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Publication Date

1995-08-01

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PEACE, STABILITY, AND NUCLEAR WEAPONS

by

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This paper is drawn mainly from Kenneth N. Waltz, The Spread of Nuclear Weapons, Adelphi Paper No. 171 (London: International Institute of Strategic Studies, 1981) and from Chapters 1 and 3 of Scott D. Sagan and Kenneth N. Waltz, The Spread of Nuclear Weapons: A Debate (New York: W.W. Norton, 1995). I thank the Institute on Global Conflict and Cooperation for supporting my research and Karen Ruth Adams, Amy J. Bricker, and Sandra Escobedo for helping me with this paper.



If proliferation does take place we may continue to complain about it, but we shall live with it. And leaders who now assert that nonproliferation is indispensable to our security will presumably find other subjects to dramatize.

James R. Schlesinger, 1956¹

Throughout the nuclear age, fear of nuclear proliferation has been pervasive even though we have yet to witness the phenomenon. Rather than proliferating, nuclear weapons have spread glacially. From 1945 to 1970, only five countries, counting Israel, followed the United States into the nuclear world. Since 1970 when the Nuclear Nonproliferation Treaty (NPT) came into effect, only three countries—in addition to the three that became nuclear by succession to the Soviet Union—have, or may have, joined and remained members of the nuclear club: India, Pakistan, and North Korea. If slowing the spread of nuclear weapons can be credited to the NPT, then it can be called a measured success.

Why Countries Want Nuclear Weapons

In contemplating the likely future, we might first ask

why countries want to have nuclear weapons. They want them for one or more of seven main reasons:

- First, great powers always counter the weapons of other great powers, usually by imitating those who have introduced new weapons. It was not surprising that the Soviet Union developed atomic and hydrogen bombs, but rather that we thought the Baruch–Lilienthal plan might persuade it not to.
- Second, a state may want nuclear weapons for fear that its great-power ally will not retaliate if another great power attacks. When it became a nuclear power, Britain thought of itself as being a great one, but its reasons for deciding to maintain a nuclear force arose from doubts that the United States could be counted on to retaliate in response to an attack by the Soviet Union on Europe and from Britain’s consequent desire to place a finger on our nuclear trigger. As soon as the Soviet Union was capable of making nuclear strikes at American cities, West Europeans began to worry that America’s nuclear umbrella no longer ensured that its allies would stay dry if it rained.

¹ James R. Schlesinger, “The Strategic Consequences of Nuclear Proliferation,” *The Reporter*, 20 October 1956, pp. 35–8.

- Third, a country without nuclear allies will want nuclear weapons all the more if some of its adversaries have them. So China and then India became nuclear powers, and Pakistan naturally followed.
- Fourth, a country may want nuclear weapons because it lives in fear of its adversaries' present or future conventional strength. This was reason enough for Israel's nuclear weapons.
- Fifth, for some countries nuclear weapons are a cheaper and safer alternative to running economically ruinous and militarily dangerous conventional arms races. Nuclear weapons promise security and independence at an affordable price.
- Sixth, some countries are thought to want nuclear weapons for offensive purposes. This, however, is an unlikely motivation for reasons given below.
- Finally, by building nuclear weapons a country may hope to enhance its international standing. This is thought to be both a reason for and a consequence of developing nuclear weapons. One may enjoy the status that comes with nuclear weapons and even benefit from it. Thus, North Korea gained international attention by developing nuclear military capability. A yen for attention and prestige is, however, a minor motivation. Would-be nuclear states are not among the militarily most powerful ones. The security concerns of weaker states are too serious to permit them to accord much importance to the prestige that nuclear weapons may bring.

The Fear of Nuclear Weapons

Fears of what the further spread of nuclear weapons will do to the world boil down to five. First, new nuclear states may put their weapons to offensive use. Second, as more countries get the weapons, the chances of accidental use increase. Third, with limited resources and know-how, new nuclear states may find it difficult to deploy invulnerable, deterrent forces. Fourth, American military intervention in the affairs of lesser states will be impeded by their possession of nuclear weapons. Fifth, as nuclear weapons spread, terrorists may more easily get hold of nuclear materials. (In this chapter, I leave the fifth fear aside, partly because the likelihood of nuclear terror is low and partly because terrorists can presumably steal nuclear weapons or buy them on the black market whether or not a few more states go nuclear.)²

² For a brief discussion, see Chapter 3 of Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate* (New York: W. W. Norton, 1995).

Offensive use

Despite the variety of nuclear motivations, an American consensus has formed on why some states want their own weapons—to help them pursue expansionist ends. “The basic division in the world on the subject of nuclear proliferation,” we are authoritatively told, “is not between those with and without nuclear weapons. It is between almost all nations and the very few who currently seek weapons to reinforce their expansive ambition.”³ Just as we first feared that the Soviet Union and China would use nuclear weapons to extend their sway, so we now fear that the likes of Iraq, Iran, and Libya will do so. The fear has grown despite the fact that nuclear capability added little to the Soviet Union's or China's ability to pursue their ends abroad, whether by launching military attacks or practicing blackmail.

The fear that new nuclear states will use their weapons for aggressive purposes is as odd as it is pervasive. Rogue states, as we now call them, must be up to no good, else we would not call them rogues. Why would states such as Iraq, Iran, and North Korea want nuclear weapons if not to enable them to conquer, or at least to intimidate, others? The answer can be given in one word: fear. The behavior of their rulers is often brazen, but does their bluster convey confidence or fear? Even though they may hope to extend their domination over others, they first have to maintain it at home.

What states do conveys more than what they say. Idi Amin and Muammar el-Qaddafi were favorite examples of the kinds of rulers who could not be trusted to manage nuclear weapons responsibly. Despite wild rhetoric aimed at foreigners, however, both of these “irrational” rulers became cautious and modest when punitive actions against them seemed to threaten their continued ability to rule. Even though Amin lustily slaughtered members of tribes he disliked, he quickly stopped goading Britain when it seemed that it might intervene militarily. Qaddafi showed similar restraint. He and Anwar Sadat were openly hostile. In July 1977, both launched commando attacks and air raids, including two large air strikes by Egypt on Libya's el-Adem airbase. Neither side let the attacks get out of hand. Qaddafi showed himself to be forbearing and amenable to mediation by other Arab leaders. Shai Feldman used these and other examples to argue that Arab leaders are deterred from taking inordinate risks, not because they engage in intricate rational calculations but simply because they, like other rulers, are “sensitive

³ McGeorge Bundy, William J. Crowe, Jr. and Sidney D. Drell, *Reducing Nuclear Danger* (New York: Council on Foreign Relations, 1994), p. 81.

to costs.” Saddam Hussein further illustrated the point during, and even prior to, the war of 1991. He invaded Kuwait only after the United States gave many indications that it would acquiesce in his actions. During the war, he launched missiles against Israel, but they were so lightly armed that little risk was run of prompting attacks more punishing than Iraq was already suffering. Deterrence worked once again.

Many Westerners write fearfully about a future in which Third World countries have nuclear weapons. They seem to view Third World people in the old imperial manner as “lesser breeds without the law.” As ever with ethnocentric views, speculation takes the place of evidence. How do we know that a nuclear-armed and newly-hostile Egypt, or a nuclear-armed and still-hostile Syria, would not strike to destroy Israel? Yet we have to ask whether either would do so at the risk of Israeli bombs falling on some of their cities? Almost a quarter of Egypt’s people live in four cities: Cairo, Alexandria, El-Giza, and Shoubra el-Kheima. More than a quarter of Syria’s live in three: Damascus, Aleppo, and Homs.⁴ What government would risk sudden losses of such proportion, or indeed of much lesser proportion? Rulers want to have a country that they can continue to rule. Some Arab country may wish that some other Arab country would risk its own destruction for the sake of destroying Israel, but why would one think that any country would be willing to do so? Despite ample bitterness, Israelis and Arabs have limited their wars and accepted constraints placed on them by others. Arabs did not marshal their resources and make an all-out effort to destroy Israel in the years before Israel could strike back with nuclear warheads. We cannot expect countries to risk more in the presence of nuclear weapons than they did in their absence.

Second, many fear that states that are radical at home will recklessly use their nuclear weapons in pursuit of revolutionary ends abroad. States that are radical at home, however, may not be radical abroad. Few states have been radical in the conduct of their foreign policy, and fewer have remained so for long. Think of the Soviet Union and the People’s Republic of China. States coexist in a competitive arena. The pressures of competition cause them to behave in ways that make the threats they face manageable, in ways that enable them to get along. States can remain radical in foreign policy only if they are overwhelmingly strong—as none of the new nuclear states will be—or if their acts fall short of damaging

vital interests of other nuclear powers. States that acquire nuclear weapons are not regarded with indifference. States that want to be freewheelers have to stay out of the nuclear business. A nuclear Libya, for example, would have to show caution, even in rhetoric, lest it suffer retaliation in response to someone else’s anonymous attack on a third state. That state, ignorant of who attacked, might claim that its intelligence agents had identified Libya as the culprit and take the opportunity to silence it by striking a heavy conventional blow. Nuclear weapons induce caution in any state, especially in weak ones.

Would not nuclear weapons nevertheless provide a cheap and decisive offensive force when used against a conventionally armed enemy? Some people once thought that South Korea, and earlier, the Shah’s Iran, wanted nuclear weapons for offensive use. Yet one can neither say why South Korea would have used nuclear weapons against fellow Koreans while trying to reunite them nor how it could have used nuclear weapons against the North, knowing that China and the Soviet Union might have retaliated. And what goals might a conventionally strong Iran have entertained that would have tempted it to risk using nuclear weapons? A country that launches a strike has to fear a punishing blow from someone. Far from lowering the expected cost of aggression, a nuclear offense even against a non-nuclear state raises the possible costs of aggression to incalculable heights because the aggressor cannot be sure of the reaction of other states.

North Korea provides a good example of how the United States imputes doubtful motives to some of the states seeking nuclear weapons. Between 1989 and 1991, North Korea’s world collapsed. The Soviet Union and South Korea established diplomatic relations; China and South Korea opened trade offices in each other’s capitols and now recognize each other. The fall of communist regimes in Eastern Europe, and the disintegration of the Soviet Union, stripped North Korea of outside support. The revolution in its international relations further weakened an already weak North Korea.

Like earlier nuclear states, North Korea wants the military capability because it feels weak and threatened.⁵ The ratio of South Korea’s to North Korea’s GDP in 1993 was 15:1; of their populations, 2:1; of their defense budgets, 6:1.⁶ North Korea does have twice as large an active army and twice as many tanks, but their quality is low, spare parts and fuel

⁴ *The Middle East and North Africa, 1994*, 40th ed. (London: Europa Publications, 1993), pp. 363, 810.

⁵ This section is based on Karen Ruth Adams and Kenneth N. Waltz, “Don’t Worry Too Much About North Korean Nuclear Weapons,” unpublished paper, April 1994.

⁶ International Institute for Strategic Studies, *The Military Balance 1994–1995* (London: Brassey’s, 1994), pp. 178–181.

scarce, training limited, and communications and logistics dated. In addition, South Korea has the backing of the United States and the presence of American troops.

Despite North Korea's exposed position, Americans especially have worried that the North might invade the South and use nuclear weapons in doing so. How concerned should we be? No one has figured out how to use nuclear weapons except for deterrence. Is a small and weak state likely to be the first to do so? Countries that use nuclear weapons have to fear retaliation. Why would the North once again invade the South? It did so in 1950, but only after prominent American congressmen, military leaders, and other officials proclaimed that we would not fight in Korea. Any war on the peninsula would put North Korea at severe risk. Perhaps because South Koreans appreciate this fact more keenly than Americans do, relatively few of them seem to believe that North Korea will invade. Kim Il Sung at times threatened war, but anyone who thinks that when a dictator threatens war we should believe him is lost wandering around somewhere in a bygone conventional world.⁷ Kim Il Sung was sometimes compared to Hitler and Stalin.⁸ Despite similarities, it is foolish to forget that the capabilities of the North Korea he ruled in no way compared with those of Germany and the Soviet Union under Hitler and Stalin.

Nuclear weapons make states cautious, as the history of the nuclear age shows. "Rogue states," as the Soviet Union and China were once thought to be, have followed the pattern. The weaker and the more endangered a state is, the less likely it is to engage in reckless behavior. North Korea's external behavior has sometimes been ugly, but certainly not reckless. Its regime has shown no inclination to risk suicide. This is one good reason why surrounding states counseled patience.

Senator John McCain, a former naval officer, nevertheless believes that North Korea would be able to attack without fear of failure because a South Korean and American counterattack would have to stop at the present border for fear of North Korean nuclear retaliation.⁹ Our vast nuclear forces would not deter an attack on the South, yet the dinky force that the North may have would deter us! A land-war game played by the American military in 1994 showed another side of American military thinking. The game pitted the United States against a Third

World country similar to North Korea. Losing conventionally, it struck our forces with nuclear weapons. For unmentioned reasons, our superior military forces had no deterrent effect. Results were said to be devastating. With such possibilities in mind, Air Force General Lee Butler and his fellow planners called for a new strategy of deterrence, with "generic targeting" so we will be able to strike wherever "terrorist states or rogue leaders... threaten to use their own nuclear, chemical or biological weapons." The strategy will supposedly deter states or terrorists from brandishing or using their weapons. Yet General Butler himself believes, as I do, that Saddam Hussein was deterred from using chemicals and biologicals in the Gulf War.¹⁰

During the 1993 American-South Korean "Team Spirit" military exercises, North Korea denied access to International Atomic Energy Agency inspectors and threatened to withdraw from the nuclear Non-Proliferation Treaty. The North's reaction suggests, as one would expect, that the more vulnerable North Korea feels, the more strenuously it will pursue a nuclear program. The pattern has been a common one ever since the United States led the way into the nuclear age. Noticing this, we should be careful about conveying military threats to weak states.

The control of nuclear weapons

Will new nuclear states, many of them technologically backward and with weapons lacking effective safety devices, be able to prevent the accidental or unauthorized use of their weapons and maintain control of them despite possible domestic upheavals?

"War is like love," the chaplain says in Bertolt Brecht's *Mother Courage*, "it always finds a way."¹¹ For half a century, nuclear war has not found a way. The old saying, "accidents will happen," is translated as Murphy's Law holding that anything that can go wrong will go wrong. Enough has gone wrong, and Scott Sagan has recorded many of the nuclear accidents that have, or have nearly, taken place.¹² Yet none of them has caused anybody to blow anybody else up. In a speech given to American scientists in 1960, C.P. Snow said this: "We know, with the certainty of statistical truth, that if enough of these weapons are made—by enough different states—

⁷ A.M. Rosenthal, "Always Believe Dictators," *New York Times*, 29 March 1994, p. A15.

⁸ R.W. Apple, "Facing Up to the Legacy Of An Unresolved War," *New York Times*, 12 June 1994, p. E-3.

⁹ John McCain, letter, *New York Times*, 28 March 1994, p. A10.

¹⁰ Eric Schmitt, "U.S. is Redefining Nuclear Deterrence, Terrorist Nations Targeted," *International Herald Tribune*, 26 February 1993.

¹¹ Bertolt Brecht, *Mother Courage and her Children: a Chronicle of the Thirty Years' War*, trans. Eric Bentley (New York: Grove Press, 1966), p. 76.

¹² Scott D. Sagan, "More Will Be Worse," in Sagan and Waltz, *Spread of Nuclear Weapons*, pp. 47-91.

some of them are going to blow up. Through accident, or folly, or madness—but the motives don't matter. What does matter is the nature of the statistical fact." In 1960, statistical fact told Snow that within, "at the most, ten years some of these bombs are going off." Statistical fact now tells us that we are twenty-five years overdue.¹³ But the novelist and scientist overlooked the fact that there are no "statistical facts."

Half a century of nuclear peace has to be explained since divergence from historical experience is dramatic. Never in modern history, conventionally dated from 1648, have the great and major powers of the world enjoyed such a long period of peace.

Large numbers of weapons increase the possibility of accidental use or loss of control, but new nuclear states will have only small numbers of weapons to care for. Lesser nuclear states may deploy, say, ten to fifty weapons and a number of dummies, while permitting other countries to infer that numbers of real weapons are larger. An adversary need only believe that some warheads may survive its attack and be visited on it. That belief is not hard to create without making command and control unreliable. All nuclear countries live through a time when their forces are crudely designed. All countries have so far been able to control them. Relations between the United States and the Soviet Union, and later among the United States, the Soviet Union, and China, were at their bitterest just when their nuclear forces were in early stages of development and were unbalanced, crude, and presumably hard to control. Why should we expect new nuclear states to experience greater difficulties than the ones old nuclear states were able to cope with? Although some of the new nuclear states may be economically and technically backward, they will either have expert scientists and engineers or they will not be able to produce nuclear weapons. Even if they buy or steal the weapons, they will have to hire technicians to maintain and control them. We do not have to wonder whether they will take good care of their weapons. They have every incentive to do so. They will not want to risk retaliation because one or more of their warheads accidentally strike another country.

Deterrence is a considerable guarantee against accidents, since it causes countries to take good care of their weapons, and against anonymous use, since those firing the weapons can know neither that they will be undetected nor what punishment detection might bring. In life, uncertainties abound. In a

conventional world, they more easily lead to war because less is at stake. Even so, it is difficult to think of conventional wars that were started by accident.¹⁴ It is hard to believe that nuclear war may begin accidentally, when less frightening conventional wars have rarely done so.

Fear of accidents works against their occurring. This is illustrated by the Cuban Missile Crisis. Accidents happened during the crisis, and unplanned events took place. An American U-2 strayed over Siberia, and one flew over Cuba. The American Navy continued to play games at sea, such games as trying to force Soviet submarines to surface. In crises, political leaders want to control all relevant actions, while knowing that they cannot do so. Fear of losing control propelled Kennedy and Khrushchev to end the crisis quickly. In a conventional world, uncertainty may tempt a country to join battle. In a nuclear world, uncertainty has the opposite effect. What is not surely controllable is too dangerous to bear.

One must, however, consider the possibility that a nuclear state will one day experience uncertainty of succession, fierce struggles for power, and instability of regime. That such experiences led to the use of nuclear weapons neither during the Cultural Revolution in China nor during the dissolution of the Soviet Union is of some comfort. The possibility of one side in a civil war firing a nuclear warhead at its opponent's stronghold nevertheless remains. Such an act would produce a national tragedy, not an international one. This question then arises: Once the weapon is fired, what happens next? The domestic use of nuclear weapons is, of all the uses imaginable, least likely to lead to escalation and to regional or global tragedy.

Vulnerability of forces and problems of deterrence

The credibility of second strike forces has two faces. First, they have to be able to survive preemptive attacks. Second, they have to appear to be able to deliver a blow sufficient to deter.

The uneven development of the power of new nuclear states creates occasions that permit strikes and may invite them. Two stages of nuclear development should be distinguished. First, a country may be in an early stage of development and be obviously unable to make nuclear weapons. Second, a country may be in an advanced state of development and

¹³ C.P. Snow, "Excerpts from Snow's speech to American Scientists," *New York Times*, December 28, 1960, p. 14.

¹⁴ Scott Sagan has managed to find three, not all of which are unambiguous. *The Limits of Safety: Organizations, Accidents and Nuclear Weapons* (Princeton: Princeton University Press, 1993), p. 263.

whether or not it has some nuclear weapons may not be surely known. All of the present nuclear countries went through both stages, yet until Israel struck Iraq's nuclear facility in June of 1981, no one had launched a preventive strike.

A number of causes combined may account for the reluctance of states to strike in order to prevent adversaries from developing nuclear forces. A preventive strike is most promising during the first stage of nuclear development. A state could strike without fearing that the country it attacked would be able to return a nuclear blow. But would one country strike so hard as to destroy another country's potential for future nuclear development? If it did not, the country struck could resume its nuclear career. If the blow struck is less than devastating, one must be prepared either to repeat it or to occupy and control the country. To do either would be forbiddingly difficult.

In striking Iraq, Israel showed that a preventive strike can be made, something that was not in doubt. Israel's act and its consequences, however, made clear that the likelihood of useful accomplishment is low. Israel's action increased the determination of Arabs to produce nuclear weapons. Israel's strike, far from foreclosing Iraq's nuclear career, gained Iraq support from some other Arab states to pursue it. Despite Prime Minister Menachem Begin's vow to strike as often as need be, the risks in doing so would have risen with each occasion.

A preemptive strike launched against a country that may have a small number of warheads is even less promising than a preventive strike during the first stage. If the country attacked has even a rudimentary nuclear capability, one's own severe punishment becomes possible. Nuclear forces are seldom delicate because no state wants delicate forces, and nuclear forces can easily be made sturdy. Nuclear warheads are fairly small and light; they are easy to hide and to move. Even the Model-T bombs dropped on Hiroshima and Nagasaki were small enough to be carried by a World War II bomber. Early in the nuclear age, people worried about atomic bombs being concealed in packing boxes and placed in the holds of ships to be exploded when a signal was given. Now more than ever, people worry about terrorists stealing nuclear warheads because various states have so many of them. Everybody seems to believe that terrorists are capable of hiding bombs.¹⁵ Why should states be unable to do what terrorist gangs are thought to be capable of?

It was sometimes claimed that a small number of bombs in the hands of minor powers creates greater

dangers than additional thousands in the hands of the United States or the Soviet Union. Such statements assume that preemption of a small force is easy. Acting on that assumption, someone may be tempted to strike; fearing this, the state with a small number of weapons may be tempted to use the few weapons it has rather than risk losing them. Such reasoning would confirm the thought that small nuclear forces create extreme dangers. But since protecting small forces by hiding and moving them is quite easy, the dangers evaporate.

Hiding nuclear weapons and being able to deliver them are tasks for which the ingenuity of numerous states is adequate. Means of delivery are neither difficult to devise nor hard to procure. Bombs can be driven in by trucks from neighboring countries. Ports can be torpedoed by small boats lying offshore. A thriving arms trade in ever more sophisticated military equipment provides ready access to what may be wanted, including planes and missiles suited to the delivery of nuclear warheads.

Lesser nuclear states can pursue deterrent strategies effectively. Deterrence requires the ability to inflict unacceptable damage on another country. "Unacceptable damage" to the Soviet Union was variously defined by former Secretary of Defense Robert S. McNamara as requiring the ability to destroy a fifth to a fourth of its population and a half to two-thirds of its industrial capacity. American estimates of what is required for deterrence were absurdly high. To deter, a country need not appear to be able to destroy a fourth or a half of another country, although in some cases that might be easily done. Would Libya try to destroy Israel's nuclear weapons at the risk of two bombs surviving to fall on Tripoli and Benghazi? And what would be left of Israel if Tel Aviv and Haifa were destroyed?

Survivable forces are seen to be readily deployed if one understands that the requirements of deterrence are low. Even the largest states recoil from taking adventurous steps if the price of failure is the possible loss of a city or two. An adversary is deterred if it cannot be sure that its preemptive strike will destroy all of another country's warheads. As Bernard Brodie put it, if a "small nation could threaten the Soviet Union with only a single thermonuclear bomb, which, however, it could and would certainly deliver on Moscow," the Soviet Union would be deterred.¹⁶ I would change that sentence by substituting "might" for "would" and by adding that the threat of a fission bomb or two would also do the trick.

¹⁵ E.g., David M. Rosenbaum, "Nuclear Terror," *International Security* Vol. 1 (Winter 1977), p. 145.

¹⁶ Bernard Brodie, *Strategy in the Missile Age* (Princeton: Princeton University Press, 1959), p. 275.

Once a country has a small number of deliverable warheads of uncertain location, it has a second-strike force. Belatedly, some Americans and Russians realized this.¹⁷ McNamara wrote in 1985 that the United States and the Soviet Union could get along with 2,000 warheads between them instead of the 50,000 they may then have had.¹⁸ Talking at the University of California, Berkeley, in the spring of 1992, he dropped the number the United States might need to sixty. Herbert York, speaking at the Lawrence Livermore National Laboratory, which he once directed, guessed that one hundred strategic warheads would be about the right number for us.¹⁹ It does not take much to deter. To have second-strike forces, states do not need large numbers of weapons. Small numbers do quite nicely. Almost one-half of South Korea's population centers on Seoul. North Korea can deter South Korea by leading it to believe that it has a few well-hidden and deliverable weapons. The requirements of second-strike deterrence have been widely and wildly exaggerated.

The weak versus the strong

Nuclear weapons do not make lesser states into great powers. Nuclear weapons do enable the weak to counter some of the measures that the strong may wish to take against them.

Americans believe, rightly, that the possession of nuclear weapons has conferred benefits on us. Our weapons place limits on what other countries can do. In similar fashion, the possession of nuclear weapons by other countries places limits on our freedom of action. It lessens our power. William C. Foster saw the point when he was director of the Arms Control and Disarmament Agency. "When we consider the cost to us of trying to stop the spread of nuclear weapons," he warned three decades ago, "we should not lose sight of the fact that widespread nuclear proliferation would mean a substantial erosion of the margin of power which our great wealth and industrial base have long given us relative to much of the rest of the world."²⁰

A strong country invading a weak nuclear country has to worry that it may use a weapon or two

against the invader's massed troops or retaliate against one of its cities or a city of an ally. Thus in 1991, the United States could have put pressure on a nuclear Iraq and exacted a price for its invasion of Kuwait, but it would have been deterred from leading a headlong invasion of the country. As Marc Dean Millot has said: "Small survivable arsenals of nuclear weapons in the hands of regional adversaries are likely to become an important obstacle to U.S. military operations in the post-cold war world."²¹ The fourth reason for America's zeal in countering the spread of nuclear weapons is that, even in the hands of relatively weak states, they would cramp our style.

Stability

When he was Director of the CIA, James Woolsey said that he could "think of no example where the introduction of nuclear weapons into a region has enhanced that region's security or benefited the security interests of the United States."²² But surely nuclear weapons helped to maintain stability during the Cold War and to preserve peace throughout the instability that came in its wake. Except for interventions by major powers in conflicts that for them are minor, peace has become the privilege of states having nuclear weapons, while wars are fought by those who lack them. Weak states cannot help noticing this. That is why states feeling threatened want their own nuclear weapons and why states that have them find it so hard to halt their spread.

At least some of the rulers of new and prospective nuclear states are thought to be ruthless, reckless, and war-prone. Ruthless, yes; war-prone, seldom; reckless, hardly. They have survived for many years, despite great internal and external dangers. They do not, as many seem to believe, have fixed images of the world and unbending aims within it. Instead they have to adjust constantly to a shifting configuration of forces around them. Our images of leaders of Third World states vary remarkably little, yet their agility is remarkable. Are hardy survivors in the Third World likely to run the greatest of all risks by drawing the wrath of the world down on them through aggressive use of their nuclear weapons?

Aside from the quality of national regimes and the identity of rulers, the behavior of nations is

¹⁷ Kenneth N. Waltz, "Nuclear Myths and Political Realities," *American Political Science Review*, 84:3 (September 1990).

¹⁸ Robert McNamara, "Reducing the Risk of Nuclear War: Is Star Wars the Answer?" *Millennium: Journal of International Studies* 15:2 (Summer 1986), p. 137.

¹⁹ Cited in Robert L. Gallucci, "Limiting U.S. Policy Options to Prevent Nuclear Weapons Proliferation: The Relevance of Minimum Deterrence," Center for Technical Studies on Security, Energy and Arms Control, Lawrence Livermore National Laboratory, 28 February 1991.

²⁰ William C. Foster, Arms Control and Disarmament, *Foreign Affairs* Vol. 43 (July 1965), p. 591.

²¹ Marc Dean Millot, "Facing the Emerging Reality of Regional Nuclear Adversaries," *The Washington Quarterly* 17:3 (Summer 1994), p. 66.

²² "Proliferation Threats of the 1990's," Hearing before the Committee on Governmental Affairs, U.S. Senate, 103rd Congress, 1st Session, February 24, 1993 (Washington DC: GPO, 1993), p. 134.

strongly conditioned by the world outside. With conventional weapons, a status-quo country must ask itself how much power it must harness to its policy in order to dissuade an aggressive state from striking. In conventional worlds, countries willing to run high risks are hard to dissuade. The characteristics of governments and the temperments of leaders have to be carefully weighed. With nuclear weapons, any state will be deterred by another state's second-strike forces. One need not be preoccupied with the qualities of the state that is to be deterred or scrutinize its leaders.

America has long associated democracy with peace and authoritarianism with war, overlooking that weak authoritarian rulers often avoid war for fear of upsetting the balance of internal and external forces on which their power depends. Neither Italy nor Germany was able to persuade Franco's Spain to enter World War II. External pressures affect state behavior with a force that varies with conditions. Of all of the possible external forces, what could affect state behavior more strongly than nuclear weapons? Nobody but an idiot can fail to comprehend their destructive force. How can leaders miscalculate? For a country to strike first without certainty of success most of those who control a nation's nuclear weapons would have to go mad at the same time. Nuclear reality transcends political rhetoric. Did the Soviet Union's big words or our own prattling about nuclear war-fighting ever mean anything? Political, military, and academic hard-liners imagined conditions under which we would or should be willing to use nuclear weapons. None was of relevance. Nuclear weapons dominate strategy. Nothing can be done with them other than to use them for deterrence. The United States and the Soviet Union were both reluctant to accept the fact of deterrence. Weaker states find it easier to substitute deterrence for war-fighting, precisely because they are weak. The thought that a small number of nuclear weapons may tempt or enable weak countries to launch wars of conquest is the product of feverish imaginations.

States do what they can, to paraphrase Thucydides, and they suffer what they must. Nuclear weapons do not increase what states can do offensively; they do greatly increase what they may suffer should their actions prompt retaliation by others. Thus, far from contributing to instability in South Asia, Pakistan's nuclear military capability, along with India's, limits the provocative acts of both countries and provides a sense of security to them. Recalling Pakistan's recent history of military rule and the initiation of war, some have expected the opposite. For a more reasoned view we might listen

to two of the participants. When asked recently why nuclear weapons are so popular in Pakistan, Prime Minister Benazir Bhutto answered: "It's our history. A history of three wars with a larger neighbor. India is five times larger than we are. Their military strength is five times larger. In 1971, our country was disintegrated. So the security issue for Pakistan is an issue of survival."²³ From the other side, Shankar Bajpai, former Indian Ambassador to Pakistan, China, and the United States, has said that "Pakistan's quest for a nuclear capability stems from its fear of its larger neighbor, removing that fear should open up immense possibilities"—possibilities for a less worried and more relaxed life.²⁴ Exactly.

Conclusion

Nuclear weapons continue to spread ever so slowly, and the world seems to fare better as they do so. Yet the rapid spread—that is, the proliferation—of nuclear weapons remains a frightening prospect; the mind boggles at the thought of all or most countries having them. Whatever the policies of the United States and other countries may be, that prospect is hardly even a distant one. Many more countries can make nuclear weapons than do. One can believe that American opposition to nuclear arming stays the deluge only by overlooking the complications of international life. Any state has to examine many conditions before deciding whether or not to develop nuclear weapons. Our opposition is only one factor and is not likely to dissuade a determined state from seeking the weapons. Many states feel fairly secure living with their neighbors. Why should they want nuclear weapons? The answer usually given is "for prestige." Yet it is hard to imagine a country entering the difficult and risky nuclear military business mainly for the sake of buoying its *amour propre* and gaining the attention that doing so may bring.

We can play King Canute if we wish to, but like him, we will be unable to hold the (nuclear) tides at bay.²⁵ What are the possible courses of action? I concentrate on six main ones:

²³ Claudia Dreyfus, "Benazir Bhutto," *New York Times Magazine*, 15 May 1994, p. 39.

²⁴ Shankar Bajpai, "Nuclear Exchange," *Far Eastern Economic Review*, 24 June 1993, p. 24.

²⁵ Editor's note: During the early 11th century, Canute the Great ruled Denmark, Norway, and, after defeating Edmund Ironside at the Battle of Assandun, England. A 12th century historian, wishing to demonstrate the frailty of even the most comprehensive of earthly powers compared to the might of God, invented the legendary tale of Canute's unsuccessfully ordering the tide to recede to make way for his battle plans. Hence the aphorism, coined by William Shakespeare, "time and tide wait for no man."

1. Some fear that weakening opposition to the spread of nuclear weapons will lead numerous states to obtain them because it may seem that “everyone is doing it.”²⁶ Why should we think that if we relax, numerous states will begin to make nuclear weapons? Both the United States and the Soviet Union were relaxed in the past, and those effects did not follow. The Soviet Union initially supported China’s nuclear program. The United States helped both Britain and France to produce nuclear weapons. More recently, the United States Department of Energy gave technical assistance to Japan in the producing of weapons-grade plutonium.²⁷ Moreover, America’s treatment of states that break into the nuclear military business varies with our general attitude toward them. By 1968, the CIA had informed President Johnson of the existence of Israeli nuclear weapons, and in July of 1970 Richard Helms, director of the CIA, gave this information to the Senate Foreign Relations Committee. These and later disclosures were not followed by censure of Israel or by reductions of economic assistance.²⁸ In September of 1980, the executive branch, against the will of the House of Representatives but with the approval of the Senate, continued to do nuclear business with India despite its explosion of a nuclear device and despite its unwillingness to sign the NPT. North Korea’s weapons program aroused our strong opposition while Pakistan’s caused less excitement. On the nuclear question as on others, treating differently placed countries differently is appropriate. Doing so has not opened the floodgates and prompted the wild spread of nuclear weapons in the past, nor is it likely to do so in the future.

2. Chapter VI of the NPT calls on the original five nuclear powers to set a good example by reducing their nuclear arms and promising ultimately to eliminate them. Substantial reductions have been agreed upon in the past decade and more are easily possible in the arsenals of the United States and Russia without their reaching levels that would make the maintenance of second-strike forces difficult. Reductions may please non-nuclear adherents to the treaty, but one wonders whether many of them believe that nuclear states will reduce their arsenals below the level required to maintain deterrent forces. States paring their arsenals may claim to be on the road to nuclear disarmament, yet the elimination of nuclear weapons is well understood to be an impossible goal so long as anyone remembers how to

make them or can figure out how to hide small numbers of them.

3. Various proposals have called upon nuclear states to help any non-nuclear state threatened by the nuclear weapons of others.²⁹ This is sometimes called “leveling the playing field.” But for countries like Pakistan, it is the bumps in the conventional field that are hard to level. Promises of help against nuclear threats are easily offered since they are largely irrelevant. With the playing field unlevel, conventional attack is the fear.

4. The effective way to persuade states to forego nuclear weapons would seem to be to guarantee their security against conventional as well as nuclear threats. Few states, however, are able to guarantee other states’ security or wish to do so. And guarantees, even if issued by the most powerful states, will not be found sufficiently reliable by states fearing for their security. Even at the height of the Cold War, America’s promise to extend deterrence over Western Europe was thought to be of doubtful credibility. Since guarantees given by others can never be fully credited, each country is left to provide for its security as best it can. How then can one country tell another what measures to take for its own defense?

5. If some states want nuclear weapons to use in attacking other states, defenses against nuclear weapons appear to be an obvious remedy. Because of the great damage that nuclear warheads can do, however, a near perfect defense is at once required and unachievable. For this reason, those who advocate defense resort to the nugatory argument that it would complicate the enemy’s attack and make it more expensive. No doubt, but improved defenses would, as ever, spur further offensive efforts and fuel arms races. If defenses did magically become absolutely reliable, they would simply make the world safe for conventional war. Perfect defenses would recreate the problem that nuclear weapons can solve. The notion of defending against absolute weapons is attractive mainly to the technologically mesmerized and the strategically naive.³⁰

6. The one definitive way to stop the spread of nuclear weapons would seem to be to launch strikes to destroy other states’ incipient nuclear-weapons programs or to fight preventive wars—now termed

²⁶ Joseph Nye, “Maintaining a Non-Proliferation Regime,” *International Organization* Vol. 35 (Winter 1981).

²⁷ Arjun Makhijani, “What Non-Nuclear Japan Is Not Telling the World,” *Outlook, Washington Post*, 10 April 1995, p. C2.

²⁸ Feldman, *Israeli Nuclear Deterrence*, ch. 5.

²⁹ Barbara Crossette, “UN Council Seeks Support to Renew Pact Curbing Spread of Nuclear Arms,” *New York Times* 6 April 1995, p. A7.

³⁰ For a brief treatment of nuclear defense, see Kenneth N. Waltz, “Nuclear Myths and Political Realities,” *American Political Science Review* 84:3 (September 1990), pp. 741–3.

“wars of non-proliferation”—against them.³¹ In truth, preventive wars promise only limited success at considerable cost. The trouble with preventive strikes is that one has to strike so hard that the country struck will be unable to resume its nuclear career for years to come. The trouble with preventive wars is that one has to fight them, win them, and impose effective controls over the indefinite future. The noblest wars may be those fought for the sake of establishing and maintaining peace, but I for one hope we won’t take the lead in fighting them.

I end with two thoughts. Nuclear weapons continue to spread slowly, while conventional weapons proliferate and become ever more destructive. Nuclear weapons are relatively cheap, and they work against the fighting of major wars. For some countries, the alternative to nuclear weapons is to run ever-more expensive conventional arms races, with increased risk of fighting highly destructive wars. Not all choices are happy ones, and for some countries nuclear weapons may be the best choice available.

Nuclear weapons will long be with us. We should keep in perspective both the benefits they bring and the dangers they pose. States with huge nuclear arsenals may accidentally fire warheads in large numbers. One estimate has it that if Soviet missiles had accidentally gone off, 300 warheads might have hit the United States and that our missiles were set to shoot as many as 500 warheads in return. The accidents of small nuclear countries would be serious enough, but only large nuclear countries can do horrendous damage to themselves and the world. As ever in international politics, the biggest dangers come from the biggest powers; the smallest from the smallest. We should be more fearful of old nuclear countries and less fearful of recent and prospective ones. Efforts should concentrate more on making large arsenals safe and less on keeping weak states from obtaining the small number of warheads they may understandably believe they need for security.



³¹ The term is used by Michael Mandelbaum, “Lessons of the Next Nuclear War,” *Foreign Affairs* 74:2 (March/April 1995), pp. 35–6.



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Susan L. Shirk, a professor in UC San Diego's Graduate School of International Relations and Pacific Studies and in the UCSD Department of Political Science, was appointed director of IGCC in June 1992 after serving for a year as acting director. Former directors of the institute include John Gerard Ruggie (1989–1991), and Herbert F. York (1983–1989), who now serves as director emeritus.





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