BERNARD BRODIE:

AMERICA'S PROPHETIC STRATEGIC THINKER

by

WILLIAM P. SNYDER AND JOHN A. MAC INTYRE, JR.

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Bernard Brodie (1910-1978) achieved national prominence as a civilian defense strategist in the period after World War II. He was the most original and thoughtful of the civilian strategists who helped shape American and Western strategic thought in recent decades and deserves ranking with the major classical strategists.

A historian by training, Brodie's highly regarded first book, Sea Power in the Machine Age *(1941), examined the effects of technological developments on naval operations. Following wartime service in the Navy, Brodie edited and contributed to* The Absolute Weapon *(1946), the first careful analysis of the military and strategic consequences of atomic weapons. An early advocate of deterrence, Brodie anticipated with remarkable foresight the strategic and operational implications of that strategy. In 1950, following service on the staff of the National War College, Brodie joined the RAND Corporation where he carried out studies on limited war and nuclear strategy. His* Strategy in the Missile Age *(1959) was a landmark study that synthesized the central ideas on deterrence and limited war that had emerged during the 1950s. His subsequent books include* Escalation and the Nuclear Option *(1966), a critique of American policy toward NATO, and* War and Politics *(1973), an important general treatise on strategy.*

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On 6 August 1945, President Truman informed the American people of the use earlier that day of an atomic weapon on Hiroshima. The weapon, he noted, "had more power than 20,000 tons of TNT" and "two thousand times the blast power" of any bomb used previously. In his announcement, Mr. Truman reminded Japanese leaders of the surrender ultimatum issued previously at the Potsdam Conference; if Japan did not accede, it could "expect a rain of ruin from the air, the like of which has never been seen on this earth."[1]

Just a month after a second atomic device destroyed Nagasaki, the Japanese government surrendered. It seemed clear at the time that atomic weapons to some degree had hastened the surrender of Japan.[2] The truly decisive effect of that first use of atomic weapons, however, was the challenge the new technology posed to the ideas held by military leaders and statesmen on national security and military strategy.

The issue that attracted the most immediate concern in the United States was the question of how atomic power should be controlled. A few observers seemed sympathetic to using atomic weapons to "discipline" the Soviet Union. But most, including a small contingent of the scientists

who had helped develop the bomb, believed that some form of world government was essential to achieve the desired control. Foremost among the world government advocates was Dr. J. Robert Oppenheimer, who had headed the scientific team at Los Alamos. Oppenheimer declared that atomic weapons "are weapons of aggression, of surprise, and of terror," and that they have "altered abruptly and profoundly the nature of the world . . . . To accept as fact this new terror" is "to accept with it the necessity for those transformations in the world which will make it possible to integrate these developments into human life." Conceding that the needed changes in relations among nations and peoples were visionary, Oppenheimer nevertheless insisted that "this, for us, in our time, is the fundamental problem of human society."[3]

Despite the eloquence and sincerity of Oppenheimer's plea, other civilian and many military observers were skeptical. One of the earliest opposing views came from Bernard Brodie, a scholar at the Yale Institute of International Affairs. In a paper published in November 1945, Brodie noted that Oppenheimer's categorization of the atomic bomb as a weapon "of aggression, of surprise, and of terror" assumed that an aggressor "will not need to fear retaliation. If it must fear retaliation, the fact that it destroys its opponent's cities some hours or even days before its own are destroyed may avail it little." "So much the more reason," Brodie continued, "to take all possible steps to assure that multilateral possession of the bomb, should that prove inevitable, be attended by arrangements to make as nearly certain as possible that the aggressor who uses the bomb will have it used against him."[4]

Bernard Brodie was one of the handful of American scholars—others being Harold and Margaret Sprout, Percy E. Corbett, William T. R. Fox, Walter Millis, Frederick S. Dunn, Arnold Wolfers, and Quincy Wright—then pioneering the new academic discipline of national security studies. Brodie's observation regarding multilateral possession of atomic weapons and his startling suggestion that the threat of retaliation provided a feasible solution to the control problem provoked a bitter response from world-government advocates. Indeed, one advocate, then the president of one of America's prestigious universities, vigorously opposed—unsuccessfully as it turned out—publication the following year of a revised version of Brodie's paper in a collection of essays dealing with atomic weapons.[5]

The dispute over methods of controlling atomic weapons obscured the remarkably prescient ideas on nuclear strategy outlined in Brodie's two chapters in *The Absolute Weapon: Atomic Power and World Order*. In the first of those chapters, Brodie described the destructive power of the atomic bomb and examined the general military consequences of atomic weapons. Some of his conclusions were obvious and shared by other writers—that an effective defense against atomic weapons was impossible and that other countries would have similar weapons in a few years. Other conclusions were contrary to the then conventional wisdom—for example, Brodie argued that "superiority in numbers of bombs is not a guarantee of strategic superiority" and that "superiority in air forces, though a more effective safeguard . . . than superiority in naval or land forces, nevertheless fails to guarantee security."[6]

Brodie turned in his second chapter to the consequences of these weapons for overall national strategy. The critical distinction of atomic weapons was not that they "make war more violent," but that they "concentrate the violence in terms of time."[7] An appropriate strategy, therefore, was deterrence—hardly a new idea in strategic thinking but one peculiarly appropriate to the nuclear age. Brodie's thoughts on the subject are summarized in the following passage:

> The first and most vital step in any American security program for the age of atomic bombs is to take measures to guarantee to ourselves in case of attack the possibility of retaliation in kind. The writer in making that statement is not for the moment concerned about who will *win* the next war in which

atomic bombs are used. Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose.[8]

If deterrence was an appropriate strategy for the atomic age, Brodie saw with equal clarity that a deterrence strategy presupposed a major restructuring of the nation's military forces. Those military and civilian leaders who envisaged a peacetime military establishment that could be expanded rapidly after hostilities commenced were guilty of "pre-atomic thinking."[9] However fitting in the past, a mobilization strategy was unsuited for the future. Rather, "the idea which must be driven home above all else is that a military establishment which is expected to fight on after the nation has undergone atomic bomb attack must be prepared to fight with the men already mobilized and with the equipment already in the arsenals."[10] The need for a "force in being" extended to all types of forces. Moreover, the military units assigned the retaliatory mission required special attention: this force must be kept in "isolation from the national community"; its "functions must not be compromised" by other military missions; the force would "have to be spread over a large number of widely dispersed reservations"; and "these reservations should have a completely independent system of inter-communications."[11] A more accurate blueprint of future American nuclear strategy and of the forces assigned the retaliatory mission is hard to imagine!

This insightful analysis of the strategic implications of atomic weapons enhanced Bernard Brodie's already substantial reputation in American circles as a perceptive and original strategic thinker. An earlier work, *Sea Power in the Machine Age*, published in 1941, was an analysis of changes in naval strategy brought about by technological developments beginning in the mid-19th century.[12] *A Layman's Guide to Naval Strategy* appeared one year later; it explained and updated the basic concepts of naval strategy.[13] When that book was adopted as a textbook in Navy officer training schools and as required reading aboard ship, Brodie became an apostle of naval strategy and interpreter of Admiral Mahan to the naval officer corps of World War II and the decade thereafter. But it was *The Absolute Weapon* that previewed the analytical contribution that Brodie and other social scientists were to make on national security policies in the decades after World War II. Further, the major concerns addressed in his two chapters—the appropriateness of a deterrence strategy and the design of military forces to achieve deterrence—were to become central themes in Brodie's subsequent writings extending over the next 30 years.

More than a decade elapsed between publication of *The Absolute Weapon* and Brodie's next major work, *Strategy in the Missile Age*.[14] During the interim, Brodie served briefly on the faculty of the National War College and also published several important articles on strategy and limited war. His major contribution, however, was as an analyst at the RAND Corporation. The first and most important of the think tanks, RAND was an attempt to establish on a permanent basis the fruitful cooperation between the military services and civilian scientists that had developed during the war.[15] RAND quickly became an important center of strategic thinking; and Brodie, as an experienced

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Colonel William P. Snyder, USA Ret., is Associate Professor of Political Science at Texas A&M University. He graduated from the US Military Academy in 1952, received a Ph.D. in political science from Princeton University in 1963, and graduated from the US Army War College in 1971. After retirement in 1975, he joined the Texas A&M faculty. In 1979-80 he was Visiting Professor of Political Science at the Army War College. He is the author of *The Politics of British Defense Policy, 1945-1962* (1964), *Case Studies in Military Systems Analysis* (1967), and numerous articles and reviews. Currently, he is writing a biography of General Walter Bedell Smith.

strategist, soon became something of a mentor there to the younger analysts, many of whom would make important contributions to strategic thought in later years.

Brodie's essays in *The Absolute Weapon* were predictive and prescriptive. *Strategy in the Missile Age* provided an expanded and analytical examination of the themes discussed in his earlier book, incorporating many of the strategic concepts developed by his colleagues at RAND. Thus, *Strategy in the Missile Age* was a synthesis of the major strategic ideas that had emerged since the beginning of the atomic age. The book was directed equally to military officers and to political leaders; Brodie especially hoped to bridge the intellectual no man's land between those who "decide how to wage war" and those who "decide when and to what purpose" wars should be waged.[16]

Strategy began with an examination of the evolution of strategic thinking concerning aerial bombardment and air power, ideas that dominated American strategic thought. Brodie cautioned, however, that "ideas about war and how to fight it" predate the "truly cosmic forces [that have] been harnessed to the machines of war."[17] Clearly, it was impossible "to start from scratch with completely fresh ideas and, guided merely by logic, to fashion a strategy according to the needs of the time."[18] In his review of air strategy, he gave particular attention to the work of Giulio Douhet, an Italian airman. An early advocate of strategic bombing, Douhet believed that command of the air could be achieved by aggressive bombing of cities, which, in turn, would quickly lead to surrender. Further, air power's decisive role in warfare not only relegated armies and navies to a purely defensive role, but made it clear that the air arm itself should become a separate military service.

Brodie noted that, although Douhet's strategic thinking was unrefined, his ideas on air power had influenced all major air forces except those of Japan and the Soviet Union. More important, Brodie believed, Douhet's concepts had provided the intellectual foundation for the strategic bombing campaigns of World War II.[19]

World War II had provided a good test of Douhet's theories of strategic bombardment. Analyzing the results of postwar strategic bombing surveys, Brodie concluded that strategic bombing operations against Germany had caused considerable inconvenience and discomfort, but not until 1944 had war production suffered. Against Japan, Brodie noted, better target selection and more concentrated raids had resulted in increased effectiveness and accordingly had contributed to a decline both in civilian morale and in war production. In neither case, however, had bombing been decisive in the final outcome. Douhet's theory had failed. But with the advent of atomic and thermonuclear weapons there was no longer any question concerning the decisiveness of strategic bombardment.

The remainder of *Strategy in the Missile Age* was devoted to defining a strategy appropriate to an age of "truly cosmic forces." An effective defense against a nuclear attack had become impossible, Brodie observed, although a counterforce strategy, if successfully carried out, had defensive implication in that it would reduce the opponent's capability to inflict damage. Preventive war could be ruled out on moral and political grounds. Preemptive war raised similar questions and, in any event, was possible only in a theoretical sense. "Massive retaliation," the strategy adopted by the Eisenhower Administration in 1954, was also faulty. That strategy was appropriate in response to a Soviet attack on the United

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Colonel John A. MacIntyre, Jr., is presently assigned to the Office of the Surgeon General, Department of the Army. He is a graduate of Pennsylvania Military College and holds master's degrees from George Washington University in international business (1971) and from Trinity University in health care administration (1975). Colonel MacIntyre graduated from the US Army Command and General Staff College in 1976 and the US Army War College in 1980. He has held a variety of staff and command positions, including command of the 3d Medical Battalion, 3d Infantry Division.

States or on NATO, Brodie believed. But to threaten an attack against the heart of Soviet power in response to local aggression—an implication of the strategy conveyed by Secretary of State Dulles—was both dangerous and foolish, little more than preventive war with an excuse.

Given the unacceptability of preventive war and of a preemptive strategy, the only feasible strategy was the one Brodie had earlier proposed—deterrence. His discussion of deterrence and of the forces needed to achieve that strategy was considerably refined over the ideas voiced in *The Absolute Weapon*. One refinement involved the distinction between "basic" deterrence and "war winning" requirements. Basic deterrence, Brodie contended, did not necessarily require a force larger than the opponent's. Nevertheless, planners had to keep in mind the possibility that deterrence might fail: "So long as there is a finite chance of war, we have to be interested in outcomes; and although all outcomes would be bad, some would be very much worse than others."[20] A second refinement involved the retaliatory force. Its most critical quality was its security—it was essential that enough of the force survive an attack to strike back with a telling effect. Security could be obtained by a diversity of forces, by hardening, by dispersion, and, in the case of bomber forces, by airborne alerts. Brodie especially feared that the "bias towards the offensive" in American military doctrine could cause a neglect of security measures. He hoped for a change in doctrine and advised civilian leaders that they "must be prepared to find the military selling the defensive short."[21] Also essential, and related to the security of the retaliatory force, was adequate early warning, an idea developed by two RAND colleagues, Roberta and Albert Wohlstetter. Finally, Brodie believed that civil defense measures, including shelters, increased the credibility of deterrence; moreover, "reasonable protection to our population may become critical" if we expect to deter attacks on "territories beyond our shores."[22]

In his discussion of deterrence, Brodie anticipated policy issues that were to emerge in later years. He foresaw, for example, the intense public debate that was to surround the civil defense proposals of RAND colleague Herman Kahn, but he noted that governments "have no moral right . . . to adopt cavalier attitudes about the value of individual survival."[23] Brodie also concluded that "a force which fulfills . . . [the deterrent] requirement is likely to be . . . a good strike-first force," an observation at the heart of the limited nuclear options debate of the last decade.[24] Finally, he favored arms control measures, "especially . . . those which . . . reduce . . . the danger of surprise attack."[25] Without such measures,

> technological progress could . . . push us rapidly towards a position of almost intolerable mutual menace. Unless something is done politically to alter the environment, each side before many years will have thousands of missiles accurately pointed at targets in the other's territory ready to be fired at a moment's notice.[26]

Brodie also addressed a second broad issue—limited war. Wars before the nuclear era had often been limited, and the Korean War seemed to demonstrate that wars could remain limited in the nuclear age. There were, however, two important questions regarding limited war. The first involved nuclear weapons: Could we find "sanctions for keeping out of action . . . those existing instruments which from a . . . military point of view are far the most efficient"?[27] Brodie was clearly undecided on this question. He thought that in some instances the use of nuclear weapons might help realize the political objectives of the war without leading to an all-out war. He was not undecided, however, on the contention that such weapons *must* be used: That conclusion had been reached "too quickly [and] on the basis of far too little analysis."[28] The second question was related and concerned a separate military capability for limited war. Brodie believed a separate capability was essential. Otherwise, deterrence would be compromised and nuclear weapons would, out of necessity, be used.

Strategy in the Missile Age was the most important book on American national strategy to appear in the decade of the 1950s.[29] It provided the first detailed explanation of the advantages, indeed the necessity, of a deterrence strategy and an equally thoughtful analysis of the forces required to achieve deterrence. Brodie's concern that traditional military doctrine would delay adoption of or weaken a deterrence strategy by failing to provide appropriate security for the retaliatory force seems, in retrospect, largely unwarranted. Similarly, he perhaps assumed greater public acceptability of deterrence and its related security measures than was warranted, especially in regard to civil defense. Nevertheless, his cogent criticism of other strategic alternatives, coupled with his exceptionally clear explanation of deterrence and of how best to achieve it, contributed importantly to our understanding of the problems of national security in the nuclear age. That the book appeared at a time of considerable public uncertainty over the adequacy and direction of American national security policies served only to heighten the importance of Brodie's contribution.

Bernard Brodie remained at RAND until 1966. During his time there he wrote several articles and two more books. In *From Crossbow to H-Bomb*, with his wife as coauthor, Brodie examined the application of science to the weaponry and methods of warfare.[30] The book contained only brief comments on strategy, but it was an interesting and useful historical survey of the application of new knowledge and technology to warfare. A favorite Brodie concern, the conservative force of military doctrine, appeared there under a broader guise—the inhibiting effect of "accustomed ways and accustomed thoughts," what Brodie termed the "cake of custom."[31]

The second book, *Escalation and the Nuclear Option*, was published in 1966, shortly after Brodie had accepted an academic position at the University of California at Los Angeles.[32] The book addressed NATO strategy, particularly the relative importance of nuclear and conventional forces in deterring a Soviet attack. Secretary McNamara had proposed a sharp increase in NATO's conventional capabilities, a position strongly advocated by several of Brodie's former RAND associates. Brodie's criticism of the assumptions underlying those proposals, as well as his analysis of European views on NATO strategy, unfortunately attracted little attention at the time. He anticipated correctly, however, the problems that the proposals were to cause in NATO.

Escalation and the Nuclear Option dealt mainly with two issues: The first was the "firebreak" concept—the notion that a gap exists between conventional and nuclear weapons; the second was whether and when tactical nuclear weapons should be employed in a limited war. McNamara and his advisers contended that the "firebreak" had to exist at an intense and high level of conventional operations; otherwise, the pressures to breach it would be immense. Further, any circumvention of the "firebreak" would lead quickly to full-scale nuclear war. This position assumed that a nuclear capability would deter an opponent's use of nuclear weapons, but would not deter a limited or conventional conflict. Consequently, very large conventional forces were necessary, sufficient in capability to achieve at least a draw with the opponent. The political consequences were equally clear, as illustrated by the Kennedy Administration's repeated calls for large increases in the conventional forces of the European members of NATO.

There was, Brodie noted, a certain irony in his own position: Only a decade earlier he had urged American policymakers to seek ways of limiting war and avoiding undue reliance on nuclear weapons. Nevertheless, Brodie contended that the McNamara approach was seriously flawed. First, the strategy effectively deprived NATO of a potentially valuable option—the use or threat of use of tactical nuclear weapons. Second, the proposal to strengthen conventional

forces was based on improbable assumptions regarding the outbreak of war and likely Soviet behavior. Finally, the concept was "seriously disturbing to the coherence of . . . [the] alliance."[33] European leaders had a different view of NATO than did Americans: NATO was less a defensive alliance than a

> . . . unilateral guarantee in the guise of an alliance of equals—sufficient to *deter* the Soviets from aggression . . . . The American drive . . . for greater efficiency . . . , for greater rationality in war-fighting plans, and for various related values has always seemed to most informed Europeans . . . beside the point, and, in so far as it involved a certain measure of hectoring, has been decidedly negative in its results.[34]

Military measures to contain aggression in the NATO area, Brodie argued, should have three characteristics: They should be (1) "effective enough initially to prevent extensive deterioration of the military situation"; (2) "limited enough to leave unused, at least temporarily, such higher levels of violence as are not likely to be immediately necessary" to prevent deterioration; and (3) "determined enough to show that we are not more unwilling than the enemy to move toward those higher levels."[35] Existing conventional forces provided the first two capabilities. *Early use* of tactical nuclear weapons could provide the third and best way of making clear to any enemy "before he reaches for those higher levels that it is dangerous for him to do so and will avail him nothing."[36] Brodie acknowledged that great uncertainty attended policies regarding tactical nuclear weapons. He was convinced, however, that the existing combination of conventional and strategic forces was an effective deterrent. Not only were large additional expenditures for conventional forces unnecessary, but continuing harassment of our European allies, reflected in de Gaulle's decision to leave NATO, was counterproductive. Continuation of NATO was "more important by far than the ideal correctness or the economic efficiency of its military planning and arrangements."[37]

Brodie's last book, *War and Politics*, was published in 1973. Although Brodie regarded the book as his most important work, public interest in defense issues had soured during the Vietnam War, and *War and Politics* attracted less public attention than *Strategy in the Missile Age*. The book was "less detached and analytical" than Brodie's earlier work, and he displayed a measure of "optimism about the future—an attitude shared by few other military strategists."[38] It differed further from Brodie's earlier work in that it was not primarily about American strategy or national security policy. *War and Politics* was, rather, a general treatise on strategy. Brodie was concerned with the issue addressed by his favorite classical strategist, Clausewitz. The issue is the "logic" of war—why a nation engages in war and whether its strategy is consistent with the goals for which it goes to war. This concern is cogently summarized in Marshall Foch's famous question: "*De quoi s'agit-el*?" (What is it all about?). It is the most important question in all of strategy, Clausewitz believed, and it is this question that Brodie examined in *War and Politics*.

First Brodie evaluated national strategy in the 20th-century wars in which the United States had participated. Had the political goals been important? Had strategic plans and the military actions they guided served those goals? In Brodie's view, the results were mixed. In World War I, none of the belligerents had declared political goals of great consequence. Military action had soon settled into stalemate and given every sign of being costly and indecisive. Yet neither side had been willing or able to halt the war. The reason, Brodie argued, was the "fierce dedication to the goal of victory" and "the obverse of this obsession . . . the fear of losing."[39] As a result, "an infinitely bloody and senseless war" had persisted for more than four years.[40] Strategy had shown a "sublime disregard of the Clausewitzian ideas that would marry strategy to a political purpose."[41] In World War II, in contrast, the Allied objective of total defeat of Germany had been correct, as had been the decision to

defeat Germany first. Brodie also defended the use of atomic weapons against Japan. The major strategic errors had been the failure to move Allied forces into Eastern Europe and the misjudging of Soviet intentions regarding participation in the war in Asia. In Brodie's view, those mistakes had substantially improved the political position of the Soviet Union in the postwar period.

Unlike the two World Wars, Korea and Vietnam had involved deliberate restraints on the use of force, and confusion regarding strategic objectives; in each instance the war had become a domestic issue. Intervention in Korea had been appropriate, Brodie concluded, given the context of the Cold War and the American policy of containment. Differences over American objectives during the early months of the war had been of little consequence as long as UN forces were on the defensive. After the Inchon landing and the rout of much of the North Korean Army, however, the objectives of the war had become the central question in US strategy. The adoption of more ambitious objectives by the Administration, in the flush of victory at Inchon, had been a strategic error, although Brodie did endorse Washington's later decisions—acceptance of more limited strategic objectives and President Truman's relief of General MacArthur. A second and more serious strategic error had been the halting of the UN offensive in June 1951. The Chinese armies, near defeat, had been able to recover, and the Chinese had then been under little military pressure during the ensuing peace talks. As a result, the last two years of war had not witnessed any significant political gains for the United States or South Korea.

Two long chapters were required for Brodie's analysis of the Vietnam War. Like George Kennan, he regarded the war as a serious mistake, and he cited Kennan's 1966 Senate testimony approvingly:

> Our military involvement in Vietnam has to be recognized as unfortunate, *as something we would not choose deliberately, if the choice were ours to make all over again.*[42]

To that judgment Brodie added the following:

> It is the conception simply of reasonable price, and of its being applied to strategy and national policy—the idea that some ends or objectives are worth paying a good deal for and others are not.[43]

Beyond believing that the price was too high, Brodie pointed out that Vietnam had involved numerous misjudgments. American policymakers had "down-graded basic political issues that should have operated as controlling parameters."[44] Three issues had been misjudged: First, Ho Chi-minh and his revolutionary cadres had been identified with Vietnamese nationalism, making the American task more difficult than the "puny quality of the opponent" suggested.[45] Second, the strategic importance of Vietnam had been overvalued, as had the consequences (the "domino theory") of its loss. Finally, American political leaders had consistently downplayed the weaknesses of the South Vietnamese government.

On the military side, sanctuaries in Laos, Cambodia, and North Vietnam had been of greater help to the enemy than was generally realized. The bombing campaigns had done little to hamper the ability of the North Vietnamese to carry on military operations. Brodie also contended that the US Army "remained highly resistant to any kind of organizational change that might enable it better to cope with a war . . . aberrant in character."[46] Finally, there was the military's "consistent and endless distortion of events on the side of optimism."[47] Still, Brodie did not accept the sweeping indictment of American military performance advanced by Henry Kissinger; of "search and destroy" operations, he noted that "there is much to be said for the Army view."[48] Overall, though, Brodie regarded Vietnam as a series of "virtually unmitigated disasters."[49] His critique, although harsh, was informed, reasoned, and convincing, the best among the early postmortems of the war.

The remainder of *War and Politics* consisted of analytical essays that examined

issues bearing on national strategy. Brodie noted, for example, that public attitudes were moving toward a rejection of "war as a means of resolving international or other disputes . . . . Present justifications . . . appear to be confined largely to self-defense," a development that "greatly affects the prospect for the success of deterrence."[50] As for the causes and cures of war, Brodie maintained that most of the widely accepted theories, including the recently popular notion of a "military industrial complex," had little substance. Instead of "thinking about curing war *per se*," we should "think more about avoiding particular wars that might otherwise engulf us."[51] "Vital interests," a concept at the very heart of strategic questions, "are not to be found in objective reality but rather in the minds of men."[52] As to whether moral considerations were a proper basis for "vital interests," Brodie cited John Quincy Adams:

> Wherever the standard of freedom and independence has been or shall be unfurled, there will be America's heart, her benedictions, and her prayers. But she goes not abroad in search of monsters to destroy.[53]

And, Brodie added,

> Where the initiative abroad appears to be warranted for some other reason, policies . . . that are either conspicuously immoral to begin with or likely to lapse into behavior that can be easily so labelled, . . . [are] likely to prove quite inexpedient and ultimately self-defeating.[54]

Brodie concluded this insightful work with a lengthy discussion of strategists and decision makers. Soldiers, he observed, view themselves as "men of action rather than intellectuals."[55] Commanders are picked for their leadership skills, and "that talent which is also necessary . . . , strategic insight, may come off a very poor second."[56] Efforts to reduce strategy to certain principles, a process that began early in this century, would have "appalled" Clausewitz and indicated "a basic misunderstanding" of strategy.[57] As for the "scientific strategists" and the RAND Corporation, their "outstanding contribution . . . [is] the development of systems analysis."[58] Systems analysis is "likely to be far superior to anyone's simple, intuitive judgment,"[59] but it is not a substitute for strategy. To underline this point, Brodie suggested that Clark Clifford, in "changing our direction [in Vietnam], may well go down as a more significant Secretary . . . than McNamara," for all of the latter's devotion to systems analysis.[60]

Brodie concluded by reminding political leaders that "the skills developed in the soldier are those of the fighter, and not of the reflector on ultimate purpose."[61] Therefore, "the civil hand must never relax, and it must without one hint of apology hold the control that has always belonged to it by right."[62] Implicit in that observation was another important conclusion: Civilian political leaders must reflect thoughtfully on the nation's ultimate purpose and its strategy.

Many of the classical strategic thinkers—Frederick, Clausewitz, Jomini, Foch, Upton, Mahan, Douhet, Liddell Hart—were men who turned to strategic studies during or after active military service. With the advent of total war in the 20th century, the study of strategy began to attract civilian scholars in increasing number. The development of atomic—and then thermonuclear—weapons accelerated this shift in two ways: First, issues of war and peace clearly became issues of national survival, "too important," as Clemenceau declared, "to be left to generals." Second, maintaining the large, combat-ready forces on which deterrence depends changed the quality of military service, taking away the leisure time that intellectually active officers of earlier generations had directed to the study of military history and strategy. Civilian scholars began to fill this gap, replacing the military intellectuals of an earlier age. A new organization, the think tank, replaced military schools and general staffs as the institutional center of strategic

thinking. These trends are most advanced in the United States, but Western Europe and even the Soviet Union have moved in the same direction.

Bernard Brodie was a leading figure in this transformation of strategic thinking. He began his preliminary studies just before World War II, when only a handful of civilian scholars regarded national security policies as worthy of academic inquiry. He was involved, in an intimate way, with every subsequent development in this transformation until his death in 1978. Along the way, Brodie pioneered the adaptation of deterrence to the nuclear age; he also, with remarkable foresight, defined the characteristics of the forces required by that strategy. He played an important role in the development of the RAND Corporation—not as an organizer, but as a mentor for the young analysts recruited to that organization in the 1950s. Brodie was a model of rigor, balance, and personal grace to these scholars and to others whom he met and influenced. One of the early and principal advocates of limited war, he saw both the benefits and complications that attend restraints on force. As the first generation of civilian strategists matured and became productive in the decade after World War II, it was Brodie who synthesized their work into a coherent and understandable strategy that took account not only of nuclear weapons but of technological developments in aircraft, missiles, and electronics. Throughout, Brodie was a thoughtful critic—both of the military and of his fellow strategic intellectuals.

Brodie brought to his work three important qualities often missing in current strategic thinking. First, he was an able historian, as familiar with Frederick's campaigns and the American Civil War as with the post-World War II military balance. He was especially sensitive to the evolution of strategic thought and to the effect of technology on warfare. History informed Brodie's writings, and historical examples, more than an abstract appreciation of the destructive power of nuclear weapons, gave strength to his analyses of American strategy. Although Brodie contended that nuclear weapons had invalidated military history as a guide to strategic principles, his own use of history provides the strongest challenge to that view.

The second quality evident in Brodie's work was his understanding of military professionals. He clearly appreciated the unique demands of officership and the behavior patterns produced by those demands; that, in turn, gave him a keen awareness of the appropriate role military professionals could play in the formulation of strategy and national policy. His understanding of—and even sympathy for—military professionals did not cause him to excuse what he regarded as bad military judgment: His criticism of Admiral Halsey's actions during the battle of Leyte Gulf and of General Earle Wheeler's role in the Vietnam War were strong indeed; but his was an informed criticism that thoughtful military leaders would regard as fair and evenhanded. Brodie believed that civilian control of the military was an absolute requirement for an effective national strategy. He also recognized that military doctrine was essential for battlefield success, but he believed that doctrine was a conservative force that could inhibit effective thinking about strategic problems. These views shaped, but did not weaken, Brodie's conviction that military leaders had an important role to play in formulating national strategy and policy.

The final quality is hard to define precisely. But Brodie displayed in all his published work a keen sense of the larger purpose of strategy. Put another way, he never forgot Marshall Foch's question "*De quoi s'agit-el*?" Brodie understood the constituent elements of strategy, but he was never diverted from the central question, no matter how interesting the constituent element. Moreover, for Brodie strategy was certainly not abstract and abstruse theorizing—it was "nothing if not pragmatic."[63] An effective strategy rested on a clear definition of political goals and broad political support, not historical precedence or theoretical elegance. Equally, clarity and

simplicity were essential qualities in strategic thought. These important characteristics were present in all of Brodie's work.

Four decades of writing and thinking about military strategy convinced Bernard Brodie that Clausewitz was the best of the classical strategists. Brodie's contribution to strategic thinking is neither as original nor as rigorous as that of Clausewitz. Still, his contributions—especially the adaptation of deterrence to the nuclear age— make him one of the preeminent strategic thinkers of the nuclear age and place him in the historical lineage of genuinely important strategic theorists. If deterrence continues to provide, as it has for the last three decades, a means for the superpowers to avoid conflagration, future historians of strategic thought may be inclined to rank Brodie with the best of the classical theorists. If deterrence fails, then the survivors may wish that national leaders had studied Brodie more carefully.

NOTES

1. "Text of Statements by Truman, Stimson in the Development of the Atomic Bomb," *The New York Times*, 7 August 1945, p. 4.
2. The effect of the two bombs on the Japanese decision to surrender is still in question. For a brief discussion of the issue, see Bernard Brodie, *War and Politics* (New York: MacMillan, 1973), pp. 50-55.
3. J. Robert Oppenheimer, "Atomic Weapons and the Crisis in Science," *The Saturday Review of Literature*, 24 November 1945, pp. 9-11.
4. Bernard Brodie, "The Atomic Bomb and American Security," Yale Institute of International Studies, Memorandum No. 18, New Haven, Conn., November 1945.
5. Asher Brynes, "The Uncertainty Principle," *The Nation*, 15 October 1973, p. 373. Brodie comments briefly on the incident in *War and Politics*, p. 377n. The university president was Dr. Robert M. Hutchins, of the University of Chicago. Hutchins subsequently wrote a highly critical review of *The Absolute Weapon*. See "Scholarly Opinion on Atomic Energy—and Its Control," *The New York Times Book Review*, 9 June 1946, pp. 6ff. Most other reviews of *The Absolute Weapon* were favorable.
6. Bernard Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt, Brace, 1946), pp. 28-34; 63-69; 40, 46.
7. Ibid., p. 71.
8. Ibid., p. 76. Italics in original.
9. Ibid., pp. 88-89.
10. Ibid., p. 89.
11. Ibid., p. 91.
12. Bernard Brodie, *Sea Power in the Machine Age* (Princeton: Princeton Univ. Press, 1941). A listing of Brodie's major works appears at the end of these notes.
13. Bernard Brodie, *A Layman's Guide to Naval Strategy* (Princeton: Princeton Univ. Press, 1942). Subsequent editions were published in 1943, 1944, and 1958; a fifth edition was published in 1965 by Frederick A. Praeger. "Layman's" was dropped from the title beginning with the third (1944) edition.
14. Bernard Brodie, *Strategy in the Missile Age* (Princeton: Princeton Univ. Press, 1959).
15. For a history of RAND, see Bruce L. R. Smith, *The RAND Corporation: Case Study of a Nonprofit Advisory Corporation* (Cambridge: Harvard Univ. Press, 1966).
16. Brodie, *Strategy in the Missile Age*, p. 7.
17. Ibid., pp. 19, 7.
18. Ibid., p. 20.
19. For a contrary view on Douhet's influence on American thinking, see Alfred F. Hurley, *Billy Mitchell: Crusader for Air Power* (Bloomington: Indiana Univ. Press, 1975), pp. 146-47, 177.
20. Brodie, *Strategy in the Missile Age*, p. 278. Italics in original.
21. Ibid., pp. 175-76.
22. Ibid., p. 296.
23. Ibid., p. 299.
24. Ibid., p. 283.
25. Ibid., p. 300.
26. Ibid., p. 304.
27. Ibid., p. 311. Italics in original.
28. Ibid., p. 330. That was one of the conclusions of Henry Kissinger in *Nuclear Weapons and Foreign Policy* (New York: Council on Foreign Relations—Harper & Brothers, 1957).
29. Henry Kissinger's *Nuclear Weapons and Foreign Policy* was the best selling book on national security policy to appear in this period. Our judgment that Brodie's book was more important rests on the following: (1) it was broader in scope—a synthesis of thinking on both nuclear and limited war, and (2) Kissinger reversed himself in regard to the use of tactical nuclear weapons in a subsequent book.
30. Bernard and Fawn Brodie, *From Crossbow to H-Bomb* (Bloomington: Indiana Univ. Press, 1973). Brodie's wife, Fawn, was a controversial biographer-historian who employed psycho-analytic concepts in historical studies. Her most provocative work is *Thomas Jefferson: An Intimate History* (New York: Norton, 1974). Mrs. Brodie died in 1981; her last book was *Richard Nixon: The Shaping of His Character. From Crossbow to H-Bomb* is the only book on which the two collaborated.
31. Ibid., p. 12.
32. Bernard Brodie, *Escalation and the Nuclear Option* (Princeton: Princeton Univ. Press, 1966).
33. Ibid., p. 14.
34. Ibid., p. 92. Italics in original.
35. Ibid., pp. 101-02.
36. Ibid., p. 102.
37. Ibid., p. 14. Brodie later summarized the issue in *War and Politics* (New York: Macmillan, 1973), pp. 396-416. Brodie's views on Secretary McNamara's strategic ideas are spelled out in some detail in "The McNamara Phenomenon," *World Politics*, 21 (July 1965), 672-86.
38. Peter J. Ognibene, "Who Determines The National Interest?" *The New Republic*, 30 June 1973, pp. 27-28.
39. Brodie, *War and Politics*, p. 25.
40. Ibid., p. 26.
41. Ibid., p. 13.
42. George Kennan, cited in Brodie, *War and Politics*, p. 159. Brodie added the italics.
43. Brodie, *War and Politics*, p. 159.

44. Ibid., p. 188.
45. Ibid., p. 115.
46. Ibid., p. 188.
47. Ibid., p. 194.
48. Ibid., p. 189. The Kissinger indictment appears in his article "The Vietnam Negotiations," *Foreign Affairs*, 47 (January 1969), 211-34.
49. Brodie, *War and Politics*, p. 115.
50. Ibid., p. 274.
51. Ibid., p. 340.
52. Ibid., p. 364.
53. Ibid., pp. 373-74. Adams made the remark during a Fourth of July speech in 1821.
54. Ibid., p. 374.
55. Ibid., p. 436.
56. Ibid., p. 448.
57. Ibid., pp. 446, 451. For a fuller statement of Brodie's views on the principles of war see "Strategy As a Science," *World Politics*, 6 (July 1949), 467-88.
58. Ibid., p. 460.
59. Ibid., p. 462.
60. Ibid., p. 477.
61. Ibid., p. 492.
62. Ibid., p. 496.
63. Ibid., p. 452.

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