had conducted at the Semipalatinsk testing site in the northeastern part of the country. Still, Alma Ata was in no rush to send these weapons back to Russia. Kazakhstan President Nursultan Nazarbayev wanted to craft a special relationship with the United States, and astutely seized upon the nuclear issue as the best way to do so. The Kazakh leader wanted to ensure that Washington understood his

country's geographic vulnerability between Russia and China.²⁰

Secretary of State James Baker invested significant diplomatic capital in 1991 and 1992 trying to win Alma Ata's commitment to denuclearization, and although he received numerous private assurances, Nazarbayev refused to commit himself in public. By the beginning of May 1992, it appeared as if Kazakhstan intended to retain strategic nuclear weapons on its territory for some time. Yet less than 3 weeks later, Nazarbayev stood by President Bush's side in the White House and pledged, for the first time, to ratify the START agreement, join the NPT in the shortest possible time, and eliminate all nuclear weapons on Kazakh territory within 7 years. In Lisbon 4 days later, Kazakhstan formalized these pledges.

U.S. policy played a large role in this turnaround. Secretary Baker repeatedly conveyed the security assurances the United States would extend to Kazakhstan if it joined the NPT as a non-nuclear weapon state. And, indeed, the two countries signed a host of economic and trade agreements during the May Bush-Nazarbayev meeting at the White House. Six weeks after the Lisbon summit, in July 1992, Kazakhstan quickly ratified the START agreement to demonstrate its good faith to the United States.

Getting Alma Ata to ratify the NPT proved more difficult. A main culprit was U.S. domestic politics. With the change of American administrations in 1993, Kazakhstan seized the opportunity to try to parlay NPT membership into further concessions, especially additional security commitments. Consequently, during Secretary of State Christopher's visit to Kazakhstan in October 1993, he was surprised by Nazarbayev's refusal to cooperate on denuclearization efforts and his insistence on meeting personally with President Clinton.

In the weeks and months after the Christopher visit, Washington told Alma Ata that Nazarbayev would only

meet with Clinton if his country joined the NPT. Kazakhstan would also receive \$84 million in dismantlement and other nuclear-related assistance, and \$200 million in economic assistance in Kazakhstan and other central Asian countries.

As in the other former Soviet states, the formula of limited economic assistance, cooperative threat reduction programs, security assurances, and good relations with the United States, proved to be a winner.

Argentina. During the 1970s, Argentina was widely thought to harbor aspirations as a nuclear weapons state. Motivations included its desire to win status and prestige; to justify its self-appointed notion of exceptionalism; to maintain a technological and scientific lead over its neighbors; and hedge against the possibility of a Brazilian bomb. A number of influences weaned Buenos Aires away from this path. The military's poor showing in the 1982 Falklands/Malvinas war discredited its leadership and paved the way for its return to the barracks, which, in turn, made possible the country's first popular election in 1983. Newly elected President Raul Alfonsin slashed the budget for the nuclear program by 40 percent and placed it under civilian control.

But Argentina still balked at signing the NPT and accepting full-scope safeguards on its nuclear activities. These steps came later, under the leadership of Carlos Menem, who was determined to chart a new path for Argentina that would improve relations with the United States, and allow Argentina to become more fully integrated into the First World's financial mainstream and the international community. Menem's approach was summarized by his famously saying, "I'd rather govern the last country in the First World than the first country in the Third World." To reorient Argentina's foreign policy, Menem withdrew from the Non-Aligned Movement, reestablished ties with Britain, and in 1990 announced the suspension of the Condor II ballistic missile program, which

Washington strongly opposed.²¹ But the primary impediment to better relations was the country's nuclear program. In exchange for Argentina and Brazil signing an agreement to allow full-scope IAEA safeguards on both countries' nuclear programs, the Quadripartite Agreement, Washington rewarded Buenos Aires in December 1993 with a technology cooperation agreement that permitted Buenos Aires to purchase advanced computer equipment, nuclear technology, and aeronautical guidance systems; the deal itself symbolized American confidence in Argentina. Two months later, the United States approved the sale to Argentina of 36 A-4M Skyhawk jets with advanced radar technology, over British objections. Argentina was also invited to join the Missile Technology Control Regime in November 1993 and to become a full member of the Nuclear Suppliers Group in 1994. Argentina was the lone South American and Third World country to belong to both of these nonproliferation arrangements. In January 1994, Argentina ratified the Treaty of Tlatelolco, which called for a nuclear-weapon-free zone in Latin America, and a little over a year later joined the NPT.

Brazil. Brazil was also thought by many to aspire to nuclear weapons status. Its anti-NPT rhetoric, secret nuclear development program (the "parallel program") run by different branches of the armed services, interest in developing nuclear-powered submarines, and desire for international status commensurate with its leading position in the region all reinforced these suspicions.

Also like Argentina, a change in the direction of the country's nuclear program awaited a change in political leadership. In March 1990, Fernando Collor became Brazil's president. Staunchly anti-nuclear, (his father had been invited by the United States to witness a nuclear test in the Pacific and was horrified by what he saw) he moved to retake the nuclear program from the military and to halt all nuclear weapons-related research. Like Menem, Collor wanted to improve relations with the international community, especially the United States, to help pull

forward his country's lagging economy. The price for entry into the international community was allowing international inspections of its nuclear facilities. But after Brasilia signed the Quadripartite Agreement in December 1991, the Brazilian Senate refused to ratify it. It did not help matters that Collor was forced from office in December 1992 because of a bribery scandal, but cooperation and transparency with Argentina and the IAEA continued nonetheless. Diplomatic pressure from Germany, Brazil's main supplier of nuclear technology, augmented Washington's strictures that Brazil would remain on the margins of global economic, political and technological advancements so long as it remained outside of the NPT. With Argentina already reaping the benefits of nonproliferation, Brazil agreed to join. Ironically, the Brazilian legislature refused ratification until 1998. By that time, however, questions about Brazil's nuclear intentions had been laid to rest.

Conclusion.

What do these case studies suggest for competitive nonproliferation strategy? First, the spread of nuclear weapons around the globe does not equally threaten U.S. national security. By and large, this has been recognized by U.S. policymakers, who have crafted differentiated strategies to deal with varying circumstances. It is striking, however, that during the past 50 years, in only one case—Iraq—did the United States employ military force (i.e., counterproliferation) to forcibly denuclearize a country. And it was Baghdad's invasion of Kuwait, not its well-known nuclear weapon program, that triggered military action. Although it may be useful to keep nuclear wannabees guessing as to U.S. intentions, it is in fact difficult to construct a scenario in which the United States would preemptively and unilaterally attempt to destroy another country's nuclear weapons facilities.

Second, Washington learned that the most successful nonproliferation policy for countries facing external threats was to address the root cause of their insecurity through an alliance with the United States. NATO is the premier example of a collective defense arrangement; U.S. security guarantees to Japan and South Korea are also noteworthy. In all of these cases, the U.S. commitment was manifested by the physical presence of U.S. troops and backed by nuclear weapons stationed on that country's territory. These formal security guarantees have been the most effective and the most costly. Security assurances have been less costly, but also useful, as witnessed in Ukraine. Finally, at the end of this continuum is the importance countries have attached to good relations with the United States—an importance whose stock has risen with the magnified American role after the end of the Cold War.

Third, what might be termed dollar diplomacy has also been used very successfully by Washington to persuade countries that they have more to gain by remaining non-nuclear than by acquiring the bomb. The end of the Cold War created new opportunities for Washington to push this policy further, both because of its economic strength and because of the reduced rationale for turning a blind eye on proliferation to maintain Cold War relationships. Financial inducements played an important role in keeping Germany, Japan, South Korea, and Taiwan from going nuclear. Similarly, economic factors helped tip the balance toward denuclearization in Ukraine, Kazakhstan, and Belarus. The United States pledged to Ukraine a total of \$900 million in Nunn-Lugar funding and other U.S. assistance. Kazakhstan and Belarus received lesser, but nonetheless substantial, sums from Washington to return the strategic nuclear weapons stationed on their territories.

Fourth, bilateral economic incentives were not directly offered by Washington to influence the nuclear decisions in South Africa, Argentina, and Brazil. At best, there was in these countries the generalized belief that tempering or eliminating their nuclear programs would accelerate and

expand commercial ties with the United States and other Western industrialized powers. They also hoped that changes in their nuclear programs would attract U.S. and Western investment and lift multilateral restrictions on sensitive technologies that could be used for economic development. In short, they hoped that good nonproliferation credentials would enable them to participate in multilateral trading arrangements and gain access to dual-use technologies useful for growing their increasingly technology-dependent economies.

Fifth, the U.S. role in promoting and subsidizing the peaceful uses of atomic energy by other countries might best be seen as a subset of dollar diplomacy. On a selective basis, the Atoms for Peace approach played a useful role in channeling interest in nuclear power technology toward legitimate purposes. Expectations were high that nuclear energy would satisfy the energy requirements of rapidly industrializing countries such as Germany, Japan, South Korea, and Taiwan. Bilateral safeguards and IAEA inspections provided assurances that nuclear power programs would not be used as a cover for nuclear weapons. However, it should be noted that this approach fueled proliferation in India, Iraq, and Iran, to name a few failures. Technology inducements, if not integrated into a broad competitive strategy, can backfire.

Finally, sometimes it is not possible for the United States (or the international community) to score complete and unambiguous nonproliferation wins. In these cases, the best Washington can do is to develop and implement a patient coping strategy that offers the best chance of victory not immediately, but over time. These cases are frustrating; they are subject to easy criticism by media pundits and political opponents. But some of the cases identified in this paper formerly fell into this category—Argentina and Brazil in particular. Any competitive strategy that aims at victory must recognize that patience is a tool that can be just as important as security arrangements, economic assistance,

or good relations. In some cases, benign neglect may even be an appropriate strategy.

Winning requires positive and negative inducements that leverage U.S. political, military, and economic strengths against the vulnerabilities of a proliferator. When the United States has had the will to win, the scorecard is impressive. Some of the losses might have been wins, but other priorities took precedence. And there will always be intractable or ambiguous cases that can only be handled by a coping approach.

Looking ahead, the ingredients are available to win future proliferation challenges, but they will remain disconnected pieces unless policymakers integrate them into competitive strategies. Without such strategies, the United States may find itself relying more on luck than brains to avoid proliferation that could have been prevented.

CHAPTER 4 - ENDNOTES

1. We have adopted the definition of success elaborated by Henry Sokolski in Chapter 3.

2. William Perry, "US Counterproliferation Efforts: Prevent, Deter, Defend," in Barry Schneider and William Dowdy, eds., *Pulling Back From the Brink: Reducing and Countering Nuclear Threats*, Portland, OR: Frank Cass, 1998.

3. Quoted in Catherine McArdle Kelleher, *Germany and the Politics of Nuclear Weapons*, New York: Columbia University Press, 1975, p. 9. Kelleher's book remains the best treatment of this subject.

4. *Ibid.*

5. *Ibid.*, p. 5. See also, John D. Steinbruner, *The Cybernetic Theory of Decision: New Dimensions of Political Analysis*, Princeton, NJ: Princeton University Press, 1974.

6. On Sweden's nuclear program see Mitchell Reiss, *Without the Bomb: The Politics of Nuclear Nonproliferation*, New York: Columbia University Press, 1988, pp. 37-87.

7. See Kelleher.

8. *Ibid.*, p. 266. See also, David N. Schwartz, *NATO's Nuclear Dilemmas*, Washington, DC: Brookings Institution, 1983, pp. 82-135; and Steinbruner, pp. 153-326.

9. Kelleher, pp. 300-301.

10. Deborah Shapley, "Nuclear Weapons History: Japan's Wartime Bomb Projects Revealed," *Science*, Vol. 199, No. 4325, January 13, 1978; Leslie Groves, *Now It Can Be Told*, London: Andre Deutsch, 1963, pp. 367-372; Richard Rhodes, *The Making of the Atomic Bomb*, New York: Simon and Schuster, 1986, pp. 457-459; and Reiss, *Without the Bomb*, pp. 109-137.

11. For recent scholarship on the history of the U.S.-Japan nuclear alliance, see Morton Halperin, *The Nuclear Dimension of the US-Japan Alliance*, and Hans Kristensen, *Japan Under the Nuclear Umbrella* both papers written for the Nautilus Institute, 1999, available at <http://nautilus.org>

12. Joint Statement on U.S.-Japan Defense Guidelines, U.S.-Japan Security Consultative Committee (SCC), September 23, 1997. The SCC approved the initial guidelines in 1978. Presidents Clinton and Hashimoto agreed to review the guidelines in 1996. The new guidelines were announced September 23, 1997.

13. Selig Harrison, ed., *Japan's Nuclear Future: The Plutonium Debate and East Asian Security*, Washington DC: Carnegie Endowment for International Peace, 1996.

14. "South Korea Planned Nuclear Weapons," *Jane's Defense Weekly*, February 27, 1993, p. 6; "South Korea's Emerging Nuclear Potential," in *Foreign Broadcast Information Service, Special Memorandum*, (henceforth *FB-SM*)-96-10002, February 22, 1996.

15. David Albright and Corey Gay, "Taiwan: Nuclear Nightmare Averted," *Bulletin of the Atomic Scientists*, Vol. 54, No. 1, January/February 1998, p. 54.

16. On South Africa's nuclear program see Mitchell Reiss, *Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities*, Washington DC: Wilson Center Press/Johns Hopkins University Press, 1995, pp. 7-43; David Albright, *South Africa's Secret Nuclear Weapons* Institute for Science and International Security, Washington DC, May 1994, available on the ISIS web site at www.isis-online.org.

17. On Ukraine's nuclear stance see Reiss, *Bridled Ambition*, pp. 90-129.

18. Nunn-Lugar expenditures exceeded \$2 billion by 1999. Amy Woolf, *The Expanded Threat Reduction Initiative for the Former Soviet Union: Administration Proposals for FY2000* CRS Report RS20203, May 20, 1999.

19. On Belarus, see Reiss, p. 129.

20. On Kazakhstan, see Reiss, pp. 138-150.

21. On U.S. nonproliferation diplomacy toward Argentina and Brazil, see Reiss, *Bridled Ambition*, chapter 3, pp. 45-88; and Leonard Spector, *Tracking Nuclear Proliferation*, Washington, DC: Carnegie Endowment for International Peace, 1995, chapter 9, "Latin America," pp. 147-158.