

Deterrence

Deterrence has been defined as a psychological process involving threat and dissuasion, or promise and persuasion, to influence the perceptions and will of potential opponents and, thereby, to increase one's own security and freedom of action.¹ Thus defined, deterrence can be seen as a key ingredient in a larger strategic design, a means for securing national interests by either avoiding conflict altogether or, that failing, by confining conflict to manageable levels of intensity. Constraints on an adversary's ability to operate at one level may make it possible to pursue advantages against the same opponent in other areas.²

Since the dawn of the Atomic Age in the waning months of the Second World War, avoidance of total war between nuclear powers has become an article of faith throughout the international community. The nearly exclusive association between nuclear weapons and the concept of deterrence is both understandable and inevitable, given the vast destructive potential and seemingly indiscriminate effects of these weapons and the Clausewitzian extreme of unlimited violence that they represent.³

Yet, in a larger sense, deterrence transcends particular kinds of weapons, or the effects they create, and is as old as the use of force in human affairs. The ancient Latin adage, *Qui desiderat pacem, praeparet bellum* (Let him who desires peace, prepare for war) has long dominated strategic calculations. The threat of force to obtain compliance with one's wishes or to discourage a potential opponent was a familiar tool of statecraft in the classical world. For several centuries, Rome relied on the well-deserved fighting reputation of her legions and diverse diplomatic methods (including bribery and hostage-holding) to secure its imperial frontiers, resorting to military operations only when pressed to relieve the pressure from external threats. Those preventative or restorative campaigns were commonly conducted with such relentless vigor and merciless intensity as to instill a well-justified fear of Roman military power among both subject peoples and external foes. A deterrent threat ("images of

force”) supplemented by the use of client and pro-Roman buffer states to maintain stability at the margins of the empire often proved far more cost-effective than did time-consuming and costly military campaigns.⁴

Historical precedent also indicates that fear of reprisal, once war has started, can preclude one or both antagonists from pursuing otherwise feasible (and potentially useful) military courses of action. That the German military never employed chemical warfare during World War II, although it possessed a significant capability, was obviously not due to the humanitarian instincts of a regime that otherwise waged total war with unparalleled ferocity.⁵

As such experience implies, deterrence works by persuading would-be assailants that the price of conflict or of certain actions, especially the use of particular weapons during a conflict, exceeds any probable gain.⁶ Under certain conditions, deterrence can involve threatening what the other side values, promising inevitable (if not immediate) retribution for aggressive acts to limit damage to oneself and one’s allies. Under different circumstances, as when an adversary possesses exploitable weaknesses in vital areas related to overt military capability, the skillful manipulation of perceived self-interests through pressure combined with positive incentives might decrease an opponent’s willingness to risk outright conflict.⁷ In either case, adversaries must believe that a nation possesses the will and capability to carry out the threats or the promises it has made.

Involving as it does antagonists having independent will and capability who act according to their own dictates, deterrence cannot be reduced to a matter of simple arithmetic for purposes of prediction or generalization. As Israel discovered in 1973, clear and convincing military superiority is not always enough to prevent adversaries from resorting to battle to remedy strategic conditions they perceive as intolerable.⁸ Even where *prima facie* historical evidence suggests some relationship between a strong military posture and restraint by an adversary (e.g., Europe’s 45 years of peace amidst the often-bellacose cold war rhetoric of the superpowers), attributing specific causes to particular effects is both difficult and risky in the

absence of conclusive evidence. The unique combination of circumstances and rationale prompting such restraint usually can only be guessed at by outside observers or reconstructed, based on exhaustive historical analysis, after the fact.⁹

Whether a strategy of deterrence can be made to work, or an ad hoc deterrent relationship can be said to exist, depends on more than the perceived wills and capabilities of opposing parties. Situational factors (e.g., demographic, ideological, economic, etc.) may have decisive effects on the success or failure of a deterrent strategy. In conjunction with the specific aims, collateral strengths and weaknesses, and motive forces impelling the potential aggressor, evolving conditions may either reinforce or frustrate attempts to establish and maintain equilibrium.¹⁰ Because such circumstances can change significantly over time, deterrence is a dynamic process, requiring responses to changing circumstances sometimes beyond the capabilities of the deterring state. For example, the great migrations of Asiatic peoples into and through central Europe between the second and fifth centuries A.D. were a major factor in the decline of Roman power, and the armed Mohammedan conversion of large portions of North Africa and the Near East in the seventh century helped undermine Byzantine military power.¹¹

Advances in military technologies also can forge new strategic conditions, disrupting existing equilibria and adding new dimensions to the problem of deterrence. Thus, England played a relatively independent role in European power politics for three and one half centuries following the defeat of the Armada in 1588 thanks to a combination of favorable geography and a first-rate naval capability based on the deterrence-related concept of a “fleet in being.” However, the advent of the airplane, the mine, and the submarine significantly altered the strategic landscape for British military planners, leading to a new emphasis on the deterrent properties of strategic airpower as Britain’s bulwark against continental aggression.¹² However, reliance on a particular form of military power to underwrite a deterrence-based strategy carries with it seeds of potential failure.

Weapons developed as deterrents in peacetime sacrificed surprise to the needs of foreign policy. Enemies could consider alternatives or pre-emptive strategies, and in war an ex-deterrent, like a battle fleet, could simply intensify demands on resources without contributing significantly to success.¹³

Nuclear Deterrence

Aerospace power, as well as so-called weapons of mass destruction, has helped cast deterrence, and indeed the whole tapestry of strategic relationships, in a new light. No longer are nations and societies, however distant from the zone of immediate conflict, exempt from the totality of war. Moreover, for many, the atomic bomb validated theories about strategic bombing. From there, it was but a short intellectual leap to the notion that nuclear weapons, whether delivered by bomber or missile, constituted the ultimate deterrent threat.¹⁴

Although it is impossible to prove what deters an opponent, American force structures since 1945 have been organized, trained, and equipped based on what we think will deter aggression against or coercion of the United States, its allies, and friends.¹⁵ The result has been a large array of very sophisticated capabilities, whose ultimate measure of merit has been their contribution to nuclear deterrence.¹⁶ Nevertheless, constructing an enduring US strategy based on the deterrent power of nuclear weapons has proven difficult, for reasons previously noted: changes in strategic circumstance, uncertainties as to the psychological and cultural dynamics that underlie deterrence, and the uneven effects of deterrence across the broad range of enemy options. Perhaps as importantly, the destructive possibilities of nuclear weapons have helped reshape the concept of deterrence as it relates to national security strategy:

Nuclear deterrence is a necessary but negative aspect of strategy. Its only purpose is to provide freedom of action to use the positive aspects of strategy. Because nuclear weapons cannot be uninvented, knowledge of nuclear weapons, their effects, and their control is essential for the strategist. This leads to the paradoxical definition that nuclear strategy is the political maneuvering and the deployment of weapons whose purpose is to insure that nuclear weapons are never used.¹⁷

Over the past five decades, a number of nuclear-oriented deterrent theories and war-fighting doctrines have held center stage in US defense policy. Each has attempted to enhance the deterrent effects of US forces by prescribing targeting options, force structures, and capabilities considered most likely to influence the opponent's war-making calculus in light of existing strategic circumstances. US philosophies regarding the role of nuclear weapons in strategic deterrence have included, at one time or another: massive retaliation (the threat to respond to aggression with nuclear weapons, at a time and place of our choosing), assured destruction (the threat to devastate the enemy's homeland), flexible response and "graduated" deterrence (the threat to any and all of the full range of enemy capabilities through a sequence of conventional and nuclear response options), and a countervailing strategy (the threat to what we believe the adversary values most highly).¹⁸ Most recently, renewed emphasis has been placed on conventional deterrence of general war as the most realistic and meaningful means for regulating the aggressive behavior of potential adversaries.¹⁹

The quest for a truly convincing (credible) deterrent has produced corresponding debate over appropriate targeting emphases (counterforce versus countervalue, those designed to deny enemy war-fighting objectives versus "punitive" attacks on enemy infrastructure) and the wisdom of attempting to extend the US strategic nuclear "guarantee" to allies.²⁰ Such thinking has at times totally dominated national security policy and military plans. Yet, where nuclear operations are concerned, no base of experience exists to guide strategists. As a minimum, a war in which opposing sides employed nuclear weapons would be decidedly different from conventional operations. Assertions beyond this, however, must be speculative.²¹

Despite the imponderables associated with the deterrence of nuclear war, US nuclear forces have consistently been designed, structured, equipped, and trained according to the premise that the mere possession of nuclear weapons is insufficient. Potential adversaries must perceive that, even in a worst-case situation, US

nuclear forces not only will survive attack but also will be able to penetrate enemy defenses to retaliate. Planning for survivability ensures such a capability. Planning for employment demonstrates that the will to use the capability exists. Beyond these deterrence-related concerns, US commanders must have some concept of how nuclear forces might best be employed so as to retain the operational initiative, dominate events, and attain a quick and favorable end to hostilities should deterrence fail.²²

Of paramount importance in US thinking on strategic deterrence is the concept of escalation control. Most US plans assume that a major war would begin as a conventional conflict at the theater level. The hope is that nuclear deterrence would continue to work and that both sides would avoid any use of nuclear weapons.²³ The objective would be to prevent escalation by reducing the enemy's incentive to use nuclear weapons.²⁴

However, in the elusive fashion of deterrence itself, there are no guarantees that escalation could be constrained or controlled. Should conventional conflict occur with another nuclear superpower, deterring the use of nuclear weapons would require, at the least, maintaining a nuclear arsenal and a command and control system that are unquestionably survivable. Should the nuclear threshold be crossed, the question of escalation would become even more problematic. In such a case, the only alternative to an all-out nuclear exchange might be some sort of intra-war state of equilibrium, in which both sides observed similar and easily recognized constraints on the number, type, and target assignments of nuclear weapons employed for fear of inviting more severe damage.²⁵

The Evolving Context of Deterrence

As the Persian Gulf conflict and the recent relaxation of strategic tensions associated with the breakup of the Soviet Union indicate, there exists neither a fixed timetable nor precise road map for the calculated threat, or actual use, of military force. It is hardly surprising that such precision in foreign and defense policies is largely

unattainable, given the continual flux that characterizes human affairs.²⁶ War-avoidance and war-limitation strategies are particularly problematic because their ultimate center of gravity is the often unknowable mind of the adversary—the strategic and operational logic that guides the decision to wage war as well as how to prosecute it.²⁷

Absent a foolproof method of predicting when and where particular nations will seek advantage through force of arms, military capability (as well as the will to employ it) must continue to be the central measure of deterrence.²⁸ While the task of preventing nuclear devastation on a global scale remains a fundamental goal of US military forces, other threats to regional and international political stability loom ever more important in US security calculations.²⁹ Because of the potentially dire consequences for both friend and foe should nuclear weapons be unleashed, these weapons have proven to be existential threats in the fullest sense of the word and, hence, self-detering. A “better state of peace” in the face of diverse future challenges to the international order may dictate greater reliance on a wide range of advanced conventional warfare capabilities to forestall or resolve conflicts ranging from insurgencies to classic wars of fire and maneuver. Thus, the greatest consequence of the Gulf War could turn out to be its effect as a strategic deterrent. Certainly, the focused devastation wrought by coalition air forces during Operation Desert Storm well demonstrated that “strategic effect” in war is a condition independent of particular classes or types of weapons.³⁰

The implications for deterrence of such a decisive use of conventional airpower are potentially significant because conventional weapons may be a more viable option than nuclear weapons. Low-observable and precision weapon technologies make conventional weapons more usable because these technologies reduce the risk of friendly losses, minimize collateral damage, and improve weapons delivery efficiency.³¹ These factors might well alter the strategic perceptions of risk and military feasibility on which deterrence rests, although in what direction and to what degree is presently a matter of conjecture.

Because aerospace power provides unique, varied, and far-ranging means of affecting the will and capability of potential adversaries, it is virtually certain that aerospace forces will be a cutting-edge deterrent well into the future. Consequently, airmen not only must understand deterrence as a complex phenomenon subject to ever-changing conditions but also must appreciate how aerospace forces and other elements of military power can best achieve the strategic effects so vital to the effective deterrence of conflicts of all types.

Notes

1. André Beaufre, "An Introduction to Strategy," excerpted in *The Art and Practice of Military Strategy*, ed. George Edward Thibault (Washington, D.C.: National Defense University, 1984), 205.

2. The post-World War II ideological, political, and military competition between the United States and the Soviet Union waxed and waned at various levels and in different forms, always circumscribed by the possibility of global nuclear war. Although the superpowers have come perilously close to direct confrontation (and possible failure of strategic nuclear deterrence) on more than one occasion, such dangers have not altered the spirited nature of the contest in other dimensions (economic, political, psychological, etc.). Paul Kennedy, "The United States and Grand Strategy," in *Grand Strategies in War and Peace*, ed. Paul Kennedy (New Haven: Yale University Press, 1991), 172.

3. Winston Churchill eloquently summarized the thoughts of many regarding the absolute deterrent power of nuclear weapons: "Then it may well be that we shall, by a process of sublime irony, have reached a stage in this story where safety will be the sturdy child of terror, and survival the twin brother of annihilation." *Hansard Parliamentary Debates (Commons)*, 5th ser., vol. 537, col. 1899.

4. Edward N. Luttwak, *The Grand Strategy of the Roman Empire* (Baltimore: Johns Hopkins University Press, 1976), xii, 47. Where available means or existing strategic circumstances do not permit, attempts to maintain the status quo through the threat of force (as opposed to the use of diplomatic, economic, or other means) may prove ruinous to the deterring nation. For example, Spain in the early seventeenth century attempted to maintain her reputation as a predominant military power, and with it global preeminence, through defense commitments that helped bankrupt her and hasten her decline. J. H. Elliott, "Managing Decline: Olivares and the Grand Strategy of Imperial Spain," in *Grand Strategies in War and Peace*, 93, 104.

5. Both sides possessed chemical weapons but were mutually deterred from using them, indicating that deterrence, like war, is multidimensional. Seymour J. Deitchman, *Military Power and the Advance of Technology: General Purpose Military Forces for the 1980s and Beyond* (Boulder, Colo.: Westview Press, 1983), 24, 28–29.

6. *National Security Strategy of Engagement and Enlargement* (Washington, D.C.: The White House, February 1996), 13. Potential costs to the aggressor include: losses in battle, possible occupation and damage to national territory, the opportunity cost of diverting economic resources and national expenditures to wartime production, and the potential loss of domestic political support if defeated militarily. Paul K. Huth, *Extended Deterrence and the Prevention of War* (New Haven: Yale University Press, 1988), 15.

7. The “possibility of stalemate” (as in the era of nuclear weapons) has brought to the fore a range of alternative means by which to pressure and/or persuade opponents. These include, among others: “propaganda, obstructions, planned mischief, underground war, sabotage, intimidation, bribes, armed threats, limited war, and wars by proxy.” C. N. Barclay, quoted by Theodore Ropp, “The Historical Development of Contemporary Strategy,” in *The Harmon Memorial Lectures in Military History, 1959–1987*, ed. Lt Col Harry R. Borowski (Washington, D.C.: Office of Air Force History, 1988), 368. Positive inducement, to deter effectively, must ultimately rely on an implied threat; otherwise, it becomes simple bribery or appeasement. Colin S. Gray, *Strategic Studies: A Critical Assessment* (Westport, Conn.: Greenwood Press, 1982), 149–50.

8. It would appear that the Israelis were, at least partially, victims of their own perceptions of the existing deterrent balance, while the Egyptians acted according to political dictates that transcended a fundamental military inferiority and the virtual certainty of devastating losses. Israel’s political and military leaders saw what they wanted to see, even in the face of significant intelligence indications to the contrary. For an in-depth analysis of Egyptian calculations preceding the 1973 Yom Kippur War, see Janice Gross Stein, “The View From Cairo,” in Robert Jervis, Richard Ned Lebow, and Janice Gross Stein, *Psychology & Deterrence* (Baltimore: Johns Hopkins University Press, 1985), 34–59.

9. “The key to stable deterrence lies more, though certainly not exclusively, in the realm of political interests than it does in the details of strategy and forces.” In other words, deterrent measures, as well as reactions to them, reflect conscious decisions based on perceptions, fundamental assumptions, and motives not likely to be readily apparent to those in outside circles. Colin S. Gray, *War, Peace, and Victory: Strategy and Statecraft for the Next Century* (New York: Simon and Schuster, 1990), 276.

10. The evolution of US strategic doctrine during the cold war illustrates the effects of changes in geopolitical reality on how strategists view the sufficiency of

their deterrent threat. See Michael E. Howard, *Studies In War and Peace* (New York: Viking Press, Inc., 1971), especially chap. 10, “The Classical Strategists,” 154–83.

11. Michael E. Howard, *War in European History* (Oxford: Oxford University Press, 1976), 1. Others see the primary cause of the eventual failure of the Roman system of strategic defense augmented by threat of force as an operational one: the product of an unrealistic reliance on central reserves rather than perimeter forces in the later empire, as well as of the increasing barbarization and diminished operational quality of the Roman army. Arthur Ferrill, “The Grand Strategy of the Roman Empire,” in *Grand Strategies in War and Peace*, 83–85.

12. Christopher Harvie notes that, before World War I, navies were considered, first and foremost, deterrents. However, “when war broke out, their bluff was called and their deployment had to be radically changed.” “Technological Change and Military Power in Perspective,” Adelphi Paper 144, International Institute for Strategic Studies, reprinted in *The Art and Practice of Military Strategy*, 516.

13. *Ibid.*, 519. By the mid-1930s, reliance on heavy bombers as a fundamental means of dissuading attack had given way to the realization that technological advances favoring air defense (such as radar and fighter direction systems) were again changing the context of deterrence.

14. In 1956 Secretary of the Air Force Donald A. Quarles noted, “from now on, potential aggressors must reckon with the air-atomic power which can be brought to bear immediately in whatever strength, and against whatever targets, may be necessary to make such an attack completely unprofitable to the aggressor.” In 1957 Secretary of Defense Charles E. Wilson added:

There is very little money in the budget we are proposing to you now for the procurement of so-called conventional weapons. . . . we are depending on atomic weapons for the defense of the Nation. Our basic defense policy is based on the use of such atomic weapons as would be militarily feasible and usable in a smaller war, if such a war is forced upon us.

Both quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: A History of Basic Thinking in the United States Air Force*, vol. 1, 1907–1964 (Maxwell AFB, Ala.: Air University, 1971), 227, 232.

15. *National Security Strategy*, 13, 20.

16. As of June 1992, US strategic nuclear capabilities were provided by US Strategic Command (STRATCOM). Larry Grossman, “Streamlining for Leaner Times,” *Government Executive*, December 1991, 11.

17. Henry E. Eccles, “Strategy—The Theory and Application,” *Naval War College Review*, May–June 1979, 11–21, quoted in *Military Strategy: Theory and*

Application, ed. Col Arthur F. Lykke Jr. (Carlisle Barracks, Pa.: US Army War College, 1989), 40.

18. Theories about nuclear strategy and the employment of nuclear weapons come primarily from civilian analysts. Excellent reviews of the evolution of nuclear strategy can be found in Lawrence Freedman, "The First Two Generations of Nuclear Strategists," in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, N.J.: Princeton University Press, 1986), 735–78, and Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (New York: Macmillan Publishing Co., Inc., 1973), 363–477. The "classical" theorists include Bernard Brodie, Herman Kahn, and Thomas C. Schelling. See Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt, Brace, and Company, 1946); Brodie, *Strategy in the Missile Age* (Princeton, N.J.: Princeton University Press, 1965); Kahn, *On Escalation: Metaphors and Scenarios* (New York: Praeger, 1965); Kahn, *On Thermonuclear War* (Princeton, N.J.: Princeton University Press, 1960); Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966); and Schelling, *The Strategy of Conflict* (Cambridge, Mass.: Harvard University Press, 1960). One of the better recent works addressing nuclear issues is Paul J. Bracken, *The Command and Control of Nuclear Forces* (New Haven: Yale University Press, 1983). A comparison of the nuclear doctrines of the five major states possessing nuclear weapons can be found in *Nuclear Weapons: Report of the Secretary-General of the United Nations* (Brookline, Mass.: Autumn Press, 1980), 108–29. See also David MacIsaac, "The Nuclear Weapons Debate and American Society: A Review of Recent Literature," *Air University Review* 35, no. 4 (May–June 1984): 81–96, for a useful bibliography.

19. Although "deterrence of nuclear attack remains the cornerstone of U.S. national security," deterrence through flexible and effective conventional capabilities is emphasized, as well, in recent national security policy statements. *National Security Strategy*, 13, 14, 21.

20. The problem of deterring Soviet adventurism in Western Europe without igniting World War III long preoccupied NATO strategists. One study recommended that NATO nuclear weapons; command, control, and communications (C³) systems; and intelligence capabilities be geared to promoting deterrence through the threat of swift denial of Soviet military objectives, rather than the concerted destruction of supporting infrastructures. *Discriminate Deterrence, Report of the Commission on Integrated Long-Term Strategy* (Washington, D.C.: Government Printing Office, January 1988), 30.

21. See Lawrence Freedman, *The Evolution of Nuclear Strategy*, 2d ed. (New York: St. Martin's Press, 1989), 22–24.

22. The United States does not seek to fight a nuclear war. However, the credibility of the US nuclear deterrent depends both on the military options available

for response to a wide range of situations and on our capability to effect early war termination should deterrence fail. *National Security Strategy*, January 1988, 14–15. It is also important to stress that only the president can authorize the use of US nuclear weapons. This authority and safeguard is absolutely necessary. Richard H. Kohn and Joseph P. Harahan, eds., *Strategic Air Warfare: An Interview with Generals Curtis E. LeMay, Leon W. Johnson, David A. Burchinal, and Jack J. Catton* (Washington, D.C.: Office of Air Force History, 1988), 94. For a detailed examination of command and control of US nuclear operations, see Aston B. Carter, John D. Steinbruner, and Charles A. Araket, eds., *Managing Nuclear Weapons* (Washington, D.C.: Brookings Institution, 1989).

23. Although both the Soviet Union (before its breakup) and the US were armed basically in opposition to each other, neither accepted the prospects of nuclear war as a viable alternative for resolving their differences. For their part, Soviet spokesmen expressly stated that the Soviet Union would not be the first nation to use nuclear weapons in a conflict. For informed views of the Soviet perspective on nuclear issues, see Edward L. Warner III, *Soviet Concepts and Capabilities for Limited Nuclear War: What We Know and How We Know It* (Santa Monica, Calif.: RAND, February 1989), 43–48; Harriet and William F. Scott, *Soviet Military Doctrine: Continuity, Formulation, and Dissemination* (Boulder, Colo.: Westview Press, 1988), 147–50; and *Soviet Military Power: Prospects for Change, 1989* (Washington, D.C.: Department of Defense, 1989), 42–43, 86.

24. The process of escalation can be insidious, and the lessons of history are significant. None of the belligerents in World War II, for example, including the Germans, began with plans for massive air assaults against civilian targets. Both sides initially attempted to constrain strategic operations to military targets. Error and accident, however, bred reprisal, which became provocation. Ultimately, neither side could completely prevent bombing raids against their cities. Lee Kennett, *A History of Strategic Bombing* (New York: Charles Scribner's Sons, 1982), 187. The Americans, for their part, still believed in 1942 that precision, high-altitude bombing (in lieu of area bombing) could be accomplished without appreciable collateral damage and would be sufficient to win the war. By 1945, however, even they had recognized the limitations of precision bombing and had escalated to massive area bombing of civilian centers, especially in Japan. Weigley, 363; Kohn and Harahan, 72; and James Parton, *"Air Force Spoken Here:" General Ira Eaker and the Command of the Air* (Bethesda, Md.: Adler and Adler Publishers, Inc., 1986), 442.

25. Such haphazard reliance on the good intentions of the belligerents, once a nuclear war had begun, is obviously unsatisfactory from a strategic planning perspective. Hence, considerable thought has been given to effective means of: first, diminishing the possibility of uncontrollable escalation; and, second, terminating nuclear operations as rapidly as possible on terms most favorable to the United

States. One primary consideration in the so-called limited nuclear options and in the strategy of flexible response was the increased likelihood of attaining both objectives should a significant decision-making and C³ capability on both sides survive initial nuclear operations. Bracken, 189.

26. According to one analyst, future US security policy depends on the relationships between geopolitical position and changing technology, US institutional values and changing global threats and opportunities, and the state of the US economy and public support for foreign/defense investments. Robert S. Wood, "Strategic Choices, Geopolitics, and Resource Constraints," *Washington Quarterly*, Summer 1989, 139.

27. The frustrations inherent in convincing an intransigent opponent of real and immediate intentions were apparent in President Bush's comments prior to Operation Desert Storm:

I still think he (Saddam Hussein) doesn't get it. And I don't know how he could not understand . . . that the alternative is real and it would be devastating. And so it's not kind of a macho beating of the breast. It is trying to make the man understand reality.

"Very Clearly, Good Versus Evil," *U.S. News & World Report*, 31 December 1990, 24.

28. Not being privy to intentions, or fully understanding why an adversary perceives things the way he does, has made the nature of the threat itself (actual capability to inflict damage) a prime indicator of attitude and intent. Jervis, Lebow, and Stein, 13, 14.

29. *National Security Strategy*, February 1996, 1.

30. Air Force white paper, *Air Force Performance in Desert Storm* (Washington, D.C.: Department of the Air Force, April 1991), 1-2.

31. Contrary to a common belief that new and more potent conventional weapons capabilities represent but another step on the scale of weapons effects below the nuclear "firebreak," Thomas J. Welch maintains that advanced conventional weapons have obviated the classic distinction between nuclear and nonnuclear effects. For a compelling assessment of advances in weapons technology, as they apply to present concepts of deterrence and warfighting, see Welch's "Technology Change and Security," *Washington Quarterly*, Spring 1990, 111-20.