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Deterrence and the Cold War

RICHARD NED LEBOW JANICE GROSS STEIN

The role of nuclear weapons in Soviet-American relations has been hotly debated. Politicians, generals, and most academic strategists believe that America's nuclear arsenal restrained the Soviet Union throughout the cold war. Critics maintain that nuclear weapons were a root cause of superpower conflict and a threat to peace. Controversy also surrounds the number and kinds of weapons necessary to deter, the political implications of the strategic balance, and the role of nuclear deterrence in hastening the collapse of the Soviet imperium.

These debates have had a distinctly theological quality. Partisans frequently defended their positions without recourse to relevant evidence. Some advocated strategic doctrines that were consistent with military postures that they supported. "War-fighting" doctrines were invoked by the air force to justify silo-busting weapons like the MX missile. Mutual Assured Destruction (MAD) was espoused by arms controllers to oppose the deployment of particular weapons systems.

More careful analysts have been alert to the difficulty of making definitive judgments about deterrence in the absence of valid and reliable information about Soviet and Chinese objectives and calculations. McGeorge Bundy, in his masterful Danger and Survival, tells a cautionary tale of the impatience of leaders to acquire nuclear weapons, their largely futile attempts to exploit these weapons for political purposes and, finally, their efforts through arms control, to limit the dangers

¹ In keeping with the theological quality of the debate, followers of the "war-fighting" sect of deterrence had a sacred text: *Voyenaya mysl*', the Soviet *Journal of Military Thought*. Many of the professional Soviet military discussions of the contingent uses of military power were misused to infer and attribute offensive military intentions to the Soviet Union.

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nuclear weapons pose to their owners as well as their targets. Bundy emphasizes the uncertainty of leaders about the dynamics of deterrence and their concerns about the risks of escalation in crisis.²

Richard K. Betts, in another exemplary study, illustrates how difficult it is to assess the efficacy of nuclear threats.³ He found great disparity between the memories of American leaders and the historical record. Some of the nuclear threats American presidents claim were successful were never made.⁴ Other threats were so oblique that it is difficult to classify them as threats. Betts was understandably reluctant to credit any nuclear threat with success in the absence of information about the internal deliberations of the target states. When these states behaved in ways that were consistent with their adversary's demands, it was often unclear if the threat was successful or irrelevant. Leaders could have complied because they had been deterred or compelled, they could have been influenced by considerations unrelated to the threat, or they could have intended originally to behave as they did.

Newly declassified documents and extensive interviews with Soviet and American officials permitted us to reconstruct the deliberations of leaders of both superpowers before, during, and after the two most serious nuclear crises of the last thirty years. This evidence sheds new light on some of the controversies at the center of the nuclear debate. Needless to say, definitive judgments must await the opening of archives and more complete information about the calculations of Soviet and American leaders in other crises, as well as those of other nuclear powers.

THE FOUR QUESTIONS

Our analysis is organized around four questions. Each question addresses a major controversy about nuclear deterrence and its consequences. The first and most critical question is the contribution nuclear deterrence made to the prevention of World War III. The conventional wisdom regards deterrence as the principal pillar of the postwar peace between the superpowers. Critics charge that deterrence was beside the point or a threat to the peace. John Mueller, who makes the strongest argument for the irrelevance of nuclear weapons, maintains that

² McGeorge Bundy, Danger and Survival: Choices About the Bomb in the First Fifty Years (New York: Random House, 1988).

³ Richard K. Betts, Nuclear Blackmail and Nuclear Balance (Washington, DC: The Brookings Institution, 1987).

⁴ Harry Truman claimed to have compelled the Soviet Union to withdraw from Iran in 1946, but no documentary record of a nuclear threat can be found. See Betts, Nuclear Blackmail and Nuclear Balance, 7-8; Richard Ned Lebow and Janice Gross Stein, "Review of the Data Collections on Extended Deterrence by Paul Huth and Bruce Russett" in Kenneth A. Oye, ed., Specifying and Testing Theories of Deterrence (Ann Arbor: University of Michigan Press, in press); and Richard W. Cottam, Iran and the United States: A Cold War Case Study (Pittsburgh: University of Pittsburgh Press, 1988).

the superpowers were restrained by their memories of World War II and their knowledge that even a conventional war would be many times more destructive.⁵

More outspoken critics of deterrence charge that it greatly exacerbated superpower tensions. The deployment of ever more sophisticated weapons of destruction convinced each superpower of the other's hostile intentions and sometimes provoked the kind of aggressive behavior deterrence was intended to prevent. The postwar peace endured despite deterrence.⁶

The second question, of interest to those who believe that deterrence worked. is why and how it works. Some advocates insist that it forestalled Soviet aggression; in its absence Moscow would have attacked Western Europe and possibly have sent forces to the Middle East. More reserved supporters credit the reality of nuclear deterrence with moderating the foreign policies of both superpowers. They maintain that the destructiveness of nuclear weapons encouraged caution and restraint and provided a strong incentive for Moscow and Washington to make the concessions necessary to resolve their periodic crises.8

The third question concerns the military requirements of deterrence. In the 1960s, Defense Secretary Robert S. McNamara adopted MAD as the official American strategic doctrine. McNamara contended that the Soviet Union could be deterred by the American capability to destroy 50 percent of its population and industry in a retaliatory strike. He welcomed the effort by the Soviet Union to develop a similar capability in the expectation that secure retaliatory capabilities on both sides would foster stability.9

- ⁵ John E. Mueller, Retreat from Doomsday: The Obsolescence of Modern War (New York: Basic Books, 1989). Kenneth N. Waltz, Theory of International Politics (Reading, MA: Addison-Wesley, 1979), also disparaged the role of nuclear weapons and argued that bipolarity was responsible for the long peace. Waltz, "The Emerging Structure of International Politics" (paper prepared for the August 1990 Annual Meeting of the American Political Science Association) subsequently acknowledged nuclear weapons as one of "the twin pillars" of the peace. See Richard Ned Lebow, "Explaining Stability and Change: A Critique of Realism" in Richard Ned Lebow and Thomas Risse-Kappen, eds., International Relations Theory and the End of the Cold War (New York: Columbia University Press, 1995), chap. 2, for a critical examination of the realist position on the long peace.
- ⁶ Richard Ned Lebow, "Conventional vs. Nuclear Deterrence: Are the Lessons Transferable?" Journal of Social Issues 43, 4 (1987): 171-91.
- ⁷ McGeorge Bundy, "To Cap the Volcano," Foreign Affairs 48 (October 1969): 1-20; Harvard Nuclear Study Group, Living With Nuclear Weapons (Cambridge, MA: Harvard University Press, 1983); Klaus Knorr, "Controlling Nuclear War," International Security 9 (Spring 1985): 79-98; Michael Mandelbaum, The Nuclear Question: The United States and Nuclear Weapons, 1946-76 (New York: Cambridge University Press, 1979); Robert W. Tucker, The Nuclear Debate: Deterrence and the Lapse of Faith (New York: Holmes & Meier, 1985).
- ⁸ For example, Raymond Aron, The Great Debate: Theories of Nuclear Strategy, trans. Ernst Pawel (Garden City, NY: Doubleday, 1965); Stanley Hoffmann, The State of War: Essays on the Theory and Practice of International Politics (New York: Praeger, 1965), 236; Betts, Nuclear Blackmail; Bundy, Danger and Survival; Robert Jervis, The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon (Ithaca, NY: Cornell University Press, 1989).
- ⁹ For the evolution of McNamara's strategic thinking, see Desmond Ball, *Politics and Force Levels*: The Strategic Missile Program of the Kennedy Administration (Berkeley: University of California Press, 1980), esp. 171-93; Lawrence Freedman, The Evolution of Nuclear Strategy (New York: St. Martin's Press, 1983), 331-71.

Many military officers and civilian strategists rejected MAD on the grounds that it was not credible to Moscow. To deter the Soviet Union, the United States needed to be able to prevail at any level of conflict. This required a much larger nuclear arsenal and highly accurate missiles necessary to dig out and destroy Soviet missiles in their silos and the underground bunkers where the political and military elite would take refuge in any conflict. "War-fighting" supplanted MAD as the official strategic doctrine during the presidency of Jimmy Carter. The Reagan administration spent vast sums of money to augment conventional forces and to buy the strategic weapons and command and control networks that Pentagon planners considered essential to war-fighting. 10

An alternative approach to nuclear weapons, "finite deterrence," maintained that Soviet leaders were as cautious as their Western counterparts and just as frightened by the prospects of nuclear war. Nuclear deterrence was far more robust than proponents of either MAD or war-fighting acknowledged and required only limited capabilities—several-hundred nuclear weapons would probably suffice. The doctrine of finite deterrence never had visible support within the American government.¹¹

Differences about the requirements of deterrence reflected deeper disagreements about the intentions of Soviet leaders. For war-fighters, the Soviet Union was an implacable foe. Its ruthless leaders would willingly sacrifice their people and industry in pursuit of world domination. They could only be restrained by superior capabilities and demonstrable resolve to use force in defense of vital interests. Partisans of MAD thought the Soviet Union aggressive but cautious. Soviet leaders sought to make gains but were even more anxious to preserve what they already had. The capability to destroy the Soviet Union as a modern industrial power was therefore sufficient to deter attack, but not necessarily to make its leaders behave in a restrained manner. Proponents of war-fighting and MAD stressed the overriding importance of resolve; Soviet leaders had to be convinced that the United States would retaliate if it or its allies were attacked and come to their assistance if they were challenged in other ways.

Finite deterrence was based on the premise that both superpowers had an overriding fear of nuclear war. Small and relatively unsophisticated nuclear arsenals were sufficient to reinforce this fear and the caution it engendered. Larger forces, especially those targeted against the other side's retaliatory capability, were counterproductive; they exacerbated the insecurity of its leaders, confirmed

¹⁰ For war-fighting critics of MAD, see Daniel Graham, Shall America Be Defended? SALT II and Beyond (New Rochelle, NY: Arlington House, 1979); Colin S. Gray, Nuclear Strategy and National Style (Lanham, MD: Hamilton Press, 1986); Colin S. Gray and Keith B. Payne, "Victory is Possible," Foreign Policy 39 (Summer 1980): 14–27; Albert Wohlstetter, "Between an Unfree World and None," Foreign Affairs 63 (Summer 1985): 962–94; Fred Hoffman, "The SDI in U.S. Nuclear Strategy," International Security 10 (Summer 1985): 13–24.

¹¹ Morton H. Halperin, *Nuclear Fallacy: Dispelling the Myth of Nuclear Strategy* (Cambridge, MA: Ballinger, 1987); Adm. Noel Gayler, "The Way Out: A General Nuclear Settlement" in Gwyn Prins, ed., *The Nuclear Crisis Reader* (New York: Vintage Books, 1984), 234–43.

their belief in their adversary's hostility, and encouraged them to deploy similar weapons. Supporters of finite deterrence put much less emphasis on the need to demonstrate resolve. The possibility of retaliation, they believed, was enough to deter attack.

The fourth question concerns the broader political value of nuclear weapons. War fighters maintained that strategic superiority was politically useful and conferred bargaining leverage on a wide range of issues. 12 Most supporters of MAD contended that strategic advantages could only be translated into political influence in confrontations like the missile crisis, in which vital interests were at stake. 13 Other supporters of MAD, and all advocates of finite deterrence, denied that nuclear weapons could serve any purpose beyond deterrence.

RESTRAINING, PROVOCATIVE, OR IRRELEVANT?

Students of deterrence distinguish between general and immediate deterrence. General deterrence relies on the existing power balance to prevent an adversary from seriously considering a military challenge because of its expected adverse consequences. ¹⁴ It is often a country's first line of defense against attack. Leaders resort to the strategy of immediate deterrence only after general deterrence has failed, or when they believe that a more explicit expression of their intent to defend their interests is necessary to buttress general deterrence. If immediate deterrence fails, leaders will find themselves in a crisis, as John F. Kennedy did when American intelligence discovered Soviet missiles in Cuba, or at war, as Israel's leaders did in 1973. General and immediate deterrence represents a progression from a diffuse if real concern about an adversary's intentions to the expectation that a specific interest or commitment is about to be challenged.

Both forms of deterrence assume that adversaries are most likely to resort to force or threatening military deployments when they judge the military balance favorable and question the defender's resolve. General deterrence pays particular importance to the military dimension; it tries to discourage challenges by developing the capability to defend national commitments or inflict unacceptable punishment on an adversary. General deterrence is a long-term strategy. Five-year lead times and longer are common between a decision to develop a weapon and its deployment.

Immediate deterrence is a short-term strategy. Its purpose is to discourage an imminent attack or challenge of a specific commitment. The military compo-

¹² Graham, Shall America Be Defended? Gray, Nuclear Strategy and National Style; Wohlstetter, "Between an Unfree World and None."

¹³ Robert S. McNamara, "The Military Role of Nuclear Weapons: Perceptions and Misperceptions," Foreign Affairs 62 (Fall 1983): 59-80, 68; Jervis, The Meaning of the Nuclear Revolution, 34-38; Alexander L. George, David K. Hall, and William E. Simons, The Limits of Coercive Diplomacy: Laos, Cuba, Vietnam (Boston: Little, Brown, 1971); Betts, Nuclear Blackmail.

¹⁴ This distinction was introduced by Patrick M. Morgan, Deterrence: A Conceptual Analysis (Beverly Hills, CA: Sage, 1977).

nent of immediate deterrence must rely on forces in being. To buttress their defensive capability and display resolve, leaders may deploy forces when they anticipate an attack or challenge, as Kennedy did in the aftermath of the summit in June 1961. In response to Nikita Khrushchev's ultimatum on Berlin, he sent additional ground and air forces to Germany and strengthened the American garrison in Berlin. These reinforcements were designed to communicate the administration's will to resist any encroachment against West Berlin or Western access routes to the city.

GENERAL DETERRENCE

The origins of the missile crisis indicate that general deterrence, as practiced by both superpowers, was provocative rather than preventive. Soviet officials testified that the American strategic buildup, deployment of missiles in Turkey, and assertions of nuclear superiority made them increasingly insecure. The president viewed all of these measures as prudent, defensive precautions. American actions had the unanticipated consequence of convincing Khrushchev of the need to protect the Soviet Union and Cuba from American military and political challenges.

Khrushchev was hardly the innocent victim of American paranoia. His nuclear threats and unfounded claims of nuclear superiority were the catalyst for Kennedy's decision to increase the scope and pace of the American strategic buildup. The new American programs and the Strategic Air Command's higher state of strategic readiness exacerbated Soviet perceptions of threat and contributed to Khrushchev's decision to send missiles to Cuba. In attempting to intimidate their adversaries, both leaders helped to bring about the kind of confrontation they were trying to avoid.

Kennedy later speculated, and Soviet officials have since confirmed, that his efforts to reinforce deterrence also encouraged Khrushchev to stiffen his position on Berlin. 15 The action and reaction that linked Berlin and Cuba were part of a larger cycle of insecurity and escalation that reached well back into the 1950s, if not to the beginning of the cold war. The Soviet challenge to the Western position in Berlin in 1959-1961 was motivated by Soviet concern about the viability of East Germany and secondarily by Soviet vulnerability to American nuclear-tipped missiles stationed in Western Europe. The American missiles had been deployed to assuage NATO fears about the conventional military balance on the central front, made more acute by the creation of the Warsaw Pact in 1955. The Warsaw Pact, many Western authorities now believe, represented an

¹⁵ Arthur Schlesinger, Jr., A Thousand Days: John F. Kennedy in the White House (Boston: Houghton, Mifflin, 1965), 347-48. This point is also made by Alexander L. George and Richard Smoke, Deterrence in American Foreign Policy: Theory and Practice (New York: Columbia University Press, 1974), 429, 579.

attempt by Moscow to consolidate its control over an increasingly restive Eastern Europe. 16

Once the crisis erupted, general deterrence played an important moderating role. Kennedy and Khrushchev moved away from confrontation and toward compromise because they both feared war. Kennedy worried that escalation would set in motion a chain of events that could lead to nuclear war. Khrushchev's decision to withdraw the missiles indicated that he too was prepared to make sacrifices to avoid war. His capitulation in the face of American military pressure was a humiliating defeat for the Soviet Union and its leader. Soviet officials confirm that it was one factor in his removal from power a year later.¹⁷ For many years, Americans portrayed the crisis as an unalloyed American triumph. Kennedy's concession on the Jupiters and his willingness on Saturday night to consider making that concession public indicate that, when the superpower leaders were "eyeball to eyeball," both sides blinked. One reason they did so was their fear of nuclear war and its consequences.

General deterrence also failed to prevent an Egyptian decision to use force in 1973. President Anwar Sadat and his military staff openly acknowledged Egyptian military inferiority. They had no doubt about Israel's resolve to defend itself if attacked. Sadat still chose to fight a limited war. He decided to attack Israel because of intense domestic political pressures to regain the Sinai. He had lost all hope in diplomacy after the failure of the Rogers missions, and although he recognized that the military balance was unfavorable, he expected it to get even worse in the future.

Israel's practice of general deterrence – it acquired a new generation of fighters and bombers - convinced Sadat to initiate military action sooner rather than later. Egyptian military planners devised a strategy intended to compensate for their military inferiority. Egyptian officers sought to capitalize on surprise, occupy the east bank of the Suez Canal, defend against Israeli counterattacks with a mobile missile screen, and press for an internationally imposed cease-fire before their limited gains could be reversed by a fully mobilized Israel. The parallels between 1962 and 1973 are striking. In both cases, attempts to reinforce general deterrence against vulnerable and hard-pressed opponents provoked rather than prevented unwanted challenges.

General deterrence had contradictory implications in the crisis that erupted between the United States and the Soviet Union at the end of the October War.

¹⁶ On the Warsaw Pact, see Robin Allison Remington, The Changing Soviet Perception of the Warsaw Pact (Cambridge, MA: MIT Center for International Studies, 1967); Christopher D. Jones. Soviet Influence in Eastern Europe: Political Autonomy and the Warsaw Pact (New York: Praeger, 1981); David Holloway, "The Warsaw Pact in Transition" in David Holloway and Jane M. O. Sharp, eds., The Warsaw Pact: Alliance in Transition? (Ithaca, NY: Cornell University Press, 1984), 19-38.

¹⁷ Interview, Leonid Zamyatin, Moscow, 16 December 1991; Sergei Khrushchev, Khrushchev on Khrushchev: An Inside Account of the Man and His Era, trans. William Taubman (Boston: Little, Brown, 1990), 156-57; Oleg Troyanovsky, "The Caribbean Crisis: A View from the Kremlin," International Affairs (Moscow) 4-5 (April/May 1992): 147-57.

Leaders of both superpowers were confident that the other feared war; general deterrence was robust. This confidence allowed the United States to alert its forces worldwide without fear of escalation. Leonid Brezhnev and some of his colleagues, on the other hand, worried about escalation if Soviet forces were deployed in positions in Egypt where they were likely to encounter advancing Israelis. The Politburo agreed that they did not want to be drawn into a military conflict that could escalate. Fear of war restrained the Soviet Union and contributed to the resolution of the crisis.

Immediate deterrence is intended to forestall a specific military deployment or use of force. For immediate deterrence to succeed, the defender's threats must convince adversaries that the likely costs of a challenge will more than offset any possible gains. 18 Immediate deterrence did not prevent the missile crisis. After Khrushchev had decided to send missiles to Cuba, Kennedy warned that he would not tolerate the introduction of Soviet missiles in Cuba. The president issued his threat in the belief that Khrushchev had no intention of establishing missile bases in Cuba. In the face of the president's warnings, Khrushchev proceeded with the secret deployment.

Students of the crisis disagree about why deterrence failed. Some contend that the strategy could not have worked, whereas others insist that Kennedy attempted deterrence too late. 19 Whatever the cause, the failure of deterrence exacerbated the most acute crisis of the cold war. By making a public commitment to keep Soviet missiles out of Cuba, Kennedy dramatically increased the domestic political and foreign-policy costs of allowing the missiles to remain after they were discovered. A threat originally intended to deflect pressures on the administration to invade Cuba would have made that invasion very difficult to avoid if Soviet leaders had not agreed to withdraw their missiles.

Israel chose not to practice immediate deterrence in 1973. Its leaders were convinced that Egypt would only attack when it could neutralize Israel's air force. Confidence in general deterrence blinded Israel's leaders to the growing desperation of Sadat and his imperative to find a limited military strategy that would achieve his political objective. Israel's leaders worried instead that limited deterrent or defensive measures on their part might provoke Egypt to launch a miscalculated attack.

Even if Israel had practiced immediate deterrence, the evidence suggests that it would have made no difference. It is unlikely that public warnings and mobilization of the Israel Defense Forces would have deterred Egypt; Sadat had expected Israel to mobilize its reserves and reinforce the Bar-Lev Line in response

¹⁸ See Richard Ned Lebow, Between Peace and War: The Nature of International Crisis (Baltimore: Johns Hopkins University Press, 1981), 82-97, for a discussion of the four traditional prerequisites of deterrence. For discussion of the conditions essential to deterrence success, see Richard Ned Lebow and Janice Gross Stein, When Does Deterrence Succeed and How Do We Know? (Ottawa: Canadian Institute for International Peace and Security, 1990), 59-69.

¹⁹ See Richard Ned Lebow and Janice Gross Stein, We All Lost the Cold War (Princeton, NJ: Princeton University Press, 1994), chap. 3.

to Egyptian military preparations. He was surprised and pleased that Israel did not take defensive measures and that Egyptian forces did not sustain the high casualties that he had anticipated and was prepared to accept.²⁰

When the cease-fire negotiated jointly by Moscow and Washington failed to stop the fighting. Leonid Brezhnev threatened to consider unilateral intervention. The United States resorted to immediate deterrence to prevent a Soviet deployment. This was not the first time since the war began that Henry Kissinger had attempted to deter Soviet military intervention. As early as 12 October, he told Anatoly Dobrynin that any attempt by the Soviet Union to intervene with force would "wreck the entire fabric of U.S.-Soviet relations."²¹ Later that day, he warned the Soviet ambassador that any Soviet intervention, regardless of pretext, would be met by American force. ²² On the evening of 24 October, when Brezhnev asked for joint intervention and threatened that he might act alone if necessary. the United States went to a DEFCON III alert.

Immediate deterrence was irrelevant since Brezhnev had no intention of sending Soviet forces to Egypt. Soviet leaders had difficulty understanding why President Richard Nixon alerted American forces. Brezhnev and some of his colleagues were angered, dismayed, and humiliated. Immediate deterrence was at best irrelevant in resolving the crisis and, at worst, it damaged the long-term relationship between the superpowers.

Deterrence had diverse and contradictory consequences for superpower behavior. General and immediate deterrence were principal causes of the missile crisis, but general deterrence also facilitated its resolution. In 1973, general deterrence contributed to the outbreak of war between Egypt and Israel and provided an umbrella for competition between the United States and the Soviet Union in the Middle East. Immediate deterrence failed to prevent the superpower crisis that followed, but general deterrence constrained the Soviet leadership and helped to resolve the crisis. These differences can best be understood by distinguishing between the strategy and reality of nuclear deterrence.

The strategy of deterrence attempts to manipulate the risk of war for political ends. For much of the cold war, Soviet and American policy makers doubted that their opposites were deterred by the prospect of nuclear war. They expended valuable resources trying to perfect the mix of strategic forces, nuclear doctrine, and targeting policy that would succeed in restraining their adversary. They also used military buildups, force deployments, and threats of war to try to coerce one another into making political concessions. In Berlin and Cuba, these attempts were unsuccessful but succeeded in greatly aggravating tensions.

The reality of deterrence derived from the inescapable fact that a superpower nuclear conflict would have been an unprecedented catastrophe for both sides.

²⁰ Janice Gross Stein, "Calculation, Miscalculation, and Conventional Deterrence 1: The View from Cairo" in Robert Jervis, Richard Ned Lebow, and Janice Gross Stein, Psychology and Deterrence (Baltimore: Johns Hopkins University Press, 1985), 31-59.

²¹ Henry Kissinger, Years of Upheaval (Boston: Little, Brown, 1982), 508.

²² Ibid., 510.

Superpower leaders understood this; by the late 1960s, if not earlier, they had come to believe that their countries could not survive a nuclear war. Fear of war, independent of the disparity in the strategic capabilities of the two sides, helped to keep both American and Soviet leaders from going over the brink and provided an important incentive for the mutual concessions that resolved the Cuban missile crisis. The moderation induced by the reality of deterrence helped to curtail the recklessness encouraged by the strategy of deterrence.

The contradictory consequences of deterrence are not fully captured by any of the competing interpretations. Proponents of deterrence have emphasized the positive contribution of the reality of deterrence but ignored the baneful consequences of the strategy. The critics of deterrence have identified some of the political and psychological mechanisms that made the strategy of deterrence provocative and dangerous. But many ignored the ways in which the reality of deterrence was an important source of restraint.

WHEN AND WHY DOES DETERRENCE WORK?

Proponents of deterrence have advanced two contrasting reasons for its putative success. The conventional wisdom holds that deterrence restrained the Soviet Union by convincing its leaders that any military action against the United States or its allies would meet certain and effective opposition. Those who credit deterrence with preserving the peace assume that, in its absence, the Soviet Union would have been tempted to use force against its Western adversaries or their allies in the Middle East.

Throughout the years of Soviet-American rivalry, American leaders regarded their adversary as fundamentally aggressive and intent on expanding its influence by subversion, intimidation, or the use of force. Soviet leaders were frequently described as cold, rational calculators who were constantly probing for opportunities. They carefully weighed the costs and benefits and abstained from aggressive action only if its costs were expected to outweigh the gains. In this context, the peace always looked precarious to American leaders and the remarkable success in avoiding war needed an extraordinary explanation. The strategy of nuclear deterrence provided the explanation.

The strategy of deterrence seemed ideal for coping with a fundamentally aggressive and opportunity-driven adversary. It sought to prevent Soviet aggression by denying its leaders opportunities to exploit. The United States consequently developed impressive military capabilities-general deterrence-and publicly committed itself to the defense of special interests—immediate deterrence—when it appeared that these interests might be challenged. The conventional wisdom, eloquently expressed in many of the scholarly writings on deterrence, assumed that Soviet aggression would wax and wane as a function of Soviet perceptions of American military capability and resolve. Soviet leaders

would be most restrained when they regarded the military balance as unfavorable and American resolve as unquestionable.²³

Our analyses of the crises in 1962 and 1973 do not support this assessment of deterrence. In 1962, the strategy of deterrence provoked a war-threatening crisis, and in 1973 nuclear deterrence provided the umbrella under which each sought to make or protect gains at the expense of the other until they found themselves in a tense confrontation.

The alternative interpretation holds that fear of nuclear war made both superpowers more cautious than they otherwise would have been in their competition for global influence and thereby kept the peace. Although far more convincing than the argument that credits the strategy of nuclear deterrence with preserving the peace, this explanation also is not fully persuasive. The reality of nuclear deterrence had a restraining effect on both Kennedy and Khrushchev in 1962 and on Brezhnev in 1973. When superpower leaders believed that they were approaching the brink of war, fear of war pulled them back.²⁴

It is difficult to judge how much of the fear of war can be attributed to nuclear weapons. At the time of the Korean War, the United States had only a limited nuclear arsenal, but Stalin may have exaggerated American ability to launch extensive nuclear strikes against the Soviet Union.²⁵ Robert McNamara subsequently testified that President Kennedy worried primarily that the missile crisis would lead to a conventional war with the Soviet Union.²⁶ Other members of the Ex Comm disagree; they say it was the threat of nuclear war that was in the back of their minds and, probably, the president's.²⁷ McNamara also admits that he had little expectation that a conventional conflict could be contained. "I didn't know how we would stop the chain of military escalation once it began."28

²³ "United States Objectives and Programs for National Security," (NSC 68), 14 April 1950, Foreign Relations of the United States, 1950, vol. 1 (Washington, DC: Government Printing Office, 1977), 264; Vernon Aspaturian, "Soviet Global Power and the Correlation of Forces," Problems of Communism 20 (May-June 1980): 1-18; John J. Dziak, Soviet Perceptions of Military Power: The Interaction of Theory and Practice (New York: Crane, Russak, 1981); Edward N. Luttwak, "After Afghanistan What?" Commentary 69 (April 1980): 1-18; Richard Pipes, "Why the Soviet Union Thinks It Could Fight and Win a Nuclear War," Commentary 64 (July 1977): 21-34; Norman Podhoretz, "The Present Danger," Commentary 69 (April 1980): 40-49.

²⁴ There is also some evidence that the fear of war influenced Soviet behavior in Korea. Joseph Stalin authorized Kim Il Sung to attack South Korea in June 1950 in the expectation that the United States would not intervene. When Washington did intervene, Stalin, afraid that the North Korean attack would provoke a Soviet-American war, quickly signaled interest in a cease-fire. N. Khrushchev, Khrushchev Remembers: The Glasnost Tapes, trans. and ed. Jerrold L. Schecter with Vyacheslav L. Luchkov (Boston: Little, Brown, 1990), 144-47.

²⁵ Oleg Grinevsky contends that Stalin feared that even a few atomic bombs dropped on Moscow would have destroyed the communist experiment. Interview, Oleg Grinevsky, Stockholm, 24 October 1992.

²⁶ David A. Welch, ed., Proceedings of the Hawk's Cay Conference on the Cuban Missile Crisis, 5-8 March 1987 (Cambridge, MA: Harvard University, Center for Science and International Affairs. Working Paper 89-1, 1989), mimeograph, 81-83, hereafter cited as Hawk's Cay Conference.

²⁸ Hawk's Cay Conference, author's record.

Soviet leaders also worried about war in the missile crisis, but neither the written record nor the testimony of Soviet officials offers any evidence of the kind of war Khrushchev thought most likely. There is no evidence that Khrushchev or Kennedy speculated about war scenarios; they were desperately trying to resolve the crisis. They had no political or psychological incentive to investigate the consequences of failure—quite the reverse. Their fear of war remained strong but diffuse.

In 1973, the United States did not see war as a likely possibility, but Soviet leaders worried actively about war. They feared the consequences of a conventional Soviet-Israeli engagement somewhere between the canal and Cairo, or an accidental encounter at sea. However, there is no evidence that Soviet speculation progressed to more detailed consideration of how either could escalate to nuclear war. Again, the fear of war was strong but diffuse. Soviet leaders feared not only nuclear war but any kind of Soviet-American war. Their fear translated into self-deterrence; Brezhnev ruled out the commitment of Soviet forces on Egypt's behalf before the United States practiced deterrence.

The absence of superpower war is puzzling only if at least one of the superpowers was expansionist and aggressive. On the basis of the evidence now available, the image that each superpower held of the other as opportunity-driven aggressors can be discredited as crude stereotypes. Khrushchev and Brezhnev felt threatened by what they considered the predatory policies of their adversary, as did American leaders by Soviet expansionist policies. For much of the cold war, Soviet leaders were primarily concerned with preserving what they had, although like their American counterparts, they were not averse to making gains that appeared to entail little risk or cost. Serious confrontations between the superpowers arose only when one of them believed that its vital interests were threatened by the other.

With the benefit of hindsight, it is apparent that although both superpowers hoped to remake the world in their image, neither Moscow nor Washington was ever so dissatisfied with the status quo that it was tempted to go to war to force a change. It was not only the absence of opportunity that kept the peace, but also the absence of a strong motive for war. Without a compelling motive, leaders were unwilling to assume the burden and responsibility for war, even if they thought its outcome would be favorable. In the late 1950s and early 1960s, when the United States might have destroyed the Soviet Union in a first strike with relatively little damage to itself, American leaders never considered a preventive war. The Soviet Union never possessed such a strategic advantage, but there is no reason to suspect that Khrushchev or Brezhnev had any greater interest than Eisenhower and Kennedy in going to war. The reality of deterrence helped to restrain leaders on both sides, but their relative satisfaction with the status quo was an important cause of the long peace.

How Much is Enough?

There was never a consensus in Washington about what was necessary to deter the Soviet Union. Proponents of MAD maintained that Soviet leaders would be

deterred by the prospect of their country's destruction. Robert McNamara's "whiz kids" at Defense calculated that MAD required the capability to destroy 50 percent of the Soviet Union's population and industry in a retaliatory strike.²⁹ McNamara recommended to Premier Aleksei Kosygin in 1967 that the Soviet Union acquire roughly the same kind of second-strike capability so that deterrence would become more stable. Many military officers and conservative civilian strategists rejected MAD on the grounds that it was not a credible strategy. No American president, they argued, could ever convince his Soviet counterpart that he would accept certain destruction of the United States to punish the Soviet Union for invading Western Europe. To deter Soviet aggression, the United States needed clear-cut. across-the-board strategic superiority to decapitate the Soviet political and military leadership, destroy their command, control, and communications network, penetrate hardened targets, and outfight Soviet forces at every level. 30 Proponents of finite deterrence, the smallest of the three communities, argued that nuclear deterrence was robust and required only limited capabilities. Strategic thinkers in France and Israel have, of necessity, voiced this kind of argument.

The outcome of the missile crisis supports the argument of finite deterrence. The American advantage was overwhelming. The CIA estimated that the Soviet Union, which had only a hundred missiles and a small fleet of obsolescent bombers, could attack the United States with at most three-hundred-fifty nuclear weapons. The United States had a strategic nuclear strike force of thirty-five hundred weapons and far more accurate and reliable delivery systems. Because Soviet missiles were unreliable and Soviet bombers vulnerable to air defenses. it was possible that very few Soviet weapons would have reached their American targets. Had the missiles in Cuba been fully operational and armed with nuclear weapons, they would have augmented the Soviet arsenal by fewer than sixty warheads.31

Military superiority offered little comfort to the administration. It was not "usable superiority," McGeorge Bundy explained, because "if even one Soviet weapon landed on an American target, we would all be losers."32 Robert McNamara insists that "The assumption that the strategic nuclear balance (or 'imbalance') mattered was absolutely wrong."33 He recalled a CIA estimate that the Soviets

²⁹ Ball, Politics and Force Levels, 171–93; Freedman, The Evolution of Nuclear Strategy, 331–71.

³⁰ See Graham, Shall America Be Defended?; Gray, Nuclear Strategy and National Style; Gray and Payne, "Victory is Possible"; Wohlstetter, "Between an Unfree World and None."

³¹ Interview, General Dimitri A. Volkogonov by Raymond L. Garthoff, Moscow, 1 February 1989; Anatoliy Gribkov, "Transcript of the Proceedings of the Havana Conference on the Cuban Missile Crisis, January 9-12 1992" in James G. Blight, Bruce J. Allyn, and David A. Welch, eds., Cuba on the Brink: Castro, the Missile Crisis, and the Soviet Collapse (New York: Pantheon Books, 1993), 53-317, hereafter cited as Havana Conference.

³² "Retrospective on the Cuban Missile Crisis," 22 January 1983, Atlanta, GA. Participants: Dean Rusk, McGeorge Bundy, Edwin Martin, Donald Wilson, and Richard E. Neustadt (hereafter referred to as Retrospective), 6.

³³ Hawk's Cay Conference, 9-10.

might be able to deliver thirty warheads against the United States in a retaliatory attack. "Does anyone believe that a president or a secretary of defense would be willing to permit thirty warheads to fall on the United States? No way! And for that reason, neither we nor the Soviets would have acted any differently before or after the Cuban deployment." In McNamara's judgment, no president would be willing "to consciously sacrifice an important part of our population or our land and place it in great jeopardy to a strike by Soviet strategic forces, whether it be one city, or two cities, or three cities." The Soviet Union had the capability to do this even before deploying any missiles in Cuba. "And therefore, we felt deterred from using our nuclear superiority and that was not changed by the introduction of nuclear weapons into Cuba."

Proponents of war-fighting, MAD, and finite deterrence would all expect Khrushchev to be deterred by the one-sided American strategic advantage. Only proponents of finite deterrence would anticipate that Kennedy would be deterred by the small Soviet arsenal.

Ironically, Kennedy was not fully confident before or during the crisis that even overwhelming American strategic superiority would restrain the Soviet Union. Khrushchev, by contrast, was confident—before the crisis—that the small and inferior Soviet arsenal would deter Kennedy. He worried rather that the United States would exploit its strategic superiority for political purposes. His confidence in finite deterrence permitted him to deploy missiles in Cuba with the expectation that Kennedy would not go to war.

During the crisis, Khrushchev's confidence in deterrence wavered. He worried both that Kennedy would be unable to control the militants in the military and the CIA who did not share his sober recognition of the futility of war and that the crisis might spin out of control. These fears were partly responsible for the concessions that he made. Kennedy, too, worried that Khrushchev would be ousted by militants determined to go to war. Even when the United States had the overwhelming superiority that proponents of war-fighting recommend, Kennedy's confidence in deterrence was limited. He, too, then made the concessions necessary to resolve the crisis.

In making critical judgments about the robustness of deterrence during the crisis, Kennedy and Khrushchev paid little attention to the military balance. They concentrated instead on the political pressures that might push either side into using force. This success in resolving the crisis increased their confidence that the other shared their horror of war.

Although deterrence was robust in 1962, not everybody drew the same positive lessons from the missile crisis as did Khrushchev and Kennedy. Influential members of the Soviet elite believed that the Kennedy administration had acted aggressively in Cuba because of its strategic advantage. Many Americans concluded that Khrushchev had retreated because of Soviet inferiority. The lesson

³⁴ Interview, Robert McNamara, Hawk's Cay, FL, 6 March 1987.

³⁵ Retrospective, 40.

of the missile crisis was clear: the United States needed to maintain its strategic advantage, or failing that, strategic parity. In Moscow, too, there was a renewed commitment to ending the strategic imbalance. The missile crisis did not trigger the Soviet strategic buildup of the 1960s – it had been authorized by Khrushchev before the missile crisis—but it mobilized additional support for that program and made it easier for Brezhnev to justify when resources grew scarce in the 1970s.36

The crisis in 1973, the most serious superpower confrontation since the missile crisis, occurred when the strategic balance was roughly equal and both sides had a secure second-strike capability. Proponents of finite deterrence would expect the reality of nuclear deterrence to be robust and the strategy of nuclear deterrence to fail unless the security of the homeland was threatened. Given the reality of nuclear deterrence when both sides had an assured capacity to retaliate, advocates of MAD would also expect the strategy of deterrence to fail unless vital interests were at stake. War-fighters would reason differently. Since neither side possessed "escalation dominance," the side that estimated a lower risk of war would have the advantage.

The predictions of the three schools with respect to the American alert cannot be tested directly, since deterrence was irrelevant. The Soviet Union had no intention of sending forces to Egypt before the United States alerted its forces. We can nevertheless assess the Soviet interpretation of the American attempt at deterrence and examine its fit with the expectations of the three schools. Soviet leaders dismissed the American nuclear alert as incredible. They could do so in a context in which nuclear weapons were regarded as so unusable that nuclear threats to defend anything but the homeland or vital interests were incredible. There is no evidence, moreover, that political leaders in Moscow made any attempt to assess the relative strategic balance. The Soviet interpretation is consistent with the expectations of finite deterrence and MAD and inconsistent with those of war-fighters.

Analysis of these two crises reveals that it was not the balance or even perceptions of the balance but rather the judgments leaders made about its meaning that were critical. The understanding leaders had of their adversary's intentions was much more important than their estimates of its relative capabilities. Deterrence was as robust in 1962 as proponents of finite deterrence expected, and at least as robust in 1973 as proponents of MAD anticipated. Yet, worst-case analyses remained the conventional wisdom for many years among militants in both the United States and the Soviet Union. Many on both sides continued to assume that the strategic balance was and would continue to be the critical determinant of superpower behavior.

³⁶ Garthoff, Reflections on the Cuban Missile Crisis, 2d ed. rev. (Washington, DC: The Brookings Institution, 1989), 158-86, on Soviet lessons from the crisis; Interviews, Leonid Zamyatin and Anatoly F. Dobrynin, Moscow, 16-17 December 1991.

War fighters drew a direct relationship between the strategic balance and Soviet behavior. The Soviet Union would be most restrained when the United States had a strategic advantage and would behave more aggressively when the military balance tilted in their favor.³⁷ Proponents of finite deterrence denied that any relationship existed between the strategic balance and aggression, whereas adherents of MAD could be found on both sides of the debate. The proposition that the aggressiveness of Soviet leaders intensified or diminished in accordance with their perception of the strategic balance became the fundamental assumption of strategic analysis and force planning in the United States. Deterrence was considered primarily a military problem, and many American officials and strategists worked on the assumption that Washington could never have too powerful a military or too great a strategic advantage.³⁸

The link between Soviet foreign policy and the military balance is an empirical question. To test this relationship, we examined Soviet-American relations from the beginning of the cold war in 1947 to 1985, when Mikhail Gorbachev came to power. Drawing on formerly classified estimates of the strategic balance and public studies of the balance prepared by prominent strategic institutes, we developed a composite measure of the relative strategic potency of the two superpowers. Our analysis suggests that the nuclear balance went through three distinct phases. The first, 1948 to 1960, was a period of mounting American advantage. The second, 1961 to 1968, was characterized by a pronounced but declining American advantage. The third, 1968 to 1985, was an era of strategic parity.³⁹

³⁷ The assertion that the Soviet Union could only be constrained by superior military power became something close to dogma in the United States government. It received its most forceful expression in National Security Council Memorandum (NSC) 68, written on the eve of the Korean War in 1950. NSC 68 is generally recognized as the most influential American policy document of the cold war. See John L. Gaddis, Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy (New York: Oxford University Press, 1982), chap. 4; Paul Y. Hammond, "NSC-68: Prologue to Rearmament" in Warner R. Schilling, Paul Y. Hammond, and Glenn H. Snyder, eds., Strategy, Politics, and Defense Budgets (New York: Columbia University Press, 1962), 267-338; "United States Objectives and Programs for National Security," 234-92.

38 Soviet leaders, with a mirror image of their adversary, made the same assumption about American foreign policy. Khrushchev put missiles in Cuba in part to achieve psychological equality and constrain American foreign policy.

³⁹ The accepted strategic wisdom, reflected in our analysis, holds that the United States had a decisive strategic advantage throughout the 1950s. It possessed an expanding capability to attack the Soviet Union with nuclear weapons without the prospect of direct retaliation. The Strategic Air Command had a large and growing fleet of strategic bombers based in the United States, Western Europe, and North Africa. This strike force was supplemented by carrier and land-based aircraft deployed along the Soviet periphery. The Soviet Union's bomber force was small, shorter range, and technologically primitive. The relative military balance changed in the 1960s when both superpowers began to deploy ICBMs. In 1962, at the time of the Cuban missile crisis, the United States had some 3,500 warheads against approximately 300 for the Soviets. Only 20 of the Soviet warheads were on ICBMs. See Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," International Security 12 (Summer 1987): 22-51; David A. Welch, ed., Proceedings of the Cambridge Conference on the Cuban Missile Crisis, 11-12 October 1987 (Cambridge, MA: Harvard University, Center for Science and International Affairs, April 1988), final version, mimeograph, 52, 79, hereafter cited as Cambridge Conference.

There is no positive correlation between shifts in Soviet assertiveness and shifts in the strategic balance. Soviet challenges are most pronounced in the late 1940s and early 1950s in central Europe and Korea and again in the late 1950s and early 1960s in Berlin and Cuba. A third, lesser period of assertiveness occurred from 1979 to 1982 in Africa and Afghanistan. 40 The first and second peaks occurred at a time when the United States had unquestioned nuclear superiority. The third peak coincides with the period of strategic parity, before the years of the putative American "window of vulnerability." During this period of alleged Soviet advantage, roughly 1982 to 1985, Soviet behavior was restrained. The relationship between the military balance and Soviet assertiveness is largely the reverse of that predicted by proponents of war-fighting. The United States had unquestioned supremacy from 1948 to 1952 and again from 1959 to 1962, the principal years of Soviet assertiveness. Soviet challenges were most pronounced when the Soviet Union was weak and the United States was strong.

This pattern challenges the proposition that aggression is motivated primarily by adversaries who seek continuously to exploit opportunities. When leaders became desperate, they behaved aggressively even though the military balance was unfavorable and they had no grounds to doubt their adversary's resolve. In the absence of compelling need, leaders often did not challenge even when opportunities for an assertive foreign policy were present.⁴¹ A definitive answer to the question, "How much is enough?" must await detailed analyses of other nuclear crises with other leaders. Drawing on the analysis of leaders' thinking in these two cases and the broad pattern in their relationship during the cold war,

By the end of the 1960s, the Soviet Strategic Rocket Forces had deployed enough ICBMs to destroy about half of the population and industry of the United States. It had achieved the capability that McNamara considered essential for MAD. Some time in the 1970s the Soviet Union achieved rough strategic parity. This balance prevailed until 1991, although some analysts have argued that one or the other possessed some margin of advantage. American missiles were more accurate throughout the 1970s. The United States was also the first to deploy multiple independently targeted reentry vehicles (MIRVs). It put three warheads on Minuteman missiles, and fourteen on submarine-launched ballistic missiles (SLBMs). The Soviet Union began to deploy MIRVs in the late 1970s and, in the opinion of some analysts, gained a temporary strategic advantage because of the greater throw weight of their ICBMs. The SS-18 could carry thirty to forty MIRVs, but in practice was deployed with a maximum of ten.

⁴⁰ Soviet aggressiveness is a subjective phenomenon. To measure it, we polled a sample of international relations scholars and former government officials. They were carefully chosen to ensure representation of diverse political points of view. These experts were given a list of events that could be interpreted as Soviet challenges to the United States, its allies, or nonaligned states. They were asked to rank them in order of ascending gravity. The survey revealed a surprising concurrence among experts. A description of the survey and its results appears in Richard Ned Lebow and John Garofano, "Soviet Aggressiveness: Need or Opportunity?" mimeograph.

⁴¹ This kind of need-based explanation of aggression provides a convincing explanation of both Soviet and American foreign policy in the cold war since the Khrushchev and Kennedy years. See Richard Ned Lebow, "Windows of Opportunity: Do States Jump Through Them?" International Security 9 (Summer 1984): 147-86.

we can suggest a tentative answer: finite nuclear capabilities in the context of a shared fear of war. In this circumstance, a little deterrence goes a long way.

THE POLITICAL VALUE OF NUCLEAR WEAPONS

Just as there was no consensus during the cold war on how much deterrence was enough, so there was no agreement on the political value of nuclear weapons. War-fighters contended that nuclear power was fungible; they insisted that strategic advantage could be successfully exploited for political purposes. Most proponents of MAD argued that nuclear threats were likely to be effective only in defense of a state's most vital interests. Proponents of finite deterrence took the most restrictive view of the political value of nuclear weapons. They argued that nuclear weapons could only deter attacks against one's own state and perhaps against one's closest allies.

War-fighters, who were dubious about the efficacy of deterrence and set the most demanding conditions, nevertheless expressed the greatest confidence in compellence. Advocates of finite deterrence, who maintained that nuclear deterrence was relatively easy to achieve, doubted that nuclear threats would succeed in compelling nuclear adversaries. Proponents of MAD thought deterrence was somewhat easier to achieve than compellence.

These seeming contradictions between the schools of war-fighting and finite deterrence can be reconciled by examining why each argued that deterrence and compellence would succeed or fail. For war-fighters, the critical factor was the military balance. When a state possessed a decisive strategic advantage, it could more convincingly demonstrate resolve and more readily deter and compel an adversary. Parity made deterrence possible but compellence extraordinarily difficult.

Advocates of finite deterrence reasoned that leaders had a pronounced fear of the consequences of nuclear war. This fear had a low threshold and was independent of the level of destruction leaders could inflict on their adversaries. The strategic balance was therefore irrelevant to deterrence, and strategic advantage did not make compellence any easier. So long as the target state had some nuclear retaliatory capability, nuclear threats for any purpose other than retaliation lacked credibility.

Proponents of MAD also denied the utility of strategic superiority. They placed the threshold of deterrence higher than did advocates of finite deterrence and argued that a state needed an unquestioned capability, after sustaining a first strike, to retaliate in sufficient force to destroy approximately 50 percent of its adversary's population and industry. Additional nuclear capabilities did not make deterrence any more secure. Some advocates of MAD believed that strategic advantages were critical for compellence but only in limited, well-specified circumstances. Like the advocates of finite deterrence, they argued that the unprecedented destructiveness of nuclear weapons made it very difficult to make credible

nuclear threats against nuclear adversaries. Such threats would carry weight only when a state's most vital interests were unambiguously threatened.⁴²

Proponents of war-fighting and MAD argued that the Cuban missile crisis was consistent with their expectations. They both maintained that Khrushchev sent missiles to Cuba because he doubted American resolve and withdrew them because he respected American military capability. 43 The crisis illustrated a general truth to war-fighters: strategic superiority confers important bargaining advantages in crisis. Advocates of MAD maintained that the missile crisis was a special case. Compellence succeeded not only because of the American military advantage, but because of the asymmetry of interests. The United States was defending a vital interest; the Soviet Union was not.44

Both arguments took as their starting point the apparently one-sided outcome of the crisis in favor of the United States. Khrushchev withdrew the Soviet missiles in return for a face-saving pledge from Kennedy not to invade Cuba. Proponents of war-fighting and MAD treated this pledge as largely symbolic because the administration had no intention of invading the island other than to remove the missiles. Both believed that the missiles would have significantly affected the military or political balance and therefore treated their withdrawal as a major concession.

These interpretations that congealed in the 1960s are contradicted by newly available evidence. Although the administration had ruled out an invasion of Cuba, Khrushchev considered Kennedy's pledge not to invade an extremely important concession. With other Soviet leaders, he was convinced that the United States was preparing to overthrow the Castro government and was only prevented from doing so by the missile deployment. In the eyes of the president and his secretary of defense, the missiles in Cuba had much less military value than many students of the crisis have alleged. Their withdrawal was important for domestic and foreign political reasons.

We now know that Kennedy made a second important concession to Khrushchev: he agreed to remove the American Jupiter missiles from Turkey at a decent interval after the crisis. The decision to withdraw the missiles was not made before the crisis, as some administration officials contended, but was offered to Khrushchev as a concession. However, Kennedy insisted that the Kremlin keep it secret. The removal of the Jupiters had little military value but was of enormous symbolic importance to Khrushchev.

⁴² McNamara, "The Military Role of Nuclear Weapons"; Jervis, The Meaning of the Nuclear Revolution; George, Hall, and Simons, The Limits of Coercive Diplomacy; Betts, Nuclear Blackmail.

⁴³ Albert and Roberta Wohlstetter, "Controlling the Risks in Cuba," Adelphi Paper no. 17 (London: International Institute for Strategic Studies, 1965), 16. See also, Herman Kahn, On Escalation (New York: Praeger, 1965), 74-82; Thomas Schelling, Arms and Influence (New Haven, CT: Yale University Press, 1966), 80-83.

⁴⁴ McNamara, "The Military Role of Nuclear Weapons"; Jervis, The Meaning of the Nuclear Revolution, 34-38.

The outcome of the missile crisis is best explained by finite deterrence. The terms of the settlement did not reflect the strategic balance, but mutual fears of war. Despite pronounced Soviet strategic inferiority, the crisis ended in a compromise, not in a one-sided American victory. American leaders judged it too risky to rely on their strategic advantage to compel withdrawal of the Soviet missiles without making the compensating concessions.

The advocates of finite deterrence, MAD, and war-fighting would all expect compellence to be very difficult in the strategic context of 1973. War-fighters would predict that neither the Soviet Union nor the United States could compel the other side to achieve political benefit since neither had a decisive strategic advantage. Under conditions of parity and a secure capability to retaliate, proponents of MAD and finite deterrence would predict that compellence would be very difficult unless vital interests were demonstrably at stake.

The failure of Soviet compellence in 1973 is consistent with the shared expectation of all three schools. Brezhnev did not succeed in compelling the United States to restrain Israel, even though it was very much in Washington's interest to stop the fighting. On the contrary, Brezhnev's attempt to compel backfired and escalated the crisis. Although Henry Kissinger recognized Soviet interests, particularly the heavy cost of its humiliating failure to stop the fighting, he nevertheless interpreted Brezhnev's threat that he might consider unilateral action as a direct challenge to the reputation and resolve of the United States.

All three approaches expect, although for quite different reasons, strategic parity to confer no political advantage. To distinguish among the three schools, we need detailed evidence of the calculations of American leaders about the strategic balance. Yet, when Kissinger and his colleagues chose to respond to Brezhnev's threat that he might consider unilateral military action, they made no reference at all to the strategic balance.⁴⁵ When they chose not to comply with Brezhnev's threat, the strategic balance was not salient in their minds.

Our analysis of these two cases is most consistent with the arguments of finite deterrence. The overwhelming strategic advantage of the United States in the missile crisis was negated by the fear of war. When the strategic balance was roughly equal, the Soviet Union could not compel even when the United States recognized the strong Soviet interest in protecting an endangered ally and their own interest in saving the Egyptian Third Army. Our evidence suggests

⁴⁵ Years later, in an offhand comment, Kissinger claimed that he would not have felt secure enough to choose an alert if the Soviet Union had had a marked strategic advantage. Cited by Betts, *Nuclear Blackmail*, 125. This kind of indirect and fragmentary evidence fits best with the arguments of the war-fighters, largely because Kissinger thought very much as they did. It is of course debatable whether Kissinger would have acted differently had the United States been in a position of relative inferiority; the proposition has never been put to the test. Given Kissinger's heavy emphasis on reputation and resolve, it seems unlikely that he would have complied even if the Soviet Union had had a relative strategic advantage. Proponents of finite deterrence and MAD would argue that Soviet compellence was unlikely to succeed even if the Soviet Union had had a marked advantage because the interests at stake were not sufficiently important.

that nuclear weapons are unusable for any political purpose but the defense of vital interests.

NUCLEAR THREATS AND NUCLEAR WEAPONS

The role of nuclear threats and nuclear weapons in Soviet-American relations during the cold war runs counter to much of the conventional wisdom. Throughout the cold war, superpower leaders expected their adversary to exploit any strategic advantage for political or military gain. Consequently, they devoted scarce resources to military spending to keep from being disadvantaged. For four decades Soviet and American leaders worried about the political and military consequences of strategic inferiority. These fears, coupled with the worst-case analysis each side used to estimate the other's strategic capabilities, fueled an increasingly expensive arms race. In the late 1940s, the Soviet Union made an intensive effort to develop its own nuclear arsenal in the aftermath of Hiroshima and Nagasaki. In the early 1950s, both sides developed thermonuclear weapons. Following the success of Sputnik in 1957, the United States accelerated its commitment to develop and deploy ICBMs. President Kennedy's decision to expand the scope of the American strategic buildup in the spring of 1961 triggered a reciprocal Soviet decision. The Reagan buildup of the 1980s was a response to Brezhnev's intensive spending of the previous decade and widespread concern that it had bought the Soviet Union a strategic advantage.

This pervasive fear of strategic inferiority was greatly exaggerated. We offer a set of general observations about the impact of nuclear threats and nuclear weapons that summarize our arguments based on the new evidence. These observations must remain tentative until additional evidence becomes available about other critical confrontations during the cold war and about the role of nuclear weapons in Sino-American and Sino-Soviet relations.

- Leaders who try to exploit real or imagined nuclear advantages for political gain are not likely to succeed. Khrushchev and Kennedy tried and failed to intimidate one another with claims of strategic superiority in the late 1950s and early 1960s. Khrushchev's threats and boasts strengthened Western resolve not to yield in Berlin and provoked Kennedy to order a major strategic buildup. Kennedy's threats against Cuba, his administration's assertion of strategic superiority, and the deployment of Jupiter missiles in Turkey – all intended to dissuade Khrushchev from challenging the West in Berlin-led directly to the Soviet decision to send missiles to Cuba. Both leaders were willing to assume the risks of a serious confrontation to avoid creating the impression of weakness or irresolution.
- Credible nuclear threats are very difficult to make. The destructiveness of nuclear weapons makes nuclear threats more frightening but less credible. It is especially difficult to make nuclear threats credible when they are directed against nuclear adversaries who have the capability to retaliate in kind. Many Soviets worried about nuclear war during the missile crisis, but Khrushchev judged correctly that Kennedy would not initiate a nuclear war in response to the deploy-

ment of Soviet missiles. Khrushchev's principal concern was that the president would be pushed into attacking Cuba and that armed clashes between the invading Americans and the Soviet forces on the island committed to Cuba's defense would escalate into a wider and perhaps uncontrollable war.

In 1973, the American alert had even less influence on the Soviet leadership. It was inconceivable to Brezhnev and his colleagues that the United States would attack the Soviet Union with nuclear weapons. They did not believe that the interests at stake for either the United States or the Soviet Union justified war. The American nuclear threat was therefore incomprehensible and incredible.

• Nuclear threats are fraught with risk. In both 1962 and 1973, American leaders were uninformed about the consequences and implications of strategic alerts. In 1973, they did not fully understand the technical meaning or the operational consequences of the DEFCON III alert and chose the alert in full confidence that it entailed no risks. During the missile crisis, when conventional and nuclear forces were moved to an even higher level of alert, it was very difficult to control alerted forces. Military routines and insubordination posed a serious threat to the resolution of the crisis.

Evidence from these two cases suggests that there are stark trade-offs between the political leverage that military preparations are expected to confer and the risks of inadvertent escalation they entail. American leaders had a poor understanding of these trade-offs: they significantly overvalued the political value of nuclear alerts and were relatively insensitive to their risks.⁴⁶

• Strategic buildups are more likely to provoke than to restrain adversaries because of their impact on the domestic balance of political power in the target state. Stalin, Khrushchev, and Brezhnev all believed that strategic advantage would restrain adversaries. Khrushchev believed that the West behaved cautiously in the 1950s because of a growing respect for the economic as well as the military power of the socialist camp. He was convinced that the visible demonstration of Soviet power, through nuclear threats and the deployment of missiles in Cuba, would strengthen the hands of the "sober realists" in Washington who favored accommodation with the Soviet Union. Khrushchev's actions had the reverse impact: they strengthened anti-Soviet militants by intensifying American fears of Soviet intentions and capabilities. Kennedy's warning to Khrushchev not to deploy missiles in Cuba and his subsequent blockade were in large part a response to the growing domestic political pressures to act decisively against the Soviet Union and its Cuban ally.

Brezhnev's strategic buildup was a continuation of Khrushchev's program. American officials believed that the Soviet buildup continued after parity had been achieved. Soviet strategic spending appeared to confirm the predictions of militants in Washington that Moscow's goal was strategic superiority, even a first-strike capability. Brezhnev, on the other hand, expected Soviet nuclear capa-

⁴⁶ This theme is developed at length in Richard Ned Lebow, Nuclear Crisis Management: A Dangerous Illusion (Ithaca, NY: Cornell University Press, 1987).

bilities to prevent the United States from engaging in "nuclear blackmail." Instead, it gave Republicans the ammunition to defeat President Carter and the SALT II agreement. The Soviet arms buildup and invasion of Afghanistan contributed to Ronald Reagan's landslide victory in 1980 and provided the justification for his administration's massive arms spending. American attempts to put pressure on the Soviet Union through arms buildups were equally counterproductive.

• Nuclear deterrence is robust when leaders on both sides fear war and are aware of each other's fears. War-fighting, MAD, and finite deterrence all mistakenly equate stability with specific arms configurations. More important than the distribution of nuclear capabilities, or leaders' estimates of relative nuclear advantage, is their judgment of an adversary's intentions. The Cuban missile crisis was a critical turning point in Soviet-American relations because it convinced Kennedy and Khrushchev, and some of their most important advisers as well, that their adversary was as committed as they were to avoiding nuclear war. This mutually acknowledged fear of war made the other side's nuclear capabilities less threatening and paved the way for the first arms-control agreements.

By no means did all American and Soviet leaders share this interpretation. Large segments of the national security elites of both superpowers continued to regard their adversary as implacably hostile and willing to use nuclear weapons. Even when Brezhnev and Nixon acknowledged the other's fear of war, they used the umbrella of nuclear deterrence to compete vigorously for unilateral gain. Western militants did not begin to change their estimate of Soviet intentions until Mikhail Gorbachev made clear his commitment to ending the arms race and the cold war.

DETERRENCE IN HINDSIGHT

The cold war began as a result of Soviet-American competition in Central Europe in the aftermath of Germany's defeat. Once recognized spheres of influence were established, confrontations between the superpowers in the heart of Europe diminished. Only Berlin continued to be a flashpoint until the superpowers reached an understanding about the two Germanies. The conventional and nuclear arms buildup that followed in the wake of the crises of the early cold war was a reaction to the mutual insecurities they generated. By the 1970s, the growing arsenal and increasingly accurate weapons of mass destruction that each superpower aimed at the other had become the primary source of mutual insecurity and tension. Moscow and Washington no longer argued about the status quo in Europe but about the new weapons systems each deployed to threaten the other. Each thought that deterrence was far less robust than it was. Their search for deterrence reversed cause and effect and prolonged the cold war.

The history of the cold war provides compelling evidence of the pernicious effects of the open-ended quest for nuclear deterrence. But nuclear weapons also moderated superpower behavior, once leaders in Moscow and Washington

recognized and acknowledged to the other that a nuclear war between them would almost certainly lead to their mutual destruction.

Since the late 1960s, when the Soviet Union developed an effective retaliatory capability, both superpowers had to live with nuclear vulnerability. There were always advocates of preemption, ballistic missile defense, or other illusory visions of security in a nuclear world. But nuclear vulnerability could not be eliminated. MAD was a reality from which there was no escape short of the most far-reaching arms control. Even after the dissolution of the Soviet Union and the proposed deep cuts in nuclear weapons, Russia and the United States will still possess enough nuclear weapons to destroy each other many times over.⁴⁷

Nuclear vulnerability distinguished the Soviet-American conflict from conventional conflicts of the past or present. In conventional conflicts, leaders could believe that war might benefit their country. Leaders have often gone to war with this expectation, although more often than not they have been proven wrong. The consequences of war turned out very differently than expected by leaders in Iraq in 1980, Argentina in 1982, and Israel in 1982.

Fear of the consequences of nuclear war not only made it exceedingly improbable that either superpower would deliberately seek a military confrontation with the other; it made their leaders extremely reluctant to take any action that they considered would seriously raise the risk of war. Over the years they developed a much better appreciation of each other's interests. In the last years of the Soviet–American conflict, leaders on both sides acknowledged and refrained from any challenge of the other's vital interests.

The ultimate irony of nuclear deterrence may be the way in which the strategy of deterrence undercut much of the political stability the reality of deterrence should have created. The arms buildups, threatening military deployments, and the confrontational rhetoric that characterized the strategy of deterrence effectively obscured deep-seated, mutual fears of war. Fear of nuclear war made leaders inwardly cautious, but their public posturing convinced their adversaries that they were aggressive, risk-prone, and even irrational.

This kind of behavior was consistent with the strategy of deterrence. Leaders on both sides recognized that only a madman would use nuclear weapons against a nuclear adversary. To reinforce deterrence, they therefore tried, and to a disturbing degree succeeded in convincing the other that they might be irrational enough or sufficiently out of control to implement their threats. Each consequently became less secure, more threatened, and less confident of the robust reality of deterrence. The strategy of deterrence was self-defeating; it provoked the kind of behavior it was designed to prevent.

The history of the cold war suggests that nuclear deterrence should be viewed as a powerful but very dangerous medicine. Arsenic, formerly used to treat

⁴⁷ By 2003, if the cuts proposed in the START II treaty are implemented, Russia will cut its missiles to 504 and its warheads to 3,000, and the United States will reduce its missiles to 500 and its warheads to 3,500.

syphilis and schistosomiasis, and chemotherapy, routinely used to treat cancer, can kill or cure a patient. The outcome depends on the virulence of the disease, how early the disease is detected, the amount of drugs administered, and the resistance of the patient to both the disease and the cure. So it is with nuclear deterrence. Finite deterrence is stabilizing because it prompts mutual caution. Too much deterrence, or deterrence applied inappropriately to a frightened and vulnerable adversary, can fuel an arms race that makes both sides less rather than more secure and provoke the aggression that it is designed to prevent. As with any medicine, the key to successful deterrence is to administer correctly the proper dosage.

The superpowers "overdosed" on deterrence. It poisoned their relationship, but their leaders remained blind to its consequences. Instead, they interpreted the tension and crises that followed as evidence of the need for even more deterrence. Despite the changed political climate that makes it almost inconceivable that either Russia or the United States would initiate nuclear war, there are still influential people in Washington, and possibly in Moscow, who believe that new weapons are necessary to reinforce deterrence. Deeply embedded beliefs are extraordinarily resistant to change.*

^{*} This article is based on a chapter from Richard Ned Lebow and Janice Gross Stein We All Lost the Cold War.