### Acta Universitatis Lapponiensis 295

### Barry Zellen

# Bernard Brodie and the Bomb:

At the Birth of the Bipolar World

### ACADEMIC DISSERTATION

To be publicly defended with the permission of the Faculty of Social Sciences at the University of Lapland in lecture room 3 on 23 January 2015 at 12 noon

#### Advisor:

Dr. Julian Reid Professor of International Relations, University of Lapland, Rovaniemi, Finland

### External Examiners:

Professor Michael Dillon, Emeritus Professor of Politics, Lancaster University and

Dr. Bryan Mabee, Senior Lecturer, School of Politics and International Relations, Queen Mary University of London



Rovaniemi 2015

# Acta Universitatis Lapponiensis 295

# Barry Zellen

# Bernard Brodie and the Bomb:

At the Birth of the Bipolar World



University of Lapland Faculty of Social Sciences

## © Barry Zellen

Cover:

Paula Kassinen

Layout:

Taittotalo PrintOne, Helsinki

Sales:

Lapland University Press Po box 8123 FI-96101 Rovaniemi phone +358 40 821 4242, fax +358 16 362 932

publications@ulapland.fi www.ulapland.fi/lup

University of Lapland Printing Centre, Rovaniemi, Finland 2015

Printed:

Acta Universitatis Lapponiensis 295 ISSN 0788-7604 ISBN 978-952-484-802-2

Pdf:

Acta electronica Universitatis Lapponiensis 163 ISSN 1796-6310 ISBN 978-952-484-801-5

# **Table of Contents**

Abstract	7
Chapter One Introduction and Literature Review	9
Chapter Two Before the Bomb: Bernard Brodie's Beginnings	53
Chapter Three After the Bomb: Confronting the 'Absolute Weapon'	97
Chapter Four Beyond the Bomb: Confronting New Dangers: H-bombs, ICBMs and the Spread of Nuclear Weapons	135
Chapter Five  Bernard Brodie and the Rise of the Civilian Strategists:  At the Nexus of War and Policy	242
Chapter Six Bernard Brodie: A Clausewitz for the Nuclear Age?	365
Chapter Seven After Brodie: The Continuing Evolution of Clausewitz Studies	425
Bibliography	528

### **Abstract**

Bernard Brodie (1910-1978) was a leading 20th century theorist and philosopher of war. A key architect of American nuclear strategy, Brodie was one of the first civilian defense intellectuals to cross over into the military world. This thesis explores Brodie's evolution as a theorist and his response to the technological innovations that transformed warfare from World War II to the Vietnam War. It situates his theoretical development within the classical theories of Carl von Clausewitz (1780-1831), as Brodie came to be known as "America's Clausewitz." While his first influential works focused on naval strategy, his most lasting impact came within the field of nuclear strategic thinking. Brodie helped conceptualize America's strategy of deterrence, later taking into account America's loss of nuclear monopoly, the advent of thermonuclear weapons, and proliferation of intercontinental ballistic missiles. Brodie's strategic and philosophical response to the nuclear age led to his life-long effort to reconcile Clausewitz's theories of war, which were a direct response to the strategic innovations of the Napoleonic era, to the new challenges of the nuclear age. While today's world is much changed from the bipolar international order of the Cold War period, contemporary efforts to apply Clausewitzian concepts to today's conflicts suggests that much can be learned from a similar endeavor by the previous generation as its strategic thinkers struggled to imagine new ways to maintain order in their era of unprecedented nuclear danger.

# Chapter One Introduction and Literature Review

This thesis explores the theoretical evolution of Bernard Brodie, his strategic and philosophical response to the nuclear age, and his lifelong effort to reconcile the classical strategic theories of Carl von Clausewitz to the new found challenges of the nuclear era. A foundational architect of American nuclear strategy and one of the twentieth century's most influential strategic thinkers, Bernard Brodie helped not only to reintroduce a new generation of American sailors to the fundamentals of naval strategy on the eve of World War II, but to later guide the evolution of U.S. military doctrine through the nuclear age while also helping to bridge the gap between civilian theorists and military strategists.

His life spanned a period of unprecedented global disorder, upheaval, and war – from the collapse of Europe's balance of power system in the killing fields of World War I, through the even more convulsive and first truly global total war of World War II, to the calmer but more dangerous peace of the Cold War period. During Brodie's lifetime, the technology of war advanced dramatically, with a cresting wave of innovation and wizardry as creative as that century's almost endless warfare was destructive. Brodie was something of a renaissance man when it came to the many disciplines required to truly comprehend the complexity of modern war, with expertise in technology and innovation, history and philosophy, as well as the more traditional military arts of strategy and tactics. He was, through his unique combination of expertise, one of America's most important philosophers of war, and a pioneering architect of America's Cold War strategy of deterrence. And yet, while his theoretical contributions were on a scale shared by very few across history, brilliant minds like that of Clausewitz and Jomini in an earlier age whose formative experiences were forged in war, Brodie came to the art of war from the academic realm, making him one of the first civilian defense intellectuals to cross over from academia to the military world.

In addition to his pioneering work on nuclear strategy – and intimately interconnected to both his theoretical work on the strategic implications of the splitting of the atom and his historical work on the strategic implications of technological change – Brodie was a pioneer in the field of Clausewitz studies, and an important contributor to America's rediscovery of Clausewitz in the post-World War II era. Brodie has been described by many scholars as "America's Clausewitz" or the "Clausewitz of the Nuclear Age" – a title claimed by others of his generation, including, by some accounts, his long-time colleague and later rival, Herman Kahn.¹ Whereas Kahn became known

<sup>1.</sup> Indeed, in 1991 the editors of *Makers of Nuclear Strategy* predicted that: "Future generations of are likely to acclaim Brodie as 'the Clausewitz of the age of nuclear deterrence." John Baylis and John C. Garnett, eds., *Makers of Nuclear* 

for his bold theories of nuclear warfighting and his unsentimental imagination of the "day after" deterrence failed, Brodie was a true believer in the strategic and moral imperative of deterrence as a strategy, and as the optimal (and only rational) underlying strategic architecture of the Cold War's bipolar international order.

Brodie's first influential strategic efforts were in the field of naval strategy, with his first book, *Sea Power in the Machine Age* (Princeton University Press, 1941 and 1943), and his second, *A Layman's Guide to Naval Strategy* (Princeton University Press, 1942, later renamed *A Guide to Naval Strategy* at the Navy's request, which went on to enjoy multiple printings), positioning him for immediate recognition in the aftermath of Japan's dawn raid of the U.S. Pacific Fleet at Pearl Harbor. But Brodie's most lasting strategic impact would come after the end of World War II, in the emergent field of nuclear strategic theory, as he took an early lead in conceptualizing and articulating precepts that would guide the emergence and evolution of U.S. strategic doctrine for the post-Hiroshima world – refining his thoughts as technology continued to evolve, and as the military balance consequently shifted throughout the Cold War era.

This thesis explores Brodie's evolution as a theorist, and his response to the technological innovations that transformed warfare from the period just before World War II through to the Cold War's nuclear arms race, up to his death just after the Vietnam War. It places Brodie's theoretical development within a Clausewitzian context, noting that Brodie came to be an apt student of the famed Prussian strategist, and a key player in the movement to bring Clausewitz studies to America - partnering with leading Clausewitz scholars of his generation including Peter Paret, Michael Howard, and briefly Liddell Hart in their ambitious but in the end only partially successful Clausewitz Project, which famously yielded the widely read Princeton translation of Clausewitz's On War but whose grand ambition to produce six volumes would be dashed. Brodie took Clausewitz's approach to the study of war, the embrace of complexity, and the important interconnection of war to politics, to heart, and embedded his own pioneering work in nuclear strategy in a framework that was in form and substance inherently Clausewitzian. This conscious effort at emulation, combined with his distinct theoretical elegance and analytical rigor, made Brodie more deserving of the mantle "America's Clausewitz" than any other strategic thinker of his generation. The research involves an in depth and comprehensive review of his bountiful written works; secondary sources in the literature of nuclear war that reference and contextualize Brodie and his work; as well as his many speeches and letters, draft materials and notes from the Bernard Brodie papers at the UCLA archives.

The aim of this thesis is to come to understand Brodie's place in the history of strategic theory, and in its own humble way to help introduce a new generation of

students and scholars to one of the most important strategic theorists of the twentieth century, whose works transcend the Cold War context but which are infrequently assigned in strategic studies courses as interest in the early Cold War strategists has faded along with that era's bipolarity. The nuclear strategists lay the theoretical foundation not only for the rapidly evolving Cold War military doctrine as described by numerous Cold War intellectual and strategic historians, including Barry Steiner and Fred Kaplan, but also for the foundational strategic-diplomatic architecture of the Cold War's bipolar international order; it was the bomb, and both its unprecedented destructive power and the inherent balance perceived by both Cold War adversaries in the bomb's assured mutuality of destruction, that would serve as the kernel from which bipolarity would grow.<sup>2</sup>

The thesis provides a theoretical and historical context for understanding Brodie's contribution to American strategic thought, embedding his work within the Clausewitzian tradition, and showing how Brodie's increasing fascination with Clausewitz would contribute to the evolution of Brodie's own theoretical style – one that made his work both more sophisticated and enduring in its relevance, though less accessible perhaps to the practitioner of war and, ironically, less widely read and thus during his lifetime perhaps less influential than several of his peers. The thesis also sheds light on Brodie's enduring effort to bridge the civil-military divide, and thereby contribute to the birth of modern strategic studies as a civilian/academic discipline, in part to serve as a counterweight to military commanders when it came to strategic decision-making and the formulation of military doctrine, and more generally to educate both American civilian and military students and scholars on the importance of Clausewitz in addition to his own theoretical and strategic ideas on nuclear deterrence. While several scholars have commented on Brodie's interest in, and resemblance to, Clausewitz as a theorist of war during a time of upheaval who struggled to comprehend the changes under way and to craft a theoretical response, the comparisons made have often been somewhat superficial; the parallels are in fact many, and deep, spanning decades of Brodie's work and evident in his many articles, book reviews, op-eds, lectures, research memoranda and books, as well as his participation in the decade-long Clausewitz Project that would yield the widely read 1976 Princeton edition of On War. Clausewitz became so central to Brodie, as inspiration and source of emulation, that Brodie's intentional efforts to integrate Clausewitz into his work and to advocate greater scholarly interest in the Prussian became one of the central intellectual contributions that Brodie made, and with the end of bipolarity

<sup>2.</sup> Fred Kaplan, *The Wizards of Armageddon* (New York: Simon and Schuster, 1983) and Barry H. Steiner, *Bernard Brodie and the Foundations of American Nuclear Strategy* (Lawrence, Kansas: University Press of Kansas, 1991). Also see Colin S. Gray, *Modern Strategy* (Oxford: Oxford University Press, 1999); Gregg Herken, *Counsels of War* (New York: Knopf, 1985) and *The Winning Weapon: The Atomic Bomb in the Cold War*, 1945-1950 (New York: Alfred A. Knopf, 1980); John Baylis and John Garnett, eds., *Makers of Nuclear Strategy* (London: Pinters Press, 1991); and Roman Kolkowicz, ed. *Dilemmas of Nuclear Strategy* (London: Frank Cass, 1987); among others.

and declining interest in nuclear strategy generally likely the most enduring dimension of Brodie's legacy with relevance that reaches well past the Cold War and its golden age of nuclear strategy. What had long been perceived as the defining dimension of Brodie's intellectual contribution, his articulation of and later refinements to nuclear deterrence, would quickly lose its luster when the Cold War suddenly concluded, as interest in the nuclear strategists and the very dangerous bipolar world that they helped create – and which they endeavored to moderate – just as quickly waned.

### In the Literature: In Quest of Bernard Brodie

Although Bernard Brodie played a critical role in the emergence both of the new field of nuclear strategy as well as the broader emergence of a new community of civilian strategic analysts and advisors who would come to dominate the making of post-World War II American national security policy, the biographical literature on Brodie is somewhat thin, with notable contributions made by Brodie's students and peers to the strategic and academic literature, and an occasional cameo appearance in popular and intellectual histories of the Cold War. But for the theorist considered by many to be foundational to the birth of nuclear strategy – as persuasively argued by Barry Steiner in his 1991 book-length biography, discussed below – he has maintained a surprisingly low-key profile in the popular mind, eclipsed during his lifetime and after by more colorful and powerful personalities, and more controversial figures, including Henry A. Kissinger and Herman Kahn. A full decade before Steiner's book-length survey of Brodie's strategic influence came to press, a briefer survey of Brodie's contribution to the strategic literature was presented just three years after Brodie's death in a 1981 article in the U.S. Army War College's journal, Parameters, by William P. Snyder and John A. MacIntyre, Jr. Snyder and MacIntyre championed Brodie as "the most original and thoughtful of the civilian strategists who helped shape American and Western strategic thought in recent decades."3 They wrote:

In the weeks and months that followed the Hiroshima and Nagasaki bombings, Snyder and MacIntyre recall, the United States became increasingly preoccupied with the issue of keeping atomic power in check; "[M]ost, including a small contingent of

<sup>3.</sup> William P. Snyder and John A. MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," *Parameters* Vol XI, No. 4, 2. They further describe Brodie's work: "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."

the scientists who had helped develop the bomb, believed that some form of world government was essential to achieve the desired control." Dr. J. Robert Oppenheimer was at the forefront of this world government movement. But some disagreed—including Bernard Brodie, whose 1945 Memorandum No. 18, "The Atomic Bomb and American Security," published by the Yale Institute of International Studies, remarked, "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."

Snyder and MacIntyre add that "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," resulting in opposition to the publication of Brodie's work in the essay collection *The Absolute Weapon*.<sup>6</sup> (Brodie's paper appeared in the collection nonetheless.) They further note that Brodie's antagonist in this incident was the president of his own alma mater, the University of Chicago, Robert M. Hutchins, who himself published a critical review of *The Absolute Weapon* titled "Scholarly Opinion on Atomic Energy – and Its Control" in the *New York Times Book Review*, on June 9, 1946—one of the rare critical reviews of what quickly became a classic in the emergent field of strategic studies, and whose title gained tremendous metaphorical traction.<sup>7</sup>

In Brodie's second chapter, he fleshed out the strategic salience of deterrence: "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." Furthermore, "[i]f deterrence was an appropriate strategy for the atomic age, Brodie saw with equal clarity that a deterrence strategy presupposed a major restructuring of the

<sup>4.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 2-3.

<sup>5.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 3.

<sup>6.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 3.

<sup>7.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 12. As Snyder and MacIntyre observe on page three of their article: "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 safe-guard ... than superiority in naval or land forces, nevertheless fails to guarantee security."

<sup>8.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 3-4.

nation's military forces." Recognizing that a retaliatory system must be erected prior to hostilities, and that "[t]hose military and civilian leaders who envisaged a peacetime military establishment that could be expanded rapidly after hostilities commenced were guilty of 'pre-atomic thinking,'" Brodie was one of the first to recognize the "need for a 'force in being' extended to all types of forces." Snyder and MacIntyre relate. 10

Thirteen years would pass before Brodie's next great contribution to the strategic literature would be published, what many scholars view as his seminal magnum opus, *Strategy in the Missile Age*, whose creation will be examined in detail in the pages that follow. Brodie's own favorite among his many works, however, would be his final book, published in 1973, *War and Politics*, which shared with his 1959 opus a self-consciously – both stylistically and structurally – Clausewitzian approach to the study of strategy. Snyder and MacIntyre note that Brodie's 1959 opus "incorporat[ed] many of the strategic concepts developed by his colleagues at RAND" and was thus "a synthesis of the major strategic ideas that had emerged since the beginning of the atomic age." They add that *Strategy in the Missile Age* "was the most important book on American national strategy to appear in the decade of the 1950s" and "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." <sup>12</sup>

Brodie would remain at RAND until 1966, producing several articles and two books—*From Crossbow to H-Bomb* (1962), on the interplay between science and war; and *Escalation and the Nuclear Option* (1966), on "NATO strategy, particularly the relative importance of nuclear and conventional forces in deterring a Soviet attack." Brodie's final book was his 1973 *War and Politics*, which came to press just as America's Vietnam commitment collapsed under mounting popular pressure and growing antiwar sentiment; as Snyder and MacIntyre recall, "public interest in defense issues had"

<sup>9.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 4.

<sup>10.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 4. As they observe, "the military units assigned the retaliatory mission [require] 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.' A more accurate blueprint of future American nuclear strategy and of the forces assigned the retaliatory mission is hard to imagine!" They add: "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. A Layman's Guide to Naval Strategy appeared one year later; it explained and updated the basic concepts of naval strategy. 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."

<sup>11.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 5.

<sup>12.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 7.

<sup>13.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 7.

soured during the Vietnam War, and War and Politics attracted less public attention than Strategy in the Missile Age. "14

In *War and Politics*, Brodie observed how, "[u]nlike 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." But, in contrast, he "regarded Vietnam as a series of 'virtually unmitigated disasters." Brodie's concluding thoughts in *War and Politics* reiterate his Clausewitzian approach to strategy and his critique of the less analytical and philosophical Jominian approach: "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.' Commanders are picked for their leadership skills, and 'that talent which is also, necessary . . . , strategic insight, may come off a very poor second.' 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."

Brodie also lauded "the 'scientific strategists' and the RAND Corporation" for their "outstanding contribution" with their development of systems analysis. 18

In 1987, Gregg Herken – author of several prominent intellectual histories of the Cold War, including *Counsels of War* (1985); *Cardinal Choices: Presidential Science Ad-*

<sup>14.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 8.

<sup>15.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 8.

<sup>16.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 9.

<sup>17.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 10. On page twelve of their article, they add: "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."

<sup>18.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 10-11. As Snyder and MacIntyre describe: "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. ... 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. ... Brodie was a model of rigor, balance, and personal grace to these scholars and to others whom he met and influence."

vising from the Atomic Bomb to SDI (1992); and Brotherhood of the Bomb: The Tangled Lives and Loyalties of Robert Oppenheimer, Ernest Lawrence, and Edward Teller (2002) – published a chapter on Brodie's legacy, "The Not-Quite-Absolute Weapon: Deterrence and the Legacy of Bernard Brodie," in Roman Kolkowicz's 1987 edited volume, Dilemmas of Nuclear Strategy, published by Frank Cass. 19 This chapter is unusual in that it focuses specifically on Brodie and his work, in contrast to Herken's multi-character book-length works that examine the panoply of Cold War thinkers. In his chapter, Herken writes that Brodie "has been called – rightly – the 'dean' of America's civilian strategists" while noting that "Brodie's work, and his subsequent reflections upon it, is itself a kind of personal embodiment of the crisis which has befallen nuclear strategy and strategists, as well as a measure of their current discontent." 20

Herken points out that Brodie "did not invent either the concept or the term 'deterrence'," which dates back to classical times, and which first made an appearance in the *Oxford English Dictionary* in 1820, but rather was "responsible for popularizing 'deterrence' as it applied particularly to nuclear weapons. He deserves credit for bringing to public attention the fact, as he wrote, that 'what was distinctively new' about deterrence in the atomic age 'was the degree to which it was intolerable that it should fail'." Adds Herken, "Brodie's premier standing in the rank of civilian strategists was guaranteed by the small volume of essays he and his colleagues at Yale wrote in the weeks just after Hiroshima – almost literally under the shadow of the mushroom cloud – and published early in 1946 under the title *The Absolute Weapon: Atomic Power and World Order*," a work that quickly became a classic in the field and which, for "the next 40 years ... would be the essential primer for those seeking to understand how the bomb had affected military strategy and international diplomacy." <sup>22</sup>

Herken recounts that Brodie only "first learned about the bomb, as did most citizens, when he read the newspaper on Sunday morning, 7 August 1945." He was working on an essay on battleships at the time. "In the moment he became aware of the bomb, Brodie recognized that it made this essay — and the bulk of his work to date, which had mostly focused on naval strategy — instantly obsolete. But as Brodie himself had earlier observed with regard to the effect of technological innovation in warfare — 'when a change comes, it is best if it is unequivocal'." And unequivocal it was.

Herken marvels at the "clarity and depth of Brodie's vision in *The Absolute Weapon*," noting it was "all the more remarkable considering the fact that the book was begun

<sup>19.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon: Deterrence and the Legacy of Bernard Brodie," Roman Kolkowicz, ed., *Dilemmas of Nuclear Strategy* (London: Frank Cass & Co., 1987), 15-24.

<sup>20.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 15.

<sup>21.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 15.

<sup>22.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 15.

<sup>23.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 16.

within weeks of the event it analyzes and attempts to put in perspective."<sup>24</sup> Herken adds that in Brodie's second chapter in *The Absolute Weapon*, he "made a case for a secure deterrent some 13 years before Albert Wohlstetter's Foreign Affairs article on 'The Delicate Balance of Terror'. The 'first and most vital step', Brodie wrote, 'is to take measures to guarantee to ourselves in case of attack the possibility of retaliation in kind'. One needed 'to make as nearly certain as possible that the aggressor who uses the bomb will have it used against him'." 25 Herken agrees that it is "thus fair to say, as Lawrence Freedman does in The Evolution of Nuclear Strategy, that virtually all the basic axioms of nuclear strategy – as well as the issues in the current nuclear debate – were articulated in the weeks and months just after Hiroshima. And one might add that many of them were expressed first and best by Bernard Brodie in *The Absolute Weapon*."<sup>26</sup> Herken notes that many disagreed with Brodie and his embrace of deterrence as a logical strategy for the nuclear era, noting that Jonathan Schell has written that Albert Einstein's "was only one of many who rejected Brodie's conclusion in *The Absolute Weapon* that it was both possible and necessary 'to develop the habit of living with the bomb'," and that Einstein believed, "Unless [world government] prevails, and unless by common struggle we are capable of new ways of thinking', the famous physicist wrote in September 1945, 'mankind is doomed'."27 In addition to the advocates of world government were opponents on Brodie's other flank, the "warfighters" who lacked Brodie's faith in deterrence's inherent stability, but who believed the risks of deterrence's failure could be offset by the pursuit of victory in nuclear war. As Herken describes, "If Einstein, as Schell claims, was an 'idealist" and Brodie a 'realist', then there was a third category of theorists who combined attributes of both schools of thought, but who came up with an entirely different conclusion about the bomb. This was the group of theorists who believed that a nuclear war could be fought and won. It was these strategists who seized

<sup>24.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 16. He further describes: "In the first of his essays, tilled 'War in the Atomic Age', Brodie made a series of observations about the effect the atomic bomb would have upon war and peace that are now seen to be particularly prescient. First was Brodie's point that the bomb was in fact a revolutionary new weapon. 'Everything about the atomic tomb is overshadowed by the twin facts that it exists and that its destructive power is fantastically great', he wrote. While few would quarrel today with Brodie's contention that the bomb inaugurated a 'wholly novel form of war', it was a view widely contested at the time – particularly by some in the military services, who argued that the bomb simply made necessary larger conventional armies, navies, or air forces. Brodie was also quick to recognize that the prospect of defending civilian populations against nuclear weapons was 'exceedingly remote'. In the book he dismissed as feasible and too socially disruptive some ambitious proposals of the time to disperse population by breaking major US metropolitan areas into 'ribbon' or 'cellular' cities of legally-proscribed size. Though Brodie's pessimism about civil defense is now being challenged, I would argue that the fact we ate still searching for a way to defend cities some 40 years after Hiroshima proves that his original point has merit. Brodie also understood that the unique destructiveness of the bomb for its size might make it a truly decisive weapon in warfare – one that would finally make practical Douhet's dream of a war fought and decided in an afternoon. At a time when even President Truman's science adviser was expressing doubt about the feasibility of ocean-spanning rockets, Brodie forecast the coming of the nuclear-tipped ICBM."

<sup>25.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 17.

<sup>26.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 17.

<sup>27.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 17.

upon the conditional 'almost' in Brodie's theory of deterrence to argue that there was another purpose for the bomb if deterrence failed: victory in a nuclear war."<sup>28</sup>

Just as Snyder and McIntyre, Jr. observed in their 1981 Parameters article, "Bernard Brodie: America's Prophetic Strategic Thinker," Herken writes, on Brodie's opposition: "Ironically, even as Brodie was writing *The Absolute Weapon*, across the street from his office in Yale's Hall of Graduate Studies, a student at the law school was finishing his own book which would have a conclusion diametrically opposed to Brodie's. In There Will Be No Time; The Revolution in Strategy; William Liscum Borden attacked what he called the 'mutual deterrent fallacy' at the heart of Brodie's analysis. 'The essential point is that an armed peace cannot persist indefinitely, that either war or voluntary federalism must resolve the truce', Borden wrote."29 As Herken explains: "Whereas Einstein had concluded that this very choice left the country with no alternative but to pursue internationalism, Borden argued that the United States - failing the attainment of one world – must prepare to fight and win the inevitable nuclear war. 'A fall-scale atomic war will not be won on pulverizing cities and industry, but by destroying the enemy's military power of retaliation', Borden predicted. The war he envisioned would be a 'one-dimensional aerial duel' fought 'between highly decentralized military systems' where each side would – at least initially – refrain from hitting the enemy's civilian population, holding it hostage to the outcome of the conflict instead."30

Borden's work was published in 1946 only shortly after Brodie's. Both, Herken writes, "seem today almost tauntingly prescient." Among other things, "Borden predicted that, in order to avoid what he called 'a rocket Pearl Harbor', the United States would have to station its future nuclear-tipped intercontinental-range missiles in protected underground 'hedgehogs' located well away from cities, and 'on undersea platforms scattered throughout the world's oceans'." Adds Herken: "Borden himself later characterized his own way of thinking about the bomb as 'relativist', to distinguish it from what he called Brodie's 'absolutist' views on deterrence. But contemporary strategists would recognize Borden as an early proponent of nuclear war-fighting, and what he termed the 'war-between-the-bases' as perhaps the first exposition of the nuclear strategy of counterforce." The dueling foundation for the forthcoming doctrinal battles within the fractious nuclear priesthood, as chronicled in detailed in the longer works by Herken, Kaplan, Trachtenberg, and others, was thus firmly laid in those first months that immediately followed the atomic demolition of Hiroshima and Nagasaki; Brodie's work was prescient, "prophetic" as Snyder and McIntyre described in their 1981 *Parameters* article, but it was not uniquely

<sup>28.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 17.

<sup>29.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 17.

<sup>30.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 18.

<sup>31.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 18.

<sup>32.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 18-19.

prescient nor did not monopolize the post-Hiroshima discourse on atomic strategy.

Borden's competing vision would prove as prescient, and like Brodie's imperfect as well – contributing to the nuclear dialect in which Brodie would play an important role, but not necessarily a predominant one: "As the months and years passed after 1946, Borden's dire prognosis of war 'certain and inevitable' in the absence of world government seemed to be proven wrong. But Brodie, too, in this lime began to admit that some of his own conclusions in *The Absolute Weapon* were either mistaken, or at least subject to revision." As the destructive potential of nuclear weapons rapidly evolved into something even more nightmarish than Brodie had first anticipated, he was quickly faced with new challenges to his views.<sup>34</sup>

<sup>33.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 19. Herken adds, "While contemptuous in the book of what he termed the military's 'preatomic thinking', Brodie gradually realized that his own thinking had not taken into account all the ways that nuclear weapons would change strategy and the future of war. These unanticipated effects were due, in turn, to unpredictable technological advances in the weapons themselves – advances that drastically increased both the number and power of the bombs, and in the process undermined some of the basic assumptions behind *The Absolute Weapon*." Indeed, Herken points out: that the "same technological progress that made nuclear weapons simultaneously more numerous and cheaper also acted to invalidate another and more important contention of Brodie's book - that the bomb did not 'lend itself to discriminate use'. Brodie's argument in 1946 that 'for some time to come' the 'primary targets for the atomic will be cities' and that 'the bomb is inevitably a weapon of indiscriminate destruction' was based upon the assumption that nuclear weapons would remain too few and too expensive to use against any but the enemy's most valuable and most vulnerable targets. But the advent of tactical-sized atomic weapons, the Soviet Union's entry into the arms race, and the subsequent growth of the US nuclear arsenal – which quadrupled in size during the three years that Brodie worked for the Air Force - rendered invalid this view of a nuclear strategy dictated by scarcity. Perhaps the biggest surprise for Brodie was the phenomenal increase in the destructiveness of nuclear weapons." 34. Gregg Herken, "The Not-Quite-Absolute Weapon," 20. "The real shock had come with the advent of the hydrogen bomb in the early 1950s, followed closely behind by the sooner-than-expected appearance of the intercontinental ballistic missile. In 1946, Brodie had written that not even the atomic bomb was 'so absolute a weapon that we can disregard the limits of its destructive power'. Six years later, by contrast, the power of the new super-bomb seemed without limit. Brodie's colleagues at the RAND Corporation, the Air Force-sponsored think-tank where he went in 1952 after leaving the Pentagon, remembered how he was 'unsettled' and even 'swamped' by the hydrogen bomb. A friend of Brodie's at RAND suggested that he had chosen the right title in *The Absolute Weapon*, but that the book had been written about the wrong bomb. In the wake of the H-bomb's arrival, Brodie seemed willing to put less of an absolutist emphasis upon deterrence - perhaps because the prospect of deterrence's failure was now even more horrific than he had imagined in 1946. But Brodie's subsequent search at RAND throughout the early and mid-1950s for an alternative strategy to deterrence failed to produce a more hopeful result. An earlier idea Brodie had unsuccessfully proposed to the Air Force as part of his effort to introduce restraint into nuclear targeting - the notion of 'sample attacks', whereby the US would bomb certain governmental centers in Russia, but only after giving the civilian population advance warning and sufficient time to evacuate - he now recognized was no longer feasible, since the Soviets had now acquired nuclear weapons and could respond in kind to attacks on cities. For a brief period at RAND, Brodie even entertained William Borden's idea of a counterforce, or war-fighting strategy as an alternative to an absolute reliance upon deterrence, but his own quick calculations showed that a supposedly selective attack upon a 'separated target system,' in which only military targets were struck, would none the less kill an estimated two million Russian civilians. He also was convinced, from the experience of the previous war, that hostilities which began with an attack on military bases would in time escalate to attacks on cities. An article that Brodie wrote for the October 1955 issue of Harper's - titled 'Strategy Hits a Dead End' - suggests that he had by this time already abandoned his search for a preferred alternative to *The Absolute Weapon*'s reliance upon deterrence. Looking back in the article upon the last nuclear decade, Brodie acknowledged how "many of the interpretations' offered at the dawn of the atomic age had since been shown to be 'too conservative'. 'In retrospect', he wrote, 'it is clear that many of them were wedded to presumptions soon to be disproved - for example that the bomb was fated to remain scarce, extremely costly and therefore difficult to deliver, and limited to about the some power and spatial effectiveness as the Nagasaki bomb'. Even a year before the Harper's article, Brodie had written to a friend explaining why he temporarily abandoned his work at RAND on the book he intended to be a sequel to The Absolute Weapon, which was eventually published as Strategy in the Missile Age - a work, incidentally, that Lawrence Freedman has properly described as 'a gloomy book'. As he progressed, Brodie admitted to the friend, 'it became clear that "strategy" and "unlimited war" are simply incompatible concepts in a world of H-bombs."

But Brodie found, even in the face of all these changes, he could not cross completely over to Borden's side in the strategic debate. "Unwilling in the early 1960s to join his RAND colleagues in promoting counterforce to the Kennedy administration – but also unable to evince the same faith in deterrence he had had in 1946 - Brodie in his subsequent writings proposed that the United States put a greater reliance upon tactical nuclear weapons, as 'a second line of insurance' between absolute deterrence and all-out thermonuclear war." But Herken believes that Brodie's "controversial case for limited nuclear war seemed more in the nature of an intellectual argument than a seriously proposed solution to the problem of strategy in the thermonuclear age," and observes that even Herman Kahn "believed that by the time of his death Brodie's thinking on strategy had travelled full circle, arriving back at the place it began in *The* Absolute Weapon – with a nearly absolute reliance upon deterrence." As he concluded ultimately in his 1959 Strategy in the Missile Age: "A plan and policy which offers a good promise of deterring war is ... by orders of magnitude better in every way than one which depreciates the objective of deterrence in order to improve somewhat the chances of winning."35 And, adds Herken, "In the last essay he wrote on the subject, which appeared in International Security just before his death, Brodie reaffirmed his belief in deterrence - though it was, seemingly, a faith grown rather more worried and perhaps even desperate at the end."36

While Brodie clung to his faith in deterrence, the strategic community would largely turn its back on the restraint that Brodie counseled from the very beginning of the nuclear age in 1945 through to his death in 1978.<sup>37</sup> As Herken wryly notes: "Contrary to popular belief, it is not Brodie's formulation of deterrence as the prevention of war that has guided the nation's strategists and war planners since Hiroshima, but the other supposed attributes of nuclear weapons – especially the belief in the political utility of strategic superiority, and the related idea that one can 'extend' deterrence by developing the theoretical capability to fight and win a nuclear war. Perhaps the crowning irony of Brodie's legacy as a strategist is the fact that while the peace we have had for the past 40 years is the one Brodie predicted, we have been planning

<sup>35.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 21.

<sup>36.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 21.

<sup>37.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 21. "There is a certain irony to Brodie's contribution to nuclear strategy when seen in historical perspective. Despite the fact *The Absolute Weapon* had become a kind of icon of the popular faith in deterrence, its central message has been largely disregarded by most members of the so-called strategic 'priesthood'. Foremost in that message, and in Brodie's legacy, is a comment on the value of restraint. It is thus significant – even if often overlooked – that Brodie was in effect fired from his job with the Air Force in the 1950s for counseling restraint in nuclear targeting. ... Often ignored as well is the fact that Brodie's advocacy of tactical nuclear weapons – which he promoted as an alternative to making deterrence reliant entirely upon the threat of superbombs – had made him virtually a pariah at RAND by the time he left the think-tank in the early 1970's to teach at UCLA. Instead, the emphasis at RAND was upon meeting the threat of conventional force with a conventional defense."

all along for Borden's war."<sup>38</sup> Brodie never gave up on finding an alternative strategy, and as he had observed in his 1955 *Harper's* article, "Strategy Hits a Dead End," he continued "looking for what he called 'the new ideas and procedures necessary to carry us through the next two or three dangerous decades'. Brodie's subsequent work shows that he consistently rejected both the careless hope of total disarmament and the deceptive allure of preventive war as a way out of the balance of terror. By the time of his death ... it is even possible that Brodie had given up hope of finding an alternative to deterrence."<sup>39</sup> But as he had "made plain at the end of *The Absolute Weapon*," deterrence remained "only as a expedient – a means, not the end – whereby the nation would be 'better able to pursue actively that progressive improvement in world affairs by which alone it finds its true security'."<sup>40</sup>

Trachtenberg, in his close and comprehensive examination of Brodie's works, sees in Brodie's circular journey from and back to deterrence as the best of all nuclear strategies, an intentional effort to counterbalance the doctrinal excesses of his peers, and to make sure that the risks of leaning too far toward either posture – deterrence versus war-fighting – were counterbalanced by his persistent nudge back toward a middle ground, an essential and everlasting nuclear ambiguity. He describes a continuity that connects Brodie's thinking in 1946 as presented in his chapters in *The Absolute Weapon* with his 1959 reassessment in *Strategy in the Missile Age* and notes his seeming contradictory response to the issue of limited war and the challenges of escalation evolves into a more nuanced ambivalence, less contradictory by virtue of its continued equivocation. The contradiction in Brodie's initial response evolves into a fundamental contradiction inherent in deterrence itself: what may work best for the purposes of deterrence might not provide the best posture for a wartime situation.

Trachtenberg notes Brodie's first chapter in *The Absolute Weapon* "reflected the assumption that there was no meaningful defense against the bomb, that the weapon would be used mainly against cities, that because the bomb was relatively to produce and deliver, any world power possessing a nuclear arsenal could destroy the cities of its enemy. Under such circumstances, numbers of bombs, or even gross disparities in delivery systems, would not matter greatly." Brodie "took a completely opposite line" in his second chapter: "numbers here do matter, defense can make a difference, superiority is still a meaningful concept – and the bulk of the chapter is devoted to a discussion of how an atomic war should be fought." Thirteen years later, when Brodie published *Strategy in the Missile Age*, he again "failed to take a clear line. If all

<sup>38.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 21-22.

<sup>39.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 22.

<sup>40.</sup> Gregg Herken, "The Not-Quite-Absolute Weapon," 22.

<sup>41.</sup> Marc Trachtenberg, History and Strategy (Princeton: Princeton University Press, 1991), 32.

<sup>42.</sup> Trachtenberg, History and Strategy, 32.

we sought was to maximize the prewar deterrent effect, he wrote, we should 'assign the hard-core elements in our retaliatory force to the enemy's major cities, provide for the maximum automaticity as well as certainty of response, and lose no opportunity to let the enemy know that we have done these things.' The problem was that 'what looks like the most rational *deterrence* policy involves commitment to a strategy which, if we ever had to execute it, might then look very foolish..'"<sup>43</sup>

When it came to limited war strategy, Brodie "simply laid out the pros and cons and drew back in this book from taking a position on the issue himself."44 In a footnote that spans nearly two full pages of his book, Trachtenberg further elaborates on Brodie's seeming ambivalence on limited warfare and the use of tactical nuclear weapons, writing: "Since Brodie's views in the 1950s on tactical nuclear weapons were somewhat equivocal, it was easy to misinterpret his position and label him as either a supporter or an opponent of a strategy based on these weapons," and as a consequence, Herken "portrays Brodie as a champion of the strategy based on tactical nuclear weapons, even in the late 1950s, while Lawrence Freedman assumes that Brodie had by that time become hostile to the general idea."45 Yet others "claim there was a dramatic shift in Brodie's views on the subject from the late 1950s to the early 1960s," and that this "shift is most often explained in personal terms – that is, in terms of Brodie's resentment of the increasing prestige and influence of Albert Wohlstetter and his followers in the early 1960s, as against his own exclusion from policy-making circles."46 Trachtenberg concurs that "Brodie's position did shift in the 1960s, not so much in substance as in emphasis, and this shift undoubtedly had a good deal to do with personal jealousies," as becomes evident when viewing Brodie's papers archived at UCLA, which reveal "some quite extraordinary examples of his personal touchiness. ... But this is hardly the whole story."47

Assuming a role reminiscent of Clausewitz, whose work embraced complexity at the risk of persistent ambiguity, Trachtenberg suggests: "A good deal of the explanation has to do with what Brodie himself recognized as a certain perverseness of disposition ... which led him to lean against the prevailing wisdom. From his point of view, the pendulum was always shifting too far in one direction or another, and he wanted to redress that balance. This particular faculty meant that he was a superb critic, able always to see the flaws in other peoples' arguments. But by the same token, he could never be a system-builder; it was much harder for him to construct positive arguments

<sup>43.</sup> Trachtenberg, History and Strategy, 32-33.

<sup>44.</sup> Trachtenberg, History and Strategy, 33.

<sup>45.</sup> Trachtenberg, History and Strategy, 33, fn 67.

<sup>46.</sup> Trachtenberg, History and Strategy, 33-44, fn 67.

<sup>47.</sup> Trachtenberg, History and Strategy, 34, fn 67.

of his own."48 In a similar vein, Trachtenberg reflects on the development of American strategic thought in the 1950s, pointing out that: "Here were some of the brightest people in America spending years wrestling it [sic] the most basic problems of strategy in the nuclear age, and yet what they finally came up with was not terrible satisfactory. Brodie, on the most central issues, did not even pretend to give answers." 49 By 1975, two years after America's withdrawal from the field of battle in Vietnam and the very year Saigon would fall, Brodie, more than most of his peers, came to recognize that the strategists had divorced strategy from its historical and policy contexts, separating war from its political roots and thus overlooking Clausewitz's most famous dictum at their, and their nation's, peril - illustrated most tragically by the strategic failure in Vietnam. "For Brodie, especially, there was a great shift in perspective," as the "strategists as a group had vastly overestimated the extent to which war could result from essentially military factors: the problem of 'strategic stability' had been greatly exaggerated. He even went so far as to claim that he had never believed in the 'delicacy' of the balance, although this was certainly untrue."50 Trachtenberg adds that the "purely military side of war causation, as Brodie later complained, became the focus of analysis, as though war itself were not in essence a political artifact – as though the basic insight of Clausewitz, whom they all respected, was somehow obsolete. It was not that the issues they focused on were meaningless or irrelevant. ... It was simply a question of balance, of now allowing the tail to wag the dog, and this depended on the sophistication of one's theory of war causation."51 Brodie hoped to restore this balance, and to bring sophistication back to strategic theory, and that meant a willingness to embrace both complexity, and ambiguity, as Clausewitz had. Part and parcel of Brodie's solution was to reunite war and politics and thus restore this most essential Clausewitzian unity of war, and to ensure that nuclear strategy, like any strategy, appropriately matched its political context. As he wrote in a February 1968 conference paper, "Nuclear Strategy in its Political Context," "One of the distinctive weaknesses of the otherwise spectacular kind of strategic analysis that has developed in the United States is that it often seems to be conspicuously lacking in something that I can only call historic sense or sensitivity."52

Brodie's lifelong mission would be to restore this historic sense so lacking, and ensure that American nuclear strategy regained its Clausewitzian connection to its political context. It is this effort, and the inspiration Brodie takes from Clausewitz along the way, that will be our focus in the chapters that follow as we explore Brodie's four-decade

<sup>48.</sup> Trachtenberg, History and Strategy, 34, fn 67.

<sup>49.</sup> Trachtenberg, History and Strategy, 38.

<sup>50.</sup> Trachtenberg, History and Strategy, 44.

<sup>51.</sup> Trachtenberg, History and Strategy, 45.

<sup>52.</sup> Trachtenberg, History and Strategy, 46.

long effort to modernize Clausewitzian strategy for the nuclear age, and to restore a Clausewitzian balance to American strategic thought after Hiroshima. Building upon the insights of Brodie scholars such as Steiner, Trachtenberg, Herken, and Snyder and MacIntyre, who have observed the philosophical and theoretical connection binding Clausewitz to Brodie, we will revisit Brodie's original writings, observing them from a Clausewitzian perspective – and in so doing will come to understand the riddle of Brodie's theoretical prominence, even as he became marginalized from the very world of nuclear policy that took root in the fertile fields that his pioneering and imaginative work first ploughed.

### The 'Pioneer' of Nuclear Deterrence

An October 1983 article by Captain Craig D. Wildrick, US Army in *Military Review* salutes Brodie with its title, "Bernard Brodie: Pioneer of the Strategy of Deterrence." In it, beneath a photo of a bookshelf where seven of Brodie's books fill the page, Wildrick writes, "For nearly four decades, this nation's defensive strategy has been based on deterrence. While this concept is familiar to most Americans, few know much about the man who first advocated such a strategy in the nuclear age." Wildrick credits Brodie for being the "first to propose that deterrence be the basis of this country's post-World War II strategy."

He recounts Brodie's early years, and describes Brodie's early thoughts on the atomic era, noting that *The Absolute Weapon*, which Brodie edited, "was the first work of its kind and the first in which Brodie's vision and insight into the problems of nuclear strategy emerged vividly," and many of its ideas would evolve into core pillars of deterrence strategy. Wildrick marveled, "While these ideas seem self-evident today, it is remarkable that Brodie espoused them some 38 years ago, when few understood the full implications of nuclear war. In 1946 and 1947, Wildrick notes, Brodie served as "one of the original resident instructors at the newly founded National War College," and "[h] is experiences there may have contributed to the ideas he advanced in 'Strategy as a Science,' published in *World Politics* in 1949" in which Brodie "cited the need for civilian participation in the development of national security policy and asserted that the military could not and should not be expected to deal with the complex economic and political questions inherent in the conduct of war in the nuclear age." Wildrick

<sup>53</sup> Craig D. Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," Military Review, October 1983, 39. Public domain, US military publication: http://usacac.army.mil/cac2/militaryreview/index.asp.

<sup>54</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 40.

<sup>55</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 41.

<sup>56</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 41.

<sup>57</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 41.

further notes that "[t]his subject was to become a common theme in Brodie's works" and may well have contributed to "his decision to leave Yale to join the RAND Corporation in 1951."58 While at RAND Brodie authored a number of articles on nuclear strategy which were later incorporated into Strategy in the Missile Age, "an expansion and development of the concepts in *The Absolute Weapon* [that] synthesized the ideas on deterrence and limited war that had emerged during the 1950s," and in which he "modified his earlier position that 'war and obliteration are completely synonymous," as evident in the Korean War, Berlin Airlift, and Lebanon Crisis of 1958.<sup>59</sup> Despite Brodie's mid-course correction and recognition after his 1946 work that "future wars would most likely be limited in nature," and his observation that even in a strategic nuclear war, "although all outcomes would be bad, some would be very much worse than others," he would soon be outflanked by colleagues who echoed Brodie's own revised viewpoints on limited warfare in the nuclear age. 60 The "inadequacies of a strategy of massive retaliation, to which Brodie had alluded in Strategy in the Missile Age," would become "the subject of study of several of Brodie's RAND colleagues, but especially Herman Kahn," who in his lengthy tome, On Thermonuclear War, "asserted the 'the limits of the magnitude of catastrophe [in nuclear war] seem to be closely dependent on what kinds of preparations have been made, and how the war is started and fought." 61 Kahn positioned himself as a principal rival to Brodie by challenging his 1946 views and countering that "nuclear wars could be won, and the purpose of the military establishment should be to ensure victory not merely to avert war as Brodie had suggested," and this victory would be "achieved by targeting an enemy's military forces rather than his cities, as Brodie had advocated."62 But Brodie himself had been moving in this direction, as noted in his many articles and in his 1959 opus, Strategy in the Missile Age. "Like Brodie, Kahn advised against the use of nuclear weapons in a limited war to preclude escalation,' but to "provide a 'firebreak' to undesired escalation, Kahn proposed a strong conventional capability in Europe" that Brodie himself opposed favoring the current admixture of limited conventional forces and tactical nuclear weapons to strengthen their deterrent power. 63 As Wildrick notes, "Kahn's ideas were adopted by the Kennedy administration which sought and achieved a massive increase in U.S. nuclear and made frequent calls for strengthening NATO conventional forces."64 These "actions by the Kennedy administration marked

<sup>58</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 41.

<sup>59</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 42.

<sup>60</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 42.

<sup>61</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 42.

<sup>62</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 42.

<sup>63</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 42.

<sup>64</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 42-43.

the beginning of a decline in Brodie's influence on the direction of U.S. nuclear policy," and over the course of the following decade Brodie "became a dissenting voice." <sup>65</sup> In Brodie's 1966 work on escalation, *Escalation and the Nuclear Option*, he "challenged U.S. NATO policy" and "asserted that existing levels of conventional forces armed with tactical nuclear weapons were adequate to deter aggression in Europe," and split with Kahn by arguing that "a large buildup of conventional forces to provide a firebreak to escalation could signal 'a desperate desire to avoid the use' of nuclear weapons and thus indicate a lack of US resolve," thus undermining deterrence and not bolstering it as intended. <sup>66</sup> Brodie, so contrary to his relatively timid appearance when juxtaposed to more bellicose-sounding warfighters like Kahn, even "suggested that the early use of tactical nuclear weapons was 'the best way ... for us to avert not only defeat but unnecessary escalation,' because it would 'demonstrate that our readiness to take risks is not less than theirs.' He postulated that the Soviets, unwilling to risk such escalation, would quickly end the aggression."

Wildrick observes that soon after publishing Escalation and the Nuclear Option, Brodie left RAND and joined the faculty of UCLA where he remained for the rest of his career, having come to the reluctant realization that he was "[u]nable to influence the direction of US NATO policy," and thereafter "his writings became less prescriptive and more reflective in nature," as illustrated by his 1973 work, War and Politics. This marked a notably Clausewitzian turn in Brodie's writing, which would be reflected in subsequent works including his contribution to the 1976 Princeton edition of Clausewitz's classic On War. As Wildrick writes, "Clausewitz correctly identified, according to Brodie, 'the single most important idea in all strategy' - that 'war takes place in a political milieu from which it derives all purposes," and that "the influence of the [political] purpose on the means must be continuing and pervasive."68 While others, including his critic Barry D. Watts, would see in Brodie's emphasis of the political context of war an unfortunate neglect of the all-important frictional dimensions of war, Wildrick observes that "Brodie chronicled the divergence between political objectives and military strategy in the four wars" America had fought in the twentieth century, and "perceptively noted the problems which have consistently plagued the United States: ill-defined or poorly communicated political objectives, frequent midstream policy changes resulting from intense domestic debate and the failure to predict the political implications of various military actions."69 Forging a link with his earlier

<sup>65</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 43.

<sup>66</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 43.

<sup>67</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 43.

<sup>68</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 43.

<sup>69</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 44.

efforts to foster a central place for civilian strategists in the formulation of American strategy, Wildrick notes Brodie "placed the primary responsibility for these problems on the civilian leadership," as the generals were "rightly preoccupied 'exclusively with the winning of wars'," placing the onus on political leaders to "ensure that 'the basic and prevailing conception of what any war ... is trying to accomplish' is clearly understood and articulated."70 Thus War and Politics would reflect "Brodie's final effort to counsel 'strategic thinkers, planners, and decisionmakers' as to how national military strategy should be derived and to re-emphasize the importance of Clausewitz's dictum to a government which appeared not to understand."71 Wildrick writes that Brodie "devoted most of his to attempting to span what he called 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," and that Brodie's main contribution to military operations is his "insight into the problems this nation has experienced in executing a military strategy that is consistent with political objectives," as illustrated when he "correctly asserted that 'the civilian hand must never relax,' for 'the skills developed in the soldier are those of the fighter, and not the reflector on ultimate purpose."72

Despite his enormous theoretical contribution to American nuclear strategy and his prolific and multi-faceted contribution to the strategic studies literature from the years immediately preceding the nuclear age right up to the end of his life in 1978, there have been just a few scholarly works fully dedicated to Bernard Brodie and his legacy. Most comprehensive is Barry Steiner's exhaustively researched *Bernard Brodie and the Foundation of American Nuclear Strategy* (University Press of Kansas, 1991), which chronicles with the greatest of historical detail Brodie's contribution to the evolution of military doctrine and his military influence during his lifetime. Brodie's protracted effort to shape the evolution of strategic doctrine throughout the Cold War period, and to help institutionalize an enduring position of influence for the new corps of civilian defense advisors expert in the nuances of nuclear strategic thought, was a four-decade long endeavor. As Steiner described it, For forty years, until his death in 1978, Bernard Brodie's career as a strategist coincided with, and spurred on, the dispersion of strategic thinking away from the professionals on active military duty

<sup>70</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 44.

<sup>71</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 44.

<sup>72</sup> Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," 44.

<sup>73.</sup> Barry Steiner, *Bernard Brodie and the Foundations of American Nuclear Strategy* (Lawrence, Kansas: University Press of Kansas, 1991). As Steiner has described in correspondence with the author, an "earlier draft" from the 1980s (its precise year is not listed) of this monograph was titled Bernard Brodie and the American Study of Nuclear Strategy, which is available in the Belfer Library at Harvard's Kennedy School of Government with basic bibliographic details depicted only as "s.l: s.n., 198-" – s.l. (sine loco) means without place; s.n. (sine nomine) means without name, and the date '198-' suggests the precise year is unknown – and otherwise unavailable

who had long monopolized it."<sup>74</sup> This was driven by "the growing legitimation of the subject of military strategy, by the rising demand within the military establishment for reflection about it, and by the unprecedented change in the conduct of war."<sup>75</sup> Steiner notes that after World War II, "when Brodie became especially prominent in rationalizing and guiding American ideas about strategy – that is, about the shaping of war-making forces to national objectives – the extent of the dispersion has been unparalleled."<sup>76</sup>

Indeed, as Steiner has observed, "One of Brodie's major postwar accomplishments was to legitimate the study of military strategy for civilians lacking a military background," bringing to the study of war and strategy what Brodie described as a necessary "genuine analytical method," in part because "the magnitude of disaster which might result from military error today bears no relation to situations of the past."<sup>77</sup> Included in his 1991 book on Brodie was Steiner's earlier article and working paper, "Using the Absolute Weapon: Early Ideas of Bernard Brodie on Atomic Strategy" – enhanced by what he described in his introduction to the 1991 book as "minor changes" - which was published in the December 1984 Journal of Strategic Studies, and earlier that year as ACIS Working Paper, No. 44., by UCLA's Center for International and Strategic Affairs. The timing of Steiner's book, which came to press just at the close of the Cold War when interest in the architects of the Cold War would fade from the public mind with the winding down of that generational conflict, and marked the endpoint, to a significant degree, of Brodie's profound theoretical and doctrinal influence in America, and his contribution to the very creation of the bipolar world order that would define the half-century of the Cold War period.

While Clausewitz is often mentioned by strategic studies scholars in the same breath as Brodie, the comparison between these two theorists who bore witness to the transformation of war toward its absolute theoretical maximum is generally not fully or sufficiently probed, and this thesis aims in part to rectify this. For instance, Barry Steiner's densely-packed, 361-page book includes a mere 23 pages directly discussing Brodie's thoughts on and response to Clausewitz, representing the lion's share of

<sup>74.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 1. In his 1992 review of this book, Michael Howard writes that Steiner "has given us a massive critique of Brodie's thought; immensely thorough, but tough going" and notes he "provides 100 pages of footnotes to 250 pages of text, and because much substantial material is relegated to the footnotes, the work presents problems to all but the most dedicated reader." But despite the challenge to the reader, Howard believes that the work "is likely to be indispensable, if only because no one else is likely to go through all the relevant documentary collections with comparable thoroughness," adding that it's "pathbreaking because it deals for the first time with the classified work Brodie did for the US Air Force. As a scholarly monument to Brodie's work, fair-minded and thorough, it is unlikely to be surpassed. One could only wish that it made its subject a little more accessible." See: Michael Howard, "Brodie, Wohlstetter and American Nuclear Strategy," Survival 34: 2 (Summer 1992), 107-108.

<sup>75.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 1.

<sup>76.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 1.

<sup>77.</sup> Barry Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 7 citing Brodie, "Strategy as a Science," World Politics 1, July 1949.

Steiner's thirty-page "Chapter 9: On Strategy and Strategists," with a scattering of additional references to the Prussian that generally default to a single maxim. Steiner would otherwise flesh out in great detail Brodie's contribution to the rapidly evolving field of contemporary strategic studies, and his continuing challenge to advocates of "[c]ontemporary axiomic strategy" that remained "most confined ... to doctrines of the offensive use of military forces, particularly the earliest possible use in war of atomic weapons" which would "ensure horrendous casualties without necessarily forcing an end to hostilities."<sup>78</sup>

But Steiner does examine the recurring – and evolving – presence of Clausewitz in Brodie's thinking. In 1949, Steiner recalls that Brodie was less certain of the applicability of Clausewitz to the nuclear era, writing in "Strategy as a Science" in World Politics in 1949 of the profound changes wrought by atomic weapons: "Principles may still survive those changes intact, but if they do it will be because they have little applicability or meaning for the questions that really matter. The rules fathered by Jomini and Clausewitz may still be fundamental, but they will not tell one how to prepare for or fight a war."79 Brodie's thinking would remain firm on this until 1950, when the consequences of the thermonuclear revolution would profoundly affect Brodie's thinking. Brodie is cited by Steiner as stating in 1950, "War is not now, if it ever really was, a continuation of diplomacy by other means – as Clausewitz's time worn, and, in my opinion, outworn expression."80 Brodie's thinking would shift throughout the 1950s, as H-bombs and their proliferation complicated the strategic environment, and made warfare between great powers even more dangerous than during the early atomic era when Brodie suggested that the splitting of the atom had brought forth the "absolute weapon." As Steiner writes, it was in 1952 that Brodie professed his alignment with the thinking of Carl von Clausewitz: "'Six months ago,' he declared, 'I could have and in fact did deny in print that the famous, often-quoted statement of Clausewitz, 'War is a continuation of policy by other means,' could have any meaning for modern times. ... I have since come to believe that Clausewitz was in fact saying something very profound ... that the procedure and the objective must be in some measure appropriate to each other."81

Early in the 1950s, Steiner observes, "Most of Brodie's work on fusion weapons was directed at protecting cities from the effects of those weapons, because he believed, especially for political reasons, that war-making could be politically expedient with such weapons only if cities were spared their effects." Steiner reiterates that "Brodie

<sup>78.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 7.

<sup>79.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 200.

<sup>80.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 30.

<sup>81.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 15.

<sup>82.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 124.

associated control and limitations upon contemporary warfare with strategy and policy, as when he cited Clausewitz's maxim that wars should be fought as a continuation of policy and therefore as 'planned violence and therefore controlled.'"<sup>83</sup> After the Korean War, where limited war in the nuclear age was largely pioneered, Brodie came to the realization that "pursuit of Clausewitz's idea that 'war is an instrument of national policy' required 'absolute integration' between military planning and foreign policy, yet it was doubtful that such integration existed in the mid-1950s."<sup>84</sup> Meanwhile, "Playing down the search for one-sided advantages in a Soviet-American war in Europe, Brodie came out against another Clausewitzian maxim that the object of war was to impose one's will on the enemy, rejecting this maxim ... 'at least for any opponent who has a substantial nuclear capability behind him.'"<sup>85</sup> Brodie "clearly wished to control limited war-making as much as possible, which necessarily entailed manipulating threats and risks, but he also wished to keep risks as small as possible."<sup>86</sup>

Steiner observes that "Brodie's most mature work addressed the political core of strategy and the over-valuation of narrower military and technical approaches to warmaking," adding that "politics was central to strategy Brodie had learned from Clausewitz;" by 1954, when atomic weapons again revolutionized warfare with the advent of thermonuclear weapons, he came to believe that we must "rethink some of the basic principles (which have become hazy since Clausewitz) connecting the waging of war with the political ends thereof, and to reconsider some of the prevalent axioms governing the conduct of military operations." In his April 1955 article in World Politics, "Some Notes on the Evolution of Air Doctrine," and in War and Politics, "[Brodie] applied warmaking to political interests as Clausewitz had done, taking account of contemporary experience."87 Steiner points out that "Brodie had followed a very different approach from that taken in his Guide to Naval Strategy and in his essays in The Absolute Weapon, explaining in 1955 that 'I feel the new weapons require that one bring to the center of attention in any strategic discourse subjects which the older treatises on strategy could easily ignore, like questions of national objectives"—an approach, Steiner adds, that "was unorthodox for a strategist of any era, and Brodie had pioneered it as Clausewitz had earlier. Unlike Clausewitz, however, Brodie's political conception of strategy depended on a very optimistic evaluation of the contemporary great power relationship."88

Brodie's interest in, and inspiration from, Clausewitz achieved its high water mark in 1973 in Brodie's *War and Politics*, perhaps his most self-consciously Clausewitzian

<sup>83.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 155.

<sup>84.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 160.

<sup>85.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 172.

<sup>86.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 172.

<sup>87.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 172.

<sup>88.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 195-96.

work, particularly with regard to Clausewitz's most famous dictum interlinking war to its political context. As Steiner writes, "The distinction between thought and dogma was unappreciated in the past. In 1973 Brodie lauded the nineteenth-century German strategic thinker Carl von Clausewitz for his 'modernity,' because his book *On War* 'helps warn the general not to be too rigid in his conceptions, especially those that in our own times he is likely to have received in the form of simple axioms in his staff college or war college courses." Steiner further explains that "[r]ather than guide policymakers in their particular circumstances, Brodie wished as did Clausewitz to sharpen the ability of policymakers and planners to apply their prevailing dispositions to military problems." In a footnote, Steiner adds that Brodie wrote in his 1973 *War and Politics*: "What we get from Clausewitz is a deepening of sensibility or insight rather than a body of rules, because insofar as he does offer us rules he is at once avid to show us all the qualifications and historical exceptions to them."

Steiner noted that Brodie presented a potent challenge to the nuclear warfighters, who were largely advocates of "[c]ontemporary axiomic strategy" involving weapons that would "ensure horrendous casualties without necessarily forcing an end to hostilities." In *War and Politics* Brodie asked, and then responded, "Why had not the most obvious lessons of combat experience been absorbed by commanders who were to send great new armies into battle? ... Because for the most part experience not personal to themselves was not really alive to these commanders, who were not students of history, even of military history, but who had absorbed an intensive indoctrination laced through with religious fervor on the merits of the offensive." And so even if Eisenhower cloaked his reasoning in Clausewitzian terms, his commitment to the offensive was nonetheless rooted in his pre-nuclear thinking — or as Brodie suggested, a pre-nuclear instinct forged more by indoctrination to the cult of the offensive and less to thinking or analysis proper; Brodie would thus aim to hit a strategic reset button, and update Clausewitz for the nuclear age.

It is no coincidence that Brodie, one of the most Clausewitzian of the Cold War strategists, was a also a Clausewitz scholar, and a principal member of Princeton's "Clausewitz Project" that sought throughout the 1960s to bring the famed Prussian strategist's works to an Anglo-American audience, newly translated and freshly interpreted by experts that included Peter Paret, Michael Howard, and (briefly) Liddell Hart and Raymond Aron – in addition to Brodie. Brodie's later works would bear an increasing resemblance to Clausewitz's *On War* in both form and substance, notably

<sup>89.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 8.

<sup>90.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 247.

<sup>91.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 344.

<sup>92.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 7.

<sup>93.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 7.

his 1959 Strategy in the Missile Age that fleshed out the complexities of nuclear deterrence in the thermonuclear era – updating his preliminary (yet remarkably prescient) thoughts penned at the dawn of the nuclear age in his 1946 The Absolute Weapon, and his 1973 War and Politics which bears both its strikingly Clausewitzian title and its fundamentally Clausewitzian analysis of war. Brodie's unrivaled embrace of strategic complexity (long before complexity theory became vogue) would, in the end, distinguish Brodie's work from many of his contemporaries, particular the peer of his that would emerge as something of an alter ego, with a level of influence matching and later exceeding his own, and a level of literary productive output rivaling his own prodigious output – albeit with a distinctly less philosophical and a decidedly more doctrinal approach to thinking about the unthinkable – Herman Kahn.

Brodie's connection to Clausewitz was not just a theoretical or philosophical connection; there were deeper, psychological links, as Brodie empathized with Clausewitz's own battle with depression, and senses a mutuality in their frustrations dealing with smaller minds. As Steiner noted, Brodie felt "great frustration at not being called upon to exercise policymaking or policy-advising responsibility at high levels of government," which "helps explain his very critical remarks about the military establishment, first informally and later in his final study, War and Politics." Steiner later addresses these "apparent parallels between Brodie's understanding of his later frustrations and those he ascribes to Clausewitz in his psychoanalytic explanations of Clausewitz's career" in a separate chapter toward the end of his biography. Steiner alludes to Brodie's frustrations in his biography, noting in addition to Brodie's frustration arising from his lack of high-level policy advising or policymaking, that he also felt some frustration with his work environment at RAND, which became increasingly evident from his criticisms of them, including rebuttals of Herman Kahn's work on escalation and warfighting, that appeared in his published work. Steiner noted that "Brodie's later belief that his reputation as a RAND analyst was stagnating relative to that of others," and cited a letter Brodie wrote in 1952 on his motivations for moving to RAND and leaving academia: "One may have a lesser audience, measured in number of readers when writing from RAND rather than from a university; but one is likely to be a great deal more influential."94 Steiner suggests that Brodie's "need for approbation would have required that others at RAND defer to him," but that his "major project at RAND during the 1950s, published as Strategy in the Missile Age, was largely one of synthesis and conceptualization, following rather than leading other RAND analysis and apparently not receiving at RAND the great attention it inspired among informed people outside the organization."95

<sup>94.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 26.

<sup>95.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 26.

Steiner also examined Brodie's efforts to reunite war and politics along a Clausewitzian axis interconnecting the two, and thus address "the political core of strategy and the overvaluation of narrower military and technical approaches to war-making."96 Steiner writes: "That politics was central to strategy Brodie had learned from Clausewitz when, following news of the first projected test of fusion weapons, he was persuaded of the political futility of strategic nuclear war. 'We must . . . proceed,' Brodie wrote in January 1954, 'to rethink some of the basic principles (which have become hazy since Clausewitz) connecting the waging of war with the political ends thereof, and to reconsider some of the prevalent axioms governing the conduct of military operations.' In his later works, especially War and Politics, he applied war-making to political interests as Clausewitz had done, taking account of contemporary experience."97 It took the leap in destructive power introduced by thermonuclear weapons to induce Brodie's Clausewitzian evolution, and Steiner notes Brodie "had followed a very different approach from that taken in his Guide to Naval Strategy and in his essays in The Absolute Weapon," and his new "approach was unorthodox for a strategist in any era, and Brodie pioneered in it as Clausewitz had earlier."98

Steiner cites Brodie's introduction to the 1976 translation by Michael Howard and Peter Paret of Clausewitz's On War, his essay titled "The Continuing Relevance of On War," in which Brodie wrote: "Clausewitz is probably as pertinent to our times as most of the literature specifically written about nuclear war ... [from which] we pick up a good deal of useful technological and other lore, but we usually sense also the absence of that depth and scope which are particularly the hallmark of Clausewitz. We miss especially his tough-minded pursuit of the idea that war in all its phases must be rationally guided by meaningful political purposes. That insight is quite lost in most of the contemporary books, including one which bears a title that boldly invites comparison with the earlier classic, Herman Kahn's On Thermonuclear War." Steiner notes that "[u]sing Clausewitz to argue for the political irrelevance of attacking with thermonuclear weapons, Brodie, like Clausewitz, understood that war would not invariably serve 'meaningful political purposes.'"100 Brodie felt Clausewitz's concept of "absolute war," which was "characterized by the absence of restraint on the pattern of the Napoleonic wars," was particularly applicable to the thermonuclear era, and "shared with Clausewitz an understandable abhorrence of absolute war and the view

<sup>96.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 195.

<sup>97.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 195.

<sup>98.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 195.

<sup>99.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 202-03.

<sup>100.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 203.

that guiding warfare by political considerations protected best against the tendency of war to become absolute."101

Just as Brodie would come to believe that the destructiveness of thermonuclear weapons made total war incompatible with political objectives and demanded a rebalancing of war and politics, other strategists, notably including Herman Kahn, felt otherwise and in fact believed the opposite: that thermonuclear war was no different from any other kind of war, making planning for such a clash a Clausewitzian necessity rather than a Clausewitzian violation. Citing Kahn, Barry Steiner notes how the famed nuclear warfighter recalled, with a note of criticism, that the "invention of the atomic bomb . . . seemed to end any constructive thinking about strategy and tactics. Nuclear war was simply unthinkable - both literally and figuratively. This phenomenon, known as psychological denial, meant that while one side (ours) did little or no thinking about nuclear weapons, the other side simple regarded them as 'bigger bombs' . . . and also did not undertake any fundamental rethinking of classical and strategic assumptions."102 Kahn would endeavor to correct this, though critics would conclude he merely mirrored the other side by embracing their bigger-is-better approach to classical strategic concepts. Kahn viewed Brodie's 1955 Harpers article "Strategy Hits a Dead End," a relatively rare moment of national prominence for Brodie when his article appeared in a national mass-circulation publication, as symptomatic of this "block in strategic thinking" induced by the new destructive power of nuclear weapons. 103 But Steiner believes Kahn overstated the case, and underappreciated the efforts Brodie had made to in fact think about the unthinkable, noting "Brodie's first work on this subject was hardly characterized by psychological denial."104

Nonetheless, there is indeed an emotional tension separating the works of Kahn and Brodie. Brodie feared the destructive powers of total war in the nuclear age, forcing him to question the political utility of general war after Hiroshima. As Steiner observes, "Brodie's major contribution to nuclear strategy and his more mature complacence about the risks of nuclear war stemmed from his confidence about the narrower but equally important area of what the superpowers ought *not* to do with nuclear weapons." <sup>105</sup> Steiner further notes that "by 1952 Brodie's analyses focused more on what not to hit with nuclear bombs, notably American and Soviet homelands, than on potentially attractive targets." <sup>106</sup> If deterrence did fail, Brodie persisted in his belief that restraint was necessary in the new nuclear order. As Steiner observed, "Arguing that nuclear weapons

<sup>101.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 203.

<sup>102.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 205.

<sup>103.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 206.

<sup>104.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 206.

<sup>105.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 234.

<sup>106.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 236.

could more efficiently destroy enemy assets than their predecessors, Brodie also warned that capitalizing illogically and passionately upon force efficiency could be suicidal."107

Brodie's emphasis on restraint did appear to come into some conflict with Clause-witz's early emphasis on decisive action, and Steiner cites Brodie's 1959 assessment in *Strategy in the Missile Age*: "It is of course true and important that we cannot have limited war without settling for limited objectives, which in practice is likely to mean a negotiated peace based on compromise. Clausewitz's classic definition, that the object of war is to impose one's will on the enemy, must be modified, at least for any opponent who has a substantial nuclear capability behind him." Steiner notes that "Brodie was mainly interested in doing in war and in crisis what the superpowers were doing prior to those eventualities — that is, maintaining controls on the use of force," and his "horror at any strategic bombing that employed fusion weapons appears to have prevented him from studying the consequences of such bombing and the political developments conducive to it." Steiner observes that "the most important continuity in his thinking was his advocacy of using nuclear weapons to deter general war," and, as a consequence, "he was much less worried than others that giving primacy to deterrence would impair the search for unilateral advantage in nuclear war." 110

Hence Brodie's tribute to Thucydides in Strategy in the Missile Age: "What we have done must convince us Thucydides was right, that peace is better than war not only in being more agreeable but also in being very much more predictable. A plan and policy which offers a good promise of deterring war is therefore by orders of magnitude better in every way than one which depreciates the objective of deterrence in order to improve somewhat the chances of winning."111 Steiner believes that "Brodie was at his best as a strategic analyst when seeking alternatives to scenarios in which the unlimited killing power of nuclear weapons was likely to be displayed,"112 such as the scenarios that came to define Kahn's prolific canon of work from On Thermonuclear War to On Escalation: Metaphors and Scenarios. Added Steiner: "If Brodie's analyses of the physical use of nuclear weapons were generally weaker than his discussion of their coercive use, it may have been because he invariably assumed weapons yields that were uniform, large, and too unwieldy for any strategy apart from the coercive. War-winning scenarios that depended upon attacks by a diverse arsenal against a diverse array of targets would have required detailed, problematic, and elaborate studies less suited to Brodie's prevailing approach to nuclear strategy. But Brodie did not neglect war-winning strategies alto-

<sup>107.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 237.

<sup>108.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 238.

<sup>109.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 241.

<sup>110.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 241-42.

<sup>111.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 242.

<sup>112.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 246.

gether; he merely associated them with the coercive use of nuclear weapons, in which visible restraint in force employment was the key ingredient."113

Brodie thus came to distinguish the "deterrence of general war" from "deterrence in war," the latter made possible only by differentiating the efforts for "strengthening deterrence of general war" from "strengthening deterrence of hostilities at other levels." So, Steiner reasoned, "Brodie did sharply distinguish, by 1949 but not in 1946, coercive use of nuclear weapons from purely physical employment of them, a refinement critical for military restraint in a major war and for applying nuclear warfare to political objectives." But that left the issue of and challenges inherent in the physical employment of nuclear weapons largely unexplored, and thus Brodie "had little to say about strategic targets." This sharply contrasted with the warfighting tradition that would come to be exemplified by Herman Kahn, as illustrated by his many works such as Thinking About the Unthinkable and On Thermonuclear War.

In his ninth chapter, "On Strategy and Strategists," Steiner considers the "Psychological and Psychoanalytical Interpretations of Clausewitz," noting Brodie was influenced by the 1971 biography of Clausewitz authored by Roger Parkinson, titled *Clausewitz*, that suggested Clausewitz, "who had never held a senior command position, had been ambitious but later in life saw himself as a failure, had frequently been melancholy and depressed, and had broken his melancholia only when anticipating war and participation in battle." Steiner adds that "Brodie seemed attracted to Parkinson's presentation by his own deeply intuitional understanding," and in a letter to his colleague Peter Paret in 1973 noted Parkinson "came up with some remarkable letters or statements that certainly ring some kind of bell." Steiner also mentions that Brodie went on to make "a series of deductions about Clausewitz's character from statements in *On War*, each echoing Parkinson's findings," and that "[w]hen he went beyond assertions about character traits to more boldly probe Clausewitz's unconscious motivations, Brodie depended even more upon Parkinson's materials."

<sup>113.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 246.

<sup>114.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 249.

<sup>115.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 249.

<sup>116.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 249.

<sup>117.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 217.

<sup>118.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 217.

<sup>119.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 218. Steiner also cites Brodie's January 1973 World Politics article, "On Clausewitz: A Passion for War," which delves more deeply into Clausewitz's inner psyche: "The blood phrases so often quotes out of context from Clausewitz's great posthumous work burn with their own fierce fire. They are kindled by something within. They are indeed countered and, on intellectual balance, overcome with other words in which the intellect is at work rather than passion; and the intellect in this case is tremendously strong. This intellect is guided by a firm honesty, so that he will not refrain from going where it directs him and from expressing every thought that it brings to him. But the destructive passion against which that intellect is working is also strong. We are dealing here with a deep internal conflict, and there can be no doubt that this conflict is directly linked to his growing depression." Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 219.

Interestingly, Brodie "conjectured that Clausewitz's neurotic passions produced the first draft of On War, since 'the first draft is 'from the heart,' or from wherever it is that emotions reside.' That draft, Brodie pointed out, deals mostly with winning wars, in contrast to the final version, which had been revised to highlight war as policy by other means."120 Clausewitz expert and translator Peter Paret disagreed with Brodie, and in a 1973 letter wrote that "Almost to the last day of his life, Clausewitz was active, productive, and self-confident, and . . . we have no reason to believe he was a depressed human being." Paret cited many positive dimensions of Clausewitz's life and career including his being "very happily married," possessing "very close and long-lasting friendships," and thoroughly enjoying his life as a soldier, theorist, and writer, whose "creative life was characterized by steady, constant productivity." 121 Steiner suggests that "[a]s to why Brodie should have focused so tenaciously on Clausewitz's depression, it may be conjectured that because he so much admired Clausewitz as a writer on war, he probably focused upon parallels he saw between himself and Clausewitz in this and other areas," and, having himself suffered from depression during his later years, Brodie "may well have presumed that Clausewitz's character was in this respect similar to his own."122

Steiner also noted that Brodie and Clausewitz each endeavored to prevent war from becoming absolute, and thereby losing any rationality of purpose. Brodie strived to prevent the very cataclysm that Clausewitz witnessed during Napoleon's retreat from Moscow; "reacting to the Clausewitzian concept of absolute war," Brodie observed how "Clausewitz insists and reiterates that war is always *an instrument of policy* because he knew, and we know today, that the usual practice is rather to let war take over national policy." Steiner finds that "Brodie's assertion in the 1950s that war once begun had an inherent tendency to become 'orgiastic,' the starting point for his effort to strengthen war limitations, is especially compelling from this same perspective. Brodie also shared with Clausewitz an understandable abhorrence of absolute war and the view that guiding warfare by political considerations protected best against the tendency of war to become absolute." Thus Brodie reasoned, in his 1959 classic work, *Strategy in the Missile Age*, that "Clausewitz's classic definition, that the object of war is to impose one's will on the enemy, must be modified, at least for any opponent who has a substantial nuclear capability behind him." 125

<sup>120.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 219.

<sup>121.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 220.

<sup>122.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 222-23.

<sup>123.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 203.

<sup>124.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 203.

<sup>125.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 238.

Steiner believes that "Brodie's interest in Clausewitz was more abstract than practical" and that he "used him to caution against tolerating extremes, distinguishing as did Clausewitz between total and less than total war-making efforts for a given purpose." As Steiner notes, Brodie "accepted Clausewitz's rational equation between war-making and political objectives because he was as committed as Clausewitz was to logical strategy and to combating axiomatic views." But he also keenly appreciated Clausewitz's recognition of the emotional side of war. As Steiner suggests, Brodie shared much with Clausewitz, including "their distinctive roles as critics of the conventional wisdom and recognized authority" as well as "their major but unsuccessful efforts to gain larger recognition for their ideas and contributions, and their interest in the impact of emotions upon war-making." 128

Thus when Brodie set his mind to untangle the riddles of thermonuclear warfare, he came up with a decidedly different response from Eisenhower. Steiner cites a letter Brodie wrote to Schelling that recalls how, "At the beginning of 1952, when some of us here at RAND heard that a thermonuclear weapon would be tested the following November and would probably work ... I proposed that strategic bombing be interdicted altogether. ... I was not going to have them bomb any targets ... within the homeland of the Soviet Union, but sought to confine targets strictly to battlefield zones, and to disallow the larger cities even there." 129 Brodie explained to Schelling that he "thought then, and still think[s], that it would be easier to preserve a limitation founded on gross distinctions of geography than to distinguish between military and civilian targets within enemy territory, especially since the two types might in many instances be in very close juxtaposition to each other."130 Brodie wrestled with the many uncertainties associated with limiting war in the nuclear age and, as Steiner recalls, "Much of Brodie's work during the 1950s was to expose what he believed to be insufficient attention given, especially by military staffs, to these uncertainties, which were both military and political."131

As for Marc Trachtenberg, another of the small but dedicated community of Brodie scholars who have immersed in the full spectrum of the Brodie literature, his discussion of Clausewitz within the context of Brodie's work is even more succinct — with only around a half-dozen references to their connection in his 292-page *History and Strategy*, which also came to press in 1991. Trachtenberg suggests that Brodie's appreciation of the Prussian increased over time as his understanding of Clausewitz's work evolved

<sup>126.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 212.

<sup>127.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 213.

<sup>128.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 222-23.

<sup>129.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 152.

<sup>130.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 152.

<sup>131.</sup> Steiner, Bernard Brodie and the Foundations of American Nuclear Strategy, 171.

and as the dangers of the nuclear era approached the theoretical maximum reflected in Clausewitz's *absolute* war concept, revealing more common ground between their two distinct eras that helped Brodie to straddle the gap between Napoleonic-era total war and the more absolute nature of war in the nuclear era. As Trachtenberg observed, an increasingly essential component of Brodie's solution to the fundamental riddles and enduring ambiguities that lay at the heart of the nuclear discourse would come through his steady application of, and reflection on, Clausewitz's philosophy of war. Clausewitz, renown for the complexity of his thought and his own legacy of contradiction within his sprawling text, is not well-suited to simple solutions of simple maxims that boil down complex realities to pithy sound-bites; he offered instead a rich mosaic of reflection on history, war and strategy through the lens of deep analysis, one that is best appreciated over time.

#### As Trachtenberg described:

Peace would depend, Brodie had argued even in the late 1940s, on a universal conviction 'that war is far too horrible even to be contemplated. And the great dilemma is that the conviction can be sustained only by our making every possible effort to prepare for war and this to engage in it if need be.' ... Brodie had earlier thought that Clausewitz, with his insistence on the close linkage between political objectives and military means, had become obsolete: even the early atomic weapons were too destructive to be harnessed to rational political goals. But he had since come to see that Clausewitz had been 'saying something very profound.' He had been saying that 'war is violence – to be sure, gigantic violence – but it is planned violence and therefore controlled.' 132

This constant and measured balancing of ends and means, central to Clausewitzian strategy, would become Brodie's mantra, leading him time and again into combat with his peers. Many other strategists took a markedly less Clausewitzian approach to strategy, focusing on escalation and the manipulation of risk, such as Brodie's former RAND colleague and Hudson Institute founder Herman Kahn, who gained greater notoriety than Brodie but whose work was far less theoretically elegant, and Thomas Schelling, the bargaining and game theorist who was one of the first to eulogize Brodie and to celebrate his contribution to strategic studies upon his passing in 1978. As Trachtenberg described: "For Schelling especially, but to a certain degree for the others as well, the emphasis on risk meant that the manipulation of risk became perhaps *the* central concern of strategy," and the "effect, at least, in Schelling's case, was to transform strategy once again into tactics writ large – not military tactics this time, but bargain-

<sup>132.</sup> Trachtenberg, History and Strategy, 7.

ing tactics."<sup>133</sup> Trachtenberg observes that the "purely military side of war causation, as Brodie later complained, became the focus of analysis, as though war itself were not in essence a political artifact – as though the basic insight of Clausewitz, whom they all respected, was somehow obsolete,"<sup>134</sup> much as Brodie had earlier thought but which he later reassessed. Brodie would come to recognize that strategy was "a question of balance, of not allowing the tail to wag the dog" as many of the escalation and bargaining theorists unwittingly did – Schelling's bargaining approach to the "strategy of conflict" much like Kahn's "escalation ladder," would catalyze escalatory conflict dynamics that were dangerously detached from their political context, blindly driven by their own logic; as Trachtenberg noted, a more balanced approach "depended on the sophistication of one's theory of war causation,"<sup>135</sup> when it came to sophisticated, Brodie stood at the pinnacle of his field.

Ironically, many of the bargaining and escalation theorists had responded with "hostility" to the "military policies associated with Eisenhower and Dulles," especially their policy of massive retaliation which was so disproportional in its response that it seemed inherently un-Clausewitzian; but President Eisenhower was no stranger to, and was in fact intimately familiar with (and guided by) the Prussian's wisdom, finding in Clausewitz's thoughts some justification for a vigorous thermonuclear attack to a menacing Soviet Union, as he remarked at a July 29, 1954 National Security Council meeting where he alluded to "Clausewitz's principle of 'diminishing as much as possible the first blow of an enemy attack," - and who three years later again referenced the famed Prussian strategist, when noting a Soviet attack on the American homeland would cause some 50 million casualties, that "the only sensible thing for us to do was to put all our resources into our SAC capability and into hydrogen bombs," even if, as Trachtenberg added, it was "obvious that the only way this additional capability could make a difference was if the U.S. struck first." <sup>136</sup> Trachtenberg further discusses Eisenhower's Clausewitzian grounding: "The basic realities of this new world had to be faced without sentimentality. Eisenhower was never able to accept the argument about a nuclear stalemate and the possibility that a general war might be fought with only conventional weapons."137 Eisenhower rejected the suggestion by General Ridgway at a December 3, 1954 NSC meeting that the Soviets might refrain from using nuclear weapons if the United States did, retorting that he "did not believe any such thing," and earlier in the year, at a June 24, 1954 NSC meeting, said such expectations of restraint from Moscow were "completely erroneous;" the next August

<sup>133.</sup> Trachtenberg, History and Strategy, 45.

<sup>134.</sup> Trachtenberg, History and Strategy, 45.

<sup>135.</sup> Trachtenberg, History and Strategy, 45.

<sup>136.</sup> Trachtenberg, History and Strategy, 134, footnote 121.

<sup>137.</sup> Trachtenberg, History and Strategy, 138.

he reiterated his view, explaining that he "cannot see any chance of keeping any war in Europe from becoming a general war" and, as a consequence, that "we would be fooling ourselves and our European friends if we said we could fight such a war without recourse to nuclear weapons." Trachtenberg wrote, "[Eisenhower's] thinking was right out of the first few pages of Clausewitz: war has an innate tendency to become absolute. It followed that also that no restrictions or limitations could be placed on the way nuclear forces would be used in a general war with the Soviet bloc. Thus, for Eisenhower, the fundamental role of nuclear weapons was something permanent and ultimately inescapable."<sup>139</sup>

While Eisenhower framed his warfighting logic in Clausewitzian terms, it clearly was a selective interpretation of Clausewitz, and not rooted in a fuller or more nuanced interpretation as Brodie would endeavor. Brodie looked at the same challenges, the same transformation of military technology, and the same theorist of war sas Eisenhower, but drew far different conclusions. 140 Echoing Steiner, Marc Trachtenberg - another member of the dedicated community of Brodie scholars whose work has helped to chronicle Brodie's influence and to analyze his voluminous if at times seemingly contradictory body of strategic analysis to ensure future generations grasped his subtleties and the full complexity of his thinking – described: "In the 1950s, strategy emerged in the United States as a new field with a distinct intellectual personality. A small group of men - Bernard Brodie, Thomas Schelling, Albert Wohlstetter, and a handful of others - working mainly at the RAND Corporation, had moved into an intellectually barren 'no-man's land' traditionally neglected by both military officers and students of international politics. The body of thought they created was very different from anything that had come before. Their ideas would prove enormously influential, and their style of analysis in large measure became the sophisticated way of approaching nuclear issues in the United States."141

While the number of books, monographs, articles and chapters focusing exclusively on Brodie is limited, there are numerous works that have taken various levels of inspiration from Brodie – including at least one that was explicitly dedicated to him, an anthology of conference papers from the Bellagio Conference on deterrence held in December 1985 at Villa Serbelloni, Bellagio, Italy that first appeared as a special

<sup>138.</sup> Trachtenberg, History and Strategy, 138, footnote 136.

<sup>139.</sup> Trachtenberg, History and Strategy, 138.

<sup>140.</sup> Trachtenberg, *History and Strategy*, 261. As Trachtenberg observes: "With the coming of the hydrogen bomb, he argued, the strategy of unrestricted warfare had become obsolete; indeed, 'most of the military ideas and axioms of the past' no longer made sense in a world of thermonuclear weapons. But it was not enough to allow these 'old concepts of strategy' to 'die a lingering death from occasional verbal rebukes.' What was needed, he said, was a whole new set of ideas, a comprehensive and radically different framework for thinking about strategic issues. And over the next decade that was exactly what took shape. Strategy as an intellectual discipline came alive in America in the 1950s. A very distinctive, influential and conceptually powerful body of thought emerged."

<sup>141.</sup> Marc Trachtenberg, "Strategic Thought in America, 1952-1966," Political Science Quarterly 104, No. 2 (1989), 301.

edition of The Journal of Strategic Studies in December 1986 that was later published in book form by Frank Cass & Company in 1987: Dilemmas of Nuclear Strategy, edited by Roman Kolkowicz. As Kolkowicz, who like Trachtenberg and Steiner have helped bring attention to Brodie's important theoretical and doctrinal contributions, wrote in his introductory essay: "It is fair to say that the guiding intellectual spirit of the Bellagio conference and its proceedings was that of Bernard Brodie, to whom this volume is dedicated. Brodie was a pioneer of modern strategic studies in the nuclear era whose work has powerfully influenced generations of strategists and decision-makers. He was the first to perceive and publicly articulate the revolutionary implications of nuclear weapons for war and peace and for the management of international politics in a dangerous world. At the very dawn of the nuclear era, in 1946, he defined the essential paradox and inescapable truth of the nuclear condition: 'Thus far, the chief purpose of our military establishment has been to win wars. From now on, its chief purpose must to be avert them. It can have no other useful purpose." Kolkowicz also wrote of Brodie: "[He] insisted that 'we need people who will challenge and dissect the prevailing dogmas' of strategic fashions and fads. Above all, reflecting the teachings of Clausewitz whom he greatly admired, Brodie urged the 'need to stress the superior importance of the political side of strategy to the simply technical and technological'. He considered 'the most important single idea in [Clausewitz's] On War ... the one that makes it great, is the idea that war must never be an act of blind violence, but must be dedicated to achieving the supreme goal of statecraft'." 143

Kolkowicz noted that the discussion which unfolded at the Bellagio conference "pointed out the resistance after the Second World War to Brodie's revolutionary formulation of the nuclear condition and his advocacy of deterrence-only, non-military use of nuclear weapons" by those who "advocated an American strategy that was similar to that of the pre-nuclear era" and who thus "considered victory rational and obtainable"—in marked contrast to Brodie, who believed that "the idea of actually using these weapons was not thinkable" and that "military victory in nuclear war was not possible," views that became "accepted in the 1960s by the official defense community and decision-makers and became the foundation for

<sup>142.</sup> Roman Kolkowicz, ed., Dilemmas of Nuclear Strategy (London: Frank Cass, 1987), 5.

<sup>143.</sup> Kolkowicz, ed., *Dilemmas of Nuclear Strategy*, 5. As Kolkowicz further described: "He found Clausewitz's metaphor 'War has its own language, but not its own logic' to be the 'single most important idea in all strategy' because the use of military force must at all times be determined by political decision and rational purpose. He asserted therefore the need to be aware of the 'inevitable limitations and imperfections of scientific method in strategic analysis and decision-making' and to understand that 'the most basic issues of strategy often do not lend themselves to scientific analysis ... because they are laden with value judgements and therefore tend to escape any kind of disciplined thought'. In other words, 'war would only be senseless destruction if it were not in pursuit of some valid political objective'. Brodie, like Clausewitz before him, was concerned lest strategy became an abstract, excessively theoretical science of war and thus became detached from its guiding and constraining political context. Above all, Brodie asserted, before leaders consider the use of military force, they must ask 'De quoi s'agit-il?' Can nuclear weapons still be considered military usable and politically rational? He asked, 'Should we abandon deterrence strategies in favor of war-winning strategies? But what does this mean?'"

American strategic policies."<sup>144</sup> This was illustrated by former Defense Secretary McNamara in his 1983 *Foreign Affairs* article, "The Military Role of Nuclear Weapons: Perceptions and Misperceptions"; but, as recounted therein, he came to finally believe that America could not "avoid serious and unacceptable risk of nuclear war until we recognized ... that nuclear weapons serve no military purpose whatsoever. They are totally useless – except only to deter one's opponent from using them," capturing a sentiment that is at heart Brodien, and which soundly refuted his earlier notions of flexible response that captivated the best and the brightest throughout the Kennedy-Johnson years. <sup>145</sup>

In 1991, the very same year Steiner's book on Brodie's legacy came to press, Marc Trachtenberg brought to press his own book-length manuscript that focused largely, but not entirely, on the Cold War period (with an additional chapter revisiting the causes of World War I, whose tragic runaway escalation from isolated act of terror to general war was a sobering reminder to the nuclear theorists what was at stake when reflecting on escalation): *History and Strategy*, as part of the Princeton Studies in International History and Politics series published by Princeton University Press. Its first chapter was a modified version of his 1989 *Political Science Quarterly* article, with the self-same title and which also appeared in the final volume in his multi-volume anthology, *Development of American Strategic Thought: Writings on Strategy*: "Strategic Thought in America 1952-1966," which focuses heavily upon Brodie's contribution to American strategic thought in this period that immediately followed the arrival of thermonuclear weapons, based on a special public release by RAND of fourteen hitherto unpublished papers by Brodie written in nearly the identical period (1952-1965).

Trachtenberg's discussion sheds much light upon the ambiguity of Brodie's written work, which evolved over time – and in response to a rapid series of dizzying technological innovations from the splitting of the atom to the perfection of fusion bombs and their successful coupling to intercontinental missiles – and contains, as a result, some unavoidable contradictions, particularly on the topic of limited war and the battlefield use of tactical nuclear weapons. These seeming contradictions reflected the natural tension between two paradoxical responses to the new nuclear reality of the post-Hiroshima world: as Trachtenberg explained, this "basic tension" that permeated the evolution of nuclear strategic thought "was as though the coming of the hydrogen bomb in 1952 had released two great shock waves in the world of strategic thought," the first being once both superpowers "had obtained survivable and deliverable strategic forces, all-out war ... would become an absurdity," while the second was the "equally basic notion that the threat of nuclear war could be used

<sup>144.</sup> Kolkowicz, ed., Dilemmas of Nuclear Strategy, 6.

<sup>145.</sup> Robert McNamara, "The Military Role of Nuclear Weapons: Perceptions and Misperceptions," Foreign Affairs 62 (1983): 59-81, 79.

for political purposes that went well beyond deterring the use of nuclear weapons by an adversary."146

The resulting doctrinal clash between these two schools, sometimes referred to as the "assured destruction" and "warfighting" (or "war-winning") schools, would define much of the literature and suggest a theoretical polarity that clashed with a more ambiguous reality, where strategies were pulled like a pendulum between the two, sometimes showing much overlap in pursuit of the same end goal: peace and survival in the nuclear world. As Trachtenberg noted: "It was not that separate factions rallied around each of these two poles: the history of American strategic thought during this period cannot be summed up as a dispute between those who believed in 'simple deterrence' and those who wanted nuclear forces to play a more far-reaching political role. Strategic discourse was during this period was not sectarian or doctrinaire: the striking thing was that the same people were attracted to both approaches, often at the same time." <sup>147</sup> Adds Trachtenberg, "these two basic ways of approaching strategy were in obvious conflict with one another. The fundamental question was whether there was any way this conflict could be resolved."148 Such would be the challenge that Bernard Brodie would face in his four-decade long journey that started on the eve of World War II, as America rose to the heights of superpower status, and carried him past the humbling setback in Vietnam where American power – and its theories of limited warfare, escalation, and bargaining - were put to the test.

In addition to the many works of Cold War intellectual history where Brodie played a prominent role, there are even more works where he was but one member of a larger cast of characters contributing to a conversation that stretched from 1945 until the Cold War's sudden end. In 1981, Lawrence Freedman authored one of the most comprehensive intellectual histories of the nuclear age, *The Evolution of Nuclear Strategy*, published by St. Martin's Press, followed the next year with Colin Gray's *Strategic Studies and Public Policy: The American Experience*, published by the University Press of Kentucky. Then in 1983 came Fred Kaplan's widely read intellectual biography of the nuclear era's greatest thinkers, the *Wizards of Armageddon*, based on his doctoral thesis for the MIT Department of Political Science, was published by Simon and Schuster (to be reissued in 1991 by Stanford University Press as part of its Nuclear Age Series) – with colorful (and apocryphal) recollections of Brodie and his contributions to the emerging field of nuclear strategic thought, along with the other principal contributors like Herman Kahn among others. Soon after Kaplan's widely read 1983 work, Gregg Herken authored *Counsels of War* (Alfred A. Knopf, 1985, republished

<sup>146.</sup> Marc Trachtenberg, History and Strategy (Princeton: Princeton University Press, 1991), 4.

<sup>147.</sup> Trachtenberg, History and Strategy, 4.

<sup>148.</sup> Trachtenberg, History and Strategy, 4.

by Oxford University Press in 1987) covering ground quite similar to that covered by Kaplan but with greater attention to Brodie's theoretical development as one of many characters in the atomic drama, following up his earlier 1980 *The Winning Weapon* (also published by Knopf) which had barely mentioned Brodie (and when doing so misspelled his first name as Bertrand in the index!) and instead focused more on the policymakers of the era. Also in 1985, Princeton University Press published *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, edited by Peter Paret, a sequel to Earle's famed 1943 anthology with nearly identical title and much shared content; the new edition included a chapter by Lawrence Freedman, "Nuclear Strategists," that included Brodie among the key players, a topic he covered in great depth in his widely read 1981 work, *The Evolution of Nuclear Strategy* (St. Martin's), now in its third edition (now under the imprint of Palgrave, 2003). Brodie had played just as central a role in Trachtenberg's 1991 *History and Strategy*, especially his first chapter, "Strategic Thought in America."

In 1992, Herken authored Cardinal Choices: Presidential Science Advising from the Atomic Bomb to SDI (Oxford University Press, 1992) which extended his examination of the Cold War's greatest minds to the efforts by scientists to influence presidential policy starting with the atomic scientists who lobbied successfully for the Manhattan Project during World War II, and which breathed institutional momentum into the new partnership between civilian advisors and the makers of American defense and security policy, a partnership that Brodie was both part of, and which Brodie wrote about, throughout his career. A decade later, Herken authored *Brotherhood of the Bomb:* The Tangled Lives and Loyalties of Robert Oppenheimer, Ernest Lawrence, and Edward Teller, published by Henry Holt in 2002 which covered ground similar to that covered by Herb York in his 1976 The Advisors: Oppenheimer, Teller, and the Superbomb (W.H. Freeman & Co., reissued by Stanford University Press in 2009) among other works covering the H-bomb's creation and the epic political battles and debates that led to the superbomb or 'Super.' In 2007, Peter D. Smith authored *Doomsday Men*, published by St. Martin's (paperback in 2008 from Penguin) examining the scientists of the Manhattan Project more broadly; and in 2008, Alex Abella's Soldiers of Reason that recounted the history of the RAND Corporation was published by Houghton Mifflin (paperback in 2009); David Hoffman's Pulitzer Prize winning *The Dead Hand* examining the Russian side of the strategic-nuclear community was also published in 2009, by Anchor Books. Interest in the nuclear era appeared to be on the rise once more. In 2005, Harvard University Press published Sharon Ghamari-Tabrizi's The Worlds of Herman Kahn: The Intuitive Science of Thermonuclear War and Herman Kahn's best-selling 1960 tome, On Thermonuclear War, was brought back into print by Transaction in 2007, with On Escalation: Metaphors and Scenarios following in 2009, with a new foreword by Thomas Schelling. And a new anthology of Herman

Kahn's 'classic' writings was published in 2009: Paul Dragos Aligica and Kenneth R. Weinstein, eds., *The Essential Herman Kahn* (Lexington Books, 2009). These works have contributed to a revival in interest in Herman Kahn's work, and this suggests there is much potential for a similar renaissance of interest in Brodie's theoretically more elegant and rigorous work. More recently, in 2009, Fred Kaplan's *1959* was published by Wiley – focusing on this often overlooked year that immediately preceded the tumultuous decade of the 1960s but which played a pivotal historical role that Kaplan believes proved transformative, and thereby enabled the phenomenon of the sixties to transpire – with a chapter on Herman Kahn that drew heavily from Ghamari-Tabrizi's work as well as his earlier *Wizards of Armageddon*, but which offered no such chapter on Brodie's work, even though it was in 1959 that Brodie's seminal *Strategy in the Missile Age* was published.

One reason for this recent neglect of Brodie's contribution to the nuclear strategic discourse could be that Brodie's influence was more theoretical than doctrinal; and another could be that he was something of a strategic maverick, going against the grain and thus rubbing those in power the wrong way. As Ken Booth has commented, "At several important points in his career Brodie was a dissident" who "did not avoid professional discomfort" nor "think it threatening to change his mind;" as well, he "did not defer to the authority of air force commanders when he believed them wrong," nor did he "believe that his colleagues at RAND had discovered timeless truths about strategy." Brodie thus "challenged the conventional wisdom" and, "most unusual of all for an American strategist of his day, he did not believe that his own country was always right."149 And so, Booth reflects, "it is not surprising that Brodie's direct influence on the making of American strategy ... was limited," but, as he further considers, "does influence matter? Who now worries whether Clausewitz had any influence? What counts is the enduring worth of what he wrote."150 Booth describes Brodie's influence as being "indirect rather than direct, and philosophical rather than technical," with Brodie less "a 'maker' of modern strategy in a direct sense, like von Schlieffen" - and more like the pre-eminent strategic theorist, Carl von Clausewitz.<sup>151</sup>

While the literature *on* Brodie is limited, with only one book-length study exclusively focusing on him, as noted above – authored by Barry Steiner in 1991, and building upon his January 1984 ACIS Working Paper, "Using the Absolute Weapon: Early Ideas of Bernard Brodie on Atomic Strategy" – Brodie has nonetheless been an enduring, and indeed often central, character in numerous journal articles and book chapters while also being included among the cast of leading characters in many of the

<sup>149.</sup> Ken Booth, "Bernard Brodie," in John Baylis and John Garnett, eds., *Makers of Nuclear Strategy* (London: Pinters Press, 1991), 51.

<sup>150.</sup> Booth, "Bernard Brodie," 51.

<sup>151.</sup> Booth, "Bernard Brodie," 51.

intellectual histories of the Cold War, most famously perhaps in the aforementioned *Wizards of Armageddon* authored by Kaplan, and similar works by Gregg Herken, Lawrence Freedman and Colin Gray, among others.<sup>152</sup>

Barry Steiner, along with Marc Trachtenberg and Roman Kolkowicz, demonstrates a rare depth and breadth of knowledge of Brodie's writings and their impact on both the theoretical and doctrinal development of nuclear strategy, and when the study of Brodie enjoys a much-deserved renaissance, these scholars will surely serve as its foundation. Just as Steiner provides us with a unique and probing depth of insight into Brodie's thought, Trachtenberg provides us with a unique and searching breadth with his very unique anthology of preserved facsimiles of original Cold War documents in his 1988 multi-volume reference set, *The Development of American Strategic Thought: Writings on Strategy*, with a total of 73 papers, articles and reports presented in chronological sequence, including several of Brodie's lesser known articles and hitherto classified RAND papers. The first part, *Writings on Strategy 1945-1951*, includes seven Brodie chapters among its ten in total; the three-volume second part of the series, *Writings on Strategy 1952-1960* includes eight Brodie chapters out of nine in total in volume one; six Brodie chapters out of 15 total in volume two; and two Brodie chapters out of 14 total in volume three; and in the third part of the series,

<sup>152.</sup> Articles and chapters that focus on or at least prominently feature Brodie include: Bevan M. French, "Brodie Discusses 'Limited' Conflicts, Says All-Out War is 'Meaningless'," The Dartmouth CXV, No. 126 (March 20, 1956), 1; John W. Chapman, "American Strategic Thinking," Air University Review (January-February 1967); Fred Charles Iklé, "When the Fighting Has to Stop: The Arguments about Escalation," World Politics 19, No. 4 (July 1967), 692-707; Richard L. Curl, "Strategic Doctrine in the Nuclear Age," Strategic Review 3 (Winter 1975), 46-56; Reginald C. Stuart, "Clausewitz and the Americans: Bernard Brodie and Others on War and Policy," in Brian Bond and Ian Roy, eds., War and Society: A Yearbook in Military History (New York: Holmes & Meier Publishers, 1977), 166-172; Thomas Schelling's obituary of Brodie upon his death in 1978, "Brodie (1910-1978)," International Security (Winter 1978), 23; a similarly laudatory tribute on Brodie's passing in Arms Control Today, "Bernard Brodie 1910-1978," Arms Control Today (February 1979), 10; William P. Snyder and John A. MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," Parameters XI, No. 4 (1981); Jeffrey D. Porro, "The Policy War: Brodie vs. Kahn," The Bulletin of the Atomic Scientists 38, No. 6 (June/July 1982), 16-19; Craig D. Wildrick, "Bernard Brodie: Pioneer of the Strategy of Deterrence," Military Review, October 1983, 39-45; Barry Steiner, "Using The Absolute Weapon: Early Ideas of Bernard Brodie on Atomic Strategy," ACIS Working Paper No. 44 (January 1984), Center for International and Strategic Affairs, UCLA (which also appeared in the Journal of Strategic Studies 7, No. 4 (December 1984), 365-393) and which, as noted above, became chapter 2 in Steiner's 1991 book-length monograph, Bernard Brodie and the American Study of Nuclear Strategy; Gregg Herken, "The Not-Quite-Absolute Weapon: Deterrence and the Legacy of Bernard Brodie," in Roman Kolkowicz, ed., Dilemmas of Nuclear Strategy (London: Frank Cass & Co., 1987), 15-24; Marc Trachtenberg, "Strategic Thought in America: 1952-1966," Political Science Quarterly (Summer 1989), 301-334, which first appeared as his concluding retrospective at the end of his multi-volume anthology, The Development of American Strategic Thought (New York and London: Garland Publishing, 1987-1988) and which became, in extended form, his first chapter in History and Strategy (Princeton: Princeton University Press, 1991) and whose knowledge of Brodie's writings, published and unpublished, is extensive; William Huntington, "Clausewitz and Strategy in the Missile Age: A Critique of Bernard Brodie's Strategic Thought," a paper submitted to Foundations of National Security Strategy, National War College, October 9, 1990; Ken Booth, "Bernard Brodie" in John Baylis and John Garnett, eds., Makers of Nuclear Strategy (London: Pinters Press, 1991), for which Kaplan's Wizards of Armageddon served as a major historical source, and whose position as the first chapter of this anthology signifies Brodie's foundational role at the forefront of nuclear strategy (this chapter is also referenced in the literature occasionally as "Bernard Brodie: The Absolute Strategist," a fitting title); Michael Howard, "Brodie, Wohlstetter and American Nuclear Strategy," Survival 34, No. 2 (Summer 1992), 107-116; and of course, Barry Steiner's 1991 book, Bernard Brodie and the Foundations of American Nuclear Strategy, focused in its entirety on Brodie's evolving and enduring strategic influence.

Writings on Strategy 1960-1969, and Retrospectives, Brodie's chapters comprise 12 out of a total 25 chapters, which includes the four "Retrospectives" (two of which were authored by Brodie). While this anthology is not widely held by academic libraries, and as a complete set can be found in just a small number, it affords a rare glimpse into the lesser known Brodie, not the Brodie of *The Absolute Weapon* or *Strategy in the* Missile Age or even his less widely read Escalation and the Nuclear Option and War and Politics, or even his early works on naval strategy, Sea Power in the Machine Age and A Guide to Naval Strategy, the writer of heavy and enduring tomes which present as a collective a body of work on a scale that has been inhabited by an august few, theorists of war like Mahan and Clausewitz, or earlier theorists of the state like Hobbes and Machiavelli – but instead the prolific essayist and public speaker who wrote for and spoke to the lay public, and at the same time an equally prolific writer of classified reports and memoranda read primarily by America's top political and military leaders as they grappled with the new challenges of the nuclear age. Brodie's output was bountiful, even if many of his works were read by only a small audience and in the end, popular celebrity escaped him. And more importantly, as Steiner, Trachtenberg, Schelling and so many other leading strategic studies scholars have noted, Brodie's influence was felt far and wide, from the epic naval clashes of World War II through to the new challenges of the early post-Hiroshima world as bipolarity emerged, up to and beyond the humbling strategic setbacks of the Vietnam War era.

Given Brodie's pioneering, indeed pivotal, role among the leading intellectuals of the bomb from the very inception of the nuclear age, a role faithfully chronicled by Kaplan in his widely read Wizards of Armageddon, it seems odd that when Kaplan revisited this era in his more recent 1959: The Year Everything Changed published in 2009, he paid tribute to Herman Kahn's influence with his very own chapter, but largely neglected Brodie, who appears only tangentially in the chapter on Kahn – even though it was Brodie's magnum opus, Strategy in the Missile Age, that came to press in that transformative year of 1959, and which was described without any exaggeration by Colonels William P. Snyder and John A. MacIntyre, Jr., in their 1981 article in Parameters detailing Brodie's unique contribution to strategy, as "the most important book on American national strategy to appear in the decade of the 1950s," a sentiment echoed by Colin S. Gray when he described it as "the most widely praised book on contemporary strategy" - though Kahn was at that point traveling the country presenting his infamous slide show that would become, in narrative form, his bestselling 1960 On Thermonuclear War. 153 While Kahn has received much recent attention by publishers, including Harvard University Press and Lexington Books which

<sup>153.</sup> See: William P. Snyder and John A. MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," *Parameters* XI, No. 4 (1981); and Colin S. Gray, *Strategy and History: Essays on Theory and Practice* (New York: Taylor & Francis, 2006), 31.

have contributed to the recent revival of Kahn in the literature, Brodie by comparison appears relatively overlooked thus far. But Brodie's own bountiful contribution to the literature more than makes up for the lack of literature about him. His works span all manner of formats, from scholarly books bearing Princeton University Press' august imprint to popular trade books published by Dell and MacMillan, and from newspaper op-eds and magazine articles to academic scholarly and military journal articles, and from public lectures and speeches to his many classified reports, working papers, and research memoranda for the military while at RAND and lectures to the service academies.<sup>154</sup>

Brodie's approach to nuclear strategy was distinct in its sophistication, his willingness to embrace the inherent uncertainties of war unique among his peers, placing his approach to theorizing firmly in the Clausewitzian tradition, a tradition that was beyond the reach of many strategic studies scholars whose approach to war was much more *linear*, less nuanced, and less willing to embrace war's ambiguity or honestly confront its dangers while recognizing its uncertainties. But we must go beyond merely matching up Brodie and Clausewitz as likeminded philosophers of war, unparalleled in their intellect and insight, for the connection that binds Brodie to Clausewitz across a more than a century of profound historical change is truly multi-layered. As such, Brodie is best understood through a Clausewitzian lens on many levels, not just for his theoretical imitation of Clausewitz but also for his role fostering the revival of Clausewitz studies in the Anglo-American strategic studies community, helping to catalyze interest in the Prussian among a new generation of scholars, exposing students and scholars to the full richness and complexity of Clausewitz's thought, thereby fostering a more nuanced understanding of war in the modern world, particular in the nuclear era when Clausewitz's theoretical construct of absolute war first became a reality.

Unmatched among his peers for his rich and diverse range of expertise – from military history to classical philosophy to the technology of war – Brodie stepped up and filled a giant's shoes left empty ever since Clausewitz's untimely death, for a new generation that was confronted by the gravest military challenge of all time: the splitting of the atom by fallible man and his creation in the laboratory of a technology capable of realizing Clausewitz's hitherto theoretical construct of *absolute war*. Brodie's distinct style, his recurring references to Milton, his early ruminations on Socrates, his successful effort to reintroduce America to its very own "Clausewitz of the sea," Admiral Mahan, his subsequent rediscovery of and inspiration from Clausewitz himself, led to a richness in theorizing that would set him apart. But along the way, this very sophistication would alienate him from the very community he hoped

<sup>154.</sup> See the chronological listing of Brodie's works, including his books; papers, reports, lectures, and chapters; and articles, located just after the Bibliography.

to influence – as less complex thinkers better-suited for the formulation of doctrine than the more complex challenges of theory promised simplicity to an era engulfed by a cloud of fear and worry and which did not want to wade deeply into a shadow world of complexity and ambiguity, and who would, for their promise of simplicity, come to dominate the field of American nuclear strategy.

Looking back to the Napoleonic era and the duel that followed between the Jominian and Clausewitzian theoretical responses, the former which dominated military academies for a century, stretching from the American civil war when Jomini was widely read on both sides, to World War I and its tragic stalemate, through to the German and Japanese success with land- and sea-based blitzkrieg, quickly overrunning much of the world with bold, aggressive lightning strikes as if in the spirit of Napoleon (and in the end suffering the same totality of defeat). But once the nuclear stalemate set in, and later the failed application of the Jominian linearity of escalation theory to Vietnam, Clausewitz's wisdom was "rediscovered" - and Brodie was one of the theorists dedicated to that rediscovery. Brodie's interest in Clausewitz was not strictly academic; Clausewitz became in part a metaphor for the very complexity of war in a dangerous time, and the frustration felt by the philosopher of war who recognized this complexity, its danger, and its many ambiguities, and who did not reduce it to simpler catchphrases. The Jomini-Clausewitz rivalry – a battle of ideas that would take place long after Clausewitz's own death - presents us with a lens through to better understand Brodie, who was similarly confronted by more popular rivals who would achieve greater influence in his time, such as the best-selling author and pop-cultural icon Herman Kahn – and also the Nobel Prize-winning presidential adviser Henry Kissinger.

But Brodie brought to the study of war an understanding of philosophy, history, psychology, and technology – dynamic and fluid forces where change was the only constant. And this provided him with the ammunition to articulate a complex, nuanced theory of war and the place of nuclear weapons in the modern world, one that demanded restraint and understanding, and sometimes inaction instead of action. All unpopular precepts for a more muscular world that favored bold and confident action. In a world predisposed to tough talk and bold action, Brodie's ideas ruffled feathers and left him on the sidelines of a field where his ideas, ironically, were superior to those offered up by most of his peers, and which evolved in lockstep with the times from the early era of American atomic monopoly to the world of overkill that would define the latter years of the Cold War. Brodie first thought about naval strategy in the pre-nuclear world; the impact of technology change on the conduct of war across the ages; and the fundamental ambiguities inherent in digesting the past and interpreting it and applying it to the emergent future. Brodie looked first at Socrates, and saw in the great philosopher the riddle of his uncertain legacy. When he later looked to Alfred

Thayer Mahan, he helped resurrect interest in the central but neglected importance of sea power to history, just in time for America to take to the high seas, and rollback the wave of Imperial Japanese expansion in the Pacific and to establish the foundation for an American century.

In Clausewitz, Brodie found riddles similar to those he found in Socrates – and in his own remarkable if not always fully appreciated contribution to strategic theory in the nuclear era, he would leave his own legacy of riddles, rising to a rare and distinguished level as one of the truly great strategic minds of all time, joining a Pantheon of great thinkers, even if that meant becoming isolated from the world of mortal man. With Brodie's death now more than three decades in the past, and the Cold War itself part of history for over two decades, we find our world is again at war, and as we navigate this current world of conflict, we witness a new clash between the apostles of simplicity, and the more nuanced interpreters of complexity; as these two tidal forces array against each other, a re-examination of the last generation's greatest theorist of complex war and his clash with simpler minds, can offer us important lessons for our own time – and for all time. We will in the pages that follow turn to the writings of Bernard Brodie that span a tumultuous half century, from the years just before World War II to those just after America's humbling Vietnam experience; in so doing, we will come to understand Brodie's pivotal place in the evolution of strategic theory and the philosophy of war, as strategic thinkers grappled not only with the cataclysmic destruction brought by total war, but the potential extinction of humanity courted by the architects of the new, nuclear order as they wrestled with how to harness the bomb without being destroyed by it.

Early on, Brodie enjoyed what Ken Booth has described as "the knack of being in the right place at the right time." He acquired an interest in international relations during the 1930s after studying philosophy at the University of Chicago, where he stayed on for his doctorate and studied under Quincy Wright, a pioneer in the field. According to Booth, Wright was "approaching the end of his mammoth project, *The Study of War*," for which Brodie's component served as his doctoral project examining "the impact of naval technology on diplomacy in the nineteenth century," which he completed, with perfect timing, in 1940. <sup>155</sup> In addition to Wright's influence, Booth notes Brodie "also greatly benefited from Jacob Viner, a member of the economics department," who was also "an impressive thinker about international relations and in time became an early and original contributor to thinking about the atomic bomb." <sup>156</sup> Brodie next went to Princeton, "where he took up a research fellowship, helped by Wright's contact with Edward Meade Earle," who, like Brodie's mentor, "was at the

<sup>155.</sup> Booth, "Bernard Brodie," 19.

<sup>156.</sup> Booth, "Bernard Brodie," 19.

forefront of his field and was overseeing a book, *The Makers of Modern Strategy*, which would become a milestone." At Princeton, Brodie "adapted his dissertation into his own first book," *Sea Power in the Machine Age*, whose success led Princeton University Press to commission Brodie to write another book on sea power, which he quickly finished, with *A Layman's Guide to Naval Strategy* being published in 1942.

Brodie's early success and positive publishing experience suggested the possibility that "the strategic theorist might be valued by the practitioner," and that "civilian theorists could be appreciated by military professionals," helping precipitate the birth of a new field; but Booth notes that these early successes would face later setbacks and disappointments that would suggest to Brodie that such acceptance "was the exception rather than the rule." <sup>159</sup> In the chapters that follow, we will explore Brodie's ideas as they evolved from his student years before the outbreak of World War II, when the issue of "peaceful change" and what later would be derided as "appeasement" were the hot button issues of the day on the minds of international relations students and scholars, into the post-Hiroshima world, where nuclear weapons and the riddles of nuclear deterrence would pose their own vexing questions. We will see in Brodie's work a striking connection linking his efforts with those made the century before by the great philosopher of war, Carl von Clausewitz, whom Brodie studied, and later sought to import to the American academy, and in the end emulated – a kindred spirit across the chasm of time in many ways and on many levels.

<sup>157.</sup> Booth, "Bernard Brodie," 19.

<sup>158.</sup> Booth, "Bernard Brodie," 20.

<sup>159.</sup> Booth, "Bernard Brodie," 20.

# **Chapter Two**

## Before the Bomb: Bernard Brodie's Beginnings

Newell G. Bringhurst, perhaps the foremost scholar of Bernard Brodie's wife, Fawn M. Brodie – the best-selling historian and controversial pioneer in the field of psychohistory who famously exposed the human sides of such important figures in American history as Joseph Smith, the founder of the Mormon Church and U.S. presidents Thomas Jefferson and Richard Nixon - has shed much light on Bernard Brodie's early life and career in the course of chronicling his wife Fawn. Bringhurst recounts Bernard Brodie's early years, as described by Brodie's brother Leonard in an interview: "He was born in Chicago on 20 May 1910 to Morris and Esther Block Brody, Jewish immigrants who had migrated from Latvia to the United States in the late nineteenth century. The Brody family settled in a predominantly Jewish section on Chicago's west side, where Bernard, the third of four sons, grew up. His father provided for the family as an itinerant peddler, selling produce and other commodities off a horse-drawn wagon."160 Bringhurst adds that Brodie's "parents did not get along. The marriage itself, according to son Leonard, was one of convenience, arranged by family shortly after Esther's arrival in America." <sup>161</sup> In addition to their age difference of sixteen years, Bringhurst writes that "more serious were the Brodys' sharply differing values and attitudes. Morris was extremely bright; he enjoyed books and learning in general, and he passed these qualities on to Bernard."162

While Esther "had minimal education and learning," Bringhurst writes that "she encouraged her children to go to school and took pride in their educational achievements," and after Bernard graduated from Chicago "applauded his achievement as 'the greatest thing in the world." <sup>163</sup> Brodie's parents were also very different socially: "Morris, who was very frugal, never attended a play or even a movie because he considered them extravagances" and was described by his son Leonard as having "absolutely no friends," in contrast to Esther who, "by contrast, was quote sociable." <sup>164</sup> Ultimately, "their marriage didn't survive, and by 1924 the two had separated" and "Esther was left to raise her four sons on her own." <sup>165</sup> While of opposite social dispositions, Bringhurst

<sup>160.</sup> Newell G. Bringhurst, *Fawn McKay Brodie: A Biographer's Life* (Norman: University of Oklahoma Press, 1999), 60. Note the original spelling of Brodie's surname was with a 'y' at the end: Brody.

<sup>161.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 60.

<sup>162.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 60.

<sup>163.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 60.

<sup>164.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 60.

<sup>165.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 60.

writes they "[b]oth rejected all aspects of Jewish religious belief and practice," with Morris described as "strongly antireligious, believing all religions to be based on fraud and designed to gouge money out of people"; but despite his rejection of the Jewish religion, he and Esther "retained certain customs and a sense of group awareness" that suggests a continuing Jewish cultural identity, and thus "shopped in Jewish-run stores and even ate kosher meat, thus remaining at least culturally Jewish." <sup>166</sup>

After Brodie graduated from high school at fourteen, he left home to attend Crane Technical College, and reduced contact with his family during this period, a situation that remained unchanged after he enrolled at the University of Chicago, where he earned his bachelor's and then later his doctorate degrees. As Bringhurst writes, "He was ambivalent about his Jewish heritage and 'sought to disassociate himself from anyone, thing, [or] idea [that] might be considered Jewish, including his family"; he "took time to visit his mother only once every six months and avoided all contact with his three brothers." <sup>167</sup> Bringhurst speculates that this "rejection was manifest in Bernard's identifying himself as 'Brodie' rather than 'Brody'" and notes that "[i]n later years Bernard claimed that the change in spelling was due to an inadvertent error made when he first enrolled in College," a claim rejected by Brodie's brother Leonard who "asserted that the change was deliberate, an attempt to deny his Jewishness." <sup>168</sup>

It was in 1936, while completing her master's at Chicago, that Fawn McKay - the future Fawn M. Brodie - "had met and fallen in love with Bernard Brodie;" and after a "whirlwind courtship that lasted a mere six weeks," they were married on August 28, 1936. As Bringhurst writes: "Despite marked differences in their backgrounds, they were immediately attracted to each other. Fawn found Bernard appealing for a number of reasons. First, he was extremely intelligent, with an inquisitive mind and an insatiable thirst for knowledge. Then there was his personality. Bernard was dynamic and passionate. He was quick to show his feelings and emotions. Fawn's exposure to such behavior was a new, enormously exhilarating experience. Bernard, moreover, was charming. Despite a generally quiet, soft-spoken demeanor, he enjoyed interacting with others. Fawn particularly appreciated his eloquence, his mastery of the English language, both spoken and written, and his subtle, wry sense of humor." 169 But Fawn's family was not pleased with their relationship: "Disclosure of the whirlwind courtship and impending marriage caused consternation, bordering on hysteria, within the McKay family," though her mother did attend the wedding in Chicago, albeit only after failing to persuade her daughter to change her mind. 170 And while Bernard was

<sup>166.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 60-61.

<sup>167.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 61.

<sup>168.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 61.

<sup>169.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 61-62.

<sup>170.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 62.

alienated from his family, he did invite his mother and brothers but they "refused to attend;" and, as Bringhurst writes, "According to his daughter, Pamela, Bernard's family interpreted the marriage as a deliberate rejection not only of them but also of his Jewish heritage."<sup>171</sup>

In the summer of 1937, the rest of the McKay family finally met Bernard, and according to several of Fawn's relatives, Brodie won their acceptance, "despite the initial controversy generated by the marriage itself and despite strong anti-Semitic prejudices endemic to Huntsville,"172 and Bringhurst writes that "Bernard's acceptance by Fawn's family undoubtedly was facilitated by firsthand observations of how well the young couple interacted." <sup>173</sup> And interact they did, as they emerged as two of their generation's most controversial and original thinkers, transforming each of their fields and casting an enduring legacy over future scholars in their disciplines, an intellectual partnership that is reminiscent of that unique bond shared by Carl von Clausewitz and his devoted wife Marie, whose own dogged determination after her husband's untimely death ensured that his master work, On War, came to press and that his legacy endured for posterity. On their fortieth anniversary in 1975, they "celebrated at their Pacific Palisades home, inviting forty of their closest friends and family," and "shared with guests recollections of family opposition, on both sides, to the improbable match." According to Bringhurst, "Fawn remembered enduring more abuse from certain members of the extended McKay family for marrying a Jew than for writing No Man Knows My History," her controversial biography of Mormonism's founder.<sup>174</sup> Nevertheless, theirs became an "intense relationship, characterized by strong bonds and extremely rewarding to both partners."175

While Brodie was working on his doctorate, Fawn began research on the origins of the Book of Mormon which led ultimately to her first, and very controversial, biography of the Mormon Church's founder Joseph Smith. Bernard "acted as a sounding board for her ideas and evaluated her written drafts," and Fawn "praised her husband as immensely helpful in judging her conclusions with a detachment that she herself lacked." 176 But Bringhurst writes: "The Brodies' main concern during this period was not Fawn's research but rather Bernard's academic work at the University of Chicago, where he was completing his doctorate in international relations. Bernard was naturally drawn to this field, given the momentous developments in Europe and Asia – specifically, the Spanish Civil War, Germany's rearmament and aggressive takeover of Austria

<sup>171.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 64.

<sup>172.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 67.

<sup>173.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 67.

<sup>174.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 234-235.

<sup>175.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 235.

<sup>176.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 73.

and Czechoslovakia, and Japan's aggression into the heart of China." At the University of Chicago, "Bernard was particularly influenced by two outstanding professors: Jacob Viner, a specialist in the politics of international relations and former advisor to franklin D. Roosevelt, and Quincy Wright, a world-renowned expert on the causes of war." Brodie was "Wright's star student," writing a thesis on "the impact of naval technology on nineteenth-century diplomacy," which he completed in June 1940.

After completion of his doctorate, Brodie moved to Princeton, his "first of three successive moves over the next three years, as Bernard experienced difficulty in securing an academic position, despite his outstanding record of scholarship at the University of Chicago and his excellent references." This was, according to Fawn's biographer, Newell G. Bringhurst, "at least in part due to his being Jewish at a time when many institutions still openly discriminated against Jews," an observation Bringhurst attributes to Bernard's son Bruce.<sup>181</sup> But in September 1941, after a year as a research fellow at Princeton, the Brodies moved again - this time to Dartmouth where Brodie joined the political science department from 1941 to 1943, and where, as Ken Booth recounts, he prepared a course called "Modern War, Strategy and National Policies" - which included one notably Clausewitzian lecture titled "War as a Continuation of Politics" – and whose course syllabus has been described by Booth as having "a remarkably contemporary ring" and could "claim to be the first modern syllabus course in what later became strategic studies,"182 one of many efforts by Brodie to help nurture the emergence of a new science of modern strategy. But Brodie soon "discovered at Dartmouth that energy and ability do not always lead to success in academic life," and despite his early renown, and his laudable publishing accomplishments, Brodie's "achievements failed to earn him the support of some of his immediate colleagues, and his contract was not renewed."183 Citing Bruce Brodie, Bringhurst writes: "Bernard gradually became disenchanted with Dartmouth College, viewing it as an institution 'for spoiled rich children ... not smart enough to get into the better Ivy League schools"; meanwhile, he "continued the work of turning his doctoral dissertation into a book" whenever time permitted. 184 In June 1941, these efforts paid off handsomely, when Princeton University Press published his Sea Power in the Machine Age, which was not only favorably reviewed but also "particularly timely," coming to press

<sup>177.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 73.

<sup>178.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 73.

<sup>179.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 73.

<sup>180.</sup> Newell G. Bringhurst, Fawn McKay Brodie: A Biographer's Life (Norman: University of Oklahoma Press, 1999), 75.

<sup>181.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 75-76.

<sup>182.</sup> Booth, "Bernard Brodie," 20.

<sup>183.</sup> Booth, "Bernard Brodie," 20.

<sup>184.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 77.

just a few months before the surprise Japanese attack of Pearl Harbor. The Navy "immediately purchased sixteen hundred copies of the book for its naval college, making it a best-seller by university press standards." And, "Pleased by the book's success, Princeton University Press commissioned Bernard to write another, *A Layman's Guide to Naval Strategy*, which came to press a year later and ... was adopted as a basic text by the Naval Reserve Officers Training Corps. ... Thus Bernard Brodie, who had never served in the navy or even been aboard a naval vessel, came to be considered a leading expert on contemporary naval strategy." 186

Despite Brodie's remarkable early success with his research and publishing, his position at Dartmouth was not renewed. As Dean Gordon Bill explained to Brodie in a letter, "There is rather a unanimous feeling in the Department of Political Science that you are too much of a specialist and, in fact, too big a man in your field to fit into any future plans of the Department." 187 As Bringhurst explains, the dean's letter "clearly suggested that departmental infighting and the petty jealousy of insecure academicians had doomed Brodie's career at Dartmouth."188 So, in 1942, "Bernard Brodie decided to join the United States Navy, seeing it as the most appropriate place to contribute his skills in naval strategy." <sup>189</sup> Brodie was "assigned to the Office of the Chief of Naval Operations ... to write 'combat narratives'" and "also served as chief ghostwriter for the chief of naval operations." 190 And so Brodie left the academy, working for the U.S. Navy through to the end of the Second World War. According to Booth, "He soon began to learn that the relationship between civilian experts and the military could be unsatisfactory, as well as important."191 But as World War II came to a close, Brodie's academic career would finally regain traction with a March 1945 offer from Yale's Institute of International Studies, an appointment starting on August first – just five days before the age of atomic warfare began.

### Early Reflections on an Uncertain World

It is illustrative to look back to the very earliest work of Bernard Brodie, when still a student, over a decade before he rose to prominence first as an expert first of naval strategy and later as one of the first and certainly one of the most insightful of the nuclear wizards. The young Brodie, while still an undergraduate student at the University of

<sup>185.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 77.

<sup>186.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 77.

<sup>187.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 81.

<sup>188.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 81.

<sup>189.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 81.

<sup>190.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 81.

<sup>191.</sup> Booth, "Bernard Brodie," 20.

Chicago in December 1932, penned his own thoughtful reflections on Socrates and the riddle of his legacy for Course 101 of the Department of Philosophy, titled "In Quest of Socrates – Man and Philosopher." Even today, we remain confronted by the lingering a riddle of Socrates' legacy, still unsure who the real Socrates was, or how to assess the dueling interpretations of this founding father of philosophy. Brodie's effort to reconcile these contending interpretations, and to synthesize from their ambiguous parts a coherent whole, is an early indicator of his abilities to grapple with complexity, and to find order where others might only see chaos.

Brodie's paper on Socrates earned him the following comments from his professor, Thomas Vernor (T.V.) Smith, who served as dean of the University Chicago from 1922 to 1948: "Excellent Work. This is delightfully written and shows an admirable knowledge of the sources." In the paper, one can almost sense anticipation in the heart of the young and ambitious Brodie for achieving a comparable level of philosophical greatness to that Socrates had achieved. Consider how Brodie introduced his essay on Socrates: "A happy thought to fill an idle hour is the reflection on the diversity of traits on which men are borne to greatness. Unhappily for us duller ones, genius seems an indispensable ingredient, but the consideration of the qualities that may adorn genius — or encumber it — is an intriguing one." 192 Brodie further reflects on the nature of genius:

This quest stretches back over two millennia to Athens at its peak, "a city of a beautymad people, a city throbbing with activity and political turmoil, yet singularly free of the din and clatter and confusion of our own day," one that is "laid round a hill, atop which are set the noblest structures that have ever been struck against a blue sky," marred by but "one atrocity - slavery," that "gives a life of tranquility and leisure for reflection to those who are not slaves." Noting Athens "is a city with a noble convention of deliberative discourse," Brodie writes that "[o]nly such a city could have harbored and nurtured Socrates, for the Attic genius was not a genius but a climate." Brodie confronts one of the riddles of Socrates, noting, "[W]e must search for the imprint of his person in the documents of the time," where "[w]e discover at once that their (sic.) is nothing from his own hand," and speculating in his footnotes, "I wonder if Plato is hinting at why Socrates didn't write in Phaedrus 257." <sup>193</sup> Brodie reflects, "We think for a moment on the deluge of printed pulp that pours down upon us today and reflect almost sardonically that a Socrates did not write. Nor are we disappointed; somehow, it seems in keeping with the man, even as he first takes form in our imagery. We feel at once a disdain of fame, we feel a spirit of one who lived only for the living round

<sup>192.</sup> Bernard Brodie, "In Quest of Socrates: Man and Philosopher," Paper Submitted to Course 101, Department of Philosophy, University of Chicago, December 1932, 1, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.

<sup>193.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 2.

him." <sup>194</sup> But "[s] ince he did not write, we look to those of his day who wrote of him," finding "him drawn by the pens of three men, a strangely contrasting three – a comic poet, a gentleman of letters, and one whose thought has been the dazzling glory of the ages. Each draws him or paints rather – and it is a vastly different picture that comes from each." <sup>195</sup> Brodie considers Aristophanes' "grotesque, horribly caricatured sketch," though he adds Aristophanes seems to be "lampooning Socrates undoubtedly not as a person but as representative of an institution he hated" – though this lampooning had hurtful consequences, evident in "Socrates' reference to the damage of this play on his reputation in *Apology*." <sup>196</sup>

Brodie turns next to the portrait of Socrates penned by "the gentleman of letters," 197 Xenophon, who was much, much more than a man of letters, becoming one of the classical world's greatest military historians who sought to complete the history Thucydides began but never finished, and whose adventure in Persian regime change nearly changed history, and even in failure contributed to one of the most dramatic and heroic strategic withdrawals known to military history when he led the ten thousand free men of Greece out of Persia. Noting, "If we have by chance already stolen a glimpse at the third one," the image of Socrates presented by his student Plato, "we will perhaps purse our lips at this one,"198 and "will likely turn the pages of Xenophon's Memorabilia of Socrates somewhat impatiently, for here will be portrayed a man who, [though] rather shrewd to be sure, is constantly engaged in prosaically exhorting others to virtue."199 Brodie adds in a footnote that he believes "Professor T. V. Smith's oral characterization of Xenophon's portrait as that of a 'stupid good man' ("stupidly good is the Miltonic phrase) represents a sacrifice of some degree of veracity for the admirable succinctness of epigrammatism. Of course the Xenophonic Socrates is a far duller man than the Platonic one; but 'stupid' is a very strong word, and I am afraid I cannot agree with its application in this case. For, after all, I feel even Xenophon's Socrates to be a brighter man than I."200 Brodie writes, "Whether Xenophon was himself dull, or whether he was fitting his eulogy to dull readers, we are not quite sure – we suspect the former. Only here and there do we sense shining thru the mocking, subtlety and wit of what we feel, from our stolen glance, to be the true Socrates – the man, for instance, who would teach the courtesan the art of loving 'if (when she called at his house) another

<sup>194.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 2.

<sup>195.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 3.

<sup>196.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 3.

<sup>197.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 3.

<sup>198.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 3.

<sup>199.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 4.

<sup>200.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 4.

more acceptable than you be not within." <sup>201</sup> Brodie believes "the value of Xenophon's description is not to be ignored," particularly when "in trying to delineate the philosophy of Socrates, we must sift Socrates from Plato," when Xenophon's contrary assessment "will be of inestimable usefulness. If his picture is lacking in color, it has at lest [sic.] the sharpness of an etching. We can cut from it an outline of the man to superimpose upon the less sharply outline, more 'impressionistic' form of our third picture" drawn by Plato, who "will provide us color aplenty." <sup>202</sup>

Brodie next considers his third and final image of Socrates, commencing with a reference to Emerson who wrote, "Of Plato, I hesitate to speak, lest there should be no end." First Brodie considers the friendship of teacher and student, of which the "mere thought entrances us, what a drama." Brodie imagines the beginning of this powerful friendship: "We muse for a moment on how they must have first met. We have a vision of the youthful Plato, stirred and prodded by the ebullition of his expression-seeking genius, yet perplexed for choice of a channel into which to pour it. He notices one day in the Lyceum a small group gathered round a single elderly man who is discoursing with them. The youth saunters over; unobtrusively he finds a place in the outer circle. At once he is enthralled." 205

Brodie further reflects on this "peerless communion" of two of history's greatest minds: "In the youth of almost any man's life there comes a meeting with another, an older man, in whom he sees embodied the consummation of his highest ideals," writes Brodie, who then cites C.H. Cooley's *Human Nature and the Social Order*, "Every outreaching person has matters in whose . . . presence he drops resistance and becomes like clay in the hands of the potter, that they may make something better of him. He does this from a feeling that the master is more himself than he is; there is a receptive enthusiasm, a sense of new life that swallows up the old self." Adds Brodie: "That Plato, with his unsurpassed discernment of human character, should have so taken the man for his pattern in life, and, after the man was dead, cherish all his own long and eventful life the living image of him in his memory, round which he was to carve his

<sup>201.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 4.

<sup>202.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 4.

<sup>203.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 5.

<sup>204.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 5.

<sup>205.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 5-6. Brodie further describes: "Here at last is play for his restless brain; here is sagacity to match his brilliance, and character to fit his youthful ideals. In his eagerness he lets slip into the discussion a word or two; Socrates takes notice of the newcomer, his eyes shining with delight. Perhaps (if our musing holds) we see the two alone at a later time. They are walking in the street together, the quick, graceful, finely-clad, aristocratic youth measuring his pace to the deliberate walk of the poor, ill-clothed, homely man beside him. The elder man's face is perhaps earnest, that of the younger man's is glowing; they are talking together. For ordinary men to meet on their lower common level is a simple matter, but when since, in the knowledge of the world, have two other such peerless geniuses been in like communion?"

<sup>206.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 6.

great work into a monument to him, is itself a mighty tribute to Socrates. It is such a thundering salute that the peals of it will never cease to be heard so long as books are read."<sup>207</sup> Brodie adds that this "is a monument unique in all literature and art," and in a footnote adds, "With the possible exception of Jesus, i.e., of the gospels built around him."<sup>208</sup> Brodie finds that "[i]n Plato Philosophy reaches her loftiest sweep, never again to attain those heights; in him Philosophy and Art walk, not arm in arm, but interfused — one. It is a philosophy of speculative brilliance, and an art of poetic loveliness. Cast in the mold of drama, speculation becomes a setting for character, and character for speculation. In all the dialogues" — with the exception, Brodie notes, of *Laws*, and perhaps the "minor role" in *Statesmen* of the "'young' Socrates" — Socrates is "a central figure, painted as he was in life."<sup>209</sup> And yet, asks Brodie, "how can we trust in the realism of the portrait?"

Brodie suggests we can trust in the accuracy of Plato's portrait "[m]ostly because of the singularity of the figure, and of the consistency of the singularity," and in addition, "there is an honesty in the pens of great writers; we feel that a Plato would shy from an untrue stroke as a musician from a false note. That the artistic nature of Plato should have refrained entirely from embellishments we need not maintain; but of marked idealism or caricature there seems to be none. His painting has rotundity, depth, and trueness."210 And while Plato's Socratic dialogues are "preeminently philosophy of course," Brodie notes that they "are also human dramas," since "[l]ike the classic landscapers, Plato felt even the grandest vista to be incomplete without a touch of the human."211 Mixing both Xenophon's and Plato's portrait, Brodie crafts his own distinct synthesis: "What is this composite figure that emerges? A catching figure indeed! He is a short and thick man, one who with mock lament bemoans his pot-belly. A face of almost startling ugliness, like the mask of Silenius [sic.], yet in a sense attractive. Large protruding eyes, broad features, a stubbed nose "with nostrils looking toward heaven," thick lips, a white beard - a face attuned to the changing mood of the discourse, the cheeks twitching in sallies of repartee, the countenance downcast in mimicked disconsolation at an argument gone askew, always a sober

<sup>207.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 6.

<sup>208.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 7.

<sup>209.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 7.

<sup>210.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 7.

<sup>211.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 8. Brodie further elaborates his theme of Plato as the master portrait artist: "And all this genius of artistry, all this vitality of expression, finds outlet in his portraits; for Plato is the portrait painter supreme. Now with the pulsating exuberance of a Rubens, here with the bold, broad strokes of a Hals, there with the restrained elegance of a Van Dyke, mostly with the Rembrandtian softness of shading in lights and shadows, he plays on a mood now in this character, expressing himself thus on another; on his central figure he plays them all by turn and then together. In one place we see the tacit admiration in the murmurs of the youthful Lysis, or the gentle praise by Laches; then, with characteristic Platonic jest, the most sustained and extravagant praise of Socrates in the dialogues is placed in the mouth of a drunken reveler." Brodie, "In Quest of Socrates: Man and Philosopher," 10-11.

earnestness staring out of the buldging [sic.] eyes – it is a face that in the supreme moment can glow in transcendent nobleness. ... He would have beauty in all things, but most of all in the soul."<sup>212</sup>

Brodie notes Socrates "was the constant mocker, the comic sometimes the buffoon," and "[y]et there will slip into this clownishness a moment of seriousness, and we have a confession of faith, citing *Meno*: 'Some things I have said of which I am not altogether confident. But that we shall be better and braver and less helpless if we think that we ought to inquire, than we should have been if we indulged in the idle fancy that there was no knowing and no use in searching after what we know not; that is a theme upon which I am ready to fight, in word and deed, to the utmost of my power." And, Brodie concludes, "Where this creed carried him the world well knows. He might have preferred to forego the glory of martyrdom, but when offered alternatives he can see no choice. In perhaps the most serious hour of his life, *still* not without his jest, he explains to the judges of Athens that for Socrates there can only be one way of life. He is the 'gadfly' of the Athenians – his 'inner voice' wills it. Must he live without examining life? Then let him examine lifelessness." <sup>214</sup>

In a two-part appendix to his paper, Brodie presented his own "APOLOGIA" to Professor Smith: "The foregoing paper represents the product of a mature 'incubation'. I enjoyed writing it immensely. However, the unexpected shortening of the available time prevented the like development of a more technical approach to the Socratic and Platonic philosophies. In the next several pages I am presenting some fragmentary ideas I played with. They represent mental abortions, and are to be taken indulgently." The first, "Appendix A," is "The Daemon of Socrates," in which he recalls a friend riding a swiftly galloping horse, and "with my apprehension over her safety quite overshadowed by admiration of her boldness, she turned to me, and with a lovely and complete ingenuousness remarked, 'this damned horse won't stop!' It was such a horse that Socrates rode – his Daemon. Not a perverse animal to be sure, but a

<sup>212.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 11-12. Socrates is further synthesized by Brodie: "There is in him a total, almost disconcerting freedom from vanity; he remains unabashed by the most brilliant display of splendor. Abstemiousness is not only convenient for a poor man, he says, but good in itself. To be inurred [sic.] to hardships is not to suffer from them. We have Xenophon's charming remark that 'he took only so much food as he could eat with a keen relish; and, to this end, he came to his meals so disposed that his appetite for his meat was the sauce to it.' Nevertheless, on occasion, for conviviality's sake – discussion being the only luxury he cannot dispense with – he can be the gourmand; he can be the one who, having drunk more than anyone in the company, will cast his glance about at the recumbent figures on the floor, and, going out to meet the rising sun, will pass the day as usual. The son of a midwife, he is himself a 'midwife of other men's ideas'. The same lips that discourse on poetry will continually call to witness the cobblers, the horse-trainers, and the pack-asses. He is an argument-mad man. He can be led about by the bait of proffered argument like 'a cow after a bucket of grain.' He is a stranger to the refreshing countryside, for his love of learning will not suffer him to leave the city's gates. If Phaedrus will threaten to withold [sic.] all discussion in the future unless Socrates compiles with his wishes, the capitulation of 'this poor lover of discourse' is immediate. Like argument, so beauty. His love for music will bring him to learn the harp in his old age, tho the other pupils will laugh at him and call their teacher 'grand-papa's master'."

<sup>213.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 16-17.

<sup>214.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," 17.

spirited and noble steed it was, headstrong, and unwaveringly carrying his rider down the course, though it led into certain mishap."<sup>215</sup> Brodie further probes his analogy: "But perhaps my analogy is an unhappy one. Perhaps of the two the daemon was the rider. No, we must forego the horse altogether; it was an automobile, with Socrates at the wheel, and the daemon was the back-seat driver. Whether this was his playful appellation for an imperious voice of conscience, or whether Socrates actually was a potential psychiatric patient, may remain an eternal bait for scholarly squabbles. It is perhaps more curious than significant. In the gravity of the *Apology* it seems to be something real enough. But in the *Phaedrus* it is invoked to guide an action of trifling pleasantry; that is, to guide it straightway into farce – yet he explicitly calls it a "voice in my ear." Somehow, an orthodox and self-respecting voice would never take part in banter. There are the two extremes. One may take one's choice."<sup>216</sup>

### Before Deterrence: 'Peaceful Change' and the Prevention of War

The ambiguous riddle explored by Brodie as an undergraduate at Chicago in 1932 of finding Socrates from the few portraits left to us by his students and contemporaries was for Brodie a "happy hazard." But by 1938, now a doctoral student there, he began to grapple with far more potentially harmful sorts of hazards, those associated with war and its prevention - the fundamental challenge that would define his work for another forty years. In the spring of 1938, Brodie wrote a term paper titled "Can Peaceful Change Prevent War?" for submission to his Political Science 363 course, taught by the famed scholar of war Quincy Wright, Brodie's mentor and perhaps Brodie's most important advocate as he would soon embark upon his first job quest as a young scholar. In this paper, which examined the argument, gaining strength in some quarters before World War II erupted in full fury – but an argument that Quincy Wright would passionately oppose, as a thinker and as an activist – that peaceful territorial concessions and boundary revisions could prevent war, a view later pilloried (and harshly judged by history) as appeasement to aggression but which many theorists, largely within the idealist tradition (who would soon be displaced by the harder-nosed realists) before the war hoped would prevent the escalation of violence and thus fore-

<sup>215.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," Appendix A, i.

<sup>216.</sup> Brodie, "In Quest of Socrates: Man and Philosopher," Appendix A, i-ii. In his "Appendix B, The Ethics of Socrates," Brodie revisits the thorny challenging of separating Plato from his Socrates: "On the question, in the Platonic dialogues, of precisely where Socrates' philosophy ends and Plato's begins, there has been a general, and I think healthy, unanimity of disagreement," and Brodie concludes that it's "only from an extended and close reading of the dialogues that one can begin to intuit the distinction. One can begin to sense where Plato speaks [through] Socrates, or where the words of Socrates seem to ring joyously true. That the words of other scholars whom one has read may lie in the back of one's mind to warm one's own conclusions is unquestionably true. That one's demarcation may be wholly erroneous is also more than possible. Let the student recognize the difficulty and take his chances; it is at worst a happy hazard." Brodie, "In Quest of Socrates: Man and Philosopher," Appendix B, iv-v.

stall the descent of Europe into another fratricidal, continental-wide contagion. In Brodie's analysis, both in its breadth and subtlety as well as its thoughtful discussion of the peaceful change advocates' effort to prevent war, one can gain a foretaste of his future theoretical development of deterrence theory, which bore many parallels with his earlier analysis of peaceful change, and can be viewed in many ways as Brodie's response to it, modifying it to reflect the darker world view of the realists, and to achieve war avoidance not by naïve hope alone, but by a more realistic mutuality of fear of the risks and dangers of nuclear destruction.

Fred Kaplan, one of just a few scholars who discuss Brodie's early, unpublished works dating back to his student years, recalls in Wizards of Armageddon that Brodie was "Quincy Wright's start student in his graduate student days," and when he started work on his dissertation in 1939, he "won the department's only fellowship, an award of \$350, and was assigned to assist Professor Wright, then in the final phase of his leviathan," A Study of War. Wright was so impressed with Brodie that he would send out "well over a dozen letters to acquaintances in top-notch colleges across the country advertising 'an A-number-one man, Bernard Brodie'" the next year. 217 In addition to learning much from Wright, Kaplan notes Brodie "also greatly admired Jacob Viner of the economics department," who brought to Chicago "a course new to the field of economics - the politics of international economic relations."218 Like Wright, Viner embraced interdisciplinarity, and in contrast to so many of his generation who embraced econometrics, he came to "see the true nature of economics as an interdisciplinary subject – and one dominated by considerations of political power." <sup>219</sup> And so, as Kaplan observes, from Quincy Wright and Jacob Viner "Brodie learned some valuable lessons that Brodie's contemporaries in other universities were, in the main, not getting even by the end of the 1930s."220 Kaplan notes that Wright was a "major figure in the Hyde Park branch of the Committee to Defend America by Aiding the Allies, an anti-appeasement organization of some influence in 1939 and 1940 that favored repealing the Neutrality Act"221 - a view that Brodie's early writings would reflect, and which would influence the younger Brodie to embrace not only realism, but to reject the moral underpinnings of appeasement, then known as "peaceful change."

In 1938, Brodie wrote a paper for Quincy Wright's class with the title, "Can Peaceful Change Prevent War?" that postulated that, in the face of "the decay of the postwar settlements of 1919 and a resurgence of international violence, a method must be devised of establishing procedures for allowing changes in the international system, of avoiding

<sup>217.</sup> Fred Kaplan, The Wizards of Armageddon (Stanford: Stanford University Press, 1991), 14.

<sup>218.</sup> Kaplan, The Wizards of Armageddon (1991), 14.

<sup>219.</sup> Kaplan, The Wizards of Armageddon (1991), 14.

<sup>220.</sup> Kaplan, The Wizards of Armageddon (1991), 15.

<sup>221.</sup> Kaplan, The Wizards of Armageddon (1991), 15.

war by accomplishing peacefully the ends for which nations might otherwise despairingly resort to war."222 The peaceful change advocates would, however, become stigmatized by another word that would long haunt their effort to engineer preventive re-adjustments to international boundaries to prevent war: appeasement. As Brodie wrote in this paper, and as cited by Fred Kaplan, in a "particularly Viner-esque passage, Brodie responded: 'If change is to be effected to correct an injustice, or to rectify disequilibrium, it necessarily follows that states will find themselves called upon to make material concessions without receiving any material compensation, which they cannot be expected to do willingly."223 And, importantly, using the often unspoken word appeasement, Brodie added, "Are we to expect the state yielding its territories to be entirely appeased by the proud contemplation of the generosity of its contribution to world order? These are questions which cannot be glossed over. If the problems they entail cannot be satisfactorily solved, we need concern ourselves no further with the idea of peaceful change."224 Strong words, from a young man influenced by realists who approached appearement with a healthy, and soon to be historically verified, skepticism. But after the atomic bombings in the final hours of World War II upped the ante considerably, raising the price of violent changes to the international system, Brodie would in many ways reprise his original views rejecting peaceful change so decisively, and in time would incorporate into his views on nuclear deterrence elements that would embody the arguments put forth by the advocates of peaceful change who like Brodie sought to prevent the all but certain calamity of total war as experienced, seeming without purpose, after World War I, embracing not the metaphor of Munich but that earlier haunting vision of cascading systemic collapse whose spark took place at Sarajevo.

As for the lessons Brodie learned from Viner, Kaplan writes that these "reinforced those of Wright's and added a new dimension. Power, thought Viner, could be surrendered only to something more powerful still. Governments will not lay down their swords before a world government simply out of good will or in the name of international cooperation." Viner would also play an influential role later on when Brodie was trying to make his mind up about an essential dilemma of the nuclear age: would atomic weapons stabilize or destabilize the international order? As Kaplan recounts, "On the question of whether the A-bomb would deter or foster war between the great powers, Brodie had still not made up his mind" by September 1945, a month after the historic atomic bombings of Hiroshima and Nagasaki and Tokyo's subsequent surrender. That month he attended a conference at the University of Chicago where he presented an outline of his thoughts that would be elaborated later that fall and

<sup>222.</sup> Kaplan, The Wizards of Armageddon (1991), 15.

<sup>223.</sup> Kaplan, The Wizards of Armageddon (1991), 15.

<sup>224.</sup> Kaplan, The Wizards of Armageddon (1991), 16.

<sup>225.</sup> Kaplan, The Wizards of Armageddon (1991), 15.

published as his first monograph on the implications of the atomic bomb, his 1945 28-page paper, *The Atomic Bomb and American Security*. But Brodie's old mentor Viner, during his conference talk in Chicago, argued that the A-bomb "makes surprise an unimportant element of warfare" since now "[r]etaliation in equal terms is unavoidable and in this sense the atomic bomb is a war deterrent, a peace-making force." Viner, like Brodie, understood that cities "were the only efficient target of an atom-bomb attack," to which Viner added the logical argument that any atomic-armed nation would "certainly retaliate with an atomic attack of its own" if so attacked, neutralizing any advantage of striking first. Aplan cites Viner's remarks before the American Philosophical Society in Philadelphia on November 16, 1945: "What difference will it then make whether it was Country A which had its cities destroyed at 9 a.m. and Country B which had its cities destroyed at 12 a.m., or the other way around?" This "logic was indeed unassailable, and Brodie was finally convinced."

Brodie's views would soon take on their own uniqueness, distinct from those of his interwar mentors, and after the nuclear era began his strong advocacy of deterrence and consistent rejection of more bellicose viewpoints that he believed brought greater risk by undermining the all-important goal of deterring the outbreak of nuclear war would come to reflect some similarities with the peaceful change school that he had initially approached, in his student years, with the same skepticism expressed by his mentors Wright and Viner. Brodie's approach to deterrence, nuanced as it was, would be perceived by some of his critics as sounding weak in contrast to the more bellicose rhetoric of the warfighting school – as discussed by Fred Charles Iklé below – and epitomized Herman Kahn's hyperrealism (as noted by Raymond Aron, the philosopher of war and student of Clausewitz, who in 1970 wrote of Kahn, "He imagines, invents, and describes with minuteness bordering on unreality, dozens of situations of conflict reduced to simplified schemes, and the decisions that suit these situations. Failing science fiction, what other name but strategic fiction could one give to this form of literature?"229). In contrast to this surrealism seen in Kahn's hyperbolic approach to nuclear war, Brodie's approach to deterrence was marked from the get go by the very same sober realism that had led his mentors to become skeptics of peaceful change, and all too aware of its descent from noble intention to the all too tragic consequences of appearement.

In the pages below we will consider Brodie's early views on peaceful change in greater detail – but first, let us consider briefly the genesis of the term, its original

<sup>226.</sup> Kaplan, The Wizards of Armageddon (1991), 27.

<sup>227.</sup> Kaplan, The Wizards of Armageddon (1991), 27.

<sup>228.</sup> Kaplan, The Wizards of Armageddon (1991), 27.

<sup>229.</sup> Raymond Aron, "Modern Strategic Thought," tr. J. E. Gabriel, *Problems of Modern Strategy* (New York: Praeger, 1970), 31. As cited by Barry D. Watts, *The Foundations of U.S. Air Doctrine: The Problem of Friction in War* (Maxwell AFB, Alabama: Air University Press, December 1984), 103, n. 91.

aspirations during the interwar years, and its ultimate conflation in the popular mind with policies of appeasement, which after Munich would be largely repudiated. In his article on peaceful change in the Max Planck Encyclopedia of Public International Law, Hisashi Owada explains that "the term peaceful change came to acquire its specific sense in the context of the Covenant of the League of Nations, referring to the process contained in Art. 19 [of the] League Covenant"; and, citing I.L. Claude Jr.'s Swords into Plowshares: The Problems and Progress of International Organization, he notes that a "conceptual line of distinction came to separate the general problem of pacific settlement from the specific problem of peaceful change," with peaceful change coming "to be regarded as denoting 'a somewhat specialized concept' that referred to 'the problem of substituting amicable for forcible methods of resolving disputes' that arose 'out of demands for alteration of the legally established status quo'. Thus peaceful change as the specific term became popular in the political and legal milieu of the interwar period."230 Owada recalls that "during the interwar period a few incidences of peaceful change to the status quo were moderately successful, albeit not by virtue of the invocation of Art. 19." An example of this was in the Washington Conference of 1924, when "a diplomatic compromise was reached regarding the restoration to China of former German holdings of the Shantung Peninsula which had been given to Japan by the Versailles Peace Treaty. Similarly, the United States of America and Great Britain were able to reach agreement regarding the control of the Canton-Enderbury Islands."231 However, Owada notes that in "these cases, however, it was not the procedures of peaceful change that accounted for these results, but the political will of the parties involved." Citing Frederick S. Dunn – whom Brodie discussed in detail in his paper on peaceful change, and who would author the introduction to *The Absolute* Weapon, "The Common Problem," the pioneering book edited by Brodie in 1946 on the challenge of nuclear weapons - "It was said on these instances that, '[i]f the will to find a settlement is present, almost any kind of procedure will do. If the will is not there, no procedure will work, no matter how elaborate."232 However, Owada notes, the "resort to institutional mechanisms of peaceful change can backfire if the political will for peaceful change is not there," citing as an example the Munich Agreement of September 29, 1938.<sup>233</sup> Again citing Dunn, Owada writes that "World War II was blamed on a 'resort to procedures of peaceful change, especially the procedures

<sup>230.</sup> Hisashi Owada, "Peaceful Change," Max Planck Encyclopedia of Public International Law, Section 3, http://www.mpepil.com/sample\_article?id=/epil/entries/law-9780199231690-e1452&recno=19&, citing I.L. Claude Jr., Swords into Plowshares: The Problems and Progress of International Organization 4th edition (New York: Random House, 1971), 222.

<sup>231.</sup> Owada, "Peaceful Change," Section 17.

<sup>232.</sup> Owada, "Peaceful Change," Section 17, citing F.S. Dunn, "Law and Peaceful Change," American Society of International Law Proceedings 38 (1944), 65.

<sup>233.</sup> Owada, "Peaceful Change," Section 18, citing F.S. Dunn, "Law and Peaceful Change," American Society of International Law Proceedings 38 (1944), 63.

which led up to the settlement at Munich.' While 'the statesmen who engineered that particular alteration of the status quo confidently believed that they were avoiding a war', it turned out to be a disastrous move because 'it disturbed the existing security system, such as it was, and turned the balance in favour of the aggressor State without gaining any comparable advantage for the Allied nations." 234

Brodie starts his analysis off by noting, "In recent years, with the progressive decay of the settlements of 1919 and the alarming resurgence of violence or the threat of it to hasten this decay, or to effect other changes deemed by some states to be desirable, we have been hearing a great deal about the inevitable necessity of instituting procedures for effecting peacefully changes in the status quo."235 He added, in what one might call Clausewitzian fashion, that "[i]n so far as they have attempted to distinguish the causes of war from the conditions in which it occurs, students of international affairs, and protagonists of world order generally, have argued the simple logic that to avoid war one must first of all seek to accomplish by other than warlike measures the ends for which states despairingly resort to it." Brodie further notes that the "only anomaly is that these thinkers apparently withhold their approval when a statesman devotes himself to the principle with such forthright ardor as does Mr. Neville Chamberlain."236

Brodie explains that "territorial revision historically has with relatively few exceptions come as the eventuation of a war," and that it thus logically "follows that if needful revision could be accomplished by processes essentially peaceful, war would be unnecessary, and its suppression would cease to be so overwhelming a problem." He adds that "propounders of this doctrine are finally confirmed in their views by the observation that the states today most threatening to the peace are those dissatisfied with the status quo and which feel themselves to have suffered the most damaging and humiliating wrongs in the last great territorial reallocations, that is, in the peace treaties following the World War." Further supporting this view was the "negative attitude towards international cooperation to maintain the peace demonstrated by certain states which profited most extravagantly in those settlements, such as Poland, and even Italy." 238

<sup>234.</sup> Owada, "Peaceful Change," Section 18 citing F.S. Dunn, "Law and Peaceful Change," American Society of International Law Proceedings 38 (1944), 63. As Owada explained, "The Munich Agreement epitomized the danger of indiscriminately regarding any attempt for peaceful change as panacea for preventing conflict and ensuring international peace and security. It would be fair to say that the unsuccessful efforts at moderating Axis policies through diplomatic appeasement were wrongly characterized as peaceful change, since they were, in fact, based on illegitimate arbitrary decisions emanating from the desire for "peace at any cost," resulting in territorial amputations. Whatever the characterization of this unhappy event, it is clear that resort to procedures of peaceful change cannot effect a change that ensures sustainable peace, unless the situation emerging from such procedures is one that is endowed with legitimacy endorsed as such by the international community." 235. Bernard Brodie, "Can Peaceful Change Prevent War?" Term Paper Submitted to Political Science 363, Spring 1938, University of Chicago, 1.

<sup>236.</sup> Brodie, "Can Peaceful Change Prevent War?" 1.

<sup>237.</sup> Brodie, "Can Peaceful Change Prevent War?" 1-2.

<sup>238.</sup> Brodie, "Can Peaceful Change Prevent War?" 2.

While Brodie finds much to criticize in the logic of the argument put forth by the peaceful change advocates, it is interesting to note their effort to prevent war by addressing its root cause (and thereby prevent the calamitous losses brought on by war) is reminiscent, to a certain degree, of the motivation, post-Hiroshima, that deterrence theorists would bring to their efforts to prevent war through the underlying threat of nuclear retaliation, and to thereby prevent an even greater calamity. The peaceful change theorists sought to avoid war by pre-emptively modifying territorial boundaries, nipping the causes of war in the bud and thereby preserving order, whereas the deterrence theorists would later seek to avoid war by mutually affirming the permanence of the post-war division of Europe (and much of the rest of the world, albeit in a less orderly fashion), and thereby pledge not to violate the new, post-armistice territorial boundaries that defined the post-war division of Europe. It may thus seem ironic that the younger Brodie, many years before digesting the full strategic implications of the splitting of the atom and the weaponization of the unlocked forces of creation, takes the peaceful change advocates to task for their logical inconsistencies, and asserts that "we can criticize this proposition on purely logical grounds." 239 As he explains, their error "compromises, it would seem, two false assumptions: first, that war follows from the need of revision rather than merely the desire for it; second, that the revision which might be effected by a consultation of disinterested Powers based on considerations of justice would be so like the revision sought by war as to obviate recourse to it." Brodie concludes that "territorial revision follows because its provisions are considered advantageous by the victor and because the objections of the vanquished are for the time being of no consequence."240

Thus, Brodie observes, war "serves the eminently useful end, for purposes of conference, of nullifying the claims of one of the parties," which explains "why the settlements following major wars are always so far reaching." <sup>241</sup> Brodie believes that it is mistaken "to suppose that by 'peaceful change' we avoid change by violence, because the kind of change produced in the latter case is reasonably sure to be different from that of the other, unless, indeed, the 'peaceful' change is nothing other than an obeisance to the threat of force." <sup>242</sup> Brodie criticizes Mr. F. S. Dunn, the author of *Peaceful Change*, for "referring to such *faits accomplis* as the Japanese conquest of Manchuria, the Italian conquest of Ethiopia, and the German re-militarization of the Rhineland as bearing evidence that 'no peace system can be expected to work for any length of time unless it contains adequate provisions for bringing about changes in the status quo as required

<sup>239.</sup> Brodie, "Can Peaceful Change Prevent War?" 2.

<sup>240.</sup> Brodie, "Can Peaceful Change Prevent War?" 2.

<sup>241.</sup> Brodie, "Can Peaceful Change Prevent War?" 3.

<sup>242.</sup> Brodie, "Can Peaceful Change Prevent War?" 3.

by changing conditions." <sup>243</sup> Brodie further notes that "[t]he Japanese rejection of the Lytton report, and Japan's retirement from the League because of the Assembly's acceptance of that report, are on the other hand incontestable proof that disinterested proposals for revision, even when striving for the utmost in conciliatoriness, will not stay the hand of the conqueror." <sup>244</sup>

As for "Italy's claims to revision," Brodie believes these "would certainly never be seriously entertained by a tribunal basing its decisions on principles of justice." <sup>245</sup> Brodie cites Gilbert Murray, who in his chapter "Revision of the Peace Treaties," in the 1933 volume edited by L. Woolf, The Intelligent Man's Way to Prevent War suggested that "[i]f revision on grounds of justice and self-determination were ever to be realized, the first change would be some large surrenders by Italy; a great part of the South Tyrol should go back to Austria; some Slovene districts at the head of the Adriatic to Yugoslavia; and the Dodecanese, where Italian rules has been particularly oppressive, to Greece." (Brodie adds that "[t]his was of course written before the Ethiopian venture." 246) As for the case of Germany, Brodie suggests that "an international committee seeking an equitable adjustment of the problem would advocate any such solution as that reached by Herr Hitler is more than questionable."247 Brodie adds, citing Quincy Wright: "In justice, it is necessary to point out that the idea of 'peaceful change' as it is ordinarily conceived by writers comprises two distinct elements, of which territorial revision is often the subsidiary one. Frequently the concept foremost in their minds is of the peaceful revision of existing international law. Thus, Professor Quincy Write explicitly states that: 'Two types of political change have been and will be from time to time necessary, change in the general principles of international law and change in territorial boundaries and status.' ... None, certainly, would quarrel with the first of these attitudes of approach, and, for that matter, scarcely with the latter either, provided there is a sufficiency of clear thinking on what is involved in the proposal to institute procedures, other than those that already exist, for the peaceful alteration of territorial status, and provided also that not too much is claimed for it as a final preventative of war."248

Brodie suggests that "[m]ost thinkers would agree, for example, with Professor Rappard's appraisal of the international anarchy that prevails as deriving in large part from the absence of any pacific means of modifying international law without

<sup>243.</sup> Brodie, "Can Peaceful Change Prevent War?" 3. Citing Dunn, F. S., Peaceful Change, 1937, 2.

<sup>244.</sup> Brodie, "Can Peaceful Change Prevent War?" 3.

<sup>245.</sup> Brodie, "Can Peaceful Change Prevent War?" 3-4.

<sup>246.</sup> Brodie, "Can Peaceful Change Prevent War?" 4.

<sup>247.</sup> Brodie, "Can Peaceful Change Prevent War?" 4.

<sup>248.</sup> Brodie, "Can Peaceful Change Prevent War?" 4-5.

the consent of all states concerned."<sup>249</sup> Thus, as Brodie explains, "Rappard conceives the international community as being 'in the position of a State whose constitution would refuse to allow for legislation by majority and which contained no provisions permitting its own amendment."<sup>250</sup> Brodie adds that "[a]ll would concur also in his affirmation that many phenomena of international importance are at present still beyond the orbit of international law. Nor would anyone dispute that it would serve the cause of peace to amend such glaringly unjust territorial distributions as have resulted from the prostration in a recent war of one of the claimants."<sup>251</sup>

"That," Brodie contends, "surely, is problem enough, and proposals beyond that must be regarded very critically," something Wright "undoubtedly [had] in mind in the above quoted passage, as it is implied in the statement immediately following, which reads: 'as yet states which are dissatisfied with treaties and boundaries, such as Germany, Italy, and Hungary, are not convinced that these (existing) procedures are adequate to effect even such changes as commend themselves to the general public opinion of the world." 252 Brodie cautions that "[o]ne can speak altogether too glibly of the necessity of formulating some peaceful procedures for accomplishing whatever changes may from time to time in the future be required, or of the potency of such a system in the expunging of war." 253 Brodie contends, as he would later in life when assessing the impact of atomic weapons on international security, that "any consistently negative approach to the problem of peaceful change must necessarily be inadequate," as "[i]n the history of human institutions and relationships, of whatever nature, from the political to the aesthetic, the reality of change has been the most persistent characteristic." He thus cites Henry B. Brewster, who was cited by Steed, H. W. in Vital Peace, p. 318: "The subtitle of man's history might be: Annals in the Discomfiture of the Orthodox," with Brodie suggesting "The 'Orthodox' we may interpret as meaning those who have too pervasively adjusted themselves to the status quo."254 Brodie asserts that "[c]hange in territorial political status we will have, since, as a glance at any historical atlas will indicate, change we most certainly have had," and consequently, "[t]he changes to be expected in the future need be neither so rapid nor so violent as those that have characterized the past."255 On the cusp of World War II, Brodie articulates a theory on the dangers of rapid change and the necessity to reduce both its degree

<sup>249.</sup> Brodie, "Can Peaceful Change Prevent War?" 5.

<sup>250.</sup> Brodie, "Can Peaceful Change Prevent War?" 5, citing Rappard, W. E., "The Beginnings of World Government," in *Problems of Peace*, Fifth Series, 16.

<sup>251.</sup> Brodie, "Can Peaceful Change Prevent War?" 5.

<sup>252.</sup> Brodie, "Can Peaceful Change Prevent War?" 6.

<sup>253.</sup> Brodie, "Can Peaceful Change Prevent War?" 6.

<sup>254.</sup> Brodie, "Can Peaceful Change Prevent War?" 6.

<sup>255.</sup> Brodie, "Can Peaceful Change Prevent War?" 6-7.

and frequency. Only a few years later, amidst the smoldering ruins of Hiroshima and the start of what would soon evolve into the bipolar, post-war, nuclear order, Brodie would extend his thoughts on rapid and uncontrolled change and its inherent dangers to the fragility of the nuclear peace.

As he noted in 1938, "there is little reason to suspect that boundaries will ever become wholly static. And since change purchased at the price of major wars of gigantic devastation and ruin is far more dearly priced than any civilization can afford to pay, the problem of devising procedures for the peaceful establishment of territorial equilibrium, where that equilibrium is indisputably lacking, is one that must resolutely be faced."256 Much of his post-Hiroshima theoretical work would be devoted to this very challenge.<sup>257</sup> Brodie worked his way through the concept on the eve of World War II, when the imagination of destruction was shaped by the devastation of World War I. The specter of nuclear destruction would greatly exceed this, creating the very mechanism that did not exist in 1938, one of absolute, unanimous, and ubiquitous fear that the price of war was one too high to pay. Brodie argues: "we must first understand that since the peaceful change of territorial status by voluntary cession or incorporation already exists and has long existed, any discussion of new procedures of peaceful change necessarily implies constraint by the community of nations of the state that must make the requisite sacrifice. Most criticism of Article 19 of the Covenant, we ought notice, is not that it amplifies unduly the claims marked by a threat to the peace of the world, but that the decision of the Assembly must have an unanimity embarrassingly difficult to attain, and that it is only advisory and not coercive. If change is to be effected to correct an injustice, or to rectify disequilibrium, it necessarily follows that states will find themselves called upon to make material concessions without receiving any material compensation, which they cannot be expected to do willingly."258 If not, then we must respond to questions such as, "What means of persuasion are intended to be employed? What is to guaranteed that the changes proposed and enforced are not at the disproportionate expense of the weak states?"259 Brodie notes that "[h]istory, even the most recent, is markedly barren of instances that would support such expectations," so "[w]hat is to prevent the disaffection of the state making the sacrifice from being quite as great an element of disruption in our international order as that of the state whose grievance is thereby to be remedied? Are we to expect the state yielding its territories to be entirely appeared by the proud contemplation of the generosity of its contribution to world order?"260 Brodie suggests

<sup>256.</sup> Brodie, "Can Peaceful Change Prevent War?" 6-7.

<sup>257.</sup> Brodie, "Can Peaceful Change Prevent War?" 7.

<sup>258.</sup> Brodie, "Can Peaceful Change Prevent War?" 7.

<sup>259.</sup> Brodie, "Can Peaceful Change Prevent War?" 7-8.

<sup>260.</sup> Brodie, "Can Peaceful Change Prevent War?" 8.

that "[t]hese are questions which cannot be glossed over," and that "[i]f the problems they entail cannot be satisfactorily solved, we need concern ourselves no further with the idea of peaceful change." A very similar set of questions would pertain to the post-Hiroshima world, though instead of world order being sustained through selfless generosity, it would instead rely upon a more prudential self-preservation.

Brodie adds that "[a]ssuming these obstacles may be overcome, it is necessary to establish our objectives in instituting our procedures of peaceful change," which he notes is intuitively obvious, as the very "term 'peaceful change' itself indicates that our primary motive in the establishment of such procedures is the prevention of war."262 Brodie considers the prevention of war from both the long- and the short-term perspective, noting that the issue of justice is tantamount to the former but not necessarily essential to the latter: "Our presumption has been that in the long term point of view this can be secured only when the initial emphasis is on the principle of justice. But from the short term point of view the avoidance of war and the dispensing of justice may easily be antithetical."263 Brodie proposes that by "d[i]viding the principle of the pursuit of justice into differing categories according to whether our ends are bold or modest, our objectives may be posited as being three in number."264 These are: "first, the rectification of conspicuous injustices in the existing situation, particularly those brought about as the result of recent wars; second, the pursuit of an ideal equilibrium founded on previously deduced and generally recognized principles of justice and responsive to the recurrent need of new adjustment; third, the immediate avoidance of threatened war."265 These three objectives would, with some modification, bear an intriguing similarity to those of nuclear deterrence, with the third perhaps being most salient in the short-term, the second being longer-term in nature and essential to the endurance of deterrence as a system of war-avoidance, and the third emerging only later, at the end of the Cold War, when the inherently conspicuous injustices of Soviet rule were very rapidly, and to most analysts unexpectedly, rectified, though the many proxy wars in peripheral theaters of the Cold War suggest lower-risk efforts to rectify injustice could regularly be made far from the central front, as Soviet- and Chinesesponsored revolutionary movements sought to redress colonial grievances within a global system that could tolerate such efforts at rectification along the periphery so long as equilibrium was maintained at the center.

On his first objective, "the correction of glaring injustices," Brodie explains that it thus far in his analysis "was directed to those of recent origin," and that claims rooted

<sup>261.</sup> Brodie, "Can Peaceful Change Prevent War?" 8.

<sup>262.</sup> Brodie, "Can Peaceful Change Prevent War?" 8.

<sup>263.</sup> Brodie, "Can Peaceful Change Prevent War?" 8.

<sup>264.</sup> Brodie, "Can Peaceful Change Prevent War?" 8.

<sup>265.</sup> Brodie, "Can Peaceful Change Prevent War?" 8-9.

in more distant historical wrongs lose saliency in part for reasons of "common sense," noting that "[n]o one can question that the seizure by the United States of Mexican territory in the war of 1847 was clearly a wrong as many decried on the continent of Europe in the same century. Yet who in his senses would advocate the restoration of that territory today?" 266 And further, "Such a problem as the restoration of Poland was unquestionably compromised by the century and a quarter of the non-existence or subjection of that state," just as "righting the wrong of 1871' in respect to Alsace-Lorraine after almost fifty years was very far from being clearly unwrong in itself,' One must remember that the French refused, on rather casuistic grounds, the plebescite [sic.] besought by the Germans." 267

Brodie also suggests that the "re-annexation by Denmark of the northern zone of Schleswig was similarly embarrassed by the long interim that had elapsed since 1864," and "[o]nly the unusual and far-sighted restraint of the Danish Government of 1919 prevented undue aggravation of the issue."<sup>268</sup> Brodie argues that "[n]ew political dominion over a territory creates a situation to which institutions tend in the long run to adjust, and often after a lapse of time 'natural' circumstances plead as much against a change as did those prevailing at the time the current regime was established."<sup>269</sup> Brodie further explains that "[t]his tendency varies considerably with the territory and the character of the political control, but it always exists, and itself argues powerfully against over-readiness to disturb the status quo. It is fatuous to reopen the case of a humiliation that has long since ceased to smart."<sup>270</sup> Brodie believes that "'Historic' claims generally have been given altogether too much consideration," and that "[t]hey merit consideration only so far as an existing maladjustment can be explained by them."<sup>271</sup> He recalls that a "recent Czechoslovakian visitor to this country commented ruefully on the European habit of beginning all disputes with references to the Year 800!"<sup>272</sup>

In our own time, efforts to frame contemporary conflict through a lens of historic grievances, such as we have seen in the Balkans, as well as throughout the Middle East, including the incessant conflict between Israeli and Palestine, and even American claims against Saddam from decades earlier, illustrate Brodie's point nicely. But Brodie does concede that "we must recognize that boundary settlements of some antiquity may have caused disturbances of a serious economic character surviving undiminished into the present day," and these "surely deserve attention even, or rather particularly, when

<sup>266.</sup> Brodie, "Can Peaceful Change Prevent War?" 9.

<sup>267.</sup> Brodie, "Can Peaceful Change Prevent War?" 9.

<sup>268.</sup> Brodie, "Can Peaceful Change Prevent War?" 9.

<sup>269.</sup> Brodie, "Can Peaceful Change Prevent War?" 9-10.

<sup>270.</sup> Brodie, "Can Peaceful Change Prevent War?" 10.

<sup>271.</sup> Brodie, "Can Peaceful Change Prevent War?" 10.

<sup>272.</sup> Brodie, "Can Peaceful Change Prevent War?" 10.

not challenged by threats of resort to violence to secure revision."273 Brodie considers several historical cases that illustrate some problems associated with the rectification process, and points out that "[w]e must remember that in these instances, and in many others, the same powerful considerations would have to be taken into account in any attempt at revision and would clearly militate against it. Any change, moreover, might very well cause as much discontent as it healed."274 Brodie has found that where such "dispositions have proved ill, the remedy indicated is more frequently the revision of principles of law, both of the international and the municipal categories, than of territories," as "[t]he problems are such as would remain, in one form or another, regardless of how the territories were reallocated."275 Brodie further notes that "when one in investigation uncovers a case of flagrant injustice in the post-war territorial settlements, it is as likely as not to be one about which the world as a whole hears little," and "[s]uch is not ordinarily considered as threatening to world peace, except possibly indirectly."276 Brodie also suggests that "it is well to remember that righting ancient wrongs sometimes has embarrassing results," citing the case of Poland to illustrate his point.<sup>277</sup>

Brodie concludes that "[s]entimentalism may prove a good deal more disastrous in international matters than it usually does even in private affairs, and to say that there is considerable room for the development of ethical practices in the relations between nations is not to argue that every act of international brigandage committed in the last three centuries needs to be dug up and undone." Further, he adds that "it may

<sup>273.</sup> Brodie, "Can Peaceful Change Prevent War?" 10. Brodie writes one "telling example is the boundary between Belgium and Holland which gives the latter control and jurisdiction of the lower Scheldt, Belgium's great highway and only real outlet to the sea. Yet this line was fixed in the sixteenth century, when the strong Dutch were able to advantage themselves at the expense of a weak Spain in delimiting the northern boundary of the Spanish Netherlands. It was confirmed in the Treaty of Westphalia (1648) and, for 'historic' reasons, was chosen as the logical boundary between the two countries in the Treaty of 1839. This has always caused the Belgians much dissatisfaction, on cogent economic grounds, but it was impossible to satisfy Belgium on this matter in 1919 because obviously Holland was not one of the defeated Powers." From Brodie, "Can Peaceful Change Prevent War?" 10-11, citing Haskins, C.H., and Lord, R.H., Some Problems of the Peace Conference, 1920, 62 ff.

<sup>274.</sup> Brodie, "Can Peaceful Change Prevent War?" 12.

<sup>275.</sup> Brodie, "Can Peaceful Change Prevent War?" 12.

<sup>276.</sup> Brodie, "Can Peaceful Change Prevent War?" 12-13.

<sup>277.</sup> Brodie, "Can Peaceful Change Prevent War?" 13. Brodie further noted, "During the Nineteenth Century, expressions of sentimental commiseration for the poor oppressed Poles never ceased to trickle from the pens of high-minded and moral authors, and, considering the quality of the Czarist government at least, there was good reason for it. In the war years, the trickle became a deluge. President Wilson himself was particularly soft on this very issue, giving it a hallowed prominence among his Fourteen Points. But the paeans of rejoicing that resounded through the press and the drawing rooms of the world at the renascence of that state whose people were universally adjudged as so preeminently gifted must at recollection bring blushes to the cheeks of their authors. No one now would wish that the restitution of Poland had never been accomplished – she remains, for the time being, an invaluable buffer state between the gloweringly hostile states of the Soviets and the Nazis – but neither would anyone deny that she early proved herself the infant terrible of the Peace Conference. Even at present her cooperation in the collective effort to maintain the peace is far from gratifying." Brodie, "Can Peaceful Change Prevent War?" 13-14.

<sup>278.</sup> Brodie, "Can Peaceful Change Prevent War?" 14.

happen that what was obviously a wrong when brought about would even if of recent perpetration, be equally a wrong to adjust."<sup>279</sup> Brodie closes his discussion of the first objective of peaceful change by noting, "These are but a few of the difficulties bound to be met in the attempt to adjust what appear at first hand as obvious injustices"<sup>280</sup>; and, he adds, "This omits entirely consideration of the practical difficulties of carrying out such a procedure, which are stupendous."<sup>281</sup>

With regard to the second objective, "that of pursuing a maximum equilibrium responsive to changing conditions," Brodie cautions that "we must be prepared to encounter even more appalling obstacles." First among these, he explains, is "the arbitrary and changing nature of our criteria of boundary delimitation." Brodie remarks that "until we are certain we have eliminated war from the pattern of international relations we cannot ignore the imperative demands of strategic considerations in drawing our frontiers." As Brodie observes, "[S]trategic, or 'natural', frontiers rarely coincide with nationality or linguistic ones," noting: "the outline of the Bohemian and Moravian provinces of Czechoslovakia was influenced considerably more by strategic than by historic or even economic claims, and it created the misfortune of the inclusion in that state of Sudeten Germans. Italy's insistence on the strongest possible military frontier resulted in the inclusion within her territories of the quarter million Tyrolese Germans, whose lot has been particularly difficult under the rigorous Fascist endeavors to 'Italianize' them. ... Fear of future military attack and demands for precautionary frontier delimitations have created irridentas over all Europe." Europe."

Brodie also considers "the question of creating economic unities," noting such frictions between states as those caused by "[n]ationalistic impediments to international trade," which "have become a most omnipresent and disjoining reality."<sup>286</sup> As well, Brodie considers "the bitter striving for political domination of areas of rich natural resources," noting, "That an area not so great as Connecticut and Rhode Island with a population but little larger could cause as much trouble in Europe as did Alsace-Lorraine is explained in good part by reference to the coal and the enormously rich Minette iron region in Lorraine as well as the great potash deposit in Alsace." Brodie

<sup>279.</sup> Brodie, "Can Peaceful Change Prevent War?" 15.

<sup>280.</sup> Brodie, "Can Peaceful Change Prevent War?" 15.

<sup>281.</sup> Brodie, "Can Peaceful Change Prevent War?" 15.

<sup>282.</sup> Brodie, "Can Peaceful Change Prevent War?" 15-16.

<sup>283.</sup> Brodie, "Can Peaceful Change Prevent War?" 16.

<sup>284.</sup> Brodie, "Can Peaceful Change Prevent War?" 16.

<sup>285.</sup> Brodie, "Can Peaceful Change Prevent War?" 16, citing Lore, L., "Tyrol Germans Don't Count," *The Nation*, May 21, 1938.

<sup>286.</sup> Brodie, "Can Peaceful Change Prevent War?" 17.

adds, "The bitter dispute over Upper Silesia is a similar case, and the partition of it on the basis of an over-meticulous regard for nationality frontiers was one of the conspicuous scandals of the Peace." Likewise, "Poland's acquisition of the eastern part is more easily explained from the circumstances below the surface of the soil than above it." 288

As for issues of language and ethnicity, Brodie writes, "When we approach such questions as that of language, and particularly those of nationality and 'race,' we begin to have such stuff as dreams are made on. Yet these phantasmagorical elements have caused scarcely less bloodshed in Europe than the acquisitive ambitions of dynasties, and are likely in the future to completely transcend all other causes." 289 He adds that "[e]ven scholars who decry the irrationality of it in their philosophic moments are prone to accept completely the ascendancy of linguistic and nationality considerations in the less analytical portions of their discourse."290 But, as Brodie describes, "Race, in Europe at least, is a myth, and "nationality" a very ethereal something, yet there are a few things people are supposed to be more loath to discard or adulterate. As one journalist recently put it, every miserable back yard in Europe insists on maintaining its own 'historic' culture. So far as conserving a distinctive culture is concerned, the fact is that people do not really want to conserve it half as much as they think they do."291 Indeed, Brodie observes: "Culture is a kaleidoscopic thing, its trains are undergoing constant diffusion and development. Peoples are continually accepting from their neighbors, more or less eagerly, the ideas of new modes of life. The process is a direct function of the stage of communication reached by the civilization. If things are inherently good because they are 'natural,' then surely change towards the confluence of cultures is good, because it is natural. It is the attempt to hinder this process, to augment isolation rather than to break it down, that is inherently evil. The effort to make political frontiers coincide as much as possible with 'ethnic' ones is the attempt to add political factors of isolation to the existing geographic and linguistic ones. 'In applying the principle of nationality at the Peace Conference, the statesmen were using a principle already outmoded, unless combined with something else."292

Brodie adds, "Geography, the imperfections and inadequacies of communication, ancestral inheritance, will always preserve enough of regional variation of culture for

<sup>287.</sup> Brodie, "Can Peaceful Change Prevent War?" 17-18.

<sup>288.</sup> Brodie, "Can Peaceful Change Prevent War?" 18.

<sup>289.</sup> Brodie, "Can Peaceful Change Prevent War?" 18-19.

<sup>290.</sup> Brodie, "Can Peaceful Change Prevent War?" 19.

<sup>291.</sup> Brodie, "Can Peaceful Change Prevent War?" 20.

<sup>292.</sup> Brodie, "Can Peaceful Change Prevent War?" 20, citing Webster, loc. cit., pp. 18 f.

those who think it necessary. It is certainly not worth any wholesale blood spilling."<sup>293</sup> But, as Brodie points out, "in the matter of territorial status, the attempt to institute procedures of adjustment to the requirements of changing conditions brings us at once face to face with the fundamental problem of altogether unresolved criteria of boundary delimitation. Those we have been accustomed to consulting are mutually conflicting. When we have decided upon our principles we are likely to lack our facts."<sup>294</sup> And yet, when "we come to the consideration of change to prevent immediately threatened war – the type of change Mr. Chamberlain has been so assiduously cultivating at the expense of weaker states – we are not troubled by the difficulties of indeterminate criteria of revision. The recalcitrant and threatening state has ordinarily made its wants fairly plain, and it is simply the satisfaction of these wants that bring the desired end. The question is, is this *peaceful* change?"<sup>295</sup>

This question, more a riddle, and one that would in many ways mock Brodie well into the nuclear age, when doctrinal battles – between advocates of deterrence and those who would be described as "warfighters" for their imagination of, and preparation for, a time when deterrence failed – raged, and what Brodie called the "cogency of steel" loomed uneasily in the imaginations of both, forever unresolved: "If peaceful change is to mean anything in the implementing of a system of collective security and order, it must rigorously exclude any kind of settlement which while perchance disposing of the immediate problem only invites the final day of reckoning through placing a premium on the cogency of steel. This may, of course, leave us with the basic dilemma of peaceful change: if the use of arms is excluded, how may change be effected at all? But there is no gain in toying with an idea or a phrase if we are to employ it merely as a euphemism to characterize a procedure with which we are already too familiar. Any established procedure of change intended to promote an enduring order of peace must avoid the possibility of rewarding those governments which have threatened to upset it." 296

<sup>293.</sup> Brodie, "Can Peaceful Change Prevent War?" 21. Indeed, as Brodie observes on page 22: "Complete national unity is impossible to attain and dangerous to strive for, and we ought to remember that it might not be intrinsically desirable if it were attainable. The need is of such limitations and controls upon national sovereignty that a minority may be permitted to conserve its language, if it thinks that overwhelmingly essential, without necessarily altering the political dominion. Linguistic boundaries, especially in the open country, change remarkably little, even through several centuries." Brodie adds, "if our proposed future adjustments are nevertheless going to be concerned with realignment according to possible changing linguistic or ethnic conditions, we shall be encouraging ruthless assimilation of minorities as well as iron bars on immigration, the very phenomena we wish to avoid. Complete assurance of maintaining the territorial status quo would be certain at least to result in the more liberal treatment of minorities."

<sup>294.</sup> Brodie, "Can Peaceful Change Prevent War?" 25.

<sup>295.</sup> Brodie, "Can Peaceful Change Prevent War?" 25.

<sup>296.</sup> Brodie, "Can Peaceful Change Prevent War?" 27. Brodie elaborates: "Limiting ourselves to a consideration of efforts towards change otherwise motivated than by threats of violence, we find ourselves wondering if we are not pursuing a fanciful vision. We have not even attempted to analyze the practical difficulties of providing means of effecting territorial revisions in peacetime. We have found ourselves sufficiently impeded by an attempt to resolve our principles. We find that even the modestly ambitious project of ameliorating conspicuous injustices presents ideological difficulties. When we set our goal somewhat higher we are beset by a confusion of mutually contradictory principles of determination and a poverty of pertinent, impartial information. "Peaceful change on the basis of justice, moreover, even if we could accomplish it, would not obviate resort to force on the

Brodie suggests that the "idea of stabilizing the status quo territorially has perhaps not been given a fair hearing," and he believes the League of Nations has "been criticized unjustly and excessively as a device of maintaining the status quo."297 He adds, "Doubtlessly, the present arrangement is not an ideal one, and some few changes are in order. The few flagrant injustices ought to be rectified, and unquestionably the way must be kept open for the graduation into independent status of entities now administered as mandates or colonies."298 Brodie expects that "so long as there are such vast differences in kinds of government frontiers will never become unimportant," and continues: "At present, the side of a boundary an individual lives within may make an enormous difference in his possession of liberties and in his mode of life. But where is the objective norm to determine when a form of government is good or evil, when the state is well or ill governed; and who is to decide thereupon? We can no more take frontier regions from a state because we dislike the Communism, or the Fascism, of its municipal code than we can from another because we do not agree with the monarchic principle. Whether one is born to live under the relative freedom of a democracy or the regimentation of a totalitarian state depends on providence, and perhaps on the political wisdom of his forbears. Besides, what is today the most reactionary form of government and the most despotic may tomorrow make room for the most enlightened."299

Brodie cites the work of professor Frederick S. Dunn, author of the 1937 work *Peaceful Change*, and as noted above, author of the introduction to *The Absolute Weapon*, "The Common Problem," who "has pointed out the ubiquitousness of the considerations of power, prestige, honor, and self-sufficiency in any suggestion or revision," 300 to which Brodie adds "the absolute and necessary *priority* of establishing a *state of peace* before we can even begin to discuss peaceful change. The maintenance of a state of peace is not concomitant with peaceful change, and most certainly does not result from it, but must precede." Brodie next turns to classical philosophyand the

part of governments to whom justice is a principle of no great compulsion in their conduct of foreign policy. Besides, the situation in Europe being what it is, no maximum objective justice could be attained without certain states nevertheless feeling themselves to have been unjustly treated. When we consider in addition to this the periodic excrescence of such doctrines as that now promulgated by the Nazi Government that all peoples of "German nationality" must be included in the German Reich, regardless of whatever other minorities are thereby included, it is difficult to see how the propounders of the idea of peaceful change can expect so much of it." Brodie, "Can Peaceful Change Prevent War?" 27-28.

<sup>297.</sup> Brodie, "Can Peaceful Change Prevent War?" 28.

<sup>298.</sup> Brodie, "Can Peaceful Change Prevent War?" 28.

<sup>299.</sup> Brodie, "Can Peaceful Change Prevent War?" 29-30.

<sup>300.</sup> Brodie, "Can Peaceful Change Prevent War?" 30

<sup>301.</sup> Brodie, "Can Peaceful Change Prevent War, 30. Brodie cites Dunn, F.S., Peaceful Change, 1937, 11 ff: "The things which nations value most highly and for which they are prepared to go to war are the things which bear upon their power to make war... Any proposed change which would noticeably alter the existing power ratio to the disadvantage of any state is fairly certain to be resisted tenaciously, regardless of the justice of the claim or of its bearing upon the general welfare of the community." He then comments: "Certainly paradoxical would be endeavors to promote peace by proposing changes in which the likelihood of war demands first consideration."

ideas of Plato, whose well-crafted image of Socrates was discussed in his earlier paper, where he wrote: "Plato's conception of reality residing in ideas essentially unchanging and everlasting was motivated, we must remember, in good part by his profound abhorrence of the political instability of his day. To approach the divine patterns of unchangeable perfection, in which wars were embodied the good, the true, and the beautiful, required of the philosopher unceasing effort in the contemplation and the practice of the good. We need not accept Plato's metaphysics, as few of us do, but his observation of human nature was as good as any man's and he was a far way from thinking that a 'static' political order would be likely to result in the stagnation of culture. Moreover, if we could conceive of a France, or an England, or any other state, whose outline as a state and whose pattern as one ideally governed were permanently laid up in heaven, it would give politicians on earth determined to approach that reality no time for stagnation." <sup>302</sup>

Brodie closes his discussion by reasserting that "the doubts expressed in the foregoing relative to the feasibility or the desirability of instituting new procedures of peaceful territorial change are not to be construed as ignoring those instances of injustice which do survive objective analysis as noxious to world order and offensive to our sense of decency," 303 and that "[e]fforts surely ought to be expended on their melioration with the hope and expectation of strengthening thereby our proposed structure of world order." 304 Brodie concludes, "History, as a great anthropologist has reminded us, 305 is a ghost with but a single story. We cannot imagine what that story would be like, were it different from what it is. Historical accident, we may be certain, will continue to resolve our changes for the future, and at best we can only hope and strive with all our beings to assure that henceforth historical accident will be less synonymous with war." 306

## The Age of Global Sea Power

Coping with the complexities of new weapons technology – even as transformational as the atomic bomb – came naturally to Brodie, whose earlier work on sea power forced him to confront the continuous evolution of doctrine, strategy and policy, and the dynamic impact of technology change on world politics. He was fully aware of how, on the eve of World War II, there was a vocal debate over the relative supremacy (or looming obsolescence) of sea power vis-à-vis air power. On the eve of Pearl Harbor, Brodie recalls, "curiously, at that particular moment it became most fashionable to

<sup>302.</sup> Brodie, "Can Peaceful Change Prevent War?" 33.

<sup>303.</sup> Brodie, "Can Peaceful Change Prevent War?" 33.

<sup>304.</sup> Brodie, "Can Peaceful Change Prevent War?" 34.

<sup>305.</sup> Brodie is citing Dr. Alexander Goldenweiser, "in a popular lecture at the University of Chicago."

<sup>306.</sup> Brodie, "Can Peaceful Change Prevent War?" 34.

decry that apostle of modern sea power, Admiral Mahan, as a false prophet," as the "general conviction was that while sea power in the past had been invariably decisive in war and had determined the course of history . . . it was now a clearly obsolescent factor," having seemingly been displaced by air power. But as Brodie notes, "Unfortunately for Mahan's memory, he is much more often criticized than read," a fate that had also befallen another great theorist of war, Carl von Clausewitz – as has been noted by several well-known Clausewitz scholars. But a false prophet, as the "general was now a clearly obsolescent factor," having seemingly been displaced by air power. But as Brodie notes, "Unfortunately for Mahan's memory, he is much more often criticized than read," a fate that had also befallen another great theorist of war, Carl von Clausewitz – as has been noted by several well-known Clausewitz scholars.

With regard to Mahan, the first great theorist of war whose writings Brodie came to master, Brodie points out that "in his first chapter of his most famous work he pointed out that 'the unresting progress of mankind causes continual change in the manner of fighting," and thus he "would have been the first to welcome the modern airplane to the arsenal of naval weapons; and he would have been the first to reject doctrines which confuse the aims of military power with the tools for carrying them out."<sup>309</sup> Indeed, Brodie notes that the "air forces which so vitally aided the Japanese armies in their quick conquests of Malaya, the East Indies, and Burma operated from airdromes which in almost every instance had been seized by Japanese armies landed from ships ... [t]heir local air superiorities, in other words, were derived from sea power."<sup>310</sup> Brodie further noted, "Many of the aircraft involved, especially the fighter planes, and all their fuel, cargoes, and maintenance crews and supplies were brought to the scene of operations in ships," as were "[m]ost of the materials that went into the construction of the British aircraft which hurled back the Luftwaffe in the Battle of Britain."<sup>311</sup> Thus, concluded Brodie, "It does not therefore detract in the least from

<sup>307.</sup> Bernard Brodie, A Guide to Naval Strategy (New York: Praeger, 1965), Fifth Edition, 2. Originally published as A Layman's Guide to Naval Strategy. Princeton: Princeton University Press, 1942.

<sup>308.</sup> These include Christopher Bassford, who noted that On War is "much more often quoted than read or understood;" Azar Gat, who observed that, "[s]ince its appearance, On War was therefore known for being much quoted but little read;" Hew Strachan, who in recalling Wilhelm Rustow's 1857 reaction to Clausewitz, writes that "while comparing Clausewitz to Thucydides and saying he was 'good for all times', confessed that he 'has become well known, but is very little read';" and Colin Gray, who has written, "Not for nothing is the comment often made that On War is copiously quoted but much less frequently read, let alone read from cover to cover." Brodie would later extend his observation of Mahan to nearly all the great theorists of war, writing in his 1959 Strategy in the Missile Age that the "principles of war' derive from the work of a handful of theorists, most of them long since dead," and that "[t]heir specific contributions to living doctrine are not widely known, because their works are seldom read." Brodie's comment on Mahan is from Brodie, A Guide to Naval Strategy (New York: Praeger, 1965), Fifth Edition, 2. Originally published as A Layman's Guide to Naval Strategy. Princeton: Princeton University Press, 1942; Bassford's comment on Clausewitz is from Christopher Bassford, "Review Essay: Carl von Clausewitz, On War (Berlin, 1832)," posted online at: http://www.clausewitz.com/readings/Bassford/DefAnReview. htm, originally published in Defense Analysis, June 1996. Gat's comment on Clausewitz is from Azar Gat, A History of Military Thought: From the Enlightenment to the Cold War (Oxford: Oxford University Press, 2001), 228. Strachan's comment on Clausewitz is from Hew Strachan, Clausewitz's On War: A Biography (New York: Atlantic Monthly Press, 2007), 9-10. Colin Gray's comment on Clausewitz is from Colin S. Gray, Modern Strategy (Oxford: Oxford University Press, 1999), 85. Brodie's comment on these "seldom read" principal theorists of war is from Bernard Brodie, Strategy in the Missile Age (Princeton: Princeton University Press, 1959), 21.

<sup>309.</sup> Brodie, A Guide to Naval Strategy, 2.

<sup>310.</sup> Brodie, A Guide to Naval Strategy, 3.

<sup>311.</sup> Brodie, A Guide to Naval Strategy, 3.

the marvelous power of air forces to say that command of the sea is still as likely as formerly to be decisive in great wars, and that in fact the greatly increased quantity and complexity of equipment used in modern war has made control of the sea lanes more important than ever before."312

At least, Brodie later reasoned, with the equalizing effect of atomic weaponry, which would enable even a landlocked power to deliver the same retaliatory strike as the mightiest of sea powers; but even then, his initial thoughts on the sudden obsolescence of sea power would be amended, and in later editions of A Guide to Naval Strategy he would acknowledge the reinvigorated role of naval power in the nuclear era. For instance, he noted the Polaris sub program, which as of his fifth printing in 1965 was "well on its way to completion" and which now constituted "a large and important portion of the United States strategic bombing capabilities," and which in conjunction with the hardening of land-based silos ensured that U.S. strategic missiles were now "enjoying a high degree of safety from surprise enemy attack" - thus alleviating any "pressure for 'going first' in the event of serious troubles."313 And, as the Soviet Union continued a "further retreat from a surface fleet . . . and a greater than ever concentration on submarines," Brodie postulated that the USN "could thus anticipate the disappearance of rival surface navies," with U.S. surface forces required for both "possible limited wars" and for "showing the flag."314 In all, Brodie concluded, "The situation for American seapower at the end of the first score years of the atomic age has thus been greatly clarified" as demanding a "deep involvement in strategic retaliatory capabilities . . . combined with the traditional role of manifesting the American presence in far-off and deeply troubled regions. The fact that enemy surface navies have largely disappeared has altered the character of, but not greatly reduced the burdens on, American seapower."315 Recalling his thesis from his first work, Sea Power in the Machine Age, Brodie noted the Napoleonic maxim that "the moral is to the material as three is to one," and while not always the case, evidence from history showed on many occasions that "weak ships and strong men have triumphed over strong ships and weak men," suggesting that even as "the tools of war become ever more complex and more deadly, . . . the net result of those changes on the personnel factor is to place even greater demands on the spirit and intelligence of the men who plan to wage battles."316 So even though Americans "take such pride in (their) technological skill and . . . tremendous productive capacity," Brodie counseled that we "must beware of

<sup>312.</sup> Brodie, A Guide to Naval Strategy, 3.

<sup>313.</sup> Brodie, A Guide to Naval Strategy, 245.

<sup>314.</sup> Brodie, A Guide to Naval Strategy, 246-47.

<sup>315.</sup> Brodie, A Guide to Naval Strategy, 247.

<sup>316.</sup> Brodie, A Guide to Naval Strategy, 248.

relying too much on the material alone."317

Brodie, in his final chapter of A Guide to Naval Strategy, examined boldness in a manner reminiscent of Napoleon and his interpreters, who like Frederick the Great concerned themselves with genius and the coup d'oeil, and like Machiavelli considered the collision of virtu and fortuna on the outcome of war. Brodie likewise embraces boldness in command, but cautions again recklessness. (Brodie wrote that "Napoleon was a firm believer in boldness."318) Noting the tendency for commanders to be acutely aware of the danger faced by their troops while discounting or remaining unaware of the fear felt by their enemy, Brodie observes that "Napoleon recognized the universality of this feeling among leaders, and in one of his many maxims on the subject urges the general caught by surprise in a bad position not immediately attempt a retirement but adopt a menacing attitude toward the enemy in order to disconcert him and make him wonder whether he was right in assuming he had an advantage."319 Such a bold response in the face of danger has been practiced by great generals across history, including the famed U.S. Civil War general, Grant, and the infamous Japanese World War II admiral, Togo. But Brodie acknowledges that, "[o]n the other hand, a too doctrinaire belief in the merits of boldness may be exceedingly dangerous,"320 and reconciles these views by concluding, in a manner that Machiavelli might have once uttered, and perhaps Clausewitz as well, "It is true that the gods favor the bold, usually, but they are notoriously harsh with the reckless."321 One might, when considering the doctrinal debates that would emerge during the nuclear era, recognize this discussion on boldness, which traces its way all the way back to the classical philosophers and which was taken up in turn by all the great modern theorists of war, as especially pertinent, and one that helps to frame the otherwise ambiguous debate between the advocates of deterrence and the warfighters, who agreed on so many things, but who fundamentally disagreed on the issue of boldness, and the danger excess in this area can bring when fortune turns away.

Rather than unmitigated boldness, Brodie calls for thoughtful reflection and analysis, noting with some disappointment that "[t]he history of most of our wars has been marked by the gradual evolution of fine leadership, but only at the cost of a long, costly period of the elimination of incompetents."<sup>322</sup> Indeed, he notes that "Mahan's career, it might be observed, was hindered rather than promoted by his penetrat-

<sup>317.</sup> Brodie, A Guide to Naval Strategy, 248.

<sup>318.</sup> Brodie, A Guide to Naval Strategy, 254.

<sup>319.</sup> Brodie, A Guide to Naval Strategy, 253.

<sup>320.</sup> Brodie, A Guide to Naval Strategy, 255.

<sup>321.</sup> Brodie, A Guide to Naval Strategy, 257.

<sup>322.</sup> Brodie, A Guide to Naval Strategy, 263.

ing and scholarly studies."323 As he wrote in A Guide to Naval Strategy, "Things have changed since Mahan's time, but that does not mean we can rest in our efforts at improvement"; and while a "capacity for original thinking is indeed valued," this is true "only if it is combined with a fine sense of tact" (hence the court martial of Billy Mitchell, the prophet of air power who predicted an armed clash between Japan and the United States many years before hostilities erupted). With regard to the Navy, the focus of this particular work by Brodie, but a point that could be applied across the services, he wrote, "Independent and incisive thinking therefore rarely receives the preferment it deserves"324; and, furthermore, "Openmindedness and insistence upon vigorous thinking ought to reach down to the very beginning of the officer's career."325 Noting how, "[b]ecause of defective eyesight, the great German strategist General von Schlieffen would never have gained admission to the peacetime officer corps of any of the American armed forces," nor would have "[p]oor Nelson, with a patch over one eye and with but one arm," Brodie argues that "[a]n uncommonly good brain should be ample compensation for slight physical defects," and counsels that "[w]e must remember always that the basic element of strength in any nation is not its machines but in its manhood."326

Such a view of manhood as a stately virtue may seem obsolete in our gender-neutral age, but at the time of Brodie's writing was hardly controversial, and much more refined than much of the neo-Darwinian thinking from the generation prior. Indeed, an equally independent-minded theorist of naval strategy from the very dawn of the twentieth century, Frederick T. Jane, authored a controversial and colorful treatise on sea power titled Heresies of Sea Power in which he argued that an inherent "fitness to win" overshadowed strategy itself. Jane devotes his concluding chapter to a discussion of "fitness to win," in which he elaborates upon his thesis that a natural predisposition to victory appears to trump strategical superiority, as witnessed by both Rome's defeat of Carthage and by Sparta's defeat of Athens. As Jane explains: "It has been shown throughout this work that in every war almost the only solid fact common to all is that "the fittest to win" were the eventual victors. It has been shown that these victors often lacked technical skill equal to that of their opponents, or were tactically inferior, strategically inferior, or had not such good ships or weapons. But they always had the "fitness to win" quality which made up for every other deficiency and brought certain victory at the last. The "fittest to win" have never gone under before superior materiel or before superior weapons."327 Jane speculates, "It is probable that Fitness to

<sup>323.</sup> Brodie, A Guide to Naval Strategy, 263.

<sup>324.</sup> Brodie, A Guide to Naval Strategy, 263.

<sup>325.</sup> Brodie, A Guide to Naval Strategy, 263.

<sup>326.</sup> Brodie, A Guide to Naval Strategy, 264.

<sup>327.</sup> Jane, Heresies of Sea Power, 321.

Win embodies little else besides the fixed desire to kill the enemy. Good seamanship, good gunnery, good torpedo, good engineering – all these things may aid it, but apparently all are not absolutely essential. If essential, or in so far as they are essential, the desire to kill the enemy will produce them."328 Jane's thesis is controversial in its suggestion that strategy and tactics are of far less consequence in the outcome of war than most believe and that the inherent fitness to win of the victor is the key to victory, so much so that a switch of positions, from one fleet to the other as in the case of the Japanese defeat of the Russians in 1905, would not affect the outcome, even if such a switch led to a material disadvantage of the original victor. But there is nonetheless something compelling about his thesis, and his admission by way of the title of his work, that such a view is heretical.

But a less heretical perspective on naval strategy is presented by Bernard Brodie, who was known during World War II as a neo-Mahanian and whose works helped to educate American seamen on the broad sweep of naval history, and the fundamental principles of naval strategy. His doctoral thesis, which examined the impact of technology on naval history and was part of Quincy Wright's massive Study of War project at the University of Chicago, was published by Princeton University Press, updated by substantively unchanged, as Sea Power in the Machine Age, and was just one of his two book-length works on naval strategy. The other, humbly titled A Layman's Guide to Naval Strategy, would later be retitled at the U.S. Naval War College's request ever since it had become a handbook for America's war-time seamen, and was thus renamed A Guide to Naval Strategy so as to not embarrass the fighting men who depended upon this work for an introduction to naval theory, as noted by Kaplan among others. 329 In Sea Power in the Machine Age, Brodie starts out with a brief excerpt from Milton's Paradise Lost, as he did in his 1947 article "The Atomic Dilemma" – a fuller version which would later adorn the frontispiece of his 1959 Strategy in the Missile Age. Though many have perceived a distinctly separate pre-Hiroshima and a post-Hiroshima strategic persona in Brodie – with Kaplan famously quoting him as saying to his wife Fawn on August 7, 1945 upon reading of the incineration of Hiroshima the day before, "Everything that I have written is now obsolete"330 – one can see a more continuous thread connecting his early work on naval strategy up to the World War II period with his post-Hiroshima strategic thinking, with his embrace of deterrence, the primary objective of both Mahanian-influenced American naval strategy as well as the slightly more nuanced Corbettian naval strategy as practiced by the British in the era of their long decline, planting the conceptual seed that would undergird Brodie's nuclear theories

<sup>328.</sup> Jane, Heresies of Sea Power, 326.

<sup>329.</sup> Fred Kaplan, Wizards of Armageddon, 9.

<sup>330.</sup> Fred Kaplan, Wizards of Armageddon, 10.

and which would drive a wedge between his own approach to the bomb and that of the military services tasked with planning for nuclear war, which would embrace a warfighting strategy that had operational plans for a failure of deterrence.

While Jane controversially advocated a neo-Darwinian conception of "fitness to win" as a military extension of the evolutionary battle in the "survival of the fittest," he also embraced the importance of applying our knowledge of the past to the guide as on our journey from present to future, without which our tactics and strategies would surely become obsolete, as happened to the Carthaginians in their defeat by the lesser-skilled Romans. Brodie followed in this path, applying his pre-Hiroshima conceptions of world order, sustained through sea power, to his post-Hiroshima conceptions of the nuclear order, sustained through the mutuality of deterrence. It turns out that the thermonuclear-tipped ballistic missiles central to Brodie's Strategy in the Missile Age were in fact a realization of that long-sought but fanciful naval innovation that Jane pondered of a sort which was beyond his generation's ability to comprehend, and which wedded an expansion of radius with a global extension of the reach of artillery, making the finite naval operational radius obsolete in the face of the global strike provided by ICBMs. In essence, the missile age modernized precepts of classical naval strategy borne of the era of global sea power, and it was Brodie who nurtured deterrence forth from its naval originals to the nuclear age. Whether based on submarines or in silos on dry-ground mattered not; a fleet of ground-based nuclear missiles would in essence turn the interior heartland of a nation into a massive, immobile aircraft carrier that did not need to move anywhere to reach its targets, fusing the essence of land war and naval strategy. Continents, islands, naval platforms, all merged, becoming launching pads for nuclear payloads capable of pinpoint accuracy anywhere on Earth. It was thus naval thinking that paved the way for nuclear strategic thought, providing a framework and a legacy of global stability to pacify the horror of the bomb and render it into a tool for order, peace and stability.

Thus Brodie's inclusion (and expansion) of Milton's *Paradise Lost* illustrates the continuity that he saw between the age of sea power and the nuclear age. In his *Sea Power in the Machine Age*, Brodie would also cite a segment from Book Six of *Paradise Lost*, with the full support of his editor – a work he would look to for metaphorical guidance throughout his career: "Perhaps more valid Armes, Weapons more violent, when next we meet, May serve to better us, and worse our foes, Or equal what between us made the odds, In Nature none: . . . He who therefore can invent With what more forcible we may offend Our yet unwounded Enemies, or arme Our selves with like defence, to mee deserves No less than for deliverance what we owe." 331

<sup>331.</sup> Brodie, Sea Power in the Machine Age (Princeton: Princeton University Press, 1941), 2.

Brodie's first chapter of this seminal work, "Sea Power and the New Technology," notes how the "machine age came late to the navies of the world." Indeed, Brodie observes: "When the nineteenth century was approaching its halfway mark, the capital ship that ruled the seas still differed very little from its predecessor of Cromwell's time. ... Not all the implements of sea power were unaffected by the new technology, for perhaps a fourth of all vessels of war could propel themselves by steam. But these were only the whelps of the battle fleet. The ship of the line with its towering masts was still uncorrupted by funnel or fire box. Yet before the century drew to a close, the sail of the line dissolved into history and legend. Its place was taken by a monster of steel carrying huge ordnance, propelling itself by steam, and capable of hurling destruction upon antagonists miles away. What is more, sea warfare had entered a third dimension measured in depth below the surface. Each of these changes in the character of the warship and in the means of naval attack had its effect on tactics and strategy, and each influenced the relative capacities of nations to wage maritime war." 332

Brodie, who would later in his career emerge as something of a modern day Clausewitz, took his Napoleonic-era rival Jomini to task for failing to anticipate the dynamic nature of strategic change, noting that "Jomini's dictum that changes in weapons affect the practice but not the principles of war is perhaps the most reiterated pronouncement in the whole field of military literature. 'Methods change, but principles are unchanging." And while he considers this "a doctrine reminiscent of the 'ideas' of Plato," he notes that "[a]s a dogma it has often impeded full recognition of the changes wrought by the changing implements of war."333 Brodie suggests that it is in fact "specious to separate too sharply the principles from the methods of war. The conduct of war is not an exercise in metaphysics – it is a practice." Thus, Brodie writes: "To speak of a naval invention as having revolutionized maritime war is not to imply that it has affected the purposes of naval warfare or even that it has altered the basic process by which those purposes are achieved. One may mean only that it has drastically changed the means of execution. These do not, however, undergo radical change without introducing wholly new circumstances and new problems in the pursuit of hostilities at sea and in preparation for them, new circumstances which affect different states very differently. However little the advance of technology has affected man's elemental human nature or the basic mores of his culture, it has transformed his mode of life, and it has similarly transformed the conduct of his quarrels."335 Brodie adds that it's "frequently enough asserted in a general way that warfare has been revolutionized by changes in the weapons with which it is waged, but little effort has been made to determine the effect of specific

<sup>332.</sup> Brodie, Sea Power in the Machine Age, 3.

<sup>333.</sup> Brodie, Sea Power in the Machine Age, 3-4.

<sup>334.</sup> Brodie, Sea Power in the Machine Age, 4.

<sup>335.</sup> Brodie, Sea Power in the Machine Age, 4.

inventions and to clarify their impact on world politics, past or present. It is, of course, dearly impossible to isolate the effects of a single invention from the whole current of change. It seems a little absurd to consider how naval war would be carried on today if, for example, other things remained as they are but machine propulsion were absent. Yet the endeavor to do just that may not be without value. It brings sense, integration, and perception into one's confused awareness of constant change."336 This last line captures in a nutshell what it was that Brodie, as a theorist grappling with not only technological change but the very evolution of strategic thought in response to that change, sought to achieve throughout his career, overcoming the inherent uncertainties that shroud this always-changing world – piercing the cloud of ambiguity that he first recognized many years before as student grappling with the ambiguous legacy of Socrates, applying his own instincts to a riddle forever shrouded by the mists of history. From the mists of history to the fog of war, Brodie followed a linear path, one that swapped the inconsequential study of history with the greatly consequential process of securing the future. By way of illustration Brodie examines the early years of the steamship, when Britain feared it might place the island-state in jeopardy: "The steam warship during the early years of its existence gave rise to apprehension among the British that it had "created a bridge across the Channel" for hostile forces. But it had, on the contrary, removed the possibility that a chance shift of wind would favor an effort at invasion. As Winston Churchill told the House of Commons on June 4, 1940, "In the days of Napoleon ... the same wind which would have carried his transports across the Channel might have driven away the [English] blockading fleet. There was always the chance, and it is that chance which has excited and befooled the imaginations of many Continental tyrants." The new Continental tyrant who was stimulating Mr. Churchill's eloquence on that day also had in his mind's eye a bridge across the Channel, one made by machines which Napoleon could only have dreamed of and which were quite unaffected by mere shifts of wind. Whether these machines, roving some above the surface of the sea and others below it, could indeed create the bridge which the steam warship had failed to make was not then clear. But neither was it clear that such a bridge was still necessary to bring proud England to submission. The strangle hold of blockade would do just as well."337

Brodie separates in his mind the short-term tactical advantages gained by the first adopter of a new technology in war-time with the longer-term strategic advantages that are associated with broader sweeps of technological change, often helping the inventor (who aspired for an immediate tactical boost) less than his opponent. Brodie observes: "The history of warfare from antiquity to the present records innumerable attempts to secure by some new contrivance an immediate tactical advantage, perhaps a decisive one.

<sup>336.</sup> Brodie, Sea Power in the Machine Age, 4.

<sup>337.</sup> Brodie, Sea Power in the Machine Age, 5.

In such inventions the essential purpose is to obtain one's end before the adversary can bring counter-measures to bear. It is the time interval that counts. The small boats introduced by the Syracusans in the Peloponnesian Wars to get under the oars of the Athenians and shoot arrows at the rowers, the bridge-like corvus introduced by the Romans in the Punic Wars to ... overcome Carthaginian superiority in seamanship, the harpago used by Agrippa in the Sicilian War against Pompey for much the same purpose, and, in modern times, the Q-boat and the submarine-trawler devices used in the anti-U-boat campaign [of] the World War – these were inventions of surprise. They were also the offspring of Necessity.[1] Such examples are the romances of history – instances of cunning being joined with brawn to overcome a strong enemy."338

Brodie sets out for himself an ambitious goal, one he believes few are equipped intellectually to pursue, elevating himself, in his mind, to the level of Mahan, the famed Clausewitz of the sea, his first step along the road of becoming America's Clausewitz of the nuclear age. In so doing Brodie recognizes a unique role for the theorist as distinct from the practitioner, one that is not without its own shortcomings. Brodie writes: "One cannot begin to tell the story of the technological revolution in naval materiel without some attempt to evaluate a whole host of inventions according to relative importance. There are many traditional appraisals at hand, but one must be cautious of accepting them. Errors in these matters tend to be self-perpetuating. Historians rarely possess the knowledge of technology and of military science necessary to make such judgments for themselves, and are hence prone to accept without criticism the dicta of their predecessors. Even military experts are likely to be of little aid. Those concerned primarily with materiel are not often equipped with the scholarship and the historical insight of a Mahan. Excursions into history by writers on strategy, particularly naval strategy, have usually shown remarkable indifference to the implements with which the campaigns they analyze were carried on – the result, perhaps, of undue subservience to the doctrine of unchanging principles.[2]"339

Brodie explains that in order to "determine which inventions were 'most important' it is necessary to scrutinize the whole development of naval technology during the period under review and to analyze the strategic and political consequences that flowed from each major innovation." He adds that "[i]t is impossible, as a rule, to declare that an innovation appeared at a certain time and was followed by certain specific results, since

<sup>338.</sup> Brodie, Sea Power in the Machine Age, 7. Brodie notes in this paragraph, note number one, that: "In that portion of his poem from which the frontispiece of this book is taken, Milton depicts an incident in the war in Heaven which perfectly illustrates this type of invention. To overcome the advantage of the loyal angels, Satan invents the field gun, and he proceeds to employ it in a manner calculated to reap the maximum benefit of surprise. Bk. VI, lines 438-669."

<sup>339.</sup> Brodie, Sea Power in the Machine Age, 8. In note 2, Brodie adds: "Note 2: A notable exception is Admiral William L. Rodgers. See his Greek and Roman Naval Warfare (Annapolis, 1937) and his Naval Warfare Under Oars, Fourth to Sixteenth Centuries (Annapolis, 1939)."

<sup>340.</sup> Brodie, Sea Power in the Machine Age, 8.

a new device no sooner appears than it proceeds to change its character."341 This was the case in the introduction of iron armor to warships, which led to more powerful guns capable of breaching, ultimately limiting the objective of the armor itself to the ship's core systems but not the personnel, who were no longer protected by the armor from incoming fire. Thus, Brodie argues, "A military invention cannot therefore be isolated either in time or in relation to other military instruments. Moreover, the improvement of an accepted weapon may result in the appearance of a wholly new one, terrible in its potentialities."342 Because any effort to "describe at all completely the technological advances in the world's navies since the beginning of the industrial revolution would require an encyclopaedia of several volumes," Brodie is forced to be selective, and considers only advances that illustrate an "exclusively naval character of an invention," and which also illustrate "the relative importance of a technical development." Hence his book "considers only the 'revolutionary' inventions of the period covered" and thus omits a "host of subsidiary naval innovations which in the aggregate mount up to considerable importance."343 In just a few short years, Brodie would devote his full attention to one, new revolutionary technology of war: the bomb.

In Chapter 21 of *Sea Power in the Machine Age*, Brodie discusses "Naval Invention and National Policy," in which he starts out his discussion by noting the importance of prestige, and of what Jane had called the "fitness to win," but which Brodie attributes not to nationalistic or racial characteristics but to culture and tradition: "In the politics of power, military prestige is the medium of account, and nothing gives a nation greater prestige than past military victories. The political, economic, and most of all technological conditions under which those victories were won may have changed, but this counts for little except among the most discerning few. Foreign policy tends to run along channels determined by tradition, and Powers which have been great are considered great until they are proved otherwise." Adds Brodie: "To some extent this may be fortunate. For one thing, the strategic consequences

<sup>341.</sup> Brodie, Sea Power in the Machine Age, 8.

<sup>342.</sup> Brodie, Sea Power in the Machine Age, 9.

<sup>343.</sup> Brodie, Sea Power in the Machine Age, 9.

<sup>344.</sup> Brodie, Sea Power in the Machine Age, 431-32. In the language of the day, Brodie's discussion of the non-material factors of war echoes Jane's conception of the fitness to win at the dawn of the century: "For, despite what sociologists tell us about the ambiguous and loose thinking by which "racial" traits are usually discovered in nations – and they are no doubt right – the events of 1939 to 1941 have proved that there are some nationalities which can persistently win battles against odds and others which as consistently lose even when the odds are on their side. True, it is culture and tradition rather than race which accounts for it, but it is nevertheless a factor, and one which may upset estimates based on appraisals of material strength alone. It was easy to say in the summer of 1940 that Great Britain could not possibly win against the odds that faced her, and that her decisive defeat before the end of the year was to be expected. Yet somewhere deep down in the national heritage was a trait which refused to admit defeat – a trait which had somehow survived more than a century of industrial revolution and a generation of political disillusionment." Brodie would later become familiar with the language of Clausewitzian theory, and its own vocabulary to describe the non-material factors, known as the frictional dimensions of war.

of military and naval inventions – and undoubtedly other changes as well – have often been miscalculated by those living in the period in which they occur. This was true of the steam warship and to a lesser degree of the submarine; it may yet prove true of the airplane. But even more important is the fact that such a handling of national policy implies the recognition of certain non-material factors which should be considered."<sup>345</sup>

While his research looked back on the century of invention that preceded the world wars, he deduced a recurring theme of deterrence, as well as its underlying principles, which in a few short years he would nimbly apply to the nuclear age. While he is said to have greeted with bombing of Hiroshima with the resignation that his past work was suddenly obsolete, the parallel between his pre-nuclear naval thinking and his post-Hiroshima strategic thought is striking, with more than *Paradise Lost* connecting his 1941 *Sea Power in the Machine Age* to his 1947 article "The Atomic Dilemma" through to his 1959 *Strategy in the Missile Age*. Most students of Brodie see something of a firebreak between his early naval work and his later nuclear work, but in fact, the two works that epitomized each era were very closely connected.

Foreshadowing his own later neo-Clausewitzian conversion, Brodie addresses the fog of naval invention: "The unpredictability of the consequences of new developments in military technology must also be considered. One of the most ironic features in the history of naval inventions is the frequency with which new devices proved disadvantageous to those very countries which had most energetically furthered their progress. This may be due to one or more of three reasons: first, a mistaken interpretation of the tactical or strategic consequences bound to eventuate from a specific invention; second, failure to predict correctly the technical progress of the invention; and third, erroneous conclusions respecting the identity of the enemy country in the next war." 346

All of these reasons would rear their heads during the Cold War era, and present challenges to Brodie's thinking about the bomb. Brodie notes how a new "development is often said to have rendered existing materiel 'obsolete,' when it merely presents a certain degree of superiority in performance or entails a new departure in design," and points out that it "is exceedingly rare that the advent of a military invention at once renders existing equipment obsolete in the sense that it is no longer worth considering in the summation of relative power among nations." Hence, a "new type of warship, however radical its improvements, does not make existing ships entirely useless until it exists in such numbers that older types have no military functions left to perform. ... Regardless of how necessary the rebuilding of the fleet may become as

<sup>345.</sup> Brodie, Sea Power in the Machine Age, 432.

<sup>346.</sup> Brodie, Sea Power in the Machine Age, 441.

<sup>347.</sup> Brodie, Sea Power in the Machine Age, 441-42.

a consequence of a revolutionary invention, until it is rebuilt the existing fleet remains the repository of maritime power. This truism is frequently ignored in references to military inventions."<sup>348</sup>

Brodie recalls how, "In all the ensuing competition, through the rest of the century, whenever there sailed abroad a single warship that apparently outclassed any single vessel in their own navy, Englishmen lamented the impotence of their fleet." Adds Brodie: "Historians, far from exposing the absurdities in this kind of thinking, have generally tended to perpetuate them. The *Merrimac* is usually regarded as having threatened to lift the blockade of the South before being checkmated by the *Monitor* — as though it possessed a pair of seven-league-boots or a magic carpet enabling it to be everywhere at once. Much of the course of diplomacy in the immediate pre-World War period is written in terms of the *Dreadnought*, which is supposed to have rendered pre-dreadnought types of little or no use — as though those types suffered a sudden extinction of firing power and mobility." Brodie further observes, "The lexicographer's distinction between the words 'obsolete' and 'obsolescent' is useful in this connection. In the modern world, machines, whether of war or of peace, are in a state of developing obsolescence from the moment they are completed. Old arms may still be 'valid arms,' even though 'weapons more violent' are constantly being evolved to change the character of war." <sup>351</sup>

Brodie briefly considers the confidence fostered by the emergence of a secret weapon, and the belief it may be a game-changer in the event of war, thereby inducing recklessness on the path to war. It is interesting that upon the advent of nuclear weapons, Brodie becomes a principal theorist of nuclear caution, erecting a theoretical and doctrinal framework of restraint, embedding the absolute weapon into a framework of mutual deterrence, and countering the less cautious ideas of his colleagues, including Herman Kahn who approached the waging of nuclear war with much less caution and restraint: "It is clear, however, that the possession of a secret weapon, or of a new weapon against which the potential adversary is felt to be without countering agents, may be very influential in reducing the caution with which a Power would otherwise pursue its aims. ... Yet it makes a very great difference to the world what tools have been placed in the hands of the potential aggressor. If the instruments at his command have given him the means of pushing to a quick decision in war, it is obvious that all concepts of national security must be revised. "Defense" must then take on a more active and a more anticipatory attitude. It was Machiavelli, too often "taxed for his impieties," who pointed out that to delay a war may not always redound to the advantage of the state which wishes to avoid its greatest evils. The tragedies of 1939 and the years following

<sup>348.</sup> Brodie, Sea Power in the Machine Age, 442.

<sup>349.</sup> Brodie, Sea Power in the Machine Age, 443.

<sup>350.</sup> Brodie, Sea Power in the Machine Age, 443.

<sup>351.</sup> Brodie, Sea Power in the Machine Age, 445.

were the tragedies of a world which stood hypnotized by the eyes of the serpent, not knowing with what terrible swiftness it could strike or how inevitably it would do so."352

And yet while the world "stood hypnotized by the eyes of the serpent" as much of Europe was conquered, Brodie notes that on the sea, the situation remained less volatile: "War at sea is ancillary to war on land, and changes in naval materiel have not been such as to affect fundamentally the relationship of sea power to land power. Even on the sea itself, much is unaltered. The indomitable spirit at the helm and off, and the effectiveness of the combination is vastly greater than either one would be by itself. On the other hand, it is true that the danger of aerial invasion or at least raiding of an island like Great Britain does mean that the British Fleet can no longer guarantee almost by itself the security of the British Isles, though the continuing importance of its protection is generally underrated."353

Brodie would articulate a similar sentiment in his 1946 Foreign Affairs article, "New Tactics in Naval Warfare," in which he observed that in World War II "sea power reached the culmination of its influence on history" and that the "greatest of air wars and the one which saw the most titanic battles on land was also the greatest of naval wars – not alone in the magnitude of naval operations but also in the degree to which those operations contributed to final victory." This, Brodie explains, "could hardly have been otherwise in a war which was truly global, in which the pooling of resources of the great Allies depended upon their ability to traverse the sea" and to project power to "remote theaters which could be adequately serviced only by sea." So while "the land-based airplane was the original cause of the threat, the nature of the crisis which Allied sea power met and overcame cannot be adequately described merely in terms of ship versus aircraft," which understates the underlying and reciprocal naval dimensions of the conflict.

<sup>352.</sup> Brodie, Sea Power in the Machine Age, 446-47.

<sup>353.</sup> Brodie, Sea Power in the Machine Age, 447-48. Indeed, Brodie adds "The fact that the British Isles were not invaded in 1940 could hardly be due exclusively to a British air force, which was far inferior in power to the German Luftwaffe, nor could it be due to a British army which was disorganized and virtually disarmed. The question of whether the airplane will eventually replace the surface merchant vessel as the carrier of the bulk of ocean commerce needs also to be answered, though there has been a good deal of rank nonsense written on the subject. If such a change should occur, sea power as we have known it in the past will no longer have any reason for being. The most that can be said today, however, is that such a change, if it is at all possible, is still far in the future."

<sup>354.</sup> Bernard Brodie, "New Tactics in Naval Warfare," Foreign Affairs 24, no. 2 (January 1946), 210.

<sup>355.</sup> Brodie, "New Tactics in Naval Warfare," 210.

<sup>356.</sup> Brodie, "New Tactics in Naval Warfare," 210. In the Winter 1943 edition of Isis, Whittier College's Alfred Romer observed that in *Sea Power in the Machine Age*, "Brodie has traced the detailed history of the five great, essentially naval, inventions which produced it: the steam warship, armor and great ordnance, submarine modes of warfare, and naval aircraft," and that it was, overall, a "thorough study well-documented and indexed, and written with professional detachment." He noted Brodie's sweeping effort illustrates that, "Politics and technology were curiously mixed in the introduction of the new devices" – perhaps the seed from which Brodie would, by 1945 (at least tentatively) and by the early 1950s both more forcefully and frequently, link to the famous Clausewitzian dictum that war is a continuation of politics by other means. Alfred Romer, "Review: *Sea Power in the Machine Age*," Isis 34, No. 3 (Winter 1943), 230-231.

Even with air forces taking flight as independent military services, the interconnection of air power to sea power endured. A full half century after Brodie wrote, air power still remains (albeit not without some vociferous debate from air power theorists) to a substantial degree an adjunct to sea power broadly defined, with aviation still responsible for only a small fraction of world commerce, of which the lion's share still travels by the merchant fleet. Missile power, however, came to offset sea power as the primary means by which the superpowers asserted their strategic might – though ultimately the last, best guarantor of a retaliatory capability would become the stealthful ballistic nuclear submarine, and America's continued economic primacy would continue to be sustained by its unrivaled naval power on the world ocean, a naval supremacy that has endured through our time even as a new peer rises in the Far East. 357

As Brodie reflected in the pages of *Foreign Affairs* in 1946, the U.S. Navy "proved during World War II that it had the resiliency to overcome a menace of scarcely imagined magnitude," even if this "achievement lay mostly in redeeming past errors of omissions" that led to the preventable tragedy at Pearl Harbor. But the advent of the atomic bomb "introduces the possibility that in another general war the utility of navies will be decided ashore rather than at sea," since a "nation which has had its entire economy destroyed may be able to put a fleet to scant use." In other words, Brodie argued, "[T]raditional concepts of military security which this country has developed over the past fifty years – in which the Navy was correctly avowed to be our 'first line of defense' – must be reconsidered."<sup>358</sup>

Ironically, Brodie's thinking on sea power would very soon be overlooked by many scholars, who in their zeal to reconsider those traditional concepts of military security, would look to Brodie as one of the founding architects of the new nuclear order; but the clarity of his naval thought, and its endurance after half a century and more, continues to provide us with compelling reason to revisit his pre-nuclear thinking. In the end, as we will see in the pages below, Brodie's most enduring contribution to strategic studies is not that made by his study of sea power, nor to his pioneering contribution to the study of strategic nuclear power and sophisticated development of deterrence as a theory and a strategy, but to his contribution to understanding the

<sup>357.</sup> In a review in the December 1944 edition of the Pacific Historical Review, it was noted that Brodie's *Guide to Naval Strategy* – which had first appeared in September 1942 "under the title A Layman's Guide to Naval Strategy," and that the "cordiality with which it was received necessitated several reprintings and the rapid unfolding of naval actions invited revisions" – that the "present edition, though following the general lines of the author's original interpretations, represents a complete rewriting, with the classic lessons of Trafalgar, Tsushima, and Jutland supplemented by illustrations drawn from battle actions as recent as the invasions of Saipan and Normandy." Pacific Historical Review: *A Guide to Naval Strategy*," *Pacific Historical Review* 13, No. 4 (December 1944), 484. It further noted: "Air power, Mr. Brodie freely admits, has revolutionized naval warfare," but Brodie "insists, however, that the surface ship and particularly the battleship still has the fundamental role, and certain pronounced advantages, and that the basic principles of naval strategy have not been invalidated by the addition of carriers and planes."

<sup>358.</sup> Brodie, "New Tactics in Naval Warfare," 223.

broader sweep of military history and the constant influence that technological change has had – and continues to have – upon its flow. Brodie's expertise in sea power would provide him with insights from the naval services that would serve him especially well as he grappled with the implications of the atomic bomb after August 6, 1945, and a few years after that with the even more daunting thermonuclear superbomb. For sea power, in contrast to land power and even air power, was an especially subtle realm of military power, one that more intuitively comprehended the complex workings of deterrence, which was rooted in both material and non-material forces. As Brodie would observe in his 1959 Strategy in the Missile Age, in his concluding discussion of "The Problem of Stability," that deterrence "after all depends on a subjective feeling which we are trying to create in the opponent's mind, a feeling compounded of respect and fear," and he cautions that it may be "possible to overshoot the mark" and to make the opponent "fear us too much, especially if what we make him fear is our over-readiness to react." 359 Brodie counsels that the "effective operation of deterrence over the long-term requires that the other party be willing to live with our possession of the capability upon which it rests"; or, "[a]s Admiral A.T. Mahan observed: 'Force is never more operative than when it is known to exist but is not brandished."360 Therefore, Brodie argues, "Conspicuous aggressiveness in the handling of armaments does not always pacify the opponent."361

Brodie's thinking about the enduring relevance of sea power in a world that, at the time, seemed more enthralled by the rise of air power and its promise transform modern war, took place in those ominous years as Hitler's power and ambitions grew, and after Japan's surprise attack on Pearl Harbor would help catapult him to an impressive level of military influence during World War II, particularly for a civilian strategist - one of the first civilian defense intellectuals of the World War II era who would define a new pillar of strategic influence for the nascent world power that would come to be known under various monikers including the "best and the brightest," the "civilianscientific strategists," and later on as the "wizards of Armageddon." Brodie's book would become ubiquitous on America's ships of war and in the Navy's ROTC classrooms as his once-titled A Layman's Guide to Naval Strategy was rechristened A Guide to Naval Strategy and provided to thousands of America's wartime seamen, providing an early renown that would carry him across the atomic threshold into the new nuclear world, one of the first strategic thinkers to comprehend the revolutionary implications of the shocking incineration of Hiroshima, and who would presciently respond to the new challenges that were to follow, from the inevitable end to America's brief atomic

<sup>359.</sup> Brodie, Strategy in the Missile Age (Princeton: Princeton University Press, 1959), 397.

<sup>360.</sup> Brodie, Strategy in the Missile Age, 397-398.

<sup>361.</sup> Brodie, Strategy in the Missile Age, 398.

monopoly to the dangerous thermonuclear stalemate of his later years. Brodie's willingness to transcend the specificity of the now and to instead probe for deeper, more enduring truths about so fundamental an issue of world order ensured that his work would remain relevant not only to his time, but to our time as well – and beyond.

Technologies evolve, world orders rise and fall, but the fundamental relationships of technology to war, and of war to policy, remain constants in a world of dynamic change. And central to Brodie's body of work, from the age of global sea power to the nuclear era, was the enigmatic but all-important relationship of war to politics, and it was the determination and sophistication of his lifelong effort to illuminate this complex interrelationship that would set him apart from his peers, and elevate him to a distinguished status shared by only a small handful of strategic thinkers across the ages – and which might even justify the prediction made by the editors of *Makers of Nuclear Strategy* that "[f]uture generations of are likely to acclaim Brodie as 'the Clausewitz of the age of nuclear deterrence.'"362

<sup>362.</sup> John Baylis and John C. Garnett, eds., Makers of Nuclear Strategy (London: Pinters Press, 1991), 5.

## Chapter Three After the Bomb: Confronting the 'Absolute Weapon' Everything that I Have Written is Obsolete'

Fred Kaplan, in his intellectual history of then nuclear strategists, *The Wizards of Armageddon*, recalls the morning of August 7, 1945, the day after Hiroshima was destroyed by a single atomic bomb. On the other side of the planet from that city's smoldering ruins, Brodie was out driving with Fawn to purchase that morning's *New York Times*, whose banner headline read: "First Atomic Bomb Dropped on Japan; Missile is Equal to 20,000 Tons of TNT," with smaller headlines proclaiming: "New Age Ushered," "Day of Atomic Energy Hailed by President, Revealing Weapon," "Hiroshima is Target," "Impenetrable' Cloud of Dust Hides City After Single Bomb Strike." As Kaplan recounted, "Brodie read just two paragraphs of the story that followed, looked up for a few seconds, turned to his wife and said, 'Everything that I have written is obsolete." 363 Brodie had started at Yale just a few days before, on August 1.

Kaplan observed that "Brodie was not the only one for whom everything turned obsolete that morning. The whole conception of modern warfare, the nature of international relations, the question of world order, the function of weaponry, had to be thought through again. ... From these ashes an entire intellectual community would create itself, a new elite that would eventually emerge as a power elite, and whose power would come not from wealth or family or brass stripes, but from their having conceived and elaborated a set of ideas." 364 And, "[i]n those first months following Hiroshima and Nagasaki, Yale University would become a prime mover on the thinking about how to live with the bomb, and Bernard Brodie was at the center of that movement."365 On the threshold of the nuclear age, Brodie was best known for his popular books on naval strategy and as Kaplan recounts, the title to his 1942 A Layman's Guide to Naval Strategy (which in later printings, at the request of the Navy which assigned it to its ROTC courses, was shortened to A Guide to Naval Strategy. Then, with the dropping of those two atomic bombs, the world had suddenly changed. As Kaplan recounted, "When Brodie came to his office . . . the next day, Bill Fox greeted him with the same question Brodie had essentially posed to himself only a few second after glancing at

<sup>363.</sup> Kaplan, Wizards of Armageddon, 9-10.

<sup>364.</sup> Kaplan, Wizards of Armageddon, 10.

<sup>365.</sup> Kaplan, Wizards of Armageddon, 10.

the front page of the newspaper earlier that morning. 'Where does this leave you with your battleships?' Fox asked. Brodie, still somewhat baffled, just shrugged."<sup>366</sup>

At Yale's Institute of International Studies at this time could be found "some of the key figures ... in the development of 'realist' thinking about international relations" - including the institute's Frederick S. Dunn, William T. R. Fox, and Arnold Wolfers, who would later collaborate with Brodie on the widely celebrated 1946 treatise *The Absolute Weapon* along with their colleague, Percy E. Corbett, a work that Booth describes as a "book of considerable analytical clarity and technical expertise," exhibiting both a "sophisticated application of the ideas of political realism" as well as "extraordinary prescience" - so much that there would be "no comparable works for over ten years."367 Brodie was invited to join the institute, where he had planned to continue his work on sea power, only to soon learn of the dramatic events unfolding in the skies of Japan, which "quickly changed the direction of his study." <sup>368</sup> Citing the oft-quoted observation by Bernard to Fawn on the morning after Hiroshima's atomic destruction—"Everything I have written is obsolete"—Newell Bringhurst counters: "In truth, he was being overly pessimistic. Adjusting his thinking to the new realities of the atomic age, he would soon emerge as a leader in the field of nuclear strategic deterrence"369 As Bringhurst describes, "Brodie was thus among the first to come to grips with the fact of everyday living with the bomb."370

Later that year, Brodie would be appointed to teach at the new National War College, an institute for high-ranking military officers, which "require[d] Bernard's presence in Washington from September to December, allowing him to return to New Haven only on weekends."<sup>371</sup> The Brodies started out in a modest public housing complex but would soon commence building their new "dream home" north of New Haven in the idyllic town of Bethany, a place of peace and beauty described by Fawn as the first place since her childhood home in Huntsville where "she felt 'completely at peace with the world,"<sup>372</sup> and with a "'glorious view' of nearby Gaylord Mountain."<sup>373</sup> In the spring of 1947, a year before the house was completed, the couple planted flower and vegetable gardens on the land. Bringhurst observed, "For Bernard, gardening provided an effective counterweight to the atomic bomb – the grim focus of his research and

<sup>366.</sup> Kaplan, Wizards of Armageddon, 22-23.

<sup>367.</sup> Booth, "Bernard Brodie," 21.

<sup>368.</sup> Booth, "Bernard Brodie," 20.

<sup>369.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 98.

<sup>370.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 98.

<sup>371.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 114.

<sup>372.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 120.

<sup>373.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 124.

writing activities at Yale."<sup>374</sup> On August 30, 1948, the new house was at last ready to be moved into, though it still required some finishing touches. As Bringhurst recounts, "Settling into their dream home, Fawn and Bernard knew that all the time and effort had been more than worth it. 'We are really enjoying our new house tremendously,' Fawn wrote ... 'Bernard's chrysanthemums are beginning to bloom in all their gorgeous profusion of color, and it is wonderful to be able to enjoy them all the time."<sup>375</sup> The new house "attracted national attention through *Your House and Home*, being featured in that publication's inaugural 1950 issue," and their "so-called Hilltop House was praised for its tasteful planning and careful attention to detail."<sup>376</sup>

While "greatly impressed by the revolutionary character of the new weapon," Booth recalls that Brodie was at first "tentative' on the question of whether the atomic bomb would deter or provoke tension," 377 as evident in his November 1945 essay "The Atomic Bomb and American Security" that preceded his chapters in *The Absolute Weapon* the next year. But Booth notes that Brodie eventually "came to accept Viner's argument that the bomb would be stabilizing since no promise of victory would be worth the price if devastating retaliation was certain." This would become not only the foundation of American nuclear strategy, but the theoretical framework of structural realism during the Cold War period, also known as neorealism.

Together, the group of theorists who contributed to *The Absolute Weapon*, known as the "Yale group," articulated a distinct nuclear realism that rejected both the "warfighting" or "war-winning" school of thought that was articulated forcefully in 1946 by William Borden, author of *There Will Be No Time* and later by the prolific Herman Kahn, as well as the nuclear idealism of those who advocated world government as the solution to the new nuclear danger. The Yale group believed "the bomb was revolutionary but that states would not put their security in the hands of an international organization. As a result, the great powers could not return to old-style wars, but neither could they move forward to world government. They therefore had to live with the bomb but without war; this meant living in a world of competitive arms building and deterrence." 379

Brodie's early consideration of the accidents of history that so profoundly shaped man's odyssey, and the value in the effort to ameliorate conditions of injustice which, if left festering, could result in war, with the hope and expectation of strengthening thereby our proposed structure of world order, as he described in 1938 in his writings

<sup>374.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 120.

<sup>375.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 124.

<sup>376.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 124.

<sup>377.</sup> Booth, "Bernard Brodie," 23.

<sup>378.</sup> Booth, "Bernard Brodie," 23.

<sup>379.</sup> Booth, "Bernard Brodie," 25.

on the prevention of war through peaceful change, resonate even more strongly in the immediate post-Hiroshima era, when the high price of accident and the unique fragility of the emergent world order, allow for a logical and natural progression, from considering the merits of "peaceful change" to articulating a philosophy and a strategy of deterrence, which one can think of as an update to the peaceful change argument for the new, exceedingly dangerous, nuclear era. It is thus no small coincidence that Brodie was among the first to turn his full attention to the unique challenges of the post-Hiroshima world, taking the lead in conceptualizing deterrence, embracing it, and taking the first steps toward operationalizing it.

Indeed, Brodie's contributions to the foundational 1946 book on nuclear strategy, *The Absolute Weapon: Atomic Power and World Order*, helped to establish the theoretical principles that underlay America's emergent strategy of deterrence. His later work, *Strategy in the Missile Age*, updated his thinking to take into consideration the loss of America's atomic monopoly, the increase in destructive yield as thermonuclear weapons entered the arsenals of the superpowers, and the enhancement of the reach and accuracy of delivery vehicles, most notably the intercontinental missile. Brodie is perhaps best known for his conclusion, articulated most famously in his 1946 contribution to *The Absolute Weapon*, but first presented in his article "The Atomic Bomb and American Security" published by the Yale Institute of International Studies as Memorandum 18 in November 1945: "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." "380"

## Strategic Ambiguity Redux: Lessons for the Atomic Age

Brodie had long recognized an essential ambiguity inherent in naval power: "A navy thus has defensive and offensive uses, which are sometimes indistinguishable and always mutually reinforcing." This would also be true of nuclear weapons, resulting in what would remain a complex and never truly resolved ambiguity with regard to defensive and offensive weapons systems, or in the parlance of the nuclear strategists, with regard to the credibility of deterrence versus warfighting – and whether warfighting capabilities, doctrines, training, civil defense measures, and declaratory statements would augment or undermine deterrence; and if the tools required to win major wars in the nuclear age would likely precipitate such wars, or in fact (and contrary to intuition) decrease their likelihood. Over and again, from the simplicity and glaring inadequacy of massive retaliation strategies, *Sunday Punch* strikes and

<sup>380.</sup> Booth, "Bernard Brodie," 23-24.

<sup>381.</sup> Brodie, A Guide to Naval Strategy, 5.

other plans designed to deliver a *knockout blow* that later came to be known as *massive* retaliation, to the more refined but equally ambiguous strategies of *flexible response* for an era of *brushfire wars* fought to let off steam and reinvigorate deterrence while avoiding *general war*, this most elemental strategic ambiguity would never go away, or be fully resolved with clarity.

And so the nuclear doctrinal and theoretical debates would continue for nearly half a century, with Bernard Brodie leading the charge by articulating so clearly the fundamentals of nuclear deterrence, and elucidating the requirements for strategic stability in the nuclear age. Brodie was driven by the singular goal of ensuring that nuclear war never be fought, as the price paid in death and destruction would dramatically overshadow any potential political, economic or strategic benefits of war. However, as it would turn out, his view was not the only one, and a competing doctrine would emerge that postulated that nuclear wars could not only be fought, but they could be won, and preparing for nuclear victory was thus a necessity. One of the most well-known and outspoken advocates of this competing school of nuclear warfighting was Herman Kahn, an equally prolific former RANDite just like Brodie, but Kahn came to the opposite conclusion on the wisdom of fighting nuclear wars, rejecting the Brodien presumption that fighting a nuclear war was tantamount to national suicide. Kahn and his fellow warfighters came to believe atomic weapons, and later thermonuclear bombs as well, were primarily an incremental advancement in military power, an efficient means of delivering explosive power but not necessarily a transformative one and most likely not Apocalyptic in their consequences. But to Brodie, atomic weapons, even in their earliest, low-yielding form, were truly transformative and inherently revolutionary, so much so that he would initially accept the term absolute to describe them.

According to Frederick S. Dunn, Director of the Yale Institute of International Studies and prominent theorist of peaceful change cited by Brodie in his graduate work, in the foreword to Brodie's November 1, 1945 Memorandum No. 18 published by the institute, "The Atomic Bomb and American Security," it was now "obviously necessary to know as much as possible about the nature of this new weapon and its strategic and political implications. For these are so revolutionary that it would be very easy, by looking just at some aspects and ignoring others, to be led unwittingly into errors of catastrophic proportions." Dunn offers that Brodie's analysis "should be helpful alike to policy-makers and laymen, whatever program for domestic or international action they may favor as the best means of harnessing this most startling threat to future peace and stability." 383

<sup>382.</sup> Brodie, "The Atomic Bomb and American Security," i.

<sup>383.</sup> Brodie, "The Atomic Bomb and American Security," i.

It was within just 75 days of the unprecedented destruction of Hiroshima and Nagasaki, each by a single bomb dropped by a single aircraft, that Brodie published "The Atomic Bomb and American Security," a remarkably prescient analysis that foresaw not only the unique attributes of the new weapon as a deterrent, and the spread of nuclear weapons to other powers, but also the operational challenges confronting the traditional armed services in the face of such a destructive new military technology and the risk of nuclear sabotage and terrorism - over a half century before the War on Terror made worrying about nuclear terrorism a common occurrence. Brodie was struck, like many, but the awesome destructiveness of the weapon: "The introduction ... of an explosive agent which is several million times more potent, on a pound per pound basis, than the most powerful explosives previously known heralds a change not merely in the degree of destructiveness of modern war but in its basic character."384 As Brodie observed, "From the viewpoint of human welfare, the fearful accomplishment of the bomb itself makes the promise of possible eventual benefits resulting from the peacetime use of nuclear energy seem irrelevant and unimportant," as "the rewards of the end result inevitably appear meager against the bare fact that a few pounds of substance can blast whole cities into oblivion."385 From the extraordinary destructive magnitude of the bomb emerged two distinct propositions: the first, "that the atomic bomb, which in the scope of its effects defies comparison with any military innovation of the past, is not just another and more destructive weapon to be added to an already long list" and "is something which threatens to make the rest of the list relatively unimportant"386; and the second, "that it is wholly vain to expect scientists or engineers to fashion any counter or 'answer' to the atomic bomb which will redress the present disequilibrium of offense versus defense to any degree worth mentioning."387

Before the bomb would so drastically and permanently "alter the basic character of war," <sup>388</sup> Brodie had imagined that "a future war between great powers could be visualized as one in which the decisive effects of strategic bombing would be contingent upon the cumulative effect of prolonged bombardment efforts which would in turn be governed by aerial battles and even whole campaigns for mastery of the air." <sup>389</sup> But he held this belief no longer: "The atomic bomb seems, however, to erase the pattern described above." <sup>390</sup> As Brodie observed, "A world accustomed to thinking it horrible

<sup>384.</sup> Bernard Brodie, "The Atomic Bomb and American Security," in Philip Bobbitt, Lawrence Freedman, and Gregory F. Treverton, eds., U.S. Nuclear Strategy: A Reader (London: Macmillan, 1989), 65.

<sup>385.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 64-65.

<sup>386.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 65.

<sup>387.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 65.

<sup>388.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 66.

<sup>389.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 67.

<sup>390.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 67.

that wars should last four or five years is now appalled at the prospect that future wars may last only a few days."<sup>391</sup> And – foreshadowing the missile age that would not come for more than another decade – Brodie predicted that "the power of the new missile completely alters the considerations which previously governed the choice of vehicles and the manner of using them," as a "rocket far more elaborate and expensive than the V-2 used by the Germans is still an exceptionally cheap means of bombarding a country if it can carry in its nose an atomic bomb."<sup>392</sup>

And – foreshadowing the post-9/11 concerns about the specter of nuclear terrorism - Brodie anticipated that "[a]nother and possibly even more revolutionary change in the character of war produced in the atomic bomb lies in the unprecedented potentialities which it gives to sabotage."393 Before the bomb "it was hitherto physically impossible for agents to smuggle into another country, either prior to or during hostilities, a sufficient quantity of materials to blow up more than a very few specially chosen objectives," and as a consequence "[t]he possibility of really serious damage to a great power resulting from such enterprises was practically nil. Far different is the situation where such materials as U-235 or plutonium-239 are employed, for only a few pounds of either substance is sufficient to blow up the major part of a great city." 394 And while "the engine necessary for utilizing the explosive, that is, the bomb itself, seems from various hints contained in the Smyth Report to be a highly intricate and fairly massive mechanism," Brodie also suspects it to be "also probable that a nation intent upon perfecting the atomic bomb as a sabotage instrument could work out a much simpler device, something which permitted the major part of the materials used to be gathered and prepared locally in the target area."395 Brodie speculated that "the war of the future might very well take the form of a revelation by one nation to another that the latter's major cities had atomic bombs planted in them and that only immediate and absolute submission to dictate would prevent them from going off,"396 a scenario that senior Al Qaeda operative, Khalid Sheikh Mohammed - the mastermind of the 9/11 attacks on the United States – says had been implemented when he claimed under interrogation in Guantanamo Bay that Al Qaeda had hidden a nuclear bomb in Europe to be detonated if Osama bin Laden was ever killed or captured, thereby unleashing what he described as a "nuclear hellstorm" – perhaps the first effort by a substate terror group to deter the world's great powers from launching an attack upon their leader. Also anticipating some of the civil liberty issues that would arise during

<sup>391.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 67.

<sup>392.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 67.

<sup>393.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 68.

<sup>394.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 68-69.

<sup>395.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 69.

<sup>396.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 69.

the War on Terror, Brodie wrote that for "a community alerted to national danger the F.B.I. or its counterpart becomes the first line of defense, and the encroachment on civil liberties which would necessarily follow would far exceed in magnitude and pervasiveness anything which democracies have thus far tolerated in peacetime."<sup>397</sup>

Brodie considered possible methods of defense against nuclear attack, writing that a "nation which has developed strong defenses against invading aircraft, which developed reliable means of interfering with radio-controlled rockets, which has developed highly efficient counter-smuggling and counter-sabotage agencies, and which has dispersed through the surrounding countryside substantial proportions of the industries and populations normally gathered in urban communities is obviously better prepared to resist atomic bomb attack than a nation which has neglected to do these things," but also suggests that "progress is not likely to be confined to measures of defense. The use of more perfect vehicles and of more destructive bombs in greater quantity might very well offset any gains in defense. And the bomb already has a fearful lead in the race." Indeed, "Scientific knowledge today embraces no hint of a possibility of neutralizing the atomic bomb; it *does* contain signposts pointing to the possible exploitation of other and equally horrendous means of destroying human life, such as radio-active 'gases." 399

Brodie next considered the "Military Role of the Traditional Armed Forces," observing: "Obviously, the relative importance of the army and navy in wartime would be considerably diminished if not eliminated by a device which could be operated more or less independently of them and which was capable of producing havoc great enough to effect a decision by itself. And in so far as the atomic bomb is delivered to the target by means of rockets rather than aircraft, the same would be true of the air forces as we now know them. But it is likely that decisions will be won without the traditional forces being taken into account? If there is reason to doubt it, those forces clearly remain important. The problem then becomes more pragmatic – that of discovering the degree and direction of the changes necessary to adapt them to the atomic age."400 While tests were forthcoming on the effects of atomic bombing on naval warships such as the Japanese battleship Nagato, Brodie pointed out that "they can provide no answer to the basic question of the utility of sea power in the future."401 During an anticipated though finite period of atomic bomb scarcity, Brodie expected that "ships at sea are among the least attractive of military objects as targets for atomic bomb attack." He supported this argument by noting that "[t]heir ability

<sup>397.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 69.

<sup>398.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 70-71.

<sup>399.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 71.

<sup>400.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 71-72.

<sup>401.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 72.

to disperse makes them wasteful targets for bombs of such concentrated power; their mobility makes them practically impossible targets for super-rockets of great range; and those of the United States Navy at least have shown themselves able (with the assistance of their own aircraft) to impose an impressively high ratio of casualties upon hostile planes endeavoring to approach them." Nonetheless, Brodie writes, "it is still possible for navies to lose all reason for being even if they themselves prove completely immune."

Brodie argues that "sea power has throughout history proved decisive only when it was applied and exploited over a period of considerable time, and in atomic bomb warfare the time may well be lacking. Where wars are destined to be short, superior sea power may prove wholly useless."403 Brodie noted the irony of America's emergence as a world power, and as "the unrivalled first sea power of the world," just as "all this mighty power seems to have become redundant."404 Brodie could, however, envision the "possibility, admittedly slight, that a system of international machinery for the suppression of the atomic bomb can be set up and endowed with such vigor as to enable it to function even through another major war," or more likely that "neither side will dare to use the bomb even though both possess it"; and, in this circumstance, "navies might have an important role to play."405 Brodie would elaborate the possible future role for a navy in the nuclear world in the months and years ahead as he struggled to determine if all his prior work on naval strategy was now obsolete - but already he sensed that if atomic weapons could in fact be neutralized by the mutual fear of their use, there would indeed be a continuing military role for the traditional armed forces in the nuclear era.

In a footnote, Brodie invokes Clausewitz – one of his earliest discussions of the Prussian strategist – writing: "Regardless of technological changes, war remains, as Clausewitz put it, an 'instrument of policy,' a means of realizing a political end." Brodie would soon come to question this view before again circling back to his first instinct that war was, and would continue to be, a continuation of policy by other means. And as the atomic era would, a few short years later, yield to the thermonuclear era, Brodie would strenuously add the word must to Clausewitz's old dictum, making it much more than an observation, and even more than a prescription; to Brodie, it became a commandment. His earlier point, expressed in late 1945, on the enduring interconnection of war to policy no matter what the technology was, was Brodie's first articulation of what would become a sacred point to him, that was in

<sup>402.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 72.

<sup>403.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 72.

<sup>404.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 73.

<sup>405.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 73.

<sup>406.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 93, n.3.

the nuclear era would continue to obey the logic – and what would soon amount to the moral imperative – of Clausewitz. Brodie would extended the Prussian's logic to suggest that if, as in the case of nuclear war, there could be no rational end to war, then such a war could not, must not, be fought.

One could argue that Brodie was in the process of elevating an observation of the Prussian beyond a prescription, in some ways ideologizing what for Clausewitz was mere theorizing (albeit with a healthy dose of prescription woven into his Hegelian structure, with synthesis the ultimate objective), harnessing it into a normative prescription on the permissibility, or in this case the impermissibility of nuclear war. Or if Brodie senses in Clausewitz a shared horror of war in its absolute form, and a shared normative commitment to preventing absolute from erupting beyond the ideal form of its theoretical description into an orgy of real, physical and human destruction. While Brodie's first, tentative comment is buried in a footnote, it shows that Brodie as early as 1945 was thinking about Clausewitz, and while of the belief that Clausewitz's teachings still applied even after the nuclear age had begun, he had not yet realized how central they would become, and endeavored in the years ahead to introduce Americans to the long-ignored theorist, and to share his wisdom and insight in the hope that his precepts would be embraced by others just as Brodie was beginning to. So what started as a footnote penned at the dawn of the nuclear age would blossom into a lifelong inquiry into the enduring wisdom of Clausewitz and how best to apply his lessons to the new age.

It appears prescient that the context in which Brodie addresses Clausewitz and his enduring relevance is not to address the question of whether or not war in the nuclear age can be waged in a manner that honors the Clausewitzian dictum that war is a continuation of politics by other means, but the narrower question of war-termination after atomic bombs are used and the role of traditional armed services in post-attack military operations, a topic that would enjoy much attention by a later generation of escalation theorists who would debate the escalatory (and potential de-escalatory) nature of the bomb. "It has already been suggested," he writes, "that a nation which suddenly attacked another with atomic bombs would find it imperative to follow up its initial blow with rapid invasion and occupation, at the very least for the purpose of minimizing retaliation in kind,"<sup>407</sup> and that in order to "obviate retaliation with atomic bombs to any considerable degree, the invasion would have to be incredibly swift and sufficiently powerful to overwhelm instantly any opposition."<sup>408</sup> But in the same footnote where Brodie reflected on Clausewitz's relevance, he observes that "[c] ertain scientists familiar with the atomic bomb have argued privately that in any future

<sup>407.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 73.

<sup>408.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 73.

war invasion and occupation would probably not be necessary at all." With the World War II experience still fresh and with it that war's necessity for a surrender every bit as total as the war itself, Brodie argued , "Quite apart from the likelihood of direct retaliation with atomic bombs, this view is wholly untenable. A nation which had inflicted enormous human and material damage upon another would find it intolerable to stop short of eliciting from the latter an acknowledgement of defeat implemented by a readiness to accept control. Wars, in other words, are fought to be terminated, and to be terminated decisively."

Brodie's earliest published thoughts on nuclear deterrence appeared in this very 1945 essay, in a section titled "Is the Atomic Bomb a Deterrent from War?" Brodie considers the value of the atomic bomb as a deterrent in a preliminary analysis that explores both sides of an issue and in which he does not yet take sides: "Hope mixed with horror has provoked the exclamation on some hands that the atomic bomb 'makes war impossible!' In the sense that war is something not to be endured if any reasonable alternative remains, it has long been 'impossible.' But for that very reason we should suspect that the atomic bomb does not make war impossible in the narrower sense of the word. Even without it the conditions of modern war should have been a sufficient deterrent to aggression but proved not to be such. Realism therefore dictates the assumption that war remains possible, however more horrible the consequences."410 Brodie adds that "a change so fundamental in the character of war cannot but change drastically the degree of probability of the recurrence of large-scale war within any given period," though he remembers all too vividly from the 1930s "a deeper and probably more generalized revulsion against war than in any other era of history," noting that "[u]nder those circumstances the breeding of a new war required a situation combining dictators of singular irresponsibility with a notion among them and their general staffs that aggression would be both successful and cheap. The possibility of madmen again becoming rulers of powerful states is by no means ruled out for the future. But can there exist again the notion that aggression will be cheap?"411 It is this latter point that would propel Brodie to embrace deterrence as the only logical response to the unprecedented dangers of the bomb: "If the atomic bomb can be used without fear of substantial retaliation in kind, it will clearly encourage aggression." But this strikes Brodie as quite unlikely, and "[f] or this reason, the atomic bomb may prove in the net a powerful inhibition of aggression. It would make little difference is one power had more bombs and were better prepared to resist them than the opponent. It would in any case undergo tremendous destruction of life and property."412 According to

<sup>409.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 93, n.3

<sup>410.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 77.

<sup>411.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 77.

<sup>412.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 77.

Brodie, one situation "where fear of retaliation is at a minimum" is "where one side has the bombs and the other lacks them entirely," but even as far back as 1945 he was confident that this "special situation is bound to be short-lived." <sup>413</sup>

Brodie speculates that the fear of atomic destruction will be uniformly great even if it varies by culture or nation in relative intensity. He observes, "It goes without saying that the governments and populations of different countries will show very different levels of apprehension concerning the effects of the bomb"; and while "[i]t may be argued that a totalitarian state would be less unready than would a democracy to see the destruction of its cities rather than yield on a crucial political question," Brodie surmises that "in no case is the fear of the consequences of atomic bomb attack likely to be low. More important is the likelihood that totalitarian countries can impose more easily on their populations than can democracies those mass movements of peoples and industries necessary to disperse urban concentrations."

Brodie remains unsure at the time of this writing, in the fall of 1945 just a few short months after the leveling of Hiroshima and Nagasaki, whether the bomb will restrain or unleash the more aggressive instincts of states – and he even considers how it may not stop crises from erupting with the potential to escalate. He writes:

But even if one is to assume that in the net – that is, barring the special situations outlined above – the atomic bomb will act as a powerful deterrent to aggression against great powers, that fact may not be overwhelmingly important with respect to the political crises out of which wars generally develop. In a world in which great wars become "inevitable" as a result of aggression by great powers upon weak neighbors, the important question is whether the existence of the atomic bomb will cause a greater restraint on the part of great powers in all their dealings with other nations, whether the latter be great or small. It may easily have the contrary effect. Hitler made a good many bloodless gains by mere blackmail, in which he relied heavily on the too obvious horror of modern war among the great nations which might have opposed him earlier. A comparable kind of blackmail in the future may actually find its encouragement in the existence of the atomic bomb. Horror of its implications is not likely to be spread evenly, at least not in the form of over expression. The response may be a series of *faits accomplis* eventuating in that final deterioration of international affairs in which war, however terrible, can no longer be avoided.<sup>415</sup>

This image of *faits accomplis* is reminiscent of the years before World War II erupted, when a preference for *peaceful change* placed the diplomatic and strategic premium on

<sup>413.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 77.

<sup>414.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 79.

<sup>415.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 79-80.

avoiding war at all costs, even if that meant allowing for the sacrifice of the sovereign independence of smaller states; indeed, the bifurcation of the international system, along an "Iron Curtain," revealed the existence of a recognized limit of western diplomatic and military influence, essentially enabling such a blackmail situation to transpire across eastern Europe as Soviet power oppressed numerous formerly independent nations without a hint of opposition from the West; but within the free world, a counter-effect ensured that Soviet power could not be so applied on the western side of this new frontier. It was thus a precarious balance, predicated upon a mutuality of blackmail that would be enforced by the decreasingly delicate nuclear balance.

In this first effort to flesh out the many consequences of the bomb, Brodie is not yet ready to place his bet on deterrence or on the stability it might provide, and even suggests that he holds a contrary view which he would, within the year, substantially modify: "Finally, and perhaps most important, the anxiety which the atomic bomb itself induces, and which is likely to become more intense as the number of bombs and of the states producing them increases, will remain a powerful but wholly unpredictable factor in world affairs. It may stimulate a sense of urgency which will make feasible correctives far more drastic than any that are possible today. It may, on the other hand, breed national neuroses manifested in the urge for a 'preventive' war." <sup>416</sup> This would in fact prove to be a prescient forecast in the years to come when calls for timely action were raised by some who feared the loss of opportunity enjoyed first during the four-year atomic monopoly and later during the very brief ten-month thermonuclear monopoly – calls that were fortunately not heeded. Adds Brodie: "The doctrine that the only possible defense is a vigorous anticipatory offense may even acquire some military plausibility if the number of bombs in existence greatly increases, but it will be the 'solution' of total despair."417

# The Absolute Weapon?

When first grappling with the riddles of the new nuclear era, Brodie was especially sensitive to the unprecedented totality of warfare, and the prospects of atomic obliteration. As he wrote in the opening words of his chapter "War in the Atomic Age" in his widely acclaimed 1946 edited volume, *The Absolute Weapon: Atomic Power and World Order*, "Most of those who have held the public ear on the subject of the atomic bomb have been content to assume that war and obliteration are now completely

<sup>416.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 80.

<sup>417.</sup> Bernard Brodie, "The Atomic Bomb and American Security," 80. Brodie footnotes this sentence, suggesting —as he would later more assertively argue — that "[i]f the number of bombs in both of two rival camps should become very large, it might not only raise doubt of the possibility of fending off attack but also stimulate hope on the part of either party that a sudden attack upon the other would be so overwhelming as almost to eliminate the latter's chances for effective retaliation." 93. n.6.

synonymous," and that the "state of obliteration" might be the "future fate of nations which cannot resolve their disputes." Brodie speculates that a "war with atomic bombs would be immeasurably more destructive and horrible than any the world has yet known," a fact that is "indeed portentous, and to many . . . overwhelming." In his second chapter in *The Absolute Weapon*, Brodie discusses the military implications of the bomb, and argues that now an "aggressor state must fear retaliation," as "it will know that even if it is the victor it will suffer a degree of physical destruction incomparably greater than that suffered by any defeated nation of history," more so than that faced by defeated Nazi Germany; and, by Brodie's calculation, "no victory . . . would be worth the price." From the horrific destruction promised by atomic weapons, and the assured retaliation that would have to be absorbed by an aggressor in the atomic age, Brodie anticipates not chaos but order, not war but a sustained stability — as if having magically created gold from non-precious metals through some sort of nuclear alchemy.

Only if the bomb could "be used without fear of substantial retaliation in kind" would it "clearly encourage aggression," so Brodie argues that we should endeavor to "make as nearly certain as possible that the aggressor who uses the bomb will have it used against him," even if this means an inevitability of the "multilateral possession of the bomb."421 According to Brodie, so long as any atomic aggressor will inevitably face an atomic retaliatory strike, "the bomb cannot but prove in the net a powerful inhibition of aggression," even "if one power had more bombs" or was "better prepared to resist them."422 Brodie suggests that 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."423 Brodie famously explained, "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."424 This becomes the heart of Brodie's strategic philosophy for the nuclear age, with its central dependence upon deterrence as its pillar. In later years, many would disagree, resulting in the bifurcation of the emerging field of nuclear strategy into two broad categories: the deterrers and the warfighters, and their fundamental disagreement over this singular issue, whether averting war rather than winning wars

<sup>418.</sup> Bernard Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New York. Harcourt, Brace and Company, 1946). Part I: The Weapon. Chapter One. "War in the Atomic Age," 21.

<sup>419.</sup> Brodie, "War in the Atomic Age," in The Absolute Weapon, 21.

<sup>420.</sup> Brodie, "Implications for Military Policy," The Absolute Weapon, 74.

<sup>421.</sup> Brodie, "Implications for Military Policy," The Absolute Weapon, 75.

<sup>422.</sup> Brodie, "Implications for Military Policy," The Absolute Weapon, 75.

<sup>423.</sup> Brodie, "Implications for Military Policy," The Absolute Weapon, 76.

<sup>424.</sup> Brodie, "Implications for Military Policy," The Absolute Weapon, 76.

should be the "chief purpose" of American military power; and even if so, whether it was possible to avert war without being prepared to win them. In the end, successful deterrence might depend on an opponent's belief that its enemy was preparing not only to fight a nuclear war, but to win one, forever obscuring the clarity evident in Brodie's original analysis in a subsequent cloud of irresolvable strategic ambiguity and doctrinal debate.

On June 10, 1946, Time magazine published a favorable review of The Absolute Weapon, an indicator of how important this early effort to grapple with the implications of the atomic era was considered beyond the hallowed halls of academia. As *Time* wrote, "Since Hiroshima, thinkers have started one chain reaction after another about The Bomb," and "'To clear away the hysteria,' five of them published *The Absolute* Weapon ... the best overall job yet on the atom's actual political implications. They make it more real by frankly presupposing that the only two powers likely to engage in an atomic-armament race are the U.S. and Russia."425 The review considers the "Threat of Retaliation," noting, "While some scientists think that an atomic-arms race is the most dreadful thing that could happen, *The Absolute Weapon*'s text argues that it would be still more dreadful for only one nation to have bombs – for only then could they be used with impunity. 'In the atomic age the threat of retaliation is probably the strongest single means of determent." 426 The review next considers the "Threat of Stalemate": "In developing this theme The Absolute Weapon's text refutes the rather silly title. The atom can and will be fitted into military and political strategy, like all other weapons. A surprise atom-bomb attack could make Pearl Harbor look like a mere raid, but continental areas such as the U.S. and Russia are too great for immediate knock-out blows. A surprised but still surviving nation with atomic stockpiles could in its turn destroy the aggressor's cities and industries. After the first heavy devastation, both sides would have to fight minus most of their production; the war might well degenerate into a long stalemate with neither side able to launch a successful long-distance invasion."427 Time further notes, "More dangerous than the atom itself is the idea that a quick atomic blitz would defeat any great nation. No possible atomic aggressor would be able to think that if other great nations are automatically prepared. In mutual atomic war, even the 'victor' will suffer 'destruction incomparably greater than that suffered by any defeated nation in history. . . . Under those circumstances no victory, even if guaranteed in advance – which it never is – would be worth the price." 428

<sup>425.</sup> Time Magazine, "ATOMIC AGE: Absolute Weapon?" *Time*, June 10, 1946, http://www.time.com/time/magazine/article/0,9171,793035,00.html.

<sup>426.</sup> Time Magazine, "ATOMIC AGE: Absolute Weapon?" Time, June 10, 1946.

<sup>427.</sup> Time Magazine, "ATOMIC AGE: Absolute Weapon?" Time, June 10, 1946.

<sup>428.</sup> Time Magazine, "ATOMIC AGE: Absolute Weapon?" Time, June 10, 1946.

Just one day earlier, in the pages of the New York Times, this pioneering work enjoyed similarly broad exposure to the lay public – further testimony to both the importance of the subject matter in the public mind as to the esteem merited upon the authors. But in great contrast to the *Time* review, the article in the *New York Times* was absolutely scathing. Authored by none other than the Chancellor of the University of Chicago, Robert M. Hutchins, the review starts out with all guns blazing directly at the otherwise distinguished authors of this work: "This book, in which five distinguished scholars take part, is confused and contradictory in its thinking, and unimaginative and defeatist in its conclusions."429 As Hutchins critically observes, "After showing that neither international agreements, inspection, nor the fear of retaliation can prevent atomic war, it recommends that we rely on a combination of all three to save civilization. Of the three measures, the authors look with the most favor upon the fear of retaliation. Freedom from fear is no longer an aim toward which America should strive, they seem to suggest; only a world living in fear can be safe."430 Rejecting the authors' consensus on the logic of deterrence, and citing Frederick Dunn's introductory comment that the "atomic bomb is one of the most persuasive deterrents to adventures in atomic warfare that could be devised," Hutchins suggests – as many critics of neorealism would similarly do during its theoretical reign at the end of the Cold War - that "[a]t this point it would seem that we could adjourn and go home, because if the atomic bomb itself is going to prevent war none of us needs to do anything about it, except that we should urge our Government to distribute its supply of bombs all over the world. Then every nation would enjoy the pacifying influence of the fear of retaliation"<sup>431</sup> – a controversial premise that the father of neorealism, Kenneth Waltz, himself would later suggest: "But this the authors of this book do not propose. They do not even advocate making our knowledge of the technique of bomb manufacture available to other nations now."432 Hutchins holds back some fire on Brodie, saluting his "useful list of the military qualities and consequences of the atomic bomb," and finding only two faults with it: the first being Hutchins' belief that Brodie's five-to-ten year estimate for the end of the American atomic monopoly might be excessive, citing a competing viewpoint that Russia would be capable of manufacturing atomic bombs "in about three years"—a time frame that proved more accurate than Brodie's. But Hutchins also suggests that Moscow will then also become capable of producing atomic bombs "at a far higher rate than we can," which turned out not to be the case. 433

Hutchins also disputes Brodie's contention that "the possibilities of sabotage by

<sup>429.</sup> Robert M. Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," New York Times, June 9, 1946, 6.

<sup>430.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>431.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>432.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>433.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

atomic bombs are greatly exaggerated," finding a more persuasive case made for the dangers of nuclear terrorism by National Bureau of Standards director and atomic bomb expert E. U. Condon. 434 However, with the passage now of over half a century since publication of *The Absolute Weapon*, no case of atomic sabotage has yet to take place – not even in the chaotic post-9/11 world nor during the even more chaotic collapse of the Soviet Union. But apart from limited praise for Brodie's analysis, Hutchins takes aim once more at Brodie's embrace of deterrence, writing, "After making his military diagnosis, Mr. Brodie goes on to discuss its implications for military policy," and it is here that "we meet again with the fear of retaliation." <sup>435</sup> Hutchins finds Brodie "highly unconvincing when he sets out to show how we may counter-attack and fight on after an atomic assault upon us," and states that he "overlooks the great fact about the atomic bomb, even though it appeared on his list of its qualities and consequences; and that is the fact that there is literally no defense against it."436 And so, if "as we are told on high authority, 40,000,000 Americans could be killed in a single night of atomic explosions; if in the same period all our cities could be destroyed and all our transportation and communications disrupted, how could we carry on anything that would look like organized warfare?"437 According to Hutchins, Brodie "merely wants to have us get ready to fight so that we shall not be a tempting target"; and if we comply, Brodie suggests that as a nation we will be able to "pursue actively that progressive improvement in world affairs by which alone it finds true security," a contention that Hutchins rejects as nonsensical: "The elaborate measures urged by Mr. Brodie are more likely to divert us from the task of improving world affairs than they are to encourage us to tackle it," and may very well induce an opposite reaction, resulting instead in the "progressive deterioration in world affairs." 438

Hutchins directs even more hostile fire at Brodie's co-authors, describing Arnold Wolfers as "unintelligible"; taking Percy E. Corbett to task for joining his colleagues "in saying that the fear he wishes to overcome offers the greatest hope for peace"; and finding fault with all five authors for being "scornful of world government," repeatedly challenging their embrace of perpetual fear of retaliation as a foundation for peace. "He sees a glimmer of reasonableness in William T.R. Fox's observation that a "world in which two or more states were sitting on powder kegs powerful enough to destroy every major city on earth would be a world of half-peace at best" – a conclusion Hutchins finds to be "so obvious that one wonders why Mr. Fox is the only one of the five au-

<sup>434.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>435.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>436.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>437.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>438.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

<sup>439.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 6.

thors who ever shows signs of seeing it." Hutchins wonders "why he did not confide in his colleagues and why the reader is not told until the third page from the end?" 440

In a more formal – and favorable – academic review in the January 1947 edition of the Annals of the American Academy of Political and Social Science, University of Pennsylvania's Robert Strausz-Hupé writes that "[a]lthough the authors eschew the doomsday rhetoric which the general public has learned to expect from experts on atom politics, they succeed in presenting the most impressive analysis of the terrible dilemma which thus far has appeared in print." Strausz-Hupé writes that the authors "are agreed that the political problem of the atom bomb, superimposed on the staggering problems of pre-atomic world politics, cannot be isolated from the syndrome of international crisis; that control of atomic energy as a weapon is tantamount to the imposition of political, not merely technical, controls; that the United Nations offers the most practical alternatives now available for averting 'a clear-cut polarization of power around . . . the Soviet Union and the United States,' the tendency toward which is fraught with the most immediate threat of war, atomic or old-fashioned; and that the best defense of the United States against the threat of atomic attack, although not against terrible destruction once that attack has been launched, is determentpower, i.e., capacity for instant retaliation."441 He also observed how, "Paradoxically, The Absolute Weapon is a valuable contribution to the controversy on Man and the Atom just because it rejects absoluteness as a basis of discussion," writing, "Since the authors are apparently agreed that capacity for retaliation is the factor most likely to deter a would-be aggressor, they contend implicitly, it seems, that the effectiveness of atomic weapons is relative, i.e., relative to other atomic weapons" – an impression that is "strengthened by Dr. Brodie's two chapters on the strictly military implications of atomic energy."442

<sup>440.</sup> Hutchins, "Scholarly Opinions on Atomic Energy --- and its Control," 27.

<sup>441.</sup> Robert Strausz-Hupé, "Review: *The Absolute Weapon* by Bernard Brodie," *Annals of the American Academy of Political and Social Science* 249, Social Implications of Modern Science (January 1947), 177.

<sup>442.</sup> Strausz-Hupé, "Review: The Absolute Weapon by Bernard Brodie," 177-178. Summarizing Brodie's contribution, Strausz-Hupé notes Brodie's first chapter presents a "synopsis of the views expressed by various physicists," in which Brodie, "leaning heavily on the Smyth report, argues that military and naval supremacy in the traditionally accepted sense no longer furnishes protection against attack by atomic missiles," and "agrees with those scientists who assert that there is no 'secret' and that other nations will be able, in a few years, to break our monopoly of atomic weapons," after which he "proceeds to speculate brilliantly on the technical aspects of large-scale atomic warfare" and "proposes for the United States a military establishment which will be independent of urban centers of supply" and whose mission is "that of averting, rather than winning, wars." [p.177] And in contrast to "the proponents of international control as the one and only alternative to inevitable destruction," Strausz-Hupé observes that Brodie "has the intellectual courage to investigate the case that failure of international control schemes compels us to devise a unilateral policy of national security." [p.177] Strausz-Hupé concludes that The Absolute Weapon is "an important book because the authors combine thorough understanding of technical problems with a strong sense of what is and is not feasible politically," and "[w]hile principally concerned with the latest threat to our battered civilization, Dr. Brodie and his scholarly companions have contrived to expand a book on an atrocious gadget into an extremely interesting introduction to world politics." [p.178] In the December 1946 edition of Pacific Affairs, R.G. Cavell, chairman of the National Executive Committee of the Canadian Institute of International Affairs, observed that he "should like to feel certain that this small volume, which deals so ably with the subject 'Atomic Power and World Order',

Ken Booth, in his biographical chapter on Brodie in *Makers of Nuclear Strategy*, described *The Absolute Weapon* as "a landmark in the story of thinking about nuclear weapons;" but he goes on to clarify that this "is not to say that it was an influential or widely read book," and further observes: "Like several of the key works in strategic theory, it has been referred to more frequently than actually read, and in hindsight its reputation has become more significant than in the late 1940s. Even today it is unlikely that most members of the strategic profession know more about it than a couple of much-repeated quotations." <sup>443</sup> In a footnote, Booth elaborates on the book's overstated influence, arguing that the "book's landmark status when it was first published is exaggerated by Herken and Kaplan," and citing Freedman's appraisal as more accurate—that is, that "the book stands out only in retrospect." <sup>444</sup> Nonetheless, Booth does recognize that *The Absolute Weapon* "was the first comprehensive exposition of American strategy for the age of nuclear deterrence," and that it was notable for being both "[q]uickly produced" and "of exceptional quality," even if its influence is somewhat more ambiguous, and certainly less immediate, than history now suggests. <sup>445</sup>

#### A 'Few Basic Propositions' for the Atomic Age

While Brodie's contribution to *The Absolute Weapon* is often presented as the starting point of his nuclear strategic thinking, with his earlier Yale memorandum less well known, he was actually quite prolific in the first years of the atomic era with many conference presentations, book chapters and articles to his credit. Indeed, just a month after the favorable review in *Time*, he participated in the 22nd Norman Wait Harris Memorial Foundation lectures held at the University of Chicago in July 1946, presenting a paper titled "The Security Problem in the Light of Atomic Energy" that starts out by noting – as he would again more famously in his "Strategy Hits a Dead End"

will be read by all statesmen and others upon whose work and decisions, over the next few years, will depend the peace of the world." Cavell concludes that *The Absolute Weapon* is a "constructive book which should be widely read; its reading by the right people might help to clarify their minds and thus avoid further misery to those millions, particularly in the Far East, who suffer so terribly now, largely because the Great Powers fear and distrust one another." R. G. Cavell, "Review: *The Absolute Weapons*, edited by Bernard Brodie," *Pacific Affairs* 19, No. 4 (December 1946), 450. Also on p.450, Cavell notes the book "is written by five members of the Yale Institute of International Studies under the editorship of one of them, Bernard Brodie, an authority on modern armaments," and that "Brodie divides into two sections a comprehensive chapter entitled 'The Weapon,'" and in his first, "'War in the Atomic Age', he discusses very realistically, the effect of the bomb on the character of war" while in the second, "Implications for Military Policy', he goes into problems of attack and defence and stresses the fact that 'military authorities will have to bestir themselves to a wholly unprecedented degree in revising military concepts inherited from the past'." Brodie also "outlines the possibilities of defence against this new weapon," and points out that, "So far he sees no evidence that American military authorities have begun really to think in terms of atomic warfare."

<sup>443.</sup> Ken Booth, "Bernard Brodie" in John Baylis and John Garnett, eds., Makers of Nuclear Strategy (London: Pinters Press, 1991), 21.

<sup>444.</sup> Booth, "Bernard Brodie," 52, n. 17.

<sup>445.</sup> Booth, "Bernard Brodie," 21.

article in *Harper's* a decade later – that "strategy seems to have lost its entire reason for being. Certainly, the famous remark of Clausewitz, that 'war is a continuation of policy,' has now become a complete absurdity."446 Brodie would a few years later reprise his early thoughts on Clausewitz's obsolescence, finding new relevance as the atomic era gave way to the more dangerous thermonuclear era – and given Brodie's long interest in Clausewitz it is fascinating to observe him invoke the Prussian so early on and in a manner so contrary to both his later efforts to integrate Clausewitzian theory with nuclear strategy and to his first instinct captured in his aforementioned footnote less than a year earlier. As Brodie explained, "In a war in which both sides use the atomic bomb it is hardly conceivable that the victor, if there is one, can derive any benefits, even negative ones, at all commensurate with the costs. Whether that was true or not before is arguable; it is now inescapable."447 America's strategy through to its victory in World War II was "the age-old policy, which has always been basic to strategy, of destroying the enemy's armed forces – and there again we see one of the basic tenets of strategy collapsing."448 As the nuclear era began, Brodie suggested that there are three things that we will want to know: "whether the atomic bomb does nor does not facilitate aggression"; what are the "minimum requirements of any international system for the control of atomic energy"; and "whether there is any useful course of defense policy left to us in the event of a failure to attain a system possessing those minimum requirements."449

Brodie proceeds to list a "few basic propositions" he had hitherto discussed elsewhere, his first being that "in the atomic bomb we have a weapon of which one to ten units is sufficient to destroy any city in the world." He noted one colleague's objection "to our use of the term the 'absolute weapon' in speaking of the atomic bomb," which Brodie explained by saying, "When you have a weapon as effective as this one is, it does not make much difference whether you succeed in devising one which is more effective"—a point he would later revisit when the thermonuclear leap in destructiveness became apparent. But at this early juncture, he still remains "completely unimpressed by the discussion that this bomb is only a beginning and that ten or twenty years from now we shall have one a hundred times more powerful," not because this was unlikely – indeed, the H-bomb would yield a punch a thousand times greater than the A-bomb – but because he does not believe "the order of differ-

<sup>446.</sup> Bernard Brodie, "The Security Problem in the Light of Atomic Energy," in Quincy Wright, ed. A Foreign Policy for the United States (Chicago: University of Chicago Press, 1947), 89.

<sup>447.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 89.

<sup>448.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 89.

<sup>449.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 90.

<sup>450.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 91.

<sup>451.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 91.

ence between that situation and the present one is at all comparable to the difference between the atomic bomb and the preatomic-bomb era."<sup>452</sup> Indeed, "with air forces no greater than those which existed in the recent war, it is at least physically possible for any power to destroy all, or at least most, of the cities of any other great power."<sup>453</sup>

Brodie's second proposition is "that no defense against the atomic bomb is known, and the possibilities of its existence in the future are exceedingly remote." He adds that "the experience of the past, which superficially leads one to believe that aggressive weapons have always been successfully countered, breaks down under analysis as misleading or irrelevant. ... What we have always had in the past is an adjustment to new weapons which tended to qualify those weapons, and such adjustments will not be sufficient in terms of the atomic bomb." Indeed, London's successful response to the German V-1, which on their "banner day" succeeded in downing 97 of 101 missiles launched, would have seemed less a victory had they been tipped with atomic warheads: "then the survivors in London would have had little cause to congratulate themselves." This leads to Brodie's third proposition, "that superiority neither in numbers of bombs nor in numbers of air forces, let alone armies and navies, is sufficient to guarantee security." According to Brodie, even an inferior air force stands a reasonable probability that it "can succeed in penetrating" its opponent's air space, and the consequence is that the "concept of command of the air ... breaks down." <sup>457</sup>

Brodie reflected on Britain's long experience participating in foreign wars, an involvement "designed to *maintain on an economical level* those defenses which Britain found sufficient to her security," which Brodie conceived as the very "purpose of the balance-of-power principle." Until the atomic era, Brodie argues, the "British experience is certainly relevant to the American case"; and the United States "prior to the atomic bomb could have felt some assurance that ... [it] had a fairly effective guaranty against devastation, or invasion of its homeland." But with the atomic bomb, everything had now changed. Brodie next discussed his fourth proposition, the "effect of the atomic bomb on the ranges even of existing aircraft, not to mention long range rockets, which are certain to be developed within the next several decades." He noted, as he had elsewhere, that the bomb enabled aircraft to extend their range "to practically its entire

<sup>452.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 91.

<sup>453.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 92.

<sup>454.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 92.

<sup>455.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 92.

<sup>456.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 92.

<sup>457.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 93.

<sup>458.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 93.

<sup>459.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 93.

<sup>460.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 93.

straight-line cruising radius without payload," albeit at the "sacrifice of the plane and crew" – far greater than the current conventional bombing range for an aircraft of on average "one-quarter or less of its straight-line cruising radius." <sup>461</sup> In effect, an atomic bomb-equipped aircraft would become a manned cruise missile whose mission was in effect a one-war suicide mission, since it was "not likely that belligerents using the atomic bomb and delivering it by aircraft would be particularly interested in getting back after each mission the particular plane or crew which delivered it." <sup>462</sup> Brodie turns to his fifth and last proposition, that it was "pretty clear by now that there is no question at all of world-wide scarcity of the materials for producing the bomb," and that, "[r]elative to the tremendous destructive powers of the bomb, such materials are not scarce" even if "their distribution is still incompletely known." <sup>463</sup> Hence, "we all know that it is only a matter of time before there is multiple possession of the bomb among the great powers"; and while how much time remained a matter of conjecture, Brodie noted that "estimates range from three to about twenty years."

Brodie puts all these propositions together, coming to "the conclusion that military forces can no longer defend a territory in the sense of offering protection; the only defense possible is of the deterrent type. In other words, defense becomes synonymous with measures to guarantee the ability to retaliate if attacked and also of measures to diminish the ease with which the enemy can overwhelm the country by his attack."<sup>465</sup> Brodie recalled the controversy this view had precipitated, including the "violence against this suggestion, not least [by] the chancellor of the University of Chicago," and concedes that "a defense based on deterrence is of less than no value if it fails to deter," and that a "reign of mutual fear which such a system implies would unquestionably would produce psychoses, which, in turn, would have effects, the direction and magnitude of which are unpredictable, almost unimaginable."<sup>466</sup> But, he argues, "[W]e should not for those reasons too readily write off the real deterrent value of the ability to retaliate against an aggressor, provided that that ability is somehow maintained."<sup>467</sup> And so Brodie pragmatically, and realistically, embraces deterrence as our last, best hope for peace.

Brodie considers some other consequences of the nuclear era, including his realization that "in an atomic-bomb war there would be almost no scope whatever for

<sup>461.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 93.

<sup>462.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 93-94.

<sup>463.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 94.

<sup>464.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 94.

<sup>465.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 94.

<sup>466.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 94.

<sup>467.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 94.

sea power,"468 extending a bridge to his earlier work on sea power while at the same time emphasizing the break with history precipitated by the advent of the bomb. He adds that it is "a matter of no consequence at all that a navy is completely immune to the atomic bomb if the whole reason for its existence collapses,"469 which would be the consequence of nuclear war; for the navy would thenceforth be "operating from a country which has lost its entire industry" and would consequently "lose both its ability to operate and its reason for operating."470 With subsequent advances in missile technology and the deployment of ship and submarine launched missiles, Brodie would later come to recognize that sea power would become an essential component of an assured retaliatory capability – restoring sea power from this predicted obsolescence. But at this early stage of the atomic era, Brodie believes sea power to be past its historic peak. As he explains, this "is an issue of tremendous significance for the United States," which "has just inherited from Great Britain the mantle of leading sea power of the world." He continues, "I think also, contrary to the opinions of a great many observers, that sea power reached its apogee in the war just ended. It was often spoken of as an obsolescent force, of less importance than other forces, especially air power. I can think of no war in history in which sea power played a greater role."471 Indeed, Brodie suggests that "the Allied air attack on Germany ... and Japan would both have been impossible without British-American command of the seas."472 He adds, "The ability of the three major powers to marshal and combine their forces and choose first one enemy to concentrate against and then the other was also a function of their command of the seas; and, of course, a large amount of the relatively high degree of security which the United States enjoyed was the result of its great sea power."473 But now, in the atomic age, "geographical distance loses much of its importance as a barrier against attack," so much so that the long geographical isolation between the United States and the Soviet Union that provided an "impedance or obstacle to any outbreak of conflict" was, if not "entirely obliterated by the appearance of the atomic bomb," at the least "vitally affected." 474

With the emergence of the atomic bomb, Brodie observes, comes "the collapse of the threat of war as an instrument of policy on the part of responsible governments" – but at the same time that threat becomes a "much greater instrument in the hands

<sup>468.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 94.

<sup>469.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 94-95.

<sup>470.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 95.

<sup>471.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 95.

<sup>472.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 95.

<sup>473.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 95.

<sup>474.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 95.

of irresponsible governments."<sup>475</sup> This concerns Brodie, as the "threat of war ... on the part of responsible governments has had a tremendous utility in the past"; indeed he believes that while it "obviously has not prevented war ... it probably did reduce the frequency of wars."<sup>476</sup> While Brodie does not allude to his early reflections on the dangers of appeasement, he does confront the specter of a new nuclear appeasement arising should an aggressor become a nuclear power, lacking the same sense of responsibility to its own people as a more responsible state: "Now we have the situation in which a government comparable to the Hitler government could pursue a line of policy comparable to that pursued by the Hitler government in 1938, and the cards would be stacked even more in its favor than was true in the past."<sup>477</sup>

And so we find a bridge, directly interconnecting Brodie's thoughts on, and concerns about, peaceful change advocates and the corrosive dangers of appeasing a hostile power, as articulated during the interwar years that preceded World War II, and the more dangerous era of nuclear arms, when the threat of war made by a similarly aggressive state would certainly cause a more responsible government to pause, and perhaps once again accept the moral compromise that led down a very slippery slope toward continental conquest by a very dark regime. Brodie confronted such riddles, as he did before the advent of atomic weapons, and dared to think about what he himself described as "unthinkable" many years before another strategist, Herman Kahn, would make "thinking about the unthinkable" a household phrase. Brodie was not just a pioneer in his early linkage of atomic war with the phrase "unthinkable," but in his prescient anticipation of the missile age, years before the technology for such an age had even matured. Though it was only 1946 when Brodie participated in the 22<sup>nd</sup> Norman Wait Harris Memorial Foundation lectures, Brodie was already imagining the forthcoming missile age that he would christen about a decade later: "The Bureau of Ordnance of the Navy has developed some so-called guided missiles, some of which depend on infra-red rays and some on radar, which are used for short-range bombing. It is no secret now. ... Possibly that kind of technique might be devoted to very long-range rockets. And also we have to consider the fact ... that, with the atomic bomb, you have a premium on the development of long-range rockets such as you have never had before – and from the point of view of physics it is theoretically possible to build, even with existing fuel, a rocket capable of a few thousand miles' range. ... I should imagine a nation which had, let's say, four thousand-mile rockets which had the capacity of being guided accurately would be in a somewhat better position than a nation which depended on aircraft. How much better depends on what kinds of variables."478

<sup>475.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 95.

<sup>476.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 96.

<sup>477.</sup> Brodie, "The Security Problem in the Light of Atomic Energy," 96.

<sup>478. &</sup>quot;Discussion of General Security," 124.

#### The War in Heaven

Five years before the arrival of the H-bomb, Brodie would turn again for metaphorical, and one might add doctrinal, inspiration – just as he did in his 1941 *Sea Power in the Machine Age* – to the epic story of the "War in Heaven" as described in Book VI of *Paradise Lost* in his January 1947 article "The Atomic Dilemma" in the *Annals of the American Academy of Political and Social Science*. <sup>479</sup> Here he further elaborated on Milton's haunting but prophetic allegory, from which Brodie coined the term "super-absolute weapon," suggesting something more fearsome than the "absolute" weapon of the immediate post-Hiroshima period.

It is intriguing that five years later, such "super-absolute" weaponry would indeed emerge in the arsenals of man, and that it would be initially called the "superbomb" or "super" by most before the more sanitary term H-bomb came into vogue. Then, the atomic era, with its menacing increase in the totality of war toward what looked to be the equivalent of Clausewitz's theoretical abstraction of "absolute war," would experience another jarring leap in destructiveness only a five years after *The Absolute Weapon* came to press, as fusion weapons, long known to be theoretically possible, quickly became practicably possible as well – with expectations gaining currency throughout 1952 that forthcoming tests of the new thermonuclear "superbomb" were expected to be successful, which proved to be the case when on November 1, 1952, America detonated the very first hydrogen bomb – more like a small factory than a working bomb since it weighed over 62 tons and stood nearly 20 feet tall – code-named "Ivy Mike," yielding between 10 and 12 megatons of explosive blast, and generating a fireball over three miles in width.

Revisiting the epic war for Heaven, Brodie recounts: "After a day of fighting, Raphael relates, the issue is still in doubt, although the rebellious angels have received the more horrid injury. ... Satan is persuaded that their inferiority is one of weapons alone, and he announces that he has already invented the instrument which will shift the balance. ... The following day the rebel seraphs, exploiting to the utmost the benefits of tactical surprise, secretly bring up their field pieces and commit them at a critical moment to action. At first the infernal engines wreak dreadful execution. But the loyal angels, not to be surpassed in the application of science to war, seize in the fury of the moment upon the 'absolute' weapon. Tearing the seated hills of Heaven from their roots, they lift them by their shaggy tops and hurl them upon the rebel hosts. Those among the latter who are not immediately overwhelmed do likewise. In a moment the battle has become an exchange of hurtling hills, creating in their flight

<sup>479.</sup> Bernard Brodie, "The Atomic Dilemma," *Annals of the American Academy of Political and Social Science* 249, Social Implications of Modern Science (January 1947), 32-41.

a dismal shade and infernal noise. 'War,' observes Raphael, 'seemed a civil game to this uproar.' Heaven is threatened with imminent ruin, and the situation is resolved in the only way left open-the intervention of God himself, who introduces what the modern radio announcer would unquestionably call the 'super-absolute weapon.'"<sup>480</sup>

Brodie explains that this epic war for Heaven "casts into its ultimate dramatization the chief dilemma which confronts modern man and which, while commonplace, has with the coming of the atomic bomb reached truly tragic if not catastrophic proportions - the dilemma of ever widening disparity in terms of accomplishment and of magnitude of consequences between man's physical inventions and his social adaptation to them."481 Brodie is troubled that "even in the most favorable of contexts and with an omniscient and all-powerful God as a directly interested party, these nearly perfect celestial beings were unable to prevent the outbreak among themselves of a civil war which was saved from being suicidal only by the ulterior circumstance that angels cannot die,"482 in contrast to mortal man. With man as fallible as he is mortal, the particular destructiveness of the atomic bomb deeply worries Brodie, who discounts the virtues of peacetime atomic energy and medical uses of radiation for treating cancers when confronted by the sheer dangers presented by the bomb: "We may be solaced by the promise, but we should not be deceived by it. Cancer is a horrible disease, and the radioactive materials generated in uranium piles may carry us far towards alleviating or even eradicating it. But under modern conditions of sanitation, neither cancer nor the whole complex of known diseases even remotely threatens the basic fabric of our civilization, as the atomic bomb clearly does."483 Adds Brodie: "In terms of power, nature has already bountifully endowed man with fuels to turn his machines and propel his vehicles. The increasing efficiency of those machines and vehicles has been generally assumed to be a good thing, and the use in them of atomic fuels-to the degree that such fuels prove adaptable will no doubt greatly accelerate the trend towards higher mechanical efficiency in the tools of peacetime pursuits. But the rewards of the end result inevitably appear meager against the bare fact that a few pounds of substance can blast whole cities into oblivion. The scientists who worked on the bomb must have felt that intuitively, for Professor Smyth tells us that many of them wished during 1943 and 1944 that the experiments upon which they were engaged would fail."484

<sup>480.</sup> Brodie, "The Atomic Dilemma," 32.

<sup>481.</sup> Brodie, "The Atomic Dilemma," 32.

<sup>482.</sup> Brodie, "The Atomic Dilemma," 32.

<sup>483.</sup> Brodie, "The Atomic Dilemma," 33.

<sup>484.</sup> Brodie, "The Atomic Dilemma," 33, citing Henry D. Smyth, *Atomic Energy for Military Purposes* (Princeton: Princeton University Press, 1945), 224.

In addition to the medical and energy promises of atomic energy, Brodie considers the hopes among many that the advent of the bomb would motivate mankind to embrace world government, dismissing such an outcome as highly improbable: "[M] y own limited experience with proponents of the principle [of world government] is that few of them have in mind a blueprint for a system which would make sense to themselves, let alone others. Their entire intellectual capital in this respect is an insistence that mankind will now be united by an intensification of the kind of fear – the fear of one another – which has always thus far had the opposite result. "485 Brodie notes that "[p]rominent among those who are determined to bring our politics abreast of our physics, in other words to institute 'world government,' are many of the leading scientists who assisted in the production of the atomic bomb." According to Brodie, these scientists were, "understandably enough, gravely shaken by the appalling miracle they have wrought. They are also aware of their limitations as producers of further miracles in their own field. None of them, so far as I am aware, has any confidence in the ability of science to devise some agent which will counter the bomb and rob it of its terrors. They find it more profitable, therefore, to enter a field in which they have no specialized knowledge to encumber them in their designs, to mitigate the effect of their earlier work."486 Brodie takes these scientists to task for presuming they could tame the chaos of world politics when they proved impotent to tame the inherent lethality of their atomic creation, plutonium:

It is really unfortunate that these scientists have not been consistent in their methodology. If they had used in the laboratory the same kind of reasoning they have demonstrated in the political forum, we should not now have the atomic bomb to worry about. The physical scientist learns at the very outset of his career to analyze the properties of his materials and to adjust his techniques completely to those properties. He has, to be sure, created elements not previously found in nature; but even plutonium, once created, showed itself to be a true child of nature in having a will of its own concerning its proper behavior as Element No. 94. It has specific characteristics which determine its utility, and in order to exploit that utility the physicist had to adjust to all the peculiar manifestations of its coy and spritely individuality. The physicist would never dream of exhorting an element to behave like something which it was not, and it is only because he wastes no time doing so that he is able to accomplish such marvels. The physicist might therefore be expected to appreciate the fact that the cure for the world's ills does not lie in exhorting men, or the states into which they have become organized, to behave in a way which the facts of day-to-day events indicate to be utterly foreign to their natures. 487

<sup>485.</sup> Brodie, "The Atomic Dilemma," 33.

<sup>486.</sup> Brodie, "The Atomic Dilemma," 34.

<sup>487.</sup> Brodie, "The Atomic Dilemma," 34.

In a world of "two giants," the United States and the Soviet Union, "an agency with superior power not only does not exist but cannot be manufactured out of existing ingredients, even if the genuine will to do so existed, unless that will goes to the extent of preparedness on the part of the United States and of Soviet Russia to dismember themselves. Splitting the United States and splitting Soviet Russia seem to present a more difficult problem than splitting the atom proved to be."488 Brodie rebukes University of Chicago Chancellor Hutchins, who "asserts that world government is 'necessary, therefore possible,'" noting that "one might overlook the non sequitur and reply that what is manifestly impossible it is a waste of time to regard as necessary. What is necessary is in any case not world government but control of the atom bomb, by whatever means are possible."489 (Brodie further notes, in a subtle and indirect reference to Hutchins' rebuke of Brodie in an earlier review of The Absolute Weapon published by the New York Times in which Hutchins – as described by Brodie's mentor Quincy Wright "championed the argument that only world government can help," a view that Wright, like Brodie, rejected – how "in the same article Chancellor Hutchins admonishes certain persons, whose negative views on world union he regards as reprehensible, to 'read *The Federalist'* – thus bringing in the inevitable example of the American Union - one might refer him especially to the second of the papers known by that name."490) Brodie instead "urges realism," adding that it "behooves the political scientist to set about analyzing the problem of atomic-age security in a twopower world. ... If the scholar insists on speaking in terms of an ideal world wholly different from that which confronts him, he is merely rejecting his problem."491 Thus, Brodie concludes, "The business of devising and pursuing a sound national policy in a desperately dangerous world is something which demands all our intelligence as well as our moral strength. If the words 'national policy' sound too narrow, I submit that national policy is the only policy upon which we can hope to exercise any influence, and is our only channel for affecting international policy."492

# Early Thoughts on Limited War in the Atomic Age

Brodie next presents a discussion of various proposals with regard to "limited warfare" rooted in a realist approach to the new nuclear world that "are at least based on the determination to work with the materials available rather than those we would like to

<sup>488.</sup> Brodie, "The Atomic Dilemma," 35.

<sup>489.</sup> Brodie, "The Atomic Dilemma," 35.

<sup>490.</sup> Brodie, "The Atomic Dilemma," 35; Quincy Wright, A Foreign Policy for the United States (Chicago: University of Chicago Press, 1947), 107.

<sup>491.</sup> Brodie, "The Atomic Dilemma," 36.

<sup>492.</sup> Brodie, "The Atomic Dilemma," 36.

have," rejecting the notion proposed by famed British strategic theory, Liddell Hart, "who takes the position that since it seems impossible to eliminate war, we should at least attempt to restore to war the limited character it possessed in the eighteenth century." Brodie finds this position "fanciful" but notes that it "has at least the virtue of representing a situation which did actually obtain historically," and which was furthermore "in part reflected in the proposed draft convention presented by Mr. Gromyko before the Atomic Energy Commission, which on the surface is primarily a convention for the outlawry of the atomic bomb." This, like Liddell Hart's proposal, was "essentially a plan to limit the nature of wars, differing essentially, however, from previous proposals along such lines in the tight system of guarantees incorporated in it."

Brodie points out, however, that the "limited-warfare characteristic of the period between Grotius and Napoleon was never a matter of deliberate restraint of power in the sense that a renunciation of total warfare would be today, for the concept of total war did not exist, and under the circumstances prevailing could not exist." He observes, "The limitations obtaining were imposed in part by material considerations," including the fact that "campaigns were fought by mercenaries, who would desert if pressed too hard," and that it was also "necessary to restrain their avidity for plunder partly as a matter of discipline, partly out of fear of retaliation in an era when all territories were at one time or another subject to the passage of enemy armies, and partly out of desire to refrain from offending a population which was not necessarily predisposed to hostility."494 Additionally, warfare was "the calling of the aristocracy, whose lopsided code of morals, however deficient in other respects, permitted no compromise with the code of the duel," and as a consequence was "an art governed by tradition and managed by conservatives."495 It took "the plebeian Napoleon, exploiting the nationalistic fervor of the French Revolution, who involved the populations in war and who, especially in Iberia, plunged hostilities back into the bestial character of the Thirty Years' War"496 - and whose contribution to the history of war marked the arrival of total war, or war without limits. Ever since, Brodie observes, "all the sanctions making for limited war have collapsed – moral, social, and economic. Whether or not the two great wars of this century were in fact 'total wars' (and there were in fact important qualifications to 'totality' in each belligerent country even during the recent war), the fact is that the basis for total warfare may now be considered firmly established."497 That is because total warfare "stems from total mobilization, and total mobilization

<sup>493.</sup> Brodie, "The Atomic Dilemma," 36.

<sup>494.</sup> Brodie, "The Atomic Dilemma," 36-37.

<sup>495.</sup> Brodie, "The Atomic Dilemma," 37.

<sup>496.</sup> Brodie, "The Atomic Dilemma," 37.

<sup>497.</sup> Brodie, "The Atomic Dilemma," 37.

could have no meaning prior to the industrial revolution when there existed no great margin of resources to be converted to war." Brodie suggests that it "would be much easier to expunge from the human race the knowledge of how to produce the atomic bomb than the knowledge of how to produce total mobilization."

Brodie refutes the logic of the argument put forth by some advocates of proscribing the atomic bomb that we should take solace in knowing that "poison gases were not used during the recent war," writing that "poison gas and atomic bombs represent two wholly different orders of magnitude in military utility," and that, "unlike gas, the atomic bomb can scarcely fail to have fundamental or decisive effects if used at all." And while this would reduce both the logic and likely effectiveness of efforts to similarly outlaw the bomb, Brodie concedes that such efforts are not without value (much as future, protracted arms control talks) since the very effort "might prove the indispensable crystallizer of a state of balance which operates against use of the bomb." According to Brodie, "[W]ithout the existence of a state of balance-in terms of reciprocal guarantees against manufacture of the bomb or reciprocal ability to retaliate in kind if the bomb is used-any treaty purposing to outlaw the bomb in war would have thrust upon it a burden far heavier than such a treaty can normally bear." 500

Thus any effort – whether the Lilienthal plan then under negotiation, or a subsequent endeavor – by the U.S. government to control these new weapons of mass destruction must be pursued within a realistic framework, and "will need at every turn the criticism and support of a sober and informed public opinion; and one may earnestly hope that specialists in the field of political science will assume their proper function of leadership in the instruction of that public opinion." Adds Brodie, "For the scientist it is better to arrive at truth than at an optimistic conclusion which is false – though, incidentally, I should regard as the most pessimistic of all possible conclusions the notion that our safety depends on a complete revolution in the hearts and minds of men." 502 According to Brodie, "Absolute security against the atomic bomb lies irretrievably in the past, and neither panic nor incantations will help us to reinvoke it." 503

# The Unity of War and Politics: 'The Atom Bomb as Policy Maker'

In his October 1948 *Foreign Affairs* article "The Atom Bomb as Policy Maker," Brodie continues his examination of the unfolding strategic transformation in world politics,

<sup>498.</sup> Brodie, "The Atomic Dilemma," 37.

<sup>499.</sup> Brodie, "The Atomic Dilemma," 37-38.

<sup>500.</sup> Brodie, "The Atomic Dilemma," 38.

<sup>501.</sup> Brodie, "The Atomic Dilemma," 41.

<sup>502.</sup> Brodie, "The Atomic Dilemma," 41.

<sup>503.</sup> Brodie, "The Atomic Dilemma," 41.

and the central place of nuclear weapons in the emergent bipolar order.<sup>504</sup> He noted that it was "now three years since an explosion over Hiroshima revealed to the world that man had been given the means of destroying himself," and that each of the eight atomic detonations achieved thus far "was in itself a sufficient warning that the promise of eventual benefits resulting from the peacetime use of atomic energy must count as nothing compared to the awful menace of the bomb itself. The good things of earth cannot be enjoyed by dead men, nor can societies which have lost the entire material fabric of their civilization survive as integrated organisms."<sup>505</sup>

But despite this unprecedented danger to humanity, Brodie notes the continuing relevance of realism, and that the "dilemma nevertheless faces us that the enforcement of tolerable behavior among nations will continue for an indefinite time in the future to depend at least occasionally upon coercion or the threat of it, that the instruments of coercion against Great Powers will most likely be found only in the hands of other Great Powers (who can dispense with them only by acknowledging their readiness to forfeit whatever liberties they may happen blessedly to possess), and that those instruments appear fated, largely because of those same imperfections of our society which make power necessary, to include the atomic bomb and perhaps other comparable instruments of mass destruction." 506 Taking a swing at idealists who deny this unsavory reality, Brodie writes, "Individuals may retreat from this dilemma behind a barrage of high moral protestation, usually combined with glowing predictions of a better world to be. Such retreat is rendered doubly sweet because it is more often than not accompanied by applause, especially from the intellectual wing of our society. But the nation as a whole cannot retreat from the problem, and those who desert simply leave the others to think it through as best they can."507

Brodie observes that American policy during the first three years of the atomic era "has thus far been evidenced most clearly in the almost frantic effort to secure the adoption of a system of international control of atomic energy," noting critically that it is "difficult if not impossible to find an historical precedent for the eagerness with which this nation has pursued an endeavor which, if successful, would deprive it of the advantages of monopoly possession of a decisive military Weapon." While he admits this "monopoly is bound to be temporary," such a fate "has always been true of new weapons," so as evident in the historical lessons of naval history that he explored in *Sea Power in the Machine Age* a decade earlier. Brodie contends that America's ef-

<sup>504.</sup> Bernard Brodie, "The Atom Bomb as Policy Maker," Foreign Affairs 27, No. 1 (October 1948), 17-33.

<sup>505.</sup> Brodie, "The Atom Bomb as Policy Maker," 17.

<sup>506.</sup> Brodie, "The Atom Bomb as Policy Maker," 17.

<sup>507.</sup> Brodie, "The Atom Bomb as Policy Maker," 17.

<sup>508.</sup> Brodie, "The Atom Bomb as Policy Maker," 17.

<sup>509.</sup> Brodie, "The Atom Bomb as Policy Maker," 18.

fort to internationalize the control of atomic energy was driven not by a "national generosity" but instead by a "well-warranted fear of living in a world which morally and politically is little different from the one we have known but which in addition is characterized by multilateral possession of atomic weapons," a fearsome prospect even to those nuclear realists unwilling to, in Brodie's words, either retreat or desert from the new nuclear challenges.<sup>510</sup> Brodie notes that "the fear which engendered the pursuit of international control also provoked the resolve that any control scheme must contain within itself practically watertight guarantees against evasion or violation" which "greatly reduces the chance of securing the requisite agreement," and which after two years of unsuccessful diplomatic effort "leaves us ... with the unwanted bomb still in our hands, and, so far as we know, still exclusively in our hands."511 This sober nuclear realism leads Brodie to suggest that "we must also begin to consider somewhat more earnestly and responsibly than we have thus far what it will mean for the nation to adjust to an atomic age devoid of international controls," adding that that the "ramifications of that adjustment process are legion, but certainly they involve above all a continuing reconsideration of the effects of the bomb upon our plans for the national security."512

Brodie challenges the internationalists who believe that nuclear weapons render the concept of national security obsolete in the face of the bomb's global consequences, adding that America's security was now "for all practical purposes synonymous with world security" and that "large-scale war without American participation borders on the inconceivable."513 Moreover, Brodie adds, national security remains "the only policy upon which we as citizens can hope to exercise any direct influence, and it is our only channel for affecting international policy," while "world security, on the other hand, is an abstraction which gains meaning ... only to the extent that [we are] persuaded that American security is enhanced thereby."514 Brodie considers four propositions that "are basically unaffected by the existence of the atomic bomb" and which argue against internationalizing control over atomic weapons: "International organization at its existing level of development is obviously inadequate to guarantee either world or American security"; "a highly reliable and effective mechanism for the collective guarantee of security can hardly be deemed to lie within the range of conditions reasonably to be expected within our time"; the "pursuit of security against war – the objective which takes precedence above all others in the modern world – is not inevitably identical with the pursuit of smoother and more intimate international

<sup>510.</sup> Brodie, "The Atom Bomb as Policy Maker," 18.

<sup>511.</sup> Brodie, "The Atom Bomb as Policy Maker," 18.

<sup>512.</sup> Brodie, "The Atom Bomb as Policy Maker," 18.

<sup>513.</sup> Brodie, "The Atom Bomb as Policy Maker," 18-19.

<sup>514.</sup> Brodie, "The Atom Bomb as Policy Maker," 19.

cooperation, the two being especially divergent where the latter holds out little promise of significant success"; and, for "the purpose of threat or warning, adequate national strength is indispensable. The statesman who possesses it can choose whether to appease or warn; the one who lacks it can only appease."515

Brodie turns his attention the emergent bipolar structure of world politics, noting that the Soviet Union remained the "only foreign Power whose defeat would require great exertions on our part," and that this uniqueness – the Soviet Union's substantial military might – accounts for the new post-war bipolarity. As one unnamed admiral cited put it, "[T]here would still be a problem to concern us even if the Soviet Union were something other than what it is; and that the fact that the power system of today is a bipolar one has dominant implications of its own. The main trouble with a bipolar system, as a colleague has so tersely put it, is that the target is all too unambiguous."<sup>516</sup> Brodie ascribes the bipolarity to "special reasons residing in the character of the Soviet state (or, if one insists, in the difference between our two systems) and in the events resulting from that character (or difference in characters) which account for the special dangers and the present acute degree of tension."<sup>517</sup>

But for all Moscow's military might, and its willingness to use force in pursuit of its objectives, Brodie finds that a "saving grace of the Soviet philosophy so far as international relations are concerned is that, unlike the Nazi ideology, it incorporates within itself no time schedule." He further notes that even if Moscow was "convinced that ultimately there must be war between the Communist world and they call the 'capitalist' one," such a war was not necessarily imminent, and America could thus endeavor "to persuade them each time the question arises that 'The time is not yet!" Brodie thus turned his attention to the "problem of how to accomplish this act of persuasion in an atomic age, when the already precious objective of peace is made immeasurably more precious by the immeasurably enhanced horror of the alternative," a problem that Brodie would continue to wrestle with for the next thirty years. <sup>519</sup> Ever the realist, Brodie adds that "since preoccupation with the horror has brought us nothing positive thus far, and offers exceedingly little promise of doing so in the future, it is time for a shift to a more sober position. There are a large number of questions pressing for an answer, and consideration of many of them requires appraisal of the atomic

<sup>515.</sup> Brodie, "The Atom Bomb as Policy Maker," 19-20.

<sup>516.</sup> Brodie, "The Atom Bomb as Policy Maker," 21.

<sup>517.</sup> Brodie, "The Atom Bomb as Policy Maker," 21.

<sup>518.</sup> Brodie, "The Atom Bomb as Policy Maker," 23. Brodie describes Moscow's ideological enmity to the West as "a cardinal doctrine of their faith" and suggests "we can probably do nothing within the present generation to alter it" – implicitly suggesting such an alteration of their core ideological tenets might be possible over a longer period. Just such a transformation would take place four decades later, as a new generation rose up, challenging Moscow's "cardinal doctrine" with one that was at heart western

<sup>519.</sup> Brodie, "The Atom Bomb as Policy Maker," 23-24.

bomb as an instrument of war -- and hence of international politics -- rather than as a visitation of a wrathful deity." 520

Revisiting his thesis presented in 1946's *The Absolute Weapon*, Brodie recalls how, before the atomic era, "it was as nearly certain as any military prediction can be that a conflict between the two major centers of power would be a prolonged one – comparable in duration to the two world wars – and not promising the same finality of decision achieved in each of those instances"; but, he writes, the "atomic bomb has changed all that."<sup>521</sup> It had become "difficult to see how the decisive phases of a war fought with substantial numbers of atomic bombs could be anything but short."<sup>522</sup> With the inevitable loss of America's atomic monopoly – which would take place just a year after this article's publication – "the atomic bomb has deprived the United States of what amounted almost to absolute security against attack upon its continental territories," and "has in military effect translated the United States into a European Power."<sup>523</sup> Alluding – as he did in *The Absolute Weapon* and would again in *Strategy in the Missile Age* – to Milton's *Paradise Lost*, Brodie adds, "However, though Heaven is lost, not all is lost."<sup>524</sup>

## 'Living with the Atomic Bomb'

To confront the dangers of America's emergent atomic vulnerability, Brodie challenged the "frenetic pursuit of international control of atomic energy at almost any cost, including the cost of neglecting to consider any possible alternatives," noting how it was an earlier generation's effort at arms control, in the form of the Washington Naval Treaty of 1922, that "made the Pacific phase of World War II possible, for it assured to Japan something much closer to naval parity with the United States than would have been anywhere near her reach in any real building competition ensuing from the absence of such a treaty." And even if the treaty did succeed in postponing a "costly' naval building competition," Brodie suggests that war with Japan was "immeasurably more costly," asking rhetorically, "[W]ould Japan have dared embark upon a war against an America boasting a naval power which was — as it easily could have been, without any untoward strain upon the American economy — two or three times her own?" Brodie thinks not, suggesting that at least the Pacific War could have been avoided had America sought to *deter* Japanese aggression by maintaining

<sup>520.</sup> Brodie, "The Atom Bomb as Policy Maker," 24.

<sup>521.</sup> Brodie, "The Atom Bomb as Policy Maker," 25.

<sup>522.</sup> Brodie, "The Atom Bomb as Policy Maker," 26.

<sup>523.</sup> Brodie, "The Atom Bomb as Policy Maker," 26.

<sup>524.</sup> Brodie, "The Atom Bomb as Policy Maker," 26.

<sup>525.</sup> Brodie, "The Atom Bomb as Policy Maker," 27.

a decisive military advantage, and not surrendering to the false temptation of parity through arms control. It would thus be the deterrence of future major wars between great powers that would come to define Brodie's contribution to the strategic riddles of the nuclear age, reuniting strategy with policy in the tradition known to many as *Clausewitzian*.

The underlying mechanism of deterrence, Brodie writes, undergirded the long Pax Britannica, which ultimately depended upon the maintenance of British naval supremacy. Thus Brodie writes, "Those to whom armaments competition appears disastrous as well as wicked are somewhat inconsistent when they look back nostalgically on the relatively peaceful nineteenth century and on the marvelous role played by Great Britain in helping to preserve that peace," especially when they "speak vaguely of Britain's invulnerability as a contributing factor, as though that invulnerability were something handed down from on high." He continues, "It was indeed Britain's invulnerability at home which enabled British statesmen to play such an active and on the whole beneficent part in helping preserve the peace of Europe, but it was not simply the accident of the Channel which made Britain invulnerable. It was her clear-cut naval superiority over the Channel and adjacent seas, the impairment of which Britain would not brook, which gave her that enviable position." 526

The coming Pax Americana would thus depend as much upon deterring war as Pax Britannica did; and, while not often noted, Brodie firmly connected the lessons learned from age of sea power to the emerging challenges of the atomic era: "Returning again to the atomic bomb, the issue is not whether our country ought to seek to maintain its present superiority in atomic armaments but whether it has any chance at all of succeeding in such an effort. It has been argued by some (including at one time the present writer) that it was in the very nature of atomic armaments that the kind of clear and decisive military superiority that was feasible in the past – conspicuously in the case of naval armaments – could no longer be realized."527 Brodie notes that this argument, as he advocated in *The Absolute Weapon*, was "based fundamentally on two considerations: first, that there was 'no defense against the atomic bomb,' and second, that when a nation had enough bombs to overwhelm its opponent in one surprise attack and was willing to make such attack, it would make little difference whether its opponent had two or three times the number." 528 But in the two years since he first put pen to paper and grappled with the nuclear riddle, his thinking had evolved in lock step with both the horizontal and the vertical proliferation of atomic weapons – and it would continue to evolve with each new phase of the nuclear age. As of 1948,

<sup>526.</sup> Brodie, "The Atom Bomb as Policy Maker," 27.

<sup>527.</sup> Brodie, "The Atom Bomb as Policy Maker," 27-28.

<sup>528.</sup> Brodie, "The Atom Bomb as Policy Maker," 28.

Brodie found that there was "now reason to believe that the situation is not so simple as all that." He wrote: "A great deal depends on the total number of bombs which it will be possible for the various Great Powers to make in any given period of time. Clearly, a three to one superiority in numbers of bombs would mean one thing if the numbers of bombs on each side were numbered at most in the scores or hundreds, and something quite different (and much less significant) if they were numbered in the thousands. Information which would enable private citizens to make intelligent estimates concerning rate of bomb production has not been made public, but there appear to be hints in various quarters that the maximum feasible rate of bomb production is substantially less than was being generally assumed two years ago. It is also clear that the richer of the known deposits of uranium and thorium are much more accessible to the United States than to the Soviet Union." 529

Imagining the world to come in just a few short years, Brodie considers the technological dimensions of the atomic era, writying that the "enormous technological lead which the United States has over the Soviet Union -- and which shows no conclusive signs of diminishing ... is bound to mean a great potential advantage for the United States in the design of the instruments for using the atomic bomb. The bomb by itself has no military utility. It must be delivered to the target in some kind of vehicle which, unless it is a free-flying rocket, is subject to various kinds of attack. Marked superiority in the vehicle or in the means of shooting down the enemy's vehicles may be no less important than superiority in numbers of bombs, especially if those numbers are something less than gigantic. If those several types of superiority are concentrated on the same side, the disparity in atomic fighting power may be sufficient to warrant comparison with outright monopoly."530 Even with the Soviet Union's efforts to advance its military technology, Brodie remained confident that America's "lead in types of aircraft, in the ordnance of combat aviation, and in anti-aircraft materiel should, or rather could, be as great during the next 20 years as it was in the recent war," adding that the "only question is whether we will make the necessary effort to keep in the lead in our military technology. That the Soviet Union will spare no effort within her capabilities to over take us goes without saying."531 He writes: "We are often told that our monopoly of the atomic bomb is a wasting asset ... in the sense that some day it is bound to end and we are constantly getting closer to that day. But is our superiority similarly a wasting asset? In one respect, at least, we know that it is not, for our fund of bombs is increasing steadily during the period in which the Soviet Union remains without any. On the day that the Soviet Union produces its first bomb, we

<sup>529.</sup> Brodie, "The Atom Bomb as Policy Maker," 28.

<sup>530.</sup> Brodie, "The Atom Bomb as Policy Maker," 28-29.

<sup>531.</sup> Brodie, "The Atom Bomb as Policy Maker," 29.

will have many more than we do at present. What happens thereafter depends on a large number of variables. But looking forward from the present, we may say with a good deal of assurance that our present superiority in atomic armaments will increase considerably before it begins to wane, that it may continue to increase even after the Soviet Union is producing bombs, and that it may be a long time in waning thereafter. At any rate, we know that merely to distinguish – as is usually done – between the monopoly period (in which we are safe) and the post-monopoly period (in which we are lost) is not enough."532

But even if the end of America's atomic monopoly need jeopardize America's military superiority over the Soviet Union, Brodie is nonetheless concerned with the American political and military leadership's capability to effectively wield American power in the atomic era. As he puts it, "Concerning the effects of the atomic bomb upon our military organization and strategic plans, we must recognize first of all that, to paraphrase Clemenceau, the matter is much too important to be left to the generals - or to the politicians either for that matter." 533 Brodie finds that not only do political leaders tend to gravitate toward what is "politically safe," but they also have "neither the time nor the inclination to preoccupy themselves with the long-term significance of changes in military technology, and rarely the competence to make anything of it if they do," and must therefore "rely upon the advice of their military aides, who belong to a profession long recognized as markedly conservative."534 As a consequence, Brodie thought it unlikely "to find military leaders, or the civilian officials whom they advise, accepting readily upon the advent of some revolutionary military device that drastic adjustment which free and objective inquiry may indicate as necessary or at least desirable."535

Brodie suggests, "If we consider national defense policy in its broader aspects, and look beyond the period of American monopoly of atomic weapons, we see that recognition of the loss of American invulnerability to overseas attack and expectation of quick decisions in the event of war will no doubt entail a violent wrench to our defense traditions." <sup>536</sup> But traditions can be hard to change—particularly military traditions—and as of Brodie's writing in 1948, he concluded that "our military planners are thinking of an atomic bomb which is an 'important military capability' but nevertheless only an ancillary rather than a decisive weapon. The chief danger is that the inevitably transitory nature of the conditions presumed will not be recognized

<sup>532.</sup> Brodie, "The Atom Bomb as Policy Maker," 30.

<sup>533.</sup> Brodie, "The Atom Bomb as Policy Maker," 30.

<sup>534.</sup> Brodie, "The Atom Bomb as Policy Maker," 30.

<sup>535.</sup> Brodie, "The Atom Bomb as Policy Maker," 30.

<sup>536.</sup> Brodie, "The Atom Bomb as Policy Maker," 32.

sufficiently or in time."537 He added, "Regardless of what the Soviet Union may accomplish in the field, our own production of atomic bombs is proceeding apace, and the justification for regarding the weapon as an ancillary one is bound to evaporate as our stockpile accumulates." 538 Once the revolutionary nature of the new weapons becomes evident to war planners, Brodie expects that "[p]reparedness in the old sense of the term, which meant mainly provision for great expansion of the military services and of military production after the outbreak of hostilities, will appear even less adequate than it has been charged with being in the past. ... Unquestionably the costs will increase, as they have already begun to."539 Brodie notes the "problem of avoiding military expenditure which is improvident not only because it is too large but also because it is misdirected,"540 such as the proposal to disperse American cities to reduce their vulnerability - an issue that he first examined in *The Absolute Weapon*: "It is clear that such dispersion would result in a tremendous loss of fixed and sunk capital and, in all probability, in a less efficient spatial arrangement of industries than previously existed. Thus, even if one should make the wholly untenable assumption that wholesale dispersion of our cities and the losses resulting would be tolerated by the public, the project might still appear to be militarily wasteful. A great many combat airplanes could be provided with what it would cost to disperse even a relatively small city." 541 Brodie concedes that "[t]hese observations are of course not very reassuring to those who, like the present writer, deplore the necessity of spending on military protection even so substantial a portion of our national income as we are spending today," predicting that "what will occur in this country when the conviction settles upon it that the Soviet Union is producing atomic bombs is the big question of the future."542

Brodie concludes with a note of guarded optimism on our prospects for living in a nuclear world, and preventing the unthinkable from transpiring: "Our problem now is to develop the habit of living with the atomic bomb"; and he finds some comfort in knowing that "the very incomprehensibility of the potential catastrophe inherent in it may well make that task easier."<sup>543</sup>

<sup>537.</sup> Brodie, "The Atom Bomb as Policy Maker," 32.

<sup>538.</sup> Brodie, "The Atom Bomb as Policy Maker," 32.

<sup>539.</sup> Brodie, "The Atom Bomb as Policy Maker," 32.

<sup>540.</sup> Brodie, "The Atom Bomb as Policy Maker," 33.

<sup>541.</sup> Brodie, "The Atom Bomb as Policy Maker," 33.

<sup>542.</sup> Brodie, "The Atom Bomb as Policy Maker," 33.

<sup>543.</sup> Brodie, "The Atom Bomb as Policy Maker," 33.

# Chapter Four Beyond the Bomb: Confronting New Dangers: H-bombs, ICBMs and the Spread of Nuclear Weapons

America would lose its atomic monopoly on August 29, 1949, and little more than three years later, on November 1, 1952, it would lead the way forward into the thermonuclear era with its first successful 'superbmb' – also known as the 'super', hydrogen bomb, or H-bomb – test. As the complexity and potential destructiveness of the nuclear era increased, Brodie would revisit his assumptions as first expressed in "The Atomic Bomb and American Security" and in his subsequent chapters in *The Absolute* Weapon and test his faith in deterrence, and in the process would become something of an advocate of limited war. As the number of nuclear states increased – as he had long predicted would happen, and as the yields of nuclear weapons increased by an order of magnitude, Brodie's thinking reflected a recontextualization of the totality of atomic warfare, allowing for relative and not absolute considerations to come into play. Thermonuclear weapons, whose destructive yield would peak with the Soviet Tsar Bomba test in 1961 with a theoretical yield of 100 megatons and a dialed-down yield of only 50 megatons to reduce fallout (twice the yield of the United States' maximally destructive device), made the first generation of atomic fission bombs seem much less than the "absolute weapon" first imagined, realizing in destructive horror Milton's "super-absolute" weapon from the epic War in Heaven.

As recounted by Fred Kaplan in *Wizards of Armageddon*: "Living with the bomb suddenly became more awkward, difficult and perturbing than ever," and even prior to the Soviet acquisition of a nuclear capability, Brodie had written in 1948 that, with the rapid demobilization of American forces after World War II, "the fact remains that the atomic bomb is today our *only* means for throwing substantial power immediately against the Soviet Union in the event of flagrant Soviet aggression," and the precarious international situation "requires appraisal of the atomic bomb as an instrument of war – and hence international politics – rather than as a visitation of a wrathful deity." <sup>544</sup> Kaplan cited "[a]n epigram Brodie had composed two years earlier" that now seemed "immediately relevant: 'War is unthinkable but not impossible, and therefore we must think about it." <sup>545</sup> Again we find Brodie at the forefront of "thinking about the unthinkable," even though later generations would often attribute that epigram to Herman Kahn. Kaplan commented that "it seemed that one of Brodie's main as-

<sup>544.</sup> Kaplan, Wizards of Armageddon, 33.

<sup>545.</sup> Kaplan, Wizards of Armageddon, 34.

sumptions in *The Absolute Weapon* was now unraveling – the notion that superiority in atomic weapons offered no strategic advantage." <sup>546</sup> With atomic weapons assuming "enlarged importance in American policy," and with the "supposed condition of even greater atomic scarcity than previously imagined," Kaplan writes, "the question of how to use the bomb" and "which targets to strike, in what order, for precisely what desired effects" had "suddenly emerged, at least in Bernard Brodie's mind, as a vexingly pertinent problem," and this became all the more important once the Soviet Union joined the nuclear club in 1949.<sup>547</sup>

## **Lessons of Strategic Bombing: A Scientific Assessment**

Finding a "shockingly shallow" level of strategic thought in military circles with regard to the bomb, Brodie considered the effects of strategic bombing in World War II, looking to history for guidance, something he had been doing since his very first work of scholarship, *Seapower in the Machine Age.* He found from his study of the *United States Strategic Bombing Survey* and from interviews with participants that American forces "had given very little systematic thought to the problem of target selection" until late in the war; that area bombing of cities proved wasteful in terms of both bombs and lives; and that precision bombing was often undermined by the selection of "illogical points at which to aim." With the scarcity of atomic bombs and the questionable results of World War II's strategic bombing, Brodie concluded that "the bombing of cities for its own sake . . . should not dominate the strategic bombing of World War III." Problem of Exporter" – the new journal of liberal opinion published by Max Ascoli since 1949, and which would continue publishing for the next twenty years – "under the title 'Strategic Bombing: What It Can Do." 550

Five years to the day after World War II came to its formal conclusion, less than one year after the Soviet Union joined the nuclear club, and just under two months after frustrating the Korean War got under way – marking the start of the limited war era, Brodie published his article on strategic bombing in *The Reporter*, revisiting the lessons of the Allied strategic bombing effort during World War II, and the implications for the future of war – not just limited wars of the sort unfolding on the Korean peninsula, but total wars as well. Brodie noted that "what is most distinctive about Korea is that there are practically no targets outside the transportation system

<sup>546.</sup> Kaplan, Wizards of Armageddon, 34.

<sup>547.</sup> Kaplan, Wizards of Armageddon, 34.

<sup>548.</sup> Kaplan, Wizards of Armageddon, 37.

<sup>549.</sup> Kaplan, Wizards of Armageddon, 38.

<sup>550.</sup> Kaplan, Wizards of Armageddon, 38.

for strategic bombing forces," and while "B-29's are not useless in Korea" that "they would seem to be among the weapons we need least."551 Brodie added that that "detractors of strategic bombing are certainly going to have a field day-but even so our nation as a whole is not likely to fall into the delusion that perimeter war is the only kind we ought to be worrying about. It is worth repeating that in a war directly with the Soviet Union, strategic bombing would be our chief offensive weapon" since the Soviet Union was "as immune as we are to naval blockade, and has on two historic occasions shown that it can absorb great enemy armies and destroy them." 552 And while a "strong, well-equipped army supported by a powerful tactical air force is obviously indispensable for the containment of the Soviet armies," and "western Europe and other key areas can be defended," Brodie writes that "defense alone will not win the war. Soviet power must be shattered by an offensive" and in the years before the advent of ICBMs, "strategic bombing offensive present[ed] fewer technological and logistic difficulties than any other kind."553 And although the ""strategic bombing lessons of the last war would not automatically apply to another one" as "the technological circumstances and the character of the target would be very different," Brodie argued it as "nonetheless important to know whether our bombing of Germany was a success or, as the dissenters cry, a failure."554 Brodie believed without hesitation that it was a success, and that "our strategic bombing knocked the German war economy flat on its back," though he notes "this great result came too late to have anything like its full effect on the battlefields" and that "the decisive results achieved by bombing could have come much sooner."555 He observes that "the biggest single factor in delaying usual results was the effort devoted to 'area' or urban bombing - which simply did not payoff militarily,"556 and though he challenges those who argue that area bombing actually boosted German morale, he finds the impact was more subtle: morale was undermined but the effect was diluted across the whole of society, including many nonessential industries, where the decrease in morale did not thereby undermine Germany's war effort, thereby diminishing the strategic effects of urban bombing and suggesting to Brodie that a more targeted approach would be more effective, one he would continue to strongly argue during the nuclear era.

Critics point to findings in the U.S. Strategic Bombing Survey that Germany's "war production in almost all categories increased drastically between the middle of 1942 and the middle of 1944," but Brodie points out that this "is quite beside the point, because

<sup>551.</sup> Bernard Brodie, "Strategic Bombing: What It Can Do," The Reporter, August 15, 1950, 28.

<sup>552.</sup> Brodie, "Strategic Bombing: What It Can Do," 28.

<sup>553.</sup> Brodie, "Strategic Bombing: What It Can Do," 28.

<sup>554.</sup> Brodie, "Strategic Bombing: What It Can Do," 28.

<sup>555.</sup> Brodie, "Strategic Bombing: What It Can Do," 28.

<sup>556.</sup> Brodie, "Strategic Bombing: What It Can Do," 28.

the decisive bombing results we are talking about had barely begun by mid-1944."557 Brodie further points out "it wouldn't matter whether or not production as a whole diminished at all if the Germans were denied one indispensable war commodity – such as oil or liquid fuel," and that "in the final stages of the war, is just what happened" when "Allied bombers knocked out two essential German industries - liquid fueled and chemicals."558 In May 1944, Brodie recounts, "German oil-production facilities were chosen as a top priority target," and "[i]mmediately German oil production dropped precipitously," from 662,000 tons per month on average to 80,000 in less than a year, and Brodie adds: "As for aviation and motor gasoline, our results were even better," with a "tremendous" effect on the Luftwaffe, though a "somewhat slower" effect on ground operations.<sup>559</sup> And while Germany's chemical industry was "never singled out as a target," because "most of the chemical industry was closely integrated with synthetic-oil production, attacks on the latter served to dispatch the former as well" and so by August 1944, these indirect "attacks on chemicals were threatening Germany's ability to carry on the war."560 Brodie notes that the German transportation sector "became a strategic target system in March, 1944," and that "heavy attacks did not start until September, 1944," yet by the end of the next month, "carloadings were declining rapidly and showing immediately effects in overall production.<sup>561</sup> By late November and early December all munitions production had been severely affected by the failure to move critical materials" and as "the Strategic Bombing Survey put it: 'Even if the final military victories that carried the Allied armies across the Rhine and the Oder had not taken place, armaments production would have come to a virtual standstill by May; the German armies, completely bereft of ammunition and of motive power, would almost certainly have had to cease fighting by June or July."562

Even though the results came late in the war, Brodie believes "a strong case that our strategic bombing was decisive anyway," with "the fact that from the time of our Normandy landing onward our ground forces did not have to contend with any significant enemy air opposition, while our own planes were making things very rough" for the German armies, owes a great deal to our strategic bombing. <sup>563</sup> And undeniably the shortage of materials, especially oil, which our bombing was imposing on the Germans did in fact hasten the final collapse of their armies. <sup>\*564</sup> But "the fact remains" that "[b]

<sup>557.</sup> Brodie, "Strategic Bombing: What It Can Do," 28.

<sup>558.</sup> Brodie, "Strategic Bombing: What It Can Do," 29.

<sup>559.</sup> Brodie, "Strategic Bombing: What It Can Do," 29.

<sup>560.</sup> Brodie, "Strategic Bombing: What It Can Do," 29.

<sup>561.</sup> Brodie, "Strategic Bombing: What It Can Do," 29.

<sup>562.</sup> Brodie, "Strategic Bombing: What It Can Do," 29.

<sup>563.</sup> Brodie, "Strategic Bombing: What It Can Do," 29.

<sup>564.</sup> Brodie, "Strategic Bombing: What It Can Do," 29.

y the time those results were making themselves felt in a really big way, the Battle of the Bulge was a thing of the past and the Allied armies were well into Germany;" but had those results "come six months or so earlier, no one could say that our strategic bombing of Germany had no significant effect upon the outcome of the war." Of course, had the Allies made an earlier commitment to strategic bombing, Brodie points that that they "might have suffered fewer casualties," but at the same time, "the Russians might have made a separate peace" or "[i]f they had gone on fighting, it would have been their armies and not ours which would have liberated western Europe."

While Brodie at this stage in his writing does not often refer to Clausewitz, he does talk about the necessity of balancing military means with the political and diplomatic ends of war, and notes that while a "directive of June 10, 1943, gave both Allied air forces the primary objective or preparing the way for the invasion of France," which he describes as an "entirely proper objective," as "was the derivative conclusion that the first priority was the elimination of the Luftwaffe as an effective force." 567 But he explains that "the selection of the proper objective does not guarantee the choice of the proper target system," and it was the process of determining through trial and error amidst the fortunes of war that ultimately hampered the effectiveness of the strategy: "We now know that the attack upon the German aircraft industry was a failure," forcing Germany to "disperse their facilities, which proved relatively easy to do," in contrast to the oil industry. 568 Brodie also finds the failure to select the chemical industry, which ultimately collapsed under the collateral pressure of Allied bombardment of the oil industry, to be "[a]nother great failure," as was, Brodie believes, the deliberate bombing of German cities, which "turns out to have been an inordinate waste of bombs and of bombing effort," even though cities were both "easier to find and hit," particularly in unfavorable weather conditions, and were also home not only to civilian populations but also much industry.<sup>569</sup> But because the "chief objective of the deliberate attacks on urban areas was enemy civilian morale," which "of course suffered-the arguments that bombing heightened the enemy's will to resist are simply not supported by the evidence-but the effect of that diminished morale on production was spread out over all industrial enterprises, including nonessential ones, and in the end was trivial compared to the results of knocking out vital industrial complexes."570 Brodie concedes that "[t] hese conclusions about city bombing and the morale factor may have no relevance for the future" as the "atomic (or hydrogen) bomb may give a wholly new and horrible

<sup>565.</sup> Brodie, "Strategic Bombing: What It Can Do," 29-30.

<sup>566.</sup> Brodie, "Strategic Bombing: What It Can Do," 30.

<sup>567.</sup> Brodie, "Strategic Bombing: What It Can Do," 30.

<sup>568.</sup> Brodie, "Strategic Bombing: What It Can Do," 30.

<sup>569.</sup> Brodie, "Strategic Bombing: What It Can Do," 30.

<sup>570.</sup> Brodie, "Strategic Bombing: What It Can Do," 30.

meaning to city bombing,"<sup>571</sup> and in his later work, particularly on the strategic and tactical consequences of the H-bomb, would endeavor to apply the lessons from World War II's strategic bombing experience to the new nuclear realities.

Brodie concludes by reiterating, "But let no one say that strategic bombing was a failure against Germany. The facts disprove it."572 Indeed, Brodie adds, "We know for a fact that the destruction of the German economy was achieved with a minute percentage of the bombs actually dropped on Germany," and as a consequence, "[w] e may therefore conclude that given only a moderate improvement in our use of the means at our disposal, the decisive effects of strategic bombing could have come soon enough to make a great, rather than only a marginal, difference in the outcome."573 The challenge, of course, is how best to apply this lesson to the next conflict. Brodie points out some major differences between Nazi Germany and the Soviet Union, noting the latter has a "far less resilient and more thinly stretched" economy, "especially in terms of transportation," and that "it is also much farther away, and much greater penetration would be necessary to hit at vital targets;" but this more challenging geography would be partly offset by the increased destructiveness of nuclear weapons, enhanced by the "promise of a fairly long-range jet bomber, of perfected instrument bombing, and of guided bombs."574 Brodie's concern, felt since he first turned his thoughts to this new, seemingly absolute, weapon, was that there was "no guarantee that a strategic bombing campaign would not quickly degenerate into pure terroristic destruction," and that the "atomic bomb in its various forms may well weaken our incentive to choose targets shrewdly and carefully, at least so far as use of those bombs is concerned. But such an event would argue a military failure as well as a moral one, and it is against the possibility of such failure on the part of our military that public attention should be directed."575 But despite these new dangers, Brodie reaffirmed that with the lessons "we have learned from the German experience," if we "had to do the business all over again with the same weapons, we could do in a few months what in fact took us two years," and "with far less destruction of urban areas and of civilian lives than occurred in Germany," and losing "far fewer lives among our own combat men, both in the air and on the ground." In short, "Strategic bombing can be a way of saving life in war as well as of destroying it."576

<sup>571.</sup> Brodie, "Strategic Bombing: What It Can Do," 30-31.

<sup>572.</sup> Brodie, "Strategic Bombing: What It Can Do," 31.

<sup>573.</sup> Brodie, "Strategic Bombing: What It Can Do," 31.

<sup>574.</sup> Brodie, "Strategic Bombing: What It Can Do," 31.

<sup>575.</sup> Brodie, "Strategic Bombing: What It Can Do," 31.

<sup>576.</sup> Brodie, "Strategic Bombing: What It Can Do," 31.

## Anticipating the H-Bomb: Must We Shoot from the Hip?

Brodie authored an internal RAND working paper, "Must We Shoot from the Hip?" on September 4, 1951, a year before America's first thermonuclear test but well after its forthcoming arrival had been anticipated by many within the strategic community. The title may seem somewhat casual, but the content was deadly serious – fully rebuking the then-current Air Force strategy known in some circles as "Sunday Punch," a full and total strategic nuclear assault of the enemy in the event of war.

With the H-bomb on the horizon, such a massive assault would soon be excessively disproportionate, and shooting from the hip would be inherently un-Clausewitzian, even if not yet so described. While applying lessons learned from World War II's strategic bombing efforts, the lessons applied by the Air Force were contrary to those Brodie had himself derived from his analysis of the experience. While the Air Force looked to the aerial assault on Japan as the salient experience, which defanged a potentially vicious opponent without the need for a land invasion (and thus giving credence to Brodie's later argument in his 1950 article in *The Reporter*, "Strategic Bombing: What It Can Do?"), it did not, according to Brodie, properly integrate the lessons of the European air war, which demonstrated the decisive strategic benefits of precision targeting of military-industrial targets but questioned the value of urban bombing – in contrast to the Pacific air war, where it was urban bombing that was primarily practiced, including the two atomic bombings. The Air Force embraced the metaphor of Tokyo's surrender, while Brodie found greater value in Berlin's.

Anticipating the greater risks that would accompany the crossing of the thermonuclear threshold, Brodie addressed the emergent strategic transformation that would be realized a year later. In subsequent years, Brodie would revisit and largely reiterate his argument as presented in late 1951. In Brodie's "Statement of the Problem" at the top of his report, he writes that the "spacing or scheduling or atomic air strikes in the event or war has thus far been considered by the Air Force as strictly an operational problem to be left to Strategic Air Command for resolution according to its maximum delivery capabilities," and whose "prevailing attitude is that the more rapid the delivery or our atomic stockpile (or at least that major portion or it allocated to Phase I operations), the better," as "compressing and pushing forward in time a campaign disposing of a given number of bombs will mean, according to this conception, more bombs on target and also more effectiveness per bomb," adding, "that unlike most other biases with which RAND has had to contend, this one is practically universal within the Air Force and for that matter within the Military Establishment," and while "there are differences in fervor" there nonetheless "appears to be no important officer or party within the Military Establishment who seriously questions that principle" resulting in its "universality" within the service. This destruction time over target should be as early in the conflict as is practicable with achieving maximum effects" with a specific "goal of dropping 1,000 atomic bombs simultaneously over the Soviet Union launches World War III." \*\*578\*

But Brodie strongly disagrees with the proponents of the Sunday Punch. Brodie notes that the "methods of use which have brought the atomic weapon its greatest triumphs to date are the methods which, under existing biases, we would abandon in the event of war. Insofar as the explosions at Hiroshima and Nagasaki hastened the end of World War II, as they undoubtedly did by some unknown margin, it was not the two expended but the threat of more to come which tipped the balance." And so it would always be; expending the full or even a substantial part of the arsenal in a single concentrated attack would severely undermine the deterrent power that remained: "The damage done by those two explosions was, in terms of remaining overall enemy capabilities, literally nothing; the demonstration value was everything. Similarly, in the post war period we have kept the Soviet Union in check almost exclusively through the threat of our growing and much publicized atomic stockpile – at least through nothing else that is visible to us." 580

So "to seek to expend almost all we have as quickly as we can" as the Air Force then planned, required "that the results will be absolutely decisive" when it remained unclear "[w]hat grounds we have for expecting such decisive results."<sup>581</sup> Adds Brodie, "One hears in the Pentagon assertions that so powerful and early an attack as that now planned by SAC would 'break the back' of the Russian economy, which, whether true or not (and I think not), still leaves open the question whether such physical and economic results will cause political changes within the Soviet Union which will induce their leadership to surrender or seek a negotiated peace on terms favorable to us, or whether they will not be offset and possibly even nullified by the Soviet conquest of the economy of Western Europe."<sup>582</sup> Brodie notes that "[o]ne encounters references to the psychological and political results which will follow from the crushing impact

<sup>577.</sup> Bernard. Brodie, "Must We Shoot from the Hip?" RAND Working Paper, September 4, 1951, 1-2.

<sup>578.</sup> Brodie, "Must We Shoot from the Hip?", 2.

<sup>579.</sup> Brodie, "Must We Shoot from the Hip?", 14.

<sup>580.</sup> Brodie, "Must We Shoot from the Hip?", 14.

<sup>581.</sup> Brodie, "Must We Shoot from the Hip?", 14.

<sup>582.</sup> Brodie, "Must We Shoot from the Hip?", 14-15.

of the initial blow, but these references are always extremely vague and often naive in terms both of realities of the Soviet governmental structure and of existing knowledge, however meager, about human psychological and political behavior in disaster situations," and he believes instead that "we have no right to expect" that "political and psychological conditions highly favorable to us" will necessarily "follow," and that furthermore, "our techniques of bombing have scarcely been chosen to exploit such effects, let alone maximize them."<sup>583</sup>

Brodie logically suggests that "[o]ne would think that the aim of producing important psychological and political results would demand above all the capacity to continue exerting pressure in some way comparable to that exploited in an initial blow," but by concentrating the attack on the initial blow, it will lose its primary source of pressure.<sup>584</sup> Moreover, the "kind of mass attack envisioned for the opening period of the war will leave an urban population completely unnerved, distraught, and for the most part benumbed," and "will be preoccupied with personal loss and with bare problems of existence," a situation not unlike that experienced by the bombed-out cities of Germany and Japan, and if the "World War II experience is any guide, such a population is politically apathetic," so much so that we can "have no valid grounds for supposing that the governmental structure, with all its coercive apparatus, will be critically impaired."585 Or as Brodie puts it: "it is not too much to say that we shoot our bolt and then wait for something to happen, being then quite unable to affect what will happen," and in a fashion the suggests the logic of Clausewitz while not directly attributing the famed Prussian theorist, Brodie explains that "[w]e permit ourselves little or no opportunity for coordinating bombing attacks with political warfare. We permit ourselves no means of tying our attacks, especially on cities, to specific war acts of the Russian government and armed forces in a manner calculated to impress the Russians, first, that the sole responsibility lies with their government and; secondly, that they have an alternative to being destroyed."586 Moreover, "the compressing of the campaign in time leaves no opportunity for gauging the strategic as opposed to the physical effects of our earlier strikes," and thus "leaves untouched the question of what effect the actual destruction is having upon the enemy's economy and political structure, and upon his capacity to survive and to wage war."587 Adds Brodie, "These considerations suggest that one cannot wisely select targets or target systems on a comprehensive basis without some knowledge (or control) of the sequence in

<sup>583.</sup> Brodie, "Must We Shoot from the Hip?", 15.

<sup>584.</sup> Brodie, "Must We Shoot from the Hip?", 15.

<sup>585.</sup> Brodie, "Must We Shoot from the Hip?", 15.

<sup>586.</sup> Brodie, "Must We Shoot from the Hip?", 16.

<sup>587.</sup> Brodie, "Must We Shoot from the Hip?", 16.

which will hi t and of the collateral pressures to be exerted."<sup>588</sup> A full decade ahead of many of his peers, Brodie recognizes the need for developing what would later be called a *flexible response*, and which Brodie described as follows: "In other words, the relationship between the target on the one side and a time and method of attack on the other is properly a reciprocal and not a one-sided one. One must leave some room for playing by ear according to previously-prepared but flexibly-held concepts. That is the way we would fight a war if we did not previously bind ourselves to another way, which is what we are in danger of doing."<sup>589</sup>

Brodie concedes that one "the operational side, there is no doubt much to be said for the importance of hitting while the hitting is good," but questions "the assumption that that pertains only to the opening stages of the war,"590 and suggests there may be "questions concerning this proposition which seem not to have been considered" but which, given the nature of war, its inherent uncertainties, and its interactive nature, merit a close look. <sup>591</sup> One could view Brodie's questions as inherently Clausewitzian, an effort to firmly anchor strategy in the unfolding realities of war in the atomic age, and to learn from the strategic interactions that do take place how both sides in the conflict adapt to the frictional dimensions that so clearly separate war on paper from war in reality. With an eye to the lessons learned from World War II, where strategic bombing was practiced in earnest for the very first time, Brodie further suggests that: "We need to know, among other things, the minimum size cell for any attacking force if disproportionate losses are to be avoided, the utility of isolating geographical areas within the target region and taking them one at a time, and the ways in which techniques of approach can be varied through a campaign to give the defender a maximum of confusion."592 Further, Brodie reminds us that "the operational factor is after all not the only one that matters," and while "[i]t gives us the limits of the possible," Brodie explains that" [w] ithin those limits, the operational factor becomes one input

<sup>588.</sup> Brodie, "Must We Shoot from the Hip?", 16.

<sup>589.</sup> Brodie, "Must We Shoot from the Hip?", 17.

<sup>590.</sup> Brodie, "Must We Shoot from the Hip?", 16.

<sup>591.</sup> Brodie, "Must We Shoot from the Hip?", 17. These are: First, if we remember our constant (though possibly unrealistic) assumption that the enemy will initiate the war, will his defenses not be well mobilized from the beginning?; Second, may not our early attacks weaken his defensive capabilities, especially if they are directed toward that end?; Third, will we not also learn a few things from the results of our strikes? Is the learning which results from the early combat so one-sidedly in favor of the defensive?; Fourth, is there not a great difference between the learning accorded the defense by continuous raids (which are what is usually envisioned( and that which results from individual strikes widely spaced in time and using different methods of approach? The lessons which the defense derived from the 90-day German V-l attack on England (to mention the classic example) would have come much more slowly from a series of individually concentrated but widely spaced attacks; Fifth, insofar as our urgency stems from a fear of losing advance bases, such concern might suggest other sources of action besides that of dropping all our bombs simply for the sake of getting them dropped. What can be done to make those bases more secure? How can we organize our forces and plan our strikes to reduce the penalty suffered by loss of advance bases? In any case, let us by all means calculate the risks before deciding not to take them." Brodie, "Must We Shoot from the Hip?", 17-18.

<sup>592.</sup> Brodie, "Must We Shoot from the Hip?", 18-19.

among several – a vitally important one to be sure, but nevertheless subject to other considerations;" and, in a Clausewitzian fashion, he adds that the "ultimate payoff is the only thing that counts, the forces involved being a means to that end (and an expendable one at that)." <sup>593</sup>

Brodie – as he tended to do during those first years after graduate school after penning his lengthy doctoral thesis and subsequent books on sea power, looked to the naval realm for insight; in the beginning, he found a long history of deterrence as strategy that would shape his thinking about the new absolute weapon, and later he would mine from his vast knowledge of naval matters metaphorical insight that remained relevant well into the atomic era - observed that the this new Air Force "doctrine of 'Don't divide the attack' is reminiscent of the similar doctrine of 'Don't divide the fleet' which betrayed Admiral Halsey at Leyte Gulf and committed him to the absurdity of hurling ninety ships at sixteen inferior ones while leaving the essential area unguarded," an incident that Brodie would frequently cite in his effort to persuade Air Force officials of the folly of their concentrated Sunday Punch strategy, but which may have provoked greater resistance to his ideas due to the interservice biases that were the quite strong. Brodie notes that "Halsey lost only a gambit and not a war; in one sense he did not even lose the battle, and he was able at the end of his service to retire with honors," adding that in marked contrast, "We are dealing here with far greater risks, and also with a situation in which the strategic bombing campaign must perforce play a far greater role in our overall strategy than Halsey's isolated action could possibly have done."594 More generally, Brodie derives from the experience of both world wars an importance insight: "One might also point out that the predictions concerning the two World Wars which proved almost universally wrong were the predictions concerning their duration," and that "in each or those wars, the side which made the most telling early blows and the farthest advances was the side which ultimately lost."595 While Brodie concedes that there is "certainly no necessary connection in those events" he believes they do "suggest some qualification to the doctrine of always 'getting thar fustest with the mostest,'" to which he adds, "Incidentally, it was a Confederate general (Forrest) who originally made that crack, and the Confederates also lost."596

Brodie next discusses the material and non-material results of nuclear warfare, noting that the psychological dimension is a necessary element in assessing whether or not victory was possible through strategic bombardment alone, and suggesting it "may be that we cannot achieve our objectives unless we rise above the purely

<sup>593.</sup> Brodie, "Must We Shoot from the Hip?", 19.

<sup>594.</sup> Brodie, "Must We Shoot from the Hip?", 19-20.

<sup>595.</sup> Brodie, "Must We Shoot from the Hip?", 20.

<sup>596.</sup> Brodie, "Must We Shoot from the Hip?", 20.

hardware conception of strategic bombing. The question of whether steel or electric power is the better system to attack becomes relevant only after a number or other questions have been answered."597 He looks at the heavy Soviet losses sustained during Germany's invasion, and suggests that the "achievement of such results by strategic bombing would no doubt be considered very good. ... Yet despite these great losses, and despite the fact that great attritional land battles were going on concurrently ... the Russians managed to stop the huge German armies and subsequently to launch an offensive which contributed enormously to the common victory." <sup>598</sup> And while the war was fought with conventional arms, Brodie notes that "if horror be a necessary ingredient, the German provided that in plenty."599 When also considering the great suffering experienced by Russia in the decades prior to World War II, from its violent civil war through its economic collapse and famine that preceded that Nazi attack, Brodie suggests that "[o]ne might well wonder whether the A-bomb destruction we are presently capable of inflicting in the Soviet Union would actually overshadow the horrors which that country has already experienced under its present regime and which that regime easily survived."600

Brodie has found implicit in Air Force target selection an implicit interest in the psychological and political effects of bombardment, an interest that is "much more often implied than mentioned."<sup>601</sup> As Brodie explains, "Capacity to fight effects willingness to fight and visa [sic] versa, and faith or lack of faith in ultimate victory certainly affects the efforts which will be directed towards restoration of damaged industries; but that is by no means the whole story."<sup>602</sup> But Brodie adds that even "[m]ore important is the fact that psycho-political results cannot be divorced from economic ones, so that it is impossible to rule them out in effect even when we are indifferent to them in theory."<sup>603</sup> The trick is that "the results we achieve on the political front may be the opposite to those we desire and may tend to offset to some extent the favorable economic results. Both categories are after all only means to an end, that end being the early and favorable conclusion of the war, and on a basis that will make the peace at least livable."<sup>604</sup> And this ultimate objective, the "goal of securing a final and favorable conclusion to a war usually argues a basic change in the psycho-political climate in the enemy country," which Brodie believes should remain at the forefront of our targeting

<sup>597.</sup> Brodie, "Must We Shoot from the Hip?", 20.

<sup>598.</sup> Brodie, "Must We Shoot from the Hip?", 21.

<sup>599.</sup> Brodie, "Must We Shoot from the Hip?", 21.

<sup>600.</sup> Brodie, "Must We Shoot from the Hip?", 22.

<sup>601.</sup> Brodie, "Must We Shoot from the Hip?", 23.

<sup>602.</sup> Brodie, "Must We Shoot from the Hip?", 23.

<sup>603.</sup> Brodie, "Must We Shoot from the Hip?", 23.

<sup>604.</sup> Brodie, "Must We Shoot from the Hip?", 23.

strategy in the nuclear era: "Psychological objectives can no doubt be to some degree independently targeted from economic ones;" with psychological objectives in mind, we "might concentrate on cities," while the pursuit of economic objectives "would concern itself with vertical systems with small regard to the urban or non-urban location at individual targets." Brodie suggests our "choice at targets may be much less important than methods at attack," and that the oft-debated "question of whether or not we go after cities would be quite secondary to the question at whether or not we introduce some system at warning ... the resident population," and further that "the spacing of attacks, and the propaganda exploitation of those already made and those to come, will make more difference in psychological impact" than the particularities of the target itself. Ultimately, Brodie argues that it "cannot be too much stressed that there is no essential conflict between economic objectives and psychological ones."

Brodie has often been portrayed as especially sensitive, attuned to the underlying psychological issues but perhaps a tad squeamish when it came to the hard, military realities of warfare in the nuclear age, less muscular in his approach, and in his rhetoric, when compared to his colleague Herman Kahn who came to fame for thinking about the unthinkable without blinking. But a close look at Brodie's discussion of human casualties, in a section titled "Are Human Casualties a Bonus?", seems particularly Kahnian, or perhaps one might say, Strangelovian and reveals Brodie was no less willing to think about the unthinkable than Kahn, and no less willing to embrace the notion that the collateral slaughter of millions of people could in fact be construed to be a strategic advantage to the attacker, a bonus of sorts in addition to the strictly material effects of strategic bombardment. While not using the term, he certainly embraces the concept, of *megadeath*. And while in a RAND report and not in his publicly published books and articles that sought to cultivate a more benign impression, it is nonetheless telling to see Brodie wading into the raw, unpolished world of nuclear warfare and not shrinking from the task, and shows that Brodie was not so different from, say, Machiavelli in the Renaissance who whispered in the ear of his would-be Prince forgiveness for the necessary brutality, counseling the strategic supremacy of fear over love: to court the powerful, in this case the nuclear-armed military services, he talked tougher than he tended to talk to the lay public. This is a very different Brodie from the general impression imprinted in the minds of most scholars, such as Ken Booth, Fred Kaplan or Gregg Herken who emphasize Brodie's torment. Brodie, at least at the dawn of the thermonuclear era, did not seem at all tormented by the gravity of the decisions that must be made.

<sup>605.</sup> Brodie, "Must We Shoot from the Hip?", 24.

<sup>606.</sup> Brodie, "Must We Shoot from the Hip?", 24.

<sup>607.</sup> Brodie, "Must We Shoot from the Hip?", 24.

As he writes, "Among the basic questions which appear not to have been clearly resolved either in Air Force doctrine or in RAND studies concerning strategic bombing" is this question: "is it desirable to maximize human casualties or to minimize them, or is it a matter of relative indifference how many casualties result from the destruction of targets selected on other grounds? The answer adopted by the Air Staff, and I believe by most of RAND for that matter, is the one which embraces indifference but which regards slaughter of people attending destruction of an economic target as a 'bonus'."608 In an especially Kahnian passage (one might venture to say Machiavellist), Brodie adds: "Let us be clear that for the purpose of the present discussion we are not concerned with moral considerations per se. Agreed that no one wants to kill people uselessly, and that the war we are talking about would be one in which the stake is nothing less than sheer survival, the question whether we should maximize, minimize, or disregard human casualties in our strategic bombing campaign can be put on a plane where the sole criterion is whether we thereby help or hinder our program towards victory and the achievement of our national objectives. Certainly it is intrinsically an important enough question to be considered in itself."609

RAND's prior studies of this seemingly unthinkable question were "usually from the point of view of economic consequences alone" premised on the idea that "people, especially in cities, represent certain skills, and that to deprive the enemy of those skills may be a very good supplement to or even substitute for depriving him of his industry."610 Brodie adds there was "no unanimous agreement on the matter among RAND staff members in both the Social Science and Economics Divisions" but that "there does seem to be some consensus on the view that highly developed war essential skills are rather thinly distributed in a population even within a city; that people, unlike buildings, can hide or flee; and that some measure of warning is likely even if the attacker does not offer it,"611 all presenting tactic obstacles to achieving any meaningful success from purposeful human targeting. Brodie observes that "these questions are considered almost exclusively in terms of economic results is only another example of the heavy economics bias which has prevailed in this area of thought since World War II," which emerged from the realization that the devastatingly destructive "morale attacks on cities were or appeared to be a complete bust."612 That notwithstanding, Brodie, in a bold Kahnian departure from the conventional wisdom, writes: "The question now is whether we should not be ready to revisit our thinking in view of the radically new conditions created by atomic and other weapons, of the availability of

<sup>608.</sup> Brodie, "Must We Shoot from the Hip?", 25.

<sup>609.</sup> Brodie, "Must We Shoot from the Hip?", 25.

<sup>610.</sup> Brodie, "Must We Shoot from the Hip?", 25-26.

<sup>611.</sup> Brodie, "Must We Shoot from the Hip?", 26.

<sup>612.</sup> Brodie, "Must We Shoot from the Hip?", 26.

new methods of attack, and of the great difference in political climate between Nazi Germany and the Soviet Union."<sup>613</sup> Without saying it, Brodie suggests it was now time to think about the unthinkable, and to do so with a hitherto unprecedented boldness – and a balanced Clausewitzianism that never lost sight of the fundamental link binding war to politics (and thus political objectives.) Brodie notes the Soviet system was entirely different from that of Nazi Germany, marked by a notable lack of public support; as he recalls, "There was very little basis for distinguishing between the people and government in Nazi Germany because of our knowledge that Hitler had the fervent support of the overwhelming mass of the German people," in contrast to the Soviet Union where intelligence "indicates a very different state of affairs" that suggests the merits of considering "whether and how we could exploit that situation in our strategic bombing"<sup>614</sup> – a question that Brodie commences exploring, and which he will continue to explore in the coming years.

Brodie observes that "[a]lmost all references to psychological results of a bombing campaign reflect the quite unexamined assumption that such results are increased only through killing more people," but a closer look presents several "considerations which would seem to suggest the opposite, that is, the desirability of minimizing casualties -- or at least of appearing to wish to do so."615 In a description that echoes the Kahnian (or even Strangelovian) style Brodie has rarely been associated with, he notes "a corpse presents no problems other than disposal. All his anxieties are liquidated as are those of his family concerning him. Liquidated too are all his potential hostilities to the regime which governs him. A corpse makes no demand for food or shelter."616 Further, he notes, "Fear and flight of survivors are the maximum dissolving agent, especially if the regime proves powerless to provide for fugitives and if we provide incentives to the population to bring pressure to bear upon the regime. To do so requires some connection between our bombing and our stated war aims, and presentation of that connection in a form which can be translated into operational demands."617 Brodie also notes "it would probably require far fewer bombs per thousand head to create fugitives than to create an equal number of corpses."618 Brodie also suggests that "indiscriminate bombing of populations will very likely have a disproportionate effect upon the ruled as against the rulers, since the latter will enjoy the prompted internal warnings and the deepest air raid shelters" whereas the ruled will suffer disproportionately - when perhaps a reversal of this would better serve American interests,

<sup>613.</sup> Brodie, "Must We Shoot from the Hip?", 26.

<sup>614.</sup> Brodie, "Must We Shoot from the Hip?", 26-27.

<sup>615.</sup> Brodie, "Must We Shoot from the Hip?", 27.

<sup>616.</sup> Brodie, "Must We Shoot from the Hip?", 27.

<sup>617.</sup> Brodie, "Must We Shoot from the Hip?", 27-28.

<sup>618.</sup> Brodie, "Must We Shoot from the Hip?", 28.

particularly since "intelligence indicates overwhelmingly that the Russian people do not love their regime," and if Russian populace "become convinced that we want to kill Russians rather than destroy Communism, all the value of that potential disaffection is destroyed,"<sup>619</sup> much like what happened to the Nazis, who were initially greeted as liberators when they invaded the Ukraine but who squandered this opportunity by their poor treatment of the populace. Lastly, in perhaps the most Kahnian point raised by Brodie, he writes: "There are in any case far too many Russians for us to kill. It is not too much to say that we need Russians in order to defeat Russians."<sup>620</sup> All these points raised by Brodie, he writes, are "intended only to be suggestive of points which deserve further study" but which "suggest things we could do (or avoid doing) without serious cost and with the possibility of great profit," but which, even if still speculative, suggests that "we have no justification for regarding whatever large scale slaughter results from our bombings as a 'bonus'" as it may well prove "harmful to our strategic and political goals."<sup>621</sup>

Brodie concludes that much potential benefit will come from making an effort to spare civilian populaces from nuclear annihilation: "If we do not know that it is a bad thing to kill Russians indiscriminately, that is not the same as saying that we know it to be a good thing."622 And so Brodie counsels that if "we find ourselves obliged for a variety of reasons to bomb targets situated within cities – as seems almost inevitable - it may becomes [sic] a matter of great urgency so to space our attacks and to attend them with such warning that the Russian population will not inexorably conclude that we are solely bent upon their destruction, denying them all opportunity of reprieve or escape."623 And "it might be a very important factor in helping us to decide such problems as whether the centers of cities or industrial concentrations within cities" should be targeted for attack. 624 While the long, hard fight to "the very end of her capacity" by Nazi Germany may have been on the minds of many war planners in the ascendant United States armed forces at the dawn of the Cold War, Brodie suggests this may have been "an exception," and points to the "surrender of Italy and Japan in the same war, and of Germany and especially of Russia in the previous war," which "show that the will to resist may collapse long before the physical capacity to do so – provided that that will is properly conditioned by the conqueror and that the seeds of disaffection already exist in the target population. The Soviet Union looks like a perfect setup for the attack which exploits psychological weapons, and the atomic

<sup>619.</sup> Brodie, "Must We Shoot from the Hip?", 28.

<sup>620.</sup> Brodie, "Must We Shoot from the Hip?", 28.

<sup>621.</sup> Brodie, "Must We Shoot from the Hip?", 29.

<sup>622.</sup> Brodie, "Must We Shoot from the Hip?", 29.

<sup>623.</sup> Brodie, "Must We Shoot from the Hip?", 29.

<sup>624.</sup> Brodie, "Must We Shoot from the Hip?", 29-30.

bomb looks like the perfect weapon for psychological exploitation. Why not bring these two things together?"625

## In Quest of Sound Strategy

In a lecture delivered to the Naval War College on March 17 1952, Brodie returned to a more traditional Clausewitzian discussion of strategy, picking up on some of the themes he developed in his 1949 World Politics article, "Strategy as a Science." His lecture, titled "Characteristics of a Sound Strategy," started off with an apology of sorts, as Brodie confessed that the "lecture title assigned me is at once convenient and embarrassing - convenient, because it gives me a very wide latitude indeed; and embarrassing, because it implies on my part pretensions to oracular wisdom," to which he added, "I don't think I can describe the characteristics of a sound strategy except, perhaps, in the most general and abstract terms. I think I can, however, occasionally recognize an unsound strategy when I see one, as I believe I sometimes do. I shall, therefore, for the legitimate purpose of being specific rather than abstract, talk more about unsound strategies than about sound ones. In other words, I shall take a leaf from the revivalist preacher and point the way to the good life by preaching against sin."626 Brodie had begun to preach against sin a year earlier, challenging the dogma that underlay the Air Force's concentrated Sunday Punch strategy. In this lecture, he would more directly address the problem of dogma, weaving together the specific criticisms that he had about current strategy with his deeper misgivings on the dangers of an unreflective approach to strategic thinking. As Brodie explains, "my views here, too, tend to be somewhat negative" and "may perhaps conflict with those current here, but that is all to the good in an academic institution, for argument is after all the stuff of learning. If we all thought alike we should all be infinitely wise or, more likely, very stupid."627

Brodie dives straight into a critique of the so-called principles of war, making an argument that he would restate but never truly deviate from across the span of his career. He tells his audience, "Now, if by Principles of War we mean that group of maxims or axioms which are usually presented in a list of 7 to 10 or more numbered items and which are supposed to be unchanging despite the most fantastic changes in everything else, then my feeling about them is not that they are wrong or useless but that we tend to be altogether too respectful of them. And if our respect becomes so extreme that we enshrine them as dogmas, as sometimes happens, then I think they

<sup>625.</sup> Brodie, "Must We Shoot from the Hip?", 30.

<sup>626.</sup> Bernard Brodie, "Characteristics of a Sound Strategy," Lecture Delivered to the Naval War College, March 17, 1952, 1.

<sup>627.</sup> Brodie, "Characteristics of a Sound Strategy," 2.

become positively dangerous."<sup>628</sup> He adds, "You have, no doubt, heard or will hear references to bad strategies of the past where the badness is summed up in terms of its being a violation of this or that Principle of War," and suggests "it is equally true that one could point to the most egregious blunders of past actions (and I fear also of present planning) which have been committed in the name of this or that Principle of War."<sup>629</sup> He notes that the "so-called 'principles of war' … were first formulated systematically by Jomini and developed later by subsequent writers," and that "they are essentially common sense propositions," with "all the virtues of common sense propositions," as well as "the limitations of common sense propositions, including the limitation that occasionally a strict adherence to them will be extremely offensive to common sense."

Sounding much like the Roman poet Ovid, who was for the art of love what Machiavelli would later be for the art of politics and war, Brodie compares the art of strategy with that of courtship: "Now, because the principles of war are really common sense propositions, most of them apply equally to other pursuits in life – including some which at first glance seem to be pretty far removed from war. For instance, if a man wishes to win a fair and virtuous maiden and if he is not too well endowed with looks or money, it is necessary for him to clarify in his mind exactly what he wants of this girl - that is, the principle of the objective; and then to practice rigorously the principles of concentration of force, of the offensive, of economy of forces, and certainly of deception."631 Referring to his "analogy of the way of a man with a maid," Brodie notes that the man "may know that he has to concentrate all his available resources on achieving his objective. In fact he is automatically driven to do so by a deep impulse of nature, but he needs deeper intuitions to tell him just how to apply those resources. He may take her to symphony concerts – when she is not that kind of a girl at all."632 And so it is with the art of war. To illustrate this he discusses the concept of "economy of effort," as defined by the Canadian Armed Forces, which is "a balanced employment of forces and a judicious expenditure of all resources with the object of achieving an effective concentration at the decisive time and place."633 The challenge is in understanding how this proper balancing is achieved: "if we had the wisdom to know what a balanced force should properly be in the present day with all the new weapons and techniques that are crowding upon us; if we really knew what was meant by judicious expenditure of resources for the sake of achieving an effective

<sup>628.</sup> Brodie, "Characteristics of a Sound Strategy," 2.

<sup>629.</sup> Brodie, "Characteristics of a Sound Strategy," 2.

<sup>630.</sup> Brodie, "Characteristics of a Sound Strategy," 3.

<sup>631.</sup> Brodie, "Characteristics of a Sound Strategy," 4.

<sup>632.</sup> Brodie, "Characteristics of a Sound Strategy," 4-5.

<sup>633.</sup> Brodie, "Characteristics of a Sound Strategy," 5.

concentration; and, if we knew what a decisive time and place was – how to recognize one and choose one – then, I should say people endowed with that wisdom would more or less intuitively know how to put those factors together in the way suggested here. Mind you, I'm not saying this particular idea is unimportant – one can point to instances in the past where it has been overlooked, to the sorrow of those who did so."634 But the trick is in the doing; such was the realization of German grand admiral Karl Doenitz, who after "becoming a captive of the Allies" had "written an essay on 'The War at Sea' from the German point of view of World War II" in which he "points out that the German submarines in the first year of the war were ten times as effective per day at sea as they were in the second year of the war. One therefore gathers (though he doesn't make this point) that if Germany had started the war with some 300 submarines instead of 60, they would have stood a very good chance of winning the war at sea, and therefore the whole war – and relatively early."635 Asks Brodie pointedly, "why didn't they have those 300 submarines? Well, one reason is that they were enamored of the idea of a balanced force and devoted a good deal of their naval resources (which had to be limited in view of their ground and air force needs) to surface vessels, including battleships. That gave them what according to a static conception was a balanced force. The trouble was that it was highly unbalanced for a war with Great Britain. This is only one example of where the word 'balance' denotes no ready answer. The balance must always be thought of in terms of strategic needs against the particular prospective enemy."636 The salient question now was, "What is balanced force in an atomic age? ... It is certainly the great problem of our time."637

As he did in his 1951 RAND working paper, "Must We Shoot from the Hip?", Brodie again turns to the Battle of Leyte Gulf to illustrate the dangers of following the so-called principles of world unthinkingly, as dogma — with the principle in the case being the admonition never to divide the fleet, which would violate the principle of concentration. Fortunately, Admiral William Frederick Halsey, Jr., commander of the Third Fleet, recognized mid-battle the danger of following this dictum to the letter, narrowly avoiding disaster. As Brodie explains, "The purpose of the principle of concentration of force is to suggest that one should so allocate one's forces that one can hope to be superior to the enemy somewhere, preferably in the most important place, or at least minimize one" inferiority in the decisive place. I submit that the Commander of the Third Fleet had forces so overwhelmingly superior to those of the enemy that he could have divided his forces between San Bernardino Strait and the north and have remained overwhelmingly superior locally to each enemy force.

<sup>634.</sup> Brodie, "Characteristics of a Sound Strategy," 5-6.

<sup>635.</sup> Brodie, "Characteristics of a Sound Strategy," 6.

<sup>636.</sup> Brodie, "Characteristics of a Sound Strategy," 6.

<sup>637.</sup> Brodie, "Characteristics of a Sound Strategy," 7.

And when you are overwhelmingly superior – how much more superior do you want to get?"<sup>638</sup> This would be a salient question throughout the nuclear era, as a stable structure for ensuring mutual deterrence was sought – and in its pursuit, the notion of overkill emerged. As Brodie concludes, "So much for the principles of war which, to repeat, are useful as far as they go – but which simply don't go very far at all. The real military problems facing us today are problems for which the principles of war not only offer little or no guidance but in some instances are positively misleading."<sup>639</sup> While Brodie firmly rejects an approach to strategy that he defines as Jominian, he does not yet affirm in response a Clausewitzian approach; the elements are there, but not yet the attribution. By the end of the decade, he would embrace Clausewitz not only in principle but in name, and dedicate his scholarship to the revival of the great Prussian theorist's influence. But at this moment, he is still battling the ghost of Jomini.

Brodie, in addition to rebuking Admiral Halsey, challenges other principles of war that became elevated to dogma, including the previous century's tactical axiom, "The ram is the most formidable of all the weapons of the ship," which became "a dogma which prevailed for half a century and which never had any real substance in fact."640 He similarly dethrones a principle attributed to the French theorist of the nineteenth century, Charles Jean Jacques Joseph Ardant du Picq, whose famous slogan postulated that "He will win who has the resolution to advance," which "which encouraged the school of the offensive a outrance in France, which cost the French so very dearly in the first weeks of World War I."641 Returning to the lessons of Leyte Gulf, Brodie suggests Admiral Halsey nearly fell victim to a "slogan which was relatively new, but which had certainly become firmly fixed - 'The enemy's main force is where his carriers are.'"642 As Brodie observes, "In that battle the enemy's main force comprised in fact his battleships. That would have been clear except for the existence of the slogan. The slogan is objectionable for the same reason that an undue deference to the principles of war is objectionable – it acts as a substitute for thinking, and any substitute for thinking is usually a bad substitute. Worse still, it introduces a rigidity of thought which is, after all, its purpose. This may prevent the realization of the absurdly obvious."643 Such a "slogan may represent a brilliant insight of the past, but as a rule only at its first utterance. When it becomes common currency, it is likely already to be counterfeit. I submit, therefore, that one of the first tests for a sound strategy is freedom from the dominance of slogans."644

<sup>638.</sup> Brodie, "Characteristics of a Sound Strategy," 9.

<sup>639.</sup> Brodie, "Characteristics of a Sound Strategy," 9-10.

<sup>640.</sup> Brodie, "Characteristics of a Sound Strategy," 10-11.

<sup>641.</sup> Brodie, "Characteristics of a Sound Strategy," 11.

<sup>642.</sup> Brodie, "Characteristics of a Sound Strategy," 11.

<sup>643.</sup> Brodie, "Characteristics of a Sound Strategy," 12.

<sup>644.</sup> Brodie, "Characteristics of a Sound Strategy," 13.

Instead, Brodie offers that "an intelligent strategy" should be based on "the sound appreciation of existing realities, which will then enable us to make predictions which have real planning values - and that is easier said than done. It is a very big order."645 Strategic matters, Brodie notes, concern "a major portion of the entire field of human knowledge," and thus "to be covered by those responsible for strategic decisions, the military profession would have to be far and away the most learned of all professions."646 But "other characteristics are desired in the commander – ability to lead, forthrightness, and ability to make decisions," and these may be "incompatible with the contemplative way of life" - creating a challenging dilemma for professional military education that "is only partially and very unsatisfactorily served by specialization."647 Brodie considers the role that social science can play, noting from his time at the National War College in 1946 that he "had some misgivings at the very great amount of time, relatively, which was being spent on what one might call the social sciences," but wondered, "who is going to do the intensive study which the situation requires in matters concerning the proper utilization of new weapons, the changes in techniques indicated by those new weapons, the problem of proper targetting for strategic bombing, and the like?"648 Brodie found that the "problem is that more and more fields of knowledge are becoming more and more intimately related to strategic decisions," such as the place of psychology in military operations: "For example, we are becoming aware of the tact that the use of weapons in war can be manipulated to have greater or less psychological effect," particularly in the "use of fire power to maximize the psychological effects of that firepower on the enemy. This is obviously a requirement for military intelligence, for military analysis."649 But psychology remains a "field of knowledge" that "happens to be quite poorly developed" and as a consequence, there remained "a vast universe of things we don't know about the psychological effects of weapons. Nevertheless, our first priority problem is not our deficiencies in knowledge (which we can leave to the researchers), but rather the intelligent, imaginative and comprehensive application of the knowledge we do have. What we need is a steady awareness of what we know and, more important perhaps, a steady awareness of what we do not know. Above all, we need that simple but rare and indispensable thing called 'logical reasoning." 650

<sup>645.</sup> Brodie, "Characteristics of a Sound Strategy," 13-14.

<sup>646.</sup> Brodie, "Characteristics of a Sound Strategy," 14.

<sup>647.</sup> Brodie, "Characteristics of a Sound Strategy," 14.

<sup>648.</sup> Brodie, "Characteristics of a Sound Strategy," 15.

<sup>649.</sup> Brodie, "Characteristics of a Sound Strategy," 16.

<sup>650.</sup> Brodie, "Characteristics of a Sound Strategy," 16.

He illustrates this need for – and challenge of – logical reasoning with a topic that has been on his mind at least since the end of World War II, namely, "if we must say that we do not know whether a certain proposition is true – that does not mean that we know the opposite to be true. I refer here to some different schools of thought on strategic bombing. One of the things that we don't know about strategic bombing is whether it is politically and militarily desirable to maximize human casualties, to minimize them, or to choose targets which show indifference to casualties. We don't know that it is a bad thing to maximize casualties, but that is not the same as saying we know it to be a good thing to maximize casualties."651 Thus it remains essential to challenge dogma with logic: "The winning of a war (and I would add of the subsequent peace) is more important than that some doctrine should be realized in practice, such as the doctrine of balanced force or the doctrine of strategic bombing, or whatever doctrine you like – good, bad, or indifferent."652 And so "if all one's assets are to be committed to a particular plan, I should expect that one would have a reasonable prognosis of the military and political consequences of executing that plan. That, I have found, is a most unreasonable expectation. I have seen studies which thought they were attempts at war plans, but which ended simply with putting bombs on targets."653

Sounding very much the disciple of Clausewitz, Brodie observes that "war is a very complex thing indeed and interpretations of past wars, upon which our planning for future wars have to be in some part based, is not easy," and "any monistic interpretation, any interpretation which finds the answer in one particular thing, is likely to be wrong simply because it is monistic." He suggests "humbly" that all "easily available knowledge which is relevant should be absorbed," and that we resist dogma wherever it arises: "Now, if our staff planners diligently follow the few precepts I have mentioned, we would have fewer of those studies which so beautifully bear out the words of our great and good friend, Uncle Joe Stalin, and I quote: 'Paper will put up with anything that is written on it." Brodie identifies "some of the touchstones for finding a plan wrong," noting "if the assumptions are clearly unrealistic, or at least unstudied, we can suspect a poor foundation for the study." He also cautions that "there may be many important assumptions which are implicit in the plan but which are not recognized as such by the authors," as well as "internal contradictions of a significant character" and "factual data presented" that "may be susceptible of being proven incorrect."

<sup>651.</sup> Brodie, "Characteristics of a Sound Strategy," 17.

<sup>652.</sup> Brodie, "Characteristics of a Sound Strategy," 17.

<sup>653.</sup> Brodie, "Characteristics of a Sound Strategy," 17-18.

<sup>654.</sup> Brodie, "Characteristics of a Sound Strategy," 18.

<sup>655.</sup> Brodie, "Characteristics of a Sound Strategy," 19.

<sup>656.</sup> Brodie, "Characteristics of a Sound Strategy," 19-20.

<sup>657.</sup> Brodie, "Characteristics of a Sound Strategy," 20.

these touchstones, Brodie encourages a wide exposure to critical minds and opposing views – he notes that "war planning is the only important function of government – perhaps the most important function of government – which is carried on entirely without benefit of criticism from the outside, of criticism from the public" of and thus to "so far as possible avail themselves of the insights and novel points of view of persons who would not ordinarily be drawn into the planning process." of the insights are planning process.

Brodie closes his seemingly Clausewitzian rebuke of the Jominian mindset permeating war planning by at last invoking the famed Prussian strategist: "I want, finally at the end, to say a few words about national objectives - particularly in view of the age in which we live. We are living in an age in which atomic weapons already exist in substantial numbers, in which the numbers are steadily and rapidly growing, and which may at some future time include new and even more deadly weapons. If we look ahead only five years from now, we see a world in which war - if it comes must mean a devastation (assuming that present principles are carried into practice) such as the world has never seen to any degree of approximation."660 Brodie turns to Clausewitz for guidance in these dangerous times: "As you all know, Clausewitz somewhat over a hundred years ago made a statement in his famous book which has since been very often quoted, namely: 'war is a continuation of policy by other means.' I confess that for a very long time I was convinced that that statement had no meaning. To me, modern war was so different, so much more violent than diplomacy, that I could not conceive of it in terms of its being a continuation of diplomacy. To a degree that is true, but I have now become convinced that what Clausewitz said has profound meaning. What he was saying by implication was that war should follow a planned procedure for the sake of securing certain political and social objectives. By implication, too, the procedures and the objectives should be rational and to some degree at least appropriate to each other."661 Once a skeptic who thought Clausewitz had become obsolete, Brodie now found much relevance in the Prussian's theory of war – and he would increasingly turn to Clausewitz for answers and guidance in the years to come, wrestling with how to apply Clausewitz to war in the era of the 'absolute weapon', and concluding that: "Total victory, like total war, may well become an obsolete concept. It seems to me that with these new mass destruction weapons, the science of war ceases to be such. Destruction becomes all too efficient, all too easy. But there is an enormous area for wisdom and science in determining what to hit as well as what not to, in determining what can be achieved by war, and in what way,

<sup>658.</sup> Brodie, "Characteristics of a Sound Strategy," 20-21.

<sup>659.</sup> Brodie, "Characteristics of a Sound Strategy," 21.

<sup>660.</sup> Brodie, "Characteristics of a Sound Strategy," 21-22.

<sup>661.</sup> Brodie, "Characteristics of a Sound Strategy," 22.

other than by unloosing destruction on an unlimited basis."662

In the coming months, the atomic age would give way to the even more dangerous thermonuclear era, and Brodie continued to grapple with the consequences of the increasing destructiveness of the new weapons in a frantic effort to help American strategic thinking catch up to the new strategic realities. He had already launched a steady assault on the dangers of dogma, the reliance on outmoded and inflexible slogans, and the need to look beyond simple principles of war to fully grasp its underlying complexity. In his lecture, "Changing Capabilities and War Objectives," presented to the Air War College on April 17, 1952, Brodie extended his discussion of realism as the theoretical foundation for modern military strategy, discussing as well as Clausewitz the classical Greek strategist and historian Xenophon. In his discussion of Xenophon, Brodie recounts how, "[i]n the beginning of the 4th century B.C., an army of some 13,000 Greek mercenaries under a committee of generals of whom one was Xenophon – who has handed the story down to us – was hired by Cyrus, a prince of Persia, who intended to use these troops along with some of his native contingents for the purpose of unseating his elder brother, Artaxerxes, from the throne of Persia."663 After marching "some 1100 miles across Mesopotamia into the heart of the Persian Empire, fighting some battles on the way," this mercenary army, "at a place called Cunaxa, near Babylon, met the vastly superior armies of the great king and administered to those armies a decisive defeat,"664 but "during the battle, in a moment of vainglory, Cyrus quite unnecessarily got himself killed, thereby depriving the Greeks not only of a leader but of an objective. Without Cyrus there was no longer any point in trying to unseat the King. So on the very next day this victorious army began to negotiate with the enemy for the purpose of getting the opponent to

<sup>662.</sup> Brodie, "Characteristics of a Sound Strategy," 22-24. Sounding notably Clausewitzian, Brodie reflects how: "Now, the political objectives of war can not be consonant with national suicide and there is no use talking about large-scale reciprocal use of atomic weapons (including those of the future) as being anything other than national suicide for both sides. I would ask, then, is it enough to say that our armed forces exist to prevent war if possible, and to win the war if it comes? In the future it will be difficult indeed to define what you mean by winning a war and in any case the winning of a war is not an end in itself, but a necessary means to an end. We also have to ask ourselves, 'To win for what purpose?' And that will oblige us to ask, 'To win how?' Our national aims are a defense of the free world in order to enable it to remain free. Those objectives can be defended only by methods which include a readiness to wage war when the aggressor presents a military challenge. That proposition is well known and really provides the present basis for American foreign policy. But deterrents do not always deter. What, then? Are we obliged to commit ourselves to techniques of waging war which, if they provoke in the enemy (as they must) an equal and opposite reaction, will effectively destroy what they are designed to protect? Perhaps the chief problem of the future is to find some means of controlling events even after hostilities begin - not to let them get out of hand. The price of control, if it is possible to achieve it at all, must clearly include not only limitations in the means of waging war - but also limitations upon war objectives. Total victory, like total war, may well become an obsolete concept. It seems to me that with these new mass destruction weapons, the science of war ceases to be such. Destruction becomes all too efficient, all too easy. But there is an enormous area for wisdom and science in determining what to hit as well as what not to hit: in determining what can be achieved by war, and in what way, other than by unloosing destruction on an unlimited basis."

<sup>663.</sup> Bernard Brodie, "Changing Capabilities and War Objectives," Lecture to the Air War College, April 17, 1952, 2. 664. Brodie, "Changing Capabilities and War Objectives," 2.

permit it to depart in peace. It was not going to lay down its arms, mind you, but it wanted to leave; and the bulk of Xenophon's story is the saga of the passage of this army through the deserts and the mountains, through many hostile lands in which they had to fight many battles, back to the shores of Greece."665 Brodie explains that "[o] ne of the things that impressed me about the story was that in every battle the Greeks fought, in every maneuver they performed, many of them aggressive, they had only one objective; and their strategy and tactics adhered to that one objective, and that was to bring their army intact back to the shores of the Black Sea," adding that "[s]ix months ago I should not have appreciated that particular lesson in Xenophon. There are many other things in it that would have been interesting, a cognizance for example of what we call the principles of war long, long before these principles were codified. But the principle of tailoring the operation to match the objective is something I'm afraid I should not have appreciated."666 Brodie admits that he had "read this book only on the trip here this time without any idea of using it for this particular talk," but made the important connection linking Xenophon's laser-like focus on the strategic objective during his historic – and in the end successful – retreat from Persia over two millennia ago to the current strategic nuclear challenges, and the often overlooked necessity, in Brodie's mind, of balancing the means of war with the ends reflected in the national political objective. 667

Brodie reflects on how "six months ago I could and in fact did deny in print that famous, often-quoted statement of Clausewitz's, 'War is a continuation of policy by other means,' could have any meaning for modern times," and "felt that modern war, modern total war, is much too big, much to [sic.] violent to fit into any concept of a continuation of diplomacy," and "that war by its very outbreak must create its own objective – in modern times, survival – in comparison with which all other objectives must hide their diminished heads." Brodie adds that he has "since come to believe that Clausewitz was in fact saying something very profound," and in so doing was very much still relevant: "What he was saying, it now seems to me, is that war is violence – to be sure, gigantic violence – but it is planned violence and therefore controlled. And since the objective should be rational, the procedure for accomplishing that objective should also be rational, which is to say that the procedure and the objective must be in some measure, appropriate to each other." Brodie notes that "Clausewitz was himself a general, and it is interesting to notice that he insisted that the policy maker, by which he meant essentially the civilian policy-maker, must be

<sup>665.</sup> Brodie, "Changing Capabilities and War Objectives," 3.

<sup>666.</sup> Brodie, "Changing Capabilities and War Objectives," 3.

<sup>667.</sup> Brodie, "Changing Capabilities and War Objectives," 3.

<sup>668.</sup> Brodie, "Changing Capabilities and War Objectives," 3-4.

<sup>669.</sup> Brodie, "Changing Capabilities and War Objectives," 4.

supreme even in war," and "argued that where the general resents the intervention of the politician, it is not the intention which he should resent but the policy itself if it is in fact bad policy -that is, it is the policy and not the intervention which should be the subject of criticism."670 Brodie observes how, "after developing these thoughts I went back to Clausewitz, and I'm now doubly satisfied that that is in fact what he really was saying."671 He adds that Bismarck, the great Prussian unifier, "must have taken his leaf from Clausewitz when he remarked in a letter of advice to the King of Prussia that 'Wars must be fought in such a way as to make a good peace possible.'"672 Adds Brodie: "Notice, it is not merely that the objective is good peace, but that the war should be fought in such a way as to make a good peace possible. Bismarck's own wars, even though aggressive, provide on the whole an excellent example of procedures being tailored to meet the objective," as the "century between Waterloo and 1914, as you all know, has often been called a peaceful century" - and was certainly one where war remained limited, linked in a balanced manner with the political objectives being sought, after the balance of power had been restored at the Congress of Vienna and the specter of total war that Napoleon had unleashed returned to the bottle from which it came, at least until the orgy of bloodshed unleashed by the total wars the twentieth century. 673 In the era of limited wars between Napoleon's defeat and the outbreak of World War I, Brodie points out that "with one exception all these wars were fought for limited objectives," with the "one exception" being "the American Civil War" - "and civil wars are by definition wars in which one side seeks the political extinction of the other. Therefore, they cannot be limited in terms of objective."674 Brodie finds, however, that "even the American Civil War was limited in terms of military procedures" and that the U.S. Army's "Manual of 1861 happened to present the first codification of the laws of war, that is, restrictions upon the use of force" a "tradition" that "continued at least through the Spanish-American War" when it was "the American Admiral Sampson who, when he fished Admiral Cervera out of the waters off Santiago Bay after destroying his fleet, remarked to him, 'My dear Admiral, you understand there is nothing personal in this." Though Brodie does seem to gloss over General William Tecumseh Sherman's methods on his infamous March to the Sea – which included the burning of crops and cities in an effort to bring the war to the enemy's heartland and population centers, a precursor not only to total war but the very sort of counterpopulation warfare that Brodie would decry in the nuclear period.

<sup>670.</sup> Brodie, "Changing Capabilities and War Objectives," 4.

<sup>671.</sup> Brodie, "Changing Capabilities and War Objectives," 4.

<sup>672.</sup> Brodie, "Changing Capabilities and War Objectives," 5.

<sup>673.</sup> Brodie, "Changing Capabilities and War Objectives," 5.

<sup>674.</sup> Brodie, "Changing Capabilities and War Objectives," 5.

<sup>675.</sup> Brodie, "Changing Capabilities and War Objectives," 5.

After discussing the horrific outbreak of total war in World War I, he turns his attention to the even greater horror of total war in the atomic age, writing that the "A-bomb struck us as a horribly destructive weapon when it was first used in 1945," and explaining that "[n]othing has happened since to make it less so. Quite the contrary. We've merely gotten used to it - too much so in many respects," as the "A-bomb produced a real strategic change in the conditions of war." 676 But with the H-bomb on the horizon - Operation Ivy Mike would take place later that year, on November 1, and while not weaponized, it demonstrated the viability of a fusion weapon – Brodie recognized that the A-bomb, the once seemingly absolute weapon, but now "conventional nuclear fission weapon – is not so absolute a weapon that we can disregard the limits of its destructive power."677 Indeed, Brodie explains that the "problem of target selection, for example, is still important. It is important because the numbers of weapons are still too limited to warrant our throwing them around. It is important also because attrition rates to the bombing forces, operational losses, navigational and gross aiming errors, may mean that well under 50% of the bomb sorties reach the so-called proper bomb release point."678 And while "[t]here has been some unhappiness in certain sections of the Air Staff about the targets we have been selecting," Brodie believes that "[w]e have yet to develop a target philosophy suited to the Atomic Age. The concepts most often applied are those developed under World War II conditions with HE," or high explosive. 679 With A-bombs, Brodie writes, we still "have to be concerned about bombing-accuracy" 680 and "with the physical vulnerabilities of the target selected," and Brodie adds that "[o]ne detects also certain unsophisticated attitudes towards the psychological and political results to be derived from any bombing plan."681

And while Brodie expected the number of atomic weapons being produced was going to be shortly ramped up significantly, noting "our atomic weapons are increasing in numbers, and from all the build-up of the facilities we've been hearing about, they are either already or shortly will be increasing at an accelerating rate," and as their numbers rise, Brodie suggests that "military planning can anticipate these changes in at least two ways. We can find more and more targets in the strategic bombing category on which to expend our greater numbers of bombs, or we can allocate an increasing proportion of them to tactical usage." But an even greater increased was

<sup>676.</sup> Brodie, "Changing Capabilities and War Objectives," 9.

<sup>677.</sup> Brodie, "Changing Capabilities and War Objectives," 10.

<sup>678.</sup> Brodie, "Changing Capabilities and War Objectives," 10.

<sup>679.</sup> Brodie, "Changing Capabilities and War Objectives," 10.

<sup>680.</sup> Brodie, "Changing Capabilities and War Objectives," 11.

<sup>681.</sup> Brodie, "Changing Capabilities and War Objectives," 11.

<sup>682.</sup> Brodie, "Changing Capabilities and War Objectives," 15.

expected – not in number of devices, but in their yields: "As you know, the President made an announcement that we were going to go ahead with the H-bomb, and that announcement was made about two years ago. Only last week or maybe the week before, Senator McMann stated publicly ... that we were continuing to work on the H-bomb." Brodie noted that the "newspapers have also used that magic factor of 1000 by which the 'H' is supposed to be superior to the Nagasaki bomb," and "Since the Nagasaki was a 20 KT bomb," he proposed that we "consider what might happen with a 20 megaton weapon, if and when it is delivered." Brodie and his colleagues had "done some quite rough-and-ready computations" and "came out with some rather interesting conclusions. First of all, CEP no longer matters – that is, up to two miles it no longer matters. If your CEP is two or three times what the present official estimation of it is, we still get the targets. Physical vulnerability of the target selected no longer matters – at least not as much." Indeed, "Even the combination of these, physical vulnerabilities and CEP, matter astonishingly little. One might even be tempted to say that attrition rates no longer matter."

And, in an analysis that showed a certain antiseptic or callous nature one might intuitively expect more from Brodie's colleague Herman Kahn who leapt to fame on his willingness to think about the unthinkable, Brodie writes: "Our computations indicated to us that some 55 bombs of the kind I have indicated could eliminate the 50 largest Russian cities, including the practically complete destruction of most of the industry gathered in those 50 largest cities. And after you had done that much destruction, everything else would be quite marginal, in fact useless. Eliminating the 50 largest Russian cities would mean destroying upwards of 35 million people (dead, rather than casualties), assuming that they were in the World War II type of shelters. Notice that this business could literally be done overnight, so that if you didn't want them to escape they probably could not escape."687 Added Brodie, "We found that picking targets with the idea of minimizing casualties, that is, picking industrial complexes which were important but which would minimize casualties, would bring the enemy dead down to something like 10 or 11 million. Of course, this assumes that the enemy will not have a chance to warn his people and that we ourselves will not seek to warn these target populations."688

Brodie finds that "All this makes strategic bombing very efficient – perhaps all too efficient. We no longer need to argue whether the conduct of war is an art or a

<sup>683.</sup> Brodie, "Changing Capabilities and War Objectives," 17

<sup>684.</sup> Brodie, "Changing Capabilities and War Objectives," 17.

<sup>685.</sup> Brodie, "Changing Capabilities and War Objectives," 18.

<sup>686.</sup> Brodie, "Changing Capabilities and War Objectives," 19.

<sup>687.</sup> Brodie, "Changing Capabilities and War Objectives," 19.

<sup>688.</sup> Brodie, "Changing Capabilities and War Objectives," 19.

science – it is neither. The art or science is only in finding out, if you're interested, what not to hit."689 Indeed, Brodie adds that the "least this H-bomb would do, if and when it comes, is greatly reduce the force requirements for strategic bombing," and "[t]he reduction of your requirements for strategic bombing coupled with the build-up of our stockpile inevitably makes large nuclear resources and the delivery capabilities available for tactical use. Notice that if we're going to have the H-bomb, we will also at that time have a much large number of the conventional A-bombs than we have today."690 He continued: "We seem to be destined or doomed, whichever word you prefer, to a permanent inferiority in numbers of men on the ground in Western Europe. Inferiority of numbers has always traditionally been compensated for by superior mobility, if available; superior cleverness, if you have it; and superior firepower, if available. It's quite clear that weapons of this sort plus the conventional nuclear weapon introduce a fantastic augmentation of firepower. This would be an area weapon, large area, and with such a weapon the traditional arguments against the use of nuclear weapons against troops in the field fall to the ground." 691 Indeed, Brodie reflects, in what we may describe as a seemingly Kahnian fashion, "Strategic bombing has been defined as that action which destroys the war-making capacity of the enemy, but I have the feeling that burning up his armies, if you accomplish it, does the same thing. One may be as easy as the other, and certainly we shouldn't have to do both."692 He adds that "this bombing business, strategic bombing and no doubt tactical as well, is not going to be a one-way affair. The chances of its being so are over for good."693 And as a consequence, "The dilemma of our age is that in order to preserve the things we wish to preserve we must stand ready to meet a military challenge, and unless the ensuing business is handled most skillfully, the things we have moved to defend will surely perish." 694

And it is from this that Brodie derives his first articulation of his "No Cities" strategy, so described in his own handwriting on a declassified copy of his lecture notes as marked up for delivery, presented in Marc Trachtenberg's edited anthology of original Cold War documents in his multi-volume *Writings on Strategy: The Development of* 

<sup>689.</sup> Brodie, "Changing Capabilities and War Objectives," 20.

<sup>690.</sup> Brodie, "Changing Capabilities and War Objectives," 20. Brodie's original wording, in the typed draft of his lecture, was: "One thing this might do, if you're interested, is to make large nuclear resources and the delivery capabilities available for tactical use. Notice that if we're going to have this thing, when we have it we will also have a much large number of the conventional A-bombs than we have today." It was later amended by hand for presentation to read as quoted above.

<sup>691.</sup> Brodie, "Changing Capabilities and War Objectives," 20. Originally he started this sentence with "You" but crossed it out by hand and replaced it with "We" as quoted above.

<sup>692.</sup> Brodie, "Changing Capabilities and War Objectives," 21. In the original typed draft, "if you accomplish it" was originally "if you can do it".

<sup>693.</sup> Brodie, "Changing Capabilities and War Objectives," 21. In the original typed draft, "bombing business" was "bombing effect".

<sup>694.</sup> Brodie, "Changing Capabilities and War Objectives," 21.

American Strategic Thought published in 1987 and 1988. Brodie contemplates the failure of deterrence, and asks what might happen "if through some misjudgment, some misconception, we get involved in what might be called a full dress war?"695 He observes that he's "been toying with an idea about that," adding: "If I had heard it from anyone else I'd have called it a crackpot idea, but I offer it to you for what it may be worth. The atomic bomb thus far has achieved really great successes" adding: "it helped end the Pacific War, and it has so far deterred the Soviet Union from aggression."696 As he points out, "Notice that the deterrent value has resulted from the threat value. I submit that even the ending of the Pacific War resulted not from the two cities we destroyed, but rather from the threat value of the nonexistent additional bombs which the Japanese didn't know we didn't have -- from the threat of more to come."697 But, "According to our present concepts, this threat value of the atomic bomb is the thing we plan to throw away the moment that hostilities open."698 Brodie cautions that "[a] bomb which has been used no longer has threat value. A city which has been destroyed is no longer worth entering into negotiations with. I submit that if we decide through intensive study of the situation that our nuclear weapons would actually enable us to break and burn the Soviet armies on the ground wherever they might commit aggression, we might decide that it was possible to secure our objectives without bombing enemy cities. And provided we communicated that idea in advance and provided we retained a powerful and invulnerable SAC to lay down the ground rules and make sure that they were observed, we could say, 'We will not bomb your cities except in retaliation.' This, of course, would be sacrificing the prospect of total victory, but for the future that might be a small price to pay for the sake of avoiding total war."699 In his January 23, 1953 RAND working paper, "A Slightly Revised Proposal for the Underemployment of SAC in an H-Bomb Era," Brodie reiterates his No Cities proposal, and strongly argues, "If it is possible to control the course of events in a possible future war by some sort of self-denying ordnance as that described above, that possibility must be pursued to the uttermost."700

<sup>695.</sup> Brodie, "Changing Capabilities and War Objectives," 28.

<sup>696.</sup> Brodie, "Changing Capabilities and War Objectives," 28. Brodie scratched out the word "prowess" here in his original lecture and replaced it with "successes."

<sup>697.</sup> Brodie, "Changing Capabilities and War Objectives," 28.

<sup>698.</sup> Brodie, "Changing Capabilities and War Objectives," 28.

<sup>699.</sup> Brodie, "Changing Capabilities and War Objectives," 28-29. Brodie further elaborates upon his No Cities proposal in his January 23, 1953 RAND working paper, "A Slightly Revised Proposal for the Underemployment of SAC in an H-Bomb Era."

<sup>700.</sup> Brodie, "A Slightly Revised Proposal for the Underemployment of SAC in an H-Bomb Era," 12.

## **Unlimited Weapons and Limited War**

One of Brodie's first published analyses available to the public after America crossed the thermonuclear threshold came in his January 1954 Foreign Affairs article, "Nuclear Weapons: Strategic or Tactical," which presented to the public many of his ideas as presented in recent RAND working papers and lectures to the service academies. He recalled Truman's 1953 State of the Union, which "dwelt on the thermonuclear tests at Eniwetok in the preceding November," in which he had explained that mankind had moved "into a new era of destructive power, capable of creating explosions of a new order of magnitude, dwarfing the mushroom clouds of Hiroshima and Nagasaki," and in which a future war "would be one in which man could extinguish millions of lives at one blow, demolish the great cities of the world, wipe out the cultural achievements of the past – and destroy the very structure of a civilization that has been slowly and painfully built up through hundreds of generations."<sup>701</sup> So destructive were these new weapons that what was deemed only a few years earlier to be the absolute weapon was now already relative, and this, Brodie notes, led President Eisenhower, later that year to differentiate "between 'conventional' types of atomic weapons and more advanced types," that latter which could potentially induce "the possible doom of every nation and society."702 Because of the veil of secrecy on nuclear matters, Brodie had little more in the way of detail other than that "we have been told quite explicitly that a new phase of nuclear weapons development has now opened, and that it points potentially to weapons of a power 'far in excess' of the type which even in its most primitive form was enough to cause the horror of Hiroshima. We are thus faced with the necessity of exploring the implications of the new type when we have not yet succeeded in comprehending the implications of the old."703

Brodie concedes there are "extremely grave and far-reaching limitations" inherent in nuclear weapons, but these "lie not in the costliness of the weapons, in the difficulty of delivering them or in the finite boundaries of their destructive power," but rather in their "excessive destructive power." And as "stocks of thermo nuclear weapons increase, civil air defense as we now think about it will be almost meaningless, as will any active air defense which fails to achieve the very highest levels of enemy attrition. This may be the kind of war we have to fight if and when we have a major war, but it ought not be the kind which we make inevitable through our own military acts and policies." This creates for Brodie a "dilemma of our age," which is "in order to

<sup>701.</sup> Bernard Brodie, "Nuclear Weapons: Strategic or Tactical?" Foreign Affairs 32, No. 2 (January 1954), 217.

<sup>702.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 217.

<sup>703.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 218.

<sup>704.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 226.

<sup>705.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 227.

preserve those things which we hold inviolable we must stand ready to meet a military challenge, and unless the ensuing business is handled most skillfully the things we have moved to defend will surely perish. It is self-evident that national objectives in war cannot be consonant with national suicide. But for the future there is no use talking about an unrestricted mutual exchange of nuclear weapons as involving anything other than national suicide for both sides."

And, ironically, strategic bombing, only recently "deprecated on grounds of its presumed ineffectiveness, may in the future have to be restrained because it has become all too efficient. The ability to destroy the enemy's economy and some 30,000,000 or 40,000,000 of his people overnight might be inharmonious with our political objectives in war even if it could be done with impunity; but if we have to suffer such a blow the fact that we can also deliver one may be of small advantage and smaller solace."707 That's why Brodie concurs with Truman's assessment that "[s]uch a war is not a possible policy for rational men."708 Or as Brodie described it elsewhere the next year: strategy hits a dead end. Brodie is concerned that the very irrationality of nuclear war might induce a reaction reminiscent of the peaceful change advocates, who unwittingly fueled Hitler's rise and thus the inevitability of general war in Europe, despite their best intentions: "The standard political answer to such a horrible issue is that war must at all costs be avoided. But this is not a sufficient answer. War may in the net be less likely as a result of the new atomic developments, but there is not a sufficient guarantee against its occurrence. We have not yet discovered any substitute for force as a means of controlling blatant aggressions by powerful states, whose rulers may conceivably find in the universal fear of atomic war a stimulus to evil acts rather than a restraint upon them. There must also be a military answer, a second line of insurance, one which maximizes the chances that even a resort to arms will not mean an immediate pulling of all the stops."709 Because "[u]niversal atomic disarmament ... is clearly not possible," Brodie argues that we "need to maintain and develop further our strategic striking power, even if our only use of it in a war of the future is to command observance of the ground rules we lay down. And we should probably need to use nuclear weapons tactically in order to redress what is otherwise a hopelessly inferior position for the defense of Western Europe."710

Brodie suggests that if his "conception of unlimited atomic potential coupled with limited wartime use thereof appears fanciful, let us look again at what happened in Korea," which despite the imposition by the UN of "greater restrictions upon both

<sup>706.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 227.

<sup>707.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 227.

<sup>708.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 227.

<sup>709.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 228.

<sup>710.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 228.

its use of means and its strategic and political objectives than the circumstances demanded" resulting in what Brodie felt was a "deplorable stalemate," he nonetheless found it "noteworthy that narrow limits were imposed, and that it was the obviously stronger Power which imposed them and made them stick," evidence that war could remain limited in an era of unlimited weapons.711 "These facts alone render dubious some of the easy generalizations of our time concerning the inevitable totality of modern war, or for that matter of the inexorable necessity to achieve total victory rather than more limited and modest goals."712 This leads Brodie to urge that we "proceed to rethink some of the basic principles (which have become hazy since Clausewitz) connecting the waging of war with the political ends thereof, and to reconsider some of the prevalent axioms governing the conduct of military operations," so that "suitable political objectives" as well as "suitable military measures for bringing them about" are developed, in addition to "available instrumentalities for assuring that military action does not proceed beyond the suitable."713 As Brodie explains: "The time to begin such rethinking is right now, under urgency."714 That's because, even if we remain "far away from push-button war, as we are so often reminded," Brodie found that we were nonetheless "living right now in a situation in which the flashing of certain signals, possibly ambiguous signals, would in effect push buttons starting the quick unwinding of a military force which has been tensed and coiled for total nuclear war."715

Brodie synthesizes his thinking about the arrival of the H-bomb and its impact on war and strategy in a prescient article in the November 18, 1954 edition of *The Reporter* called "Unlimited Weapons and Limited War," where he not only anticipated the forthcoming "era of plenty" for both H-bombs as well as A-bombs, but also the coming of the ICBM. At the start of "Unlimited Weapons and Limited War," Brodie writes, quite engagingly, "Only day before yesterday the atomic bomb came along, and until yesterday we had a monopoly on it. Today we have lost the monopoly and we have in addition the inconceivably powerful H-bomb to reckon with. Tomorrow, we are told, the era of plenty will begin for hydrogen as well as atomic weapons. Perhaps day after tomorrow guided missiles with •atomic warheads will be hurled from one continent to another. What changes in our strategy do these present facts and future probabilities entail?"<sup>716</sup> Citing the recent observations of the U.S. President, Brodie believes that "War would present to us only the alternative in degrees of destruction.

<sup>711.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 228.

<sup>712.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 228.

<sup>713.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 229.

<sup>714.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 229.

<sup>715.</sup> Brodie, "Nuclear Weapons: Strategic or Tactical?", 229.

<sup>716.</sup> Bernard Brodie, "Unlimited Weapons and Limited War," The Reporter, November 18, 1954, 16.

There could be no truly successful outcome."<sup>717</sup> Brodie adds that the "conclusion seems inescapable that our government can use the threat of unlimited war to deter only the most outrageous kind of aggression," and that "[m]oreover, the more appalling the power of the new weapons, the more extreme must the aggression be. If the deterrent fails to deter, one can foresee only mutual devastation, leaving each side far too weak to 'impose its will' upon the other."<sup>718</sup>

Brodie revisits an earlier discussion of preventive war addressed in confidential RAND working papers in 1952 and 1953, but with less sympathy than he showed in his earlier writings where he at least appreciated the effort to inject a *bona fide*, if not necessarily logical or wise, national objective to nuclear strategy, noting that "[o]ne possible strategy has been urged *sotto voce* since the coming of the A-bomb: preventive war," and notes that "apart from the question of whether it would accomplish its designed objective, one simply cannot see our President adopting it," adding that it was "fantastic to assume, as advocates of this 'solution' usually do that a program of 'educating the public' could ever generate enough popular pressure to have it adopted."<sup>719</sup> Even "its advocates insist" that preventive war "has a time limit" and that it can be waged "only as long as the Soviets do not have a powerful strategic air arm," which "will shortly be passed, it is said," though Brodie suspects that "there probably never was a time when preventive war would have been technically-not to say politically feasible. When we had the atomic monopoly, we did not have enough power; and when we developed the necessary power, we no longer had the monopoly."<sup>720</sup>

And so he turns to a more viable strategy, that of the "blunting mission" as it is known, or "a blow aimed at the enemy's strategic air force to prevent his striking at us," on the premise that even if it was "unthinkable that we start an unrestricted nuclear war, it is conceivable that an enemy provocation might make us trigger-happy," adding that "[t]here are conditions when it would make good sense to be trigger-happy, as well as conditions when it would be insane."<sup>721</sup> Brodie notes that a blunting mission is "sometimes spoken of as the primary mission of our own Strategic Air Command," which he concedes "makes sense if we are to do strategic bombing, but let us beware of assuming that what rates top priority in planning will necessarily be easy or even feasible to carry out."<sup>722</sup> Brodie describes blunting as "air defense attained by taking the offensive" and explains that "[p]recisely because it stresses offensive action it is more congenial to a profession whose education always stresses the merits of the 'of-

<sup>717.</sup> Brodie, "Unlimited Weapons and Limited War," 16.

<sup>718.</sup> Brodie, "Unlimited Weapons and Limited War," 16.

<sup>719.</sup> Brodie, "Unlimited Weapons and Limited War," 16-17.

<sup>720.</sup> Brodie, "Unlimited Weapons and Limited War," 17.

<sup>721.</sup> Brodie, "Unlimited Weapons and Limited War," 17.

<sup>722.</sup> Brodie, "Unlimited Weapons and Limited War," 17.

fensive spirit."<sup>723</sup> But the appeal is not limited to the American side. Brodie expects that, "[a]s the Soviet capability to deliver nuclear weapons increases, we may be quite certain that a blunting mission must enjoy at least the same degree of priority among Soviet strategic planners that it does among ours. No conception could be more spontaneously congenial to the military in any country; and besides, knowing where our major and almost exclusive offensive strength lies, and knowing also how heavily we rely on it, the Soviets have every possible incentive to adopt the blunting attack idea. Thus, we undoubtedly have a situation where the strategic bombing forces of each side (which, incidentally, will not necessarily be confined to long-range bombers but may include also submarine-launched missiles) plan to eliminate each other at the first sign of war."<sup>724</sup>

Even though "[t]his symmetry in aspiration will not necessarily accompany a symmetry in actual power or in the success derived from it,"<sup>725</sup> Brodie thinks that what's "most likely" is that "neither side may be able to achieve a successful blunting mission even if it has all the initiative and surprise that it could reasonably hope for" and that "[c]ertainly thermonuclear weapons make it possible for whatever portion of a bombing force survives a surprise attack to wreak tremendous retaliation upon the aggressor."<sup>726</sup> Brodie likens the situation of the "blunting-mission game" to "a gunfighter duel, Western frontier style," where the "one who leads on the draw and aims accurately achieves a good clean win. The other is dead," but points out that in the "thermonuclear age," it's "going to require unheard-of recklessness on the part of a government to launch an attack in the expectation that the success thereby achieved will enable it to escape 'massive retaliation' or counter-retaliation."<sup>727</sup> He adds that in a "situation ... that neither side can hope to eliminate the retaliatory power of the other, the restraint that was suicidal in one situation becomes prudence, and it is trigger-happiness that is suicidal."<sup>728</sup>

Brodie looks with some sympathy to the British, who "stand ready to use atomic weapons with full force and without restraint from the first moment of hostilities," knowing that "an atomic attack upon the United Kingdom would be utterly disastrous to the British," because this remains the only way they can "avert war," and thus their "position rests everything on deterrence." Brodie notes this "at least has the merit of acknowledging the disastrous consequences of nuclear attack," even if it seems "a little

<sup>723.</sup> Brodie, "Unlimited Weapons and Limited War," 17.

<sup>724.</sup> Brodie, "Unlimited Weapons and Limited War," 17.

<sup>725.</sup> Brodie, "Unlimited Weapons and Limited War," 17.

<sup>726.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>727.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>728.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>729.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

bizarre, as well as novel, to see military leaders advocate a strategy which they agree will be suicidal if executed."730 In contrast, Brodie writes, the Americans appear to be "ignoring Soviet nuclear capabilities as a reality to be contended with in planning," with the presumption being that "it is we, not they, who will do the striking, and they, not we, who will do the suffering."731 Brodie is troubled by the assumption that "a disaster of overwhelming proportions is something that simply 'can't happen here'," and despite the existence of "loud whispered asides of alarm," he notes that "unlike the stage whispers of Shakespeare, there do not seem to enter into the plot."<sup>732</sup> Brodie reflects on how the "ultimate argument in diplomacy has usually been the threat of force," noting that "now the penalties for the use of total force have become too horrible. This means that our present-day diplomacy based on the deterrent value of our great atomic power is in danger of being strait-jacketed by fear of the very power we hold."733 And while there is "[n]o doubt the enemy himself is in a comparable strait jacket," Brodie observes that "all in all the situation is one that puts a premium on nerves. Perhaps the Russians. as they conduct their tests, will become more frightened at their own bombs than they have thus far appeared to be at ours. But this is a rather insecure basis for what Churchill called 'the balance of terror." 734

So while a "provision must still be made for that 'massive retaliation' which indisputably remains the only answer to direct massive assault," Brodie observes that "it seems unarguable that a diplomacy that concerns itself with aggressions of considerably less directness and magnitude will have to be backed by a more 'conventional' and diversified kind of force – a kind that the diplomat can invoke without bringing the world tumbling about his ears."<sup>735</sup> Rather than just a mutuality of fear, Brodie suggests that a "reciprocity of restraint, whether openly or tacitly recognized, will have to be on the basis of mutual self interest," noting as "fanciful" as this may sound, that the "Korean War was fought that way, and inadvertently too,"<sup>736</sup> illuminating a path toward stability that emphasizes not massive retaliations but more limited responses – much like he had earlier intimated in his nostalgia for limited war and his hope that the thermonuclear era would witness a recommitment to a similar mutuality of restraint. As Brodie puts it, "Rather than asking what, if anything, needs to be added to strategic air attack, we must consider what we can substitute for it."<sup>737</sup> Now, he

<sup>730.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>731.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>732.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>733.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>734.</sup> Brodie, "Unlimited Weapons and Limited War," 18.

<sup>735.</sup> Brodie, "Unlimited Weapons and Limited War," 18-19.

<sup>736.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>737.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

adds, "We must therefore explore ways of limiting those conflicts we may be unable entirely to avoid" even if the "difficulties in the way of limitation – on both sides – are immense."738 Brodie invokes the Prussian strategist Clausewitz, and ponders that "these difficulties," of restoring limits, "may be more in the minds of men than in the nature of things" and notes that "[w]e live in a generation that has identified itself with slogans Clausewitz would have regarded as preposterous – that every modern war must be a total war; that wars must be fought for total victory, 'unconditional surrender,' and the like - slogans that utterly negate the older conceptions of war as a "continuation of [presumably rational] policy." Thus Brodie concludes that "[e] xisting national security policies cannot be justified on the grounds that the A-bomb and H-bomb may turn out to be less fearsome than is predicted by those who know these weapons best," but instead "can be justified only on the grounds that there are important alternatives to unrestricted nuclear war," and adds that if "total war is to be averted, we must be ready to fight limited wars with limited objectives – if for no other reason than that limited objectives are always better than unlimited disaster. A limited war does not necessarily mean war without victory: but the terms must be short of unconditional surrender and give the vanquished a chance to negotiate on a reasonable basis."740 Brodie notes it was "amazing how we spontaneously acted on these propositions in Korea, and how our errors of comprehension because of the novelty of the problem caused us to show too much rather than too little restraint."741

Brodie explores in more detail, in a sidebar to his article. "What Clausewitz Meant," noting that the famed Prussia strategist is "to military strategy what Adam Smith is to economics or Isaac Newton to physics," but despite his importance "has been rarely read, more rarely understood, but abundantly quoted," a theme Brodie would echo for the next three decades even as he worked to introduce America to Clausewitz, and to bring an end to his being "rarely read." Making Clausewitz less accessible even to those who endeavor to read him is that, "[u]nfortunately he was a follower of Hegel's method of presenting thesis, then antithesis, followed by synthesis, where the balanced conclusions are put forward," resulting in some confusion, especially if read in parts

<sup>738.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>739.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>740.</sup> Brodie, "Unlimited Weapons and Limited War," 19. In a 1957 memo to Max Ascoli, the publisher of The Reporter, Brodie would reflect on how many of the issues that came to prominence in the 1960s, when limited war became a top issue in strategic studies circles, were anticipated by Brodie many years earlier in this article, his first published discussion of limited war – his earlier RAND papers were classified, limiting their audience – and he would observe with much disappointment that Henry Kissinger did not even include Brodie's article in the bibliography of his best-selling 1957 book on the topic, *Nuclear Weapons and Foreign Policy* – which Brodie would perceive as an intentional sleight, and an effort to erase Brodie's important contribution to the limited war literature from history.

<sup>741.</sup> Brodie, "Unlimited Weapons and Limited War," 19-20.

<sup>742.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

and not the whole.<sup>743</sup> "In his monumental work *On War*," Brodie notes, Clausewitz "first describes war in theory as subject to no limitations of violence, only to develop immediately thereafter the opposite point that qualifications in practice must check the theoretical absolute."<sup>744</sup> And so Clausewitz writes such seeming justifications of total war as: "War is an act of force, and to the application of that force there is no limit," and "In affairs so dangerous as war, false ideas proceeding from kindness of heart are precisely the worst. . . . He who uses force ruthlessly, shrinking from no amount of bloodshed, must gain an advantage if his adversary does not do the same."<sup>745</sup> As Brodie comments, "These and like remarks have been seized upon and quoted (and not by the Germans alone) as a justification for absolute violence in war."<sup>746</sup>

But if you read further, you will find that "Clausewitz takes pains to show that the above remarks apply only in a kind of theory which has no place in the real world. 'War is never an isolated act' is one of his subheadings. If war were followed to its logical but absurd extreme of absolute violence, 'the result would be a futile expenditure of strength which would be bound to find a restriction in other principles of statesmanship.' This leads him directly to his most famous and most misunderstood remark of all: "War is a mere continuation of policy by other means." Brodie explains Clausewitz's "meaning of this famous statement becomes clear if we read the seldomquoted sentences that precede it: 'Now if we reflect that war has its origin in a political object, we see that this first motive, .which called it into existence, naturally remains the first and highest consideration to be regarded in its conduct. ... Policy, therefore, will permeate the whole action of war and exercise a continual influence upon it, so far as the nature of the explosive forces in it allow.' This is in fact the leading idea of the whole work, and to it Clausewitz returns again and again. It is also the theme that governs the meaning of his famous definition of the object of war as being 'to impose our will on the enemy.' He indicated that the 'will' must have reasonable limits: 'If our opponent is to do our will, we must put him in a position more disadvantageous to him than the sacrifice would be that we demand.' In other words, according to Clausewitz, a defeated enemy, far from having unconditionally surrendered his will, must have a will of his own."748 And it is recognition of this fact, a mutuality of will, that provides Brodie with a glimmer of hope, that should deterrence fail, that a mutuality of restraint will set in – one rooted not only in fear, but also in hope that in the age of thermonuclear weapons, war can remain limited, as efforts are made on

<sup>743.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>744.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>745.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>746.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>747.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

<sup>748.</sup> Brodie, "Unlimited Weapons and Limited War," 19.

both sides to balance the means of war with its ultimate ends – the political objective.

Brodie recalled that the "history and rationale of attempts to limit wars suggest that limitations on the character and use of weapons, wherever they have been attempted, always stand up best in wars that are also limited regionally," and that of the wars "limited regionally by deliberate intent of both parties there is a long catalogue in history."<sup>749</sup> Added Brodie, "Even wars within Europe have been geographically circumscribed by great-power participants, as for example the Spanish Civil War that preceded the Second World War, and the Greek Civil War that followed it. However, history suggests that Europe is a good place not to have a war if one wants to keep it reasonably manageable. We ought therefore to begin reconsidering some of the ideas we have thrown about lately concerning what we would do in the event of another peripheral challenge like that in Korea."<sup>750</sup>

Brodie recalls how on January 12, 1954, U.S. Secretary of State Dulles "presented before the Council of Foreign Relations in New York what was to be a famous pronouncement on this subject," with his famous Massive Retaliation speech; "We have since had a really fabulous spate of corrections, clarifications, counterassertions, and restatements, with the result that confusion has become worse confounded and the original declaration almost nullified."751 Brodie explained that the "basic idea of the January 12 pronouncement was not new," noting that "[o]n several occasions during the previous Administration, one of them a public one before the Committee for Economic Development in New York, Thomas K. Finletter, then Secretary of the Air Force, asserted that the next time we were presented with a Korean-type challenge we should meet it not by local military response but by what he called 'diplomatic action.' If he meant anything effective by that phrase, he could only have meant an ultimatum to the Soviet Union, or possibly to Communist China, or both. That, of course, must also have been the essence of Mr. Dulles's reference to picking 'places and means of our own choosing.' Neither Finletter nor Dulles actually used the word 'ultimatum,' though we cannot doubt such a conception was present in their thoughts."752 Brodie argued that "[w]hat made the Finletter-Dulles proposal weak was that it was based primarily on military rather than on political considerations – and on pseudo-military ones at that," as "Finletter argued explicitly, as Mr. Dulles did by implication, that we simply could not afford to disperse our strength in meeting Koreas, but must keep it concentrated for the main event. Here we have another case of excessive deference to a classic strategic principle, in this instance the principle of concentration."753

<sup>749.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>750.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>751.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>752.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>753.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

As Brodie explains, "Certainly one should not give up peripheral areas in order to keep concentrated for a central challenge that may not come for ten or twenty more years," and even if one was tempted to keep one's military capabilities concentrated, Brodie suggested that "one may doubt whether the forces we committed to Korea would have amounted to very much in a European war; and SAC, the chief deterrent to Soviet aggression in Europe, was not even committed,"754 staying out of that fight in anticipation of a Soviet move on the central front that never materialized. Brodie concedes that "Korea-type wars are individually disagreeable, inconvenient, and in comparison with tranquil peace," much as America would again experience a decade later in Vietnam; as Brodie points out, "Americans are temperamentally and culturally indisposed to messing around" and it may thus appear to be "certainly tempting to short-circuit little wars by threatening big ones, especially if one does not expect to have to follow through."755 Brodie suggests there are "at least two essential questions to ask about the Finletter-Dulles idea," the first being, "Will our government have the courage to make the necessary ultimatum at the critical time, and will it have the necessary support at home and abroad?"756 Brodie suggests that "the history of the Korean War itself and of our more recent handling of the Indo-China affair, one feels disposed to doubt it," and "[i]f our leaders and our Allies have not yet mustered the courage to be bold, then let us not ask them to have the stomach to be rash."757 Brodie's second question for them is, "If we do manage to screw our courage to the sticking place, are we quite sure the Russians or the Chinese will yield before our ultimatum and halt their local aggressions?"758 Brodie suggests that if this is the case, "then we are basing the argument not on the military needs of concentration and on the evils of dispersion, but on a forecast of Russian or Chinese behavior before our threats."759 He posits that while "we may theoretically prefer having one big war to fighting a series of little ones" in fact "the chances are overwhelming that we will not be the ones who will choose to fight the one big war. If we were clear on that point, we should be better prepared to handle the peripheral challenges with adequate diplomacy and adequate strategy to avoid war if possible and to fight it if necessary," much as America did, even without great enthusiasm, in Korea; indeed, Brodie notes that America's "handling of the Korean War was vastly affected by the conviction of both the Truman and Eisenhower Administrations that it was 'the wrong war at the wrong time in the wrong place," and Brodie adds that "General Omar N. Bradley used those words concerning the possible extension of the

<sup>754.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>755.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>756.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>757.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>758.</sup> Brodie, "Unlimited Weapons and Limited War," 20.

<sup>759.</sup> Brodie, "Unlimited Weapons and Limited War," 21.

war against China, but by implication they applied to the whole affair. It was General James Van Fleet who insisted, on the contrary, that if there had to be a showdown with Communist China and Russia, Korea was for us the right war at the right place at the right time. If he was correct, we settled for far too little, thereby incidentally leaving in our own mouths a taste of futility and frustration that helped stop us altogether from seriously considering intervention in Indo-China."<sup>760</sup> It is ironic that America's initially bitter foretaste of Indochina's "futility and frustration" would erode, and that America would be drawn into another peripheral war that was limited both geographically and militarily, and like Korea would maintain these limits – but unlike Korea, would result in a humbling defeat for the reluctant superpower caught in a trap of its own creation, fighting a limited war with limited means only to experience a decline in commitment to that war, an echo of Korea but with a more tragic outcome. At least in Korea, the republic in the south was saved and became for coming generations a powerful beachhead for American economic, diplomatic and military influence in Asia.

Brodie suggests that "perhaps we should be grateful to Mr. Dulles for his pronouncement of January 12" since in making his bold speech, "[a]n idea that had been tossing around inside closed organizations for two or three years was suddenly exposed to public scrutiny and debate," and "subsequent Administration statements that purported to clarify the originally proposed policy actually resulted in changing it," since once "the wraps were finally taken off, and utter deflation followed," the country was "treated to ... a rare demonstration of the democratic process, in the best sense of the term, at work on essentially strategic ideas."761 Brodie believes that "[i]f such a thing could happen" more often, "some remarkable results might follow," as "[i]deas representing doctrines and orthodoxies of various kinds would be scrutinized by persons who were uncommitted to those orthodoxies" and even if we "could not expect really novel strategic ideas from such a process," Brodie holds out hope that "perhaps we could get reasonable departures from doctrines that had outlived the circumstances to which they were adapted."762 Importantly, Brodie speculates that we may even "get a new emphasis on having our strategy serve our diplomacy, and seeking to widen rather than restrict the area of choice of that diplomacy," helping to reunite war and politics in the normative Clausewitzian fashion: "Too often history has seen the opposite happen." 763 Brodie concedes it is possible "the diplomatist may completely mess up the broad choice that a wise strategy makes available to him," and as such he admits "[i]t is impossible to guarantee wisdom in high places at the critical time. But it is the business of the soldier to be sure he is wise in his own sphere, which is today a sufficiently difficult task

<sup>760.</sup> Brodie, "Unlimited Weapons and Limited War," 21.

<sup>761.</sup> Brodie, "Unlimited Weapons and Limited War," 21.

<sup>762.</sup> Brodie, "Unlimited Weapons and Limited War," 21.

<sup>763.</sup> Brodie, "Unlimited Weapons and Limited War," 21.

to spare him the temptation of prescribing wise policies for other spheres."<sup>764</sup> Brodie thus invokes the esteemed Prussia strategist in his final paragraph, noting: "Of course strategy and diplomacy cannot be separated; the union between them should in fact be much closer than it is today. But if the old Clausewitzian idea of strategy being the handmaiden of diplomacy – that is, the subservient partner – can no longer be entertained in a world of such frightening military risks as we face today and shall face increasingly in the future, let us at least not rush to invert the old relationship."<sup>765</sup> As Brodie concludes, "It will perhaps be of some help to remember that the answers to our dilemmas, if there are any answers, cannot-be found in the area of military strategy alone. Strategy cannot determine the ultimate end that war is to pursue – particularly when strategy has at its disposal the ultimate weapon."

## Strategy Hits a Dead End: All Out War Now 'Meaningless'

One of Brodie's most widely read articles during the period that followed the successful tests of the H-bomb, in a special section on "How War Became Absurd" published by Harper's magazine in October 1955, was "Strategy Hits a Dead End." Harper's editors introduced Brodie's article by noting, "Behind President Eisenhower's remark that 'there is no alternative to peace' lies the sober, cold-blooded estimate of professional strategists that warfare, as they have known it, is no longer practical."766 They presented "three articles" that "suggest the reasons why. Written independently, each of them explores a different aspect of our military future."767 Marc Trachtenberg starts off his seventh and final chapter of History and Strategy, "Making Sense of the Nuclear Age," with a discussion of this seminal Brodie article, noting: "With the coming of the hydrogen bomb, he argued, the strategy of unrestricted warfare had become obsolete; indeed, 'most of the military ideas and axioms of the past' no longer made sense in a world of thermonuclear weapons. But it was not enough to allow these 'old concepts of strategy' to 'die a lingering death from occasional verbal rebukes.' What was needed, he said, was a whole new set of ideas, a comprehensive and radically different framework for thinking about strategic issues. And over the next decade that was exactly what took shape. Strategy as an intellectual discipline came alive in America in the 1950s. A very distinctive, influential and conceptually powerful body of thought emerged."768

<sup>764.</sup> Brodie, "Unlimited Weapons and Limited War," 21.

<sup>765.</sup> Brodie, "Unlimited Weapons and Limited War," 21.

<sup>766.</sup> Bernard Brodie, "Strategy Hits a Dead End," Harper's, October 1955, 33.

<sup>767.</sup> Brodie, "Strategy Hits a Dead End," 33.

<sup>768.</sup> Marc Trachtenberg, *History and Strategy* (Princeton: Princeton University Press, 1991), 261. Citing Brodie, "Strategy Hits a Dead End," *Harper's Magazine*, October 1955, 33-37. Many of Brodie's arguments would be reiterated the next year in "Implications of Nuclear Weapons in Total War," RAND Paper (P-1118), July 8, 1957.

As if dutifully handed the baton from Clausewitz in a relay against his long-time opponent, Brodie commences his *Harper's* article with a quotation from Jomini that had enjoyed great endurance, but which had – as Brodie would point out on several occasions – at long last become, in the face of nuclear weapons, obsolete: "One of the commonest slogans in strategic literature is the one inherited from Jomini, that 'methods change but principles are unchanging'."769 As Brodie explained, "Until yesterday that thesis had much to justify it, since methods changed on the whole not too abruptly and always within definite limits. Among the most important limits was the fact that the costs of a war, even a lost one, were somehow supportable. At worst only a minor portion, literally speaking, of a nation's population and wealth would be destroyed. Even the two world wars did not go beyond this limit, despite their horrendous magnitude."770 Prior to nuclear weapons, Brodie continued, "There could therefore be a reasonable choice between war and peace. There could also be a reasonable choice among methods of fighting a war, or 'strategies'. However unrestricted they were intended to be, wars were inevitably limited by the limited capabilities (as we now see it) of each belligerent for heaping destruction on the other. Indeed, there were even slogans insisting that the application of force in war *must* be unrestricted."<sup>771</sup>

But all that began to change a decade earlier with the atomic devastation that befell both Hiroshima and Nagasaki by a single bomb. As Brodie put it, "If the time has not already arrived for saying good-by to all that, it will inevitably come soon – depending only on when the Soviets achieve and air-atomic capability comparable to the one we already have. For unless we can really count on using ours first and, what is more, count on our prior use eliminating the enemy's ability to retaliate in kind – and surely the combination would deserve long betting odds – we can be quite certain that a major unrestricted war would begin with a disaster for us, as well as for them, of absolutely unprecedented and therefore unimaginable proportions."772 For salvation, Brodie ultimately turns to the wisdom of Clausewitz, which should come as no surprise to those familiar with Brodie's lifelong interest in, and inspiration from, the famed Prussian strategic philosopher: "The key to the dilemma, if there is one, must be found in discovering the true sense for modern times of the old axiom of Clausewitz that 'war is a continuation of policy'. War is rational, he argued, only insofar as it safeguards or carries forward the political interests of the state. Certainly no one can dispute that, but it also seems at times that no idea could be further from the minds of people who presume to discuss national policy and strategy. One trouble is that even ordinary politicians and journalists feel impelled to utter resounding through

<sup>769.</sup> Brodie, "Strategy Hits a Dead End," 33.

<sup>770.</sup> Brodie, "Strategy Hits a Dead End," 33.

<sup>771.</sup> Brodie, "Strategy Hits a Dead End," 33.

<sup>772.</sup> Brodie, "Strategy Hits a Dead End," 33.

meaningless platitudes when the phrase 'national objectives' is mentioned, so that almost everything said on the subject is likely to be unrepresentative of what really lies in the minds and hearts of people at large."<sup>773</sup> But as Brodie observes, "An unrestricted thermonuclear war is to the national interest of no nation. In view of the direction in which we are moving and the speed at which we are going, it seems absolutely beyond dispute that we and our opponents will have to adapt ourselves mutually to ways of using military power which are not orgiastic. The Great Deterrent will have to remain as the Constant Monitor, and its efficiency in that role should never be subject to doubt. But to argue that its efficiency requires it always to be straining at the leash is to uphold an argument today which – if we are actually intent on preserving the peace – we are bound to abandon tomorrow."<sup>774</sup>

Brodie would continue to focus on the imperative of limiting warfare during the coming years and preventing what he would describe as the "meaningless" folly of total war in the thermonuclear era, with the now absolute destructive potential of the superbomb weighing heavily on his mind. Rather than dig in to defend his earlier views on the impossibility of war in the atomic age to retain its Clausewitzian balance, Brodie's views would continue to evolve and adapt to the emergent thermonuclear realities, and Clausewitz would continue to guide him. Consider an article in The Dartmouth published on March 20, 1956 with the telling title, "Brodie Discusses 'Limited' Conflicts, Says All-Out War is 'Meaningless'" written by Bevan M. French, who later worked for many years at NASA and is currently with the National Museum of Natural History at the Smithsonian Institution. 775 The article discussed Brodie's visit to Dartmouth, where he had earlier taught, to present a lecture to the Great Issues course there; before the lecture, he was interviewed by French, and in the interview he discussed Clausewitz and his importance for helping us frame our strategic choices, and to balance the objectives of war with the new, and most menacing, means of waging war. As French cited Brodie, "With the development of thermonuclear weapons for use

<sup>773.</sup> Brodie, "Strategy Hits a Dead End," 37.

<sup>774.</sup> Brodie, "Strategy Hits a Dead End," 37. Brodie further observes, "At a time when the opponent will be able to do to our cities and countryside whatever we might threaten to do to his, the whole concept of "massive retaliation" – and all that it stands for in both military and political behavior – will have to be openly recognized as obsolete. It is not enough to let a strategic idea die a lingering death from occasional verbal rebukes, leaving behind only confusion in public and professional opinion – including confusion about whether or not it is really dead. It is not enough to say that an unrestricted thermonuclear war cannot happen anyway because both sides will recognize its folly. There are various positive steps we must take to prevent its occurring even when military force is resorted to in disputes between nations. In a world still unprepared to relinquish the use of military power, we must learn to effect that use through methods that are something other than self-destroying. The task will be bafflingly difficult at best, but it can only begin with the clear recognition that most of the military ideas and axioms of the past are now or soon will be inapplicable. The old concepts of strategy, including those of a Douhet and of World War II, have come to a dead end. What we now must initiate is the comprehensive pursuit of the new ideas and procedures necessary to carry us through the next two or three dangerous decades."

<sup>775.</sup> Bevan M. French, "Brodie Discusses 'Limited' Conflicts, Says All-Out War is 'Meaningless'," *The Dartmouth* CXV, No. 126 (March 20, 1956), 1.

in warfare, a limited war without their use is both possible and necessary."776 French wrote that Brodie "spoke to a Great Issues course last night on 'Nuclear Weapons and Changing Strategic Outlooks," the title of a speech he would deliver to several campuses that year including the Naval War College and the Army War College. As French recounts, "In an interview before his speech, Brodie cited the theories of Karl von Clausewitz, a Prussian general who wrote that war should be a continuation of diplomatic policy, and that the objectives of war should be political. 'Some use of force seems to be necessary in modern diplomacy,' Brodie continued, 'but the presence of mass-destruction weapons makes it important that its use should not get out of hand." French adds that "[t]he 46-year-old University of Chicago graduate emphasized, however, than an all-out war is 'meaningless'" as "[t]here would be no objectives in an all-out war,' he continued slowly, 'that would make it worth fighting.""777 French noted that "Brodie went on to cite the Korean conflict as an example of a 'limited' war," and that he commented, "We had objectives in the conflict and from that point of view, it made sense to do what we did in Korea."778 Brodie would further develop his thoughts on the strategic implications of the new thermonuclear weapons on total war, and to reinforce his strengthening belief that total war was indeed now "meaningless" in any Clausewitzian sense, as evident in his discussion in his July 7, 1957 RAND paper, "Implications of Nuclear Weapons in Total War," as prepared for publication in the Fall 1957 issue of the Royal Canadian Air Force Staff College Journal.<sup>779</sup> Once the destructive power of the H-bomb was demonstrated, Brodie recalls that "AEC Chairman, Rear Admiral Lewis L. Strauss, stated on that occasion that the H-bombs that the United States could build and deliver would be individually capable of wiping out any city in the world!"780 In addition to the unprecedented explosive power of the new weapon, it also produced an "unexpectedly large amount of radioactive debris, which was deposited as 'fallout' of dangerous and even lethal intensity over thousands of square miles," adding to the weapon's Apocalyptic capabilities.<sup>781</sup>

With such a deadly weapon in the arsenal of modern states, Brodie writes that it now "became apparent that certain controversial military questions that had remained pertinent in the fission-bomb era were no longer worth tarrying over. Chief among these were the questions inherited from World War II concerning the appropriate

<sup>776.</sup> French, "Brodie Discusses 'Limited' Conflicts, Says All-Out War is 'Meaningless'," 1.

<sup>777.</sup> French, "Brodie Discusses 'Limited' Conflicts, Says All-Out War is 'Meaningless'," 1.

<sup>778.</sup> French, "Brodie Discusses 'Limited' Conflicts, Says All-Out War is 'Meaningless'," 1.

<sup>779.</sup> Bernard Brodie, "Implications of Nuclear Weapons in Total War," RAND Paper (P-1118), July 8, 1957, ii, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=AD606443&Location=U2&doc=GetTRDoc.pdf. This paper is a slightly revised version of RAND Research Memorandum RM-1842 of the same title "which differs from the original mainly in the deletion of some footnotes," as Brodie noted in an introductory "Note" on page ii.

<sup>780.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 9.

<sup>781.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 9.

selection of industrial target-systems. Industrial concentrations are usually associated with cities and vice versa, and since a thermonuclear bomb exploded near the center of a city would as a rule effectively eliminate the industrial activities associated with that city, there is hardly much point in asking which industries should be hit and in what order, or which particular facilities within any industry."782 The targeter's dilemma, for the moment, was now resolved: "once we are embarked upon an unrestricted nuclear war, the question of what to hit is all too simple to answer. We simply select the enemy's cities, which constitute the easiest targets to find anyway."783 Moreover, Brodie suggests that "since many major enemy airfields are bound to be near cities, the distinction in priority" between counterforce and countervalue targets "is in such instances likely to be an academic one. It is idle to talk about strategies being counterforce strategies, as distinct from counter-economy or counter-population strategies, unless we actually find ourselves taking deliberate measures to refrain from injuring cities," which Brodie would in fact come to counsel as the one viable path to limiting warfare in this new, deadly thermonuclear age. 784 As Brodie notes, "It can hardly matter much to the populations involved whether the destruction of cities is a by-product of the destruction of air fields or vice versa."785

Brodie discussed the introduction, in the British *Defence White Paper* of 1954, of a new concept and "expressive phrase 'broken-backed war' to describe what presumably would happen after the first huge exchange of thermonuclear weapons, assuming the exchange itself failed to be decisive," and in a footnote cites the document's description of this scenario and how it would unfold: "In this event [global war], it seems likely that such a war would begin with a period of intense atomic attacks lasting a relatively short time but inflicting great destruction and damage. If no decisive result were reached in this opening phase, hostilities would decline in intensity, though perhaps less so at sea than elsewhere, and a period of broken-backed warfare would follow, during which the opposing sides would seek to recover their strength, carrying on the struggle in the meantime as best they might." While the phrase was not widely embraced by Americans, many would embrace "the same conception," as Brodie notes in another footnote citing Admiral Robert B. Carney, U.S. Chief of Naval Operations, in a February 21, 1955 Cincinnati speech: "Presumably massive blows would continue as long as either side retained the capability. ... With the pass-

<sup>782.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 9-10.

<sup>783.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 10.

<sup>784.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 11.

<sup>785.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 11.

<sup>786.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 16.

<sup>787.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 16, n.3 citing Statement on Defence, 1954, Presented by the Minister of Defence to Parliament, February 1954 (London: Her Majesty's Stationery Office, Command Paper No. 9075), 5.

ing of that initial phase, and if the issue is still unresolved, tough people would carry on across the radioactive ashes and water, with what weapons are left. Sea control will be an elemental consideration in accomplishing either the follow-through phase of atomic war or the better appreciated chores of a prolonged nonatomic war."<sup>788</sup> And while "the conception of 'broken-backed war' appeared to be entirely abandoned in the *Defence White Paper* for 1955, which tended instead to rest everything on 'deterrence,' it has nevertheless continued to underlie and to confuse the basic structure of American and Allied defense planning,"<sup>789</sup> and Brodie questions the probability that a thermonuclear war would resemble the broken-back concept.

Brodie agrees that one may "easily conceive of conditions in both contending camps so chaotic, following the opening reciprocal onslaughts, that the war issue will not be immediately resolved and hostilities not formally concluded," and that one may also "picture surviving military units, including some possessing thermonuclear weapons and means of delivering them, continuing to hurl blows at the enemy to the utmost of their remaining though fast-ebbing capacity." But," Brodie adds, "it is difficult to imagine such intensive continuing support from the home front as would enable 'conventional' military operations to be conducted on a large scale and over a long enough time to effect any such large and positive purpose as 'imposing the national will on the enemy."791 As Brodie explains: "The major premise of the 'broken-backed war' conception was that the result of the initial mutual nuclear violence would be something like a draw. Otherwise it could not fail to be decisive. The second premise (we cannot call it a minor one) was that the level of damage on both sides following the strategic nuclear bombing phase would be limited enough to permit each to equip and sustain air, ground, and naval forces of sufficient dimensions to be able to execute noteworthy military operations. These would, presumably, be conducted at some distance from home, and would therefore require facilities, such as ports and associated railway terminals, which are generally found only in those larger coastal cities which would certainly be among the first targets hit in the nuclear phase! Implicit also was the further dubious assumption that somehow the nuclear phase would end cleanly, or diminish to a trivial magnitude, early in the hostilities, and at about the same time for both sides!"792 But Brodie adds that "[a] nother and perhaps more practical reason for questioning the 'broken-backed war' conception is that no one seems to know how

<sup>788.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 16, n.4 citing Admiral Robert B. Carney, U.S. Chief of Naval Operations, in a Cincinnati speech on February 21, 1955, as reported in the *Washington Post* and *Times Herald* on February 22, 1955.

<sup>789.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 17

<sup>790.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 17.

<sup>791.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 17.

<sup>792.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 18.

to plan for such a war," and notes "[t]here are special psychological reasons why official war planners have always in times past found it almost impossibly difficult to predicate a war plan on the assumption of national disaster at the outset. But in this case, even if the spirit was willing, the data and the imagination would be much too weak." <sup>793</sup>

In a passage reminiscent of Herman Kahn's later ultrarealist discussion of total war in the H-bomb era in his best-selling and controversial 1960 tome *On Thermonuclear War*, Brodie considers "The Problem of Survival," and writes that: "There are, of course, numerous examples in recent history of magnificent improvisation following upon disaster, or rather upon what used to be called disaster. But in each of those cases the means of making war, including such vital intangibles as established governmental authority operating through accustomed channels of communication, remained intact. A few battleships sunk, a few armies defeated and lost, even large territories yielded, do not spell the kind of over-all disaster we have to think about for the future. There are limits to the burden that can be placed on improvisation. The improvisation which the survivors of thermonuclear attack may find it within their capacities to come up with will surely have to be largely occupied with restoring the bare means of life." <sup>794</sup>

By means of historical analogy, Brodie explains that the "differences in circumstance that accounted on the one hand for the French resistance in 1914 and, on the other, for the collapse in 1940 were of trivial magnitude compared with the differences between pre-atomic and present-day strategic bombing."795 An illustrative description of this new thermonuclear reality is presented by Marshal of the Royal Air Force, Sir John Slessor, whom Brodie cites in other works including his forthcoming Strategy in the Missile Age, who in his 1954 Strategy for the West observed that he had "the perhaps somewhat unenviable advantage of an experience, which fortunately has been denied to most people, of being in a city which was literally wiped out, with most of its inhabitants, in fifty-five seconds by the great earthquake in Baluchistan in 1935, a far more effective blitz than anything laid on by either side in the late war, except Hiroshima and Nagasaki. When people talk light-heartedly about that sort of thing on a widespread scale not being decisive, I have to tell them with respect that they do not know what they are talking about. No country could survive a month of Quetta earthquakes on all its main centres of population and remain capable of organized resistance."796 And this, Brodie notes, describes "a catastrophe that is free of the additional terrible menace of lingering radioactivity,"797 which makes thermonuclear warfare even more unthinkable.

<sup>793.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 18-19.

<sup>794.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 19.

<sup>795.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 20.

<sup>796.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 21, n. 6, citing Sir John Slessor, Strategy for the West (New York: William Morrow, 1954), 111.

<sup>797.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 21.

Sounding much like Herman Kahn would sound a few years later, and not entirely unlike the Dr. Strangelove character, Brodie writes, "from a sober appreciation of the possibilities in this field of dismal speculation, it seems quite safe to assume that the number of people and the kind and quantity of capital that may survive strategic attack will be important far more for determining the character and degree of national recovery following the hostilities than for controlling the subsequent course of the hostilities themselves," but diverging from the caricatured callousness of Strangelove (as well as the infamous ultrarealism of Herman Kahn), Brodie would conclude that the "minimum destruction and disorganization that one can reasonably expect from any unrestricted thermonuclear attack in the future must almost inevitably be too high to permit further meaningful mobilization of war-making capabilities, certainly over the short term, and may well prevent effective use of most surviving military units already in being."798 Adds Brodie, "It should also be recognized once and for all that so far as predicting human casualties is concerned, we are talking about a catastrophe for which it is essentially impossible to set upper limits appreciably short of the entire population of a state. It is not only those in cities and in towns who will be exposed to risk, but, in view of the fallout effect, practically all. ... What we are in effect saying is that although the uninjured survivors of attack may indeed be many, it is also all too easily conceivable that they may be relatively few. The latter contingency is the more likely one in the absence of large-scale protective measures such as neither we nor any other people have yet shown ourselves prepared to mount. But whether the survivors by many or few, in the midst of a land scarred and ruined beyond all present comprehension, they should not be expected to show much concern for the further pursuit of political-military objectives."799

Brodie confronts what he describes as "Ambiguity in Policies," noting that there is a "monumental ambiguity in public policy, which reflects in part the ambiguity in the public pronouncements of relevant officials of the highest rank. Even those who preach the catastrophic decisiveness of nuclear strategic bombing seem to find it almost impossibly difficult to grasp the full significance of what they preach," an ambiguity that he sees in the often contradictory remarks of Sir John Slessor, who had so vividly described the horrific calamity of thermonuclear destruction but who "could also be abundantly quoted on the other side of the 'decisiveness' question from the very same book — a book that has a special importance as perhaps the most lucid and comprehensive presentation of the 'massive retaliation' doctrine to be found anywhere." Brodie takes Slessor to task for in essence ignoring his own warnings on the unique

<sup>798.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 26.

<sup>799.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 27.

<sup>800.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 27-28.

and unprecedented catastrophe that thermonuclear warfare would bring, and instead turning to the World War II experience for guidance, where Slessor came to realize: "When things are really bad the people's morale is greatly sustained by the knowledge that we are giving back as good as we are getting, and it engenders a sort of combatant pride, like that of the charlady in a government office who was asked during the London blitz where her husband was – 'he's in the Middle East, the bloody coward!' We must ensure that defence, as adequate as we can reasonably make it, is afforded to those areas or installations which are really vital to our survival at the outset of a war, or to our ability to nourish our essential fighting strength." Brodie responds that "[t]here is only one thing to be said about such language and imagery: it fits World War II, but it has nothing to do with thermonuclear bombs."

Brodie is reassured to note that Slessor's view would rapidly evolve, so in just two years he would be "seeing things in a quite different light," as evident in his May 1956 article in *The Bulletin of the Atomic Scientists*, "The Great Deterrent and Its Limitations," for which Brodie wants to "give due credit to Sir John for a flexibility of mind that is no doubt among his special distinctions."803 And with some sympathy, perhaps as a result of Brodie's own editorship and contribution to The Absolute Weapon in 1946, which presented views that sharply contrasted with Brodie's current thinking as a result of the thermonuclear revolution, Brodie suggests that "[p]erhaps there is also something about the experience of being an author, especially the author of a book, that brings one intimately into the rough-and-tumble of the marketplace so far as ideas are concerned" and credits Slessor for a "kind of drastic conversion that Sir John underwent within two years regarding some of his fundamental beliefs," which "is not a common occurrence among his professional colleagues, especially among those still on active duty. As Sir John observes in the aforementioned article: 'Not many people, even in the fighting services themselves, have really grasped the full tactical implications of an age in which nuclear power is the dominant strategic factor in war. There is a tendency almost subconsciously to shy away from those implications, which should not be ascribed merely to the influence of vested interest."804

Brodie closes his discussion of the new, pressing and dangerous thermonuclear realities and their challenge to strategy with a call for "The Need for Consistency," noting the "sense of Emerson's famous remark about consistency being the hobgoblin of little minds has on the whole enjoyed remarkable verification in military history. Trite historical examples of unintelligent rejection of the novel need not detain us,

<sup>801.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 29.

<sup>802.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 30.

<sup>803.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 31.

<sup>804.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 31.

except possibly to note that the catalog is long."805 Brodie is more concerned herein with "the instances where eager acceptance of the new is coupled, not only within the same organizations but often within the same persons, with stubborn insistence upon retaining also much of the old. These are the people who on the whole have come off best when the scores were in. For their very inconsistency has often provided a hedge against wrong predictions."806 Brodie has found that the "intensely conservative or reactionary are always proved wrong" as "changes in armaments over the past century have been much too rapid and drastic to offer any cover to those who will not adjust," and yet, as Brodie himself would find over and again, "the occasional brilliant seers who have the courage of their convictions and the analytical skill to recognize and expose inconsistency when they see it have all too often been tripped up by one or more critical assumptions which turned out to be in error, and then their own consistency worked only to make their whole logical construction dangerously wrong, as was certainly the case with Douhet,"807 and, one might argue, the early Brodie in 1946 who saw the atomic bomb as an absolute weapon that made war irrational, if not yet obsolete, and which severed the fundamental Clausewitzian linkage connecting war to politics and with it any hope for rationality. Brodie suggests that, "No doubt a proper intuitive feeling for the hazards of prediction and for the terrible forfeits involved, in the military sphere, in finding oneself overcommitted to a wrong guess, is one of the reasons why military men at a group tend to put a rather modest value on analytical brilliance as an alternative to mature military judgment."808 But he concludes, "Nevertheless, there is a limit to the amount of inconsistency that is reasonable, especially since in the world of nuclear armaments it may become, to say the least, exceedingly expensive. And if any one thing is clear from all the foregoing, it is that the strategy of 'massive retaliation', as commonly understood, is, like the headman's axe, rather too sharp a cure for ordinary ailments."809

## Toward a Strategic Balance: Strategy Meets the Missile Age

According to many students of strategy, Brodie's seminal work is his 1959 treatise on the thermonuclear era, *Strategy in the Missile Age*; it has been described by Colonels William P. Snyder and John A. MacIntyre, Jr., in their 1981 article in *Parameters*, "Bernard Brodie: America's Prophetic Strategic Thinker," as "a landmark study that synthesized the central ideas on deterrence and limited war that had emerged during the 1950s," and

<sup>805.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 31.

<sup>806.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 31-32.

<sup>807.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 32.

<sup>808.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 32.

<sup>809.</sup> Brodie, "Implications of Nuclear Weapons in Total War," 33.

which "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." They noted that that this book "was directed equally to military officers and to political leaders" and that "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." They add that *Strategy in the Missile Age* "was the most important book on American national strategy to appear in the decade of the 1950s" and "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." 812

As Ken Booth described in his chapter on Brodie in Makers of Nuclear Strategy, Brodie's Strategy in the Missile Age "was a big book which brought together a discussion of many of the problems that had been troubling Brodie over the previous few years," and "[i]n particular, he grappled with the interplay between old and new forces, when the latter were truly revolutionary."813 The origins of Brodie's widely read and lauded book are discussed by Marc Trachtenberg in his article, "Strategic Thought in America: 1952-1966," which appeared in the Summer 1989 edition of *Political Science Quarterly* as well as in the final volume, "Retrospectives," of Trachtenberg's six-volume anthology, Writings on Strategy: The Development of American Strategic Thought published that same year. Once the atomic monopoly ended, and robust nuclear forces became an undeniable fixture on both sides of the Iron Curtain, providing a strategic foundation for the emergence of a bipolar world system, strategy became more complex, less predictable, and more difficult to safely navigate. As Marc Trachtenberg describes in his article, the "question of deterrence could not be divorced from the question of use" and thus the "problem of target selection was, therefore, of fundamental importance."814 As Trachtenberg observes, "These problems were all very new, but already in 1952 one thing was clear: the targeting philosophy that had developed before and during World War II was becoming increasingly problematic. Indeed, the basic point about the absurdity of all-out war when each side had developed the means of utterly devastating the other must have been tremendously disorienting for professional military officers."815

<sup>810.</sup> William P. Snyder and John A. MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," *Parameters* Vol XI, No. 4, 2.

<sup>811.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 2.

<sup>812.</sup> Snyder and MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," 2.

<sup>813.</sup> Ken Booth, "Bernard Brodie," in John Baylis and John Garnett, eds., *Makers of Nuclear Strategy* (London: Pinter Publishers, 1991), 33.

<sup>814.</sup> Marc Trachtenberg, "Strategic Thought in America, 1952-1966," *Political Science Quarterly* 104, No. 2 (Summer 1989), 307.

<sup>815.</sup> Trachtenberg, "Strategic Thought in America, 1952-1966," 307.

He adds that it had become "clear, to the more discerning officers at any rate, that there were very basic and difficult problems here and that no one as yet had any really satisfactory answers," and General John A. Samford, the U.S. Air Force's director of intelligence, "wrote in 1952 that existing ideas on air power were inadequate and rested on 'too narrow a base'" and "he therefore asked the president of RAND to allow Brodie, whose work he liked and with whom he had been in contact, to 'produce a basic treatise on air power in war.' Since RAND was under contract to the air force, this was in effect the authorization that enabled Brodie to do the work that culminated in his important 1959 book, Strategy in the Missile Age."816 The book, while seminal and enjoying international translations and multiple printings that have continued into the post-Cold War era, was really little more than an anthology of Brodie's papers, speeches, and articles during the decade that had passed since America lost its atomic monopoly, when the strategic environment Brodie had famously analyzed in 1946 in his contributions to *The Absolute Weapon* underwent a profound transformation to a true nuclear-strategic balance the effectively bifurcated the world system. Strategy in the Missile Age was thus a treatise on the new bipolar world and how to survive its unprecedented dangers.

While the book was widely praised, Trachtenberg fairly criticizes Brodie for his lack of a clear prescription: "By 1959, when *Strategy in the Missile Age* was published, Brodie had been thinking about these issues full-time for many years. But again he failed to take a clear line. If all we sought was to maximize the pre-war deterrent effect, he wrote, we should 'assign the hard-core elements in our retaliatory force to the enemy's major cities, provide for the maximum automaticity as well as certainty of response, and lose no opportunity to let the enemy know that we have done these things.' The problem was that 'what looks like the most rational deterrence policy involves commitment to a strategy of response which, if we ever had to execute it, might then look very foolish.' 'For the sake of deterrence before hostilities,' he argued, 'the enemy must expect us to be vindictive and irrational if he attacks us' – even if his attack took care to spare our populations and successfully destroyed much of our retaliatory force; but 'a reasonable opposing view' was 'that no matter how difficult it may be to retain control of events in nuclear total war, one should never deliberately abandon control."<sup>817</sup>

Trachtenberg notes Brodie "understood that the basic issue in nuclear strategy was target selection," and that "the central problem here was whether the attack should focus on destroying the enemy's retaliatory force, sparing to the maximum extent possible the enemy's population, in order to preserve its hostage value – or whether

<sup>816.</sup> Marc Trachtenberg, "Strategic Thought in America, 1952-1966," 307.

<sup>817.</sup> Marc Trachtenberg, "Strategic Thought in America, 1952-1966," 324.

the enemy's strategic forces should not be targeted at all, since the ability to destroy them might lead the enemy to preempt and thus be destabilizing."<sup>818</sup> But much to Trachtenberg's disappointment, "Brodie simply laid out both sets of arguments and made no serious attempt to resolve the issue. He had 'given relatively little space,' he said in his conclusion, 'to the matter of how to fight a general war if it should come,' because 'the strategy of a total war is like an earthquake in that all the forces which determine its occurrence and its character have been building up over time, as have almost all the factors which determine how it runs its course.' The implication here was that rational analysis could make no real difference. And similarly, on the basic issue of limited war strategy – the question of tactical nuclear weapons – Brodie again simply laid out the pros and cons and drew back in this book from taking a position on the issue himself."<sup>819</sup>

Brodie's ambition for Strategy in the Missile Age was to not only imagine the interaction of strategy and the new, and terribly destructive technologies of war - which thanks to the proliferation of intercontinental missiles tipped with thermonuclear weapons that handily reached beyond continents and oceans, now threatened the interior heartlands that had been long insulated from the full trauma of modern war - but to also christen this new and uniquely dangerous era. Having already authored a widely read and highly regarded text on the role of sea power in what he had dubbed, for posterity, "Machine Age," Brodie hoped to not only comment on the new era of intercontinental missiles and their deadly thermonuclear payloads, but to define the new era as a distinct "age" on par with the "Machine Age." In his numerous papers, articles and speeches written as these new weapons arrived, Brodie refers to the thermonuclear era as distinct from the atomic era, but he concludes that while the H-bomb magnified the destructive power and thereby rendered strategic bombing more efficient, its arrival did not mark as fundamental transformation in war as that which was introduced by the A-bomb itself. And so Brodie looked for a better title to name this new era.

Much is revealed in Brodie's correspondence with his editor at Princeton University Press as this new work gestated, and as its final title was determined, with much persistence from Brodie in his insistence that the term "Missile Age" define his work, and remain part of its title. But in the end, his preferred phrase did not stick, though his work was nonetheless warmly received, positively reviewed, and widely influential – as other phrases jockeyed for position, with the term "Nuclear Age" becoming more commonly applied to the post-Hiroshima period generally. On January 29, 1958, his editor at Princeton, Herbert S. Bailey wrote to Brodie to discuss a new edition of

<sup>818.</sup> Marc Trachtenberg, "Strategic Thought in America, 1952-1966," *Political Science Quarterly* 104, No. 2 (Summer 1989), 324.

<sup>819.</sup> Trachtenberg, "Strategic Thought in America, 1952-1966," 324.

Brodie's best-selling *Guide to Naval Strategy*, and informing Brodie that Captain J.J. Vaughan, who served as Head of the Correspondence Courses Department at the Naval War College, might be interested in "purchasing 2000 or perhaps more copies of a revised edition of A Guide to Naval Strategy, for use in Navy correspondence courses," with "an additional chapter on the lessons of the Korean War," and with an updated chapter on "Tools of Sea Power." 820 Bailey suggested various courses of action were open: doing both, writing the new Korea chapter and welcoming revisions by them of the Tools of Sea Power chapter; welcoming from them both the Korea chapter and a revised Tools of Sea Power chapter; or telling them Brodie was too busy to do a revision but they could "simply have to take the book as it stands, supplying material on the Korean War and on the new weapons and ships by some other means."821 He added, "I hope that some method can be found to satisfy the Navy without interfering too much with your own work, which is obviously more important currently. I had hoped that your book on Air Strategy would be finished by now, though I suppose these things always take more time than one expects, and I imagine also that the recent advances in rocketry and the like have made some changes necessary."822 These advances in rocketry in fact transformed the work at its very core, so much so that the book would not be solely about air strategy, but would more broadly explore the strategic implications of a host of new technologies including the increased destructive yield of nuclear weapons as thermonuclear devices entered the arsenals of the superpowers, vastly augmenting the yields of the original atomic bombs; the advent of intercontinental rockets capable of efficiently and rapidly delivering thermonuclear payloads anywhere worldwide without viable defensive countermeasures; and the increasing complexity of the nuclear force structure as the land-air-sea triad took shape, including the emergence of largely invulnerable strategic submarines. These technologies would overshadow traditional air forces, which achieved prominence during the early nuclear era which relied on large fleets of relatively vulnerable strategic bomber aircraft to less efficiently deliver their atomic payloads deep within enemy territory, bringing us into what Brodie hoped we would call the "Missile Age."

On February 6, 1958, Brodie replied to Bailey, noting that his initial reaction to Captain Vaughan's plans for a rewrite of *Guide to Naval Strategy* -- referred to as GNS – for use in naval courses was "negative," since he "had the feeling that there was too much conservatism and orthodoxy in the course's approach for me to want to have anything to do with providing the literature for it. Besides, I have for years looked upon GNS as a book which has served its purpose, nobly so far as my own interests

<sup>820.</sup> Herbert S. Bailey, Letter to Bernard Brodie, January 29, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>821.</sup> Bailey, Letter to Brodie, January 29, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>822.</sup> Bailey, Letter to Brodie, January 29, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

were concerned, and that it should now be permitted to rest in peace. In libraries it could be useful for informing the young on what naval war was like in the days before the H-bomb."823 But he added that upon further "reconsideration, I think for favorably about the project. First of all, I think I could put some vital new stuff in the book without a great deal of additional writing. I am thinking of the first of the four alternative courses you suggested, secondly, if a correspondence course in naval strategy is going to be given at the Naval War College, one should really not expect that it would or could be anything very daring or imaginative. Where would they get the instructors for it if they were? Thirdly, if there is a reasonably nice piece of cash in it for me, I have a very good use for it."824

With that, he turned to his work in progress, which would become Strategy in the Missile Age. "Now, about my present work. I too was hoping it would be finished by now. The problem is simply that I have been suffering from, and desperately fighting, certain inhibitions amounting to what people loosely call 'writer's block.' But I have been making progress despite it all. I am sending you separately a long chapter which you have not yet seen (nor have you yet seen the chapter called 'Is There a Defense?', which for the time being is classified but which I am sure we can easily get declassified at the appropriate time. It has been quite favorably received by those who have read it, including, I might say, the Gaither Committee.) I am at work on the latest chapter, and allowing for rewriting and all the rest. I think it is not altogether foolish to talk in terms of another two months of work."825 In addition to "Is There a Defense"" - which became chapter 6 of Strategy in the Missile Age with the same title – Brodie would note in the preface to his July 23, 1958 RAND Research Memorandum (RM-2218), "The Anatomy of Deterrence" (which would become, incidentally, chapter 8 in Strategy in the Missile Age as well as an article of the same title in the January 1959 edition of World Politics), that "this paper is one in a series in preparation by the author on the general theory of air strategy in the nuclear age. Although each of these papers is intended as a chapter in the larger study, a few are being released as separate publications in view of their particular relevance to current problems."826

The papers listed were – in addition to "The Anatomy of Deterrence" and the aforementioned "Is There a Defense?" which was published as a RAND Research Memorandum (RM-1781) on August 16, 1956 but classified as "Confidential" – his unclassified December 31, 1952 RAND Research Memorandum (RM-1013), "The Heritage of Douhet," which became chapter 3 of *Strategy in the Missile Age* with the same title; his unclassified "The Implications of Nuclear Weapons in Total War," RAND

<sup>823.</sup> Brodie, Letter to Bailey, February 6, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>824.</sup> Brodie, Letter to Bailey, February 6, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>825.</sup> Brodie, Letter to Bailey, February 6, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>826.</sup> Bernard Brodie, "The Anatomy of Deterrence," RAND Research Memorandum RM-2218, July 23, 1958, iii.

Research Memorandum, RM-1842, from December 17, 1956, which became chapter 5, "The Advent of Nuclear Weapons; and his unclassified "The Meaning of Limited War," RAND Research Memorandum, RM-2224, from July 30, 1958, which would become chapter 9, "Limited War."827 As well, much of Brodie's May 14, 1957 speech to the Institute of World Affairs at the University of Utah, published by RAND on the same date as RAND Paper P-1111, "Some Strategic Implications of the Nuclear Revolution," would also appear in chapter 5, with other portions appearing as well as in chapter 1, "Introduction" (namely, where Brodie discusses the metaphorical implications of the War in Heaven as presented in book VI of Milton's Paradise Lost, as he earlier did in his first book, Sea Power in the Machine Age). Additionally, much of his June 11, 1953 RAND working paper, "A Commentary on the Preventive War Doctrine," appeared in Chapter 7, "The Wish for Total Solutions: Preventive War, Pre-Emptive Attack, and Massive Retaliation;" and much of his November 18, 1958 public Berkeley lecture, "Unlimited Weapons Choices and Limited Budgets," appeared in chapter 10, "Strategy Wears a Dollar Sign." Strategy in the Missile Age would become, in large measure, an anthology of Brodie's strategic and theoretical reflections on the new thermonuclear weapon and its global delivery systems as reflected in his papers, articles, and lectures during the years that preceded its publication as a single work, and would described in his preface to the Princeton edition as a "one-man enterprise in which I was accorded full freedom to develop my thesis as I saw fit," though he would acknowledge being "especially indebted" to ten of his RAND colleagues, among whom can be found Herman Kahn, Thomas Schelling, Hans Speier, and Albert Wohlstetter, and thankful for the feedback from thirteen several others who had read the manuscript in whole or in part.828

As Brodie explained to Bailey in his February 6, 1958 letter, "I expect none of the internal problems in rewriting the naval strategy book that I have mentioned above, probably because the material is less novel and daring." He noted that he had done some encyclopedia work during the past two years, and thus could safely promise to deliver a revised edition by the end of June. Brodie asked Bailey, "are you ready to do a new edition amounting physically to a new book, involving throwing away the present plates (if they exist) for what is after all going to be a pretty limited sale? If that question can be answered in the affirmative, the next question is whether the Navy will agree to a fee for my work which will make it all worth while. I am thinking in terms of a fee of at least \$1,000 to \$2,000 plus royalties." On March 6, 1958, Bailey wrote to Captain Vaughan, presenting the path he and Brodie had outlined for

<sup>827.</sup> Bernard Brodie, "The Anatomy of Deterrence," RAND Research Memorandum RM-2218, July 23, 1958, iii.

<sup>828.</sup> Bernard Brodie, "Preface," Strategy in the Missile Age (Princeton: Princeton University Press, 1959), vi.

<sup>829.</sup> Brodie, Letter to Bailey, February 6, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>830.</sup> Brodie, Letter to Bailey, February 6, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

the revision of GNS: "Presumably Chapters II and II on 'The Tools of Sea Power' will have to be completely rewritten. Dr. Brodie is prepared to do this. He feels strongly that Chapter IX on the 'Tactics of Fleet Action' is the most outdated chapter in the book, and will have to be either entirely eliminated or replaced. In addition, it would probably be desirable to add a chapter on the lessons of the Korean War and later developments. Dr. Brodie has already written a good deal on this subject, and would be prepared to write a special new chapter for the Guide to Naval Strategy."831 Bailey said Princeton University Press could guarantee "2000 copies for \$8500 f.o.b. New York, a discount from the \$6.00 cover price," adding, "In view of the amount of work to be done, I think this is a very fair price, and I hope it will be possible to for you to get the necessary appropriations."832 This was agreed to by Captain Vaughan, who phoned Bailey with the news, and on March 22, 1958, Bailey informed Brodie by letter of this: "I just had a telephone call from Captain Vaughan with the good news that they have been able to get the necessary appropriations immediately, so they are drawing up a contract which they will be sending me soon. In other words, we are all clear to go ahead with the revised edition of the Guide to Naval Strategy."833 Brodie was pleased with the news and on March 28, 1958, he replied in writing to Bailey: "I am glad it is all arranged with the Navy. I expect to have no trouble at all writing the required new pages, and will give up my weekends if necessary to do the job without interfering with the new book. . . . The problem is utterly different from and easier than the new book."834 Brodie added, "If what we were doing for the Navy was a new book, and they wanted to have a look at the manuscript before drawing a contract, I would tell them to go to Hell – as I am sure you would, too. Under the circumstances, however, I do not mind in the slightest."835

Brodie informed Bailey that he had nearly completed his new book, and on March 31, 1958, Bailey replied to Brodie, writing: "What wonderful news that you have really come to the end of your new book on Strategy, except for a short summary! I am so glad that you finally got through the problems that were stumping you and got it finished. I shall be looking forward to seeing it." Brodie had asked Bailey about re-using his recent presentation delivered to the University of Utah's Institute of World Affairs, and a lengthy quotation from *Paradise Lost* that had appeared in the front matter of his first book. Bailey assented, writing "by all means go ahead and use them. The quotation in *Sea Power in the Machine Age* is very unobtrusive, not

<sup>831.</sup> Bailey, Letter to Vaughan, March 6, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>832.</sup> Bailey, Letter to Vaughan, March 6, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>833.</sup> Bailey, Letter to Brodie, March 22, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>834.</sup> Brodie, Letter to Bailey, March 28, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>835.</sup> Brodie, Letter to Bailey, March 28, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>836.</sup> Bailey, Letter to Brodie, March 31, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

even in the text, and I am sure that virtually no one will notice that you are using the same quotation again. Even if they do, the quotation is so obviously apt for the use to which you put it, that it wouldn't be questioned. And it is so good that it would be a shame not to use it."837 Over the next few weeks, Brodie would juggle his revisions to GNS with his effort to complete *Strategy in the Missile Age*, and one result was a delay on the printing of GNS. As noted in a letter for Brodie from Bailey on July 17, 1958, required revisions from Captain Vaughan required bumping GNS' printing to August: "I know that it has been hard for you to get the revision of GNS done when your heart is really in your new book, but I think it is worth while and I appreciate the efforts you have made to get it through quickly."838

And finally, on December 8, 1958, Bailey wrote to Brodie, "The new edition of GNS is in at last, and two copies are on their way to you separately. I have just been looking through it, and I think it came out quite well. I hope you will be pleased with it."839 Bailey added, "I have been hoping to hear from RAND that your new manuscript is on the way, but I haven't heard anything yet. I shall be very glad to get it whenever they are ready to release it."840 On December 16, 1958, Bailey again wrote to Brodie, telling him: "I was of course excited to hear that the new book is at last nearly finished. I am looking forward to reading that copy of the manuscript you are going to smuggle to me. And I certainly hope you won't have any trouble with Hans Speier about the selection of a publisher; I think Speier is favorably inclined toward us . . . I do want to assure you that we are prepared to put the book through quickly."841 On December 29, 1958, Brodie replied to Bailey, reassuring him that Hans Speier and James (Jim) C. DeHaven would respect the author's choice for a publisher, and as such, "That means P.U.P."842 He added, "Of course, when you see the MS you may change your mind about wanting to publish it. However, I am really not worried. Excuse me for it."843 As a P.S., Brodie added: "If the Navy has paid my fee for the revision of GNS, I can use the \$1,500.00 as soon after the New Year as you can send it."844 On January 2, 1959, Bailey wrote to Brodie, noting the Navy had not yet paid Princeton University Press, "but as soon as they do I shall send you our check for the special \$1500 fee, and the regular royalties will be due and will be paid as usual in March."845

<sup>837.</sup> Bailey, Letter to Brodie, March 31, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>838.</sup> Brodie, Letter to Bailey, July 17, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>839.</sup> Bailey, Letter to Brodie, December 8, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>840.</sup> Bailey, Letter to Brodie, December 8, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>841.</sup> Bailey, Letter to Brodie, December 16, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>842.</sup> Brodie, Letter to Bailey, December 29, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>843.</sup> Brodie, Letter to Bailey, December 29, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>844.</sup> Brodie, Letter to Bailey, December 29, 1958, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>845.</sup> Bailey, Letter to Brodie, January 2, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

On January 26, 1959, DeHaven wrote to Bailey "regarding Bernard Brodie's manuscript on 'Air Strategy in the Missile Age,'" reaffirming RAND's support of the author's preference for a publisher, adding RAND was also "influenced by the interest and enthusiasm of a competent publisher for a particular manuscript," so "[b]y both of these criteria, the choice of a publisher in this case seems to converge rapidly on Princeton. We will therefore submit the final manuscript to you."846 He added, "Some words of caution may be in order at this point. As you know, we can't agree to publication until clearance has been obtained. There is no reason to believe that clearance will be withheld; on the other hand, it may be delayed, or, some changes in the text may be requested."847 DeHaven concluded his letter by assuring, "You may be sure that we are all looking forward to this continued opportunity for association with Princeton University Press and Herb Bailey."848

On January 30, 1959, Brodie wrote to Bailey, in which he discussed the tentative working title to his new work, which he originally dubbed Air Strategy Meets the Missile Age. Brodie wrote, "I have no particular commitment to the title I chose, other than the fact that titles are difficult for me to think up. I do think it would be improved by the omission of the word 'Air,' which would leave it simply 'Strategy Meets the Missile Age.' I like the word 'Meets,' because, unlike the word 'Enters,' it suggests that what has gone before it not really appropriate to the situation that now confronts us. By the way I had thought also of the word 'Confronts.'"849 Brodie added, "I had thought also of having some other word qualifying 'Strategy,' like 'Ancient' or 'Classic.' However, the connotation in these words is not good. Anyway, let's think about 'Strategy Meets the Missile Age' until we think of something better."850 On February 3, 1959, Bailey replied to Brodie, "I just received your note of the 30th, about the title. I agree that the word 'Air' in the title is not necessary. Let's use 'Strategy Meets the Missile Age' as a working title, but let's also see if we can think of something equally descriptive and more striking."851 And on February 10, 1959, Bailey again wrote to Brodie, explaining: "I have been thinking over the title, because I am not entirely satisfied with 'Strategy Meets the Missile Age.' We have had too many books about the atomic age, the missile age, the nuclear age, and other kinds of 'ages.' It seems to me that your book is a fundamental development of the whole basis of strategy, and ought to have a title that is simple and imposing. What would you think of simply 'Modern Military Strategy' or 'Strategy for Peace and War'? I don't think it's presumptuous to remember that

<sup>846.</sup> James C. DeHaven, Letter to Bailey, January 2, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>847.</sup> DeHaven, Letter to Bailey, January 26, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>848.</sup> DeHaven, Letter to Bailey, January 26, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>849.</sup> Brodie, Letter to Bailey, January 30, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>850.</sup> Brodie, Letter to Bailey, January 30, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>851.</sup> Bailey, Letter to Brodie, February 3, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

Clausewitz wrote *On War* – not a bad title." Such a Clausewitzian aspiration would re-assert itself with Brodie's 1973 work, *War and Politics*, and incidentally, Bailey's thoughts mirrored those of Herman Kahn's editors, who had suggested a similarly Clausewitzian title for Kahn's voluminous and controversial lectures on thermonuclear warfare, resulting in its neo-Clausewitzian title, *On Thermonuclear War*.

On February 16, 1959, Brodie wrote to Bailey, continuing their discussion of the title to his latest work: "About the title, I agree about the over use of the word 'Age.' However, one of my former books is, as you know, Sea Power in the Machine Age, so I have a certain proprietary commitment in that area. I should like to bring in something about missiles in order to show the newness of the thing, and I also want to have the word 'strategy' in the title. However, I am afraid I am not yet ready to go as far as you suggest in your own tentative recommendations. I want to hold on the few traces of modesty I still have left."853 Brodie added, "By the way, the two paragraphs of my quotations from Milton on the first page contain a number of wonderful book titles, provided one is not too concerned with communication information. Almost every phrase makes a good title, e.g., 'More Valid Armes,' 'Weapons More Violent,' 'When Next We Meet,' 'And Worse Our Foes,' etc. Milton seems just naturally to have breathed out titles."854 On February 16, 1959, Bailey replied to Jim DeHaven at RAND, lauding Brodie's newest work: "I am absolutely sincere when I say that I think the book is going to be the most important book of its kind in the decade. I would love to be the editor for the book and put it through the press myself, but I have so many other duties that I know I can't do it. It's going to be in good hands, though. Gordon Hubel, who I think did a wonderful job on *The Berlin Blockade*, will begin to edit the book this week."855 He added that Princeton University Press planned to put Brodie's new book "on an express production schedule, and I hope to have finished books in May for publication in June. At least that's what I'm shooting at, and if we can get clearance soon, I don't see why we can't do it."856 Bailey estimated the new book would be 432 pages long, and priced at \$6.50. The first print run was expected to be 5,000, but Oxford University Press pre-ordered 1,000 copies so the first print order was increased to 6,000, a sizeable run for an academic work.

While there was much hope for Brodie's newest work, its title remain unsettled, and on March 13, 1959, Bailey wrote to Brodie, noting, "We've been struggling among ourselves over the title of your book, though of course in the long run you will have to decide. To me, and to several others here, 'Strategy Meets the Missile Age' is somehow

<sup>852.</sup> Bailey, Letter to Brodie, February 10, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>853.</sup> Brodie, Letter to Bailey, February 16, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>854.</sup> Brodie, Letter to Bailey, February 16, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>855.</sup> Bailey, Letter to DeHaven, February 16, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>856.</sup> Bailey, Letter to DeHaven, February 16, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

flat, perhaps because it is a sentence by itself and needs a period after it. Finally, I decided to take a poll of our publishing staff."857 He added that his "own preferences are, in order, Strategy for Survival, The New Strategy, New Strategy for New Weapons. The more I think about it, the more I believe Strategy for Survival indicates and implies some of the chief points of the book - that you can't win a thermonuclear war, but that you can hope to survive if your strategy is right. Also, that the best way of surviving is by devising a strategy to prevent war. The word 'survival' clearly implies thermonuclear weapons, since there has been so much talk about their devastating effect. Moreover, Strategy for Survival is brief and to the point, would look well on the cover of the book and in ads, and is easily memorable. Again, I think everybody knows only too well that a big war would mean missiles with thermonuclear warheads, so that doesn't need to be said."858 But he added, "If you don't like Strategy for Survival, may I plead for The New Strategy? The word 'new' implies a radical change from earlier strategy, and also implies the new weapon. Also, it is short and memorable." Bailey noted that Princeton University Press' advertising department "apparently discussed the problem and settled together on Strategy for the Missile Age. Their judgment should be good, but I personally still don't like 'The Missile Age.' It is not an accepted term like 'the machine age,' nor does it pervade the entire civilization in quite the same way. Still, it got four good votes."859 Bailey closed by adding, "I hope we can settle on a title pretty soon. What do you think of all this?"860 On March 20, 1959, Brodie replied to Bailey, responding to his suggestions and concerns. "Now, about the title, which I too feel we ought to sew up. I have tried hard not to be stubborn or excessively-inlove-with-own-words. Still, I like mine best."861 As Brodie explained: "Also, the word 'Survive' or 'Survival' has been used rather too much in titles about war, including, as I recall, the first and widely-read book on the atomic bomb, and the military would be allergic to it. They would consider it 'pushing the panic button.' 'The New Strategy' is much too pretentious for a relatively modest guy like me. . . . I rather like your third choice, 'New Strategy for New Weapons,' but, like the one which comes closest to my own, i.e., 'Strategy for the Missile Age,' it sounds like a prescription for a specific strategy, which my book does not offer, and also ignores the contribution of Part I of my book. I like the word 'Meets' rather than 'for' because it is much more dynamic, and also a closer approximation to what my book is about, which is the *confrontation* of the strategy inherited from the past by a completely new situation in which, by implication, the old ideas don't fit. Also my title is easy to remember and to say. Your

<sup>857.</sup> Bailey, Letter to Brodie, March 13, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>858.</sup> Bailey, Letter to Brodie, March 13, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>859.</sup> Bailey, Letter to Brodie, March 13, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>860.</sup> Bailey, Letter to Brodie, March 13, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>861.</sup> Brodie, Letter to Bailey, March 20, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

comment that the 'Missile Age' is not an accepted term like 'Machine Age' does not sound to me like a demerit. The term 'Absolute Weapon' was not an accepted term either until my colleagues and I used it in that book edited by me." Brodie added, "Naturally, I did not entirely trust my own judgment and tried out the title question on a few people here. It is certainly not possible to get consensus, but what does it matter? Two people liked my title very much, and no one came up with an alternative that anyone else liked."

On the same day, Brodie wrote to Gordon Hubel, an editor at Princeton University Press, noting some problems with the clearance from the State Department for release of his new book: "You have by now heard the unfortunate news about the holdup on my clearance. It seems the people concerned in State simply cannot find the time to finish it. Moreover, I am still hopeful that we will get back in the swing of the original schedule."864 He turned to the topic of the book's title, adding, "I notice you are using the title 'Strategy for Survival.' Unfortunately, it cannot be that, the reason chiefly being that the military would be allergic to it. Also, the word 'survival' has been used too much in titles concerning matters of this sort. I am writing Herb a separate letter today in which I am explaining why I had to resolve on my original title 'Strategy Meets the Missile Age.'"865 Brodie referred to Hubel's earlier comment on how Brodie's draft manuscript had proved very useful in helping Hubel understand Herman Kahn's lectures, which would very soon become On Thermonuclear War: "I think your comments on how my manuscript enabled you to understand Herman Kahn's lectures is both very complimentary and very important. This is the kind of function I want that book to fulfill."866 Ironically, Kahn's sprawling lectures would deeply penetrate the American psyche, bringing Kahn fame and notoriety, and even inspiring (at least in part) the Dr. Strangelove character and shaping his apocalyptic vocabulary. Hubel had written to Brodie on March 17, 1959, presenting a proposed advertising schedule for the book he was still calling "Strategy for Survival," and in a P.S. he wrote, "Herb and I attended Herman Kahn's lecturers (sic) at the Center of International Studies Friday and Saturday last, and we were both tremendously impressed with the sweep of his knowledge in this area and his ability to communicate, but without having read your manuscript, I would not have been able to follow him at all."867 Ironically, Brodie's role, fostering greater understanding of the complex strategic issues of the *Missile Age*, contributed in his publisher's ability to comprehend,

<sup>862.</sup> Brodie, Letter to Bailey, March 20, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>863.</sup> Brodie, Letter to Bailey, March 20, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>864.</sup> Brodie, Letter to Gordon Hubel, March 20, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>865.</sup> Brodie, Letter to Hubel, March 20, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>866.</sup> Brodie, Letter to Hubel, March 20, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>867.</sup> Hubel, Letter to Brodie, March 25, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

and assess the market potential of, Kahn's lectures – which would soon become the voluminous tome, *On Thermonuclear War*, a much less elegant and theoretically less robust work of strategic analysis than *Strategy in the Missile Age*. But in terms of social influence and prestige, *On Thermonuclear War* would become a best-seller, and catapult Kahn to national prominence – so much so that Kahn would become a celebrity in his own time, in contrast to Brodie whose orbit remained peripheral to mainstream society, even as his intellectual influence peaked, no doubt a frustration that would enable Brodie to empathize with a similar frustration felt by Clausewitz in his own time, which itself mirrored the famously frustrating fall of Niccolo Machiavelli, who was not only exiled but was arrested and tortured as well.

On March 25, 1959, Bailey again wrote to Brodie on the topic of the title to what would at last be finalized as Strategy in the Missile Age. "We have been talking here again about the title, and much as we want to respect your wishes, we still aren't happy with 'Strategy Meets the Missile Age.' It seems awkward to me, and several people have pointed out that the sense of 'confronts' didn't come through to them immediately. They took 'meets' in the sense of 'how-do-you-do.' This seems absurd, and of course it is, but there is something illogical about first impressions, and the first impression a title makes is important."868 Bailey suggested meeting Brodie half-way: "But can't we compromise on 'Strategy in the Missile Age'? This doesn't get across the idea of 'confronts,' but we can work on that ideas in our advertising blurbs. You can't get everything into the title, and perhaps we have been trying too hard. I would be happy to settle for 'Strategy in the Missile Age' if you would. How about it? I hate to keep bringing this up, but the title is important to all of us."869 Bailey closed by adding, "I hope we hear from the State Department before you get this letter."870 On April 8, 1959, Brodie wrote to Hubel, updating him on the slow-going clearance review at the State Department, noting "the State Department reader is (all too slowly) approaching the close, and has so far not challenged anything he has seen. I suppose it would be better if I waited until I receive final word, but my impatience needs some outlet, so I am sending you now the second round of galley-proof corrections."871

Brodie ultimately accepted Bailey's compromise wording on the title, which was published soon thereafter as *Strategy in the Missile Age*. Bailey continued to radiate optimism as the first copies came off the press, and on August 21, 1959, he wrote to Brodie, reaffirming his belief that the book was destined for success: "I really think the book is going to be a hit. Everybody who has seen it likes it. Yesterday Charles Scribner, who receives a copy as President of our Board, called me up just to tell me how

<sup>868.</sup> Bailey, Letter to Brodie, March 25, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>869.</sup> Bailey, Letter to Brodie, March 25, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>870.</sup> Bailey, Letter to Brodie, March 25, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>871.</sup> Brodie, Letter to Hubel, April 8, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

excited he was about it. You can be sure that we are going to do everything we can to make it go."872 A few days later, on August 25, 1959, Brodie replied to Bailey, writing, "The copies of the book arrived Thursday and I am delighted with their appearance. Everybody comments on how good the pages look, and the cover and dust jacket too. . . . I am going to keep one copy aside for entering minimum necessary changes, in case there is a second printing. Thus I will be able to shoot you such changes as soon as you indicate the need for them."873 Brodie asked Bailey, when new dust jackets get printed, to swap in a new quote to replace one provided from a *Herald Tribune* review of GNS that was underwhelming in its support of Brodie: "I have always disliked that phrase 'a really adequate guide.' We have so many glowing comments to quote for that book. Excuse this one braying note when I am so pleased with everything else (including your spiel about the new book in your Fall Books announcement), but it has operational value."874

But very soon after Strategy in the Missile Age's release, controversy erupted over the publisher's press release and its incendiary tone. In a September 15, 1959 letter to Brodie, Bailey discussed this unexpected situation: "Frankly, I was quite surprised that the people at RAND kicked up such a fuss, since the release was written [right] out of the book, and every sentence in it could be documented."875 Brodie himself had thought the writer, John Criscitiello, Princeton University Press' advertising manager, "did a good job," and Bailey explained that "apparently the release, in emphasizing the controversial points of the book, put everything together in a way that flustered the authorities, and I agree with you that they are justifiably concerned."876 Bailey agreed that "we wouldn't send out any release at all. The book will attract plenty of attention anyway, and the reviewers will say what they think about it, no matter what we or the RAND Corporation say or do. I am looking forward eagerly to the reviews, and I am sure you are too."877 Sales of the book were strong, and on January 20, 1960, Bailey wrote to Brodie, informing him that "about 13,000 copies of the book have already been distributed. I think this is pretty good. Incidentally, I happen to know that it is considerably more copies than Random House has managed to sell of Oscar Morgenstern's book which came out at the same time. Since Oscar runs pretty wild and since I am convinced your book is the best on its subject, I am quite happy about that. Moreover, I am sure that your book will go on selling when Oscar's is forgotten."878

<sup>872.</sup> Bailey, Letter to Brodie, August 21, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>873.</sup> Brodie, Letter to Bailey, August 25, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>874.</sup> Brodie, Letter to Bailey, August 25, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>875.</sup> Bailey, Letter to Brodie, September 15, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>876.</sup> Bailey, Letter to Brodie, September 15, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>877.</sup> Bailey, Letter to Brodie, September 15, 1959, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>878.</sup> Bailey, Letter to Brodie, January 20, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

Bailey invited Brodie to become Princeton University Press' "special advisor on books on military affairs" as part of a new editorial advisory committee. He also discussed Brodie's concerns over some rejections of requests to send out free review copies; Bailey defended Princeton University Press' policy, noting: "I want to defend our practice of not acceding to all requests for review copies. We do distribute review copies very generously, but I don't think you realize how many journals and magazines there are, or how many requests we get from media of very limited circulation." On February 4, 1960, Brodie wrote to Bailey, proposing publication of *Strategy in the Missile Age* in Japan, and noting his surprise that the UK publication of this work was not until February 4, "which happens to be this date. No wonder I have not seen British reviews of it!" Bailey liked the idea of a Japanese edition, and on February 11, 1960 wrote to Brodie, telling him: "I would indeed be keenly interested in arranging for a Japanese edition of your book." He also noted, "I was disturbed also at the delay in British publication," and that it "appears that the book got caught in the end of the printers' strike, and therefore was delayed." 883

The book quickly went into a second printing, and Brodie sought to make some corrections to the manuscript. On February 18, 1960, he sent a telegram to Bailey noting with concern that a "major batch of corrections sent you October seventh was entirely ignored." On February 22, 1960, Bailey wrote back, acknowledging Princeton University Press' "failure to make some of the corrections requested in the second printing of *Strategy in the Missile Age*" and adding "my personal apologies," noting "the only thing we can say is that something slipped. We were just as astonished as you were." He promised to include them in the next printing. Bailey also noted approvingly Thomas Schelling's positive review of *Strategy in the Missile Age* in the February 19<sup>th</sup> edition of *Science*. On February 22, 1960, Hubel also wrote to Brodie apologetically, noting after his initial disbelief, he checked the reprinted version and "found that you are entirely correct," and offered up his "sincere apology." The next day, on February 23, Bailey again wrote to Brodie, affirming his "embarrassment and chagrin again," and reiterating his "profound apologies."

<sup>879.</sup> Bailey, Letter to Brodie, January 20, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>880.</sup> Bailey, Letter to Brodie, January 20, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>881.</sup> Brodie, Letter to Bailey, February 4, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>882.</sup> Bailey, Letter to Brodie, February 11, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>883.</sup> Bailey, Letter to Brodie, February 11, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>884.</sup> Brodie, Letter to Bailey, February 18, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>885.</sup> Bailey, Letter to Brodie, February 22, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>886.</sup> Hubel, Letter to Brodie, February 22, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>887.</sup> Bailey, Letter to Brodie, February 23, 1960, Bernard Brodie Papers (Collection 1223), UCLA.

Despite this minor setback, Strategy in the Missile Age enjoyed a very healthy run, with multiple editions and numerous milestones – after its first hard cover printing in 1959, it would enjoy a second printing in 1960, international editions released in several languages including a Russian language edition published by Moscow's Soviet Ministry of Defense in 1961; a Spanish language edition published that same year by Argentina's Escuela de Guerra Naval in Spanish; and a Polish language edition published by Warsaw's Ministry of National Defense in 1963; a fourth hard cover printing in 1963; a first paperback edition in 1965 with a new preface by Brodie; and a second soft cover printing in 1967 with subsequent paperback printings in 1970 and 1972, the latter with a new preface by Brodie; a fifth hard cover printing in 1971, with subsequent printings by Princeton in 1984 and 1991, and more recently, a September 2007 release by RAND nearly fifty years after its first printing at the dawn of the "missile age." As of this writing, over half a century since it was published, Worldcat. org shows Strategy in the Missile Age to be available in 1,116 libraries worldwide, in 27 distinct editions. On August 29, 1969, Princeton University Press' Reprint Editor, Roy E. Thomas, wrote to Brodie, telling him, "It is a pleasure to tell you that we have had to rush into a third printing of the paperback edition of Strategy in the Missile Age. As of 31 July 1969 this book has sold 6,340 copies in paperback. We have scheduled a reprinting of 3,000 copies, an estimated 2 ½ years' supply. The price of the paperback remains \$2.95."888 He added, "I am sure you must be gratified, as we are, by the continuing success of Strategy in the Missile Age."889

## Strategy's New Beginning: Philosophical Foundations

The frontispiece to Princeton University Press' editions of Brodie's seminal *Strategy in the Missile Age* cites two key influences on his work – the latter from the start of his academic career and the former much more recent: Clausewitz, the philosopher of war; and Plato, an early architect of the modern state, and Socrates' top pupil and chief biographer who has profoundly shaped our understanding of his teacher, and thus preserved his teachings for us through his interpretation. From Clausewitz's *On War*, Brodie cites the following: "In these windings [of special interest] the logical conclusion is caught fast, and man, who in great things as well as in small usually acts more on particular prevailing ideas and emotions than according to strictly logical conclusions, is hardly conscious of his confusion, one-sidedness, and inconsistency." And from Plato's *Republic*, Brodie cites: "And is anything more important than that the work of the soldier should be well done?" From philosophy, Brodie quickly migrates to epic poetry.

<sup>888.</sup> Roy E. Thomas, Letter to Brodie, August 29, 1969, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>889.</sup> Thomas, Letter to Brodie, August 29, 1969, Bernard Brodie Papers (Collection 1223), UCLA.

When reading the introduction to Brodie's *Strategy in the Missile Age*, it is poetry that greets the reader, not math or science or even history – just as we saw in his opening sentences of his 1947 article, "The Atomic Dilemma" and again in his 1957 RAND Paper (P-1111), "Some Strategic Implications of the Nuclear Revolution," which was the text of a speech Brodie presented to the Institute of World Affairs at the University of Utah on May 14, 1957 - with passages from Book VI of Paradise Lost cited, with Angle Raphael recounting to Adam the story of the epic war in Heaven that led to Satan's fall, an allegory for the new nuclear age. As Brodie writes, "[a]fter the first day of fighting, Raphael relates, the issue was still in doubt, although the rebellious angels had received the more horrid injury. . . . Satan is persuaded that their inferiority is one of weapons alone, and he suggests: 'perhaps more valid Armes, Weapons more violent, when next we meet, May serve to better us, and worse our foes, Or equal what between us made the odds, In Nature none," to which Nisroc, his lieutenant, enthusiastically agrees: "He who therefore can invent/ With what more forcible we may offend/ Our yet unwounded Enemies, or arme/ Ourselves with like defence, to mee deserve/ No less then for deliverance what we owe."890 Satan announces the invention of a new and transformative weapon, a field gun that will alter the balance of power, which the next day is deployed with "dreadful execution," but "the loyal angels, not to be surpassed in the application of science to war, in the fury of the moment seize upon the 'absolute weapon'" and "[t]earing the seated hills of Heaven from their roots, they lift them by their shaggy tops and hurl them upon the rebel hosts. Those among the latter who are not immediately overwhelmed do likewise. In a moment the battle has become an exchange of hurtling hills, creating in their flight a dismal shade and infernal noise," and "Heaven is threatened with imminent ruin."891

In case the point is missed, Brodie writes "The war in Heaven dramatizes the chief dilemma which confronts modern man, especially since the coming of the atom bomb, the dilemma of ever-widening disparity in accomplishment between man's military inventions and his social adaptation to them." Adds Brodie: "Until recently the deadliest weapon known to man represented only a modest refinement of the field gun which Milton describes in his poem. Now, however, we can come much closer to matching, in kinetic-energy equivalents, the hills hurtling through space; we have thermonuclear weapons and the planes and ballistic missiles to carry them." Add to

<sup>890.</sup> Bernard Brodie, "Introduction," *Strategy in the Missile Age.* Santa Monica: RAND Corporation Report R-335, January 15, 1959, 3. An electronic copy of the RAND Report is available at the RAND Corporation website. The book's first cloth edition was published by Princeton University Press in multiple editions, with its first paperback in 1965. Much of *Strategy in the Missile Age* appeared in earlier RAND working papers, articles and speeches by Brodie, and while the work is largely perceived to be a stand-alone publication, it is to a remarkable degree really an anthology of Brodie's writings during the decade that followed publication of *The Absolute Weapon*.

<sup>891.</sup> Brodie, "Introduction," Strategy in the Missile Age, 4.

<sup>892.</sup> Brodie, "Introduction," Strategy in the Missile Age, 4.

man's newfound destructive power was a worrisome trend in the nature of war itself, which until the twentieth century had managed to retain a "well-recognized function in diplomacy" with an "institutionalized quality" and an "overlay of antique customs, traditions, and observances" that "tended to limit further a destructiveness already bounded by a primitive military technology." Modern war was now at risk of becoming "uncontrolled and purposeless," with a "near-collapse of the factors previously serving to limit war." 894

As Brodie described, "Today, however, with truly cosmic forces harnessed to the machines of war, we have a situation for the first time in history where the opening event by which a great nation enters a war – an event which must reflect the preparations it has made or failed to make beforehand - can decide irretrievably whether or not it will continue to exist," and this unprecedented fact demands that the pre-atomic world's willingness to let decisions pertaining to the conduct of war be made "in a fairly undefiled world of 'strictly military considerations'" no longer be tolerated: "Obviously, therefore, we cannot go on blithely letting one group of specialists decide how to wage war and another decide when and to what purpose, with only the most casual and spasmodic communication between them." Brodie himself sought to intermediate this conversation between political leaders and the military commanders whose job it would be to fight the next great war, and found his efforts thwarted by those who resisted civilian interference in what had been traditionally military decisions on how to conduct war once hostilities commenced, or by those civilians who questioned his philosophical and historical interpretations. At RAND he found himself at a nexus where the two worlds more comfortably intertwined, but the problem nonetheless persisted, enough so that he felt compelled in 1959, nearly a decade after he was tossed by the Air Staff out of the Pentagon, to address the "Intellectual No-Man's Land," and to describe how "[t]here exists in America no tradition of intellectual concern with that border area where military problems and political ones meet," noting that even the "civilian official in the State Department will rarely know much about current military problems and will therefore have no feeling for their relevance to the issues in his own jurisdiction," and that even the "National Security Council is for that and other reasons mostly a monument to an aspiration," and suggesting "whether any real enrichment of strategic thinking has proceeded from it is another question."895 Thus, Brodie concludes, "Any real expansion of strategic thought to embrace the wholly new circumstances which nuclear weapons have produced will therefore have to be developed largely within the military guild itself," as it is only "the professional military

<sup>893.</sup> Brodie, "Introduction," Strategy in the Missile Age, 5.

<sup>894.</sup> Brodie, "Introduction," Strategy in the Missile Age, 6.

<sup>895.</sup> Brodie, "Introduction," Strategy in the Missile Age, 7-8.

officer" that is "dedicated to a career that requires him to brood on the problems of war, in which activity he finds himself with very little civilian company." 896

But Brodie finds "the soldier has been handed a problem that extends far beyond the expertise of his own profession," and though "[h]e had learned to collaborate well enough with the physical scientist, to the mutual profit of both and to the advantage of their nation," this has not proven to be the case with regard to "military questions involving political environment, national objectives, and the vast array of valueoriented propositions that might be made about national defense."897 One reason why, Brodie learned from earlier experience, is "the barrier of secrecy," which he finds now "conceals far more, relatively, than it ever has before," 898 but he argues that "we must not put too much blame on the security barrier for the general ignorance of defense problems," since "[t]he amount of information available to the public on military and strategy affairs is very much greater than the casual observer would guess," and Brodie believes that the real culprit is thus a lack of understanding of and appreciation for "the stakes involved and also the opportunities available to them to contribute their special insights and skills to a great common problem," a challenge that Brodie takes upon himself to counter, with Strategy in the Missile Age "in part intended to help them make that contribution."899 Once properly motivated to contribute to this common problem, however, Brodie acknowledges that the next challenge is getting through to the "military audience" and overcoming what he describes as the "Traditional Military Depreciation of Strategy," and what we might describe as an inherently Jominian problem (the tendency to reduce strategy to stratagem in military circles), or as Brodie himself described as "the general conviction, implicit throughout the whole working structure and training program of the military system, that strategy poses no great problems which cannot be handled by the application of some well-known rules or 'principles', and that compared with the complexity of tactical problems and the skills needed to deal with them, the whole field of strategy is relatively unimportant."900

Brodie's view is inherently Clausewitzian, and reflects the continuity of a problem the Prussian himself had encountered, and from which he had even sought to insulate himself by shunning publicity, going so far as to publish anonymously and keeping his magnum opus locked away until after he had died, in contrast to Jomini's enduring self-promotion, prolific publishing, and constant effort to generate fame and notoriety. Indeed, it is in the colorful personage of Herman Kahn, who would emerge to be Brodie's principal rival in many ways, that we find our modern Jomini – not for any

<sup>896.</sup> Brodie, "Introduction," Strategy in the Missile Age, 9.

<sup>897.</sup> Brodie, "Introduction," Strategy in the Missile Age, 10.

<sup>898.</sup> Brodie, "Introduction," Strategy in the Missile Age, 10.

<sup>899.</sup> Brodie, "Introduction," Strategy in the Missile Age, 11.

<sup>900.</sup> Brodie, "Introduction," Strategy in the Missile Age, 11.

wanting absence in his intellect or any shortfall in his strategic thinking, but in his showmanship and self-promotion, his willingness not to just think about the unthinkable as Brodie had been doing from the moment Hiroshima lay in smoldering ruins, but to aspire to become renown as the man who *dared* to think about the unthinkable (as if this was something Brodie had somehow neglected!) Kahn's bravado contrasted greatly with Brodie's more mild-mannered approach to publicity, though both did publish widely, and both did seek to break down barriers in communication, Brodie hoping to break down barriers between civilian scholars and defense intellectuals and military professionals, and Kahn hoping to directly engage the public in the great nuclear doctrinal debates of the age. Kahn would gain wider notoriety, achieving a rare level of celebrity and entering into the consciousness of American pop-culture, for his effort – while Brodie would in many ways fade into the background of the very field that he can be credited with founding.

## **Learning from History**

Brodie raises in his introduction to *Strategy in the Missile Age* the still recent strategic bombing campaigns of World War II, noting that it was "rarely criticized on tactical grounds," and that there has been "no serious dissent from the general consensus that, for a new type of operation, the whole job was magnificently handled,"901 but rather that "[a]ll the important and voluminous criticisms of the effort center upon questions that are essentially strategic," such as: "Were the basic military resources absorbed by strategic bombing too great in view of the returns? Could not these resources have been better used, even in the form of air power, for other military purposes? Were not the wrong target systems selected?"902 Pulling back somewhat from his earlier critical assessment of these issues, which led to his exile from the Pentagon to the distant think tank of the RAND Corporation, Brodie asserts: "Whatever views one may have about the answers to these questions, or to the spirit behind the questioning, the questions themselves are neither irrelevant nor unimportant."903

But Brodie concedes that the reality of war limits commanders' exposure to independent strategic analysis, overwhelmed as they are by their daily need, especially in wartime, to respond to tactical and administrative demands. As Brodie explained: "There is no doubt that tactics and administration are the areas in which the soldier is most completely professional. The handling of battles by land, sea, or air, the maneuvering of large forces, the leadership of men in the face of horror and death, and

<sup>901.</sup> Brodie, "Introduction," Strategy in the Missile Age, 14.

<sup>902.</sup> Brodie, "Introduction," Strategy in the Missile Age, 14-15.

<sup>903.</sup> Brodie, "Introduction," Strategy in the Missile Age, 15.

the development and administration of the organizations that effect these purposes are clearly not jobs for amateurs. In these tasks there is no substitute for the hard training and the experience which the services alone provide."904 Brodie adds that, "During war the tests of command become far more exacting than in peacetime, and some officers turn out to be more talented than others. . . . But unless the officer attains some independent and important command, he may never in his career have to make a decision that tests his insight as a strategist. Small wonder, then, that the services on the whole have paid relatively scant attention to the development of strategic theory," particularly since "[t]oday the basic conditions of war seem to change almost from month to month. It is therefore hard for the professional soldier to avoid being preoccupied with means rather than ends. Also, his usefulness to his superior hangs upon his skill and devotion in the performance of his assigned duties, rather than upon any broader outlook, and if there is one thing that distinguishes the military profession from any other it is that the soldier always has a direct superior."905

Brodie turns to history to provide us with the tools required to develop an independent capacity for strategic analysis and to break free from the constraints of dogma and maxims, so that we may respond to the challenges of the nuclear age not with incremental tactical innovation but forward thinking strategic insight. Hence when he asks, "Why Look Back?" he has a ready answer: "if we examine the history of ideas" behind current strategic convictions, "we usually find that they have evolved in a definitely traceable way, often as the result of the contributions of gifted persons who addressed themselves to the needs of their own times on the basis of the experience available to them," 906 much the way Clausewitz threw himself into a lifelong process of digesting the Napoleonic experience, saving his conclusions for posterity to consider, and to apply to their ages. "Our own needs and our experience being different, we are enabled by

<sup>904.</sup> Brodie, "Introduction," *Strategy in the Missile Age*, 19. Brodie continues, "Some conception of ends there has to be, but its formulation is not the stuff of day-to-day work. Presumably it is the province of a few in exalted rank, who have been prepared for their high responsibilities by passing slowly through the tactics-oriented lower ranks and whose advancement has been based primarily on their success in posts of command, that is to say on their qualities of leadership. The inevitable tendency is to accept as given the ends handed down by traditional doctrine, usually in the form of maxims or slogans. . . . Today we are talking not about machine guns and barbed wire but about a weapon that may in a single unit destroy all of Manhattan Island and leave some of it a water-filled crater. We may as well admit that the strictly tactical problem of destroying Manhattan is already absurdly easy, and time promises to make it no less easy. That is only to say that its protection, if it can be protected, is henceforward a strategic and political problem rather than a tactical one."

<sup>905.</sup> Brodie, "Introduction," Strategy in the Missile Age, 19. Brodie continues, "Some conception of ends there has to be, but its formulation is not the stuff of day-to-day work. Presumably it is the province of a few in exalted rank, who have been prepared for their high responsibilities by passing slowly through the tactics-oriented lower ranks and whose advancement has been based primarily on their success in posts of command, that is to say on their qualities of leadership. The inevitable tendency is to accept as given the ends handed down by traditional doctrine, usually in the form of maxims or slogans. . . . Today we are talking not about machine guns and barbed wire but about a weapon that may in a single unit destroy all of Manhattan Island and leave some of it a water-filled crater. We may as well admit that the strictly tactical problem of destroying Manhattan is already absurdly easy, and time promises to make it no less easy. That is only to say that its protection, if it can be protected, is henceforward a strategic and political problem rather than a tactical one."

<sup>906.</sup> Brodie, "Introduction," Strategy in the Missile Age, 19.

our study to glimpse the arbitrariness of views which we previously regarded as laws of nature, and our freedom to alter our thinking is thereby expanded."907 Brodie notes some might think in our "age of missiles, thermonuclear warheads, atomic powered submarines capable of strategic bombing, and other comparably fantastic systems, it may seem atavistic to look back to strategic views which antedate World War I," but he posits that "ideas about war and how to fight it are not," to which he adds that "we should not deceive ourselves that we have the ability to start from scratch with completely fresh ideas and, guided merely by logic, to fashion a strategy according to the needs of our time," as this is "too much to expect of human beings. For better or worse, we shall be applying our intellects, as presently furnished, to new and baffling problems."908

Hence the purpose of Strategy in the Missile Age, to "scan the earlier development of strategic theory . . . and then consider some of the strategic policy choices confronting us today."909 And so Brodie engages in a dialogue with earlier strategic thinkers, including Clausewitz, who himself engaged in his own dialogue as did so many earlier theorists, many of which have defined what political theorists and scholars of international relations call the *realist tradition*, and which unifies the study of politics with the study of war, hoping to find balance in not just means and ends, but to establish a firewall between order and chaos, maximizing the former while containing the spread of the former, or perhaps more accurately, maximizing the prevalence of order at home while either minimizing the intrusion of chaos across one's frontiers, or when necessary exporting one's own vision of order to pacify those chaotic border lands, or when desperate to impose chaos upon a competing vision of order as would be accomplished by a nuclear retaliatory strike. Brodie thus looks back and joins a conversation that has carried forth since Herodotus first sought to decipher the events that transpired when Greece withstood the onslaught of their militarily superior Persian opponent, and Thucydides sought to grapple with the challenges faced by the Athenians as they clashed with their non-democratic opponents, the Spartans, losing in spite of their faith in the superiority of their democratic system, perhaps because of their ideological presumption of superiority which led then to commit international excesses, violating their democratic principles by committing atrocities abroad, and the students of Socrates sought to avenge his death by the manipulated demos, and to create a more enduring system that would at once enrich the world without imploding upon itself, through variations upon the philosopher-king model, ultimately unleashing Alexander upon the world, and who paved the way for Roman equilibrium to govern

<sup>907.</sup> Brodie, "Introduction," Strategy in the Missile Age, 19.

<sup>908.</sup> Brodie, "Introduction," Strategy in the Missile Age, 19-20.

<sup>909.</sup> Brodie, "Introduction," Strategy in the Missile Age, 20.

for a millennium, a period that Machiavelli would later seek to resurrect, and later realists would attempt to modernize, giving birth to Hobbes' Leviathan, a theoretical blueprint that others would seek to construct, from Napoleon and his interpreters to the wizards of Armageddon, where Bernard Brodie would reconnect with this long tradition, taking from it what guidance he could, as he struggled to prepare his world for the legacy of Hiroshima and the rise of the nuclear Leviathan.

In Brodie's segue to his discussion of air power, at the start of his second chapter, "Prologue to Air Strategy," he again addresses the challenge of strategic theory, and why it so often surrenders to the tide of simplification, emerging as maxims and stratagems: "Military strategy, while one of the most ancient of the human sciences, is at the same time one of the least developed. One could hardly expect it to be otherwise. Military leaders must be men of decision and action rather than of theory. Victory is the payoff, and therefore the confirmation of correct decision. There is no other science where judgments are tested in blood and answered in the servitude of the defeated, where the acknowledged authority is the leader who has won or who instills confidence that he will win."910 Brodie adds, "Some modicum of theory there always had to be. But like much other military equipment, it had to be light in weight and easily packaged to be carried into the field. Thus, the ideas about strategy which have evolved from time to time no sooner gained acceptance than they were stripped to their barest essentials and converted into maxims or, as they have latterly come to be called, 'principles.' The baggage that was stripped normally contained the justifications, the qualifications, and the instances of historical application or mis-application."911

Brodie notes that the "principles of war' derive from the work of a handful of theorists, most of them long since dead," and that "[t]heir specific contributions to living doctrine are not widely known, because their works are seldom read."<sup>912</sup> He adds that the "richness of their ideas is but poorly reflected in the axioms which have stemmed from those ideas,"<sup>913</sup> tilting his hat toward the likes of Clausewitz, and not Jomini. When it comes to the new field of air power, Brodie adds there has been only time enough for "one distinguished name" to emerge, that of Douhet, whose "essential, correct, and enduring contribution lay in his turning upside down the old, trite military axiom, derived from Jomini, that 'methods change but principles are unchanging," instead insisting "that a change in method so drastic as that forced by the airplane must revolutionize the whole strategy of war."<sup>914</sup> Brodie thus directly rebukes Jomini and the Jominian influence, and in his praise of Douhet carves out a

<sup>910.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 21.

<sup>911.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 21.

<sup>912.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 21.

<sup>913.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 21.

<sup>914.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 22.

function for strategic theory that more properly mimics the complex but insightful tradition of Clausewitz, who would emerge as the principal inspiration for Brodie. Before leaping into his discussion of air power and the legacy of Douhet, which reiterates his December 31, 1952 RAND research memorandum, RM-1013, "The Heritage of Douhet," RM-1013, Brodie presents a quick introduction to the field of "modern strategic thought," including an examination of the dual (and dueling) influences of Clausewitz and Jomini.

Brodie notes the emergence of some half dozen to a dozen enduring "principles of war" that are "supposed to be unchanging despite the fantastic changes that have occurred and continue to occur in almost all the factors with which they deal,"915 and points out that "[i]n a world of ideas such durability is usually characteristic either of divine revelation or of a level of generality too broad to be operationally interesting,"916 making these "hallowed 'principles' . . . essentially common sense propositions,"917 and though they contain obvious "utility,"918 "unreasoning devotion" to them can also prove to be "unfortunate" as happened when Admiral Halsey refused to divide his fleet in dogmatic obedience to "an antique slogan" only to "throw the whole of the great Third Fleet against a puny decoy force under Admiral Ozawa."919

Brodie, much more the Clausewitzian than the Jominian, argues that "[i]f we wish to avail ourselves of whatever light the wisdom of the past can throw upon our present problems, we must go beyond the maxims which are its present abbreviated expression," and while "[t]he maxim may be the final distillate of profound thought," by the time "it becomes common currency it is likely to be counterfeit." And so Brodie turns to a proper understanding of strategic thought, rejecting maxims and stratagems in favor of a more fundamental understanding of the essence of war and strategy. Brodie thus turns to Clausewitz, noting with curiosity that his famous maxim that "war is a continuation of policy by other means' happens never to be included in the lists of 'basic principles' – an omission that is both curious and significant." Brodie notes "how small is the number of general treatises on strategy even over the span of centuries," in contrast to the bountiful "richness of writings in military history" which "does not prepare us for the poverty in theoretical writings on the strategy of war," with only a "few theorists (that) have enjoyed an exceptional scarcity value," first and foremost among them being Clausewitz, whom Brodie calls "the first great

<sup>915.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 23.

<sup>916.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 23.

<sup>917.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 24.

<sup>918.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 24.

<sup>919.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 25.

<sup>920.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 27.

<sup>921.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 28.

creative figure in modern strategy" on a level comparable to Adam Smith in economics, but who in contrast to Smith, who turned out to mark the "headwaters of a large and still expanding river of thought to which many great talents have contributed," poor Clausewitz "stands almost alone in his eminence," and while "[o]thers may be worthy of honor, especially his contemporary Antoine Henri Jomini," none "challenge his preeminence," and only some "two-thirds of a century later" does there appear a figure of "comparable stature," with the emergence of the naval strategist Mahan, and even later, the air power theorist Douhet. 922 Brodie acknowledges "skipping over the names of some distinguished theorists," but asserts "only a small number of men have left written judgments and precepts that influenced the thinking of soldiers in their own, and subsequent generations."923 One reason for Clausewitz's endurance, revival, and relevance to the contemporary world has to do with the transformation of war by Napoleon. While "we may have little to learn from the purely military strategy of pre-Napoleonic wars," Brodie suggests that "we may have something to learn from the eighteenth century concerning the use of war in pursuit of political purposes," and this is one of the centerpieces of Clausewitz's analysis and the focus of his most well-known dictum.924

Brodie credits Napoleon for introducing us to the "era of modern war on land," 925 noting his "genius lay less in novel tactical and strategic combinations than in his ability to see basic changes in strategic conditions . . . and to exploit them."926 Further, "[w] ith national armies raised by conscription and supported by the whole people," an able commander "could do what was not possible with mercenary forces maintained by the prince for strictly dynastic purposes," and so armed, Napoleon was able to "bring superior forces to bear on successive portions of the opposing forces before the latter had a chance to unite," applying "a dense mass of troops, without regard to losses," against the opponent. Brodie was impressed with Napoleon's recognition of the importance of history, writing: "Napoleon's attitude towards the intellectual basis of his art is reflected in a number of his famous maxims, of which the following is representative: 'Read over and over again the campaigns of Alexander, Hannibal, Gustavus Turenne, Eugene, and Frederick. Make them your models. This is the only way to become a great general and to master the secrets of war.' What he was urging was a creative reading of history, not a sterile review of rules and principles, which then scarcely existed in any systematic form. Such also must have been the prescription of his great predecessors. Frederick wrote his own treatises on strategy, but in his

<sup>922.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 28-9.

<sup>923.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 29.

<sup>924.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 29.

<sup>925.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 31.

<sup>926.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 31.

active years in the field there had been little of the sort for him to read."927 Napoleon's influence reached beyond the battlefield, into the very study of war, as his "startling innovations and even more startling achievements inspired the work of Clausewitz and Jomini," of whom the former is elevated as "clearly the greater," even though the latter "was much the more influential." In this observation we find a similar parallel to the nuclear era strategists, Brodie included; after all, it was Herman Kahn whose influence reached beyond the insular world of strategic thinkers, permeating the public consciousness and even engaging pop culture, suggesting that even in our own time as during Clausewitz's that the more influential strategic theorist is not necessarily the better theorist, which by most accounts remains none other than Brodie himself, as Schelling affirmed in his post-mortem tribute to his colleague and friend

Adding to Jomini's influence was the fact his rival's major work was not published until after Clausewitz's death whereas "Jomini enjoyed a remarkably full literary career through a very long life," and that he also "wrote in French, a much more international language than the German of Clausewitz."928 Further, Jomini's writings were "easier to comprehend" than his rival's and also "more concrete and 'practical,' and more determined to provide guidance for action and to arrive at 'fundamental principles,'"929 all giving Jomini an edge (and also mirrored by the more successfully marketed work of Herman Kahn, who also aimed more squarely at the world of action than the halls of higher thought and reflection. And so, observed Brodie, "Clausewitz's appeal is limited, for he is much more given than Jomini to 'undogmatic elasticity' in his opinions, and he is more metaphysical in his approach," and though "an active professional soldier, he wrote with competence on philosophical problems pertaining to the theory of knowledge," and "his insights, like those of all great thinkers, can be fully appreciated only by readers who have already reflected independently on the same problems."930 And so Brodie naturally felt a greater affinity for the famed philosopher of war than his contemporary. Of course, Clausewitz's influence among Prussian and German military professionals grew dramatically as the nineteenth century ended and the twentieth began, so by the time Schlieffen became chief of the General Staff, Clausewitz's star had begun to shine brightly, so much so that he "had become a shade rather than a living spirit, quoted abundantly but not studied in any comprehending fashion," and thus widely misunderstood, a situation the persisted well into the nuclear age, necessitating Brodie's contribution to the 1976 translation of On War by means of a guide to understanding the intent of the master strategist, clarifying and explaining Clausewitz in order to prevent continued misperception.

<sup>927.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 33.

<sup>928.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 34.

<sup>929.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 34.

<sup>930.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 34.

Brodie attributes the continued endurance of Clausewitz and Jomini into our era, making "large portions of their work come alive today, especially that of Clausewitz," not to the "elucidation of principles but rather the wisdom which they brought to their discussion of them," and "[i]n the case of Clausewitz this wisdom is reflected in a breadth of comprehension which makes him dwell as tellingly on the qualifications and exceptions to the basic ideas he is expounding as he does on those ideas themselves."931 Brodie is further impressed by Clausewitz's "not merely distinctive but very nearly unique" contribution to the study of war: that is, "[n]o other theorizer on military strategy has penetrated so incisively to the nature of the relationship between war and national policy."932 But at the same time Brodie finds Clausewitz to be much misunderstood, in part because "the fruits of his brooding thought are transmitted by capsular quotations taken out of context," such as his discussion of "total or 'absolute' war," 933 for which he is wrongly presumed to be an apostle when in fact he believed war to be constrained by political objectives and obscured by many elements of fog. As Brodie observes, Clausewitz's "method," borrowing reverently from Hegel's thesis and antithesis, combined with his "natural inclination of a searching mind to work all around a subject," makes him "quotable on whichever side of an issue one desires," and on top of this, "he is of all the noteworthy writers on strategy the one least susceptible to condensation."934 But in spite of Clausewitz's best efforts, and the promise his sophistication offered the field of strategic theory, "what developed from the groundwork which Clausewitz and Jomini so brilliantly laid down at the beginning of the century preceding the first World War" was an unfortunate "Decline of Strategic Theory," as his next section is so labeled, and as such, "the study of strategy, which is in part historical but in larger part also analytical and speculative, has tended to fall between two stools, being neglected by the professions of arms and of scholarship alike."935 While military values "are not incompatible with scholarly values," Brodie has found that the "pursuit of normal duties" doesn't "leave much time" for scholarly pursuits. 936 He noted prior to the atomic age, most "writings in strategy were usually built upon critical study of the military history available to their authors," often "incomplete," sometimes "inaccurate," and always "vicarious" to actual military experience.937 When the calamity of World War I came

<sup>931.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 36.

<sup>932.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 37.

<sup>933.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 37.

<sup>934.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 38.

<sup>935.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 39.

<sup>936.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 38-9.

<sup>937.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 39.

to pass, Brodie believes the cause can be at least in part assigned to the failure of strategists to heed Clausewitz's most famous point, that asserting the interconnected nature of policy and war.

In the killing fields of World War I, total war erupted in a conflict that was ultimately about limited objectives. "Thus a war that was clearly not being fought for total objectives, such as the political extirpation of the enemy state, was allowed to become total in its methods and intensity,"938 and citing the wisdom of Clausewitz, he adds: "Policy is the intelligent faculty, war only the instrument, and not the reverse. The subordination of the military point of view to the political is, therefore, the only thing that is rationally possible."939 But as things unfolded across Europe, the first World War was a "purposeless war, which no one seemed to know how to prevent and which, once begun, no one seemed to know how to stop," as Brodie explained, 940 and was "also a war which, because of technological changes of much lesser degree than those which are new to us now, completely baffled the military leaders who had to fight it. They were not incompetent men, but they had been reared under a regime of maxims and precepts which bore no relation to the situation in which they found themselves," and this "bafflement and confusion contributed enormously to the tragedy." 941 Ominously, Brodie suggested that "if the total war of the future is fated to be the one where victory is pursued blindly, and therefore at wholly incommensurate costs which destroy its meaning, it will be more akin to the first than to the second of the two world wars."942 Again citing Clausewitz, this time in response to the frenzied release of popular passions during the French Revolution, Brodie provides us with an explanation for the purposeless lethality that erupted in World War I: "The means available – the efforts which might be called forth – had no longer any definite limits; the energy with which the war itself could be conducted had no longer any counterpoise and consequently the danger for the adversary had risen to the extreme."943

## **Nuclear Weapons and Total War**

This unlimited "purposeless lethality" as experienced during World War I serves as a compelling prelude to Brodie's exploration of nuclear weapons, and their impact on war. His early conclusions, about the revolutionary impact of atomic weapons, as

<sup>938.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 67.

<sup>939.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 67.

<sup>940.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 55.

<sup>941.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 56.

<sup>942.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 55.

<sup>943.</sup> Brodie, "Prologue to Air Strategy," Strategy in the Missile Age, 68.

articulated in *The Absolute Weapon* and in his early articles, are only reinforced by the next leap in destructive power when atomic weapons became dwarfed by thermonuclear weapons. Brodie recounts, in his 1959 work, the remarkable changes that had taken place since *The Absolute Weapon*, finding none challenged the "immediate and almost universal consensus" that formed after Hiroshima that "the atomic bomb was different and epochal." Added Brodie, "On the contrary, the first decade of the atomic age saw the collapse of the American monopoly, of the myth of inevitable scarcity, and of reasonable hopes for international atomic disarmament. It saw the development of the thermonuclear weapon in both major camps. If at the end of that decade one looked back at the opinions expressed so voluminously at the beginning of it, one found almost none that had proved too extravagant." 945

Brodie suggests, a decade into the atomic era, "we may first ask what difference, if any, the thermonuclear or fusion or hydrogen bomb must make for our strategic predictions," and suggests, hypothetically, "We have been living with the fission bomb for more than a decade, and it may well be that the fusion type of introduces nothing essentially new other than a greater economy of destruction along patterns already established. Unfortunately, that is not the case."946 With fusion bombs, we find an even greater split with the past than that caused by the advent of fission bombs. At least "fission bombs were sufficiently limited in power to make it appear necessary that a substantial number would have to be used to achieve decisive and certain results," and this "made it possible to visualize a meaningful and even if not wholly satisfactory air defense," thus sustaining our need "to think in terms of a struggle for command of the air in the old Douhet sense," and to "apply, though in much modified form, the lore so painfully acquired in World War II concerning target selection for a strategic-bombing campaign," as it was still "possible also to distinguish between attacks on population and attacks on the economy," and lastly, "ground and naval forces, though clearly and markedly affected by the new weapons, still appeared vital."947 All this changed with thermonuclear weapons, though Brodie acknowledges that it was possible that "the feeling that the H-bomb was distinctively new and significantly different from

<sup>944.</sup> Brodie, "The Advent of Nuclear Weapons," *Strategy in the Missile Age*, 151; Brodie made this same point, verbatim, in "Some Strategic Implications of the Nuclear Revolution," RAND Working Paper, P-1111, May 14, 1957, 7.

<sup>945.</sup> Brodie, "The Advent of Nuclear Weapons," Strategy in the Missile Age, 151-52; see also "Some Strategic Implications of the Nuclear Revolution," 8.

<sup>946.</sup> Brodie, "The Advent of Nuclear Weapons," *Strategy in the Missile Age*, 152; see also "Some Strategic Implications of the Nuclear Revolution," 8.

<sup>947.</sup> Brodie, "The Advent of Nuclear Weapons," *Strategy in the Missile Age*, 153; see also "Some Strategic Implications of the Nuclear Revolution," 8, with the exception of the phrase, "still "possible also to distinguish between attacks on population and attacks on the economy," which Brodie added to his 1959 book.

the A-bomb argued in part an under-estimation of the A-bomb." But with the destructive power of fusion weapons so much greater than fission bombs, Brodie noted "[o]ne immediate result of the new development was the realization that questions inherited from World War II concerning appropriate selection among industrial target systems were now irrelevant." Brodie adds, "It is idle to talk about our strategies being counter-force strategies, as distinct from counter-economy or counter-population strategies, *unless* planners were actually to take deliberate restrictive measures to refrain from injuring cities." 950

But Brodie takes care to emphasize the new scale of destructiveness, to dispel any illusions that we may comprehend the scale of destruction in a future thermonuclear exchange, as "never, even when the British-American strategic bombing forces were at the height of their power, were they able to inflict in six months or even a year of bombing the scale of destruction that would lie easily within the capability of the United States or the Soviet long-range bombing forces on Day One or even Hour One of a new war."951 And Brodie firmly believes "No one can specify how many bombs it would take to 'knock out' . . . a country as large as the Soviet Union or the United States, since analytical studies of the problem can do little more than suggest broad limits to the reasonable range of figures," and "cannot even touch the imponderables, such as popular panic and administrative disorganization, which might easily govern the end result."952 Brodie adds that such "people who do such analyses are as a rule interested in the results from the offensive or targeting point of view," so "therefore consider it a virtue to be conservative in their estimates of damage," and even to "dismiss the imponderables as unmeasurable." 953 Brodie notes "the fantastic degree to which the coming of the A-bomb gave a lead to the offense over the defense," and adds that "subsequent developments in nuclear weapons have tended to further that advantage."954 Indeed, in even the best case scenario imagined by Brodie, the "minimum destruction and disorganization that one should expect from an unrestricted thermonuclear attack in the future is likely to be too high to permit further meaningful mobilization of war-making capabilities over the short term," and "whether the survivors be many or few, in the midst of a land scarred and ruined beyond all present

<sup>948.</sup> Brodie, "The Advent of Nuclear Weapons," *Strategy in the Missile Age*, 153; see also "Some Strategic Implications of the Nuclear Revolution," 8.

<sup>949.</sup> Brodie, "The Advent of Nuclear Weapons," Strategy in the Missile Age, 155.

<sup>950.</sup> Brodie, "The Advent of Nuclear Weapons," Strategy in the Missile Age, 156.

<sup>951.</sup> Brodie, "The Advent of Nuclear Weapons," Strategy in the Missile Age, 163.

<sup>952.</sup> Brodie, "The Advent of Nuclear Weapons," Strategy in the Missile Age, 164.

<sup>953.</sup> Brodie, "The Advent of Nuclear Weapons," Strategy in the Missile Age, 164.

<sup>954.</sup> Brodie, "The Advent of Nuclear Weapons," *Strategy in the Missile Age*, 165; also argued verbatim in "Some Strategic Implications of the Nuclear Revolution," 12.

comprehension they should not be expected to show much concern for the further pursuit of political-military objectives."955

In many ways the analytical heart of Strategy in the Missile Age is Brodie's eighth chapter, "Anatomy of Deterrence" – which first appeared the year before as a RAND paper conceived from the outset as part of his ongoing project on strategy in the aviation age that took book form at Strategy in the Missile Age, and which was also published as an article with the same title in World Politics in January 1959 - where Brodie reasserts his fundamental belief in the strategy of deterrence, which has held steady since his first formal articulation of the theory earlier in the atomic era, and which presupposes America's unlikelihood to "ever deliberately initiate a total war for the sake of securing to ourselves the military advantage of the first blow"956as he had argued in his prior chapter where he reiterated his rejection of preventive war, and "the complementary principle of limiting to tolerable proportions whatever conflicts become inevitable"957 as he had long argued and which would form the heart of his next chapter on limited war; as a consequence, America settled upon a strategy of deterrence largely by default, rooted ultimately in the "rejection of the idea of 'preventive war." 958 This leads inevitably to a serious consideration of such concepts as limited war, flexible response, and the dynamics of intra-war escalation, which are considered by Brodie along with the entire brotherhood of nuclear wizards for the remainder of the Cold War era, sometimes quite fractiously.

Brodie noted deterrence had long been part of both "national strategy or diplomacy" and in and of itself was "nothing new," 959 and even speculates that deterrence may have played a more active role in the unfolding of history than historians recognize. As Brodie observed deterrence is as old as the art of war and that "the threat of war, open or implied, has always been an instrument of diplomacy," but that since the advent of nuclear weapons, "the term has acquired not only a special emphasis but also a distinctive connotation." 960 Indeed, the recurrent outbreak of war suggests that "the threat to use force, even what sometimes looked like superior force, has often failed to deter," suggesting the need for there to be "credibility inherent in any threat," and for deterrence to be dynamic, acquiring "relevance and strength from its failures as well

<sup>955.</sup> Brodie, "The Advent of Nuclear Weapons," Strategy in the Missile Age, 167.

<sup>956.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 271.

<sup>957.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 268.

<sup>958.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 268.

<sup>959.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 271; and "The Anatomy of Deterrence," *World Politics* 11, no. 2 (January 1959), 174. Also see Brodie, "The Anatomy of Deterrence," RAND Research Memorandum (RM-2218), July 23, 1958, 3.

<sup>960.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 271; World Politics, 174; RAND (RM-2218), 3.

as its successes."<sup>961</sup> Brodie suggests that deterrence may be something of a recurring hidden secret, an untold story underlying much of human history, hidden behind all those battles that were never fought – "because avoidance not only of wars but even of crises hardly makes good copy for historians, we may infer that past successes of some nations deterring unwanted action by other nations add up to much more than one would ever gather from a casual reading of history."<sup>962</sup>

But prior to the nuclear age, deterrence could afford to be "dynamic" as it "acquired relevance and strength from its failures as well as its successes," whereas post-Hiroshima the risks of failure had become too great, using "a kind of threat which we feel must be *absolutely* effective, allowing for no breakdowns ever."963 A feature of deterrence that strikes Brodie as "unreal" is our hope and expectation that "the retaliatory instrument upon which it relies will not be called upon to function at all," and yet must "be maintained at a high pitch of efficiency and readiness and constantly improved . . . at high cost to the community."964 Or as Brodie similarly described in his World Politics article that served as the foundation of this chapter, deterrence in the nuclear age is different in that "it uses a kind of threat which we feel must be absolutely effective, allowing no breakdowns whatsoever," since one failure would be "fatally too many."965 This reveals an underlying contradiction inherent in this so-called absolute weapon: "We thus have the anomaly that deterrence is meaningful as a strategic policy only when we are fairly confident that the retaliatory instrument upon which it relies will not be called upon to function at all," and as a consequence, we will be continuously "expecting the system to be constantly perfected while going permanently unused." 966 As Brodie suggests, "Surely, we must concede that there is something unreal about it all."967

Such an unreality can be seen in the doctrine of "Massive Retaliation" that was adopted by the Eisenhower administration after the frustrating and strategically ambiguous conclusion to the Korean War, in spite of the fact that it had remained a non-nuclear conflict, and thus was waged in a manner that was definitively limited. Consider the strategic enunciations of John Foster Dulles, who presented the new doctrine of Massive Retaliation in 1954, a doctrine that appears cut from the same philosophical cloth as Brodie's very first theoretical impulses when articulating the

<sup>961.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 272; World Politics, 174; RAND (RM-2218), 4.

<sup>962.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 271; World Politics, 174-175; RAND (RM-2218), 4.

<sup>963.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 272; RAND (RM-2218), 4-5.

<sup>964.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 272-73; RAND (RM-2218), 5.

<sup>965.</sup> Brodie, "The Anatomy of Deterrence" World Politics, 175; RAND (RM-2218), 5.

<sup>966.</sup> Brodie, "The Anatomy of Deterrence" World Politics, 175; RAND (RM-2218), 5.

<sup>967.</sup> Brodie, "The Anatomy of Deterrence" *World Politics*, 175; RAND (RM-2218), 5. In *Strategy in the Missile Age*, Brodie modifies this slightly to be, "Surely, there is something almost unreal about all this," 273.

principles of nuclear deterrence in 1945. 968 The logic of massive retaliation or what has been called "assured destruction" clashes with its emotional credibility. Would a massive escalatory response follow a limited attack? Would the center risk its own existence to secure an ally on its distant periphery, or might this violate the essential wisdom of Clausewitz, and those who came before him, for balanced reciprocity? The economic logic, and political logic in the wake of the Korean War, was indeed attractive. But the emotional unreality of massive retaliation became its Achilles' heel: since deterrence was designed to preserve the security of the West and to protect its basic liberties, that it at once seemed unreal raised some troubling questions that the warfighters later sought to correct: not trusting in the system to correct itself by self-balancing, and fearing that a failure in credibility would undermine the viability of the system, the warfighters were prepared to take things into their own hands. In a way, their efforts were a reflection of the system's need to correct itself, as the strategists and targeters were part of the system, rooted in the Waltzian first image, raised and nurtured in the bosom of its second to conduct foreign and defense policy, all in an effort to augment the weakness they perceived in the third. This interconnectedness of all three "levels of analysis" or "Waltzian images," at once suggests the continued relevance of classical realism, the overriding imperatives of neorealism, and the intermediating impacts of what some observers would later call neoclassical realism. Adding to the muddle of labels, the individual actors on Level 1 sought to construct weapons systems and decision-making structures at Level 2 in the hope of increasing order at Level 3, and as such suggest that the constructivists, who emphasize the primacy of social construction to both theory and action in international affairs, may also be correct.

Brodie tackles this thorny problem of credibility, and argues that for "basic deterrence," credibility is a non-issue since "the enemy has little reason to doubt that if he strikes us, we will certainly try to hit back." But to back up the threat with deeds, Brodie says we must meet the challenge of "fitting this power into a reasonable concep-

<sup>968.</sup> John Foster Dulles, "The Evolution of Foreign Policy," Department of State Bulletin 30 (January 25, 1962): 107-10. As Dulles proclaimed: "We need allies and collective security. Our purpose is to make these relations more effective, less costly. This can be done by placing more reliance on deterrent power and less dependence on local defensive power. This is accepted practice so far as local communities are concerned. We keep locks on our doors, but we do not have an armed guard in every home. We rely principally on a community security system so well equipped to punish any who break in and steal that, in fact, would be aggressors are generally deterred. That is the modern way of getting maximum protection at a bearable cost. What the Eisenhower administration seeks is a similar international security system. We want, for ourselves and the other free nations, a maximum deterrent at a bearable cost. Local defense will always be important. But there is no local defense which alone will contain the mighty landpower of the Communist world. Local defenses must be reinforced by the further deterrent of massive retaliatory power. A potential aggressor must know that he cannot always prescribe battle conditions that suit him. Otherwise, for example, a potential aggressor, who is glutted with manpower, might be tempted to attack in confidence that resistance would be confined to manpower. He might be tempted to attack in places where his superiority was decisive. The way to deter aggression is for the free community to be willing and able to respond vigorously at places and with means of its own choosing."

<sup>969.</sup> Brodie, "The Anatomy of Deterrence," *World Politics*, 175-176; RAND (RM-2218), 5. In *Strategy in the Missile Age*, Brodie puts it nearly the same way: "the enemy has little reason to doubt that if he strikes us, we will try to hit back," 273.

tion of its utility," placing a "considerable strain" upon us as we seek to harness that "almost embarrassing availability of huge power," leading us, during our early nuclear adolescence, to espouse the doctrine of massive retaliation, which we later "rejected in theory but not entirely in practice," even while it lacked credibility as a response to "less than massive aggression." To close the gap, Brodie chronicles the evolution of "win-the-war strategies" along "the sliding scale of deterrence," which follows an asymptotic curve of declining deterrent effect as the nuclear force multiplies: just crossing the nuclear chasm contributes the maximum effect, hence the race by so many states to join the nuclear club, particularly now when nuclearization is one of only two known methods to avoid pre-emptive strike by the newly assertive United States, the other being nuclear disarmament or, to some, surrendering without a fight to the West – as witnessed at the Cold War's end by poor nuclear states Ukraine, Kazakhstan, Uzbekistan, and South Africa, each surrendering their nuclear status for a combination of incentives including money and diplomatic recognition by the victorious post-Cold War West.<sup>971</sup> For the bankrupt states of the Former Soviet Union (FSU), this was a no-brainer since they lacked the indigenous technological capability and financial resources necessary to sustain their nuclear arsenals, which were developed with Soviet intellectual property; and for South Africa, the absolute weapon had been developed as a doomsday weapon to prevent the ouster of the Apartheid oligarchs by the black African majority, but with the peaceful resolution of South Africa's internal, ethno-political dialectic and the constitutional integration of black and white into the newly democratic South Africa, there was no need for an internal deterrent to create a firewall between the races any longer, and the Apartheid scientists hardly desired to see the bomb transforming the military power of sub-Saharan Africa, giving their former enemies an absolute weapon to wield.

Brodie considers the requirements for deterrence to succeed in the nuclear age – and points out that what matters more than "the size and efficiency of one's striking force before it is hit as the size and condition to which the enemy thinks he can reduce it by a surprise attack – as well as his confidence in the correctness of his predictions," a kind of logic Brodie finds traditional military planners uncomfortable embracing, being "unused to thinking in terms of the enemy having the initiative" and inclined by reasons of "training, tradition, and often temperament" to be "interested only in strategies that can win," which is often more than needed for successful deterrence.<sup>972</sup> Brodie concludes that "diversification for the hard-core survival forces" will improve the probability of surviving a surprise attack, and this leads Brodie to prescribe a triad

<sup>970.</sup> Brodie, "The Anatomy of Deterrence," World Politics, 176; RAND (RM-2218), 6. In Strategy in the Missile Age, Brodie uses the words "linking this power to" in lieu of "fitting this power into," 273.

<sup>971.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 274; World Politics, 176; RAND (RM-2218), 7.

<sup>972.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 281; World Politics, 180; RAND (RM-2218), 14.

of ballistic submarines, land-based missiles and strategic bombers, each with its various pros and cons, that together helps to offset the others' weaknesses. But having a survivable force structure capable of unleashing God's fury is just the beginning; the end is having a targeting strategy that contributes to the deterrent effect: Brodie argues that we must have, as primary retaliatory targets, targets dear to the heart of the enemy – his cities: "The rub comes from the fact that what appears like the most rational deterrence policy involves commitment to a strategy of response which, if we ever had to execute it, might then look very foolish. And the strategy of deterrence ought always to envisage the possibility of deterrence failing."

"974 Because, presumably, the enemy "cares intrinsically more [for] those cities than he does for his airfields, especially after the latter have already done their offensive work," we have little choice but to focus our retaliatory wrath upon them. But what if the enemy, in his surprise attack, takes great caution to protect our cities, and leaves us with "a severely truncated retaliatory force while his force remained relatively intact?"

"975 Won't such a counter-city retaliation be an act of "suicidal vindictiveness?"

As such, Brodie deduces that "it is easy to imagine a situation where it is useless to attack the enemy's airfields and disastrous as well as futile to attack his cities." Would our capacity "in our rage and helplessness" to "strike blindly at enemy cities" thus deter him from attacking us in the first place? Just as Clausewitz sought to tame the Napoleonic genie, Brodie seeks to tame the nuclear genie, and suggests that perhaps, "for the sake of maximizing deterrence it is wise deliberately to reject the Napoleonic maxim, 'On s'engage, puis on voit." Brodie thus concludes that for deterrence to succeed, a retaliatory response "ought to be not only automatic but sensibly so." Yet contradictorily, Brodie also realizes that "a reasonable opposing view is that, however difficult it may be to retain control of events in nuclear total war, one ought never

<sup>973.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 285; World Politics, 182; RAND (RM-2218), 17.

<sup>974.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 292; World Politics, 185; RAND (RM-2218), 22.

<sup>975.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 293; World Politics, 185; RAND (RM-2218), 23.

<sup>976.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 293; World Politics, 185; RAND (RM-2218), 23.

<sup>977.</sup> Brodie, "The Anatomy of Deterrence" *World Politics*, 185; RAND (RM-2218), 23. In *Strategy in the Missile Age*, Brodie adjusts "useless to attack the enemy's airfields" to "of little use to hit the enemy's airfields," 293.

<sup>978.</sup> Brodie, "The Anatomy of Deterrence" *World Politics*, 185; RAND (RM-2218), 23. In *Strategy in the Missile Age*, Brodie writes "in our rage and recklessness" instead of "in our rage and helplessness," and instead of "strike blindly at enemy cities" he clarifies this to "strike at something," 293.

<sup>979.</sup> Brodie, *Strategy in the Missile Age*, 293; "The Anatomy of Deterrence" *World Politics*, 185; RAND (RM-2218), 23. In the book Brodie starts the phrase with, "One view might be that," while in his article and RAND research memorandum he starts with just the word, "Perhaps."

<sup>980.</sup> Brodie, "The Anatomy of Deterrence" *World Politics*, 186; RAND (RM-2218), 24. Brodie rewrites the end of this paragraph entirely in the book, though this author's views is that it was elegantly stated in the article and in the RAND research memorandum. In *Strategy in the Missile Age*, he writes: "For the sake of deterrence before hostilities, the enemy must expect us to be vindictive and irrational if he attacks us. We must give him every reason to feel that that portion of our retaliatory force which survives his attack will surely be directed against his major centers of population," 293.

to abandon control deliberately," and as such, we must be prepared to cope with "an enemy offensive which exercised the kind of discriminating restraint" as he described, since it is plausible that "men who have been reared in the tradition which holds that extra damage from a delivered bomb is always a 'bonus' – a tradition which is probably as strong on the Soviet side of the military fence as it is on our own," would be inclined to think that way. 981 Indeed, Brodie contemplates the benefits of developing a "clean" bomb with minimal nuclear fallout to prevent radioactive blowback on neutral or friendly soil "and even to drift back to the territories of the users of the bomb," which would satisfy most nuclear warfighters; and at the same time, he contemplates the opposite, the development of a "super-dirty" weapon capable of releasing "a much greater amount of radioactive fallout" - which, "when we consider the special requirements of deterrence in the minimal or basic sense of deterring a direct attack upon oneself, it is possible that one can see some utility in the super-dirty bomb," as deterrence demands that the "emphasis has to be on making certain that the enemy fears even the smallest number of bombs that might be sent in retaliation," and consequently, "one wants these bombs to be . . . as horrendous as possible." 982 Thus the logic of deterrence nudges us to make "super-dirty, as well as large" bombs that don't require accurate delivery due to their powerful (and messy) effect.983

Thus the goals of successfully waging nuclear war and preventing war through successful nuclear deterrence dictate the development of opposing tools, the warfighter seeking cleaner weapons than the deterrer. As such, would the deployment of superdirty weapons be, of itself, a less credible deterrent? Does preparing to deter, as opposed to preparing for a fightable, winnable nuclear war, create a greater risk, because it erodes the credibility of use? Brodie expands his reasoning, briefly, from basic deterrence to a "somewhat bolder" manifestation of deterrence that came to define the showdown between West and East, extending deterrence to "territories beyond our shores," and he speculates that perhaps, if we protect our mainland population with shelters, this might make us bolder, and possibly reckless in our willingness to entertain the thought of retaliation if an ally is attacked.<sup>984</sup> However, Brodie suggests that "an adequate civil

<sup>981.</sup> Brodie, "The Anatomy of Deterrence" *World Politics*, 186; RAND (RM-2218), 24. In the book, Brodie tweaks the first sentence and its word order, but the meaning is nearly identical: "A reasonable opposing view, however, is that no matter how difficult it may be to retain control of events in nuclear total war, one should never deliberately abandon control," 293.

<sup>982.</sup> Brodie, "The Anatomy of Deterrence" *World Politics*, 186-187; RAND (RM-2218), 25-26. Again, the wording in *Strategy in the Missile Age* is modified but the meaning remains the same, with a slight change in tone toward greater pessimism with Brodie writing, "we may find a need even for super-dirty bombs," 295, from the more hypothetical original wording, "it is possible that one can see some utility in the super-dirty bomb."

<sup>983.</sup> Brodie, "The Anatomy of Deterrence" World Politics, 187; RAND (RM-2218), 26. In Strategy in the Missile Age, the wording is changed to: "very large and also intensively contaminating," 295.

<sup>984.</sup> Brodie, "The Anatomy of Deterrence" *World Politics*, 187-188; RAND (RM-2218), 27. In *Strategy in the Missile Age*, Brodie drops the words "somewhat bolder" when discussing extended deterrence, but replaces the words "all-important: with the word "critical" when describing the need to protect the populace, 296.

defense program may prove an indispensable factor in keeping wars limited," by fostering in the enemy "the necessary credibility" that comes with having "some cover for our population." But *some cover* is not necessarily the same secure cover required to preserve a "secure retaliatory force," which is for Brodie the "*sine qua non* of deterrence" and the "one instrument which could conceivably make all other instruments designed for defense unnecessary." Prudence suggests the need to go beyond this basic sine qua non, and to develop "some backstops" such as "a well-designed shelter program for civil defense." And beyond that, Brodie notes some believe it prudent to also protect "the tools and materials required for national economic recovery within a reasonable period after the war," suggesting that "a nuclear war is not necessarily the end of the world for us, let alone humanity;" hence the notion of preparing "caves and unused mines" for the "storage or actual operation of essential production capital," so that there can indeed be a day after.

Thus Brodie's preliminary thoughts on nuclear deterrence lead him down the road of nuclear ambiguity, as he comes to grips with the contradictions inherent in a nuclear warfighting posture and a deterrent posture. The most menacing of threats, such as a thermonuclear super-dirty bomb, may not be a practical weapon of warfighting, and as such, raises the question: could deterrence remain credible without pursuing clean nuclear weapons? Obviously it would not; nor would deterrence remain credible if the population was not provided with some cover, and a recovery capability to kick-start the economy after nuclear war not developed. Thus, for deterrence to work, for the system to remain credible, it must evolve beyond the simple, basic threat of a horrific massive retaliation, to a more graduated, calibrated series of potential strategic responses. Deterrence compels us to consider nuclear warfighting, simply for the sake of deterrence. And that's music to the ears of the nuclear warfighters, who did not like being left with only super-dirty bombs to wage a shooting war.

One essential requirement of deterrence is that the threats upon which its successful operation depends must remain *credible*, an issue less pertinent for *basic deterrence* of the American homeland, but which begin to lose credibility when applied to less vital interests, as Brodie's discussion of massive retaliation suggested. Brodie's discussion of credibility and in particular the credible survival of the retaliatory force leads him to contemplate a "sliding scale of protection" that enables a portion of each component of America's second strike arsenal remains intact and capable of striking back, such as through keeping some portion of the strategic bomber fleet "at a very advanced"

<sup>985.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 297; World Politics, 188; RAND (RM-2218), 28.

<sup>986.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 298; World Politics, 188; RAND (RM-2218), 29.

<sup>987.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 298; World Politics, 189; RAND (RM-2218), 29.

<sup>988.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 298; World Politics, 189; RAND (RM-2218), 29.

state of readiness"989 or even airborne, while keeping another portion onboard nuclear submarines, and yet another portion in hardened ballistic missile silos, with each component enjoying relative and varying strengths and weaknesses and the overall mix ensuring the survival of the deterrent force. Thus Brodie concludes that it is "unavoidable that for some time in the future the ideal strategic bombing force will be a mixed missile and manned-aircraft force," though Brodie expects that "the missile would be favored over the aircraft" for the second strike force. 990 As for the targeting of the second strike force, Brodie believes that for the purpose of maximizing the deterrent effect prior to hostilities, we should "assign the hard-core elements in our retaliatory force to the enemy's major cities, provide for the maximum automaticity as well as certainty of response, and lose no opportunity to let the enemy know that we have done these things"991 so they know, even in the event of a surprise attack, he will pay a high price for his aggression. And yet, as compelling as this logic is, Brodie suggests that in the event deterrence fails, it "might look very foolish" to execute. 992 For instance, Brodie supposes, what if the attacker "took scrupulous care to avoid major injury to our cities," and we retaliated against his cities; then, he would retaliate in kind, so "[o]ur hitting at enemy cities would simply force the destruction of our own, and in substantially greater degree."993 Brodie contemplates this ambiguity, trying to balance the benefits of the Napoleonic maxim, "on s'engage, puis on voit," and thus responding vindictively and emotionally to the primary attack, versus a more moderated and rational response, based upon the notion that "no matter how difficult it may be to retain control of events in nuclear total war, one should never deliberately abandon control."994 The matter remains unresolved, but Brodie suggests the need for us to recognize that "wartime decisions may be very different from those we presently like to imagine ourselves making,"995 as has been demonstrated throughout history.

When contemplating the maximization of deterrence, Brodie considers some seemingly fanciful and inherently horrific solutions, such as "super-dirty bombs" that are designed to inflict a maximum of toxicity and radioactivity, and thus become a weapon

<sup>989.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 284; RAND (RM-2218), 16.

<sup>990.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 288; RAND (RM-2218), 19.

<sup>991.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 291-92; RAND (RM-2218), 22.

<sup>992.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 292; RAND (RM-2218), 22.

<sup>993.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 293; the second sentence is not in the original RAND research memorandum or article, but was added to the paragraph in the book.

<sup>994.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 293; the second phrase is slightly reworded in the earlier RAND research memorandum and article but retains the original meaning.

<sup>995.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 294. This sentence is a substantial rewrite from the earlier paper and article which stated more clearly Brodie's concern with the ability to recognize "discriminating restraint," and to react appropriately: "The question is whether men who have been reared on the tradition which holds that extra damage from a delivered bomb is always a 'bonus' ... are likely to approach the problem in so dangerously fresh a manner," RAND RM-2218, 24.

of terror aimed at inducing fear amongst the enemy that "even the smallest number of bombs that might be sent in retaliation" would inflict results that are "as horrendous as possible," a weapon of limited battlefield use, in contrast to cleaner weapons designed to limit the lethality of their side effects. 996 Brodie also considers the role of fallout shelters, noting while we may not predict with any accuracy how big a different they will make, and that "[w]e could be supine with shelters and brave, even reckless, without them," he nonetheless believes that "if they existed at the moment of crisis, they would tend to sustain and fortify an attitude in favor of courageous decision."997 As well, credibility itself is uplifted by the existence of shelters, since the enemy must, as we must, believe we possess "the requisite willingness" to follow through upon the threat of retaliation, even if the sort of crisis that might precipitate a nuclear exchange "may seem to be utterly improbable." 998 With regard to the "billions we are spending on the total-war aspect of national defense," Brodie notes "most" is being spent on "situations which are, we hope, at least equally improbable," and that "[a]ll our efforts are in fact directed . . . towards making such situations still more improbable. That is what national defense is all about in the thermonuclear age."999 That being the case, the risks are so great and the worst case so frightful that Brodie embraces arms control efforts, but not necessarily because of any sentimental endorsement of disarmament as a goal, as the compelling logic of deterrence makes it "abundantly clear that total nuclear disarmament is not a reasonable objective," and "[v]iolation would be too easy for the Communists, and the risks to the nonviolator would be enormous."1000 But at the same time, Brodie acknowledges it has become "obvious that the kind of bitter, relentless race in nuclear weapons and missiles that has been going on since the end of World War II has its own intrinsic dangers," and in the post-Hiroshima world that became so "abundantly supplied with multi-megaton weapons and therefore destined hence-forward to be living always on the edge of total disaster," Brodie came to believe "military thinking has to move beyond its traditional fixation on immediate advantage."1001 Consequently, Brodie embraces arms control efforts that promise to "seriously reduce on all sides the dangers of surprise attack," and thus to "reduce on all

<sup>996.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 295. While using different wording, the point is nearly identical in RAND RM-2218, 26. The word "some" replaces "even the smallest number of," but "as horrendous as possible" remains the same.

<sup>997.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 297. Brodie again adjusts his language but the point remains the same as argued in RM-2218, 27-28: "We could be cowardly with shelters and bold (or reckless?) without them; but surely if they existed at the moment of crisis, their effect would tend to favor courageous rather than craven decision."

<sup>998.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 297; RAND RM-2218, 28.

<sup>999.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 298; RAND RM-2218, 28-29.

<sup>1000.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 300; RAND RM-2218, 31.

<sup>1001.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 300; the first quoted phrase is nearly identical with the wording in RM-2218, 31 with slightly different word order, but the second phrase appears to have been added by Brodie to the 1959 manuscript.

sides the incentives to such attack, an end which is furthered by promoting measures that enhance deterrent rather than aggressive posture."<sup>1002</sup> Breaking a cycle of hypothetical and Apocalyptic violence, arms control can, in the words of theorist Thomas Schelling (whom Brodie salutes for providing "one of the most incisive contributions to the literature on disarmament"), "'Self-Defense' becomes peculiarly compounded if we have to worry about his striking us to keep us from striking him to keep him from striking us. . . ."<sup>1003</sup> As Brodie explains, any "measures which reduce the probability of accidental outbreak of war also reduce the probability of planned or 'preventive' war,"<sup>1004</sup> and in the end, that's precisely why Brodie concludes that "Nothing which has any promise of obviating or alleviating the tensions of such situations should be overlooked."<sup>1005</sup>

But just as arms control efforts can, by reducing the risk of surprise attack, strengthen deterrence while at the same time mitigating the risk of preventive war – thereby contributing greatly to international stability, and thus being worthy of pursuit not as an end unto itself, but rather a means toward enhancing the viability of deterrence strategy – Brodie also considers the logic of limited war, which likewise becomes more compelling in the era of thermonuclear weapons when the cost of deterrence's failure is so high that any "large-scale mutual exchange of nuclear weapons on cities reduces war to a suicidal absurdity." <sup>1006</sup> Thus Brodie becomes a skeptic on the suicidal implications of massive retaliation and its "all or nothing' attitude to the use of force." <sup>1007</sup> Brodie notes "the total-war idea, which seemed so overwhelming in its simplicity, was a fairly novel one historically," and "[f]ollowing World War I it became axiomatic that modern war means total war," with was again "confirmed and reinforced by World War II" and during the subsequent period of America's atomic monopoly, "there was no great incentive for Americans to think otherwise." <sup>1008</sup>

Brodie credits the stalemate of the Korean War for re-introducing the concept of limited war, and which "proved anew that great-power rivals occasionally prefer to test each other's strength and resolution with limited rather than unlimited commitments to violence, and it demonstrated also some of the major constraints necessary to keep a war limited. Most important among these was a willingness to settle for goals representing a considerable degree of compromise with the enemy, and thus readiness to keep

<sup>1002.</sup> Brodie, "The Anatomy of Deterrence," *Strategy in the Missile Age*, 300-301. This same point is made in RM-2218, but with slightly different wording, 31-32.

<sup>1003.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 301. The wording here differs from RM-2218.

<sup>1004.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 302. The wording here differs from RM-2218.

<sup>1005.</sup> Brodie, "The Anatomy of Deterrence," Strategy in the Missile Age, 304; RM-2218, 33.

<sup>1006.</sup> Brodie, "Limited War," Strategy in the Missile Age, 305.

<sup>1007.</sup> Brodie, "Limited War," Strategy in the Missile Age, 307.

<sup>1008.</sup> Brodie, "Limited War," Strategy in the Missile Age, 307.

contact and to enter and maintain negotiations with him." Because "unrestricted thermonuclear war seems to be at once much too destructive and too unpredictable to be invoked in any but the most dire straits," this can "explain why serious thinking about limited war had to await the coming of the large thermonuclear bomb besides the obvious reason that basic patterns of thinking, and certainly of political and diplomatic behavior, always change slowly."1010 In contrast to total war, limited war "involves an important kind and degree of restraint – deliberate restraint," 1011 and though great powers are involved, sometimes directly, more often it is waged "through proxies on one or both sides," as would continue to be the case until the Cold War's own conclusion forty years later. 1012 Brodie describes the restraint involved as "massive," in that "strategic bombing of cities with nuclear weapons must be avoided," 1013 and it is the scale of this restraint that differentiates contemporary limited warfare "from anything that has happened in the past."1014 Limited war thus "connotes a deliberate hobbling of a tremendous power that is already mobilized and that must in any case be maintained at a very high pitch of effectiveness for the sake only of inducing the enemy to hobble himself to like degree."1015 As Brodie adds, "No conduct like this has ever been known before."1016 While total war in the nuclear age would involve massive destruction of urban centers, limited war would be defined by its absence, though "[1] imited war might conceivably include strategic bombing carried on in a selective or otherwise limited manner."1017 Brodie takes to task those who perceive limited warfare to be fought only for "a limited objective," as such a view "diverts attention from the crucial fact that the restraint necessary to keep wars limited is primarily a restraint on means, not ends."1018 It's not that the ends are unimportant; indeed, quite the contrary. The ends could prove to be very important; but we must nonetheless "keep the war limited simply because total war as it would be fought today and in the future against a well-armed enemy is simply too unthinkable, too irrational to be borne."1019 And there we have it: Bernard Brodie, one of the earliest and by far the most analytically sophisticated theorist of deterrence strategy, finds the prospect of fighting a total war in the nuclear age to be unthinkable.

```
1009. Brodie, "Limited War," Strategy in the Missile Age, 308.
1010. Brodie, "Limited War," Strategy in the Missile Age, 309.
```

<sup>1011.</sup> Brodie, "Limited War," Strategy in the Missile Age, 309.

<sup>1012.</sup> Brodie, "Limited War," Strategy in the Missile Age, 310.

<sup>1013.</sup> Brodie, "Limited War," Strategy in the Missile Age, 310.

<sup>1014.</sup> Brodie, "Limited War," Strategy in the Missile Age, 311.

<sup>1015.</sup> Brodie, "Limited War," Strategy in the Missile Age, 311.

<sup>1016.</sup> Brodie, "Limited War," Strategy in the Missile Age, 311.

<sup>1017.</sup> Brodie, "Limited War," Strategy in the Missile Age, 310.

<sup>1018.</sup> Brodie, "Limited War," Strategy in the Missile Age, 312.

<sup>1019.</sup> Brodie, "Limited War," Strategy in the Missile Age, 312.

While Brodie in fact does think a great deal about the unthinkable, so much so that nuclear warfare is clearly not an unthinkable event, just an unpalatable one, and one that he is convinced is mutually suicidal, and thus not in the interest of any major power, because he suggests, indeed explicitly states, that total war in the nuclear age is "unthinkable," he exposes himself to criticism from those who find this most insightful analyst, and intellectual courageous analyst, is something of a nuclear coward, afraid to peer into the nuclear abyss and thus confront the resultant specter of nuclear horror. Brodie is anything but. He has peered into the nuclear abyss and emerges somehow changed, his realism intact but his ends-means assessment rebalanced. He is not afraid of war - indeed, in the coming decade he would counsel tactical nuclear warfare in Europe as both logical in the face of Soviet conventional superiority, and de-escalatory in the clarity of resolve tactical nuclear use would signal -- he not only fully understands the fundamental role war plays in history, but is not afraid to consider the waging of limited nuclear warfare when necessary. And, Brodie is not at all afraid of embracing the logic of nuclear deterrence, which in fact operates upon a threat so horrible, of total war in an age of unlimited destructive potential, that it dwarfs the very power of the Leviathan as imagined by Thomas Hobbes and would result in a chaos as dark as the very state of nature Hobbes so feared. Brodie thus accepts the efficacy of the nuclear leviathan to impose a peace, and to ensure a steadiness to the international equilibrium, maintained by the very same foundation of fear that Machiavelli and Hobbes embraced, and which both Clausewitz and Jomini struggled to interpret in the wake of Napoleon's brief triumph. Brodie was prepared to tolerate a permanence of fear, so long as it was a stable system maintained by reciprocity, and so long as efforts were made to enhance its stability. So it's not that Brodie is frightened into pacifism; indeed, he sees in limited war our salvation from the suicidal logic of massive retaliation and the all or nothing premise of mutual assured destruction, appropriately known as MAD. Later theorists like Herman Kahn, who appropriated from Brodie the notion of the unthinkability of nuclear war, authoring his own popular tome, *Thinking* About the Unthinkable, as if a knowing affront to Brodie's timidity, and later his On Thermonuclear War, suggesting a Clausewitzian realism binding war and politics for the nuclear age, as much an affront to Brodie who seemed to more suitably fit the bill as the Clausewitz of the nuclear age. In fact, Kahn could be better thought of as the Jomini of the nuclear age, not in that his work was any less worthy than Brodie's but rather that Kahn was as much a man of action as Jomini, who fought at Napoleon's side, and was thus able to maintain the enduring embrace of the military leadership with his unblinking fearlessness and bravado, while Brodie, the veritable intellectual of the bomb, was largely overshadowed by less nuanced men for his thoughtful questioning of the effects of strategic bombing, and his skeptical response to SAC's early war plans that, under the influence of LeMay's pre-nuclear thinking, sought to perpetuate

so many of the World War II strategic bombing's falsehoods and to disregard so many of its important lessons.

While thinking about something less *unthinkable*, such as limited war in the era of unlimited weapons, Brodie revisits Clausewitz, and to adapt him for the new era. He does not do so lightly, and proceeds with a deep appreciation of the Prussian's theoretical and philosophical contributions to the study of war. As Brodie writes: "It is of course true and important that we cannot have limited war without settling for limited objectives, which in practice is likely to mean a negotiated peace based on compromise. Clausewitz's classic definition, that the object of war is to impose one's will on the enemy, must be modified, at least for any opponent who has a substantial nuclear capability behind him. Against such an opponent one's terms must be modest enough to permit him to accept them, without his being pushed by desperation into rejecting both those terms and the limitations on the fighting. . . . We must be clear, however, that the curtailing of our taste for unequivocal victory is one of the prices we pay to keep the physical violence, and thus the costs and penalties, from going beyond the level of the tolerable. It is not the other way around." 1020

Brodie noted there was "Resistance to Limited War Thinking," and that while "[a] ll of us assume almost without question that peace is better than war," that it was "curious and interesting that we do not have the same consensus that limited war is preferable to total war," and he attributes this in part to the persistence of "some people apparently [who] still entertain fantasies of total war which have the United States doing all the hitting while receiving few if any nuclear bombs in return." Brodie comments with dismay, "How these fantasies can exist is a matter of much wonder," particular in that "we have rejected preventive war." Brodie also attributes what he describes as "fantasies of total war" to an underlying psychological cause related to the "repressed rages harbored in so many breasts," a hint of the Freudian influences on his own personal thinking about life, death, and conflict.

But Brodie quickly moves on to "important institutional reasons as well" which he finds to be "more pertinent to our inquiry." This is epitomized by "General Douglas McArthur's remark following his dismissal," that there "can be no substitute for victory," which Brodie found to be "endemic in all the armed services" and which "works strongly against any restraint upon the use of force in wartime." Drodie again cites Clausewitz, noting the philosopher of war was "ambivalent in this as in many other

<sup>1020.</sup> Brodie, "Limited War," Strategy in the Missile Age, 314.

<sup>1021.</sup> Brodie, "Limited War," Strategy in the Missile Age, 314.

<sup>1022.</sup> Brodie, "Limited War," Strategy in the Missile Age, 314-15.

<sup>1023.</sup> Brodie, "Limited War," Strategy in the Missile Age, 315.

<sup>1024.</sup> Brodie, "Limited War," Strategy in the Missile Age, 315.

<sup>1025.</sup> Brodie, "Limited War," Strategy in the Missile Age, 315.

respects" and thus "can be and has often been quoted out of context to demonstrate his vehement rejection of restraint in war."1026 As for the resistance to restraint, Brodie found it to be uneven across the services, with the Air Force in particular "reared on the doctrine of the predominance of strategic bombing," noting that "Airmen, however, have always felt, with special justice since the atomic bomb arrived, that a total war would be primarily theirs to fight," and that a "limited war, on the contrary, seems to throw the Air Force back into the unpalatable role of providing support to the ground forces." 1027 Also contributing to the resistance to restraint was the "adverse effects of the Korean War on limited-war thinking,"1028 and while Brodie had found the experience of Korea largely positive in that it "made it possible to think of limited war in its peculiarly modern form, and on something other than a trivial scale," that during the war and "for sometime afterward, the spontaneous national reaction to it was generally one of distaste and rejection," as it had been both "costly" and "humbling," and as a direct result, Brodie writes that the "most conspicuous result of the war in the field of American diplomacy was the Dulles 'Massive Retaliation' speech of January 1954." 1029 While Korea was extremely helpful for doctrinal and theoretical development, Brodie concedes that America's "handling of the Korean War does not stand as a model for shrewd limited-war strategies," particular in light of General Omar Bradley's widely shared view that it was "the wrong war, at the wrong place, at the wrong time, and with the wrong enemy."1030

Brodie argues that it's "precisely *because* the chance for total war is finite and real that we must think earnestly about limited war," 1031 but that we must nonetheless proceed with caution and avoid presuming either that limited wars must inevitably escalate into total ones, which Brodie found "to be the vice of intellectuals," or that total war has somehow "now been abolished," a view held primarily by "practical men," thus enabling all of our military resources to be redirected to the execution of limited wars. 1032 Brodie believes the latter is "even more dangerous" than the former danger, as "it encourages a neglect of the basic precautions enjoined by the danger of total war," and could result in a "recklessness about the handling of limited wars that will make it more likely they will erupt into unlimited ones." 1033 Indeed, this very eventuality would dominate much of Brodie's attention, as reflected in the large percentage of

<sup>1026.</sup> Brodie, "Limited War," Strategy in the Missile Age, 315.

<sup>1027.</sup> Brodie, "Limited War," Strategy in the Missile Age, 316.

<sup>1028.</sup> Brodie, "Limited War," Strategy in the Missile Age, 316.

<sup>1029.</sup> Brodie, "Limited War," Strategy in the Missile Age, 317.

<sup>1030.</sup> Brodie, "Limited War," Strategy in the Missile Age, 317.

<sup>1031.</sup> Brodie, "Limited War," Strategy in the Missile Age, 356.

<sup>1032.</sup> Brodie, "Limited War," Strategy in the Missile Age, 356.

<sup>1033.</sup> Brodie, "Limited War," Strategy in the Missile Age, 357.

his writing devoted to this rising danger, throughout the 1960s, especially after the Kennedy-Johnson era commenced and the strategy of Massive Retaliation was firmly rejected in favor a new limited war ethos that Brodie came to believe over-emphasized fighting conventional wars in its effort to reduce the chance of stumbling into even more dangerous nuclear wars — but which would, Brodie later came to believe, not only place the security of Western Europe at greater risk, but which would lead to unnecessary conventional wars — such as that which ultimately took place in Vietnam.

Brodie's penultimate chapter addresses economic matters, and is titled "Strategy Wears a Dollar Sign," which reiterates his argument presented at a public lecture at Berkeley on November 18, 1954 with the title, "Unlimited Weapons Choices and Limited Budgets," and examines the parallels between economics and strategy, which both "are concerned with the most efficient use of limited resources to achieve certain ends set by society," and whose propositions would be familiar to practitioners of either craft.<sup>1034</sup> In Brodie's economic discussion, he notes it "is obviously true that national military security over the long term requires a healthy economy, for the economy must carry the burden,"1035 and how such military leaders as post-World War II army chief of staff Eisenhower, and his successor Bradley, both were concerned that military spending remain at a level that could be economically sustained 1036 He also observes how for most of America's history, it enjoyed great security for a markedly low cost, but now, for the first time, its peacetime military expenditures must be sufficient to sustain the nuclear peace. Nonetheless, Brodie argues while "[i]f there is no end to our insecurity, there does have to be an end to our military expenditures," 1037 but even so, with only a modest increase in defense expenditure, he felt "we could provide an impressive amount of useful passive defense over a few years, both for our retaliatory force and for civil defense, and also a strong force specialized for non-nuclear limited war."1038 And while there remained much uncertainty, Brodie noted that we did know with certainty that "we can afford to do much more for our security without giving up much more than a certain rate of growth in our very high standard of living; that a great deal remains to be done; that if it is done the horrors which a general war would bring would be much alleviated; and that the chances of general war would be to some real even if unmeasurable extent diminished by our doing it."1039 To help

<sup>1034.</sup> Brodie, "Strategy Wears a Dollar Sign," *Strategy in the Missile Age*, 361. Also see Brodie's "Unlimited Weapons Choices and Limited Budgets," Public Lecture at Berkeley, November 18, 1954, 1-31.

<sup>1035.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 367.

<sup>1036.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 366; "Unlimited Weapons Choices and Limited Budgets," 12.

<sup>1037.</sup> Brodie, "Strategy Wears a Dollar Sign," *Strategy in the Missile Age*, 376-77; a similar point is argued in "Unlimited Weapons Choices and Limited Budgets," 3 and 11.

<sup>1038.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 377.

<sup>1039.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 380.

assess our defense needs, Brodie notes, the fields of systems analysis and war gaming have emerged, but he cautions that despite being "marvelous ways of bringing informed, scientifically-trained minds intensively to bear on baffling problems,"1040 they each present "imperfections and limitations," 1041 including the fact they are both based upon "assumptions" derived "with great care" and with the "use all kinds of special knowledge" that are "nevertheless estimates untested in war," 1042 and "use not one but many such factors, compounding the chances the model will show significant departures from reality."1043 Further while "[t]he element of chance is recognized and provided for," the "turns of the dice which often govern the war game may not give us a good clue to that one turn which will govern the real thing."1044 As well, sounding again Clausewitzian, but without mentioning the philosopher of war, Brodie notes "[m]any considerations which we know to be extremely important in real life often cannot be introduced into an analysis because we lack a means for measurement. These involve especially psychological and other imponderable factors." 1045 Ultimately, Brodie concludes that: "The truth, unfortunately, is that the profound issues in strategy, those likely to affect most deeply the fates of nations and even of mankind, are precisely those which do not lend themselves to scientific analysis, usually because they are so laden with value judgments. They therefore tend to escape any kind of searching thought altogether. They are the issues on which official judgments usually reflect simply traditional service thinking."1046

Brodie's discussion of the relationship of economics to strategy, and of the parallels found between economic and strategic thinking, reinforce Brodie's adherence to Clausewitz's most fundamental dictum wedding war to policy (and not just *politics*, as economic policy and broader issues of economic security are important contextually to both the formulation of strategic policy, as well as to the pre-war preparations through weapons development and deployment programs.) As well, Brodie's intuitive interconnection of strategy and economics proved in some ways prophetic. As Brodie died in 1978, he did not live to see the widely unexpected collapse of the Soviet Union – not under the pressing duress of a preventive or retaliatory nuclear attack, but more under the cumulative economic strain of its Cold War military expenditures, suggesting the strategy of deterrence, while never tested by force of arms with the exception of several limited wars fought entirely with conventional weapons, delivered

<sup>1040.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 386.

<sup>1041.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 386.

<sup>1042.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 386.

<sup>1043.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 386.

<sup>1044.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 387.

<sup>1045.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 387.

<sup>1046.</sup> Brodie, "Strategy Wears a Dollar Sign," Strategy in the Missile Age, 388.

its fatal blow through the slow-motion but inexorably economic impact of the arms race itself. So the Soviet Union was not crushed by an external blow, but fell to a combination of internal economic collapse and consequent popular uprising, whose end result was the complete collapse of the Soviet Union as a sovereign entity, and the subsequent re-emergence of the nation-states that had been incorporated into the Soviet entity, often by force.

Thus the relationship of economics and strategy, framed broadly by the Clausewitzian ecosystem of war and policy, experienced what was likely thought of by most war planners as an unintended consequence, though from Brodie's discussion of the economic context as well as consequences of strategic planning, one can deduce that he would not have been entirely surprised by the Soviet Union's ultimate end. He full well understood that our strategic programs and policies, and the Soviets' own respective programs and policies, each asserted their own economic pressures on the two nations. Our funding levels turned out to have been at a level that proved to be sustainable, much as Brodie himself predicted, whereas the Soviet economy proved less able to sustain such a continuous output, as its GDP was substantially lower while its requirements for military expenditure remained comparable, and its security environment was considerably more complex, with costs associated with maintaining its empire of internal republics and satellite states, and a wide diversity of neighbors ranging from NATO opponents to emerging rivals such as China, in addition to direct contiguity to the restive Islamic world. So in the end, preparations for the long nuclear peace and their sustained economic commitments led to a show-down, but not one defined by direct hostilities, at least not total war. Rather, a series of limited wars, proxy engagements, and continued economic commitments to the complex systems required for maintaining deterrence - with the final strain that many consider to be the decisive blow emanating from the move, rhetorical if not entirely strategical, away from the logic of assured destruction and toward strategic defense, as the very expensive Strategic Defense Initiative, really from the moment of inception and long before any substantial investment had been required, ultimately bankrupted the Soviet economy, resulting in its internal collapse and fracture into constituent nation-states. Brodie's reflections are especially interesting in light of this final chapter of the Cold War, and how in the end it was not escalation to total war that brought America's principle opponent to its end, but the quiet economic collapse of the Soviet Union, its economy strained to the breaking point by its strategic competition with the United States. Brodie would have been proud to see the complex, and potentially lethal, system of deterrence held steady right up until the end, right to the very eve of the Soviet collapse, proving more stable than the underlying political and economic fabric of the USSR

Brodie's concluding thoughts in *Strategy in the Missile Age* resonate his fundamentally Clausewitzian outlook on war in the nuclear age, and are reminiscent of the ideas that

permeated the philosopher of war's famous work. Just as Clausewitz had struggled with his interpretation of Napoleon's impact on war, learning how to mimic Napoleonic methods in his effort to slow and then reverse his march across the continent, and in the process grappled with complexity, and contradiction, finding dualities and asserting causal linkages such as those connecting war and policy, Brodie similarly grapples with the complexities and contradictions of the nuclear age, accepting ambiguities where they arise and repeatedly rebuking those whose quest for certainty and simplicity, as he found in the military services, led them away from the very complicated truths of the nuclear era. Brodie's journey really starts with a close look at the theorists of airpower, but quickly moves on to a consideration of "the utility of these ideas in a world shaken by the tremendous revolutionary impact of nuclear weapons, now combined with various novel vehicles of delivery including intercontinental ballistic missiles." 1047 He further "probed the complexities of the present strategic situation, for which our historical experience with war offers so little guidance," joining Clausewitz in a similarly complex undertaking. 1048 Having found the path of preventive war rejected with "quite remarkable unanimity," 1049 and concluding that "it is something approaching idiocy to invite total war on any other basis" since "we no longer have assurance of getting in the first blow,"1050 there emerges "a special 'it-must-not-fail' urgency about deterrence," even though history presents "little in the experience of our own or any other nation" to shape a "purposeful strategy of deterrence." 1051 And yet "the fact is that deterrence can fail," especially so long as there is "great advantage of striking first,"1052 thus America must "devote much of its military energies to cutting down drastically" this advantage, which "means above all guaranteeing through various forms of protection the survival of the retaliatory force under attack,"1053 through its "hardening," something "especially true for the missile age now dawning," 1054 though in the "not so distant future, mobility may have to replace hardening as the main prop of security to the retaliatory force," whether utilizing America's vast and underused rail system or its internal water ways. 1055 Brodie identifies as the "second principle of action" the provision of "a real and substantial capability for coping with limited and local aggression by local application of force," which will require a spirit of compro-

<sup>1047.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 390.

<sup>1048.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 390.

<sup>1049.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 392.

<sup>1050.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 393.

<sup>1051.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 393.

<sup>1052.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 393.

<sup>1053.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 394.

<sup>1054.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 395.

<sup>1055.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 396.

mise, including the "possible abjuration of nuclear weapons in limited war." <sup>1056</sup> His third principle of deterrence emerges "simply from taking *seriously* the fact that the danger of total war is real and finite," which dictates to us that "[p]rovision must be made for the saving of live on a vast scale," and that "[a]t minimum there is a need for a considerable program of fallout shelters outside cities" in order to offset the long neglected "military risks we seem daily willing to take." <sup>1057</sup>

Brodie also considers the "Problem of Stability" that is unique to deterrence, including the seemingly paradoxical "need to limit or control the unsettling effects of our deterrent posture."1058 On this Brodie elaborates: "Deterrence after all depends on a subjective feeling which we are trying to create in the opponent's mind, a feeling compounded of respect and fear, and we have to ask ourselves whether it is not possible to overshoot the mark. It is possible to make him fear us too much, especially if what we make him fear is our over-readiness to react, whether or not he translates it into clear evidence of our aggressive intent. The effective operation of deterrence over the long term requires that the other party be willing to live with our possession of the capability upon which it rests." 1059 This subjective dimension of deterrence is one aspect of Brodie's strategic theorizing that brings him closest to Clausewitz, since Clausewitz embraced the "moral" and intangible dimensions of warfare, and all the ambiguities that entailed. Brodie explains that "we can hardly be too strong for our security, but we can easily be too forward and menacing in our manipulation of that strength," so he cautions that we must no longer be so "lacking in awareness that deterrence is supposed to last a very long time."1060 Compounding our challenge, and further imbuing deterrence with ambiguity, is the probabilistic murkiness of the endeavor, as if it were cloaked in an impenetrable Clausewitzian fog. As Brodie explains, "These considerations would have no merit if we knew that the probability of total war was in any case infinitesimal, or if on the contrary we had reason to regard it as being . . . almost inevitable."1061 But "because we have no basis for placing the probability in either the very low or the very high category," Brodie concludes that "we have to take earnest account of the fact that our behavior with the new armaments may critically affect it."1062

Brodie notes both sides in the deterrence relationship have "reasons for being careful," and he dismisses the "almost paranoiac fears which have often been voiced in this

<sup>1056.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 396.

<sup>1057.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 397.

<sup>1058.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 397.

<sup>1059.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 397.

<sup>1060.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 398.

<sup>1061.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 398.

<sup>1062.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 399.

country of an 'atomic blackmail' before which we would be bound to retreat because of our presumed greater sense of responsibility or caution."1063 Instead Brodie believes "we have got too accustomed to an attitude which has become increasingly discordant with the facts – the attitude that our government, trusting in the continuity of its superior strength, is really prepared to use our nuclear total-war capability aggressively over a wide array of issues," and that "[t]his is the kind of 'bluff' which results from a failure of self-examination." 1064 And while the "complex relationships between military power and foreign policy have by no means been adequately explored," Brodie believes "what we have learned or could learn from history on the subject needs to be reappraised in the light of the totally new circumstances produced by the new armaments."1065 As easy as this sounds, Brodie notes "experience has nevertheless indicated how difficult it is" to in essence change paradigms, as "they appear to run counter to most of the standard axioms inherited from an earlier day concerning the attitudes as well as the methods by which we should fight."1066 Before the nuclear age, there was some logic to military aggressiveness since that was "an age when it was the same force which took the offensive or stayed on the defensive," and when "an offensive failed, an impromptu redeployment usually achieved a defensive posture."1067 In such a world, Brodie writes, "[t]he accent was therefore appropriately on boldness," because "[e] ven when boldness proved improvident and costly, it rarely sacrificed the life of the nation." After Hiroshima, this was no longer the case, so if deterrence failed, it could be "nearly impossible to avoid total war," 1068 and this might mean ultimately sacrificing the life of the very nation itself.

Brodie acknowledges that he has "given relatively little space to the matter of how to fight a general war," 1069 something his colleague Herman Kahn would later redress with his own work exploring in graphic detail just such a matter. Brodie's reasons for this omission is his belief that "the strategy of a total war is like an earthquake in that all the forces which determine its occurrence and its character have been building up over time, as have almost all the factors which determine how it runs its course." 1070 In one manner, Brodie expects the strategy of total war to be simpler than that of the second World War, namely the "dominance of strategic air power," and the primacy of the "opponent's strategic bombardment power" as a target. And, Brodie adds, "[t]

<sup>1063.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 399.

<sup>1064.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 399.

<sup>1065.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 400.

<sup>1066.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 400.

<sup>1067.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 401.

<sup>1068.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 401.

<sup>1069.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 401.

<sup>1070.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 402.

he strategic air ascendancy which determines the outcome is itself decided by" determining who strikes first, with what degree of surprise, and against what protective preparations of the opponent's retaliatory force. Brodie believes what will result will be "an extraordinarily destructive yet quick contest to determine who retains exclusive capability for yet further nuclear destruction," presumably followed rapidly by armistice negotiations, lest the conflict degenerate into "grandiose, wanton destruction." But it is here that Brodie finds simplicity gives way to "difficulty and complexity," as the "unsolved problem of modern total war is that of how to stop it, quickly, once it is decided." And this great "unsolved" challenge makes it ever more likely that "a future total war, if it comes, will be enormously more destructive than it needs to be to fulfill anyone's military purpose." 1073

Brodie introduces the historian and icon of realist thought, Thucydides, in his closing pages as he examines "The Unpredictability of the Outcome," noting the famous historian of ancient Greece once wrote, "Consider the vast influence of accident in war before you are engaged in it. . . . It is a common mistake in going to war to begin at the wrong end, to act first, and wait for disaster to discuss the matter." 1074 Brodie finds this wisdom especially relevant to the nuclear age, since "[i]n wars throughout history, events have generally proved the pre-hostilities calculations of both sides, victor as well as loser, to have been seriously wrong," as "[e]ach generation of military planners is certain it will not make the same kinds of mistakes as its forebears, not least because it feels it has profited from their example."1075 On top of this, Brodie notes the current generation is especially confident because it is "more scientific than its predecessors," but even so, he points out that "[t]he universe of data out of which reasonable military decisions have to be made is a vast, chaotic mass of technological, economic, and political facts and predictions," and "[t]o bring order out of the chaos demands the use of scientific method in systematically exploring and comparing alternative courses of action."1076 But Brodie cautions that experience "thus far with scientific preparation for military decision-making warns us to appreciate how imperfect is even the best we can do," and that "[t]hose of us who do this work are beset by all kinds of limitations, including limitations in talent and in available knowledge," with a further complicating factor: "we are dealing always with large admixtures of pure chance." 1077 Add to this the ambiguities inherent in determining the opponent's

<sup>1071.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 403.

<sup>1072.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 404.

<sup>1073.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 404.

<sup>1074.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 405.

<sup>1075.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 406.

<sup>1076.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 406.

<sup>1077.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 407.

capabilities and intentions, and the ubiquity of human bias, despite "our strong efforts to be objective." 1078 Adding fuel to this combustible fire of complexity is "the utterly unprecedented rate of change that has marked the weapons revolution since the coming of the first atomic bomb," 1079 transporting "us far beyond any historical experience with war," and "much too fast to be fully comprehended even by the most agile and fully-informed minds among us."1080 In what one might consider a potential critique of the emergent school of warfighters who waded calmly into a sea of presumed certainty and simplicity, Brodie writes "[o]nly someone very foolish could believe he had mastered the unknowns and uncertainties which becloud our picture of future war."1081 To these more Jominian thinkers prone to move more quickly from thought to action, and thus avoid becoming ensnared by the doubt that seems to have ensnared Brodie, he cautions that "[w]e know from even the most casual study of military history how fallible man is in matters concerning war and how difficult it has been for him . . . to adjust to new weapons. Yet compared to the changes we have to consider now, those of the past, when measured from one war to the next, were almost trivial. And almost always in the past there was time even after hostilities began for the significance of the technological changes to be learned and appreciated. Such time will not again be available in any unrestricted war of the future."1082

Brodie tries to emerge through the fog and uncertainty unscathed, knowing from his study of wars past that great commanders overcome systemic chaos, applying their genius as Napoleon did, and in the manner prescribed by Machiavelli, augmenting their *virtu* with the blessing of *fortuna*. And so Brodie observes that, "[d]espite all this uncertainty, decisions have to be made," and the "military establishment has to be provided and equipped, and it must develop and refine plans for its possible commitment to action," but in Brodie's language, his insertion of the qualifier "possible" rendering action into a possibility, not even a probability, he reinforces his hope that military action is forever displaced by the permanence of threat. Thus he counsels, "We have been forced to revise our thinking about weapons; but unfortunately there is not a comparable urgency about rethinking the basic postulates upon which we have erected our current military structure," which remains rooted to "large measure" in an "ongoing commitment to judgments and decisions of the past." Brodie admits he has in the previous pages "tried to do some of that kind of rethinking," but again it seems vague, unsatisfied or incomplete, clinging to hope that his logic, his

<sup>1078.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 407.

<sup>1079.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 407.

<sup>1080.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 407.

<sup>1081.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 407-08.

<sup>1082.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 408.

<sup>1083.</sup> Brodie, "Recapitulation and Conclusions," Strategy in the Missile Age, 408.

confrontation with the all but certain abyss that total war represents "must convince us that Thucydides was right, that peace is better than war not only in being more agreeable but also in being very much more predictable." And so Brodie closes his treatise on nuclear strategy with a reaffirmation of hope that his strategy, his plan of war avoidance rather than warfighting, "offers a good promise of deterring war," and as a result is "by orders of magnitude better in every way than one which depreciates the objective of deterrence in order to improve somewhat the chances of winning," since even if it is true that "winning is likely to be less ghastly than losing, whether it be by much or by little we cannot know." And this pressing uncertainty, Brodie hopes, remains forever shrouded by the fog of unfought future war.

He places some hope that limited wars fulfill the "function of keeping the world from getting worse," not unlike the limited wars fought during the balance of power era, enabling a restoration of equilibrium and preventing a descent into the chaos of total war. Oddly, Brodie, a self-admitted adherent of Freudian psychoanalysis, closes his masterful work of strategic theory with a comparison of two distinct portions of the world, the developing world which faces a self-inflicted chain reaction of its own in its runaway population growth, which he believes perpetuates poverty endemic to the region, surrendering to an "almost unrestrained procreation which keeps people desperately poor;" and the developed world, which "seems to have escaped that danger entirely by increasing its productivity much faster than it increases its population," but which now faces "the greatest danger of destruction from nuclear bombs." These two very different parts of our world, Brodie believes, share in "common the fact that the chief menace facing each of them is man-made," and his final words to his readers – who have traveled through the ages, examining the impacts of new technologies on the underlying nature of war, and in particular the affirmation in the nuclear age of the ascendancy of air power as predicted earlier in the century by Douhet, presenting man with the new and haunting riddle of nuclear weaponry, and the risk forever with man that whether through malice, aggressiveness, or accident, a sudden onset of total war could destroy all that he has built – aims to draw a parallel, between the reckless irresponsibility he finds in one, and the potential for wanton self-destruction he is afraid might engulf the other, asking, "Do they also share in common a bemused helplessness before the fate which each of them seems to be facing?" 1084 And so he closes, leaving us to mull over his question, and to apply this closing riddle to his earlier treatise on deterrence.

As conclusions go, it seems to be displaced, and discontinuous, with his earlier arguments, that suggest the need for us to keep focused on the dangers and the risks of total war, so that with each decision that we make, each weapons system imagined

<sup>1084. &</sup>quot;Recapitulation and Conclusions," Brodie, Strategy in the Missile Age, 409.

or deployed, each response or non-response to aggression, no matter how local or peripheral to world affairs, never be divorced from the permanence of danger, and the systematization of risk, inherent in our new nuclear-armed world. The connection between the population bomb, and the nuclear bomb, was more obvious a generation earlier, before the rapid industrialization of the southern hemisphere and the global integration of the world's economies narrowed the poverty-gap between the developed and developing worlds. But even so, it reads as if an opportunity has been missed, to close his argument artfully, to reassert his central thesis so rigorously developed in earlier pages, by instead introducing a new referent, and to make a fundamentally new argument about the choice we make. Of course, other futurists including his colleague Herman Kahn would address the issue of population growth and Third World poverty, as a compelling strategic threat, and would even in his Jominian approach to nuclear strategy and his more willing embrace of nuclear warfighting at all levels, consider the Malthusian implications of war in the nuclear age; but nonetheless, Brodie's conclusion to Strategy in the Missile Age seems to almost miss the point, as if he is trying to shame the architects of the nuclear world order into showing greater control than their counterparts in the developing world, a parochial, indeed condescending, perspective on a part of the world that would, in just a few years, command America's full strategic attention as the next limited war, even more so than the war fought to a standstill in Korea, greatly taxed and ultimately shook the foundations of American military power.

## Missile Age Revisited: Reflections Five Years On

Brodie's continued thinking about limited war would be reflected in the new preface he authored in December 1964 for the paperback edition of *Strategy in the Missile Age* that was published in 1965. That occasion, he writes, served as a reminder that "some time has elapsed since the original publication" in 1959, "and that in the field of modern strategy time tends to deal severely with concepts as well as facts." Brodie found that "[o]n the whole this book has fared very well," but nonetheless the passage of a half decade did "warrant a statement about what one would do differently if one were writing the book today," and first among these was the coming to power in 1960 of President Kennedy, and his – and his successor, President Johnson's – administrations "pursued an ideology in defense matters markedly different from that which infused the previous administration," while Brodie's 1959 treatise "turned out to be a projection of the intellectual structure within which the defense doctrines and distinctive military postures of the Kennedy administration were to take shape," albeit in a "descriptive

<sup>1085.</sup> Bernard Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," December 30, 1964, 1.

rather than a causative sense." <sup>1086</sup> Brodie thus qualifies his "later criticisms of certain administration defense policies that seemed superficially to be entirely in line with ideas advocated in the original volume." <sup>1087</sup> Brodie thus hopes this explains how he could have, in his May 23, 1963 article in The Reporter, "What Price Conventional Capabilities in Europe?", "systematically criticized what I held to be excessive devotion to the idea of resisting possible Soviet aggression in Europe mostly by conventional means" after he "had apparently advocated comparable ideas" in Chapter 9 of Strategy in the Missile Age. 1088 Brodie explains that "[0]ne relevant fact and partial explanation is that when the book was written (some parts of it were first composed long before 1959), those sections that deal with limited war, and especially with conventional capabilities for fighting a limited war, had to be advanced against much intellectual opposition" - so much so that Brodie's "own writings, then classified, urging that more study and resources be devoted to limited-war capabilities date from the beginning of 1952 (when I first heard of the thermonuclear weapon to be tested the following November), and at that time the views I was expressing met in some quarters not only opposition but amazed disbelief." 1089 Brodie adds that it was "difficult to recall now that at that time it was a completely accepted axiom - despite the ongoing Korean experience, which was regarded as entirely aberrational - that all modern war must be total war. This idea had been by no means completely dissipated at the time of the publication of the book in 1959."1090 And it is in "that respect the situation" Brodie found as 1964 drew to a close "today is vastly different," and that the "present frame of mind on relevant issues within the defense community ... would make unnecessary today the tone of advocacy sometimes manifested in the book," and had it been written a half-decade later, "it would be more appropriate to point out (as I tried to do in the above-mentioned article and other papers) the limitations and drawbacks attending possible over-emphasis of what is basically a good and necessary idea."1091

In the five years since *Strategy in the Missile Age* first came to press, Brodie notes with much approval the "revolution in the degree of security built into the strategic retaliatory forces of the two major nuclear powers, especially those in the United States," and while Brodie did "indeed stress in the book the importance of such a chance" in 1959, he found that the "degree to which it has in fact taken place has outrun my expectations," thanks in large measure to the commitments made by Defense Secretary McNamara and his colleagues in the Kennedy and Johnson administrations,

<sup>1086.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 1-2.

<sup>1087.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 2.

<sup>1088.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 2.

<sup>1089.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 2.

<sup>1090.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 2-3.

<sup>1091.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 3.

who "were quick to recognize the importance of this vulnerability problem, and to push programs designed to cope with it," among the most important of which were the Polaris submarine and Minuteman missile programs, and whose development meant that in a crisis, "the pressure for 'going first' with our strategic forces is not only reduced but well-nigh eliminated," bringing "immeasurably more stability into any crisis situation," as a result of which "escalation' to general war is far less to be feared from any commitment to limited war than was formerly the case – even, I would hold, if nuclear weapons should be used." 1092

Brodie also considers the lessons of the October 1962 Cuban crisis, noting that "its most successful resolution for the United States" resulted from the fortuitous fact that Moscow's leaders proved to be "determined to avoid hostilities with the United States – perhaps due in part to the fact that they were less given than our own leaders to distinguishing between local and general war and less ready to think of the possibility of keeping the former from graduating to the latter." 1093 And he briefly notes the virtually nil progress made in the area of civil defense since 1959, suggesting that the "reason seems mainly to be that while offensive missiles and devices for their protection promise to deter war, fallout shelters and the like appear to have minimum utility for deterrence and are urged mostly for the sake of saving lives if general war does in fact occur," though he found it was "not really surprising that many people derive an additional sense of security from attacking what could be of use only if the unthinkable happens." 1094 Ultimately, Brodie attributes the endurance of his book, and its relevance, across such a tumultuous and fast-changing half decade, to the "considerable orientation of the book towards developing the historical origins of contemporary situations" as much as to his "lucky guesses concerning the future." 1095

<sup>1092.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 4.

<sup>1093.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 5.

<sup>1094.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 6.

<sup>1095.</sup> Brodie, "New Preface for Paperback Edition of 'Strategy in the Missile Age'," 6.

## **Chapter Five**

## Bernard Brodie and the Rise of the Civilian Strategists: At the Nexus of War and Policy

To help us live through the new dangers of the nuclear age – and to hopefully avoid the very sorts of strategic blunders that led, both ironically and tragically, to America's Vietnam debacle – a new corps of civilian strategists would emerge who dedicated themselves to the new and in so many ways unprecedented challenges of the post-Hiroshima world – an era created by the very wizardry of civilian scientists serving the higher purpose of a nation at war, and one that would require a new wizardry of civilian strategic theorists to ensure there would be a lasting peace. And Brodie can be found at this corps' very forefront, indeed – among its founders. Among his fellow nuclear strategists, Bernard Brodie stood unique in that he was equally adept as a theorist and strategist, and was as aware of the historical uniqueness and importance of the new field that he was pioneering as he was of the particular strategic challenges it was grappling with. In this vein, he was much like Clausewitz, the great philosopher of war who was himself a sophisticated philosopher and strategist – and as some have argued, a pioneer in the still not yet invented field of complexity theory, anticipating a method of analysis that would not emerge until the next century. 1096 Brodie would ask, over the years, whether strategy was more art or science, concluding as the years passed that it should contain elements of both. But early on in his work, he intuited the profound need for strategic theory to become more properly scientific, and in so doing to gain an analytical capacity that had generally been eluded in the long march of time since Clausewitz. Brodie would in fact would be celebrated later on as the father of civilian-scientific strategy. In his graduate work, Brodie had looked primarily to America's "Clausewitz of the Sea," the naval theorist Alfred Thayer Mahan, for inspiration, but before long he was expanding his historical lens to include the more recent theorist of air power, Giulio Douhet, as well as the earlier Prussian theorist of war from the Napoleonic era, Clausewitz. Brodie would put pen to paper on multiple occasions as he probed the lessons that these past thinkers could bring to the challenges of the nuclear age.

One of his most illuminating efforts was in his July 1949 World Politics article,

<sup>1096.</sup> See Alan D. Beyerchen, Alan D. "Chapter 7: Clausewitz, Nonlinearity, and the Importance of Imagery," in David S. Alberts and Thomas J. Czerwinski, eds., *Complexity, Global Politics, and National Security.* Washington, DC: National Defense University Press, 1997, http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA460550. Also see Alan D. Beyerchen, "Clausewitz, Nonlinearity and the Unpredictability of War," Appendix 1, in Tom Czerwinski, ed., *Coping with the Bounds: Speculations on Nonlinearity in Military Affairs* (Washington, DC: National Defense University Press, 1998), 151-197, as posted on The Clausewitz Homepage, http://www.clausewitz.com/readings/Beyerchen/CWZandNonlinearity.htm.

"Strategy as a Science," which appeared just one month before the Soviet Union joined the nuclear club with its first successful atomic test on August 29, 1949. Brodie started off this article by noting a series of resignations from high ranking positions in the U.S. government by top military officials, which he thought, with relief, would "no doubt allay somewhat the suspicions current a year or more ago that the military were 'moving in' where they did not belong," though he noted that their "original appointment to civil posts ... was hardly due to design on the part of the armed services, being quite easily and plausibly explained on other and quite innocuous grounds."1097 Nonetheless, Brodie pointed out that "the military departments unquestionably do have a greater influence upon high policy decisions than was true before the recent war" and that it was "therefore time to express concern not so much that that military will move in where they do not belong, but rather that in the process of moving in where in part, at least, they do belong, their advice will reflect their imperfections not as diplomatists but as soldiers."1098 Brodie therefore reiterated his view, oft-made, that we must never forget the "immortal expression in the famous apothegm of Clemenceau that war was too important to be left to the generals" and that "the waging of war or the preparation for it requires many skills to which the soldier makes no pretensions," including, Brodie contends, "the skill which is peculiarly his own" which "is in all but the rarest instances incomplete with respect to one of its fundamentals – a genuine understanding of military strategy."1099

Yes, Brodie has come to believe that strategy itself, the very science of generalship, has become too complex and requires too much theoretical rigor for the military man to fully grasp; as he explain, it "is hardly surprising, since the understanding would have to follow the development of a theoretical framework which as yet can scarcely be said to exist" and "[c] reating the mere foundations of such a framework would require a huge enterprise of scholarship, and the military profession is not a scholarly calling — as its members would be the first to insist,"1100 and even the "scholar who on rare occasions appears within its ranks can expect but scant reward for the special talents he demonstrates," something Brodie experienced firsthand. Brodie notes that it's "for quite different accomplishments that the silver stars which are the final accolade of success are bestowed," and that the "soldier's rejection of the contemplative life would be of no concern to him or to us if the universally enduring maxims of war — the so-called 'classical principles of strategy' — which are quite simply elucidated and easily understood, really did provide an adequate foundation upon which to erect precise strategic

<sup>1097.</sup> Bernard Brodie, "Strategy as a Science," World Politics 1, No. 4 (July 1949), 467.

<sup>1098.</sup> Brodie, "Strategy as a Science," 467.

<sup>1099.</sup> Brodie, "Strategy as a Science," 467.

<sup>1100.</sup> Brodie, "Strategy as a Science," 467-68.

plans," as soldiers have "been trained to believe." <sup>1101</sup> But Brodie believes otherwise and in his article he aims "to demonstrate that on the contrary the theory contained in those maxims is far too insubstantial to enable one even to begin organizing the pressing problems in the field, that the bare core of theory which they do embody is capable of and demands meaningful elaboration, and that that elaboration and the mastery of it by military practitioners must require intensive, rigorous, and therefore prolonged intellectual application." <sup>1102</sup> In short, Brodie's conception of strategy bears a greater similarity to Clausewitz's complex, at time convoluted, and intellectually rigorous conception of the military art, than it does to Clausewitz's counterpart and in many ways antithesis, Jomini, who clearly elucidated maxims warmly embraced by military practitioners in the wake of Napoleon's revolutionary transformation of war, including American civil war generals on both sides of that bloody conflict.

Brodie's effort, if successful, will thereby "demonstrat[e] that strategy is not receiving the scientific treatment it deserves either in the armed services or, certainly, outside of them" and also "show that our failure to train our military leaders in the scientific study of strategy has been costly in war, and is therefore presumptively – perhaps even demonstrably – being costly also in our present security efforts." <sup>1103</sup> Brodie considers the endurance of "certain basic ideas about fighting a war which over the centuries have been proved valid" and which "have been exalted by various writers to the status of 'principles,' and have been distinguished from other elements in the art of generalship chiefly by their presumptive character of being unchanging," such as Jomini himself had argued in his famed and "often-quoted dictum," in which he argued "Methods change, but principles are unchanging," but while unchanging Brodie notes they're "certainly not esoteric" and thus "many generals, from Napoleon to Eisenhower, have stressed their essential simplicity."1104 Brodie further noted that these so-called principles "are skeletal in the extreme" and "not only contain within themselves no hints on how they may be implemented in practice, but their very expression is usually in terms which are either ambiguous or question-begging in their implications – a trait which has grown more marked since Jomini's day under the effort to preserve for them the characteristic of being un-changing."1105 Case in point, the principle of "Economy of Force," or as dubbed by the Canadians, "Economy of Effort," an idea that is "thus reduced to a truism" but whose very "violation has often been advocated during war and sometimes practiced."1106 Brodie finds similar fault with related conceptions like

<sup>1101.</sup> Brodie, "Strategy as a Science," 468.

<sup>1102.</sup> Brodie, "Strategy as a Science," 468.

<sup>1103.</sup> Brodie, "Strategy as a Science," 468.

<sup>1104.</sup> Brodie, "Strategy as a Science," 468.

<sup>1105.</sup> Brodie, "Strategy as a Science," 469.

<sup>1106.</sup> Brodie, "Strategy as a Science," 469.

"Principle of Concentration" and "Principle of Aim," whose most noted commonality, to Brodie, is the "barrenness of the concepts." 1107 Unchanging principles may have had their use in "a day when the techniques of war changed but little from one generation to the next," a time when "they were more than adequate," but a time that as of the nuclear era had clearly passed. 1108 Brodie is more sympathetic to Napoleon, who embraced a simplicity of precepts but who rightly cautioned those who would try to follow too literally in his footsteps: "Napoleon, who often mentioned the simplicity of the principles by which he was guided, nevertheless admonished those who would emulate him: "Read over and over again the campaigns of Alexander, Hannibal, Caesar, Gustavus, Turenne, Eugene, and Frederick. Make them your models. This is the only way to become a great general and to master the secrets of war." It is still a good rule. ... In the present day, with the techniques of war changing radically not only from generation to generation but from decade to decade, a list of theorems inherited almost intact from the early nineteenth century, however much embroidered by examples even from recent military history, can hardly serve the function generally reposed upon it."1109

As Brodie concludes, "Principles may still survive those changes intact, but if they do it will be because they have little applicability or meaning for the questions that really matter. The rules fathered by Jomini and Clausewitz may still be fundamental, but they will not tell one how to prepare for or fight a war."1110 The only reason these "'enduring principles' have endured so long as a substitution for a body of live and flexible theory is due mainly to their exceptional convenience," and that they "lend themselves so readily to 'indoctrination,'" making them "peculiarly well adapted to the traditional patterns of military education."1111 Brodie is as dismissive of the value of these enduring principles as he is of military slogans and maxims, noting that the "maxim may indeed be the supreme distillate of profound thought, but only at its first use - that is, when it is still an apt expression and not yet a slogan. No sooner does it become currency than it is counterfeit."1112 Brodie points out that the "function of a slogan is to induce rigidity of thought and behavior in a particular direction," and that the "progress of strategy as a science will be roughly measurable by the degree to which it frees itself from addiction to the slogan."1113 Noting Eisenhower's effort after World War II to "set up a commission under General L. T. Gerow to study the

<sup>1107.</sup> Brodie, "Strategy as a Science," 469.

<sup>1108.</sup> Brodie, "Strategy as a Science," 470.

<sup>1109.</sup> Brodie, "Strategy as a Science," 470.

<sup>1110.</sup> Brodie, "Strategy as a Science," 471.

<sup>1111.</sup> Brodie, "Strategy as a Science," 471.

<sup>1112.</sup> Brodie, "Strategy as a Science," 472.

<sup>1113.</sup> Brodie, "Strategy as a Science," 472.

lessons of the European theatre in World War II," Brodie suggests that "[w]ith their traditional reverence for what they term the 'practical,' the military are inclined to dignify by the name of 'battle experience' what is in fact an excessively narrow pragmatism," and while "[t]here is of course no substitute for the test of battle or experience in war," Brodie suggests that "there are at least three reasons why such experience is of limited usefulness and may even be positively misleading."1114 The first is that "since great changes occur from one war to the next, military planners are obliged to make far-reaching decisions on issues concerning which there is little or no directly applicable experience."1115 The second is no matter what the merits or detractions of a particular decision made in war, "since the enemy's responses have a good deal to do with" the end results, those very "results often fail to provide a basis for judgment upon those decisions," making it all but impossible to know with any certainty whether "a decision which turned out well rather than ill [was] a good decision." 1116 And, the third is that "even within the scope of what our experience does illuminate, the lessons it affords are rarely obvious in the sense of being self-evident," and we must therefore remain "on the alert for rigidities of thought and action in the actors which vitiated the results of even repeated experiment" and at the same time "look for the hidden jokers in a situation, the vagaries of circumstance which profoundly affected the outcome, and ... clearly distinguish between the unique and the representative. In short, [we] must engage in a refined analytical operation involving a large element of disciplined speculation. The task requires a mind trained for analysis and for the rigorous scrutiny of evidence."1117

Brodie notes, in contrast to the field of economics, which "has produced a tremendous body of literature of impressive quality," the "far older profession of arms, content with mere reiteration of its wholly elementary postulates, which change not with the changing years, has yet to round out a five-foot book- shelf of significant works on strategy. The purpose of soldiers is obviously not to produce books, but one must assume that any real ferment of thought could not have so completely avoided breaking into print." In a footnote that follows, Brodie observes, "I am trying desperately here to restrain the bias of the academician that the effort of writing is an almost indispensable catalyst to the production of original thoughts. On the other hand, too many people have found that it is so to enable us quite to reject the idea." The upshot, to Brodie, is the dearth of truly worthy strategic theoreti-

<sup>1114.</sup> Brodie, "Strategy as a Science," 473.

<sup>1115.</sup> Brodie, "Strategy as a Science," 473.

<sup>1116.</sup> Brodie, "Strategy as a Science," 473.

<sup>1117.</sup> Brodie, "Strategy as a Science," 474.

<sup>1118.</sup> Brodie, "Strategy as a Science," 476.

<sup>1119.</sup> Brodie, "Strategy as a Science," 475, n. 9.

cal literature when compared to the younger but more bountiful field of economics: "The comparison drawn above between economics and strategy is especially telling in view of the similarity of objectives between the two fields. Although the economist sometimes disclaims responsibility for those community values which determine economic objectives, it is quite clear that historically he has been devoted mainly to discovering how the resources of a nation, material and human, can be developed and utilized for the end of maximizing the total real wealth of the nation. ... Strategy, by comparison, is devoted to discovering how the resources of the nation, material and human, can be developed and utilized for the end of maximizing the total effectiveness of the nation in war."<sup>1120</sup>

In both cases, Brodie notes, "we are dealing primarily with problems of efficiency in the allocation of limited resources and with measuring means against policies and vice versa."1121 Therefore, Brodie observes, "One might expect to find, therefore, that a substantial part of classical economic theory is directly applicable to the analysis of problems in military strategy. One might further expect that if the highly developed conceptual framework which lies ready at hand in the field of economics were in fact so applied, or at least examined for the suggestive analogies which it offers, some very positive results would follow."1122 It is interesting to note that this is precisely what theorists of international politics endeavored to do with their application of systems theory to the problems of war and peace, starting with Morton Kaplan, then refined by Kenneth Waltz; as they likewise did with the application of game and bargaining theory to these very same thorny problems, as illustrated by the work of Thomas Schelling. As Brodie reflects, "It might of course be aesthetically abhorrent to discover gallant admirals and airmen discussing their common problems, or the occasional amiable debates between them, in terms like 'marginal utility,' 'diminishing returns,' or 'opportunity costs.' It happens, incidentally, to be quite abhorrent to this writer to find himself inadvertently pleading for a jargon in any discipline, though in this instance there is no danger of corrupting the pure; the military already have a quite substantial jargon of their own. But the advantage of using symbols which are tied to well-thought-out formulations has at least two advantages besides the obvious one of providing a short-hand for intra-discipline communication: first, it may help to assure that the fundamentals of a problem will not be overlooked, and secondly, it may offer economies in the process of thinking the problem through."1123

Brodie concedes there remains a "great hurdle between clear understanding of the principles applicable to a problem and the practical resolution of that problem," but he

<sup>1120.</sup> Brodie, "Strategy as a Science," 476-77.

<sup>1121.</sup> Brodie, "Strategy as a Science," 477.

<sup>1122.</sup> Brodie, "Strategy as a Science," 478.

<sup>1123.</sup> Brodie, "Strategy as a Science," 480.

firmly believes there's "a great practical difference between that rule of thumb which is recognized to be the optimum feasible realization of correct theory and that much more common species of rule of thumb which simply replaces the effort of theorizing." he adds that "some of the more glaring errors of our recent military history could not have been perpetrated by intelligent men who were equipped with even a modicum of theory," so many in fact that "examples could be piled on indefinitely." And "[w] hether this or that concept can be applied with profit is something which interests us only in passing," Brodie's main point and one he reiterates in later works is that it's "in the field of methodology that a science like economics has most to contribute, and the point which it is the whole purpose of this article to bring home is that what is needed in the approach to strategic problems is genuine analytical method." Especially after Hiroshima; as Brodie notes, "Formerly the need for it was not great, but, apart from the rapidly increasing complexity of the problem, the magnitude of disaster which might result from military error today bears no relation to situations of the past."

From the prenuclear world, Brodie takes inspiration from Mahan, who despite representing "evidence of the primitive development of strategic theory," nonetheless wielded great influence, filling; Brodie notes Mahan most "[c]ertainly ... could not be called systematic," and, with his backward-looking naval observations, was "in some essential respects behind his own times." Despite such faults of analysis, and evidence of the primitive state of strategic theory in the prior century, Brodie observes that Mahan nonetheless "stood before his colleagues as one who seemed to know the purpose for which warships were built, and he carried all before him," and while his contribution sets him apart, Brodie notes that "Mahan has remained, for the United States Navy at least, an isolated phenomenon" and any "groundwork which he laid for what might have become a science of naval strategy was never systematically developed by the profession," and in the decades that followed, "years of overwhelming technological and political change – the service from which he sprang has not produced his successor." A similar absence of strategic and analytical achievement, Brodie notes, was not unique to the Navy: "Air power is still young, but it is certainly not new.

<sup>1124.</sup> Brodie, "Strategy as a Science," 483.

<sup>1125.</sup> Brodie, "Strategy as a Science," 483-84.

<sup>1126.</sup> Brodie, "Strategy as a Science," 484.

<sup>1127.</sup> Brodie, "Strategy as a Science," 484.

<sup>1128.</sup> Brodie, "Strategy as a Science," 484.

<sup>1129.</sup> Brodie, "Strategy as a Science," 484.

<sup>1130.</sup> Brodie, "Strategy as a Science," 485.

<sup>1131.</sup> Brodie, "Strategy as a Science," 485.

<sup>1132.</sup> Brodie, "Strategy as a Science," 485.

Yet it is not possible to find in any language a treatise which explores in discerning and relatively objective fashion the role of air power in war, the factors governing its potentialities and limitations, its relation to other arms, and the chief considerations affecting its mode of operation. Sea power has at least had its Mahan; the literature of air power is all fragments and polemics."1133

Brodie struggles to identify "available remedies," explaining that the problem is that we're "dealing fundamentally with a conflict in value systems," as the "profession of arms requires inevitably a subordination of rational to romantic value," and where "[a]ction, decisiveness, and boldness are idealized," resulting, unfortunately, in an "anti- theoretical bias which is in fact anti-intellectual" and where the "emphasis is on the so-called 'practical'" – and "in his eagerness to be doing, he does throughout his career a fantastically large amount of work of a sort which contributes nothing to his greater understanding of his art even on the technical level."1134 Even the "training at one of the various war colleges - which he reaches at about the age of thirty-five to forty - is looked upon as an interlude in the more active phases of his career," and Brodie argues that we "need to make of our war colleges genuine graduate schools in method and duration of training," and that "military staffs should be chosen for the special attainments of their members in the several fields of strategic analysis" and that students at the war colleges "should be selected according to standards which give due weight to the intellectual purpose of the institution."1135 Brodie expects that the "military will object that it is not their purpose to train scholars, that there are other besides intellectual qualities necessary in a military leader, and that their needs in strategic planners are after all very limited. They are of course right."1136

He concedes that a "successful military leader must have something besides a good mind and a good education in strategy" but explains that this means only that "the military calling is more exacting than others," and that it carries a unique burden: "In what other profession does the individual affect or control directly not only the lives of thousands of his fellow citizens but also the destiny of the national community and perhaps also of western civilization as we know it? Analytical acumen need not be emphasized to the exclusion of those other qualities (i.e., 'leadership,' et al.), but it has a long way to go to gain consideration even comparable to the latter." Brodie believed that no matter "how limited was the actual need in such special skills as strategic analysis, we should have to have a respectably broad base for selecting those

<sup>1133.</sup> Brodie, "Strategy as a Science," 486.

<sup>1134.</sup> Brodie, "Strategy as a Science," 486.

<sup>1135.</sup> Brodie, "Strategy as a Science," 487.

<sup>1136.</sup> Brodie, "Strategy as a Science," 487-88.

<sup>1137.</sup> Brodie, "Strategy as a Science," 488.

called to the task and an adequate means of training them." <sup>1138</sup> In a short time, as the dangers of the nuclear-armed world spiraled upward, first on August 29, 1949 with the Soviet ascension to the nuclear club, and then, only three years later with the first successful thermonuclear test on November 1, 1952 during Operation Ivy Mike at Enewetak Atoll, the burden of command would increase in tandem, and with it the need for capable strategic analysis to ensure that war and policy maintained their inherently, and in Brodie's mind *normatively*, Clausewitzian balance.

## **Crossing the Civil-Military Chasm**

In an internal debate at RAND over Brodie's views on the strategic theoretical capabilities of the military versus the rising corpus of civilian defense intellectuals, Brodie is taken to task for articulating with too little subtlety a condescending outlook on his military counterparts, during which Brodie clarifies his views on the fundamental differences in strategic thinking of these two distinct groups of strategic thinkers. The squabble emerged in late 1954 after Brodie sent his young colleague Nathan Leites some glowing feedback on Leites' latest article, "If War Were to Break Out Tomorrow," in which he made comments perceived by RAND's then-director Hans Speier as dismissive of their military colleagues and, importantly, funders, whose continued largesse RAND depended upon. On November 5, 1954, Brodie wrote to Leites, lauding his article, describing it as "brilliantly incisive, sensitive, and novel. This is the sort of analysis we need, but I have seen nothing like it before."1139 Brodie noted he had made a "very small number" of critical remarks in the margins and in his letter to Leites said these were "of much too trivial a nature to be mentioned here." 1140 As for the "general organization" of Leites' article, Brodie made some recommendations, writing: "I have a feeling that your leading points or ideas could be made to stand out more clearly and crisply than they do. Your writing in this paper tends sometimes to give one the feeling that you are musing out loud, rather than that you are communicating some ideas which are already well developed in your mind. This is an intangible sort of thing, and it is hard for me to put my finger on it. But I do believe it is organizational rather than stylistic."1141 What got Brodie into trouble were his remarks concerning the military, and Leites' obligations to present his entire article to them: "Of course much depends on what you plan to do with this paper. I do not expect that our Pentagon friends will be able to make anything of it, so its being

<sup>1138.</sup> Brodie, "Strategy as a Science," 488.

<sup>1139.</sup> Brodie, Letter to Hans Speier, November 5, 1954, Bernard Brodie Papers (Collection 1223), Department of Special Collections, UCLA.

<sup>1140.</sup> Brodie, Letter to Hans Speier, November 5, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1141.</sup> Brodie, Letter to Hans Speier, November 5, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

put into an 'R' or 'RM' would be largely a matter of form and of courtesy. On the other hand, a simplified summary which more or less outlined the basic points might indeed be useful. But I am thinking more about publication for scholars."<sup>1142</sup> Brodie suggested "it has the substance now for an excellent *World Politics* article," though in need of some abbreviation. <sup>1143</sup>

On November 19, 1954, in a personal memo to Brodie, Hans Speier made reference to these comments from Brodie: "I do not think the impression of entertaining, the opinion that the people who are intelligent enough to finance RAND lack the ability to understand its research results; or that we fulfill our obligation toward RAND and the Air Force if we publish something in scholarly or popular magazines. I believe your letter to Nathan can easily be misunderstood to the effect that you regard the RAND audience as less important than other audiences which RAND and the Air Force permit us to reach. *World Politics* would indeed be a suitable place for publishing Nathan's excellent piece, but it will be desirable first to put it into a form which might raise your hope that our governmental readers will understand it."<sup>1144</sup>

A few days later, on November 23, 1954, Brodie responded to Speier's memo with his own lengthy and detailed personal memo, in which he noted that he had been "erroneously of the opinion that I was commenting on some RAND-sponsored research, in which the Air Force presumably has no proprietary interest," but adding that "Victor Hunt corrected me on that." 1145 Brodie also explained: "I grant you that contemptuous feelings where they exist are in danger of being ultimately betrayed to the object of those feelings, and are therefore legitimately a matter of concern with respect to the relationship between RAND and its clients. On the other hand, in this instance I feel that 'contemptuous feelings' are not involved but that simple realism is. I earnestly believe that the substance of the remark of mine to Nathan which you quoted is something with which you yourself, upon reflection, would fully concur."1146 Brodie further defends his remark, explaining: "More important in your own mind, I think, was your statement: 'I do not think we should permit ourselves ever to develop, or give the impression of entertaining, the opinion that the people who are intelligent enough to finance RAND lack the ability to understand its research results. . . . ' I do not see how it is possible for you to mean that literally."1147 Brodie observed "RAND hires, among other things, nuclear physicists, mathematicians, and social scientists whose training includes a measure of psychoanalysis," adding "I certainly would not

<sup>1142.</sup> Brodie, Letter to Hans Speier, November 5, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1143.</sup> Brodie, Letter to Hans Speier, November 5, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1144.</sup> Hans Speier, Letter to Brodie, November 19, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1145.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1146.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1147.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

expect Air Force officers to feel, and it would be extremely naïve of them to feel, that all the written products of such specialists should be interesting or intelligible to them. ... Neither the statement I have just made nor the one I made to Nathan carries the implication that our clients are unintelligent – only that they are not intellectuals trained in our special brand of intellectualism. Nathan's paper as I read it would not make much sense to any Air Force officer I have met, some of whom I regard as having high intelligence, but I do think, as I said to Nathan, that 'a simplified summary which more or less outlined the basic points might indeed be useful.' If this is a contemptuous or ungracious thought, then you and I must either have read different versions of Nathan's paper or have known entirely different kinds of military officers."1148 Brodie further explained, "This would not be worth going into at such length if we were dealing with an isolated incident. But you have several times chided me gently on my attitude on the intellectual endowment of the military, and I think there is a possibly important misunderstanding between us on that score. Let me first of all point out that my own best and most careful work has always been done for military audiences, including the recent *Reporter* article, which was originally worked up as a lecture to the Army War College. . . . Also, if my remarks or bearing really exuded contempt for the intelligence of the military generally, I should hardly have been welcomed over many years at the various war colleges, to which I have devoted a great deal of earnest and careful work; and I should hardly number, as I do, so many military officers among my close friends."1149 Brodie conceded that it was "certainly true that [some]1150 of the things I have written and said have called attention to the conceptual and intellectual shortcomings of the military gild. I have hear you privately do likewise, as for example when you were describing to me a year or so ago a conversation or briefing you had with a group of general officers which included General Doolittle. You were at that time profoundly shocked, as I think you had every right to be. Now, we ought to be clear, is this question generally a forbidden area, even for private discussion (e.g., a fairly personal letter to Nathan), or do you simply feel I am wrong and am exaggerating? Maybe the difference between us is that you feel the Doolittle episode you described was atypical, whereas I would regard it as typical."1151

Brodie listed his views "about the intelligence of the military," noting "They compare favorably in average I.Q., and in the range of intelligence of individual members, with any profession I know of other than those specifically involved with learning. In other words, they compare favorably (i.e., about on par) with MD's, but not with scientists or university professors at leading universities. How could they, since the latter are

<sup>1148.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1149.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1150.</sup> Note that the word "some" is written by hand, scratching out the word "many" that was originally typed.

<sup>1151.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

selected for their intellectual attainments, while the military are and must be selected for quite different skills and talents,"1152 Further, Brodie notes "Their training, by and large, is certainly not comparable in intensity or in manipulation of abstract ideas with that of the usual Ph.D. candidate at one of our graduate schools. They are not 'intellectuals,' and certainly don't regard themselves as such." 1153 And, he added, "There is also a certain endemic anti-intellectualism in the gild, which I regard as entirely natural to a profession which must stress action rather than subtleties of thought in according both deference and preferment. The degree of anti-intellectualism varies considerably, however, from person to person within the profession."1154 Brodie also observes that "Each military service tends to be a closed corporation, and also a tightlyknit hierarchical one. These conditions further a traditionalism and conservatism which is already fostered by the conditions of non- or anti-intellectualism referred to above."1155 Brodie finds that "The record show unequivocally that in the past, with technological changes of far lesser moment and degree than those we are witnessing now, the military have usually proved themselves conceptually behind-handed at the onset of each major war. Because of the nature of the enterprise, the national cost has often been hideous and tremendous. These thoughts are so far hardly novel, being shared and more or less forcefully argued by almost all major students of war, including the professional officers among them."1156 And lastly, Brodie adds that "Because of the nature of the technological changes occurring today, the lag between concept and reality is bound to be both far greater in degree and far costlier in effects than any similar lag in the past."1157

While noting he "could go on," Brodie closes his memo by stating "these are in general the ideas that inform so much of my work. Naturally one must always exercise due tact in expressing them. I am grateful for correction where I slip from due tact or from avoidance of gratuitous references to military shortcomings. But that is another matter entirely from saying either that this comprises a forbidden area of discourse, or that in certain specific respects my views are wholly wrong. I should very much appreciate your remarks on these points, which are obviously of great importance to me."1158

On November 30, 1954, Speier sends Brodie another long personal memo stamped quibbling over whether Leites' paper was "Rand-sponsored rather than Project RAND," the former not requiring presentation to the government and the latter being required

<sup>1152.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1153.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1154.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1155.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1156.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1157.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1158.</sup> Brodie, Letter to Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

to in "a more detailed fashion." 1159 Speier notes Brodie still believes he had given Leites "good advice," while Speier counters, "I still think you did not," and that the memo Brodie sent to Leites on this matter "embarrasses me in two ways," the first being Speier believes Leites "should not follow your advice, but I find it is difficult to tell him so myself, because your advice was given to him in a personal letter. Next, I think in your reply to me you built up a straw man that suffered the fate awaiting all straw men."1160 Speier believes strongly that Leites study "should be given a form suitable for presentation to our sponsors," and while Brodie views "a simplified summary to be a matter of courtesy to our sponsors," Speier regards "the preparation of the whole study in suitable form as an obligation on our part." 1161 He adds Brodie is "less interested in the preparation of a simplified summary than in the publication of the study in World Politics. I think, in the case of Project RAND studies, that Nathan's study will eventually reach wider audiences as well," or to "put it differently, there is no reason why Nathan's brilliant study, 'If War Were to Break Out Tomorrow,' should be regarded as intellectually less intelligible to our sponsors than his Study of Bolshevism. The new small study needs the kind of rewriting and editing from which the earlier and fuller work profited. You were helpful to Nathan and to RAND at the time by suggesting ways of improving the form of the larger study. Why do you think that the smaller one cannot be understood by our sponsors if it is suitably revised?<sup>1162</sup>

Recalling remarks Speier had made regarding the issue of the "intellectual endowment of the military profession," Speier explained he had told Brodie, "I do not think we should permit ourselves ever to develop, or give the impression of entertaining, the opinion that people who are intelligent enough to finance RAND lack the ability to understand its research results.' You gave me the impression, perhaps inadvertently, of entertaining just such an opinion in the quoted passage of your letter. . . . This impression has in part been corrected by your declaration that you do not consider our clients to be unintelligent."<sup>1163</sup> Speier further explained, "I do not advocate that you suppress any of your thoughts on the ability of the military, either in general or specifically with regard to their ability, to understand a given RAND study. I do suggest that in case of an unfavorable opinion in this regard you should ask yourself whether such inability is our fault or theirs. If ours, I think we should try to correct it, instead of saying let's be quick and courteous with our sponsors and think of publication elsewhere."<sup>1164</sup> He added that the "larger question at issue in this correspondence,

<sup>1159.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1160.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1161.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1162.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1163.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1164.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

however, is not what you and I think of the intellectual endowment of the military. We are free to think what we like as long as we believe that they are able to stick to the good and change toward the better, and as long as we, on our part, are able to meet our obligations in RAND without compromising truthfulness and accuracy in our work for the sake of popularization."1165 He further reflected, "I am not sure that the major question is really one of tact. . . . Possibly the real question has to do less with tact than with stylistic predilection. In the past I have tried whenever an occasion arose to convey my impression to you that you delight in pejorative statements about men of power. In your condemnations I hear faint echoes of the Jewish Prophets or the Puritan preachers: like them you speak with the righteousness of your cause and you are harsh if others don't serve it. I am glad to acknowledge that you are keeping good company, as it were, but is it the company you, as a scientist, really want to keep?"1166 Speier concluded, "I suspect that these predilections sometimes distract you from an effort to render your studies scientifically even more rewarding than they are. I know that I can learn much from you. You disappoint me whenever I seem to learn less than expected merely because you are engrossed in scolding some uninteresting people with well-known names. It is only natural, I suppose, that I should expect your influence on your military audience as well to be even greater than it is if you chided them less often. The response to stern and frequent chiding by an outsider will depend not only upon their intelligence but also upon their pride."1167

Speier proposed a memo to Leites reaffirming the need to "first consider revising the study for distribution as a RAND publication to our government sponsors," and also explaining that Brodie was not aware the study was "undertaken for Project RAND." This put the matter to rest, while allowing for an illuminating discussion about the strategic thinking of the military and the unique role of RANDites in probing military complexities, often with such detailed expertise that their analysis might prove of limited understanding and potentially limited practicable utility to the men of arms who created RAND, helping to thus give birth to a new generation of nuclear wizards to grapple with the world's unprecedented strategic challenges.

## Military Strategy: 'Most Ancient and Least Developed'

Brodie revisits his discussion of the need for a more scientific and analytically rigorous approach to strategy, further extending his observations on sea power to the equally analytically-challenged field of air power, in his April 1955 *World Politics* article,

<sup>1165.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1166.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1167.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1168.</sup> Speier, Letter to Brodie, November 30, 1954, Bernard Brodie Papers (Collection 1223), UCLA.

"Some Notes on the Evolution of Air Doctrine," where, he reiterates his views that military strategy is "of all the human sciences at once the most ancient and the least developed," adding, "It could hardly be otherwise. Its votaries must be men of decision and action rather than of theory. Victory is the payoff, and is regarded as the most telling confirmation of correct judgment. There is no other science where judgments are tested in blood and answered in the servitude of the defeated, where the supreme authority is the leader who has won or can instill confidence that he will win." 1170

But that notwithstanding, Brodie points out that "[s]ome modicum of theory there always had to be. But like much other military equipment, it had to be light in weight and easily packaged to be carried into the field. Thus, the strategic ideas which have from time to time evolved have no sooner gained acceptance than they have been stripped to their barest essentials and converted into maxims. Because the baggage that was stripped normally contained the justifications, the qualifications, and the instances of historical application or misapplication, the surviving maxim had to be accorded a substitute dignity and authority by treating it as an axiom, or, in latter-day parlance, a 'principle.'"1171 As Brodie had noted six years earlier, these "so-called 'principles of war' have been derived from the work of a handful of theorists, most of them long since dead," and "[t]heir specific contributions to living doctrine may not be widely known, because their works are seldom read, and the dimensions of the original thought may find but the dimmest reflection in the axiom which has stemmed from it. Nevertheless, by their ideas, however much those ideas have suffered in the transmission, these theorists have enjoyed in the most pragmatic and 'practical' of professions a profound and awful authority."1172

But that's not the case with air power, since it was still "too young to have among the theorists of its strategy more than one distinguished name, and he has carried all before him" 1173 much the way Mahan did for sea power, as he discussed in his 1949 article: "The views of General Giulio Douhet would be worth study today even if air force thinking had progressed considerably beyond him and away from him, because he would still remain the first to have presented an integrated, coherent philosophy for the employment of air power," Brodie observed, 1174 adding that "the fact is that air strategists have moved very little beyond or away from him. American air strategists today may or may not acknowledge in Douhet's philosophy the origin of their present

<sup>1169.</sup> Bernard Brodie, "Some Notes on the Evolution of Air Doctrine," World Politics 7, No. 3 (April 1955), 349-370.

<sup>1170.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 349.

<sup>1171.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 349.

<sup>1172.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 349.

<sup>1173.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 349.

<sup>1174.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 349-50.

doctrine, but there can be no doubt about the resemblance between the two."1175 Brodie, who would go on to discuss Douhet again in much detail in a his 1959 Strategy in the Missile Age, argues that the "contribution of Douhet which commands greatest respect is that he turned upside down the old trite military axiom, derived from Jomini, that 'methods change but principles are unchanging," and "insisted instead that a change in method so drastic as that forced by the introduction of the airplane must revolutionize all the so-called principles of war." 1176 Brodie suggests that it "took a bold and original mind to conceive that the sacrosanct principles might be outmoded, and a strong and independent will to assert it,"1177 a comment that we in hindsight can apply to Brodie as well, who very likely was of the same opinion. Brodie noted that Douhet "not only asserted it but supported his arguments with remarkably firm and consistent logic," adding that it "would be well if we were capable today of the same kind of originality and boldness with respect to the new nuclear weapons."1178 Like Brodie: "Douhet himself refused to justify his ideas according to whether they did or did not accord with some inherited gospel. He was much more interested in whether they accorded with the facts of life as he saw them," and was "too proud of his intellectual independence to appeal to the authority of the old principles where they happened to implement his own views."1179 Nonetheless, despite Douhet's own best efforts and intentions, Brodie observes "the controversy over the proper role of air power has often, on its more intellectual fringes, revolved around the question whether the Douhet thesis, or, more loosely, the emphasis on strategic bombing, does or does not conform to the tried-and-true, 'enduring' principles of war," 1180 so much so that air power theorists have turned to such "venerated authorities like Clausewitz, who after all has been dead for a century and a quarter," such as Captain Robert H. McDonnell, who in his article, "Clausewitz and Strategic Bombing," in the Air University Quarterly Review<sup>1181</sup> is cited by Brodie for countering critics of strategic bombing who believed it was a violation of Clausewitzian principles, suggesting "what is needed is 'a closer examination of Clausewitz' principles'!"1182

And so Brodie turns his attention to Clausewitz, the grand master of strategic theory, who asserts an enduring, and compelling, presence throughout Brodie's career.

<sup>1175.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 350.

<sup>1176.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 352.

<sup>1177.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 352-53.

<sup>1178.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 353.

<sup>1179.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 353.

<sup>1180.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 353.

<sup>1181.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 353. See: Captain Robert H. McDonnell, "Clausewitz and Strategic Bombing," Air University Quarterly Review VI, No. 1 (Spring 1953), 43-54.

<sup>1182.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 353, footnote 6.

Brodie asks, "What then are these ancient teachings to which appeals are so constantly made," and even "[m] ore important, from whence do they derive such commanding authority?"1183 Brodie expects much from these so-called principles of war, since they are "a body of ideas or axioms to which in our own time literally millions of lives have been sacrificed, and on the basis of which within the last decade great battles have been organized and fought. More to the point, we are concerned with a heritage of thought which even today dominates decisions on which the life or death of our nation may well hinge."1184 He finds that, "[i]n the main, the maxims or axioms which we call 'principles of war' are simply common-sense propositions, most of which apply to all sorts of pursuits besides war," and sounding much like Ovid, the master Roman strategist who turned his attention to the challenges of courtship and seduction, "If a man wants to win a fair and virtuous maiden, he must first make up his mind what he wants of the girl, that is, the principle of the objective, and must then practice the principles of concentration, of pursuit, of economy of force, and certainly of deception."1185 Brodie agrees that "common-sense principles are valuable precisely because they represent common sense, and are valuable only so long as they are compatible with common sense," but unfortunately he's found "too many examples in recent war of a slavish devotion to the so-called principles of war offending against common sense," which he attributes to a "slavish devotion" and a "low intellectual estate to which these maxims have fallen today" that obscures their more noble and intellectually enlightened origins. To wit, Brodie recalls that Clausewitz was "the first great figure in what might be called modern strategy, just as Adam Smith is the first great figure in modern economics," which - continuing his line of thought articulated in his aforementioned 1949 article; indeed in note 7, he cites his earlier article, writing, "For a more extended discussion of the relevance and irrelevance of strategic principles, see my 'Strategy as a Science,'" article – reflects a "science which is in many respects remarkably analogous. But unlike Smith, whose Wealth of Nations proved to be only the headwaters of a mighty and still expanding river of thought to which many great talents have contributed, Clausewitz is also, except for his lesser though impressive contemporary, Antoine Henri Jomini, almost the last great figure in his field,"1186 and while "[0]thers may also be worthy of honors and of notice, but they do not challenge his preeminence."1187

Indeed, Clausewitz stands on so high a pedestal in the pantheon of strategic theorists that "it was very difficult to be original in this field after Clausewitz," and "[n]

<sup>1183.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 354.

<sup>1184.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 354.

<sup>1185.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 354.

<sup>1186.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 354.

<sup>1187.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 354-55.

ot until two-thirds of a century later does anyone appear of anything like comparable stature, and Alfred T. Mahan, by confining himself to naval strategy, put himself into a rather more limited context than did Clausewitz."<sup>1188</sup> It is only "[a]fter Mahan [that] we come to the unique name of Douhet, that is, unique in a separate and new field of strategy," though Brodie concedes that he was "of course skipping over the names of some writers, not many, who would have to be considered in any history of strategic thought," some of whom "showed real originality" while others were "more important for their influence on their times than for originality or incisiveness," such as Ferdinand Foch. <sup>1189</sup>

Brodie found it "interesting to note that Clausewitz, who was certainly the most profound as well as systematic thinker on war who has yet appeared, specifically rejected the idea that there could be such things as principles or rules," even though we can "find discussed at considerable length in Clausewitz, as in Jomini, most of the basic ideas later to be exalted to the status of principles. But what makes large portions of Jomini and especially of Clausewitz come alive today in the reading is not the elucidation of basic ideas or principles but rather the wisdom that these two thinkers, one profound and the other incisive and eminently practical, brought to their discussion of these ideas. This wisdom is reflected in a flexibility and breadth of comprehension that makes Clausewitz dwell as tellingly on the qualifications and historical exceptions to the basic ideas he is promulgating as he does on those ideas themselves, though of course at lesser length."1190 Adds Brodie: "Another respect in which the wisdom of Clausewitz is manifested concerns a subject in which his contribution is not merely distinctive but unique. No other theorizer on military strategy, with the possible exception of Mahan, has devoted anything like comparable attention and careful thought to the relationship between war strategy and national policy. Clausewitz' contemporaries, notably Jomini, took the dependence of strategy upon policy so completely for granted that they thought it worth little mention, whereas those who are more nearly our own contemporaries, notably Douhet, lost the point entirely or denied it."1191 And so it's in "this regard more than in any other, Clausewitz has had not only the first word, but also practically the last," but it was "in this respect as in all others," Brodie observes, that "the fruits of his brooding intelligence have been not transmitted, but rather catalogued in the form of capsular quotations taken out of context," which Brodie found to be "especially ironical," particularly that "some of the very quotations which are often cited to prove that he was the prophet of total or absolute war are wrenched from a chapter in which he specifically insists that 'war

<sup>1188.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 355.

<sup>1189.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 355.

<sup>1190.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 355.

<sup>1191.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 355-56.

is never an isolated act' and that military aim and method must always defer to the political object."1192

Brodie himself would be misunderstood during his own time, his earlier thoughts held up against his later re-assessments, with the former often overshadowing the nuances of the latter. As Brodie explains, "Clausewitz is especially subject to such misinterpretation because of his subservience to the method of the contemporary German philosopher Hegel, whom he apparently studied with great reverence. Thus, after vigorously building up a case for war being in theory subject to no limitations of violence, he goes on to develop with equal vigor the point that in practice there must be many qualifications to the theoretical absolute, which of course reflects Hegel's well-known method of presenting the thesis, the antithesis, and then the synthesis. This method, plus the natural inclination of a searching mind to feel all round the subject, makes Clausewitz amenable to being quoted on whatever side of an issue one desires, and he has been amply abused in this fashion. Moreover, he is of all the noteworthy writers on strategy the least susceptible to condensation." 1193

## Political Science and Strategic Studies: A Call to Arms

In his December 1957 article in *The Scientific Monthly*, "Scientific Progress and Political Science" – based on his paper presented to the joint session of the National Academy of Economics and Political Science, the American Political Science Association, and Section K (Social and Economic Sciences) of the American Association for the Advancement of Science at the New York meeting of the AAAS in December 1956 – Brodie presented something of an update to his 1949 World Politics article, "Strategy as a Science," suggesting there was still a long way to go toward completing the bridge he hoped would span the civil and military sides of the strategic community, and thereby stimulate the emergence of a robust and active civilian-scientific strategic community. Part of the problem was resistance within the field of political science to the new discipline of strategic studies, even though it – on the surface – looked to be a natural incubator of civilian-scientific strategists, especially with its long tradition and interest in world affairs and international politics. There were many explanations for this resistance, many inherent to the field of political science and its traditions. In a discussion of "Politico-Military Problems," Brodie observes that "a weakness exists which is not at all necessary and which demands a remedy," a "weakness that is pervasive in American intellectual life" and that is America has "no tradition of intellectual concern with that increasingly wide border area where military problems meet political ones. Political

<sup>1192.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 356.

<sup>1193.</sup> Brodie, "Some Notes on the Evolution of Air Doctrine," 356.

science has a greater obligation in this respect than has any other single discipline. Few scholars consider it their primary business to inquire about the effects that current and projected military developments must have upon politics, and vice versa."<sup>1194</sup>

Brodie adds that "[t]his particular poverty in the intellectual life of the country is bound to be reflected in the world of affairs," and even though "the military approach to strategic problems needs to be extended and leavened by the relevant insights of the statesman, such insights are likely to be undeveloped among those real-life civilians with whom the military actually have to deal. There has been much advocacy of closer communion between politicians and soldiers in matters relating to foreign policy. This closer communion, unquestionably desirable, has been much less often urged on the ground that civilians might have a beneficial influence upon military policy – a fact which reflects an almost universal consensus, presumably erroneous, that military affairs are inaccessible to the layman in a way different from that in which foreign affairs are."1195 Brodie explains that the "problem is not simply one of achieving closer communion between two groups of men of markedly different training and orientation. It is, rather, that of developing a real competence on each side to penetrate and comprehend the issues with which the other side is currently seized."1196 He points to the National Security Council as "a monument to an aspiration, and the aspiration is undeniably sound. But whether any real enrichment of strategic thinking has proceeded from it is another question."1197 Brodie suggests it in fact "works much better as a medium by which the military can impress their views on the civilians than the reverse – always excepting the matter of imposing budget ceilings on military expenditures, where arbitrariness generally rules."1198 Brodie believes "[t]here cannot be a real enrichment of strategic thinking unless and until considerable numbers of scholars in germane fields begin to concern themselves with the relevant issues."1199 Brodie writes that "[t]here are a number of reasons why the contribution of political scientists could be crucial," one being "political scientists, especially that group of them who specialize in international affairs, are concerned with the context of military operations in a way that the military themselves are not," as a "military officer is forced by the heavy professional demands of his craft to be preoccupied with tactical, as against strategic, matters, and to the relatively small degree that he concerns himself with the latter, his interpretation of strategy is likely to be a restricted one."1200

<sup>1194.</sup> Brodie, "Scientific Progress and Political Science," 317.

<sup>1195.</sup> Brodie, "Scientific Progress and Political Science," 317.

<sup>1196.</sup> Brodie, "Scientific Progress and Political Science," 317.

<sup>1197.</sup> Brodie, "Scientific Progress and Political Science," 317.

<sup>1198.</sup> Brodie, "Scientific Progress and Political Science," 317.

<sup>1199.</sup> Brodie, "Scientific Progress and Political Science," 317.

<sup>1200.</sup> Brodie, "Scientific Progress and Political Science," 317.

Brodie recalls how Clausewitz, "himself a general, pointed out 125 years ago that the object of a war, which is always political and therefore appropriately determined by the politicians, must govern the whole conduct of that war; but this idea has never really been absorbed and digested by the military profession. To the military, the means available, rather than the object, are what determine the character of a war, and they have usually resisted any 'interference' from their civilian chiefs with respect to their choice of means."1201 This has become increasingly apparent in the Cold War, and Brodie recounts how "the Korean war uncovered a deep and pervasive confusion on the matter of ends and means. The politicians restrained the soldiers' use of means because they spontaneously recognized that the true objects of American intervention required such restraints. On the other hand, largely because of the novelty of the situation, the political leaders were so inept at formulating and explicating those objectives that they made basic and even elementary errors of direction," as he had noted in earlier critiques of American strategic policy in Korea. 1202 Brodie noted that "Americans do not understand a kind of war in which relatively heavy sacrifices are made, yet in which they appear to be committed to something less than a clear victory. Yet 'limited' or 'peripheral' wars are by all odds the kind most likely to engage us within the next decade or two if we become involved in military actions at all," since limited war presents what in fact may be the only viable military option - "[n]oninvolvement may mean surrender of important positions, and certainly the only other alternative, all-out thermonuclear war, is an infinitely more grim and forbidding prospect than any kind of local war." 1203 Furthermore, Brodie notes "the posture that deters the enemy from all-out attack does little, if anything, to deter him from making peripheral challenges."1204

And while less likely, the far graver consequences of general war demand attention be paid to the risks and challenges of nuclear warfare; as Brodie observes, "[o]ne of the most critical changes wrought by the atomic bomb is almost universally overlooked and at great peril," and that is the "extent and character of military capabilities for any future crisis tend to be predetermined by peacetime preparations made long before the event. ... Decisions have been made and are being made now which will determine whether limited wars can be pursued at all and, if so, under what circumstances and with what constraints. The manner in which the character of any total war of the future is being predetermined by current preparations is even more striking, though less interesting from a political point of view, both because it is less likely and also because it is potentially annihilative."

<sup>1201.</sup> Brodie, "Scientific Progress and Political Science," 317.

<sup>1202.</sup> Brodie, "Scientific Progress and Political Science," 318.

<sup>1203.</sup> Brodie, "Scientific Progress and Political Science," 318.

<sup>1204.</sup> Brodie, "Scientific Progress and Political Science," 318.

<sup>1205.</sup> Brodie, "Scientific Progress and Political Science," 318.

Brodie notes how in recent years, the "Soviet retaliatory air capability continues to grow" and with its growth, "the conditions under which we can hint at a possible use of our strategic air force against the U.S.S.R. become vastly more circumscribed" and will likely "be confined to use only against the threat of a direct strategic air attack upon this country, which means that it will cease to be of much significance for a host of lesser contingencies. Yet there is no evidence that there has been any fundamental reorientation of politico-military outlook on the world since the days when America enjoyed undisputed monopoly of the atomic bomb."1206 Brodie turns back to the challenges – and opportunities – facing political science, observing: "Clearly, these are great problems on which political scientists could have much of value to say, if more of them could interest themselves."1207 One inhibiting factor Brodie notes is the need for secrecy and the limitations in access to classified information, though Brodie has come to the conclusion that "the information in the public domain is so immeasurably greater in volume and significance than what is kept secret that the latter may well be ignored except for quite special problems," and that "in most instances, the secrets are of relevance to technicians and not to political policy specialists" and that overall "secrecy is much less important than other factors." 1208 A "second inhibiting factor is that the esoteric nature of the military art is commonly exaggerated," and even though "one does not learn how to be a general by reading books," Brodie points out that "no general becomes really outstanding without absorbing a kind of knowledge available in books - and there is nothing to keep civilians from reading the same books. In other words, one can learn from books what is consequential (the strategic as distinct from the tactical) about the military art, though very few people attempt to do so." 1209 And a "third factor in this context is that technological change is rampant everywhere in society but nowhere more so than in the military art," but even here the civilian is no more disadvantaged than the military professional, who "tends to develop an inferiority complex toward the scientist and the engineer, though he has good defenses against letting his attitude of deference spread."1210 The last inhibiting factor, Brodie notes, is "that tradition determines, to some degree, scope and method in political science," where "the favored fixations tend to be too enduring even to be called fads, often lasting for a generation or more," slowing the pace of change and adaptation, and thus far preventing a full embrace of strategic studies as a bona fide subfield: "One of the most enduring attitudes of all has been that which exempts the study of war itself from a field in which scholars are intensely (and quite properly)

<sup>1206.</sup> Brodie, "Scientific Progress and Political Science," 318.

<sup>1207.</sup> Brodie, "Scientific Progress and Political Science," 318.

<sup>1208.</sup> Brodie, "Scientific Progress and Political Science," 318.

<sup>1209.</sup> Brodie, "Scientific Progress and Political Science," 318.

<sup>1210.</sup> Brodie, "Scientific Progress and Political Science," 319.

concerned with the matters that tend to produce or to prevent war," and in addition to the issues he has thus far discussed Brodie observes "there is also some redolence of an attitude that was much more prominent during the interwar period than it is now – namely, that the preoccupation with matters military is somehow immoral in a scholar, or at least not wholly respectable. In the 1920's and 1930's one was expected, instead, to be interested in the finer points of the League of Nations Covenant, which was designed to prevent war. And although that attitude has itself largely disintegrated, its consequences linger on. The military profession is often charged with being unduly staid, but it cannot begin to compete in that respect with the curriculum designers in American colleges." Brodie cautions that "[n]either an indictment nor a justification of political science is called for, but rather an explanation of some of its peculiarities of scope and method," and in particular "the failure of political science to cope with the many political problems associated with the nature of modern war, especially in its more novel aspects, should be emphasized." After all, Brodie writes, "the H-bomb does raise some oppressively important issues."

## Rethinking the Unthinkable: Escalation and Limited War

Just a year after Brodie's Strategy and the Missile Age came to press with consistently positive reviews from civilian scholars and military practitioners alike, his long-time colleague Herman Kahn would publish his very own treatise on the new dangerous era – a massive tome titled *On Thermonuclear War* that was also published by Princeton University Press but which would breakout as a runaway best-seller, generating widespread criticism for its callous insensitivities and ruthless realism while at the same time, perhaps because of the whiff of controversy and consequent curiosity thereby generated, would make its author a household name. Brodie would later reflect on Kahn's 1960 treatise, noting that thus far in the nuclear age, "we have had some experiences that were entirely predictable and some that would have been previously unbelievable," and that there has been "much additional thinking about nuclear weapons and about what they would mean in war and therefore in the basic affairs of mankind" - some of which "has taken strange twists and turns and led down weird byways." 1214 And while it "would not be correct to say that today our confusion is worse confounded," there has nonetheless "been a good deal of confusion along the way." 1215 Brodie reflects on how, in "the minds of the great majority of people, nuclear weapons are objects

<sup>1211.</sup> Brodie, "Scientific Progress and Political Science," 319.

<sup>1212.</sup> Brodie, "Scientific Progress and Political Science," 319.

<sup>1213.</sup> Brodie, "Scientific Progress and Political Science," 319.

<sup>1214.</sup> Brodie, War and Politics, 381.

<sup>1215.</sup> Brodie, War and Politics, 382.

of unmitigated horror, and so they are – in use."1216 But not all nuclear strategists had accepted this – and perhaps most famous among these doubters was Herman Kahn, who rose to fame for his seeming rejection of the inevitability of such "terrible potentialities," much as Henry Kissinger had gained notoriety for his willingness to consider in detail the potentiality for tactical nuclear warfare a few years earlier.

Brodie discusses - and rebuts - Kahn's thesis as put forth in On Thermonuclear War, which struck Brodie as particularly un-Clausewitzian, and which seems to more closely align with the Jominian school in its linearity and purely mathematical logic in discussing escalation toward total war than to the more philosophically complex and less self-consciously scientific inquiry of Clausewitz. As Brodie writes: "Herman Kahn, in the book that made his name a byword, set out to prove that, *provided* certain precautions were taken . . . the United States could survive a strategic thermonuclear war. By that he meant that the fatalities and other casualties, though very large, could be kept within limits that he considered tolerable, and that within a term of years that others might consider astonishingly short, say five to ten years, the country could be back to the GNP that it had enjoyed before the war. The special condition to which he attached such supreme importance was the provision in good time of adequate fallout shelters and other forms of civil defense . . . and also the storage in caves or man-made shelters of certain well-selected machine tools, the preservation of which would greatly assist in the reconstruction." <sup>1217</sup> Brodie noted Kahn had commented in a footnote that, "It is the hallmark of the expert professional that he doesn't care where he is going as long as he proceeds competently," and that Kahn had felt this was "a reasonable charge against his book," something with which Brodie "fully agrees, especially concerning the competence."1218 Brodie seems to salute Kahn for his unique "courage to explore as thoroughly as his exceptional ability and knowledge permitted the character of a 'general war' with thermonuclear weapons," something that distinguished Kahn from "other writers in the field of strategy, including myself." 1219 And yet, Brodie added, "having expressed this tribute I must take part of it back by declaring that while Kahn cared well enough where he was going, he was helped along by an optimism that has in some critical respects turned out to be unwarranted."1220 Brodie noted that "the precautions that Kahn deemed absolutely essential before his somewhat roseate conclusions could be warranted have not been taken and it is now abundantly clear that they will not be," as America had "reacted violently against the fallout shelter program studied and proposed by Kahn," and that program had thus "collapsed and was never thereafter

<sup>1216.</sup> Brodie, War and Politics, 407.

<sup>1217.</sup> Brodie, War and Politics, 419.

<sup>1218.</sup> Brodie, War and Politics, 419.

<sup>1219.</sup> Brodie, War and Politics, 419-20.

<sup>1220.</sup> Brodie, War and Politics, 420.

revived."¹²²¹ Further, Kahn "assumed a situation in nuclear weapons that was fast changing for the worse," and he himself conceded his arguments "would no longer be valid a decade hence" without "significant and far-reaching" disarmament; but "that decade has passed, and with MIRV and other developments," the "great increase in the sheer quantity of destructiveness" rendered his assumptions obsolete."¹²²²²

Brodie also chastised Kahn for "being neither by training nor temperament sensitive to the vast psychological and emotional damage that a society like ours would suffer along with the physical devastation of a thermonuclear war," and as such believed Kahn had "undoubtedly underestimated the problems of recovery even from a war taking place under the premises he postulated."1223 Brodie noted "[p]ast wars and other disasters have proved the human being and his societal structure remarkably resilient, but there are limits," and one pitfall of thinking about the unthinkable is that "one cannot find any real parallels in history."1224 Brodie speculated that we could "intuit with some assurance . . . that democracy as we know it could hardly survive."1225 Ultimately, Brodie rebukes Kahn for not being properly Clausewitzian, observing while "Kahn could see reasons why this unspeakable sum of destruction might nevertheless have to be accepted rather than yield one's position on an important political dispute," Brodie himself could "imagine no such issue that is at all likely to arise." 1226 As Brodie further explains: "On the simple Clausewitzian premise that we have repeated throughout this book - that a war must have a reasonable political objective with which the military operations must be reasonably consonant – we have to work back from the assumption that 'general war' with thermonuclear weapons must never be permitted to begin, however much we find it necessary to make physical preparations as though it might begin."1227 So while Kahn "was obsessed with the notion that nations might habitually play the game of 'chicken,' which is to keep rigidly to collision course waiting for the other side to yield," Brodie believes while this may sometimes be true, we must nonetheless "not give up the search for all possible preventives that might be effective against such collision," and furthermore, that the "leaders of no nation will wish to risk the total destruction of their country, and one of the things we have been learning over the past twenty-five years is that there are indeed many stopping points between friction, even some measure of combat, and all-out war." 1228

<sup>1221.</sup> Brodie, War and Politics, 420.

<sup>1222.</sup> Brodie, War and Politics, 420.

<sup>1223.</sup> Brodie, War and Politics, 421.

<sup>1224.</sup> Brodie, War and Politics, 421.

<sup>1225.</sup> Brodie, War and Politics, 421.

<sup>1226.</sup> Brodie, War and Politics, 421.

<sup>1227.</sup> Brodie, War and Politics, 421.

<sup>1228.</sup> Brodie, War and Politics, 430.

Brodie remains confident that "we have ample reason to feel now that nuclear weapons do act critically to deter wars between the major powers, and not nuclear wars alone but any wars," and he finds this to be "really a very great gain," one "we should no doubt be hesitant about relinquishing." And, Brodie adds: "We should not complain too much because the guarantee is not ironclad," since it's "the curious paradox of our time that one of the foremost factors making deterrence really work and work well is the lurking fear that in some massive confrontation crisis it might fail. Under these circumstances one does not tempt fate." 1230

Kahn's lengthy, and unapologetically optimistic treatise, On Thermonuclear War, and also his sequel Thinking About the Unthinkable, reveal Kahn to be much less afraid of the dangers of war in the nuclear age, including thermonuclear war, and thus much more comfortable imagining the world after deterrence had failed than Brodie – though Brodie and Kahn were more alike, and their thinking evolved in a far more parallel fashion, than their reputations. On Thermonuclear War largely dismisses the many real dangers of general war and post-deterrence hostilities that Brodie so greatly feared, generating controversy while at the same time generating great interest in the subject, though Kahn's levity was not nearly to the extent parodied by Kubrick in his dark comedy of the nuclear era. To Kahn, the greater danger lay in not preparing to fight and win such a conflict, and not being prepared to think about such potentialities. It is interesting to note that Brodie was critical of Kahn's approach, and in particular his levity, as evident in their correspondence prior to publication of *Thinking About* the Unthinkable. On January 19, 1962, Brodie wrote to Kahn, noting he had received a copy of Kahn's Thinking About the Unthinkable, which he would comment on in subsequent dispatches. In this first letter on the subject, Brodie noted, "I have just received your manuscript, "Thinking About the Unthinkable," and will try to get it read over the weekend. It looks like it will be pleasant and easy reading."1231 While he had not yet had time to immerse in it, he did observe right from the get go an issue of historical accuracy he felt required attention: "Incidentally, I think I detect an error in the very first paragraph of Chapter 1, relative to your clause: 'No level of English society was immune from having its daughters seized and used.' I find it simply impossible to believe that upper-class or even middle-class English society was not immune to this hazard, at the end of the Nineteenth Century or at any other time. It seems a pretty late date even for the lower classes to have suffered large scale abduction 'by force' of their daughters. By fraud, perhaps yes, but by force – show me."1232

<sup>1229.</sup> Brodie, War and Politics, 430.

<sup>1230.</sup> Brodie, War and Politics, 431.

<sup>1231.</sup> Brodie, letter to Kahn, Jan. 19, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1232.</sup> Brodie, letter to Kahn, Jan. 19, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

The next week, on January 25, 1962, having begun to review Kahn's manuscript, Brodie wrote again to explain, "Your manuscript is taking me longer to read than I had bargained on. I did not have a whole week-end to devote to it, but I am reading a portion of it each evening. However, it reads very easily. You write immeasurably more lucidly and smoothly than you did when I first began reading manuscripts by you some years ago. There is no problem with style editing." <sup>1233</sup> Brodie took issue with the bulk of Kahn's manuscript, as well as its style, suggesting new readers might take offense:

In view of the apparent haste on your side, however, let me anticipate at least two comments that I know I should want to make in my final summation. First and most important, I think that parts of the book could be greatly condensed to benefit the whole. This is particularly true of the non-substantive, self-justifying chapters, like the first chapter, where you are in fact making a single, simple point: i.e., events which are greatly evil but also possible must not escape intelligent investigation and discussion. Some amount of blowing up and repetition is necessary to drive home even a simple and "obvious" point, but it can too easily be over-done. Anyway, since even your substantive chapters (at any rate, those I have read thus far) tend to repeat what you have written in OTW, you should aim at putting out a quite small, easily read book. Secondly, you have a personal style which your friends know and accept but which new readers are likely to find offensive. I am referring especially to your very frequent use of the first person, singular. I think you could very easily slice out some 60 to 80 per cent of phrases like "I think," "I believe," "I feel," etc. Frequently you even use such phrases in a way to suggest that your thinking thus and so settles the matter. Regardless of whether or not I agree with you (I usually do), I cannot avoid that feeling that you are giving too much credit to your intuitions. Hostile reviewers will charge you with intellectual immodesty. Thus, where reference to yourself is easily avoidable (I grant it is not always so), it should be avoided. 1234

Brodie's comments were presented in a manner that seems both supportive and encouraging, noting Brodie generally agrees with Kahn, but also cautioning Kahn that his style exposed him to the risk of being charged with *intellectual immodesty*. History shows that it was just this immodesty that bought Kahn notoriety. But there is at this point no suggestion in Brodie's comments of an underlying tension or envy as would be more apparent in Brodie's very public rebuke of Kahn's work in his introduction to *On War* in 1976. Brodie closed his letter kindly, noting "I am looking forward to seeing you and Jane on March 13," and in preparation for his upcoming visit, added, "And oh yes, please have someone send me instructions on how to get from New York to White Plains." 1235

<sup>1233.</sup> Brodie, letter to Kahn, Jan. 25, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1234.</sup> Brodie, letter to Kahn, Jan. 25, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1235.</sup> Brodie, letter to Kahn, Jan. 25, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

The next week, on January 31, 1962, Brodie wrote again to Kahn, this time having completed his reading of *Thinking About the Unthinkable* but this time delivering a more critical and pessimistic assessment of it. As Brodie noted, "Since writing my last letter I have finished reading your manuscript; 'Thinking about the Unthinkable.' In view of the fact that you are pushing through this manuscript in a hurry, I could not take the time to read as slowly and as carefully as I could otherwise have done. However, I did form some fairly solid impressions."1236 And these impressions, Brodie explains, were not nearly as positive as in his prior letter. But while more critical, Brodie aims to soften the blow by couching his criticisms within an apologetic tone, and also explaining that Brodie's intention is to be constructive, and to prevent Kahn's tone, and what Brodie feels to be an inappropriate levity for such a somber subject matter, from eroding Kahn's "presently considerable reputation." 1237 As Brodie writes: "I am, I regret to say, less optimistic about this book than I was at my previous writing. It seems to me to show, in its organization and its writing, that it is thrown together in haste. The writing is lucid enough, as I said it was in my previous letter, but it lacks the exciting formulations which one frequently encountered in your OTW and which reflected real brooding on your part ... I must also repeat with emphasis my remarks I made in my previous letter about the merits of condensation and of greatly cutting down the references to yourself. Forgive me for the very negative tone of this letter, but it seems to me you are rushing into print unnecessarily with a second manuscript which will do nothing to enhance your presently considerable reputation. If you want to write an essay justifying your thinking about the unthinkable, why not publish a long article in a magazine of wide circulation? Or if you think you have enough to say on that subject to warrant a small book, by all means write such a book but don't load it down with all sorts of other materials."1238

Brodie closes his letter with some comments on Kahn's style, and in particular his tendency to "lapse into levity," 1239 something the topic being addressed must, in Brodie's estimation, always be avoided. Kahn, of course, disagreed, and in his effort to shatter the nuclear taboos and generate a wider debate on the role of nuclear weapons in

<sup>1236.</sup> Brodie, letter to Kahn, Jan. 31, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1237.</sup> Brodie, letter to Kahn, Jan. 31, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1238.</sup> Brodie, letter to Kahn, Jan. 31, 1962, Bernard Brodie Papers (Collection 1223), UCLA. Brodie also commented, ". I remember, for example, your analogy to a structure that an architect designs not only fort the breezes of a summer's day but for storms and earthquakes and the like. I remember Fawn's reading it to me aloud when she came upon it. In the present manuscript I came upon nothing which would tempt one to pause and savor its full wording and meaning. You even have a few bloopers which show haste: for example, on page 206 you have a ship arriving "with two divisions of Chinese troops." That would be a ship of most gargantuan proportions, would it not? Incidentally, I do not think you realize how boring scenarios can be to people who do not use them for work purposes. The reader knows what you are describing has not happened and will not happen. What does happen in the future will be different. The detail therefore seems pointless. At least, that is the way scenarios always affect me."

<sup>1239.</sup> Brodie, letter to Kahn, Jan. 31, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

foreign policy and military doctrine, counted on his style to spark the very passionate debate that more scholarly writing like Brodie's tended not to spark. One can sense, in Brodie's comments, a widening of the gap between these two pivotal nuclear wizards, as one found wisdom and solace in the highest of philosophy and theory while the latter brought his wisdom deep into the cave, and to the masses there enchained. One can also get a glimpse of the incipient rivalry between these two friends and colleagues, and sense its parallel to that which came to mark the relationship between Clausewitz and Jomini a century before: "Let me please with you also that on the subject on which you write the slightest lapse into levity must be avoided. You are discussing a serious and terrible subject, and you do nothing to enhance the acceptability of your work by being occasionally (even if most infrequently) flippant. Avoid also terms like 'tit for tat' when you are talking about destruction of cities, and 'bonus' when you are talking about destruction of population. I think that tendencies of this sort on your part account for much of the hostility aroused by OTW. There is no use making pious protestations in some places when your phraseology in other places effectively nullifies them. So grim a subject does not exclude an appropriate kind of humor used very sparingly; but levity is never legitimate."1240 Brodie nonetheless, at this stage anyway, meant his comments to be constructive, and not disparaging, and added in closing, "I still look forward to seeing you on March 13."1241

Before commencing his review of Kahn's draft of *Thinking About the Unthinkable*, Brodie had been in discussion with Kahn about a visit to the Hudson Institute, at Kahn's invitation, and also about Brodie's potential membership at Hudson, also at Kahn's invitation. On January 4, 1962, Brodie wrote to Kahn after having been invited to join Kahn's institute, to which Brodie responded appreciatively, but also cautiously. As Brodie explained, "I am touched by your very warm letter, with its invitation to become a fellow member of the Hudson Institute. It is a privilege to be associated with you in any way, especially in one which increases the likelihood of being able to see you and talk with you from time to time." <sup>1242</sup> Brodie explained that he could only "tentatively" accept membership owing to his need to review the bylaws concerning the duties and obligations of members, and also to notify his "RAND superiors with the fact that I am accepting some kind of office in your institute." <sup>1243</sup> Brodie sought clarification on these issues from Kahn prior to January 12, and though he thought it unlikely he'd have to withdraw his tentative acceptance, he nonetheless wanted to proceed with cautiously, noting: "You see, I am getting to think like a politician, or,

<sup>1240.</sup> Brodie, letter to Kahn, Jan. 31, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1241.</sup> Brodie, letter to Kahn, Jan. 31, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1242.</sup> Brodie, letter to Kahn, Jan. 4, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1243.</sup> Brodie, letter to Kahn, Jan. 4, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

even worse, an operator!"<sup>1244</sup> With regard to a visit, Brodie was also cautious: "Concerning the matter of making a trip East to see you, I should like to do so very much. However, mostly for the reasons I mentioned in our last telephone conversation, I should like to make the trip contingent upon your having something fairly specific to talk over with me. The visit would, of course, have to be made on my own time, which is to say on annual leave from RAND."<sup>1245</sup> That being said, however, Brodie closed his letter warmly, writing: "Meanwhile give my warm thanks to Jane for the offer of the guest room, which I shall certainly take up when I make the trip. Give her also my love and best wishes (and to you as well) for the New Year."<sup>1246</sup>

In his January 19th letter acknowledging receipt of Kahn's draft of *Thinking About* the Unthinkable, Brodie noted that he had received "an invitation from Bill Fox of Columbia to come and lead a discussion which will take place somewhere around March 10 - though it will be a working day rather than a weekend," adding that "This is one trip I should like to combine with a visit to your place, taking up what I presume is your standing invitation. Will you be around at that time? Would your Institute be able to pay my freight? I should like to make the whole trip on private rather than RAND time."1247 Brodie followed up on this matter in his January 25, 1962 which was largely devoted to his critical feedback on Kahn's manuscript. He noted Columbia would be providing an honorarium, so he would only have to charge half his LA to NY airfare to the Hudson Institute. On February 9, 1962, Brodie was officially admitted as a member of Hudson, and as his letter of acceptance noted, he was "duly admitted as a Fellow Member of *Hudson Institute Inc.*," commencing March 1, 1962, and his acceptance letter was signed and dated on February 9, 1962 by Kahn himself. 1248 As things turned out, however, Brodie's membership proved to be problematic owing to RAND policies. In a February 16, 1962 letter to Kahn explaining the situation, Brodie said he had to reluctantly withdraw owing to a "change of policy" at RAND, which also required his colleague Albert Wohlstetter to withdraw his membership. 1249 As Brodie explained, "You are of course aware that the Hudson Institute is not being subject to any unusual or discriminating treatment," and added that a "ruckus in Congress is causing people to be sensitive about possible charges of 'conflict of interest.' Whatever we may think of the sense of such charges, it is a simple and non-corrupting matter to trim some sail in that kind of wind."1250 And

<sup>1244.</sup> Brodie, letter to Kahn, Jan. 12, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1245.</sup> Brodie, letter to Kahn, Jan. 12, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1246.</sup> Brodie, letter to Kahn, Jan. 12, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1247.</sup> Brodie, letter to Kahn, Jan. 19, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1248.</sup> Brodie, letter to Kahn, Feb. 9, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1249.</sup> Brodie, letter to Kahn, Feb. 16, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1250.</sup> Brodie, letter to Kahn, Feb. 16, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

so, Brodie concluded, "Please forgive me for any possible inconvenience caused by my about face. I trust I am still invited to visit you on March 13."1251 On February 22, Kahn's colleague, Max Singer, confirmed receipt of Brodie's letter and Singer's removal of Brodie's name from the Hudson membership roster. Singer wrote, "I have your letter of 16 February 1962," and "In accordance with your request I have removed your name from our official roster of Fellow Members. Since this action was taken before March 1st the Certificate you have can be treated as if it were void from its inception, and our records will reflect the fact that you never became a Member of the Hudson Institute, Inc."1252 Kahn also penned a letter to Brodie on February 22, writing "I was sorry to hear that you will not be able to become a member of the Institute. However, I both empathize and sympathize with your reasons; in fact they are pretty overwhelming."1253 He added that "Your changing your mind has caused us no inconvenience, only a sense of great loss. I am still looking forward to seeing you on March 13, and I have asked my secretary to enclose with this letter the instructions for getting here."1254 Owing to a clerical error, however, those instructions did not get enclosed with Kahn's letter to Brodie, so on February 28, 1962, Susan Hirsch, a research secretary for Herman Kahn, wrote to Brodie, explaining that there was "some slip-up regarding your request for directions," and with Kahn out of the office, she took it upon herself to include a new set of directions to ensure Brodie could navigate his way from Columbia to the Hudson Institute. 1255 Upon completion of his trip, on March 13, 1962 Brodie sent a letter to Max Singer with a tally of his travel expenses, with half being charged to the Hudson Institute and half to Columbia University. The total air cost was \$411.18, and Brodie's taxis to and from LAX came to \$11.00, with air travel insurance costing an additional \$10.00. Brodie's total travel cost came to \$432.18, with \$216.09 sought for reimbursement from Hudson.

The next year, on September 18, 1963, Brodie wrote to Kahn asking for a copy of Kahn's recent pamphlet, "Escalation and its Strategic Context;" he also asked for information on the book it was included in, and about the book's author: "Are we to assume it is Herman Kahn?" That Brodie did not know could be indicative of the absence of communication between these old friends and colleagues. It is not clear if Brodie's critical response to Kahn's *Thinking About the Unthinkable* and his concurrent withdrawal from membership in the Hudson Institute contributed to the cooling of their relationship. In his letter, Brodie added, "How are you anyway? And, how are

<sup>1251.</sup> Brodie, letter to Kahn, Feb. 16, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1252.</sup> Max Singer, letter to Brodie, Feb. 22, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1253.</sup> Kahn, letter to Brodie, Feb. 22, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1254.</sup> Kahn, letter to Brodie, Feb. 22, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1255.</sup> Susan Hirsch, letter to Brodie, Feb. 28, 1962, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1256.</sup> Brodie, letter to Kahn, September 18, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

things going? People sometimes ask me, as though I ought to know, which I think I should."1257 From Brodie's comments, one can sense that communication between Brodie and Kahn was not a frequent affair, and that Brodie was perhaps falling out of touch with his old friend and colleague. Brodie's wording seems to also suggest that Brodie was feeling somewhat snubbed, finding himself out of the loop with regard to one of the most widely regarded, and clearly one of the most controversial, members of strategic community. In his letter, Brodie wrote, "I know you must have read my article, 'What Price Conventional Capabilities in Europe?' in the May 23<sup>rd</sup> Reporter, reprinted in the current issue of Survival. You must have thoughts about it, and I would like to hear them. Alex, Nathan, and I are planning to do further work on the subject."1258 He closed his letter by noting, "I am leaving for a six-weeks trip to Europe tomorrow, but a reply from you will be preserved nicely until my return. Best wishes, As ever, Bernard Brodie."1259 Kahn responded promptly upon his return from traveling. On October 3, 1963, he wrote: "Dear Bernie, I just came back from a trip and found your letter waiting for me. I did, indeed, read your article in the Reporter magazine and found it, as usual, impressive, creative, and mostly sensible. I did note a certain strain of acidness in it which I do not usually associate with your writings. This sort of startled me but, later, when I checked the reaction of some of our colleagues to your article, I conjectured the reasons for it. To many of the analysts raising such questions of crossing the nuclear threshold, diminishing the role of the NATO alliance, or the relative sanity or sense of de Gaulle, or even the value of current proposals (which I, myself, favor) such as controlled response, is worse than heresy – it's a sign of senility. Yours for more penetrating senilities. My best regards to you and Fran, Herman Kahn."1260 Kahn's observation of a "certain strain of acidness" in Brodie's article, and which he did "not usually associate" with Brodie's work, is intriguing, though Kahn attributes it more to the passion of the doctrinal debate over flexible response strategies, and the belief among some deterrence theorists that issues like "crossing the nuclear threshold" were "worse than heresy," suggesting that doctrinal and theoretical split taking shape within the strategic community was hardening, furthering the distance between these two pivotal strategic thinkers.

Brodie's views on the matter, and his concern with the proposals being advocated by some of the warfighters, escalation dominators, and flexible responders, becomes clearer in an exchange of letters with Max Singer at the Hudson Institute the next year, in November 1964. On November 4, Singer wrote to Brodie, commenting on Brodie's June 1964 paper, "The Communists Reach for Empire" (P2916), which

<sup>1257.</sup> Brodie, letter to Kahn, September 18, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1258.</sup> Brodie, letter to Kahn, September 18, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1259.</sup> Brodie, letter to Kahn, September 18, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1260.</sup> Kahn, letter to Brodie, October 3, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

Singer said he read "with pleasure and profit." 1261 And, "Because so much of it seems to be right to me I wanted to send you the following comments," of which he felt his "most important comment," his fourth, was: "You say, 'I see no reason why we should let them (the Chinese) have the idea that they could fight such a war without being exposed to tactical nuclear weapons.' I believe that we have a very large interest in trying to shape the world in a way in which nuclear weapons have as small a role as possible. While this does not necessarily contradict your statement, I believe that statement is the clearest example of the lack of consideration in your paper of this fundamental policy objective of the United States."1262 On November 9, Brodie replied to Singer, "I cannot understand why people seem always to be displacing upward the place at which deterrence becomes really important. I am all for the concept of carrying the deterrence concept all the way up the ladder of hostilities levels, but we should avoid derogating from its special importance at low levels, above all at the hostilities threshold."1263 Two days later, on November 11, Brodie wrote a lengthy reply to all of Singer's comments on November 11, 1964, and in response to his fourth point, Brodie wrote: "I wish I could agree, but I am not sure that I can. We can pretend that nuclear weapons don't exist but we cannot make them not exist, and since they do exist we might as well recognize that we are deriving from their existence enormous benefits. War between the Russians and ourselves, and I think also between the Chinese and ourselves, is far, far less likely because they exist than it would be in their absence. (Emphasis added.)"1264 This singular point presents what might in fact be the most precise and efficient statement of nuclear realism borne of the Cold War period.

Brodie referenced the wider doctrinal debate under way as flexible thinking infused the strategic discourse, noting, "I hope you do not feel I am too sharp in my replies but, as was especially true in my previous letter, some of your points are similar to points made by others, with whom I have been jousting for some time. I have also learned that in this debate no one seems ever to succeed in convincing any opponent." He also noted the enclosed copy of a May 1, 1964 letter Singer had sent to Dr. Melvin Harrison of the Lawrence Radiation Laboratory in Livermore, outlining Singer's views of the "nuclear shape of the world," which included several elements including: the distribution of nuclear weapons and materials around the world; the state of weapon technology and its distribution; legal and institutional mechanisms, if any, for controlling distribution and use of nuclear weapons; precedents about and attitudes toward nuclear weapons and nuclear war ("how we get to 1975 may be as important

<sup>1261.</sup> Singer, letter to Brodie, November 4, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1262.</sup> Singer, letter to Brodie, November 4, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1263.</sup> Brodie, letter to Singer, November 9, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1264.</sup> Brodie, letter to Singer, November 11, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1265.</sup> Brodie, letter to Singer, November 11, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

as static description of the world at that time)"; and the general state of international relations. 1266 Singer had written: "The trick of course is to decide what we think we want. Then we can ask how we can point towards getting it, either by direct action or – probably more important – by letting our objectives in this area influence other policy choices." 1267

Brodie responded as follows: "I have no special comment on your letter to Dr. Melvin Harrison. I agree it would be a nice thing to be able to prevent, or at least slow down, what we call nuclear proliferation. I should be interested, however, in hearing some good ideas about how to do it." On November 12, Singer replied to Brodie, thanking him for his "prompt and thoughtful response to our paper," and noting he "would agree with most of your comments," but reiterating his belief in the value of a "clear breathing space in which it was accepted and understood and agreed we would not use nuclear weapons would seem to me to remove much of the poison from the system" and thus detoxify the "running argument" between civilian/military and American/ European "on whether we would introduce nuclear weapons." Singer conceded, "One can argue whether this would help or hurt deterrence of Soviet attack. I would like to think it helps, but I think we would agree that a marginal rational factor on that scale probably is not relatively important, at least today." He closed his letter, while standing firm on the non-use of tactical nuclear weapons and the preservation of the nuclear threshold, with the kind words, "Thanks again for your quick response."

Herman Kahn, in his own voluminous writing on nuclear war and strategy, and his distinctive response to the very same transformation of war that defined Brodie's work and which led Brodie to articulate the logic of deterrence so cogently, would logically advocate the necessity to look beyond the failure of deterrence, and to imagine how to navigate the new, complex, and fog-obscured strategic landscape in the event deterrence failed, and nuclear war broke out. For instance, consider Kahn's rebuke of "some finite-deterrence advocates" (in the company of, curiously, both "moralists" and "some extreme 'militarists'") that would seem to include Brodie, in his discussion of the 44th and final rung of his famous escalation ladder in *On Escalation: Metaphors and Scenarios*, that of "Spasm or insensate war." As Kahn observes: "It has come as a distinct shock to me that many people not only accept, in effect, the concept of spasm or insensate war, but assign a humanitarian value to it, arguing that if this is the only conception of war a country has (or discusses), war becomes 'unthinkable'

<sup>1266.</sup> Brodie, letter to Singer, November 11, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1267.</sup> Brodie, letter to Singer, November 11, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1268.</sup> Brodie, letter to Singer, November 11, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1269.</sup> Singer, letter to Brodie, November 12, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1270.</sup> Singer, letter to Brodie, November 12, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1271.</sup> Singer, letter to Brodie, November 12, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

or 'impossible' – or that deterrence is improved. Thus, there is a curious area of agreement between some extreme "militarists," some arms-controllers, and some members of the peace movement, although they arrive at their agreement from quite different assumptions and moral positions." <sup>1272</sup>

Of course, as we have seen, Brodie did not entirely neglect the topic of limited war and when it came to the defense of Western Europe was a strong proponent of escalation, particular with regard to the use of tactical nuclear weapons to blunt a Soviet conventional attack – and in his correspondence takes great pains to remind his peers and colleagues of this fact. Indeed, his written work looks well beyond basic deterrence, with the advent of thermonuclear weaponry as well as the continued vertical and horizontal proliferation of nuclear weapons forcing him to recalibrate the "absolute" nature of atomic weapons, and to recognize their increasingly relative nature, so much so that Brodie and Kahn dived into the topic of escalation across the nuclear threshold at around the same time. But it was Kahn that we would remember as becoming the voice of the warfighter, the thinker of the unthinkable, and not Brodie, much to Brodie's own frustration.

Brodie felt a similar frustration a decade earlier as Kissinger rose to prominence, to some degree fueled by the unacknowledged theoretical and doctrinal influence of Brodie, whose early ideas on limited war anticipated the issues that would later come to dominate the strategic nuclear discourse. As revealed in a September 6, 1957 memo to his editor, Max Ascoli, the publisher of *The Reporter*: "Dear Max: In all the current hoopla about 'limited war,' especially in connection with the Kissinger Book, there has been an under-current of attitude that the idea is new. I wonder if you remember the article I wrote for you and which you published in your issue of November 18, 1954 It was entitled 'Unlimited Weapons and Limited War,' and if you can find the time to scan it, you will find that it anticipated all the basic issues which are being so much discussed now. Oddly enough, I have never seen any reference to that article anywhere else. It is even omitted from the bibliography of Kissinger's book, though in his case I suspect the omission is deliberate and for petty motives. So far as I know, it was the first article directly on the subject in any journal, American or British. I thought you might be interested in knowing that. My own *Foreign Affairs* article of

<sup>1272.</sup> Herman Kahn, On Escalation: Metaphors and Scenarios (New York: Praeger, 1965), 195. Also reprinted as an excerpted chapter in Philip Bobbitt, Lawrence Freedman, and Gregory F. Treverton, eds., U.S. Nuclear Strategy: A Reader (London: Macmillan, 1989), 332-333. Kahn further observes: "Some moralists and some finite-deterrence advocates are against studying limitations and restraint in central wars for fear that it might cause it to be too ready to resort to war. Some militarists (and many Europeans) are against the study of limitation and restraint in central war because they feel that by appearing to reduce the consequences of deterrence-failing, such studies also decrease the reliability of deterrence; and they may fear, too, that these studies might simultaneously erode U.S. or Allied determination and will. Thus, there are those who believe that this ultimate escalation option should not only be available, but that it should, either by default or deliberately, be the only option – no others being planned for. Hence the rung is included in the escalation ladder; although the original purpose for its inclusion, to dramatize – perhaps unfairly – a lack in official thinking, has been fulfilled."

the January preceding came somewhat close to anticipating the subject; I had also been writing classified memoranda on limited war for at least two years preceding the *Foreign Affairs* article; but my first published treatment of the subject was in the article in your journal."<sup>1273</sup> Brodie was correct to point out his contribution to the limited war literature, both classified internal documents as well as public articles. But history often is myopic, responding less to the substance of historical dialogue and more to its style. Brodie's style, and Kahn's, were widely divergent, much like Brodie's and Kissinger's had differed, with Kissinger becoming a very powerful statesman shaping and guiding American foreign and military policy, and Brodie remaining an outsider, like the frustrated Machiavelli in an unending exile from power and influence. Both Brodie and Kahn thought about the unthinkable, the former with greater theoretical sophistication than the latter. But it is the latter whom most will remember for not only thinking about the unthinkable, but for planning the unthinkable – and for boldly imagining the world the day after deterrence failed.

Brodie had also discussed limited war in his February 1956 Naval War College presentation, when he suggested that we needed to experience a revolution in the way we think about war and peace in the nuclear age, to mirror the revolution in military technology that had been fostered by the splitting of the atom: "Today we speak of limited war in a sense that connotes a deliberate hobbling of a tremendous power that is already mobilized – for the sake only of inducing the enemy to hobble himself to comparable degree. We have to admit that it offends against some of the most cherished ideas and doctrines of what we consider to be classic strategy. ... There has to be a revolution in ways of thinking about war and peace, among civilians and military alike, before we can even undertake to deal with the many technical problems of limited or peripheral war. That revolution will not be easy to accomplish." 1274

Brodie's closing words present a snapshot of his most enduring contribution to the study of total war, a lesson that Clausewitz had sought to articulate but which also largely went unheard by those moved by more practical, less nuanced, Jominian thought: "Anyway, we must get away from thinking about war and peace in terms of all or nothing. Such is the sweet voice of reason. But what we come up against immediately is the fact that passion and fear have also been inseparable from war, that the resort to arms is itself enough to stimulate in those who do so a powerful flow of adrenaline, which promotes the forceful handling of those arms. War, in other words,

<sup>1273.</sup> Brodie, memo to Max Ascoli, September 6, 1957, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1274.</sup> Brodie, "Influence of Mass Destruction Weapons on Strategy," 20-21. Brodier further writes: "It is all very well to outline what reason dictates: that neither the Soviet Union nor the United States wants to destroy the other if in the process it also destroys itself, that every casus belli tends at least to start with a certain geographic identification and with a conflict of purposes such as can usually be described in modest and particular rather than global terms. All that is necessary, seemingly, is to keep the quarrel limited to the terms on which it began. In the past small powers were sometimes given guarantees that could not be fulfilled except by resort to general war, but presumably that kind of guarantee is now out of date."

does have an inherent and almost necessary tendency to be orgiastic. But that does not argue that we can afford to surrender to that tendency, or that we must use our reasonable moments during peace to concoct doctrines and strategies that imply lack of reason in war." 1275 And so counseled Brodie, once the high priest of the dangerous dark art of nuclear war and the founding father of America's deterrence strategy.

As recounted by Newell Bringhurst, Brodie felt "disappointed at not having been asked to join the New Frontier defense analysts in Washington following John F. Kennedy's 1960 election. His expectations had been raised as the new secretary of defense, Robert S. McNamara, recruited a number of Brodie's colleagues at RAND. Brodie himself seemed destined for appointment, given his well-known Democratic leanings - and the fact that John F. Kennedy himself had personally expressed his favorable reaction to Bernard's recently published Strategy in the Missile Age." 1276 But working against this ambition, "Brodie's views on tactical nuclear warfare were at variance with those of important officials in the Kennedy administration. His reputation as a loner – not a team player – also worked against his appointment. He was, according to at least two close RAND associates, outspoken and unwilling to 'adapt his views to ... conventional wisdom.' Brodie himself blamed his longtime nemesis at RAND, Albert Wohlstetter" who "had been able to 'gather round himself a veritable court' of individuals at RAND, including Alain Enthoven, Henry Rowen, William Kaufmann and Daniel Ellsberg - individuals who, according to Brodie, were 'not quite of the first rank intellectually, but nevertheless very able.' Yet Wohlstetter had an inside track that enabled to get his people appointed. 'All of the so-called 'whiz kids' around McNamara were either members of [Wohlstetter's] original RAND following ... or people who were intellectually beholden to them,' Brodie claimed, whereas he himself, not being one of Wohlstetter's favored persons, was passed over."1277 Brodie "was active in his own research and writing" and "continued to be outspoken and blunt regarding American foreign policy, and his views reflected the deep division of opinion among RAND people." His May 1963 article in *The Reporter* ("What Price Conventional Capabilities in Europe") "further isolated him various RAND colleagues. According to one observer, Bernard 'occasionally displayed a savage temper and a bristling ego, especially if he thought others were robbing his ideas."1278

Then, in 1966 Brodie "published *Escalation and the Nuclear Option*," and this "controversial study called for deployment in Europe of tactical nuclear weapons, with the threat of using them, if need be. In arguing his position, Brodie took issue with strategists promoting the deployment of large conventional forces, which he thought

<sup>1275.</sup> Brodie, "Influence of Mass Destruction Weapons on Strategy," 21-22.

<sup>1276.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 162.

<sup>1277.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 163.

<sup>1278.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 168.

a waste of hundreds of billions of dollars. He discounted the threat of war posed by nuclear deployment, arguing that the very existence of such weapons – and the adoption of an unequivocal poli[c]y to use them – were prime guarantees of preventing war in the first place. This thesis opposed the conventional-war position of the then secretary of defense, Robert S. McNamara, and the stance of many of Brodie's RAND colleagues."<sup>1279</sup>

And so, Brodie would soon find himself eclipsed by theoretically less rigorous minds, pragmatists and politicos better suited to the formation of doctrine than the high art of theory, men like Henry Kissinger who would wield the bomb as a diplomatic tool, a saber to be rattled, and like Herman Kahn, who more readily embraced the orgiastic nature of atomic destruction with a "What, me worry?" attitude that helped propel him to pop-stardom as the living embodiment of Dr. Strangelove. Brodie, meanwhile, ever the theoretical purist, would see his intellectual influence wane. But his canon of work, his richly textured theory infused with historical knowledge and his unique philosophical inquiries into the nature of war, its all-important connection to politics, and its inherent dangers, would remain his legacy — to be unearthed for a new generation that would continue to face the same worrisome intermixture of nuclear proliferation amidst the persistence of war.

## **Escalation: Some Preliminary Observations**

In a September 13, 1962 working paper prepared for U.S. Army Major General Harold K. Johnson, who was "chairman of a special study group on the staff of the Joint Chiefs," <sup>1280</sup> Brodie incisively outlines many of the salient issues associated with "escalation" – one of the new terms that Brodie would later describe as being in "wide use of late," part of a new wave of "fashionable jargon" that emerged once deterrence had stabilized with the unprecedented "degree of security built into the strategic retaliatory forces of the two major nuclear powers" in the early 1960s. <sup>1281</sup>

While in later years Brodie would lament being perceived as something of an opponent to the "limited war" school, he was in fact one of the first to recognize the need for limited war in thermonuclear era when his earlier description of atomic weapons as *absolute* weapons proved premature, just as the dangers of general war increased so dramatically that the tactical use of nuclear weapons, even the new superbombs, became a necessary tool to prevent escalation to general war and to signal the West's determination to defend its interests from the specter of Soviet attack. This was evident

<sup>1279.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 183.

<sup>1280.</sup> Bernard Brodie, Preface, "Some Preliminary Observations on Escalation," RAND Working Paper, September 13, 1962, ii.

<sup>1281.</sup> Brodie, "Some Preliminary Observations on Escalation," 4, New Preface S/M

in his entire chapter devoted to the subject of limited war (titled appropriately, "Limited War") in *Strategy in the Missile Age*, not to mention the many papers, articles and speeches that he authored in the years preceding that work's publication that reflected this self-same recognition of necessity to fight limited wars. The topic of escalation was thus a topic of interest to Brodie early on; and while his published monograph on the topic would follow that of Herman Kahn by several months, and his lengthy internal RAND report on the same topic (and with nearly the same identical content) would appear the same year as Kahn's widely read work, Brodie actually first put pen to paper several years earlier with an introductory paper dated September 13, 1962 that outlined his thoughts and which to a large degree mapped out his argument that would be elaborated in the longer report, and ultimately published as a book four years later by Princeton University Press.

Like many classic works of strategy, dating as far back as Sun Tzu's famous thirteen chapters, Brodie's preliminary work on escalation was tidy and succinct, just fourteen pages long and presented into 23 specific points. These digestible, bite-sized points were tailor-made for the professional military audience, and its pressing need to boil down complex analyses into actionable maxims suitable for the demanding realities of war. A marked departure for Brodie, whose style of theorizing tended to reflect the bulkier literary style of philosophers of war like Clausewitz more than the precisely calibrated style of theorists like Jomini who boiled down the principles of war into similarly bite-sized units as Brodie now presented, "Some Preliminary Observations on Escalation" demonstrated that behind the veil of secrecy that obscured his classified work from public sight, Brodie was nonetheless able to digest war's awesome complexity and boiled down its complicated essence for practitioners of the art of war to handily apply.

While not as well known for this art, and quite the critic of those whose works favored boiling down over elaboration, it is intriguing that in the contest to define the challenges of escalation and its solutions, Brodie was among the very first out of the gate, even if in the end he was not recognized for firing the first – and potentially most succinct – shot fired in the escalation battles. Moreover, while later critics would over-emphasize Brodie's early belief that the bomb was so absolute that it could only be used to deter war and not to fight one (lest it court national suicide and thus break ranks with Clausewitz's impassioned prescription that war remain linked to its political objectives and that the means thereby remain consistent with the ends sought), and some would thus attack Brodie for emphasizing one Clausewitzian dictum while ignoring another, the confounding importance of the frictional dimensions of war, which prevented war from attaining its absolute potential, Brodie explores in great detail the many frictional components of escalation, including the emotional dynamics as well as the inherent uncertainties and relativisms of intuition. So while later,

theorists like Herman Kahn would elucidate the many granular levels of escalation ladders, Brodie would instead shine a light on all the frictional dynamics unleashed that would obscure, and thereby invalidate, the simple, machine-like, mathematically deterministic elegance of linear, logical, rational steps up or down that ladder, when in realist all escalations would be shrouded in many layers of obscuring fog.

In his first point Brodie observes that the "subject of escalation has been much talked about, but very little thought about," and that a "quick survey of the relevant literature reveals little systematic exploration of the meaning of escalation and of the factors bearing upon it" with "many stated assumptions concerning probabilities of escalation under particular contingencies, but the relevant factual or logical bases for these assumptions are rarely made explicit."1282 Moreover, Brodie notes that "[m]ost of the meager writing on escalation is concerned with one factor bearing on the subject -- the use or non-use of tactical nuclear weapons" while "many other factors are ignored." He aims to remedy this shortfall. 1283 His second point is that "[a]ssertions concerning the chances of escalation under particular contingencies are usually derived from intuition," a danger of which is the inescapable fact thar "one man's intuition is not another's ... who brings a different body of experience and different sets of conscious premises and unconscious biases to bear." 1284 Brodie ties this relativism of intuition to the recent debate on the use of tactical nuclear weapons in Europe, noting that "it seems to some perfectly clear that even in Europe the introduction of tactical nuclear weapons would be a much more shocking and disequilibrating event in a limited war than, say, the outbreak of hostilities in the first place or the sharp increase of the level of conflict from a few battalions to something comprising the whole of the ground forces on both sides" while others instead may "remember vividly the shock effect of numerous events in World War II besides the introduction of nuclear weapons such as the German breakthrough in France in May, 1940, the German attack on the Soviet Union in June, 1941, or the Pearl Harbor attack" and thus "question the above-mentioned assumption."1285 And while it would certainly "be difficult to .prove either point of view" Brodie nonetheless concludes that it "would help if on the major issues we could make all grounds for holding certain beliefs as explicit as possible."1286 And so he thus proceeds; first by elaborating upon "The Difficulty of Quantifying Probability Estimates," noting in his fourth point that, "Even a great deal of thought and examination is unlikely to produce usable formulations expressed in specific values of probability," with only a few scenarios so high or low in likelihood that they can be

<sup>1282.</sup> Brodie, "Some Preliminary Observations on Escalation," 1.

<sup>1283.</sup> Brodie, "Some Preliminary Observations on Escalation," 1.

<sup>1284.</sup> Brodie, "Some Preliminary Observations on Escalation," 1

<sup>1285.</sup> Brodie, "Some Preliminary Observations on Escalation," 1-2.

<sup>1286.</sup> Brodie, "Some Preliminary Observations on Escalation," 2.

presented as either a "virtual certainty" or a probability that's "almost zero," while the rest find themselves along a "great range where we are obliged to use terms no more specific than 'highly probable,' 'rather probable,' or 'rather improbable,'"1287 and thus offering little practical value. His fifth point adds that "[t]00 many available adjectives are worn out from overuse, and there is therefore a common tendency to use terms more extreme than one might be willing to defend," so much so that "when a distinguished writer of more than usual insight and reliability (who has also contributed more than anyone else to our understanding of escalation)," and who is revealed in a footnote to be none other than Thomas Schelling, "asserts that the tactical use of nuclear weapons in limited war increases the chances of escalation to general war 'by an order of magnitude,' he is using that phrase in a rhetorical sense and not at all in the mathematical sense signifying 'by a factor of ten.' He is merely stating forcefully that, in his intuitive judgment, introducing nuclear weapons ... greatly increases the chances of escalation."1288 Brodie adds in the footnote revealing this "distinguished writer" to be Schelling that he did "not present this remark as a reason for being opposed to the introduction of tactical nuclear weapons in a limited war" but instead "argues, on the contrary, that the demonstration might be necessary, so long as we know what we are doing, which in his opinion is threatening the imminence of general war."1289

Brodie next turns to "The Emotionally Charged Environment of Limited War," similarly embedding his analysis in an important element of Clausewitzian friction. In his sixth point, Brodie points out how the "usual discussion of escalation ignores the fact that not only nuclear weapons but war itself invariably and deeply involves the emotions, especially those emotions loosely described as anger and fear," 1290 and this recognition of the importance of the emotional reality of escalation (and war more generally) is made a full three years before Herman Kahn's On Escalation: Metaphors and Scenarios helped to strip escalation of its emotional core (contributing, as part of a broader literature that sanitized escalation into a mathematical exercise divorced from emotional and political realities that included works of such pre-eminent theorists as Thomas Schelling, to the blind logic that fueled the Vietnam War's continual but ultimately fruitless, but ever so lethal, escalations which somehow turned a series of battlefield victories into a tragic political and strategic failure.) Brodie explains that "[w]ars simply cannot be fought without such involvement" and while "[s]trong emotion does not negate rationality" he points out that "it powerfully affects it." 1291 Foreshadowing the tragedy of Vietnam, Brodie noted that the emotional dimensions

<sup>1287.</sup> Brodie, "Some Preliminary Observations on Escalation," 2.

<sup>1288.</sup> Brodie, "Some Preliminary Observations on Escalation," 2-3.

<sup>1289.</sup> Brodie, "Some Preliminary Observations on Escalation," 3

<sup>1290.</sup> Brodie, "Some Preliminary Observations on Escalation," 3.

<sup>1291.</sup> Brodie, "Some Preliminary Observations on Escalation," 3.

of escalation are reflected in the "difficulty of ending wars, because the losing side usually postpones as long as possible acceptance of the fact of defeat."1292 In his seventh point Brodie further notes that, "when one asserts that in a postulated limited war the Russians would not do thus-and-so (e.g., use nuclear weapons if we did not) because it would be 'contrary to their interests,' one seems to overlook the fact that the very outbreak of hostilities generally argues some strong irrationality somewhere," and that the "Russians are bound to see their interests and to appraise the factors which bear upon the military and political situation in a quite different way from us. Certainly the Japanese did so at the time of Pearl Harbor." 1293 Brodie cautions that we must therefore "try to understand the opponent's views of his interests, because we have to be ready to bargain with him both by act and by word. But in the highly charged atmosphere of conflict we should be ready for surprises, including some surprises concerning our own reactions."1294 Emotional reactions are part of the political and strategic landscape and must not be overlooked; Brodie notes in his eighth point that "[w]hen President Truman made the decision to resist by force communist aggression in Korea in June, 1950, his response was an emotional one" but "it was also, so far as we could see then or now a highly rational one."1295 And while "[t]here were probably several quite different kinds of rational action conceivable," Brodie observes that "the particular one chosen was largely determined by emotion."1296 Other emotions came into play, as America's Korean "involvement was later to engender dismay, alarm, and anger over our defeats at the hands of the Communist Chinese, and present from the first was fear that the Russians were using Korea as a diversion while preparing an attack in Europe."1297 Brodie's next point adds that this "latter fear, which turned out to be entirely unwarranted, was felt strongly even on the level of the Joint Chiefs, and it exercised a predisposing force on policy decision" and "helped us keep under tight control the emotions aroused by the Korean involvement," which contributed to America's ability to "demonstrate in that conflict several historically unprecedented restraints"1298 and demonstrate both the military and emotional viability of keeping wars limited.

Brodie next considers the many "Meanings of the Term "Escalation," noting that the term's "most common use ... refers to a change from limited to general war," and that "the term itself connotes the idea that the progress from-one condition to the

<sup>1292.</sup> Brodie, "Some Preliminary Observations on Escalation," 3.

<sup>1293.</sup> Brodie, "Some Preliminary Observations on Escalation," 4.

<sup>1294.</sup> Brodie, "Some Preliminary Observations on Escalation," 4.

<sup>1295.</sup> Brodie, "Some Preliminary Observations on Escalation," 4.

<sup>1296.</sup> Brodie, "Some Preliminary Observations on Escalation," 4.

<sup>1297.</sup> Brodie, "Some Preliminary Observations on Escalation," 4.

<sup>1298.</sup> Brodie, "Some Preliminary Observations on Escalation," 5.

other can be by-stages, which may, however, be traversed rapidly."1299 Brodie adds that "[s]ome further refinement has lately crept into the discussion and the term may now refer to changes: (a) in yields (from non-nuclear weapons to small nuclear weapons, and from small nuclear weapons to large ones), (b) in types of target (with a regressing order of relevance respecting army operations; or one may speak of tactical targets with minimum civilian damage as against tactical targets with large civilian damage), and (c) in zones of targetting (leading from the. theater where contact exists between the opposing armies to the ZIs of both sides, which is general war). Another kind of escalation, which might be fitted under (b) or (c) above but which is also somewhat distinctive. is the change from observance to non-observance of certain tacitlyaccepted sanctuaries." 1300 And, point eleven, Brodie suggests that "another and most important kind of change. which is rarely considered as escalation but which clearly ought to be so considered, is that of rapid increase in the sizes of the tactical forces committed to action, even if they confine themselves to using conventional weapons,"1301 a point Brodie had been arguing for the better part of a decade against an increasing chorus of conventional war in Europe (CWE) advocates (known to some as firebreak theorists), as he pointed out, "It is interesting that the standard argument in favor of larger conventional forces in Europe not only tends to assume considerable ease of escalation in the size of forces committed but, even more, seems on examination to be willing to make it easy for this kind of escalation to take place ... by attempting to suppress the threat that increase in scale of commitment will trip use of nuclear weapons."1302 History suggests caution when increasing conventional force levels in Europe, and Brodie speculates that "[i]f escalation in size of forces is in fact (especially in Europe) a very dangerous as well as intrinsically destructive kind of escalation, it might be well to seek means for inhibiting rather than encouraging it; one way to discourage it would be to threaten to bring in nuclear weapons relatively early, or actually to do so. In this respect the threat or actual use of tactical nuclear weapons may be counter-escalatory."1303

Ultimately, escalation is at heart part of a process that calibrates the amount of, type of, and location of force used with the political objectives in an inherently Clausewitzian fashion, and so Brodie turns his attention next to "A Contest of Will over Political Objectives" that defines and contextualized escalation. In his twelfth point, Brodie observes that a "limited war between powerful opponents is not merely a matter of military capabilities" but is in fact "a contest of will over political objectives which

<sup>1299.</sup> Brodie, "Some Preliminary Observations on Escalation," 5.

<sup>1300.</sup> Brodie, "Some Preliminary Observations on Escalation," 5-6.

<sup>1301.</sup> Brodie, "Some Preliminary Observations on Escalation," 6.

<sup>1302.</sup> Brodie, "Some Preliminary Observations on Escalation," 6.

<sup>1303.</sup> Brodie, "Some Preliminary Observations on Escalation," 6.

is influenced by existing military action and the threat of introducing additional force."1304 Brodie explains that "[t]his follows from the fact that the sources of military strength of both major opponents are not immediately at risk in a limited war; both have important ,even dominant, military capabilities that are not yet committed to the local struggle," and as a consequence, "military capabilities can be used to demonstrate that one has the political resolution and determination to exact a high price of the opponent for his actions, and to test the latter's willingness to pay it," and this "may serve to keep a local war from growing rapidly and perhaps unnecessarily." 1305 In his thirteenth point Brodie introduces two propositions "concerning escalation" that "can be accorded very high probability," the first being a "new and higher level of violence introduced by one side in a conflict is highly likely to be at least met by the other side, so long as the latter possesses the appropriate capabilities and is not ready to relinquish its position,"1306 and the second that "[i]n war, levels of violence tend almost always to move upwards, rarely downward, until the actual ending of the conflict by armistice or capitulation." 1307 Both are highly probably because "they show a high degree of historical persistence" and "the psychological and other reasons for that persistence are relatively easily observed or intuited."1308

Brodie next looks to "What Constraints Do We Have on the Russians?" in which his fourteenth point is presented, in which Brodie notes while "we can assume that if we use tactical nuclear weapons in a European limited war, it is highly likely the Russians will do likewise" but it remains unclear if the opposite is true – that is, "whether the Russians will be likely to refrain from using them if we refrain and have promised in advance to do so." While Brodie suspects that "[s]ome constraint in that direction we would undoubtedly be exercising," he asks: "but is it a strong constraint?" The answer depends in large measure on "the Russian view of what is 'natural' or 'bizarre' with respect to the use in the field of modern weapons." Brodie notes how, "[u]ntil very recently a proposal to avoid use of nuclear weapons in any substantial hostilities with the Soviet Union, especially hostilities taking place in Europe, would have struck most informed Americans as bizarre" but "now it seems to strike some Americans as quite natural," but it still remains quite unclear whether there is "good reason for supposing that the Russians have made a similar transition in their thinking, or that they

<sup>1304.</sup> Brodie, "Some Preliminary Observations on Escalation," 6.

<sup>1305.</sup> Brodie, "Some Preliminary Observations on Escalation," 7.

<sup>1306.</sup> Brodie, "Some Preliminary Observations on Escalation," 7.

<sup>1307.</sup> Brodie, "Some Preliminary Observations on Escalation," 8.

<sup>1308.</sup> Brodie, "Some Preliminary Observations on Escalation," 8.

<sup>1309.</sup> Brodie, "Some Preliminary Observations on Escalation," 8.

<sup>1310.</sup> Brodie, "Some Preliminary Observations on Escalation," 8.

<sup>1311.</sup> Brodie, "Some Preliminary Observations on Escalation," 8.

are highly likely to do so."<sup>1312</sup> While Brodie cannot determine with any measurable degree of probability whether the Russians would "conceive it to be in their interest to launch an aggression with conventional weapons alone if we convinced them we were (1) committed not to accept a significant loss of territory and (2) had nuclear weapons available for tactical support of our forces, even if these were reserved to the control of higher command levels," Brodie does believe it to be probable that the Russians would "(as has been true thus far) choose to refrain from aggression under those circumstances, but if so the thanks are due to something other than our promises to refrain for a while from using nuclear weapons"<sup>1313</sup> and can be attributed more likely to the workings of deterrence and the implicit threat of escalation by means of retaliation should they pursue aggression Europe.

Brodie's final section considers possible "Methods of Investigation" and thus outlines the research agenda necessary to address the many unmeasured probabilities associated with escalation that currently rest only on imperfect intuition. As Brodie describes in his fifteenth point, "Most of the above observations indicate the value of investigating problems of escalation through the examination of numerous scenarios, positing circumstances as varied as the disciplined imaginations of the participants can make them," but despite this appeal Brodie notes that the "pursuit of scenarios is not a panacea," and even though "unplanned or accidental issues which can dominate the outbreak of political and military crises are indeed frequently inserted into scenarios," Brodie points out that "accidents are by definition atypical, and the whole range of significantly different possible accidents is beyond imagination." <sup>1314</sup> Moreover, just as accident is by nature an unpredictable element, "the constraint imposed by emotion in a diplomatic or military crisis is hard to capture under scenario writing or gaming conditions,"1315 leaving its impact as much to chance and fortune as earlier theorists like Clausewitz and Machiavelli posited long ago. And, Brodie adds, "it is easier to vary accidental events than basic assumptions about the behavior of the enemy and even ourselves, and these can easily be too rigid. All this being said, it remains to add that any single scenario which tends to become standard and all too familiar is almost bound to be wrong as an approximation of future reality: as the "significant variations that reality may take in the future are too abundant for that." <sup>1316</sup> While several years before Herman Kahn's widely read On Escalation: Metaphors and Scenarios would be published, Brodie not only anticipates the approach that will continue to gain traction in the emergent field of escalation studies, but soundly deflates what would become the principal approach to the problem.

<sup>1312.</sup> Brodie, "Some Preliminary Observations on Escalation," 8.

<sup>1313.</sup> Brodie, "Some Preliminary Observations on Escalation," 9.

<sup>1314.</sup> Brodie, "Some Preliminary Observations on Escalation," 9.

<sup>1315.</sup> Brodie, "Some Preliminary Observations on Escalation," 9.

<sup>1316.</sup> Brodie, "Some Preliminary Observations on Escalation," 9.

As for the specific issue of accidental war, dramatically portrayed in Sidney Lumet's 1962 novel *Fail Safe* the very year of Brodie's first effort to flesh out his thoughts on escalation, Brodie writes in his sixteenth point that that "we should distinguish sharply between accidents of circumstance by which and within which crises are developed, and the so-called 'accidental war,' which connotes an outbreak of conflict that neither side has desired or really wants to press" such as "local bluffs being unexpectedly called." Thus, "To say that accidental war is a possibility worth a good deal of thought is not the same as saying that a conflict breaking out in Europe is more likely than not to be of the accidental variety. The latter proposition, which is made frequently, deserves to be very carefully examined, because the whole concept of limitation and escalation is greatly affected by it." 1318

In his seventeenth point Brodie addresses the most likely scenarios of escalation, writing that it "seems clear that under many different kinds of scenario conditions, two general considerations will dominate the probabilities of total escalation to general war," the first being "the importance of the outcome of the local action on the global position of each contestant," and the second being "the relative vulnerability or invulnerability of the major strategic striking forces." <sup>1319</sup> He further develops these considerations in his eighteenth point, noting that the relative importance "of the outcome of the local action on the global position" of the superpowers has "long been felt intuitively, accounting for the fact that limited war has generally been considered a more practical and likely contingency for the Far East and the Middle East than for Europe"1320 where extended deterrence has sought to closely bind the fate of America to that of its European allies, raising the stakes and the risks of escalation to general war more so than in peripheral areas where America more freely engaged in conventional combat with an intuitive expectation of a lower risk of general war. Though Brodie observes "[o]nly recently have there been proposals for confining wars in Europe to limited wars, and to large-scale though conventional limited wars at that, 1321" proposals that Brodie has strenuously opposed in his many papers, articles and speeches. As for the "relative vulnerability or invulnerability of the major strategic striking forces," Brodie notes "the prevalence of a feeling that if there does not yet exist a mutual standoff with respect to nuclear strategic striking forces, there will be such a condition soon,"1322 a situation that in fact emerged with the relentless modernization of the nuclear forces of both superpowers and their concerted efforts to secure their retaliatory forces; with

<sup>1317.</sup> Brodie, "Some Preliminary Observations on Escalation," 10.

<sup>1318.</sup> Brodie, "Some Preliminary Observations on Escalation," 10.

<sup>1319.</sup> Brodie, "Some Preliminary Observations on Escalation," 10.

<sup>1320.</sup> Brodie, "Some Preliminary Observations on Escalation," 10.

<sup>1321.</sup> Brodie, "Some Preliminary Observations on Escalation," 11.

<sup>1322.</sup> Brodie, "Some Preliminary Observations on Escalation," 11.

the then current asymmetry, with American retaliatory forces more secure than their Soviet counterparts, Brodie notes that "it is sometimes argued that the Russians could probably reply devastatingly against targets in Western Europe even if they would not reply in comparable degree to a strategic first strike by us" and Brodie suggests that the "deterrence value for us in this kind of position – which presents us with a clear advantage and which has already lasted much longer than anyone would have predicted – needs to be examined anew, or rather continuously." <sup>1323</sup> Brodie finds that it "remarkable how far we have gone, and how quickly, in discarding a stance (i.e., massive retaliation) upon which until recently (and, no doubt, mistakenly) we were ready to hang everything" but as "we still have an unquestioned strategic superiority," Brodie adds, "issues of escalation are directly affected. Some of these same effects will hold good even in that long-promised but not-yet-arrived situation when the standoff in strategic nuclear response between the two major contestants is really mutual."1324 It is the dynamics of a more balanced, mutual nuclear-strategic standoff that Brodie next addresses in his nineteenth point, noting in such "a standoff situation we can see some marked inhibitions operating against the escalation from limited war to general war," leading Brodie to wonder, "how would such a situation affect escalation of violence within the framework of limited war? Do strong mutually-shared inhibitions against going to general war inhibit also the introduction of nuclear weapons in limited war?"1325 Brodie observes that "[w]e can see one constraint operating in that direction, namely the conviction, or at least strong feeling, that use of nuclear weapons may prompt escalation even to a mutually disastrous general war" while "[o]n the other hand, insofar as the standoff were genuinely and deeply felt to be such, it could easily have the opposite effect with respect to escalation from non-nuclear to nuclear weapons on the tactical level" as Brodie had long argued in response to the CWE advocates: "In other words, if one side or the other deems itself to be advantaged by the introduction of tactical nuclear weapons, it has the bracing assurance that both sides recognize it to be clearly and deeply in their interests to refrain from going to strategic nuclears. In short, stability at the top works to some extent against stability at lower and intermediate levels."1326

As Brodie approaches the conclusion of his preliminary sketch on escalation, he notes in his twentieth point that his "above remarks ... deliberately avoided certain important issues that are tangential to the question of escalation," including "the feasibility of tactical nuclear war, that is, whether troops as presently trained and equipped could really live in a nuclear environment, or, if not, whether they could be

<sup>1323.</sup> Brodie, "Some Preliminary Observations on Escalation," 11.

<sup>1324.</sup> Brodie, "Some Preliminary Observations on Escalation," 11.

<sup>1325.</sup> Brodie, "Some Preliminary Observations on Escalation," 12.

<sup>1326.</sup> Brodie, "Some Preliminary Observations on Escalation," 12.

so trained and equipped;" and in addition "the question whether the incorporation of small nuclear weapons in the armament of forward echelons makes the ultimate escalation to high levels of violence more likely than keeping tactical nuclear weapons to larger sizes which can be controlled by the most senior commanders." Brodie suggests that for "a region like Europe, the most dangerous eruption is probably the one that commits the first battalion, and any deployment that helps to deter that kind of eruption – if it really does so – has much in its favor," and thus re-asserts his confidence that deterrence remains not only the best policy but the wisest strategy, threatening escalation in order to dissuade one's opponent, by deterrence, from taking the sorts of risks that would court escalation. 1328

Thus Brodie questions the currently in-vogue CWE strategy, and argues in his twenty-first point that such a "view holds that forward troops armed with small nuclear weapons are more vulnerable than troops not so armed because they invite nuclear attack, and hence have lower *net* fighting power," while Brodie suggests that "it might be equally plausible to say that a force so armed has a greater effect in deterring attack – since its implicit threat to use (or to prompt surviving units to use) nuclear weapons at tactical levels fairly promptly, hardly strains credibility." And credibility is the *sine qua non* required for deterrence to succeed; as Brodie observes, "It was after all the credibility issue on which the 'massive retaliation' doctrine was most effectively attacked, though it is worth recalling that credibility was considered especially in question for *areas outside Europe*." 1330

Brodie reiterates his earlier argument that "while our use of nuclears may guarantee enemy use, our non-use of these weapons falls far short of comparably guaranteeing enemy non-use." Because enemy non-use is far from certain, Brodie reminds us that we have to be prepared to in essence think about the unthinkable, a point that would later help make Herman Kahn famous even though Brodie made this very same argument; in his twenty-second point he thus asks the hard question: "are we advantaged by a mutual use of nuclear weapons as compared with a mutual non-use? Surely the primary answer would have to be: 'Not necessarily.' It might even be: 'Usually not.' But surely too the answer would depend on circumstances and places, and perhaps an overriding consideration is that the choice may not be ours to make. A searching inquiry would perhaps come up with something like the following answer: unless we could have high confidence that non-use by us tactically would enjoin non-use on the enemy, we have to be both prepared physically to use them and also accustomed to the

<sup>1327.</sup> Brodie, "Some Preliminary Observations on Escalation," 12.

<sup>1328.</sup> Brodie, "Some Preliminary Observations on Escalation," 12-13.

<sup>1329.</sup> Brodie, "Some Preliminary Observations on Escalation," 13.

<sup>1330.</sup> Brodie, "Some Preliminary Observations on Escalation," 13.

<sup>1331.</sup> Brodie, "Some Preliminary Observations on Escalation," 13.

idea of using them."1332 In short, we have to be prepared to not only think about the unthinkable, but to also, as Peter Lavoy, Scott Sagan, and James Wirtz would argues four decades later, plan the unthinkable. In a footnote, Brodie adds: "The question whether one can and should distinguish between nuclear and non-nuclear weapons is, however, quite distinct from the question whether or not they should be used," and noting that at the time he published Strategy in the Missile Age in 1959, "the tide of military opinion was flowing overwhelmingly in the direction of advocating free and easy use of tactical nuclears," and so Brodie was "therefore inclined to sound cautionary notes. The situation is quite different today." <sup>1333</sup> Brodie closes his preliminary reflections on escalation with an eye to future conflicts, perhaps engaged in succession, each one affected by its predecessor: "Another thought requiring mention is that so long as we are thinking about limited war, we are thinking not about a single conflict (which is all we do think about with general war) but possibly a succession of conflicts. Thus, it should be borne in mind that each case will have a great effect on expectations concerning the next outbreak of hostilities. One cannot expect to play each military episode as though it were historically unique."1334

## In the Shadow of Total War

In the Fall 1962 edition of *Daedalus*, Brodie revisited the specter of total war, written while on a "Reflective Year fellowship" sponsored by the Carnegie Corporation while on leave from RAND. It is interesting that Brodie notes that the "RAND Corporation and its sponsors are more than usually dissociated from the views expressed by the author," suggesting a widening gulf between his views, and those of his colleagues. 1335

Brodie starts out his article by noting that the United States, "the original home of the doctrine of 'massive retaliation,' is also the country with a national compulsion to deny the possibility of total war," evident in the recent "shocked rejection provoked in the latter part of 1961 and the beginning of 1962 by some serious talk and a slight amount of activity concerning fallout shelters." As well Brodie recalls "in the same connection the bitter denunciation by some reviewers, and by many others who may or may not have seen the book of Herman Kahn's *On Thermonuclear War*," and notes "the passionate and also the discriminate nature of the outcry against" shelters greatly contrasted the "remark ably passive public acceptance of a national-security budget

<sup>1332.</sup> Brodie, "Some Preliminary Observations on Escalation," 13-14.

<sup>1333.</sup> Brodie, "Some Preliminary Observations on Escalation," 13, n. 5.

<sup>1334.</sup> Brodie, "Some Preliminary Observations on Escalation," 14.

<sup>1335.</sup> Bernard Brodie, "Defense Policy and the Possibility of Total War," Daedalus 91, No. 4, American Foreign Policy: Freedoms and Restraints (Fall 1962), 733.

<sup>1336.</sup> Brodie, "Defense Policy and the Possibility of Total War," 733.

recently raised to fifty billion dollars and covering an array of conspicuously offensive and therefore presumably more 'provocative' weapons," a vast sum of which the controversial shelter program would have accounted for just one percent. "Why," asks Brodie, "has this program – especially the private efforts which were quite independent of the government al locations – been singled out for such special reprobation?" Brodie suggests that shelters, "like the Kahn book," became "objectionable because, unlike ballistic missiles, they cannot be written off to 'deterrence' – a useful and important word that has by now acquired some of the qualities of magic," and while they "may help somewhat in deterrence," the curse of fallout shelters was their "most obvious utility is for saving life in the event of total war. Thus to accept shelters is to accept the possibility of the unthinkable. The thought frightens, and fright hides behind moralistic indignation." <sup>1339</sup>

Brodie found that the "most interesting argument urged against shelters is that they would make war more likely," and this was because they'd make "the citizenry and the politicians more complacent or more bellicose and by detracting from the more 'positive' kind of efforts for peace – that is, proposals for disarmament and the like, where the appeal to the opponent gains its force only indirectly or in veiled fashion from military power." Brodie suggests that even if this complaint that shelters would increase the likelihood of war had merit, "it would still be important to know: By how much?" Brodie believes that "[e]ven if the probability of war were originally either very low or very high, we might still want to go ahead with our shelter program so long as shelters (a) added only marginally to the risk, and (b) had a good chance of being considerably useful in war; for a low probability is not the same as a zero probability where so much is at stake, and a high probability puts a certain urgency on getting ahead with anything that promises to reduce substantially the loss in lives." 1342

But Brodie's discussion of the fallout shelter backlash is meant primarily to illustrate "that it is often useful or necessary to think quantitatively, at least in terms of 'more' or 'less,' of 'much' or 'little,' even where we cannot discover the true values for the relevant quantities or probabilities."<sup>1343</sup> Further, Brodie adds that policymaker "should respond in their planning to an array of possible contingencies, and not merely to the single most expected event,"<sup>1344</sup> and it is this broad approach to the question of total

<sup>1337.</sup> Brodie, "Defense Policy and the Possibility of Total War," 733.

<sup>1338.</sup> Brodie, "Defense Policy and the Possibility of Total War," 733.

<sup>1339.</sup> Brodie, "Defense Policy and the Possibility of Total War," 733-34.

<sup>1340.</sup> Brodie, "Defense Policy and the Possibility of Total War," 734.

<sup>1341.</sup> Brodie, "Defense Policy and the Possibility of Total War," 734.

<sup>1342.</sup> Brodie, "Defense Policy and the Possibility of Total War," 734.

<sup>1343.</sup> Brodie, "Defense Policy and the Possibility of Total War," 734.

<sup>1344.</sup> Brodie, "Defense Policy and the Possibility of Total War," 735.

war, and the estimation of its probability, that Brodie now turns: "How, then, shall we appraise, if not measure, the probability of total war, or "general" war, as the military prefer to call it? It is certainly more than merely conceivable, for it is frequently being explicitly or implicitly threatened by one side or the other in the cold war. The probability of such war is also clearly affected by our policies, so that by acts of omission or commission we can make it much more or much less probable. On the other hand, it is not always easy to know what actions, or omissions, have what effect on the degree of probability. Also, we suspect that the best behavior on our part would still leave a residual possibility of we know not what dimensions. Uncertainty concerning the degree of probability of general war is the problem most basic to our national defense policies, and it has equally great consequences for our military commitments with our allies in NATO and elsewhere." 1345

But just as Americans responded viscerally to the reality of fallout shelters, which forced them to consider the uncomfortable prospect of fighting a nuclear war, Brodie found that people on both sides of the Atlantic - and not just the lay public, but also "people who are deeply interested and well informed, and whose views are often reflected in governmental policy" - were "reluctant to accept seriously the threat of general war," particularly the Europeans. Brodie cites the "retired head of the Royal Air Force" who wrote "of total war having been 'abolished' by nuclear weapons" as well as "the well-known book by General Pierre Gallois, formerly of the French Air Force, Strategie de l'age nucleaire," which "advances the view that not only total war but all war will be abolished by nuclear weapons when enough countries have such weapons."1346 Noting a wide current of "direct or implied criticism of American 'overspending' on total war," Brodie explained that total and limited war capabilities "indeed compete for funds, but President Kennedy's administration is apparently determined to build up both," and pointing out that "since the ability to retaliate to a strategic nuclear strike is basic to our security – and to that of the whole Western alliance – its requirements must have first priority." 1347 But that doesn't resolve the "heated controversy within the American military services, much of it inevitably in public, concerning the minimum and maximum needs for the retaliatory forces," which pitted advocates of "finite retaliation" that believed "saved resources ... should go into limited-war capabilities," in contrast to proponents of "a general-war fighting capability which, although certainly not infinite, is nevertheless much larger" and who thereby are "willing to cut back on limited war, and certainly on conventional war capabilities" in order to maximize their punch. 1348

<sup>1345.</sup> Brodie, "Defense Policy and the Possibility of Total War," 735.

<sup>1346.</sup> Brodie, "Defense Policy and the Possibility of Total War," 735.

<sup>1347.</sup> Brodie, "Defense Policy and the Possibility of Total War," 735.

<sup>1348.</sup> Brodie, "Defense Policy and the Possibility of Total War," 735.

Brodie sees in their debate an underlying disagreement over the probability of total war: "The interesting thing about this argument is not the precise levels sought by each side but the fact that the 'finite retaliation' advocates put the chances of total war at an extremely low level – though they concede that it is the existence of the retaliatory force that makes the risk so small," and they believe "a relatively modest retaliatory force, especially if it is secure (like a few squadrons of submarines of a Polaris type) is enough to deter." This is in contrast to "the other side [which] argues first that it is very difficult to know how much is enough to deter, given different kinds of crisis and given especially the fact that techniques are constantly changing," and that "total war may break out despite deterrence, in which case it will then have to be fought to a favorable conclusion, or anyway to the least disastrous one possible. There is an important difference, they insist, between winning and losing even a nuclear war, and there are vastly different degrees of damage to be suffered in either winning or losing." 1350

Since the atomic era began, Brodie observes, the "degree of probability low enough to have warranted a quite relaxed attitude before the advent of nuclear weapons may well be alarming," caused both by "the enormously greater destructiveness of war under nuclear conditions" as well as "the fact that in nuclear general war virtually all significant preparations must be completely ready in advance. The latter consideration is in some respects more overwhelming than the former, certainly in its requirements on the peacetime thinking of the citizenry concerning war." <sup>1351</sup> So "even if we estimate the probability of a general war within any given time span as very low, say one percent, the implications for policy of our taking seriously that degree of probability might be very great."1352 Brodie suggests that "[a]ny specific estimate of the probability of an event must also be fitted into a time dimension if it is to have meaning," noting: "Over a long enough run, almost anything can happen. But our decisions, especially in the fields of military and political policy, are not concerned with the state of the world over the next two hundred years, nor even the next fifty. Our military policy decisions do have to be concerned with lead time in the development and production of new weapon systems, and such lead times are generally longer than the layman expects them to be. Even so, ten to fifteen years is about as long a time as we can meaningfully plan ahead with respect to specific hardware systems. The last ten years, incidentally, have been long enough to see two distinct and basic revolutions in weaponry: the advent and quick development of both the thermonuclear bomb and the long-range missile, each developing the potency of the other."1353

<sup>1349.</sup> Brodie, "Defense Policy and the Possibility of Total War," 735.

<sup>1350.</sup> Brodie, "Defense Policy and the Possibility of Total War," 735-36.

<sup>1351.</sup> Brodie, "Defense Policy and the Possibility of Total War," 736.

<sup>1352.</sup> Brodie, "Defense Policy and the Possibility of Total War," 736.

<sup>1353.</sup> Brodie, "Defense Policy and the Possibility of Total War," 737-38.

In addition to the weapons systems required, Brodie points out that there is also the "political structure of the world to be considered too, and that happens also to be subject to swift and often unpredictable shifts," and this contributes to the limited time horizon for "making estimates of the probability of war," and "something between a decade and a score of years is as long a span as one should reasonably attempt to handle." And even it became "possible to arrive at some kind of estimate of the probability of war for the next ten or fifteen years," Brodie notes that we'd "have a figure which has meaning only as a statistical norm." Making matters more complicated, Brodie adds that a phenomenon like general war is "a unique event" that is "almost by definition an aberration from any statistical estimate of probability," so "even if we could be assured that the probability of general war is low, we should nevertheless have to be guided in many of our policies by the realization that it could happen." 1356

Brodie comes to the realization that, "[a]bove all, the probability of total war is affected by what we do about it," noting that it's "possible to imagine a world in which general war could be produced only by madmen," and while this "would not relieve us of all our worries," it would at least "be a different and safer world from the one we live in now." While controlling the behavior of a nuclear-armed madman may not be viable, he notes that "[m]uch remains to be done in the military field, and no doubt in other fields as well, to reduce the chances that sane men could resort to total war," and "[a]mong the various military actions likely to have that effect, the most important by far are those which reduce the vulnerability of the retaliatory forces — thereby reducing or even nullifying the advantage of striking first, or the necessity of quick reaction or of anticipating enemy action." 1358

With the goal of "reducing the vulnerability of our own retaliatory forces," and thereby "assuring ourselves of the ability to retaliate if hit," Brodie points out that "we are not comparably desirous of denying the enemy a similar posture," since if the "object is to reduce the probability of general war, it is not necessarily true that whatever is his gain is our loss, or vice versa. It is a very good thing to be able to hit the enemy hard if we go first, and certainly it may be useful to be able to make that threat; but against that consideration we have to weigh first the fact that we are not likely to go first, and second, the compensating advantages to us of his feeling secure in his retaliatory force, which should make him less trigger-happy in a crisis." 1359 As Brodie describes: "The Russians will not ask us to decide for them how they should

<sup>1354.</sup> Brodie, "Defense Policy and the Possibility of Total War," 739.

<sup>1355.</sup> Brodie, "Defense Policy and the Possibility of Total War," 739.

<sup>1356.</sup> Brodie, "Defense Policy and the Possibility of Total War," 739.

<sup>1357.</sup> Brodie, "Defense Policy and the Possibility of Total War," 740.

<sup>1358.</sup> Brodie, "Defense Policy and the Possibility of Total War," 740.

<sup>1359.</sup> Brodie, "Defense Policy and the Possibility of Total War," 739.

handle their vulnerability problem, but by our example we will certainly influence their relevant decisions. If making our retaliatory forces more secure causes them to make theirs more secure, the net result appears clearly more advantageous to both sides (in terms of reducing the probability of general war) than a condition of mutual vulnerability. One must be clear, however, that a condition of mutually decreased vulnerability tends to shift the burden for supporting policy to limited-war forces." 1360

Noting Albert Wohlstetter's influential 1959 Foreign Affairs article, "The Delicate Balance of Terror," which "called attention to the likelihood that if the enemy struck first in an all-out war, most of our retaliatory forces might never get into the air against him, and those that did might never arrive over their targets,' so "in a showdown the enemy might see a chance to eliminate our power with something like impunity," 1361 Brodie points out that the question to address "now is whether adequate measures are being taken to reduce progressively and rapidly any continuing danger," noting "[w]e have Polaris submarines, and programs are under way to 'harden' or shelter the launching sites of long-range land-based missiles," and that "[o] ther things have been done or are planned to make an enemy surprise attack less likely to succeed in destroying our retaliatory forces." 1362

Brodie suggests that "we ought to think in terms of moods during a sharp and bitter crisis, in which mutual intransigence is compounded with fear of each other's next move," noting that when "designing an edifice, the architect does not consider merely the wind load of a summer's breeze; he takes into account the worst gales the region has known, and adds some safety factor for that still worse gale yet to come. The same must be true of a retaliatory force, which has to deter not merely those attacks which might be based on quiet calculations of advantage but also those which spring from the sharp conviction that untold danger lies in waiting." But this "takes us outside the realm of the rational," where "we find a great part if not the greater part of political as well as personal behavior." 1364

By considering the psychological dimensions, a realm of moods and passions, Brodie notes what he's "saying here is certainly not new. Plato lamented the fact that kings were not philosophers, and that they acted out of passion rather than reason. So have many other writers since his time." <sup>1365</sup> Brodie believes that in "periods of intense crisis, we are probably as capable as the Russians of acting out what may seem to be the imperatives of the moment. Our conceptions of what we are compelled to do will be

<sup>1360.</sup> Brodie, "Defense Policy and the Possibility of Total War," 739.

<sup>1361.</sup> Brodie, "Defense Policy and the Possibility of Total War," 741.

<sup>1362.</sup> Brodie, "Defense Policy and the Possibility of Total War," 742.

<sup>1363.</sup> Brodie, "Defense Policy and the Possibility of Total War," 743.

<sup>1364.</sup> Brodie, "Defense Policy and the Possibility of Total War," 744.

<sup>1365.</sup> Brodie, "Defense Policy and the Possibility of Total War," 744-45.

molded, like theirs, by a range of rational, semirational, and non rational judgments or impressions, all coming out of human beings charged with emotion, including emotions of which the possessors are not even conscious."1366 As well, Brodie notes "we have commitments which may force us to take intransigent and even menacing positions," with American diplomacy continuing to "place heavy reliance on threats of force, implicit or explicit, to maintain existing positions, or to change them in one's favor," so even though the "world's statesmen feel far greater fear and horror of what wars bring than they did before the nuclear revolution, or for that matter before 1914, that fact has not yet been enough to bring into being adequate substitutes for the age-old reliance upon force." 1367 New ideas for waging limited war have emerged to counter the overstated and thus largely empty threat of massive retaliation, and these were "causing the present administration to take vigorous steps to revive forces equipped to fight with nonnuclear weapons" and to further "impress our new ideas as to the value of conventional forces on our allies in NATO and elsewhere," but Brodie questions "who can ever know what will come of a limited response to a limited aggression" and is concerned that were we to "guarantee in advance that our response would remain in each case within nonnuclear bounds, we would only stimulate the enemy to try to outmatch us in the localized application of force – which in many areas he will be able to do, secure in the knowledge that he runs no exceptional risks in doing so."1368 The best we can do, Brodie comments, is to remain "[c]onscious of our great over-all strength" and to "to act in the expectation that our determination will induce the other side to refrain from carrying out his threats. But there can be no guarantee that determination, even if judged by the other side to be genuine, will have so benign an effect. ... It is largely this kind of ambiguity concerning what needs to be done that makes international politics so serious and so full of risk." 1369

Brodie remains convinced that "there is no real basis for the relaxed assumption that total war has now been abolished by nuclear weapons" and that as a consequence, we "must take seriously the fact that total war can happen, and to take that fact seriously is to do certain things which we have thus far almost entirely omitted to do (such as building fallout shelters) or to do adequately (such as increasing the protection of our retaliatory force)," even though these "are things which must certainly add to the net burden of our defense costs, because there is no other area of our defense expenditures which can be appropriately shrunk enough to offset the difference." But at the same time, Brodie does not believe "expenditures for 'conventional' or limited-war capabili-

<sup>1366.</sup> Brodie, "Defense Policy and the Possibility of Total War," 745.

<sup>1367.</sup> Brodie, "Defense Policy and the Possibility of Total War," 745.

<sup>1368.</sup> Brodie, "Defense Policy and the Possibility of Total War," 745.

<sup>1369.</sup> Brodie, "Defense Policy and the Possibility of Total War," 745.

<sup>1370.</sup> Brodie, "Defense Policy and the Possibility of Total War," 746.

ties should be reduced," as they've "been too long neglected; the more effectively we do our job in the area of total war capabilities, the greater the range of possible cases for the application of limited force," which means "we probably have to spend more on total war in order to have sound reasons for spending more on limited war." <sup>1371</sup>

## **Further Thoughts on Escalation**

Brodie would revisit the increasingly "hot topic" of escalation in a longer treatise on the subject whose first version was a June 1965 RAND Research Memorandum, and which with minor changes a year later was published in book form by Princeton University Press. As Brodie had noted in his preliminary 1962 discussion of escalation, attitudes in the United States continue to change with regard to limited war, and the climate of fear and anxiety that had contributed to what Brodie felt to be a dangerous persistence of massive retaliation as strategic doctrine continued to soften as deterrence continued to hold along the central front, and as the principal Cold War adversaries continued to grow accustomed to each other's destructive capabilities, separating those to some degree from their intentions and from that separation forging ahead with new relationships designed to last.

With this continuing reduction of anxiety, Brodie found that the earlier resistance to limited war thinking in official circles also began to soften; and so in this context he authored his relatively lengthy RAND Research Memorandum (RM-4544-PR), Escalation and the Nuclear Option, that became the next year an uncharacteristically short book for Brodie – whose earlier works were considerably more voluminous, from his 786 page doctoral thesis to his 432 page Strategy in the Missile Age - just over 150 pages in length including its index, with the same title as his RAND report. While Brodie's classic text Strategy in the Missile Age, authored in 1959, was followed quickly the next year by Herman Kahn's On Thermonuclear War, which took a thencontrarian view on nuclear warfighting and directly challenged Brodie's impassioned advocacy of deterrence and more cautionary approach to the dangers of escalation, Brodie's later volume on escalation came to press a year after Kahn's own relatively thin work – at 300 pages, less than half the length of his On Thermonuclear War tome but still twice the length of Brodie's treatment of this subject – published in 1965: On Escalation: Metaphors and Scenarios. But this publishing sequence does not suggest Brodie's volume was a direct response to Kahn's, since as he notes in his introduction to the published version of his treatise on escalation, "I should mention Mr. Kahn's most recent work," but it "unfortunately, was published too late to be of assistance to me in writing the essay which follows, especially since the latter had to spend some

<sup>1371.</sup> Brodie, "Defense Policy and the Possibility of Total War," 747.

time in going through clearance. Otherwise I should have had more than one occasion to mention it."<sup>1372</sup> That his RAND report was published midway through 1965 also contributed to the absence of full discussion of Kahn's work, since a juxtaposition of the text of the two versions of this work shows only minor, cosmetic changes to the RAND report by the editors at Princeton, who elected to leave its content alone (with the exception of the appendix added to the work, a very brief September 1964 RAND paper by Brodie, "The Intractability of States.")

Escalation and the Nuclear Option paid a revisit to the question of nuclear use during limited war, and his earlier reluctance to cross the nuclear threshold, and thereby risk the danger of uncontrolled escalation. With deterrence now showing signs of both stability and endurance, Brodie felt compelled to reconsider some of his earlier ideas that had been formulated during times of greater international anxiety and see if they had withstood not just the passage of time but the increased survivability of the great powers' nuclear arsenals. Brodie starts out the published edition of his treatise on escalation with something of a confession; first, that he had expected to further "develop and expand" his manuscript prior to publication so it would be "a substantially larger book," but it took so long to gain the necessary clearances that he ended up only adding the "present Introduction" to the work, and including as an appendix the paper he presented to a panel at the 1964 American Psychological Association conference on "Pacifism, Martyrdom, and Appeasement: Dealing with Intractable State by Non-Violent Means," which provided Brodie with a chance to rebuke the pacifist's perspective and at the same time reinforce his belief that psychology and strategy are somehow bound, perhaps by the same intangible threat that Clausewitz noted joined the physical and moral in war. 1373 While the "reader is perhaps advantaged thereby," as the "book has less weight, can be read faster, and is cheaper to buy," it does seem that Brodie himself was disappointed by the book's relatively light nature, even though he acknowledged that "[t]o expand is not always to improve." 1374

His preface to the RAND Memorandum of the same title issued the year before (and largely the same substance, less the introduction crafted for the Princeton edition), Brodie further notes that his effort "represents a tentative effort to introduce some fresh thoughts into the discussion of escalation and its relation to the use of tactical nuclear weapons," and "stresses the importance, in making any choice of strategies, including the decision to use or refrain from using nuclear weapons, of gauging the *intent* behind the opponent's military moves," which Brodie contends "should not be difficult," particularly when it comes to differentiating between "a probe or a

<sup>1372.</sup> Bernard Brodie, *Escalation and the Nuclear Option* (Princeton: Princeton University Press, 1966), 21. n. 14.

<sup>1373.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), Preface 1 (not numbered).

<sup>1374.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), Preface 1 (not numbered).

determined aggression."<sup>1375</sup> Brodie's study "also suggests that the use or threat of use of tactical nuclear weapons may often be counterescalatory" and thus "may check rather than promote the expansion of hostilities."<sup>1376</sup> As in the Princeton volume, in his RAND Memorandum Brodie seems self-conscious with regard to the light nature of the work, and explains that in his belief that "the study of escalation needs more systematic study than it has yet received," he thus "hopes to develop a larger and more comprehensive analysis" of the topic as well as "an intensive survey of the literature."<sup>1377</sup>

In his "Introduction" crafted for the 1966 Princeton edition of Escalation and the Nuclear Option, Brodie also starts off by noting he "presents an argument," albeit one he hopes is "respectably analytical and even objective," as he has "tried to be fair to opposing arguments." 1378 His opponents, he admits, have enjoyed "an astonishing success both among students of strategic affairs and among those responsible for determining ... official defense policies," and with publication of this work Brodie expresses his hope "to take my leave" of the debate, though he expects "the subject is bound to continue to be important for a long time to come."1379 Brodie sounds a regretful tone in writing "[m]y in this controversy can hardly be one to give me great satisfaction," as he had found himself "obliged to defend the idea of using or threatening to use tactically what J. Robert Oppenheimer has recently called 'that miserable bomb.' Who can enjoy finding himself in a position which, besides being somewhat lonely intellectually, seems by contrast with that of the opposition to be more than a little insensitive, heartless, and even wicked?" 1380 Add to this the "irony" that "I have been opposing a position which - as the record shows - I played a special part in helping to create,"1381 and since the dawn of the thermonuclear era, he "began to urge" that "we must seek means of limiting war, even between the superpowers, and also of avoiding too exclusive a dependence on nuclear means of fighting," a view that may even have seemed "trite" at the time of Escalation and the Nuclear Option but which at the time he first articulated it required "the fortitude to be willing to appear something of a crackpot – even within the RAND organization itself."1382

Indeed, Brodie recalls that "[e]ven as late as the Quemoy crisis of 1958, few of our combat aircraft had bomb-racks suitable for carrying 'conventional' or non-nuclear

<sup>1375.</sup> Brodie, Escalation and the Nuclear Option, RAND Memorandum RM-4544-PR (Santa Monica: RAND Corporation, June 1965), Preface, iii.

<sup>1376.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), Preface, iii.

<sup>1377.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), Preface, iii.

<sup>1378.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 3.

<sup>1379.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 3.

<sup>1380.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 3.

<sup>1381.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 3-4.

<sup>1382.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 4.

bombs,"<sup>1383</sup> so any armed intervention would have required "nuclear means" owing to our seeming "insufficient conventional capability."<sup>1384</sup> Brodie recalls being "consistently critical of the official views and policies of the time, which I held to be excessively obsessed with general nuclear war."<sup>1385</sup> But now, midway through the 1960s, Brodie found that "times have changed," with "ideas of limited war and of non-nuclear fighting . . . very much in the air."<sup>1386</sup>

While Brodie credits the "nuclear genie" with "some useful service," namely by "critically reducing the probability of war" between the superpowers, he understands why "all civilized persons must share in greater or less degree a desire to put the nuclear genie back in the bottle," but he nonetheless feels compelled to "plead for keeping and indeed expanding the benefits that have come to us from that same 'miserable bomb'," and thereby avoiding "the cost and possibly even danger of carrying an intrinsically good idea much too far, and with so much excess of fervor and religiosity, that it becomes a crippling obsession," and thus allow for the continued "self-denial" of a limited, tactical nuclear option. Brodie thus hopes to counter those views, official and otherwise, that "inhibit unduly our capacity to use — or much more important, our capacity effectively to threaten to use — nuclear weapons on the tactical level." He thus takes aim at the "allegedly self-propelling escalatory effect of any use of nuclear weapons," a fear he had once held during the prior era of heightened nuclear risk.

Though Brodie had admitted from the outset of his introductory chapter that he had "been engaged in this debate," he later modified this somewhat by explaining it was only a "debate" in the academic sense of the word, "as a sort of intellectual courtesy," but that in fact he found there has "in fact been a conspicuous lack of any real debate," in part because only a "very small" number of people were "responsible for developing the leading ideas in the strategic thinking of our time," making it easy for an idea to "win what looks like overwhelming acceptance" and thus for the small brotherhood of strategic thinkers to come to "apparent consensus," as "has certainly been the case with the 'conventional war' idea," leaving important questions on the

<sup>1383.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 4.

<sup>1384.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 5.

<sup>1385.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 5.

<sup>1386.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 6.

<sup>1387.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 7.

<sup>1388.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 8.

<sup>1389.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 3.

<sup>1390.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 9.

<sup>1391.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 8-9.

use of tactical weapons "hardly at all discussed publicly," 1392 presumably reflecting "a lack of real rumination . . . within classified studies." 1393

While Brodie's work was written concurrently with Kahn's On Escalation and thus does not address his contemporary's current thoughts on escalation, he does reference Kahn's earlier On Thermonuclear War, mildly rebuking Kahn for what could describe as strategic shallowness, or perhaps not thinking hard enough about the unthinkable. Brodie cites the way Kahn described "when an engineer puts up a structure designed to last twenty years or so, 'he does not ask, 'Will it stand up on a pleasant June day?' He asks how it performs under stress, under hurricane, earthquake, snow load, fire, flood, thieves, fools, and vandals." 1394 To this Brodie adds, "One should add, however, that the warranted strength of the structure also depends on its purpose, on the anticipation of the *probability* of some of the catastrophes above mentioned during the use span envisioned, and in many cases on the choice between having a structure able to cope with the worst possible catastrophes and not having one at all. Few dwellings are built to withstand tornadoes, and few architects would suggest that they should be. All but a minute fraction of these structures last out their natural lives without suffering such visitations or various other of the catastrophes that Kahn mentions."1395 And these probabilities, when specifically applied to the risk of nuclear war and not to the metaphorical examples of catastrophes mentioned by Kahn, have considerably declined, and Brodie notes "one of the striking changes in the climate of the times since Kahn published the above-quoted lines," is that "the same bomb that caused the fears of fifties to which Kahn was giving expression at the end of that decade has caused also the more relaxed attitude of the sixties," and thus a "remarkable change" in the "prevailing climate of expectation concerning the probability of future catastrophe." 1396

Brodie closes his introductory chapter with one further apology, noting he has "been taxed by some of my colleagues with the reminder that I had in the past asserted in print that there was no essential difference between tactical and strategic nuclear weapons to warrant the distinction in terminology," to which he admits, adding his view has now changed "on the grounds that technology has indeed moved on to the point where there are already very marked distinctions and where there could be even sharper ones if we exploited more of the possibilities for specialized bombs." So in addition to his admitted "past error," Brodie notes the emergence of a "large family of weapons which are specifically intended for possible tactical use and would rarely if ever

<sup>1392.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 9.

<sup>1393.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 10.

<sup>1394.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 20.

<sup>1395.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 20.

<sup>1396.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 21.

<sup>1397.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 22.

be considered for strategic use." <sup>1398</sup> But when it comes to the "much more important point of criticism" that Brodie has put himself "in the position of arguing for the use or threat of use, when appropriate, of specific types of weapons in a limited and essentially tightly controlled manner, even though existing arrangements may make it quite difficult or even impossible to exercise such control," Brodie concedes the latter point "is probably true," but he finds this "criticism irrelevant over the long term," since "whatever tactical nuclear doctrine we have is obsolete and ought to be altered," and that the neglect of "small-scale, controlled use" of tactical nuclear weapons "should be corrected, and with some urgency," so that they may play their role "primarily as a deterrent and, if they fail in that function, as a de-escalating device." Hence Brodie's determination to counter the belief that tactical weapons are "in fact the opposite," a tool not of de-escalation but of escalation itself. <sup>1399</sup> This becomes his thesis, which he presents in greater detail in subsequent chapters of his work.

In his next chapter, "Escalatory Fears and the Effectiveness of Local Resistance," which marked the first chapter of his RAND Memorandum on escalation, Brodie revisits his observation on the profound shift in international anxiety, and how "[n]ot long ago it was only the sudden surprise onset" of nuclear war "that was considered a real possibility," with an "overwhelming" temptation to strike first in the event hostilities commence. But by the mid-sixties, "the conviction has spread and deepened that in the future, so long as we keep something like our present posture, general war can hardly occur except through escalation from lesser conflicts." 1400 Now, added Brodie, "the constraints to refrain from strategic nuclear attack . . . have become great and also obvious,"1401 driven by both physical and psychological changes, the former being "the enormous and continuing improvement in the security of our retaliatory forces . . . against attack through the well-known devices of hardening, concealment, and mobility," and the latter because "[o]ur confidence is further increased by the fact that this physical change has served to buttress a comparably profound psychological change" borne of "improved understanding . . . of the motivations and psychology of the opponent."1402 Recalling Dulles' speech on massive retaliation, Brodie writes "[t]he time for insisting mainly on such strategies, or rather threats, is clearly past," and American policy had "for some time been committing us to the principle that local aggressions on the part of our major opponents must at least initially be resisted locally," and this means, Brodie unhesitatingly affirms, "[t]he possibility of further escalation will, to be sure, be unavoidably but also usefully present," as it will "tend

<sup>1398.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 22.

<sup>1399.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 23.

<sup>1400.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 1.

<sup>1401.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 1.

<sup>1402.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 2.

to induce caution on both sides" and "more especially tend to dissuade the aggressor from testing very far the efficacy of a *resolute* local defense." $^{1403}$ 

An irony of the strategic relaxation Brodie has observed is that the "very easement of the danger of surprise strategic attack has stimulated a special fear of what in quite recent times has come to be called escalation," which now appears to be "the only way, or at any rate much the least unlikely way, in which general war can occur." In earlier years when the fear was that "any outbreak of unambiguous hostilities . . . would escalate almost immediately to general war," Brodie explains, strategic thinkers "therefore concentrated our concern on avoiding the outbreak of war, rather than on the escalation that we feared must surely follow such an outbreak." Once the prospect of limit war was imagined, "escalation, which is to say the erosion or collapse of limitations, became quite appropriately the object of special attention," and Brodie found that "the abhorrence that most civilized people feel towards nuclear weapons" shifted to "the *tactical* use of such weapons in limited war," driven in part by a widely held presumption "that use of them in limited war would be *critical in tripping off uncontrolled escalation*."

And while avoidance of any use of nuclear weapons might be politically desirable, Brodie questions the automaticity, even if he cannot disprove the possibility, that "resort to such weapons could be the critical factor in provoking uncontrolled escalation," he suggests the opposite may also be true, that "a weapon which is feared and abhorred is so much the less likely to be use *automatically* in response to any kind of signal." But even this fundamental ambiguity cannot change the fact that "views attributing a powerful and automatic escalatory stimulus to nuclear weapons – views not the less firmly advanced for being based entirely on intuition – have been of critical importance in molding attitudes toward appropriate strategies in the event of limited war," and "thereby greatly affected force postures" and the "whole gamut of national defense policies." <sup>1408</sup>

Brodie next considers "The Methodological Problem" (he changed the title of this chapter to "The Analytical Problem" in his next year's Princeton release), a very brief chapter of just five pages that considers the challenges inherent in realistically estimating "the risks of escalation," in which he explains that "we are dealing ... with issues of human behavior under great emotional stress in circumstances that have never been

<sup>1403.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 3-4.

<sup>1404.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 7-8.

<sup>1405.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 8.

<sup>1406.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 8-9.

<sup>1407.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 9.

<sup>1408.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 9-10.

experienced,"<sup>1409</sup> and as a consequence, "the appropriate degree of fear or dread on both sides is thus only dimly imagined."<sup>1410</sup> He argues that there are thus "no special tools, devices, or gimmicks by which we may drastically improve our predictions concerning the chances of escalation in any crisis," and while using "such techniques as war or crisis gaming helps importantly to enlarge the perspectives of the players … it does not provide them, or those who read their reports, with answers to the crucial questions," nor with "the kind and degree of emotional tension and feeling of high responsibility bound to be present among decision-makers in real life crises in the nuclear era."<sup>1411</sup> War gaming and crisis simulation may nonetheless provide us with a useful analytical tool, albeit one which, Brodie notes, for "present purposes the improvement of the players' 'conceptions and understandings' of the world they live in is much more essential to our ends than the use of the game technique itself."<sup>1412</sup>

Brodie next considers "The Relevant Image of the Opponent," since "[e]stimating probabilities of escalation is essentially an exercise in predicting the behavior" of both our opponent's and our own leaders "under various kinds of crisis situations." 1413 Brodie believes that Soviet leaders, as well as those in Communist China, were fully aware of the "terrible hazards of general nuclear war," 1414 as evidenced by not only the statements of Soviet leaders but also their relatively restrained behavior during various crises including the 1948 and 1961 Berlin crises, and during the 1962 Cuban Missile Crisis, where Khrushchev's ultimate decision to remove the missiles must "surely modify one's estimate of his boldness in putting the missiles in," leading Brodie to comment: "Khrushchev may have been foolish, but was he really being foolhardy?" [In the Princeton volume published the next year, Brodie adds the following sentence, further clarifying his view on Khrushchev's relatively moderate behavior: "Clearly he not only did not want war, but he thought he was taking no real risk of it."1416) Brodie in fact chides the United States for "having made a bad prediction" about Soviet behavior, adding this "does not itself justify our calling the Russian 'unpredictable." Indeed, Brodie finds Soviet behavior during the Cold War period to have been impressively restrained, with "no infringement of frontiers and not the slightest skirmish between

<sup>1409.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 11.

<sup>1410.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 11-12.

<sup>1411.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 12.

<sup>1412.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 13.

<sup>1413.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 15.

<sup>1414.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 15.

<sup>1415.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 19.

<sup>1416.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 45-47.

<sup>1417.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 20.

their troops and ours,"<sup>1418</sup> suggesting that arguments made by the United States to justify a buildup of NATO's conventional forces fostered "an image of the Soviet Union which inflates Soviet military aggressiveness" (in Brodie's Princeton revision the next year, he changed "inflates" to "grossly inflated.") <sup>1419</sup>

Brodie's reading of history suggests that concerns about accidental escalation are also overblown, with events ranging from Hitler's invasion of Poland to China's intervention in the Korean War, upon closer analysis appear not to be evidence of "accidental" wars, even if there was indeed some "miscalculation" involved in the decision-making; indeed, Brodie sees in Korea evidence not of the dangers of accidental escalation but "the degree to which escalation was in fact controlled and stopped." As earlier discussed in our philosophical examination of realism, which has at times been juxtaposed to idealism when in fact the two philosophies have more in common than many appreciate, the core difference in world views can be attributed to contrary dispositions, one toward optimism and the other toward pessimism. Those alarmed by the prospects of uncontrolled escalation can be described as pessimists, in contrast to Brodie who looks to history and concludes such concerns are overstated, finding in history enough solace to emerge an optimist on this matter.

Thus Brodie asks, "What should now cause accidental war . . . to become more probable in a nuclear age than it has been in the past?" He considers and dismisses "the possibility of gadgetry malfunctioning," noting "extensive and elaborate precautionary measures" have been taken; and he also considers and dismisses the likelihood that unintended clashes between opposing units would tend to escalate, not finding evidence of the necessary "limitless concern with saving face" nor the sufficient "ground-in automaticity of response and counterresponse" to ensure "a swiftly accelerating ascent in scale of violence." He prodice admits that it "would be foolish and irresponsible to insist that accidental war is impossible" or even that "efforts to picture its occurrence in scenarios," which is part of the subtitle of Kahn's own work on the topic, "are misguided," and adds that "No doubt the capability for dreaming up 'far out' events is to be cultivated and cherished, but so is the capability for applying a disciplined judgment about the probability of those events." Indeed, grappling with the interplay of chance and probability, Brodie acknowledges that "important things happen that few had previously thought probable — occasionally things that no one

<sup>1418.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 21.

<sup>1419.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 21.

<sup>1420.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 23.

<sup>1421.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 25.

<sup>1422.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 25-26.

<sup>1423.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 27-28.

had conceived of."<sup>1424</sup> But he adds "[t]hat does not, however, establish that we must consequently abandon the notion that some things are very much more probable than others, and that with appropriate study we can have a good deal to say about which is which."<sup>1425</sup> It is Brodie's belief that "[t]hough it is good to be imaginative and important to keep an open mind, it is imperative to avoid basing far-reaching policy decisions on contingencies which can be called conceivable only because someone has conceived of them."<sup>1426</sup>

Brodie's next chapter, also very brief at just over four pages, addresses "The Attenuation of Incentives For 'Going First'," in which he further develops his view that the "rapidly diminishing . . . advantage and thus incentive of going first in any *strategic* exchange" . . . "must have a great and possibly decisive influence in reducing the danger of uncontrolled escalation following from any local outbreak." <sup>1427</sup> Brodie cites a 1963 statement from Defense Secretary McNamara that illustrates American recognition that "the degree of advantage that was until recently thought to accrue to the side making a surprise strategic attack — where it could hope to wipe out the retaliatory force of the opponent with near impunity — is gone and not likely to return." <sup>1428</sup> Or, as Brodie explained in a new paragraph added to the end of this chapter in the Princeton release the next year, "the opportunities for a 'first strike' are rapidly diminishing if not already gone." <sup>1429</sup>

In "What Is the Enemy Up To?" Brodie starts off by commenting that "much of the public discussion concerning the appropriate time for introducing nuclear weapons in tactical operations has neglected to consider the enemy's intention," and instead has concerned the "mechanical phenomena, like the scale of hostilities reached or the rate at which territory is being yielded," rather than what Brodie believes "the first consideration" should be: "What is the enemy up to?" [1430] (In the revised edition released by Princeton the next year, Brodie strengthens his opening remark to: "It is amazing but true that practically all public discussion," from "much of the public discussion." [1431] Brodie is confident that "upon the outbreak of any real hostilities," our opponent's intentions are "likely ... to be fairly obvious," and no longer cloaked by such a "probable obscurity." [1432] Indeed, Brodie points out that a "deliberate major

<sup>1424.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 29.

<sup>1425.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 29.

<sup>1426.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 29.

<sup>1427.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 31.

<sup>1428.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 32-33.

<sup>1429.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 66.

<sup>1430.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 34.

<sup>1431.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966(, 69.

<sup>1432.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 34.

aggression will look very different from a probing action," and in his 1966 revision augmented this by adding to this, "out of which 'accidental' wars are supposed to grow." This means, Brodie contends, that "[f]or the sake of deterrence, and also to reassure our allies, it would seem appropriate to relate flexibility of response mainly to discrimination of enemy intent. That would make more sense than saying, as we have in effect said in the past: 'We will use conventional weapons until we find ourselves losing." Brodie suggests instead that since "the possibility of a deliberate massive Soviet attack against western Europe is exceedingly remote, so much the more reason for avoiding ambiguity concerning our response to it." 1435

Brodie observes that even as "the idea that sudden general or strategic war between the great nuclear powers has become extremely improbable," many observers "seem to find unsettling the effects of that conclusion upon their estimate of the probabilities of war on any lesser scale," and "seem to be tacitly . . . assuming that the probability of some kind of war occurring has remained basically fixed," implying that with the risk of general war lessened, "that limited war (including quite large-scale limited war) has become more so!"1436 Brodie considers the risk of general war in Europe, finding it to be highly implausible; he notes a Soviet attack upon Western Europe "would be the kind of operation that would come closest to triggering the general war that they are, with good reason, desperately anxious to avoid," leading him to speculate that if it does occur, it "must come about through escalation from Soviet probing actions," or barring that, from "an attack by us upon them," as Soviet ideology long expected to be the more likely scenario. 1437 Brodie believes that "the most fruitful question we could ask about the use of nuclear weapons in tactical operations . . . would be: How could their use, or non-use, or threat of use affect the prospects for the occurrence of escalation from small-scale to large-scale combat."1438 Added Brodie: "We should not to be talking, at least not initially, about using a great many nuclear weapons; that is a possibility that occurs only after a conflict has already graduated to large proportions. We are interested mainly in seeing how it can be prevented from ever reaching such proportions. We are interested, in other words, in the deterrence of escalation – though not for a moment are we less interested in the deterrence of initial hostilities." <sup>1439</sup>

Brodie found that "the phrase 'if deterrence fails' rolls rather too readily off the tongue among those many defense specialists whose work requires them to think

<sup>1433.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 34 and (Princeton: PUP, 1966), 69.

<sup>1434.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 34.

<sup>1435.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 34.

<sup>1436.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 35-36.

<sup>1437.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 36-37.

<sup>1438.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 37.

<sup>1439.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 37.

about what happens in actual combat," but he believes we should also ponder "some all-important intermediate questions, like: Why should deterrence fail? How could it fail? How can we keep it from failing?" With the exception of facing "utter madmen," Brodie believes "there is no conceivable reason why in any showdown with the Soviet Union, appropriate manipulations of force and threats of force . . . cannot prevent deterrence from failing." 1441

Brodie next turns to "The Status Quo as a Standard," in which he argues avoiding "major war without politically disastrous retreats implies . . . that we have preferably a commanding superiority in our overall force posture" or "at least a position that we cannot be induced to recognize as inferior" and "that there be some standard in the world by which both sides can . . . simultaneously distinguish acceptable behavior from the intolerably deviant kind."1442 On the former, Brodie recalls from history that assessing superiority "has always had more complications than appeared on the surface," but that "[i]n our own time the problem has become enormously more complicated as a result of the special intolerability of nuclear devastation."1443 Brodie places great import on maintaining the status quo, since "things-as-they-happen-to-be," in strategic affairs, are "conspicuously inseparable from peace," 1444 with an added plus being its maintenance is "usually also supported by international law." 1445 Even in Europe, with its division into East and West and the formal division of Germany into two states, however temporary that arrangement was envisioned to be, Brodie observed that the "territorial status quo has gained markedly in sanctity in the nuclear era," 1446 as "both sides . . . definitely prefer a not too unhappy peace to any kind of war," and thus "appear reconciled to continuing indefinitely what was once recognized by both to be a temporary state of affairs," an "indispensable consensus" that "does not exclude what we used to call 'peaceful change'." <sup>1447</sup> Even those who advocated German reunification came to believe such change had to occur "ohne Krieg – without war." 1448

It is within this context, of preserving the status quo, and thus maintaining the peace, that Brodie puts forth hiss argument for the tactical use of nuclear weapons. They no longer become a tool of escalation so much as the means by which aggression can be withstood. His intention is to thus restore to the discussion a proper balancing

<sup>1440.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 38.

<sup>1441.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 38.

<sup>1442.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 39.

<sup>1443.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 39-40.

<sup>1444.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 40-41.

<sup>1445.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 41.

<sup>1446.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 43.

<sup>1447.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 43.

<sup>1448.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 44.

of ends and means, which had become disentangled as opponents of nuclear use, in their horror at the thought of risking escalation, in effect deflated aggression, even massive aggression, from its proper scale. As Brodie explains: "However, the debate on nuclear versus conventional strategies or 'options' has so sharply focused men's minds on the dread consequences of using nuclear weapons tactically that the very act of aggression that might invoke these possibilities has been excessively deflated by comparison. In many discussions of the issue, the fact of aggression is given about the emotional loading of an enemy prank. It is supposed to be contained in a manner that is effective but at the same time tolerant and wise. The argument . . . that we should be unambiguous at least about opposing with nuclear arms any deliberate and massive Soviet attack in Europe is in one sense only a plea to resume treating such aggression with the seriousness it deserves." 1449

In his next chapter, "On Enemy Capabilities Versus Intentions," Brodie takes up the riddle of "whether our defense preparations and planning must be responsive to enemy capabilities or to enemy intentions," and concludes the "answer has to be, and is inevitably, to 'both'." 1450 The former presents a necessary measure for comparing "their strength and ours,"1451 but it's only one factor to keep in mind. The latter helps us to determine "not only the magnitude but also the character of our preparations," even though such assessments are "generally considered to be more subjective, tenuous, and faulty" than measurements of capabilities. 1452 When contemplating the potential response by an opponent to a crisis, Brodie finds, "[i]n our spontaneous, entirely intuited, ambivalent, and highly uncertain answers . . . are wrapped up all our fears and doubts about escalation," and he thus concludes that "The control of escalation is an exercise in deterrence," and that means, at "inducing the enemy to confine his actions to levels far below those delimited by his capabilities."1453 (In a parenthetical note Brodie added just before press time to the close of his next chapter, "The New and Different Europe," in the 1966 Princeton release of Escalation and the Nuclear Option on this very dynamic nature of deterrence, which requires efforts to induce restraint by pushing back against the probing efforts of the opponent in an effort to hold violence to sustainably low levels, Brodie lauds the efforts and the courage displayed by President Kennedy during the Cuban Missile Crisis, and rebukes the critical remarks of reviewer I.F. Stone in his review of Elie Abel's 1966 The Missile Crisis for suggesting that Kennedy's audacity was of itself dangerous, with Stone placing his fears of escalation before what Brodie believes to be the greater risk of Soviet

<sup>1449.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 46.

<sup>1450.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 47.

<sup>1451.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 47.

<sup>1452.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 47.

<sup>1453.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 49.

aggression. As Brodie explains: "with respect to the Cuban missile crisis . . . when this book first went to press I thought it quite unnecessary to point out that against an opponent given to probing an occasional *confrontation* was an essential ingredient of deterrence. However, a review-article by I.F. Stone . . . was one long expression of horror that President Kennedy had had the audacity to make this confrontation. Mr. Stone did not hesitate to attribute the late President's action to his vanity. In view of the extremely favorable outcome of that confrontation, one would have thought it incumbent upon Mr. Stone at least to speculate on what might have been the consequences had Kennedy lacked the courage to make it." 1454

In the next chapter, "How Big an Attack?," Brodie again takes up his earlier proposition that a massive Soviet attack against NATO across the central front "ought to be put among the lowest levels of probability," despite the fact it "happens to be the kind of war outbreak in Europe that has been most discussed in official circles."1455 (In his 1966 revision for Princeton, Brodie notes this need not be "necessarily paradoxical" since "it is the existence of NATO that makes, or helps to make, the probability of Soviet attack so low."1456) But while such massive attacks defined modern European warfare prior to the nuclear era, Brodie believes the splitting of the atom forever changed things, and in the post-Hiroshima world, "it is virtually impossible to discover in the real world the considerations that could make the Soviet leaders undertake to do such a thing in the face of minimum gains and the enormous risks they would be incurring." 1457 This leads him to "assign a far higher probability to the breaking out of conflicts on a small scale initially rather than on a grand scale," and to predict that "neither side will be able seriously and convincingly to use for political ends threats of strategic nuclear attack, or anything that in scale is even close to it."1458 Instead, Brodie asserts, "What one can threaten are lesser actions that could start events moving in that direction," and as the "opponent cannot at any stage be deprived of the choice . . . of making the situation more dangerous or less so; but we can reasonably hope and expect to influence his choices appropriately. This is what we must henceforth mean by containing aggression militarily."1459 (In his 1966 revision, Brodie added the word deterrence to this sentence for clarity: "what we must henceforth mean by deterrence, or by containing aggression militarily."1460) In Brodie's formulation, deterrence itself becomes a more dynamic enterprise, whose aim shifts in emphasis from

<sup>1454.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 96.

<sup>1455.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 56.

<sup>1456.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 97.

<sup>1457.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 56.

<sup>1458.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 59.

<sup>1459.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 59-60.

<sup>1460.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 101.

preventing total war to containing escalation by restraining the military aggression of the opponent, which of itself means by threatening, and engaging in, limited wars to prevent aggression from increasing toward totality. Brodie presents his new thinking as follows, explaining that "[o]ur military measures ought, so far as possible, (a) to be effective enough initially to prevent extensive deterioration of the military situation, especially such deterioration as basically alters the character of that situation; (b) to be limited enough to leave unused, at least temporarily, such higher levels of violence as are not likely to be immediately necessary to accomplish the objective stated under (a) – levels which must be most unattractive for the enemy to enter; and (c) to be determined enough to show that we are not more unwilling than he to move toward those higher levels." <sup>1461</sup>

Brodie further points out that "(b) simply defines limited war" while "(c) establishes what *is* essential to effective containment through limited means," and thus "[w] ithout (c) we either lose outright, or we encourage the enemy to move to higher levels of violence in which we avoid losing only by following him," hence Brodie's support of Kennedy's courage during the Cuban Missile Crisis showdown, and his determination to persuade the Soviet Union that he was certainly no more unwilling than they to move higher on what would later become popularly known as the escalation ladder.

Brodie next continues his exploration of the nuclear threshold, or what he calls "The 'Firebreak' Theory," with the "firebreak" signifying "at the tactical level the distinction between the use and non-use of nuclear weapons," a term he attributes to Alain C. Enthoven that had come to prominence, usurping Brodie's own less elegant phrase, "vast *watershed* of difference" between nuclear and non-nuclear weapons. <sup>1464</sup> The notion of such a firebreak had gained so wide a following that Brodie found "almost everyone must now subscribe to the firebreak idea," even if the "notion that the atomic bomb is 'just another weapon' was ... not wholly illogical," even if it was "insensitive to the importance of a distinction, however arbitrary, that most of the world was obviously going to insist upon." <sup>1465</sup> (In his 1966 revisions, Brodie strengthened his comment on the near universal acceptance of the firebreak theory to: "almost every thinking person must now subscribe to the firebreak idea." <sup>1466</sup> While America's non-use of atomic weapons in Korea reflected that war's "certain special circumstances not likely to be repeated in the future," <sup>1467</sup> Brodie does find relevant to the future the high level

<sup>1461.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 60.

<sup>1462.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 60.

<sup>1463.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 60-61.

<sup>1464.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 62.

<sup>1465.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 63.

<sup>1466.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 104.

<sup>1467.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 63.

of anxiety "mere mention of nuclear weapons by the President" generated in British Prime Minister Atlee, which illustrated how "since the beginning of the nuclear era there has been in the minds of men a strong tendency to distinguish between nuclear and non-nuclear weapons, combined with a widespread fear of and aversion to the former" which has grown "stronger with time rather than weaker." 1468 While Brodie takes care to differentiate between "[r]ecognition of that important fact" and its advocacy, he does note that as of his writing in the mid-sixties and in contrast to the previous decade that "a nearly universal consensus exists within the ranks of professional military people that small military operations are simply out of bounds so far as concerns the use of nuclear weapons,"1469 and that this "consensus unquestionably extends over a fairly considerable and quite important zone of contingencies."1470 Further, Brodie notes the United States now "possesses a substantial non-nuclear capability" sufficient to redress a "quasi-accidental outbreak of fighting or small foray" of the sort that confronted America during the 1958 Quemoy crisis, so much so that it was now "most doubtful that any voices would be raised, as some then were, to insist that we ought to intervene with nuclear weapons or not at all."1471 Indeed, in Brodie's 1966 revisions, he added that America's "large conventional commitment to Vietnam" was "proof of that." 1472 And while the "more enthusiastic advocates" of firebreak theory advocate "building up our conventional capabilities" to enable postponing "introducing nuclear weapons until a very high level of military operations is reached," Brodie cautions that their logic may be flawed, as "the standard argument for rejecting as a useful firebreak any discrimination according to size of nuclear weapons is that it gives the enemy too much opportunity to mistake or deliberately exaggerate the size of the bombs one has used, and thus to proceed to larger ones. One never senses in connection with this argument any inclination to question whether the enemy will want to do so, an issue that would surely predominate over the question of his capacity to discriminate."1473 In his 1966 revisions, Brodie adds to this, "He might very well want to do the opposite."1474

Further, Brodie suspects the formal introduction of a firebreak would contribute to an unhesitating escalation up to that level of violence so determined, and his analysis of the Cuban Missile Crisis suggests to him that the United States was likely the beneficiary of the absence of such a notion, as the Soviets "clearly wanted no fighting

<sup>1468.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 64.

<sup>1469.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 64.

<sup>1470.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 64.

<sup>1471.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 65.

<sup>1472.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 106.

<sup>1473.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 65-66.

<sup>1474.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 107.

at all" given their fear that "any fighting was extremely dangerous," a viewpoint they may not have had if a firebreak had been established or asserted. 1475 Brodie suspects it was the absence of a firebreak that resulted in "the immediate amelioration in the tension over Berlin"1476 that followed the crisis in Cuba, even though "the Russians enjoy local conventional superiority." 1477 Brodie finds that the "firebreak proponents seem to feel that the present anti-firebreak Soviet attitude may help deterrence but is much more dangerous to us if deterrence fails. For that reason they want to speed up Soviet acceptance of the idea, which they regard as anyway inevitable. One might in passing notice in this reasoning the interesting differentiation between what are alleged to be deterrence interests and what are alleged to be war-fighting interests." 1478 It is this bifurcation of deterrence and warfighting interests that came to define a major cleavage within the field of strategic theory, and which carried over to doctrinal and policy debates through to the end of the Cold War, without ever truly being resolved. Partly why, of course, is the artificial nature of this bifurcation, when the fundamental ambiguity inherent in deterrence suggests the absence of a clear boundary separating deterrence from warfighting, which thrives in the absence of such clarity. Hence clear assertions of nuclear non-use, whether the firebreak concept discussed by Brodie in this chapter, or the later notion of no-first-use that became popular toward the end of the Cold War period, may in fact increase the likelihood of war, which of itself could increase the probability of escalation to nuclear war, thus clashing with the original intent of the declarations.

Brodie observes that when the Chinese intervened in the Korean War it came only after "five months of watching us fight, sometimes desperately, without nuclear weapons – a fact which could be relevant," a view supported by the work of Allen S. Whiting in his 1960 *China Crosses the Yalu: The Decision to Enter the Korean War.*<sup>1479</sup> Brodie strengthened this speculation in his 1966 revisions with more affirmative wording: "a fact which was unquestionably relevant and could have been important."<sup>1480</sup> Brodie suggests that quite contrary to the firebreak theorists, it may in fact be more in America's interest to "soften" and not "promote further . . . those distinctions between nuclear and non-nuclear weapons," as had been done by many American officials in their efforts, largely unsuccessful, to "induce our European allies to build up their conventional forces."<sup>1481</sup> At the very least, Brodie believes "we cannot avoid debating on

<sup>1475.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 67-68.

<sup>1476.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 68.

<sup>1477.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 68.

<sup>1478.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 69.

<sup>1479.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 69.

<sup>1480.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 111.

<sup>1481.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 69.

its merit a question as important as this one," <sup>1482</sup> and hence turns in his next and final chapter to "Predicting the Probabilities of Escalation: Some Sample Cases," which at twenty-seven pages (twenty-two as the pages were laid out in the 1966 revision published by Princeton University Press) is one of the longest in his book. Brodie starts out be reiterating his belief that "wherever deterrence-of-war objectives diverge from either war-fighting or anti-escalation objectives, as they inevitably do in important ways, it would be seriously wrong to sell the former short." <sup>1483</sup>

While he finds most defense experts then believed America's system of deterrence, in particular its "powerful and low-vulnerability strategic bombing system," faced "little danger, at least in the near-term, of being challenged," Brodie remained concerned with the consequences of deterrence failing, and believed we must "consider what to do militarily if it does," and this means "considering how and under what circumstances it will have failed."1484 He thus considers a scenario relating to a show-down over a Berlin convoy that risks escalating toward accidental war, which leads Brodie to ponder "the circumstances that can really make such a situation . . . go out of control," 1485 which he finds "boil down basically to two categories of factors," 1486: "the prevalence of rigid mechanisms of military response such as do tend or at least have tended in the past to pervade war-initiation concepts and also to get written into war plans," and "that bundle of psychological factors summed up by (a) concern with loss of face and (b) tendencies to yield to feelings of hatred and rage."1487 He noted with both interest and alarm that after the Cuban Missile Crisis, there was a "tendency to think or at least to talk in such simplistic but absolute terms" as conveyed by such "common expressions about 'pushing the button' or 'the balloon going up,'" in spite of the "sophistication they had presumably been accumulating in the preceding months concerning the appropriateness of flexible response and the feasibility of limited operations." <sup>1488</sup> But on the other hand, Brodie, ever the deterrence theorist, finds such a "crisis-induced regression to older patterns of thinking about war and peace" to be complementary to deterrence objectives since "the fear of precisely such semi-automatic escalatory reactions on the part of the opponent acts as a powerful deterrent to both sides,"1489 and the "present intensity of such fears among all the major powers" shows how much

<sup>1482.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 70.

<sup>1483.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 71.

<sup>1484.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 72.

<sup>1485.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 75.

<sup>1486.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 75.

<sup>1487.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 75.

<sup>1488.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 75-76.

<sup>1489.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 76.

Europe in the Cold War differed from "what it was before 1914 or even 1939." <sup>1490</sup> Brodie finds these fears to be "counterescalatory at lower levels of violence, and that the levels at which automatic or spontaneous escalation may tend to take over are being pushed critically higher," strengthening deterrence by "moving towards much higher levels of tolerance for types of behavior that previously would have been considered impossibly offensive." <sup>1491</sup>

As for saving face, Brodie suggests "[a]n imputed universal preoccupation with saving face" undergirds "why most people so readily assume that resort to nuclear weapons must make for spontaneous escalation." 1492 But history shows when it comes to choosing between saving face, or saving your country from destruction, nations, even superpowers, will choose the latter, hence the reason "the Soviet Union backed down in Cuba," and why the United States "to a considerable degree back down in Korea ... when it quite clearly modified its objectives as a result of Chinese intervention." 1493 Whether it's rage or humiliation, Brodie found that "governments, even Communist dictatorships, tend today to be corporate entities in which emotional feelings of individuals, regardless of how highly placed, are likely to be moderated and contained by the counsels of their advisers." 1494 When turning back to his scenario of an escalating conflict over the convoy supplying Berlin, Brodie argues that "one of the great drawbacks of following the so-called firebreak theory is that the more that confidence is built up in the firebreak, the less is each side restrained from committing larger and larger conventional forces within the limits of its capabilities. In other words, the effect is to stimulate escalation on the conventional side of the barrier." 1495 If for any reason NATO forces had not achieved conventional parity with the Soviet side, Brodie explains, this would leave NATO with an uncomfortable choice between a conventional rout, or to escalate with a nuclear threat to counter the strategic imbalance on the ground.

Brodie fully expects such a nuclear threat would de-escalate the crisis, rather than contribute to an escalatory cycle past the nuclear threshold, since in this scenario the conflict has been largely accidental, and not reflective of the desire of either party for war. Hence the Soviet Union, when faced with a nuclear risk, would have no reason to counter, much as it had no reason to challenge the American threat in Cuba. And even if the Russian do not back down, and show an uncharacteristic recklessness, Brodie believes American resolve, if demonstrated "by using the weapons rather more abruptly than the Russians seem to have bargained for," might well be "the best way,

<sup>1490.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 76.

<sup>1491.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 76-77.

<sup>1492.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 77.

<sup>1493.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 78.

<sup>1494.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 79.

<sup>1495.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 79-80.

perhaps the only way, for us to avert not only defeat but unnecessary escalation." <sup>1496</sup> Of course, Brodie recognizes it remains an open question "whether our own leaders could marshal the necessary psychological resources to introduce the use of nuclear weapon and to outbid any Soviet use," but while "it is one thing to say we could not," he finds that it's "quite another to say we should not," <sup>1497</sup> which advocates of both a conventional build-up in Europe and of the firebreak theory were strongly suggesting if not outright counseling. Brodie notes his speculative scenarios "encompassed only cases in which a relatively small number of nuclear weapons are used more or less in demonstrations" <sup>1498</sup> (and in his 1966 revisions adds that he recognizes "[t]here could be variations on this theme, including fairly wide use of small and highly specialized weapons – but the essential issue is maintaining tight control.") <sup>1499</sup> Lacking that, Brodie explains, would mean that it would no longer be the case that "both sides share a common determination to avoid going into an exchange that is many, many times more costly than any imaginable political goal could be justify," and this would mean "we are inevitably back in the world of massive retaliation." <sup>1500</sup>

Brodie considers the situation in Asia, noting our prior non-use of nuclear weapons in the Korean War, and he speculates that for various reasons, whether "some romantic . . . spirit of fair play" or our being "restrained by the firebreak idea," it remained "quite possible that we could fight another war in the Far East as large as the Korean War without using nuclear weapons." <sup>1501</sup> But this would mean "going about the job in the hard way," while at the same time causing "repercussions for the future that would in the net be not to our liking," as "we will have fixed for [our opponent] a pattern" of our non-use of nuclear weapons that "they have every further incentive to exploit." <sup>1502</sup> America's "gigantic nuclear capabilities" had "already been appreciably cut down in their effectiveness for deterring aggression by what might be called established world opinion opposed to their use," <sup>1503</sup> and Brodie cautions that "it behooves us to examine much more carefully than we have thus far some of the main propositions and arguments commonly made in support of our own drive to push even further toward what is in effect the psychological self-neutralization of our nuclear capabilities." <sup>1504</sup> Brodie counter charges that "we have not really faced up to the awful risks inherent

<sup>1496.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 83.

<sup>1497.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 85.

<sup>1498.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 85.

<sup>1499.</sup> Brodie, Escalation and the Nuclear Option (Princeton: PUP, 1966), 131.

<sup>1500.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 86.

<sup>1501.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 86-87.

<sup>1502.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 87.

<sup>1503.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 87.

<sup>1504.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 88.

in miscalculation" by arguing that such "risks are something that we have to measure as best we can," and his discussion of escalation in the above pages reflected his "effort to contribute to such measurement," on his realist assessment that "[w]e cannot forfeit the task simply by allowing in advance such gross exaggeration of the risks as to 'play it safe'" particularly as a 'second look quickly tells us that we do not really add to our safety by doing so." 1505

## **Dueling Views on Escalation**

International relations scholar Fred Charles Iklé would review the back-to-back works on escalation by both Brodie and Kahn, juxtaposing their ideas in an interesting sideby-side comparison of their two nearly simultaneous treatises on escalation: Kahn's 1965 On Escalation: Metaphors and Scenarios published by Frederick A. Praeger, and Brodie's 1966 Escalation and the Nuclear Option, published by Princeton University Press, which had published his 1959 Strategy in the Missile Age. In his July 1967 review in World Politics, Iklé observes that what became known as escalation since 1950, when the era of limited war began in earnest on the Korean peninsula, was really just a new label to describe an old process, one dating back to at least the Middle Ages, in which "one or both of the belligerents could have done significantly more to fight his enemy but chose not to do so" and instead limited the escalatory dynamic of war, preventing it from becoming total. 1506 He notes that there are "many ways in which a limited war can become less limited and many reasons why, during a war, governments change the level of effort that they devote to bargaining, fighting, and deterrence," and each of these is "tucked under the label 'escalation" today. 1507 Iklé adds that the word escalation "makes us think of stepwise increments, each of which confronts the enemy with a noticeable challenge" and "suggests that such steps succeed each other up or down a 'ladder'." 1508 It's precisely this image of a ladder the absorbs the attention of Herman Kahn, who Iklé notes was "aware that the metaphor of an 'escalation ladder' has serious shortcomings (to which he devotes a full chapter)" and "that the level of military effort (or violence) need not change in discrete steps;" Kahn thus "invented his forty-four steps precisely to remind us 'that there are many relatively continuous paths between a low-level crisis and an all-out war," and that in the fog of battle, "Both the distinct quality of a rung [on the ladder] and the distance between rungs can be blurred, particularly if a participant in the escalation wishes to blur them," and Iklé

<sup>1505.</sup> Brodie, Escalation and the Nuclear Option (RAND RM-4544-PR, 1965), 88.

<sup>1506.</sup> Fred Charles Iklé, "When the Fighting has to Stop: The Arguments about Escalation," *World Politics* 19, No. 4 (July 1967), 692.

<sup>1507.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 692.

<sup>1508.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 692.

adds that "Kahn also makes the important point that the participants in a war will have different perceptions of these various levels or intensities of military power." 1509

Iklé suggests that "if we think in terms of a single ladder descending from here to hell, we are likely to overlook important trade-offs between an increment in one dimension and a decrement in another,"1510 but he notes "a sophisticated author like Kahn would be the first to recognize these trade-offs, and he begins his book by stressing that there are several ways to 'escalate' a conflict," whether heading vertically up or down the ladder or expanding geographically at the same rung (whether to an adjacent theater or to an altogether different region, in what he dubs "compound escalation." <sup>1511</sup> Kahn's taxonomy of escalatory steps include not just increments of hard power, but includes "economic sanctions and verbal or symbolic acts (hostile propaganda, declarations of war, and such). 1512 While Kahn's book is "largely analytical in that it deals with a wide range of possibilities and takes up many aspects of escalation," Brodie's book is instead "essentially a plea for a change in U.S. policy, a plea that the United States give tactical nuclear weapons a greater role in NATO (to deter large-scale aggression) and cease to press for stronger conventional forces."1513 Iklé finds that what makes Brodie's book "somewhat frustrating to an exacting reader" is that the "various motives for and against nuclear escalation are inextricably intermingled in his easy-flowing prose."1514 As Iklé further describes: "On the one hand, he seems to argue that our use (or threatened use) of nuclear weapons would give us an advantage on the battlefield (or would threaten to do so)," while "[o]n the other hand, he seems to be uninterested in affecting the local military situation and instead wants to use tactical nuclear weapons merely to introduce 'the threat that leaves something to chance.' What we can threaten, Brodie argues, is some action that 'could escalate,' but we 'have to leave to the opponent in his next move the choice of making the situation more dangerous or less so . . . 'In the event of large-scale Russian aggression, Brodie writes, 'the best way, perhaps the only way, for us to avert not only defeat but unnecessary escalation is to demonstrate clearly that our readiness to take risks is not less than theirs. How can we do that except by using [nuclear] weapons – demonstratively, few rather than many, and in as controlled a manner as possible, but nevertheless rather more abruptly than the Russians seem to have bargained for in launching their aggression?' But if it is Brodie's objective to increase the shared risk of nuclear war and to demonstrate our willingness to compete in this risk-taking, it is not at all clear why we need "tactical"

<sup>1509.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 692.

<sup>1510.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 693.

<sup>1511.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 693.

<sup>1512.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 693.

<sup>1513.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 694.

<sup>1514.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 697.

nuclear weapons. A single "strategic" bomb against a military target might be just as effective, perhaps more controllable, and would certainly belong to a less vulnerable category of weapons."<sup>1515</sup>

Iklé speculates that "[p]erhaps the fairest interpretation of Brodie's book is that he wants us to rely more on tactical nuclear weapons for both reasons: the better to defeat aggression locally, and to scare the enemy into retreat by raising the risk of further escalation. After the mid-1950's, the possibility of such a dual effect of our tactical nuclear weapons might indeed have helped to deter the Russians from military aggression against NATO or against Berlin, assuming the Russians had to be deterred at all. But the proposal that, in the future, NATO should rely more rather than less on this effect is a bit like walking over thin ice and then saying, 'Let's do it again – it was so nice and smooth!' <sup>1516</sup> Iklé cautions that to "demonstrate our 'readiness to take risks' by exploding nuclear weapons that we call 'tactical' is not an appealing strategy for an alliance, particularly if this demonstration is to occur so close to our allies' heartland." <sup>1517</sup>

Iklé is concerned that "once fighting has started and we then do introduce tactical nuclears, will the enemy know when the fighting has to stop? That is, will he know that he should stop instantly? Brodie's point is well taken, that the enemy would have a strong incentive to recognize our con- trolled, small-scale use of nuclears as such and that he would contemplate his option of responding in kind with utter dismay. But Brodie skips over the difficulties of war termination in suggesting that the enemy would be less 'willing to accept defeat (or even stalemate) in a battle that has remained conventional than in one that has gone nuclear',"1518 and this raises for Iklé an important element in escalation overlooked by both Brodie and Kahn: that of the time dimension: "Even if the enemy did not respond in kind to our introduction of nuclears, he need not stop the advance of his conventional forces. His superior conventional forces might overcome our 'demonstration' use of tactical nuclears, ifas Brodie seems to recommend - our conventional forces were kept small relative to his and our use of nuclear weapons remained very limited. Should we then step up the use of nuclear weapons? Doing so might finally bring us success on the battlefield (assuming the enemy still withheld his nuclears), but it would confront us with the 'tactical' vulnerability problem: the fact that in the realm of 'tactical' nuclears, a large-scale first strike does pay. And if we therefore decided on a 'tactical preemption' instead of leaving this option to the enemy, could we rely on the firebreak between tactical and strategic weapons? Or should we go all the way? My point here is that

<sup>1515.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 697-99.

<sup>1516.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 699.

<sup>1517.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 699.

<sup>1518.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 703.

we cannot separate the introduction of tactical nuclears from a certain willingness to threaten strategic nuclear war, or at least a willingness to move into some of Herman Kahn's 'bizarre' crises of 'limited strategic war.'"1519

And while we "have some idea about how conventional wars are fought, what havoc they might cause, how they might become larger, and how the fighting can be stopped," Iklé is concerned that "[o]ur image of nuclear wars is a house of cards with one untested hypothesis piled upon another. The only thing we know fairly certainly are the physical effects of nuclear detonations. It is one of Brodie's themes that since conventional war can be so awful (and conventional preparations so costly), we should bring the nuclear deterrent up closer on the heels of conventional fighting." Iklé agrees that "[t]his is a valid motive," but cautions that "we must not become smug about the reliability of nuclear deterrence. Deterrence, in the long run, is dangerous." But despite the inherent dangers of deterrence, Iklé concedes that "[a]gainst the threat of strategic nuclear attack we may have no other choice-for decades to come — but to rely on deterrence." But he disagrees with Brodie's recommendation that we counter Soviet conventional superiority with our tactical nuclear edge; "in view of the long-term danger just alluded to, it would seem prudent to choose strategies that will help to curtail the implements and role of nuclear deterrence."

Iklé is aware that Brodie and Kahn are, in essence, debating, and that their dueling treatises are point and counterpoint in this debate; but he observes that "we cannot have a useful debate – much less intellectual progress – unless we make it clear where we agree and disagree," <sup>1524</sup> and he finds that this has been the case in these two works. "I would have found it useful if Bernard Brodie had related his themes more to the existing body of thought. He never mentions Schelling's 'threat that leaves something to chance,' and yet this is what he primarily seems to have in mind (if he does not, all the more important to say so). And, in a footnote, Brodie writes that Kahn's present book came too late for him to consider. Yet one wishes Brodie had added some linkages with Kahn's work (after all, he did have time to add an appendix after Kahn's book had come off the press). For instance, some of the points that seem to be missing in Brodie's criticism of the 'firebreak theory' can be found in Kahn's rich chapter on the nuclear threshold." <sup>1525</sup> On the other hand, Iklé acknowledges that "Brodie meant to

<sup>1519.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 703.

<sup>1520.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 703.

<sup>1521.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 703-05.

<sup>1522.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 705.

<sup>1523.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 705.

<sup>1524.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 705.

<sup>1525.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 705.

write one coherent essay, not a lexicon of cross-references."<sup>1526</sup> In contrast, Kahn "is less willing to make sacrifices for the harmony of his prose" and "enjoys sticking in little asides" even if that affects his narrative flow, though at times his lucidity shines through, particularly, Iklé believes, in Kahn's Appendix, "Relevant Concepts and Language for the Discussion of Escalation," which he describes as "a masterpiece in comprehensiveness and lucid categorization" and which can serve as the foundation that "could become a truly definitive synopsis of the subject" with additional refinement, and believes that "one of the merits of Kahn's book that it deals with so many aspects of escalation," including important observations on the often-overlooked topic of war termination and de-escalation, as well as the complicated question of escalation dominance.<sup>1527</sup>

## **The American Scientific Strategists**

In his October 1964 RAND paper, "The American Scientific Strategists" - which appeared that same year in shorter form and with slightly abbreviated title as "The Scientific Strategists," a chapter in Robert Gilpin and Christopher Wright, eds., Scientists and National Policy-Making - Brodie dives headlong back into the discussion he started in his seminal 1949 article, "Strategy as a Science" and which erupted in a series of heated memos a few years later at RAND, and recalled that "[p]ublications on military strategy" had until recently "been rather rare" and that "[m]ost of the few people who wrote them were career military officers." 1528 He speculated that this was possibly "one reason why the publications were so few," as the "specific qualifications and virtues required of a military officer have always left little room for what is essentially a scholarly, analytical, and preferably also a literary activity." 1529 But all that was now changing; indeed during "the last dozen years the situation has been vastly changed, at least within the United States" and "[a]rticles and books on strategy or strategic problems have become relatively abundant, not as compared with other intellectual fields but certainly as compared with former times."1530 And, Brodie adds, "the writers of these publications are almost always civilians, and of a particular type. They are highly trained in the formal academic sense, and their training is basically scientific," and particularly "since the coming into office in January, 1961 of the Kennedy-Johnson

<sup>1526.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 707.

<sup>1527.</sup> Iklé, "When the Fighting has to Stop: The Arguments about Escalation," 707.

<sup>1528.</sup> Bernard Brodie, "The American Scientific Strategists," RAND Working Paper (P-2979), October 1964, 1. Also see: Bernard Brodie, "The Scientific Strategists," in Robert Gilpin and Christopher Wright, eds., *Scientists and National Policy-Making* (New York: Columbia University Press, 1964), 240-266.

<sup>1529.</sup> Brodie, "The American Scientific Strategists," 1.

<sup>1530.</sup> Brodie, "The American Scientific Strategists," 1-2.

Administration, they have risen spectacularly in importance."1531 And while the new breed of civilian strategists have "little military experience themselves or occasionally none," with some being "too young to have served in World War II," Brodie notes that "the special abilities of these 'scientific strategists' have been recognized and fully used by the military services, often even with enthusiasm, and the relations between these civilians and the military officers whom they have served is on the whole quite close," Brodie, "The American Scientific Strategists," 2.) though a Brodie would discover, this is not always the case. As these new scientific-strategists rose to the complex and dangerous challenges of the nuclear era, Brodie found that it was "no exaggeration to say that all the distinctively modern concepts of military strategy, most of which have been embraced by the military services themselves, have evolved out of their ranks,"1532 including the cornerstone of America's Cold War strategy, deterrence. Brodie added that "[d]espite the still relatively small number of these specialists, the contrast between the situation today and that existing before 1950, or at least before World War II, is spectacular." 1533 While the landscape of strategic theory had been punctuated by the occasional prophetic voice, whether a Mahan or Corbett of the sea, or a Douhet or Mitchell of the air, or a Clausewitz or Jomini of the land, but their voices were few and preciously infrequent; with regard to land warfare, Brodie noted "[t]here had been no really great writer on strategy since the towering Karl von Clausewitz, who died in 1831, and the very influential though lesser figure of the Swiss mercenary, Antoine Henri Jomini, both career staff officers of the Napoleonic period." The approach of these more classical strategic theorists, Brodie points out that the "method of these men was mainly the scrutiny of military history to see what abiding lessons could be derived from the experience of the past," and that "[s]ome, like Du Picq and Mahan, had been careful and mostly objective historians" while "others, like Foch, were not averse to distorting history, with which they had little enough familiarity, to serve their pre-existing convictions." <sup>1535</sup> But Brodie added that "none of these figures, including the most recent, had been at all interested in applying quantitative measures to their data," adding that "[p]erhaps the modern school of strategists contrasts most sharply with the old in precisely this difference of attitude about numbers."1536

Before the renaissance in strategic thinking fostered by this new generation of civilian scientific-strategists, Brodie noted that "if we were to include the names of all the lesser figures whose writings on strategy make them worth mentioning at all, the total

<sup>1531.</sup> Brodie, "The American Scientific Strategists," 2.

<sup>1532.</sup> Brodie, "The American Scientific Strategists," 2.

<sup>1533.</sup> Brodie, "The American Scientific Strategists," 3.

<sup>1534.</sup> Brodie, "The American Scientific Strategists," 4.

<sup>1535.</sup> Brodie, "The American Scientific Strategists," 5.

<sup>1536.</sup> Brodie, "The American Scientific Strategists," 5.

number in this field in the hundred years preceding 1950 would still be remarkably small," and all said, "the theoretical study of military strategy, has been until now the most sparsely-populated of intellectual pursuits, despite the periodic recurrence of important wars." 1537 But despite the small size of the strategic-theoretical community, it was nonetheless an influential group, but not necessarily benign in its influence. As Brodie commented, the "important military decisions were in the past the work of men who, though professional soldiers, were rarely specialists in strategy" and while "[t]he generals or admirals in top command were usually older men who had spent their lives in those varied pursuits that we call military," Brodie notes "much of it had to do with drill and very little of it with the conduct of war." <sup>1538</sup> In Brodie's view, "by any pragmatic standard we have to concede that the system worked very badly for those whom it was supposed to serve. The tactical and strategic 'lessons' presented by the experience of successive wars often had to be learned over and over again, always at great cost and frequently at the risk of defeat." 1539 Asks Brodie, "Why had not the most obvious lessons of combat experience been absorbed by commanders who were to send great new armies into battle? Because for the most part experience not personal to him was not communicated to the leader of new forces, who was likely to pride himself more on being a man of action than on being a student of history, even of military history." 1540 Brodie also cautioned that "[o]ne must remember too – and the military are not the only ones of whom this is true – that people wedded to dogmas will often continue to cherish them undiminished after direct personal experiences which should prove them wrong," and "[i]n a profession where rank means so much, and where promotion is so much at the mercy of one's seniors, who will question or challenge the dogmas of his elders?"1541

But with the series of sweeping technological transformations of war that took place during World War II, the traditional approach to strategic theorizing came under new pressures, and required "a different and more flexible kind of military leader," and "among the more conspicuous factors of change, two deserve special mention. The first was the introduction at the very end of the conflict of the atomic bomb, which not only presented in itself a basic strategic change of totally unprecedented importance but also signalled the beginning of an era of extremely rapid and also extremely costly technological development. The second was the heavy reliance upon scientists to assist not only top military commanders but even heads of government to reach

<sup>1537.</sup> Brodie, "The American Scientific Strategists, 6.

<sup>1538.</sup> Brodie, "The American Scientific Strategists," 6.

<sup>1539.</sup> Brodie, "The American Scientific Strategists," 9.

<sup>1540.</sup> Brodie, "The American Scientific Strategists," 10.

<sup>1541.</sup> Brodie, "The American Scientific Strategists," 11.

critical tactical and strategic decisions."1542 as Brodie explained, the "tremendous novelty of the new military conditions was naturally bound to throw some doubt on the pertinence of the professional soldier's military experience," just as the unprecedented "destructiveness of nuclear weapons meant that total or 'general' war (which for the first decade of the atomic age was practically the only kind one thought about) would have to be fought with forces in being at the outset – a change that effectively pushed all the major strategic decisions, including choice of weapon systems, of deployments, and of targets, into the pre-war period, when the military man has not yet 'taken over' from the civilian."1543 Added Brodie: "Furthermore, the rapidity of change that resulted from the development of a wide range of nuclear weapons, combined with the development of fabulous new vehicles for carrying them, diminished greatly the utility of simple professional judgment in selecting the appropriate systems, especially in view of the tremendous sums of money involved in the choices. The military man had all he could do to keep abreast of current technological developments pertinent to his work."1544 While it "was not altogether a new problem for the military to have to think ahead technologically," Brodie observed that "certainly the dimensions and complexity of the problem was totally new," and this meant that the military would increasingly depend upon "technicians who could be counted on to maintain an alert understanding of the evolving 'state of the art' in any one technological field."1545

Fueled by this growing need, as well as by "the new prestige of scientists as a result of the nuclear developments," Brodie describes how "a development took place in the United States that was to have consequences far beyond those expected by the sponsors. This was the founding of a number of institutions closely associated with but outside the military services, where people with various kinds of scientific training and access to classified information would devote themselves on a full-time basis to the consideration of military problems," organizations like the RAND Corporation, both the "prototype of these organizations and the best known among them." <sup>1546</sup> As Brodie recounts, "those who were given the task of organizing RAND included in it almost from the outset divisions of mathematics, economics, and social science, as well as the more-to-be-expected engineering and physics divisions," adding that their "inclusion of an economics division turned out to be of especially critical importance, and the inclusion of a social science division made it possible to undertake, among other things, a thoroughgoing study of the Communist enemy or enemies of a kind

<sup>1542.</sup> Brodie, "The American Scientific Strategists," 11-12.

<sup>1543.</sup> Brodie, "The American Scientific Strategists," 13.

<sup>1544.</sup> Brodie, "The American Scientific Strategists," 13-14.

<sup>1545.</sup> Brodie, "The American Scientific Strategists," 14.

<sup>1546.</sup> Brodie, "The American Scientific Strategists," 15.

that had too long been lacking from the strategic studies." Indeed, Brodie describes numerous "conceptual parallels between strategy and economics," recalling that in his 1949 article, "Strategy as a Science," he "called attention to the remarkable similarities in both method and objectives between the science of economics and what could become a science of strategy." 1548

Indeed, he observed that a "majority of those who have made their mark today as theorists in strategy have been trained as economists, or at least have more than a bowing acquaintance with the concepts and principles in that field," including Herman Kahn, who in addition to being a physicists, "trained himself quite seriously as an economist, and was once even offered a professorial post in economics in a leading American university," as well as Thomas Schelling and Albert Wohlstetter, who "were intensively trained as economists," among many others – including several economists "who were formerly of RAND but now hold important posts in the Department of Defense."1549 So while "[e]arlier generations of strategic writers used practically no tools other than history," Brodie found that "few of the present writers in the field ever trouble to read history" – which would itself become problematic in the years to come as historical insight all but lost out to the new scientific logic. 1550 As Brodie observed, "One is sometimes amazed at how little some of the best-known strategic analysts of our times may know about conflicts no more remote in time than World War I, let alone earlier wars (the same is, however, true of professional military officers). It is not that they have no time for history but rather that the devotees of any highly developed science - and economics is clearly the most highly developed of the social sciences -tend to develop a certain disdain and even arrogance concerning other fields. It is a grave intellectual fault, but a very common one."1551 Brodie found that the "modern training of economists, with its heavy emphasis on mathematics and other tools of quantitative analysis, tends to fit one peculiarly well for grappling with certain characteristic problems of strategy, especially in what we call 'cost-effectiveness' analysis." 1552 But other analytical tools would be required, as the "importance of being sensitive to the political issues that are omnipresent in strategic questions would be hard to overestimate,"1553 and as "some of the most important factors relevant to determining the performance of a system are not finally reducible

<sup>1547.</sup> Brodie, "The American Scientific Strategists," 18.

<sup>1548.</sup> Brodie, "The American Scientific Strategists," 20.

<sup>1549.</sup> Brodie, "The American Scientific Strategists," 21.

<sup>1550.</sup> Brodie, "The American Scientific Strategists," 21.

<sup>1551.</sup> Brodie, "The American Scientific Strategists," 22.

<sup>1552.</sup> Brodie, "The American Scientific Strategists," 21-22.

<sup>1553.</sup> Brodie, "The American Scientific Strategists," 22.

to dollar comparisons."1554 Nonetheless, "at every stage decisions are made which are difficult at best and impossible to make wisely without utilizing all the tools that modern concepts of economic and strategic analysis have made available to us. This is a new and now permanent condition, a state of the world undreamed of in 1939."1555 Indeed, Brodie can't understate the complexity of the challenge confronted by strategic analysts: "As we move to a larger context we see that we have hardly begun to measure the complexity of the major issues of strategy. We observe that a nation makes its strategic dispositions not against a more or less predictable state of nature but against an opponent or group of opponents whose present intentions and capabilities have to be analyzed to the best limits of our information and their future course predicted. These opponents are cunning and have objectives in direct conflict with our own. ... Moreover, one has to adjust to a range of possible situations – the single most likely situation does not necessarily have a high degree of likelihood. And, obviously, one's defensive preparations when detected will affect the offensive designs of the opponent and vice versa."1556 But as Brodie observes, "As the 'scientific strategists' have become more at home in their work, their greater maturity has resulted in important changes in basic approach. Where their tendency used to be to try to find the optimum method of dealing with a single most-expected contingency, the realization that the enemy might play the game differently from the way in which we think we ought to play it has prompted us instead to seek that mixture of solutions which does rather well over a complex of contingencies."1557 Brodie discusses both the use and limitations of gaming techniques, noting that game theory "as developed mostly by the late mathematician John von Neumann" was "generally of little importance to the strategist" and that in fact "many strategic analysts do important and excellent work in their field without having much understanding of game theory. What matters is the spirit of the gaming principle, the constant reminder that in war we shall be dealing with an opponent who will react to our moves and to whom we must react. It is amazing how little this simple conception has characterized war plans in the past."1558 Brodie explains that "the greatest value of the gaming technique is in conditioning the analyst or decision-maker to ask himself spontaneously: 'How is the enemy likely to respond if I carry out (or refrain from) this proposed action, and what new problems will that response create for me."1559

<sup>1554.</sup> Brodie, "The American Scientific Strategists," 23.

<sup>1555.</sup> Brodie, "The American Scientific Strategists," 25.

<sup>1556.</sup> Brodie, "The American Scientific Strategists," 25-26.

<sup>1557.</sup> Brodie, "The American Scientific Strategists," 28-29.

<sup>1558.</sup> Brodie, "The American Scientific Strategists," 30.

<sup>1559.</sup> Brodie, "The American Scientific Strategists," 31.

While the scientific approach to strategy is not without its faults, Brodie found that its "greatest limitation" was that decisionmakers "often fail to use scientific method when they should or when they pretend to" and in "[s]uch lapses" reveal that "they are human, and thus disposed to sharing the infirmities of humanity."1560 But, he points out, "Even in the areas in which strictly scientific analysis is appropriate, the complexity of the field, the impossibility of really testing conclusively one's suppositions or deductions, and the fact that one is constantly running up against value judgments or simply against the mysteries of the future mean that temptations always exist both to shortcut some of the analytical difficulties and to pretend to analytic objectivity where it has ceased to operate."1561 A more scientific approach was thus "not what we have too much of but what we too often fail to achieve," but despite its faults, Brodie believed that the "great merit of the scientifically trained analyst is that he tries more persistently than others, and he can perhaps be more easily made aware of his lapses when they occur. When we do succeed in using scientific method for the systematic exploration and comparison of alternative courses of action, we are doing simply the best we can do to bring some order into the vast, chaotic mass of technological, economic, and political facts and predictions which form the universe of data in which reasonable military decisions have to be made."1562

Brodie discussed the relationship between the civilian strategists and their military clients, noting "relations between the civilian scientific strategists and their military clients have in the main been thoroughly good and mutually profitable," and when this "has not been so, it is usually because we are dealing with character weaknesses on one or both sides. Most military officers know their own worth, and their special qualifications for indispensable service, and are content to recognize the limits of their training and experience. Some are not."<sup>1563</sup> Brodie added the "same is true on the side of the analysts. It has always been true that creative abilities are not necessarily combined in the same person with such character endowments as tact and modesty."<sup>1564</sup> The relationship had become especially close with the "coming to office with the Kennedy Administration of the extraordinarily able, vigorous, and self-confident Mr. Robert S. McNamara as Secretary of Defense," which "had extraordinary consequences with respect to the relationships we have been discussing," and though "[s]ome of these consequences are likely to be enduring," Brodie cautioned that "others will no doubt be but temporary."<sup>1565</sup> Brodie described the "team that entered office with

<sup>1560.</sup> Brodie, "The American Scientific Strategists," 32.

<sup>1561.</sup> Brodie, "The American Scientific Strategists," 33.

<sup>1562.</sup> Brodie, "The American Scientific Strategists," 34.

<sup>1563.</sup> Brodie, "The American Scientific Strategists," 34.

<sup>1564.</sup> Brodie, "The American Scientific Strategists," 34.

<sup>1565.</sup> Brodie, "The American Scientific Strategists," 36.

Mr. McNamara" as including "in positions of relatively high responsibility, a small group of persons who had made their mark as strategic analysts of the kind we have been describing," and "[t]his nucleus of experts on the staff were able also to enlist the services, on a part-time consultative basis, of others who had had the same kind of training and experience. With such able and knowledgeable people on his staff or otherwise available to him, and speaking a kind of 'cost effectiveness' language which as a former industrialist he had come to understand and appreciate, Mr. McNamara quickly developed so marked a confidence in his own judgment that he was before long making decisions that ran counter to the unanimous advice of committees of his military advisors."1566 Indeed, McNamara did this with "the now famous TFX airplane controversy, and also in refusing to countenance the construction of more new aircraft carriers (besides the already-built Enterprise) with nuclear propulsion, insisting instead on the cheaper conventional propulsion," but "[e]ven more important was his insistence on planning to fight even large-scale local wars with conventional rather than with tactical nuclear weapons,"1567 a policy that would come to haunt him after the humbling defeat in Vietnam.

But importantly, Brodie commented that "[i]t should be noted that no previous Secretary of Defense had ever made a decision of mostly military significance against a unanimous judgment of the Joint Chiefs. Some of them had reluctantly intervened when the Joint Chiefs were hopelessly split, but only after urging them to come to a meeting of minds if possible. What was new in Mr. McNamara's method was not only that he was willing to place his own judgment against that of his military advisors, but also that the kind of analytical investigations which the separate services had previously conducted on their own initiative and responsibility, which enabled them to reserve to themselves authority to accept or reject the advice they received from the institutions like RAND which they supported, were now being reported directly to the Secretary of Defense. In short, the military to a large extent lost control of the kind of analytical operations which they had themselves sponsored. It probably did not help matters that some of the civilians involved were very young and not inclined to be especially tactful or deferential to the military. The remarkable thing is that relations did not become more critical." <sup>1568</sup>

Brodie anticipated that "much of this situation is bound to be impermanent" and saw "little chance for institutionalizing the pervasive and searching kind of civilian control of the whole gamut of important military decisions that a very special kind of Secretary aided by an unusual array of assistants has eagerly undertaken," predicting

<sup>1566.</sup> Brodie, "The American Scientific Strategists," 36-37.

<sup>1567.</sup> Brodie, "The American Scientific Strategists," 37.

<sup>1568.</sup> Brodie, "The American Scientific Strategists," 37.

that "[m]ost future Secretaries will not want to shoulder that kind of responsibility" and as a consequence, we could "thus expect in the future to see the military chieftains or the Joint Chiefs regain much of their formerly unchallenged responsibility and authority for major military decisions and for providing their political superiors with appropriate advice."1569 However, Brodie added that "[o]n the other hand, a number of important trends already existing before the present Administration and brought to fuller fruition under Secretary McNamara represent long-term and largely irreversible changes," including "the new kind of budgeting according to strategic functions rather than to services" as well as "the tendency for the making of decisions on major weapons systems to be brought into the direct purview of the office of the Secretary of Defense."1570 Brodie further expected it would be "probably unlikely that military leaders will quickly forget the salutary shock of being required to present closely reasoned justifications for their recommendations, rather than merely their sovereign judgment," and "since their problems are not getting any simpler, we may expect that they will continue to rely heavily on the kind of intricate systems analysis to which they have by now become entirely accustomed."1571 And the military would indeed "continue to rely heavily on the kind of intricate systems analysis to which they have by now become entirely accustomed,"1572 yielding to the analytical prowess of the new corpus of civilian strategists at RAND and, increasingly, serving at the highest levels of the Pentagon. Only a few years later, such a sea change in how strategy was made would come back to haunt both sides, as the effort at controlled-escalation taking place in Vietnam began to tragically spin out of control.

## From Prophet to Courtier: 'What RAND Hath Wrought'

As Colin Gray recounted in his Autumn 1971 Foreign Policy article, "What RAND Hath Wrought," the 1950s "saw a renaissance of strategic thought" during which "such civilian theorists as Albert Wohlstetter, Henry Rowen, Bernard Brodie, Thomas Schelling, Herman Kahn, William Kaufmann and Henry Kissinger constructed an edifice of strategic theory that has come to have a profound impact upon all important aspects of U.S. defense policy" and so when President Kennedy came to power at the dawn of the sixties, "the promise was high" – particularly as the "civilian strategists came to Washington to assume an influential role in a new administration." But when writing a full decade after Kennedy had come to power (and more than a quarter-century

<sup>1569.</sup> Brodie, "The American Scientific Strategists," 38.

<sup>1570.</sup> Brodie, "The American Scientific Strategists," 38.

<sup>1571.</sup> Brodie, "The American Scientific Strategists," 38.

<sup>1572.</sup> Brodie, "The American Scientific Strategists," 38.

<sup>1573.</sup> Colin S. Gray, "What RAND Hath Wrought," Foreign Policy 4 (Autumn 1971), 111.

before his 1999 tribute to Clausewitz in *Modern Strategy*, which was also, to a lesser degree, a tribute to Brodie), Gray then felt it was "fair to say that their performance has not lived up to their promise" – adding, "[a]nd that's putting it mildly."<sup>1574</sup>

As Gray observed: "The Vietnam war, the conduct of the strategic arms race and major intra-alliance difficulties suggest that the following charges may be leveled at the strategic scholars whose theories won official acceptance in Washington." 1575 The first is that the "methodology of the civilian strategists has been dominated by an 'economic conflict' model" and its "assumption that inter- national conflict can be analyzed in terms of rational 'strategic men' has been vital for the progress of theorybuilding in strategy, but it has proved fatal to the relevance of theorists who have shifted from model- building to prescription."1576 The second is that "[b]ecause they are essentially men of ideas, the civilian scholars of strategy have been overimpressed with the potential transferability of theory to the world of action." <sup>1577</sup> And third, that "[t]he civilian scholars who arose in the 1950's to fill certain obvious holes in strategic understanding succeeded, first, in gaining intellectual access to political and military elements in opposition to the Eisenhower Administration, and, second, gained access in the early 1960's to the actual policy making processes of government. The prophets became courtiers. The consequence has been that since the middle and late 1960's the United States has been living off its strategic theoretical capital."1578

As Gray saw things, "If policy prescription may be described as the advocacy of 'viable solutions,' so scholarship should be viewed as the pursuit of truth. The civilian strategist has fallen between the two extremes. The 'think-tank' world, as exemplified by the RAND Corporation, has been the middle ground between academe and government. Yet because of its dual loyalty – to the needs of problem-oriented officials and to the disinterested or 'policy-neutral' standards of scholarship – it has tended to produce both irrelevant policy advice and poor scholarship." <sup>1579</sup> And this was particularly evident in Vietnam: "It would appear that by most criteria the Vietnam War has been a massive failure for the United States," Gray writes; "Success or failure are not to be measured solely in terms of the objectives attained, but also by the costs incurred." <sup>1580</sup> Gray observes that the Vietnam War "has unfortunately been taken to be a test case for the doctrine of flexible response," where the United States had "tried everything short of a 'take-over' of the government in Saigon, the employment of nuclear weapons

<sup>1574.</sup> Gray, "What RAND Hath Wrought," 111.

<sup>1575.</sup> Gray, "What RAND Hath Wrought," 111.

<sup>1576.</sup> Gray, "What RAND Hath Wrought," 111.

<sup>1577.</sup> Gray, "What RAND Hath Wrought," 111.

<sup>1578.</sup> Gray, "What RAND Hath Wrought," 111-112.

<sup>1579.</sup> Gray, "What RAND Hath Wrought," 112.

<sup>1580.</sup> Gray, "What RAND Hath Wrought," 112.

and an invasion of the sanctuary area of North Vietnam. Nation-building, counterinsurgency, limited war, a controlled escalation of punishment by air-power – all have been attempted and all have failed to produce either the military-political defeat of the Viet Cong/North Vietnamese or the negotiated settlement that was expected." <sup>1581</sup>

On the other hand, Gray thinks that Vietnam "does not demonstrate the inutility of flexible response." 1582 Instead, "What it does demonstrate is that the United States was ill-advised to wage a protracted, semi-conventional war on the Asian mainland against an enemy whose pain threshold for settlement was either non-existent or was unattainable, and in tandem with a local government distinguished by its lack of popular support and by its degree of corruption (these distinctions are, of course, far from unique)."1583 Thus the "failure of America's strategic theorists over Vietnam was not at the level of theoretical understanding. Rather, the theorists failed to insist to their government in strong enough terms that the task was too great. There is good reason to question the mode of employment of American military power in Vietnam (particularly the air war against North Vietnam and the extensive and unrewarding 'search and destroy' operations). But the truth appears to be that, in the 1960's, South Vietnam was not a nation that could be 'built' by massive American intervention. The most that could be accomplished, at frightful cost to the American political system, was the elimination of the possibility of military victory by the Viet-cong, while the victory of North Vietnam in the long term would seem to have been assured."1584

In the Winter 1971-72 edition of *Foreign Policy* magazine, Brodie's "Why Were We So (Strategically) Wrong?" responded directly to Gray's "What RAND Hath Wrought" article in the previous edition that "charged that a number of civilian strategists (including this one) fell flat on their faces over the past decade in trying to predict the character and outcome of the Vietnam war."

1585 Brodie concedes that "[i]n this he is obviously quite correct, and it is an important and disturbing conclusion. It might be highly instructive to explore why they (or we) have erred, and that is why, at the request of the editors of *Foreign Policy*, I am responding to Mr. Gray's critique."

1586 Brodie cites Gray, who wrote that "If policy prescription may be described as the advocacy of 'viable solutions,' so scholarship should be viewed as the pursuit of truth. The civilian strategist has fallen between the two extremes."

1587 Brodie notes Gray's attitude "reflects much of the social science thinking of our time, but I find it particularly inopportune

<sup>1581.</sup> Gray, "What RAND Hath Wrought," 112.

<sup>1582.</sup> Gray, "What RAND Hath Wrought," 112.

<sup>1583.</sup> Gray, "What RAND Hath Wrought," 112.

<sup>1584.</sup> Gray, "What RAND Hath Wrought," 112.

<sup>1585.</sup> Bernard Brodie, "Why Were We So (Strategically) Wrong?" Foreign Policy 5 (Winter 1971-72): 151.

<sup>1586.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 151.

<sup>1587.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 151.

in this instance. For strategic thinking, or 'theory' if one prefers, is nothing if not pragmatic. Strategy is a 'how to do it' study, a guide for accomplishing something and doing it efficiently. The question that matters in strategy – as in many other branches of politics – is, will the idea work? More, will it be likely to work under the precise and inevitably special circumstances under which it will next be tested? How much these circumstances are known or knowable depends partly on how close we are to the moment of testing. The failure of the civilian strategists in Vietnam, as Mr. Gray fails to notice, is that that part of their theory he most admires proved utterly irrelevant, and many of their ideas which were not irrelevant proved false." 1588 Adds Brodie, "The score as tested against the special reality of Vietnam was much worse than it should have been, and the error is measured in something much more tragic than red-faces. Mr. Gray chides the 'civilian scholars of strategy' with being 'overimpressed with the potential transferability of theory to the world of action.' What, pray, could their theory possibly be for if it were not meant to be transferable to precisely that world? The theory of strategy is a theory for action, or, to turn around Gray's own words, strategy is a field where truth is sought in the pursuit of viable solutions."1589

Brodie explains that strategic theory "differs from theory in the pure sciences only in that the latter is content to describe and explain rather than to prescribe," but that at heart both face the reality check of the real world.¹590 "Social scientists who yearn for the theoretical and methodological elegance of the physical sciences often seem unaware that theorists in physics evaluate their formulations entirely by whether they are ultimately proved or disproved by experiments or other observations, in other words by whether they accord fully and consistently with the real world."¹591 Brodie also notes that Gray "accuses these well-meaning but dangerous people of whom he writes of insinuating themselves, especially during the McNamara regime, directly into the policy-making process," suggesting a complicity and perhaps even a malicious intent that mirrors the popular misperception of Machiavelli as the conniving would-be courtier ingratiating himself with the Prince's circle.¹592 Brodie cites Gray, who "puts it, 'The prophets became courtiers,' with a consequent loss of their purity and allegedly also a bootless using up of their 'strategic theoretical capital.'"¹593

Brodie scolds Gray for such a generalization, and also reveals his own frustration having lacked an enduring connection with the decision-making elite: "People like in general to be more, rather than less, useful, and as one who was not invited into the

<sup>1588.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 151-152

<sup>1589.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 152

<sup>1590.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 152.

<sup>1591.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 152.

<sup>1592.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 152.

<sup>1593.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 152.

McNamara circle I am bound to say I would not have felt sullied if I had been. My own service at high levels in the Pentagon came much earlier in time, and during a very few months in that place I learned a great deal that was useful to my subsequent thinking. Perhaps the most useful thing I learned was how badly things are done at the strategic level in the 'world of action,' but the shocks that go with the experience help overcome the diffidence which an outsider might otherwise feel." Brodie thus sympathetically describes the enormous weight on the shoulders of the strategic theorists, and recounts how when he joined RAND in 1951 he was the sole analyst with an interest in, and knowledge of, strategy – and over time, even as the number increased, "the number has always remained small – especially if one limits the count to those who demonstrated a capacity for some originality. Upon this small group there fell by default the job of determining how to think about the atomic bomb, and how to do so under technological and political circumstances that were steadily and rapidly changing." 1595

Brodie retells the story of his lone opposition to the conventional build-up by NATO in the face of Soviet armed strength along the central front, noting that "[o] n the question, for example, whether or not the United States and its NATO allies should build up large conventional forces in Europe, which for several years was the prime issue in American foreign security policy, I believe that mine was the only American voice raised in criticism and opposition, at least as recorded in published statements," and had Brodie "desired to avoid offending leaders of the inner circle," he explains, "the Administration view would have escaped any criticism. Not that it mattered greatly in this instance, because the effective opposition came from the sit-down strike of our NATO allies. Whether I was right or wrong is beside the point;

<sup>1594.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 152-53.

<sup>1595.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 153. Brodie's entire description is quote compelling to digest in full: "The civilian strategists, as Gray concedes, represented a very thin line upon whom was thrust a tremendous burden. When I joined RAND in 1951, I was the single member of it who appeared to be interested in strategy - certainly the only one who had published anything on strategy, nuclear or pre-nuclear. Albert Wohlstetter and Herman Kahn were already members of that organization (Malcolm Hoag, William Kaufmann, and Thomas Schelling were to show up later) but their thoughts had not yet sortied out into the open reaches of national strategy. They were still working on technical problems of limited scope defined by RAND's sponsor, the U.S. Air Force, and thereby helping to develop systems analysis. Other persons at other places were to appear gradually, but the number has always remained small – especially if one limits the count to those who demonstrated a capacity for some originality. Upon this small group there fell by default the job of determining how to think about the atomic bomb, and how to do so under technological and political circumstances that were steadily and rapidly changing. When I say 'by default' I mean that the professional military, with exceedingly few exceptions, contributed little but resistance - especially resistance to the idea of restraint - and have continued ever since to contribute little or nothing to the understanding of the basic strategic-political problems of our times. That is not to be wondered at, because they have been improperly educated for that part of their job. They have in fact a trained incapacity for dealing with it, and their performance in Vietnam should be all the proof we need. The fact of small numbers of contributors is of acute importance. Among people who are grappling with new and baffling problems, opinions are bound to be expressed which are dubious or false, and the appropriate response or refutation will often not be heard because there are too few or perhaps even none available to make it. Those that formed McNamara's "court" comprised a highly like-minded school which absorbed a large proportion of the available talent, and dissident voices outside were few and easily drowned out."

what counts is that the issue, which was certainly important enough, did not present such self-evident answers as to warrant the near-absence of debate." 1596

Brodie discusses his own skepticism for systems analysis, and a widespread overdependence upon it, noting that "[a]nother great misfortune in the last two decades was the wholly excessive attention and deference paid to systems analysis, a deference which Mr. Gray fully shares." 1597 And while Brodie accedes that, "[c]ertainly the technique of systems analysis is indispensable for the consideration of many important military questions raised in the modern era" such as selecting "appropriate weapons systems among types not yet developed," which "would be a baffling and terribly wasteful business without it," Brodie believes while "it is an important tool in making some military decisions, it is not coterminous with strategy, as Mr. Robert McNamara, among others, thought it was." 1598 Brodie lays blame for the Vietnam debacle squarely on systems analysis, and the over-dependence of strategic analysts, especially that of Defense Secretary McNamara, upon this new method. As Brodie explained, "Classical systems analysis, despite the yeoman's work done by Alain Enthoven's office, has had just about zero relevance to everything concerned with Vietnam." 1599 Brodie believes "[o]ur failures there have been at least 95 percent due to our incomprehension and inability to cope with the political dimensions of the problem, not forgetting that part which is internal to the United States," and that "[i]f we had understood these problems we should certainly not have gone in, and the failure belongs not simply to the 'civilian strategists' but also to the political science profession, at least that part of it which is involved in foreign policy questions and regional studies."1600 And "[a] mong those errors that were primarily military," Brodie places "at the top the failure to anticipate properly the importance of giving the opponent a sanctuary which comprises his entire homeland," as "[f] or over three years it was not a sanctuary against bombing (which also failed to deliver the results expected of it – and let us hear no more from

<sup>1596.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 153.

<sup>1597.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 153.

<sup>1598.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 154. As Brodie described in detail, "Secretary McNamara, by training a statistician, was plainly in love with it. He gloried in the graphs, multicolored, in layer upon layer, and rejected the 'poetry' of those who sought to introduce a little political intuition. His 'court' was comprised mostly of systems analysts (Enthoven, Wohlstetter, Rowen, et al). Nor was Mr. McNamara alone in his infatuation. Within RAND itself there was a quiet but strongly-felt status differential between those who knew how to handle graphs and mathematical symbols, especially if they also knew how to manage teams of similarly equipped young men, and those who merely knew how to probe political issues. Elegance of method is indeed marvelously seductive, even when it is irrelevant or inappropriate to the major problems. At RAND it seduced some who were trained to be political analysts and might have become good ones. The point was made well enough back in 1960 by Charles J. Hitch, now President of the University of California, at a conference of systems and operations analysts in Aix-en-Provence. When one excited participant urged that their special techniques, thoroughly computerized, be immediately adapted to the solution of foreign policy problems, Hitch, himself a pioneer in the field, dryly responded that they really appeared more appropriate to rationalizing traffic over the George Washington Bridge." Brodie, "Why Were We So (Strategically) Wrong?" 155-56.

<sup>1599.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 156.

<sup>1600.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 156.

Admiral U.S. Grant Sharp about our not having done enough bombing); but it has always been a complete sanctuary against ground force incursion, which meant that the enemy could, to paraphrase Lord Bacon, take as much or as little of the war as he wanted, and could shift his degree of participation whenever he wanted. Our errors here, partly the result of misreading the lessons of Korea, were disastrous." But as Brodie observes, "that disaster pales in comparison with the consequences of our willful blindness in trying to shore up a corrupt, inefficient, and thoroughly unpopular regime. We had no business trying, and we could not succeed." Brodie cites Gray, who wrote, "The failure of America's strategic theorists over Vietnam was not at the level of theoretical understanding. Rather the theorists failed to insist to their government in strong enough terms that the task was too great." Brodie responds, "Well, one would wish that that were so. It is pretty nearly the opposite of the truth." Indeed, as Brodie observes, "At the level of 'theoretical understanding' their error was total." Brodie responds.

Brodie considers "the cures," noting that "Gray has some, but I do not fully understand them. They seem to be counsels of perfection – more emphasis on purer theory and on avoiding 'the seductions of power." <sup>1606</sup> Brodie presents, perhaps in frustration at his own exclusion from that inner circle, "the opposite advice for a man of younger or middle years, provided he were invited to be operational at or near the highest levels," as "[h]e would learn a good deal that is perennial about the military, the politicians, and 'how things are done,' and inasmuch as he would last at most for one administration and probably much less if he were a free spirit with an independent mind, not too much of his life would be taken up in the process." <sup>1607</sup> But "[i]f he wants to be a thinker about important issues and make significant contributions in writing, he must of course avoid getting entangled in the bureaucracies, though even they manage to absorb some quite exceptional men without always ruining them," such as "George Kennan, and there are some others." <sup>1608</sup>

<sup>1601.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 156.

<sup>1602.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 156.

<sup>1603.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 157.

<sup>1604.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 157.

<sup>1605.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 157. Brodie elaborated, "Also, I know no one among the civilian strategists Gray mentions and some others besides who by the end of 1965 had manifested any misgivings about the course that President Johnson had embarked upon. Most assuredly I know of none of the group who seemed to think that the 'task was too great.' On the contrary, for some of them it was precisely the kind of application of their ideas which they could not help but relish – for example, the concept that by granting sanctuary to North Vietnam from our ground forces we could assure China's staying out of the war. This would mean, they thought, that we could keep the war limited and fight it on our own terms. They were probably right about keeping China out, but not about the price. One also painfully remembers all the talk about building up conventional forces not only for Europe but for stamping out 'brush fires' – which by definition included Vietnam – until we began to pour oil on the flames."

<sup>1606.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 160.

<sup>1607.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 160.

<sup>1608.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 160.

Ever the realist, Brodie finds much learning taking place from the Vietnam experience, noting that "[w]e are even now learning a great deal from the Vietnam experience precisely because it has been so searing and so prolonged. We are witnessing in various places, including the pages of this journal, what appears to be a searching post-mortem (though at this writing the war is not yet the corpse it ought to be)."1609 Brodie adds that "[w]e are learning to be mistrustful of political dogmas, and less diffident about confronting military dogmas," and that "[w]e certainly need to stress the superior importance of the political side of strategy to the simply technical and technological side," and to "[p] reserve and cherish the systems analysts, but avoid the genuflections."1610 Brodie believes there remains "a long way to go," but points out that "much distance has already been traveled. When we recall how we discussed methods for demonstrating 'our superior resolve' without ever questioning whether we would indeed have or deserve to have superiority in that commodity, we realize how puerile was our whole approach to our art. Well, one learns from hard experience, though in this case we have learned also the importance of depressing the quantity of comparable experience in the future."1611

A few years later, in his 1977 International Security article "Across the Nuclear Divide: Strategic Studies, Past and Present,"1612 Gray more sympathetically revisits the transition in strategic studies from the pre- to the post-nuclear worlds and suggests that the "immediate pre-nuclear origins of nuclear-age strategic studies may easily be identified in the operational research industry that flourished in the Second World War;" and yet, he finds that it was "still true to say that the several perceived discontinuities imposed by the technological changes that began with the first atomic bombs have resulted in the growth of a strategic studies community that is sociologically very distinct indeed from its functional parallels in the past,"1613 as illustrated by the new found expertise of civilian strategists recognized by the military: "In the 1970s when a national military college in the United States or Britain wished to hear an authoritative exposition of the political, economic and military implications of new tactical nuclear weapon technologies, it tended to invite a civilian to deliver the address - even a civilian who had no direct military experience whatever," and Gray found this to be "a major development that a civilian should be believed to have the most appropriate credentials for an exposition on such a subject," particularly since

<sup>1609.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 160-61.

<sup>1610.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 161.

<sup>1611.</sup> Brodie, "Why Were We So (Strategically) Wrong?" 161.

<sup>1612.</sup> Colin S. Gray, "Across the Nuclear Divide: Strategic Studies, Past and Present," originally published in International Security 2, No. 1 (Summer 1977), 24-46 and republished in Gray's *Strategy and History: Essays on Theory and Practice* (New York: Taylor & Francis, 2006).

<sup>1613.</sup> Colin S. Gray, Strategy and History: Essays on Theory and Practice (New York: Taylor & Francis, 2006), 25.

before 1945, civilians "were not invited to instruct the military profession on how its news weapons could be used most effectively." <sup>1614</sup>

Far less critical, Gray now specifically identifies Brodie's 1959 *Strategy in the Missile Age* as "the most widely praised book on contemporary strategy," and suggests that "[s]trategists, daunted by the dimensions of Edward Mead Earle" and his mammoth anthology, *The Makers of Modern Strategy*, "could obtain a far quicker 'fix' on their pre-nuclear heritage from the first four chapters of Brodie's work," which Gray described as "witty, brilliant, and economical," in addition to being "also very contentious," including Brodie's views on the "poverty" of theoretical writings on war. <sup>1615</sup> Gray cites Brodie: "As one goes in quest of the wisdom of the past on the subject of war, one notices first of all how small is the number of general treatises on strategy even over the space of centuries. There have been many great soldiers in the past, and military historians have favored us with thousands of volumes recounting the exploits of outstanding military leaders, as well as of many of them not so outstanding. But this richness of writings in military history does not prepare us for the poverty in theoretical writings on the strategy of war. Indeed the few theorists have enjoyed an exceptional scarcity value." <sup>1616</sup>

But Gray also challenges Brodie, writing that the "principal frailty in Brodie's argument is that it requires a baseline for assessment," and if in fact "there was a 'poverty in theoretical writing' (and it is by no means self-evident that this was the case – although this author agrees with Brodie)," then the question remains "is that a poverty in quantity, in quality, or in both?" Indeed, Gray suggests that the "quality of contemporary theory *may* be reflected in the protracted absence of a direct clash of arms between the superpowers," which in fact endured from the Cold War's beginning through to its end, much to the relief of many, though Gray concedes that "there is no way of being certain that this is the case." And in addition to the successful prevention of general war between the superpowers and consequent avoidance of nuclear warfare, Gray also observes that at least with regard to the quantity of strategic theorizing, the "scale of effort of strategic theorizing from the mid-1950s onwards was unprecedented," also posing a challenge to Brodie's description of a poverty of theoretical writing on war. <sup>1619</sup>

But the issue of quality remains, and it is here Gray is more sympathetic to Brodie: "To confront Brodie's argument directly, it is useful to pose two questions. First, are there more first-class minds studying the interface between war and politics today than

<sup>1614.</sup> Colin S. Gray, Strategy and History: Essays on Theory and Practice (New York: Taylor & Francis, 2006), 25.

<sup>1615.</sup> Gray, Strategy and History, 31.

<sup>1616.</sup> Gray, Strategy and History, 31.

<sup>1617.</sup> Gray, Strategy and History, 31.

<sup>1618.</sup> Gray, Strategy and History, 31-32.

<sup>1619.</sup> Gray, Strategy and History, 32.

was the case, say, in 1900," and if so, then "is the numerical discrepancy reflective not of a pre-nuclear 'poverty' but rather of the scale and complexity of contemporary problems?" Gray notes that while "the strategic studies community today is very large by comparison with times past," that nonetheless "the number of theoretical innovators is very small indeed," measured by Gray to be "between 5 and 10 perhaps – though their identity would be disputed according to personal preference." Gray is of the view that "[g]iven the compression of comprehension time imposed by upon theory-builders by the pace of technological innovation, it is quite plausible to argue that the scale of strategic theoretical activity prior to 1945, allowing for the peaks and troughs of inventiveness that characterize all streams of intellectual endeavor, was neither inappropriate to the pace of military developments, nor – historical contexts recalled – was it on a scale greatly disproportionate to that conducted today." 1622

Gray endeavors to maintain a balance between his great respect for Brodie's strategictheoretical contributions, and his contrary view on the issue of Brodie's claim with regard to this strategic theoretical poverty; as he concludes: "As a naval historian and theorist of the first rank, Bernard Brodie was, of course, full aware of both the continuities and the discontinuities in strategic problems and thought effected in part by the development of nuclear weapons. However, the overall impression left by the first four chapters of Strategy in the Missile Age is one of an era marked by strategic intellectual 'poverty' and by military malpractice. The statements in a positive vein are swamped by the generally negative thrust of the argument."1623 Despite Brodie's negativity of tone, Gray nonetheless lauds Brodie's 1959 tome as seminal, writing: "It was a landmark text: a work summarizing and transcending the debates of a decade," and "remains, in the 1970s, the first book on the subject of strategy that newcomers are requested to read."1624 And, even with Brodie's negative assessment of the state of strategic-theoretical art, Gray concludes that, "even if Brodie were correct in his implicit claim that pre-nuclear strategic theory was but a pale and undernourished forerunner of contemporary theorizing, it does not follow (and, indeed, Brodie suggests to the contrary) that pre-nuclear military and diplomatic practice offers no substantial reward to the determined scholarly explorer."1625

<sup>1620.</sup> Gray, Strategy and History, 32.

<sup>1621.</sup> Gray, Strategy and History, 32.

<sup>1622.</sup> Gray, Strategy and History, 32.

<sup>1623.</sup> Gray, Strategy and History, 32.

<sup>1624.</sup> Gray, Strategy and History, 32.

<sup>1625.</sup> Gray, Strategy and History, 32.

### Strategic Thinkers, Planners, Decision Makers

Brodie would continue to examine, through to his very last article published in 1978, the rise of the civilian strategists, that group of defense intellectuals Fred Kaplan colorfully dubbed the "wizards of Armageddon," a group to which Brodie not only belonged, but for many its most esteemed member. Brodie described this group less colorfully than Kaplan, but perhaps more accurately as the *civilian-scientific strategists*, or as the new scientific strategists, and he would close his 1973 War and Politics with a discussion of their rise in its final chapter, "Strategic Thinkers, Planners, Decision Makers," resuming his quarter-century examination (since his 1949 World Politics article) of the civilian defense intellectual, and his increasing – though by no means untroubled - contribution to the formulation of strategic-military policies. In this final chapter, he revisits Clausewitz, as well as his predecessor Machiavelli, as well as his generation of military and civilian strategists, bringing to a close his discussion of war, and politics, and the fundamental relationship between the two. He starts out with the insights of the "great Marshal Maurice de Saxe," who "observed in his Reveries that most commanding generals displayed on the battlefield the utmost confusion," attributing this to the fact that "very few men occupy themselves with the higher problems of war," and instead "pass their lives drilling troops and believe that this is the only branch of the military art," so "[w]hen they arrive at the command of armies they are totally ignorant, and, in default of knowing what should be done, they do what they know." Brodie seems to find some personal comfort in these observations, and notes while "these words were written over 200 years ago, they have applied perennially to the art of the soldier, and apply about as well now as when they were written."1626 Brodie wonders how the "few military geniuses that time and the passage of many wars throws across our vision" managed to "learn the art of the general," and how those who assumed the highest levels of command "learn strategy?" Brodie finds that the "strategic conception is more abstract than the tactical one" and thus less readily learned through "precept and experience," suggesting that there needs to be an "inventiveness, a native cunning, and a tendency to reflect on the enemy's goals as well as the needs and aspirations of his allies."1627

While Maurice, like Frederick the Great, put pen to paper and authored his "own little book" published posthumously in 1757, Brodie observes that "[l]ike Frederick's *Instructions to His Generals* (1747) and memoranda to his successor, Maurice's book was not intended by its author for publication," and like Frederick, Maurice "dwelt mostly on homely matters concerning the handling and provisioning of armies, and

<sup>1626.</sup> Brodie, War and Politics, 434.

<sup>1627.</sup> Brodie, War and Politics, 435.

only incidentally and in passing made observations or contributions on what we should now consider fundamental strategy." 1628 And when Clausewitz emerged a century later in the wake of Napoleon, penning "the first really adequate treatise on strategy, and still by a wide margin the greatest, he paid little attention to either Maurice de Saxe of Frederick," and instead "pa[id] his respects to the original Renaissance source of wisdom on politics and strategy, Niccolo Machiavelli."1629 As Brodie observed, "Clausewitz, who tended to scorn most other military writers, treated Machiavelli with respect because like him 'he was convinced that the validity of any special analysis of military problems depended on a general perception, on a correct concept of the nature of war." 1630 Brodie further reflects that "Machiavelli's large contribution reminds us that there have always been some few civilians to whom the study of warfare was intriguing as something besides history, and of course we know that most military history has been written by civilians, especially in modern times. Soldiers have always cherished the image of themselves as men of action rather than as intellectuals, and they have not been very much given to writing analytical inquiries into their own art."1631 Indeed, Brodie noted that "[p]erhaps as a result of some defensive feeling on the matter, military men have in the past turned a certain degree of obloquy on those of their colleagues who were in their eyes too scholarly about war," much like the later naval strategist Mahan, who "would be called 'a pen-pushing sailor" and who only truly came into his own when "he was transferred to an essentially civilian pursuit as a faculty member of the new U.S. Naval War College." 1632 By and large, however, Brodie has found "civilian writers with something important to say have usually been well received by the professionals, who understand their own needs and also the paucity of contributions by their own brethren," though Brodie notes "[s]ome professional military may in certain moods, inveigh against 'armchair strategists,' by which they mean interlopers on their terrain who are not identifiable by service uniform, but this is usually an attitude of disgruntlement concerning particular views in which they are in disagreement," and concedes "there are an always have been a few primitives who consider the fact of wearing or having worn a uniform the indispensable entitlement to the expression of any views on military affairs; but these are normally the ones who would never read anything of a reflective character anyway even if written by one with the most unchallengeable military credentials." 1633

<sup>1628.</sup> Brodie, War and Politics, 436.

<sup>1629.</sup> Brodie, War and Politics, 436.

<sup>1630.</sup> Brodie, War and Politics, 436.

<sup>1631.</sup> Brodie, War and Politics, 436.

<sup>1632.</sup> Brodie, War and Politics, 437.

<sup>1633.</sup> Brodie, War and Politics, 437-38.

Brodie explains that the "role of the civilian in contributions to this field, which became so prominent following World War II, is more understandable when we reflect further on what strategy really means and what it embraces," and his definition starts with the concept from Mahan that defined strategy as pertaining to operations prior to contact with the enemy, and upon contact, tactics are employed. 1634 Brodie accepts this as a starting point, as it "helps us to get on with the real job of exploring the true meaning of the idea," which he traces back once more to Clausewitz, the intellectual inspiration of War and Politics and to whom its title is largely a tribute. "The idea stressed repeatedly in this book, explicitly and implicitly, is that which most makes Clausewitz stand out from those who might otherwise come near to being his peers and which accounted for his being impressed with Machiavelli," and this is "the concern with the fundamental nature of war as a branch of politics." 1635 So while the "general has indeed been trained or conditioned to want desperately to win, and will be willing to pay any price possible to do so,"1636 there nonetheless "has to be at the top, certainly in the civilian and preferably also in the military departments o the government, the basic and prevailing conception of what any war existing or impending is really about and what it is attempting to accomplish. This attitude includes necessarily a readiness to reexamine whether under the circumstances existing it is right to continue it or whether it is better to seek some solution or termination other than victory" $^{1637}$  – as ultimately happened in Vietnam. Brodie finds in Clausewitz such a sensibility, noting he had "learned from experience very early in his career the importance of 'the correct political bias' for any nation at war,"1638 and notes with interest that "Clausewitz, whose life from boyhood on was spent in military service and who as a scholar and philosopher was totally self-taught, should have grasped the essence of the issue, the nexus between politics and strategy, so much more clearly than virtually all of his peers and successors," and attributes the clarity of his insight to "the extraordinary power and reach of his mind" as well as to "some bitter and extraordinary personal experiences to help him along the war." 1639 Among these was Clausewitz's decision (along with "various others of the leading reformist soldiers of Prussia") to resign his commission serving Friedrich Wilhelm, and to cross over to the Russians, "thus becoming nominally the enemy of his own king and that of the king's army, which contained two of his brothers." 1640 And, Brodie added, "[w]ith the Russians he fought

<sup>1634.</sup> Brodie, War and Politics, 438.

<sup>1635.</sup> Brodie, War and Politics, 438.

<sup>1636.</sup> Brodie, War and Politics, 438.

<sup>1637.</sup> Brodie, War and Politics, 439.

<sup>1638.</sup> Brodie, War and Politics, 440.

<sup>1639.</sup> Brodie, War and Politics, 441.

<sup>1640.</sup> Brodie, War and Politics, 443.

in the great campaign of 1812, in which the Grand Armee went to Moscow and then perished in the retreat," and "witnessed with his own eyes and was torn to the core by the unspeakable horrors of this flight."1641 This would "no doubt accentuate his feelings of that the correct use of thought in the handling of (war) deserved a very high priority." Brodie notes Clausewitz's "real anguish at the horrors he saw" clashed with his strategic logic that a more aggressive blow against the retreating French was needed to consolidate the victory, and he speculates that "the inner conflict between his undoubted compassion and something much fiercer in his nature must have contributed to the depression that seems to have developed steadily throughout his life."1642 Brodie feels a connection with "this sensitive, retiring, and deeply emotional man," and though he "knew very well the worth of his own ideas, such searing experiences, including that of the occupation of Paris afterwards, would burn deeply into his consciousness the necessary unity of war with its object."1643 Brodie notes Clausewitz was especially "appalled by the vindictive behavior and attitudes of his Prussian colleagues," which "undoubtedly confirmed his feelings about the supreme requirement of appropriate political direction during war and its aftermath, which he developed so persistently in his On War."1644

Brodie considers Clausewitz something of a strategic prophet, whose ideas still resonate with relevance today. "Although no single author could be an adequate 'guide' to us in our present problems, and not alone because the world we live in is so different from his, the startling insights that leap up at us from so many pages of his great work are still often directly applicable to our own times. There has been no one to match him since." 1645 Brodie notes Clausewitz "specifically rejected the notion that there could be any well-defined body of particular rules or principles that universally dictated one form of behavior rather than another," in contrast to "his contemporary, Antoine Henri Jomini," and Brodie suspects Clausewitz "would have been appalled" at recent efforts by "various army field manuals" that "attempt to encapsulate centuries of experience and volumes of reflection into a few tersely worded and usually numbered 'principles of war.'"1646 While such a "catalog of numbered principles . . . may be necessary to communicate to second-order minds (or minds too busy with the execution of plans to worry much about the specific validity of the ideas behind them)," or "may help the ordinary commander to avoid the most glaring or commonplace errors," Brodie believes a such a "catalog of principles must be recognized

<sup>1641.</sup> Brodie, War and Politics, 443.

<sup>1642.</sup> Brodie, War and Politics, 445.

<sup>1643.</sup> Brodie, War and Politics, 446.

<sup>1644.</sup> Brodie, War and Politics, 446.

<sup>1645.</sup> Brodie, War and Politics, 446.

<sup>1646.</sup> Brodie, War and Politics, 446.

for what it is, which is a device intended to circumvent the need for months and years of study of and rumination on a very difficult subject," and notes that in his time, "in the training of the modern officer such study and rumination are not allowed for, either at the staff college level or the war college," as it "takes too much time" and requires "analytical and reflective qualities of mind that are not commonly found either among student officers or among their instructors." 1647 On top of this, Brodie observes the "military services have learned very well that what they need most in their commanders is that quality called 'leadership,' and in this they are quite right." 1648 As consequence, however, "that talent which is also necessary in the top leadership, that is, strategic insight, may come off a very poor second." 1649 In Clausewitz's time, Brodie notes, this was resolve "by distinguishing between the qualities necessary in the commander, who was expected to provide leadership and aggressive drive, and his chief of staff, who was supposed to do much of his tactical and strategic thinking for him," much as Clausewitz himself had served. 1650

Brodie finds "[t]here are some today who yearn to see created a true science or theory of strategy, replete with principles that are both immutable and deeply meaningful, but they only indicate by that desire a basic misunderstanding of their subject," and taking his cue from Clausewitz's generality, recalls how "in these pages" he has "been lauding the modernity of Clausewitz," but that his modernity is not the kind to "give us the answers to our contemporary problems but which, at its best, will sharpen our receptivity to appropriate insights about those problems."1651 Brodie contrasts this strategic insight fostered by Clausewitz with the "twinge of delight" we feel when reading Plato's insights from two millennia ago: "It is not that Plato adds to our understanding; we can feel the pleasure only because that understanding already exists." However, he believes "[w]e do in fact learn something from Clausewitz – a good deal more, I think, than we ever learn from Plato," even though in the end "what we get from Clausewitz is a deepening of sensibility or insight rather than a body of rules."1652 Nevertheless, Brodie assures us that strategic thinking is ultimately "pragmatic," and thus aims to generate a "theory for action," one that accepts that "uncertainty is itself a factor to be reckoned with in one's strategic doctrine." 1653 Because strategic theory is designed to be "transferable to the world of action," Brodie explains, "it is like other branches of politics and like any of the applied sciences,

<sup>1647.</sup> Brodie, War and Politics, 448.

<sup>1648.</sup> Brodie, War and Politics, 448.

<sup>1649.</sup> Brodie, War and Politics, 448.

<sup>1650.</sup> Brodie, War and Politics, 449.

<sup>1651.</sup> Brodie, War and Politics, 451.

<sup>1652.</sup> Brodie, War and Politics, 452.

<sup>1653.</sup> Brodie, War and Politics, 452.

and not at all like pure science, where the function of theory is to describe, organize, and explain and not to prescribe." 1654

Brodie noted the civilian-scientific strategists belonged to "a group that evolved almost entirely since World War II, mostly in the United States, and usually associated with institutions like the RAND Corporation and a number of other organizations that have sprung up." <sup>1655</sup> Brodie noted that the "use of scientists for assistance in making tactical suggestions goes back to at least World War I," but that "employment of scientists for advice in military decisions was carried very much further in World War II, especially in the novel field of strategic bombing," and at that war's end "the nuclear scientists showed what they had been up to all this time in the extremely secret Manhattan District Project," and "the prestige that the accomplishment of the nuclear bomb gave to scientists in general . . . accounted probably more than any other one thing for the conviction of General H.H. Arnold," the chief of staff of the U.S. Army Air Forces "that scientists should be retained on a continuing basis in peacetime," and so RAND was established as an outside, autonomous organization that was "closely associated" with the Air Force. <sup>1656</sup>

His conviction on the continued utility of scientists to America's strategic planning was reinforced by the worrisome "fact that the Germans had rather disturbingly beat us in several important technological advances, including a jet engine" that may well "have been enough to stop entirely the Anglo-American air offensive" had it been applied not to bombers as Hitler urged, but instead to fighters. 1657 Arnold's decision, Brodie added, was imitated by the other services. Brodie credits RAND for its "outstanding contribution . . . to modern strategic thinking" with systems analysis, which promised "to be far superior to anyone's simple, intuitive judgment," 1658 and to "produce far more reliable results." 1659 With the election of John F. Kennedy, and his appointment of Robert S. McNamara as Secretary of Defense, came to the office of the Secretary of Defense "a mind most sympathetically attuned to the charms of systems analysis,"1660 which would come to play a central role in decision-making, resulting in a "struggle to control" the decision-making process with the services. Brodie cites several leading military men, whose opposition to the rise of the defense intellectual, appeared uniform. General Thomas D. White, who served as Air Force chief of staff, wrote "In common with many other military men, active and retired, I

<sup>1654.</sup> Brodie, War and Politics, 453.

<sup>1655.</sup> Brodie, War and Politics, 453.

<sup>1656.</sup> Brodie, War and Politics, 453.

<sup>1657.</sup> Brodie, War and Politics, 459.

<sup>1658.</sup> Brodie, War and Politics, 462.

<sup>1659.</sup> Brodie, War and Politics, 463.

<sup>1660.</sup> Brodie, War and Politics, 464.

am profoundly apprehensive of the pipe-smoking, tree-full-of-owls type of so-called professional 'defense intellectuals' who have been brought into this nation's capitol. I don't believe a lot of these often over-confident, sometimes arrogant young professors, mathematicians and other theorists have sufficient worldliness or motivation to stand up to the kind of enemy we face." 1661 And General Curtis LeMay, who headed up SAC and commanded the strategic bombing campaign in Japan, retiring after serving as Air Force chief of staff, echoed this sentiment, writing: "The military profession has been invaded by pundits who set themselves up as popular oracles on military strategy," and "Today's armchair strategists, glibly writing about military matters to a public avid for military news, can do incalculable harm. 'Experts' in a field where they have no experience, they propose strategies based upon hopes and fears rather than upon facts and seasoned judgments."1662 Brodie challenges LeMay, noting "[i]nsofar as he is clearly alluding to the trials of thermonuclear war, he does not explain where in fact the military have got the 'facts' and the 'seasoned judgments' that are denied to the civilians who are also occupying themselves full-time on the same problems." 1663 Indeed, Brodie counters LeMay's dismissal of the seeming inexperience of civilian strategists by noting the "much-touted 'experience' that the military so commonly advance in their special claims to superior wisdom in military decisions is in this realm almost always irrelevant," though Brodie does concede, as he earlier did, that "[c]ertainly senior military men possess indispensable skills acquired only through experience," and "[c]hief of these is the ability to command." 1664 But "when it comes to choosing major weapons systems for some future state of affairs that may be considerably more different from the present . . . there often exists no military experience whatever that is relevant."1665

However, Brodie does not overplay his defense of the civilian strategists, noting their own "overvaluation of systems analysis," and he explains how the "best of the systems analysts have most often been trained as economists," history or even in contemporary politics," and yet are "rarely aware of how important a deficiency this is for strategic insight." Brodie notes in contrast how "the great strategic writers and teachers of the past, with the sole and understandable exception of Douhet, based the development of their art almost entirely on a broad and perceptive reading of history — in the

<sup>1661.</sup> Brodie, War and Politics, 466.

<sup>1662.</sup> Brodie, War and Politics, 467.

<sup>1663.</sup> Brodie, War and Politics, 467.

<sup>1664.</sup> Brodie, War and Politics, 472.

<sup>1665.</sup> Brodie, War and Politics, 472.

<sup>1666.</sup> Brodie, War and Politics, 474.

<sup>1667.</sup> Brodie, War and Politics, 475.

case of Clausewitz and Jomini mostly recent history but exceptionally rich for their needs," while "the present generation of 'civilian strategists' are with markedly few exceptions singularly devoid of history." And though Brodie admits that it "could be argued that in a world that has to adopt itself to nuclear weapons, the reading of history may be an impediment," he concludes that this is not the case, particularly "if we continue to consider strategy what Clausewitz considered it – a branch of politics, a 'continuation of politics by other means." 1669

### Brodie's Place in the Development of Nuclear Strategy

Brodie's final article would be published just months before his 1978 death in the pages of International Security - though it had first appeared two years earlier as a 1976 Advanced Concepts and Information Strategy (ACIS) working paper and later re-appeared posthumously as a chapter in the 1983 anthology National Security and International Stability that he co-edited with Michael D. Intriligator and Roman Kolkowicz, and which ensured Brodie had a hand in writing his own epitaph and thus a say in his own legacy. "The Development of Nuclear Strategy," as it was titled, was based on his plenary address at the Inter-University Seminar on Armed Forces and Society National Conference held at University of Chicago that year. It is fitting that this broad theme was the topic of his final article, since Brodie was a pivotal player from the very start of the atomic era when his phraseology would help to define the new era with the publication of *The Absolute Weapon*. His later effort to top this with the formulation of the "Missile Age" as what he hoped would become the defining concept of the next chapter of the nuclear age did not take - though his book by the same title, as earlier discussed, became one of the most highly regarded works on that era, and in many ways it was his failure to so define that next chapter of the nuclear period that would mark the beginning of his decline in influence. Nonetheless, even if he failed to achieve the same level of celebrity as his best-selling and more extroverted colleague Herman Kahn, he remained an active voice with a steady presence in the academic literature throughout the nuclear period right up until his death.

Brodie rightly claims credit for being there right at the starting gate, noting the central concept that "was put forward almost at once at the beginning of the nuclear age" and which was "still the dominant concept of nuclear strategy" was "deterrence," and that "[i]t fell to me – few other civilians at the time were interested in military strategy – to publish the first analytical paper on the military implications of nuclear weapons," his Fall 1945 Occasional Paper at the Yale Institute for International Studies,

<sup>1668.</sup> Brodie, War and Politics, 475.

<sup>1669.</sup> Brodie, War and Politics, 475.

"The Atomic Bomb and American Security." 1670 Adds Brodie, "[i]n expanded form it was included as two chapters in a book published in the following year under the title The Absolute Weapon, which contained also essays on political implications by four of my Yale colleagues."1671 Brodie cited from that work his most famous paragraph, widely cited, with and without his approval, which stated that "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," and while "[t]hus 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." <sup>1672</sup> Brodie reflected that "while the idea of deterrence per se was certainly nothing new, being as old as the use of physical force, what was distinctively new was the degree to which it was intolerable that it should fail. On the other hand, one could add that 'in no case is the fear of the consequences of atomic bomb attack likely to be low,' which made it radically different from a past in which governments could, often correctly, anticipate wars that would bring them considerable political benefits while exacting very little in the way of costs." 1673

Brodie observes that since *The Absolute Weapon* was published over thirty years earlier, "there has been much useful rumination and writing on nuclear strategy and especially on the nature of deterrence, but the national debates on the subject have revolved mostly around three questions, all relating directly to the issue of expenditures," which were: "1) What are the changing physical requirements for the continuing success of deterrence? 2) Just what kinds of wars does nuclear deterrence really deter? and 3) What is the role, if any, for tactical nuclear weapons? Far down the course in terms of the public attention accorded it is a fourth question: If deterrence fails, how do we fight a nuclear war and for what objectives? The latter question has been almost totally neglected by civilian scholars, though lately some old ideas have been revived having to do with what are called limited nuclear options. Otherwise most questions about the actual use of nuclear weapons in war, whether strategic or tactical, have been largely left to the military, who had to shoulder responsibility for picking specific targets, especially in the strategic category, and who were expected to give guidance about the kinds and numbers of nuclear weapons required."1674 Brodie points out the unprecedented fact that "[v]irtually all the basic ideas and philosophies about nuclear

<sup>1670.</sup> Bernard Brodie, "The Development of Nuclear Strategy," *International Security* 2, No. 4 (Spring, 1978), 65. Published earlier as a 1976 Advanced Concepts and Information Strategy (ACIS) working paper with the same title, and republished posthumously as chapter 2 in the 1983 anthology *National Security and International Stability* (Cambridge: Oelgeschlager, Gunn & Hain, 1983) that Brodie co-edited with Michael D. Intriligator and Roman Kolkowicz, 5.

<sup>1671.</sup> Brodie, "The Development of Nuclear Strategy," IS, 65; also in National Security and International Stability, 5.

<sup>1672.</sup> Brodie, "The Development of Nuclear Strategy," IS, 65; also in National Security and International Stability, 5-6.

<sup>1673.</sup> Brodie, "The Development of Nuclear Strategy," IS, 66; also in National Security and International Stability, 6.

<sup>1674.</sup> Brodie, "The Development of Nuclear Strategy," IS, 66; also in National Security and International Stability, 6-7.

weapons and their use have been generated by civilians working quite independently of the military, even though some resided in institutions like Rand which were largely supported by one or another of the services," and as a result, when it came to the new art of nuclear strategy, "the military have been, with no significant exceptions, strictly consumers, naturally showing preference for some ideas over others but hardly otherwise affecting the flow of those ideas." <sup>1675</sup>

One consequence of the prominent role played by civilian strategists in conceptualizing deterrence was that "to the military man deterrence comes as the by-product, not the central theme, of his strategic structure," and "[a]ny philosophy which puts it at the heart of the matter must be uncongenial to him. One military writer significantly speaks of the deterrence-oriented 'modernist' as dwelling 'in the realm of achieving non-events in a condition where the flow of events is guided, not by his initiatives, but by other minds.' And further: 'The obvious difficulty with deterrent theory . . . is the yielding of the initiative to the adversary.'" Brodie disagreed with the view that initiative was surrendered to the adversary, since "to prepare against all possible crises in the future, it is desirable to minimize that proportion of our retaliatory forces which the opponent can have high confidence of destroying by a surprise blow and to help keep alive in his mind full awareness of the penalties for miscalculation," which provided America with a mission to ensure that deterrence would endure until the political conditions that defined the Cold War stand-off resolved themselves, as they would just a decade after Brodie's death.

Brodie observes that the strategic community is "inhabited by peoples of a wide range of skills and sometimes of considerable imagination," and that as a result, "All sorts of notions and propositions are churned out," but whether they are "worth a second thought, however, is another matter," and "should undergo a good deal of thought before one begins to spend much money" in their development, since on matters of national defense, "sums spent on particular proposals can easily become huge." <sup>1677</sup> Brodie cautions that "thinking up of ingenious new possibilities is deceptively cheap and easy, and the burden of proof must be on those who urge the payment of huge additional premiums for putting their particular notions into practice." <sup>1678</sup> Brodie's own thoughtful analysis, across nearly half a century of technological and strategic change, instead proffered us a consistent set of ideas firmly embedded in an historical context – one that did not presume simplicity but instead recognized the complexities and ambiguities in the world, and in so doing, endeavored to reduce the grave

<sup>1675.</sup> Brodie, "The Development of Nuclear Strategy," IS, 66; also in National Security and International Stability, 7.

<sup>1676.</sup> Brodie, "The Development of Nuclear Strategy," IS, 66; also in National Security and International Stability, 7.

<sup>1677.</sup> Brodie, "The Development of Nuclear Strategy," IS, 83; nearly verbatim in National Security and International Stability, 21.

<sup>1678.</sup> Brodie, "The Development of Nuclear Strategy," IS, 83; also in National Security and International Stability, 21.

dangers inherent therein and to combat lesser ideas that were oft-floated, whether in the pages of the popular press, more erudite scholarly journals, or top-secret-stamped memos circulating in the halls of power.

In a March 23, 1978 letter (just eight months before Brodie died from cancer on November 24 that year) from a then very young Dennis Ross – a 1970 graduate of UCLA and former graduate student in its political science department who would leave the academic world for the policy arena, rising to the very highest levels of power as an advisor to four American presidents in both major political parties – writing in praise of Brodie's final article, "The Development of Nuclear Strategy," based on his plenary address at the Inter-University Seminar on Armed Forces and Society National Conference held at University of Chicago that year, and published by the National Defense University's Institute for National Strategic Studies, as well as the Spring 1978 edition of *International Security*: "Dear Professor Brodie, I just wanted to drop you a note to let you know how much I enjoyed your recent ACIS paper – 'The Development of Nuclear Strategy,'" noting Brodie had "reminded us, once again, of the larger questions we should be addressing. While my present surroundings seem to place a premium on narrow operational thinking, your teachings prevent me from straying too far into the realm of strategic fantasy – thanks." 1679

# Strategy as an Art: A 'Classical-Military' Response to the Scientific Strategists

In an intriguing response to the theorists of deterrence and the limitations of their civilian-scientific orientation is presented by U.S. Army Col. Richard L. Curl in his 1975 *Strategic Review* article, "Strategic Doctrine in the Nuclear Age." Adding to its intrigue, this work – critical as it is – was cited by Brodie himself in his Spring 1978 *International Security* article, "The Development of Nuclear Strategy," his final work. We will first examine Brodie's discussion of the article, and then look more closely Curl's critique of deterrence and its theoretical tradition. <sup>1681</sup>

Brodie had observed how, "Since 1946 there has been much useful rumination and writing on nuclear strategy and especially on the nature of deterrence, but the national debates on the subject have revolved mostly around three questions, all relating directly to the issue of expenditures ... 1) What are the changing physical requirements for the

<sup>1679.</sup> Letter from Dennis Ross to Brodie, March 23, 1978. Bernard Brodie Papers (Collection 1223). UCLA. Ross was then working in the Secretary of Defense's Office, and would later serve as Policy Planning Director at the U.S. State Department in the first Bush Administration, later becoming America's special envoy to the Middle East, during the entire two-term presidency of Clinton – returning as a special envoy for the region at the start of the Obama administration in February 2009, where he is now grappling with the complex transformation of the Arab world known as the "Arab Spring." 1680. Richard L. Curl, "Strategic Doctrine in the Nuclear Age," *Strategic Review* 3 (Winter 1975), 46-56.

<sup>1681.</sup> Bernard Brodie, "The Development of Nuclear Strategy," International Security 2, No. 4 (Spring, 1978), 65-83.

continuing success of deterrence? 2) Just what kinds of wars does nuclear deterrence really deter? and 3) What is the role, if any, for tactical nuclear weapons?"<sup>1682</sup> But Brodie noted that "[f]ar down the course in terms of the public attention accorded it is a fourth question: If deterrence fails, how do we fight a nuclear war and for what objectives?"<sup>1683</sup> Brodie contends that this "latter question has been almost totally neglected by civilian scholars," a view that Herman Kahn would surely disagree with, "though lately some old ideas have been revived having to do with what are called limited nuclear options. Otherwise most questions about the actual use of nuclear weapons in war, whether strategic or tactical, have been largely left to the military, who had to shoulder responsibility for picking specific targets, especially in the strategic category, and who were expected to give guidance about the kinds and numbers of nuclear weapons required. In that connection, one must stress a point which certain young historians who are new to the field have found it difficult to grasp.<sup>1684</sup>

Brodie writes that "[v]irtually all the basic ideas and philosophies about nuclear weapons and their use have been generated by civilians working quite independently of the military, even though some resided in institutions like RAND which were largely supported by one or another of the services," and thus "the military have been, with no significant exceptions, strictly consumers, naturally showing preference for some ideas over others but hardly otherwise affecting the flow of those ideas. Whatever the reasons, they must include prominently the fact that to the military man deterrence comes as the by-product, not the central theme, of his strategic structure. Any philosophy which puts it at the heart of the matter must be uncongenial to him." <sup>1685</sup> It is here that Brodie cites Curl, noting: "One military writer significantly speaks of the deterrence-oriented 'modernist' as dwelling 'in the realm of achieving non-events in a condition where the flow of events is guided, not by his initiatives, but by other minds.' And further: 'The obvious difficulty with deterrent theory . . . is the yielding of the initiative to the adversary.' In the preceding sentence initiative has already been called the sine qua non of success. [6]"1686 These quotations, as noted in footnote number six, are from Col. Richard L. Curl's article, "Strategic Doctrine in the Nuclear Age," in the Winter 1975 edition of Strategic Review.

The article itself was derived from Curl's thesis at the U.S. Army War College, which juxtaposes the "classicist" versus "modernist" influences on military strategy, noting the former was "dominated by military-historical influences," but the "advent of the atomic era brought an ascendancy of civilian-scientific influences," and while

<sup>1682.</sup> Brodie, "The Development of Nuclear Strategy," IS, 66.

<sup>1683.</sup> Brodie, "The Development of Nuclear Strategy," IS, 66.

<sup>1684.</sup> Brodie, "The Development of Nuclear Strategy," IS, 66-67.

<sup>1685.</sup> Brodie, "The Development of Nuclear Strategy," IS, 67.

<sup>1686.</sup> Brodie, "The Development of Nuclear Strategy," IS, 67.

"classical strategy sought to serve political ends by achieving military victory, the modern strategists have been preoccupied with avoiding war, not with winning it," a preoccupation that Curl argues dates back before the atomic era when "concern for the destructive power of weapons had led some to conclude that war was now impractical and weapons should be limited by agreement," but whose "[e]xpectations of universal peace foundered in an era of great wars." 1687 Curl's article starts off with Brodie's famed aphorism, first articulated in 1945 but more widely read in his contributions to the 1946 The Absolute Weapon, and to which Curl attributes Brodie's famous words: "Thus far the chief purpose of our military establishment has been to win wars. But from now on, its chief purpose must be to avert them. It can have almost no other useful purpose." As Curl observes, "When Bernard Brodie and his collaborators in the Yale Institute of International Studies penned these lines in 1946, they were giving expression to a philosophy which seemed so apparent, considering the awesome destructive potential of the A-Bomb, so attuned to the American view of war as an unmitigated disaster, and so compatible with America's new position as a satiated superpower, that the philosophy rapidly became dogma," and this "dogma, in turn, became the foundation for the strategy of deterrence which has guided our national military and foreign policy ever since."1688

It is intriguing that Curl recognizes Brodie's philosophy had reified into dogma, and also ironic in that Brodie was such a passionate critic of doctrinaire thinking and his entire approach to the philosophy of war, with all its complexities, has been to resist dogma and the over-simplification of reality that it courts, as evident in his critique of rules-based military handbooks that seek to boil down war's many complexities into simple, actionable aphorisms. Brodie waged a lifelong battle against dogma, and dueled with those he felt succumbed to its oversimplicity, emulating Clausewitz and rebuking Jomini for failing to embrace complexity with the same fervor as the Prussian he so admired. That his efforts helped foster the emergence of the predominant strategic dogma of the Cold War is truly sardonic. Curl believes Brodie's 1946 book "marked a dramatic change in the character and quantity of American strategic thought," one Curl believes was "dramatic enough to be termed revolutionary" with three parts: firstly that the "influential thinking was now overwhelmingly 'civilian-scientific' instead of 'military-historical';" secondly, that as a "consequence, the center of gravity of strategic thinking shifted from its traditional European base to America;" and thirdly, that the "classical' strategist was relegated, if not to an intellectual graveyard, at least to a semi-moribund state of catatonia." <sup>1689</sup> In contrast to *classicist* who "devoted his

<sup>1687.</sup> Richard L. Curl, "Strategic Doctrine in the Nuclear Age," Strategic Review 3 (Winter 1975), 46.

<sup>1688.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 46.

<sup>1689.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 46-47.

time and talent to determining how wars could be won," the new *modernist* instead "believed that force could be eliminated or at the very least intelligently controlled" and in so doing "took the *threat* of the use of force as a major element in the definition of strategy, and devoted their time to determining how wars could be avoided." <sup>1690</sup>

The classicist favors action, while the modernist hopes for inaction, or as Curl describes, in the passage that caught Brodie's eye and was subsequently quoted in his Spring 1978 *International Security* article, his very last article before he passed from this world that very same year: "The classicist can focus on fairly concrete events and outcomes while the modernist must dwell in the realm of achieving non-events in a condition where the flow of events is guided, not by his initiatives, but by other minds. In classical strategic theory, the initiative is considered a *sine qua non* – the key to success." Moreover, Curl argues, the "superior strategist is he who controls his adversary's actions – who causes him to react predictably and to the strategist's advantage. The obvious difficulty with deterrent theory in these terms is the yielding of the initiative to the adversary," and thus it is "scarcely surprising then to find, as one traces the development of deterrent theory to America, a distinct thread of intellectual frustration over this point. Indeed the search for the initiative, though disguised with words such as 'increased options' or 'flexibility,' is the single most prominent evolutionary thread of modern strategic theory." 1692

This thread sought to redress the general neglect by deterrence theorists to offer a roadmap forward should deterrence fail; indeed, Brodie, even in his seminal 1959 *Strategy in the Missile Age*, which "essentially codified deterrent theory to that point ... offered no thought on how, if worst came to worst and deterrence somehow failed, nuclear war should or could be conducted." And so it "was left to one of his RAND colleagues, Herman Kahn, to attempt for the first time in his behemoth effort, *On Thermonuclear War*, a more classical-oriented approach on how to survive and win," and which argued "nuclear war could be ended with a majority of the U.S. population surviving – the proportion of which could be increased by a number of preparatory measures," and that there existed "options which might be available within a range of nuclear conflicts," so instead of "assuming a spasm type of war as the only possibility, Kahn suggested a controlled nuclear war-fighting strategy with targets tied to political ends." While Kahn's classical approach to strategy generated a "barrage of criticism ranging from unfriendly to hysterical" from the more modernist deterrence theorists that was "notable more for a sense of moral outrage than for objective

<sup>1690.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 47.

<sup>1691.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 48.

<sup>1692.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 48.

<sup>1693.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 49.

<sup>1694.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 49.

or intelligent analysis," Curl lauds Kahn for restoring "some of the key elements of an operational, positive strategy which had been missing for the past ten years." The clash of Brodie's thesis with Kahn's antithesis would yield to a new synthesis of "enhanced deterrence" that went beyond "graduated response" to a more "credible response," but as Curl describes, "deterrent theory had seen an increasing search for a strategy more sensitive to the classical concepts but still centered, first and foremost, on the avoidance of war." 1696

Brodie - in contrast to the gregarious Kahn (whose training was as a physicist and whose strength appears to have been in his ability to deliver engaging, often hilarious, and almost always marathon briefings) - was much more the *philosopher* of nuclear war whereas Kahn would be its chief publicist. Their written works addressed many of the very same themes, often at the same time, but whose styles and personalities so differed with a notable impact on the reach and influence of their efforts, Brodie penetrating more deeply into the fundamental, indeed one might say *academic*, essence while Kahn more broadly disseminating ideas to the lay public as well as the policy and warfighting communities. This parallelism strikes an uncanny resemblance to the rivalry between Clausewitz and Jomini during the Napoleonic period, so much so that both Clausewitz and Brodie would die much sooner than their more popular rivals, and as a result, Kahn and Jomini would not only get the last say, so to speak, but they would be able to lay the institutional foundation for their influence to penetrate deeply into the formulation of military doctrine during their lifetimes and in the years that immediately followed. It would take the passage of much time for Clausewitz to be rediscovered, and for his voice to finally echo well beyond his grave as new generations of theorists found his wisdom reached far into the future, and this is in part one of my reasons for revisiting the works of Brodie, sensing the time may be right for his wisdom to emulate that of his great Prussian mentor and reach across the chasm of time. On the irony of Kahn's greater notoriety, one of his popular works was *Thinking* About the Unthinkable, with a new edition to come out immediately after his death called Thinking About the Unthinkable in the 1980s, influencing the debate that was then raging on nuclear strategy even after he had passed on to eternity. Brodie had sought to label the thermonuclear era as the "Missile Age," inspired by the earlier "Machine Age" that became part of his first book's title, Sea Power in the Machine Age, insisting to his publisher that his widely regarded Strategy in the Missile Age retain the "Missile Age" in its title. His original title was Strategy Meets the Missile Age, which his publisher found awkward on the ear. Even the famous concept of the absolute weapon, while the title of the 1946 book on nuclear strategy edited by Brodie, was not his own

<sup>1695.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 49.

<sup>1696.</sup> Curl, "Strategic Doctrine in the Nuclear Age," 49.

invention – but that of his colleague and fellow contributor to *The Absolute Weapon*, William T.R. Fox, but it would be forever tied to Brodie because this influential book appeared with his byline, under his editorial leadership. 1697

Brodie's and Kahn's topics were nearly identical, but their styles, their philosophical and theoretical approaches, and their use of language greatly differed – sometimes subtly, sometimes obviously. While the warfighters favored action over inaction and were thus prepared (on the surface) to cross the nuclear threshold, and the deterrers favored inaction over action and thus sought to preserve that threshold forever unbroken, each in his own way thought about, and risked, the unthinkable. The warfighters appeared, on the surface, to be more firmly in the tradition of classical realism (their language was bolder, and more aligned with action), but it was the deterrers who threatened a far more absolute Apocalypse in their effort to hold the line and to prevent the outbreak of nuclear war. What they threatened to unleash was far more destructive than the more limited nuclear use contemplated by the warfighters (at least during the early stages of nuclear war). Which approach was the more dangerous, and which more likely to sustain the peace, remained a riddle throughout the Cold War, and even in these many years since that conflict's quiet end, the ambiguity remains, unresolved.

Brodie famously probed deeply, hoping to penetrate the fog of complexity, in contrast to Kahn, who surveyed broadly, aiming for clarity and in the end achieving celebrity for his efforts. It was Brodie who had the most enduring impact on the evolution of strategic theory, while Kahn's approach found greater favor in the formulation of strategic doctrine – as noted by Jeffrey D. Porro in the June/July 1982 edition of *The Bulletin of the Atomic Scientists*. Porro examined the battle for strategic influence between Brodie and Kahn, one of the few articles to explicitly juxtapose these two prominent theorists within a dialectical framework, with Brodie representing the Clausewitzian perspective, and Kahn representing a decidedly non-Clausewitzian perspective. Porro's article starts out by noting, "The ideas of two men have set the terms of the debate among U.S. policymakers over nuclear strategy. For the moment, the view of one has prevailed," namely Herman Kahn; "But if we are to reduce the risk of nuclear war, we must return to those of the other," none other than Bernard Brodie. As Porro observes, "Throughout his work, Kahn the physicist never asked the questions that bothered Brodie: What possible political goal could justify the loss of

<sup>1697.</sup> As noted in *The Absolute Weapon* Revisited: Nuclear Arms and the Emerging International Order," William T.R. Fox anticipated the relative versus absolute gains debate when he coined the phrase *The Absolute Weapon*: 'When dealing with *The Absolute Weapon*, arguments based on relative advantage lose their point.' Richard J. Harknett, "State Preferences, Systemic Constraints, and *The Absolute Weapon*," in T.V. Paul, Richard J. Harknett and James J. Wirtz, eds., *The Absolute Weapon* Revisited: Nuclear Arms and the Emerging International Order (Ann Arbor: University of Michigan Press, 1998), 67, citing William T.R. Fox, "International Control of Atomic Weapons," in Bernard Brodie, ed., *The Absolute Weapon*, 181. 1698. Jeffrey D. Porro, "The Policy War: Brodie vs. Kahn," *The Bulletin of the Atomic Scientists* 38, No. 6 (June/July 1982), 16-20.

a hundred cities or even a 'few' million people? Could the people of a nation which suffered even 'limited' nuclear damage be expected, in Brodie's words, to 'show much concern for the further pursuit of political military objectives?" 1699 And while not everyone "who rejected Brodie's view of nuclear strategy agreed completely with Kahn," or disagreed with Kahn's rosy optimism on "the prospects of recovery from nuclear war," most came to believe "Brodie's view of deterrence was insufficient, and that it would be more advantageous for us if our forces could fight a nuclear war by attacking the Soviet military." <sup>1700</sup> And while "supporters of Brodie's version of deterrence were far from silent," Porro found that "they no longer had their former impact" and by "late 1976, even the 'moderates' writing about nuclear arms accepted the need for increased war fighting capabilities." <sup>1701</sup> While "[s] ome in what had become the minority Brodie school placed their hopes in the election of Jimmy Carter," Porro observes that Harold Brown, Carter's defense secretary, "began to sound like the others. In 1978 he said: 'We cannot afford to make a complete distinction between deterrence forces and what are so awkwardly called warfighting forces.' Over the next two years he elaborated what he called a 'countervailing strategy,' which meant having plans 'to attack the targets which comprise the Soviet military force structure and political power structure, and to hold back a significant reserve." 1702

While Brodie had acknowledged, in War and Politics in 1973, that it was "not acceptable to all that deterrence is all-important and that 'winning' is a matter of crude and brutal irrelevance," and noted "the military, among others, have consistently refused to accept this notion," 1703 by the end of Brodie's life, what had once been a dialectic pitting Brodie's thesis against Kahn's antithesis (and the Cold War-era thinking of Colin S. Gray) had achieved a synthesis of sorts. As the dueling ideas of the "wizards of Armageddon," the phrase elegantly coined by Fred Kaplan, inched their way closer to reality, and the debate became entwined by the co-evolution of both doctrine and policy, a passionate and partisan debate would engage academia, government and the military for the better part of a generation, eventually finding a consensual middle ground, aiming for deterrence while at the same time preparing for its failure. We thus witnessed a fascinating dialectical interaction between theory and doctrine, as abstract thought interacted with the constant probing of military action (and preparation) – and in this dance of thought influencing action (which in turn influenced thought again), deterrence and warfighting would begin to converge, forming a nuclear dialectic that guided the pace and composition of the arms race between the Soviet

<sup>1699.</sup> Porro, "The Policy War: Brodie vs. Kahn," 17.

<sup>1700.</sup> Porro, "The Policy War: Brodie vs. Kahn," 17.

<sup>1701.</sup> Porro, "The Policy War: Brodie vs. Kahn," 19.

<sup>1702.</sup> Porro, "The Policy War: Brodie vs. Kahn," 19.

<sup>1703.</sup> Brodie, War and Politics, 378.

Union and the United States until the two competing superpowers, locked in their own deadly struggle, would come to experience their own unique, and unexpected, synthesis – bringing to a peaceful end a struggle that had once threatened an Apocalyptic end to civilization itself. This dialectic would present striking parallels between an earlier evolutionary dialectic witnessed in Clausewitz's theoretical response to the Napoleonic Wars, whether in contrast to the contending ideas of his contemporary rival Jomini, or as recent Clausewitz scholars have tended to instead emphasize, that between the "early" or "Idealist" Clausewitz who was responding to Napoleon's sweeping early victories, and the "late" or "Realist" Clausewitz who came to understand how the Napoleonic juggernaut was slowed, and then reversed, and as "absolute" war was once again constrained by the limits imposed by the rational objectives of policy. 1704

### **Brodie and His Rivals: The Battle for Posterity**

In his comparative discussion of Herman Kahn, Thomas Schelling, and Bernard Brodie in the January-February 1967 edition of *Air University Review*, "American Strategic Thinking," John W. Chapman observes that Brodie "is a strategist whose style of thinking differs significantly from those exhibited in the works of Kahn and Schelling," and who "describes himself as a 'pragmatic thinker' and derides the 'romantic' and 'mechanistic' and other deficiencies which he detect[s] in the writings of others," an irony of sorts given the highly mechanistic nature of the very system of mutual nuclear deterrence envisaged by Brodie, the subject of some later criticism by Barry D. Watts in 1984. As Chapman notes, in contrast to Kahn and Schelling, "Brodie seems inclined to regard the world as not so pervaded by either insecurity or uncertainty as they would have it. In his perspective the relevant alternative[s] narrow down sharply. We are indeed in a difficult and dangerous situation, but situations have a structure to them, which is open to historical and analytical investigation; we can, as we have in the past, think our predicament through." 1705

While writing a full decade before neorealism would emerge as the in-vogue variant of realism, embedded in international structures the primary causality of international relations, Chapman presciently points out that "Brodie's concern with the structure of the political and strategic environment derives possibly from his background in political science; analysis in that field typically runs in terms of the shaping influences which the structure of an institution exerts upon its constituent processes. In this connec-

<sup>1704.</sup> Stephen J. Cimbala synthesizes the apparently distinct "early" and "late" Clausewitzes, arguing instead that Clausewitz observed two distinct and conflicting forces in war, a "strong" and a "weak" force; the strong force includes those forces "which propel war toward its absolute form," and the weak includes "those which resist this trend." See Stephen J. Cimbala, Clausewitz and Escalation: Classical Perspective on Nuclear Strategy (London: Frank Cass, 1991), 15-16.

<sup>1705.</sup> John W. Chapman "American Strategic Thinking," Air University Review, January-February 1967, http://www.airpower.au.af.mil/airchronicles/aureview/1967/jan-feb/chapman.html.

tion, perhaps one should notice also his earlier work, *A Guide to Naval Strategy*, naval strategy being an area of strategic thinking which is peculiarly responsive to reflection that is styled structurally."<sup>1706</sup> Chapman sees in Brodie the art of a constructive realist motivated to fuse ideas with real structures to embody them. Noting that "Brodie is resolutely empirical, looking hard at the given and specific situation" and "manifestly reluctant to drift off into conceptual speculation," Chapman reiterates that "it helps in differentiating him from other strategic thinkers to stress his sensitivity to the structural aspects of strategic confrontations. He exhibits a bracing suspicion of the abstract, of thought that moves on rails of principle – he once said that the classical principles of war are little more than refined common sense – and of the overly sophisticated. Compare his reference to 'the marvelous clarity of the choice between nonwar and destruction' (in *Escalation and the Nuclear Option*) with talk of 'thresholds,' 'bargaining,' 'escalation ladders,' and the like."<sup>1707</sup>

In his June 1965 RAND report and his 1966 book version with the same title largely identical in substance, with the addition of an appendix and a new introductory chapter, "Brodie argues that there has been a 'crucial change' in the 'general strategic environment" and in marked contrast to Wohlstetter, he believed that a "stable balance of terror has been reached at the strategic level, and his evaluation of this development does differ interestingly from those of Kahn and Schelling. 'Unless we are dealing with utter madmen, there is no conceivable reason why in any showdown with the Soviet Union appropriate manipulations of force and threats of force, along with more positive diplomatic maneuvers, cannot prevent deterrence from failing."1708 Brodie concluded that it was a "fairly safe prediction that from now on neither side will be able seriously and convincingly to use for political ends threats of strategic nuclear attack, or anything that in scale is even close to it."1709 But as Brodie put forth Escalation and the Nuclear Option, "strategic stalemate means tactical freedom, and he suggests that 'the use or threat of use of tactical nuclear weapons may often be counterescalatory." This is a marked change from his earlier position presented in his 1959 Strategy in the Missile Age in which he wrote, "between the use and non-use of atomic weapons there is a vast watershed of difference and distinction, one that ought not be cavalierly thrown away, as we appear to be throwing it away, if we are serious about trying to limit war."1711 As Chapman reflects, "Apparently Brodie has had occasion to change his mind on this issue," and he adds that a "number of considerations seem to influence Brodie's stance on

<sup>1706.</sup> Chapman "American Strategic Thinking."

<sup>1707.</sup> Chapman "American Strategic Thinking."

<sup>1708.</sup> Chapman "American Strategic Thinking."

<sup>1709.</sup> Chapman "American Strategic Thinking."

<sup>1710.</sup> Chapman "American Strategic Thinking."

<sup>1711.</sup> Chapman "American Strategic Thinking."

tactical nuclears. If any one consideration is decisive, it is his belief in strategic stalemate: there can be no general war. And this circumstance of itself offers encouragement to the provocative and the aggressive, those who would escalate, not to the top rungs of the ladder, to be sure, for they are gone; rather up the ladder for political advantage. Some such nations can be deterred, and safely so, by the threat to use, or the actual use of, tactical nuclear weapons."1712 Brodie reiterated this view in his 1965 paper, "What Price Conventional Capabilities in Europe?" which appeared in *Problems of National Strategy:* A Book of Readings (1965), Henry A. Kissinger, ed., in which he argued, "I see no basis in experience or logic for assuming that the increase in level of violence from one division to thirty is a less shocking and less dangerous form of escalation than the introduction of any kind of nuclear weapons." <sup>1713</sup> Chapman suggests that "Brodie's appraisal is consistent with his style of strategic thinking, with his focus upon the structure of the situation, as distinguished from the way in which the use of nuclears would stand out. If it is structure that counts, i.e., the relations of the adversaries, then one can ignore the subtleties of psychological restraints. Indeed, their introduction only serves to blur the realities, appreciation of which is at the foundation of rational calculation." 1714

Chapman finds that, particularly as compared to Kahn and Schelling, Brodie appears "rather more confident than many that the intentions of potential enemies can reliably be interpreted and forecast; politics is a less volatile activity than many are tempted to think; speculation about the us[e] of resolve is no substitute for study of an opponent's character and characteristic ways of behaving." 1715 Adds Chapman: "His method is to begin with direct analysis of the situation confronted; this sensitizes him to changes in the strategic environment, as he calls it; this in turn would seem to prepare him to place greater confidence in the possibility of forecasting political behavior, in estimating the pressures of codes and character in a situation. Here I would contrast Kahn's assumption that political behavior is likely to be irrational, the more so when persisting insecurity is present, and his assumption that the irrational cannot be forecast. In this perspective, any confrontation is likely to seem more precarious than it would appear to Brodie."1716) Chapman also sees a marked contrast with "Schelling's emphasis on uncertainty, derived from his conception of military and strategic activity as dynamic processes containing their own inherent tendencies. Brodie would seem to be saying that the very structure of a confrontation imposes constraints upon the political and military processes that go on within it, including those human responses that would be called irrational. Stability need not be premised on the presence of a dominant and dominating power, as Kahn

<sup>1712.</sup> Chapman "American Strategic Thinking."

<sup>1713.</sup> Chapman "American Strategic Thinking."

<sup>1714.</sup> Chapman "American Strategic Thinking."

<sup>1715.</sup> Chapman "American Strategic Thinking."

<sup>1716.</sup> Chapman "American Strategic Thinking."

would have it; nor need stability be tied to the kinds of mental processes revealed by Gestalt investigation." <sup>1717</sup> In short, the stability that Brodie predicts will emerge from the nuclear strategic balance emerges naturally from the very bipolar structure of international relations that took root in the post-World War II world, as two nuclear-armed superpowers faced off across their nuclear chasm; the world that Brodie perceived, and which his ideas on deterrence helped to create, was one where the mutuality of risk and of fear inherent in the nuclear balance induced restraint. In short, Brodie's ideas about deterrence and its mutuality, first conceived at the dawn of the nuclear age, would take root, and from them would emerge the very bipolar stability that would enshrine the emergent theory of neorealism that would reign supreme until the Cold War's end.

In his concluding thoughts, Chapman observes that Henry Kissinger, in his "Editor's Conclusion" to his 1965 edited volume, Problems of National Strategy: A Book of Readings, wrote that "national security policy is not primarily a technical problem, but a challenge to political understanding, and ultimately, to philosophical insight."1718 Chapman adds to this, just as "[p]olitical theorists and philosophers differ over the ways in which it is profitable to think about ourselves and to investigate our environment," then "so, too, do our strategic philosophers. They all have styles, each one of which is powerful and illuminating, and perhaps also constricting," and rather than choose one over the other, Chapman believes that we "need not choose among styles of thought; rather we should be aware that there are various dimensions to strategic thinking, no one of which may with impunity be neglected."1719 For "principles do not apply themselves," as their "application is an operation of judgment, and this requires an understanding of the environment in which they are to be applied."1720 So while Herman Kahn's "way of thinking is grounded in the political principle that men require security in order to be rational," Chapman points out that the "pragmatic Bernard Brodie would fix our attention upon the actual situation that we confront. Theories generate principles, and situations have structures. Both sorts of consideration are fundamental, but in different ways. Without principles, we lack direction; without a map, directions lose their meaning. 'Strategic principles' there are, but they can be misleading without a grasp of the 'strategic environment,' Brodie's environmentalistic way of thinking seems particularly relevant," and "impressive insights ... flow directly from Brodie's concern with structural relationships." 1721

It is the complicated relationship, and eventual theoretical rivalry, between Herman Kahn and Bernard Brodie that strikes a chord with that earlier clash of theoretical

<sup>1717.</sup> Chapman "American Strategic Thinking."

<sup>1718.</sup> Chapman "American Strategic Thinking."

<sup>1719.</sup> Chapman "American Strategic Thinking."

<sup>1720.</sup> Chapman "American Strategic Thinking."

<sup>1721.</sup> Chapman "American Strategic Thinking."

styles between Clausewitz and Jomini; as with these two influential Napoleonic-era rivals, Brodie's and Kahn's written works addressed many of the very same themes, often at the same time, but whose styles and personalities so differed with a notable impact on the reach and influence of their efforts, Brodie penetrating more deeply into the fundamental, indeed one might say academic, essence while Kahn more broadly disseminating ideas to the lay public as well as the policy and warfighting communities. This parallelism indeed presents an uncanny resemblance to the rivalry between Clausewitz and Jomini, so much so that both Clausewitz and Brodie would die much sooner than their more popular rivals, and as a result, Kahn and Jomini would not only get the last say, so to speak, but they would be able to lay an institutional foundation for their sustained influence to penetrate deeply into the formulation of military doctrine both during their lifetimes and in the years that followed. It would take the passage of much time for Clausewitz to be rediscovered, and for his voice to finally echo well beyond his grave as new generations of theorists found his wisdom reached far into the future, and this is my hope for Brodie, as the time may now be right for his wisdom to emulate that of his great Prussian mentor and reach across the vast chasm of time. On the irony of Kahn's greater notoriety, one of his popular works was Thinking About the Unthinkable, with a new edition to come out immediately after his death called Thinking About the Unthinkable in the 1980s, influencing the debate that was then raging on nuclear strategy even after he had passed on to eternity.

But this famous phrase, "thinking about the unthinkable" – which would spawn several imitators in later years including Jeff Smith's 1989 Unthinking the Unthinkable: Nuclear Weapons and Western Culture; Peter R. Lavoy's, Scott D. Sagan's and James J. Wirtz's 2000 Planning the Unthinkable: How New Powers Will Use Nuclear, Biological, and Chemical Weapons, as well as numerous articles including my own 2004 Rethinking the Unthinkable: Nuclear Weapons and the War on Terror and Wade L. Huntley's Unthinking the Unthinkable: U.S. Nuclear Policy and Asymmetric Threats rebutting my effort – was not the brainchild of Herman Kahn, as noted in the pages above, but in fact was first suggested by Brodie. As Booth observed in his chapter on Brodie in Makers of Nuclear Strategy, "In words which Herman Kahn was later to echo and make famous, Brodie summed up the task of the new strategists as follows: 'War is unthinkable but not impossible, and therefore we must think about it.' Thinking About the Unthinkable (the title of Kahn's 1962 book) is what Brodie did in the late 1940s, and he communicated his ideas by means of regular lectures to the American military and a steady output of publications."1722 Indeed, Brodie was the first to introduce the notion that fighting nuclear war was "unthinkable"

<sup>1722.</sup> Ken Booth, "Bernard Brodie," in John Baylis and John Garnett, eds., Makers of Nuclear Strategy (London: Pinters Press, 1991), 25.

as early as 1946 – a full sixteen years before Kahn would make "thinking about the unthinkable" famous.

In his 1992 *Survival* article, "Brodie, Wohlstetter and American Nuclear Strategy," Michael Howard writes that during the Cold War, "some of the best minds in the Western world addressed themselves to the problem of maintaining an effective balance of power without having to fight a war that nuclear weapons would render inconceivably terrible to both sides," and the result of their efforts, "a huge literature developed, misleadingly labelled 'strategic studies': misleading, because the subject under discussion was not how to fight wars, the traditional concern of strategists, but how to prevent them. Most of the contributors had never heard a shot fired, or even a bomb dropped, in anger, which gave their writing a curiously arid quality; but then, their concern was not how to do it, but how to ensure that it was never done." As he put pen to paper in 1992, he noted that already "their work is beginning to seem as remote as that of sixteenth-century theologians, their jargon as abstruse and irrelevant as the vocabulary of transubstantiation and consubstantiation. When librarians consign their collections, first to the remotest stacks, then to the cellars, finally to the recycling process, what will be left?" 1724

Howard includes Brodie as one of two names that he thinks "are likely to figure on any short list," the other being Albert Wohlstetter – "not only because of what they wrote, but also because of what they stood for. Some have seen them as the Carl von Clausewitz and the Henri Jomini of their day, the one for the profundity of his insights, the other for the clarity of his analysis. Another comparison, to continue the theological analogy, might be with Martin Luther and John Calvin; the first for his pioneering perception of a central and fundamental truth, the second for his implacable logic in following the trail of reasoning, however unpopular the conclusions to which it led. In any case, Brodie and Wohlstetter stand as pole and antipole in the strategic analysis produced since World War II." Howard observes that Brodie and Wohlstetter "had little time for one another. Although trained as a political scientist, Brodie wrote primarily as a historian, interested less in analysis of static situations than in process and development, the significance of the contingent, the part played in history by accident and personality and by complexities of which only hindsight can make us aware." 1726

Howard recounts that Brodie "discovered Clausewitz rather late in life, in the course of thinking about limitations on war and the primacy of policy over strategy, but it was the Clausewitzian concept of friction that fascinated him. Like Clausewitz, he

<sup>1723.</sup> Michael Howard, "Brodie, Wohlstetter and American Nuclear Strategy," Survival 34: 2 (Summer 1992), 107.

<sup>1724.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 107.

<sup>1725.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 107-08.

<sup>1726.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 108.

insisted that war in reality was very different from war on paper; this was especially true of nuclear war. While initially welcoming the contribution that systems analysis could make to strategic thought and military planning, Brodie became increasingly sceptical about its utility" and in fact "remarked at a moment of particular frustration, that they seemed to have 'a trained incapacity for giving due weight to social and political imponderables'." 1727 It is curious that Barry D. Watts' primary criticism of Brodie was his failure to fully acknowledge the implications of friction in his work, since Howard suggests here that Brodie was in fact "fascinated" by the concept – a view that is borne out by a close look at his voluminous writings on war and strategy, which probe the psychological undercurrents of war and recognize the ubiquity of chance and uncertainty (albeit without frequent use of such Clausewitzian buzzwords as friction or fog.) Howard notes Brodie thought even less of "the professional military – a failing that was, in his chosen profession, something of a disadvantage," and he recalls how Brodie, "[i]nvolved first as a young staff-officer in analysing naval operations in World War II and then as an independent consultant to the chief of the Air Staff in 1950, ... complained bitterly about what he saw as the ossified nature of the military mind, the absence of flexibility and critical analysis in their thinking," and Howard agrees that Barry Steiner "quite reasonably suggests that much of the trouble lay with Brodie himself. He was a young man with a high opinion of his own abilities, who tended to reach conclusions rapidly on the basis of solitary contemplation and who lacked the patience and tact to argue through his conclusions in a group environment. In this, he had much in common with his British mentor, B.H. Liddell Hart, who was also a loner; crafting his concepts in the solitude of his study, enunciated them as dogmas, impatient of the bureaucratic process of translating ideas into programmes and resentful of his consequent lack of effective power." 1728

Howard recalls that in 1950, General Hoyt Vandenberg "called on Brodie to advise on targeting policy against the Soviet Union," and at the time, Strategic Air Command (SAC) "wanted to plan an all-out attack against Soviet industrial capability, focusing on the Soviet Union's electrical network. Brodie argued that with the limited number of atomic bombs available, this would have little effect on the capacity of Soviet armies to overrun Europe and that the SAC would do better to attack a small number of cities in the expectation that the shock to Soviet morale, with the threat of further punishment in reserve, would force a reversal of policy - a programme, in fact, of 'intra-war deterrence'. Brodie failed to persuade his clients. Within a few years the development of thermonuclear weapons and Soviet retaliatory capabilities rendered both strategies

<sup>1727.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 108.

<sup>1728.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 109.

out of date."<sup>1729</sup> Brodie believed "nuclear war could never be won and should never be fought" and had "made his famous Lutheran declaration of principle as early as 1946: 'Thus far the chief purposes of our military establishment has been to win wars. From now on its chief purpose must be to avert them'. It was slightly premature: four years later, he was advising the military establishment how to win a war. But by the mid-1950s, his declaration of faith was common ground among virtually all strategic thinkers, who differed only as to how it should best be implemented."<sup>1730</sup>

Howard recalls that it was "at this stage that the gap began to appear between 'existential' deterrence, as formulated in the United States by Brodie, and what might be termed 'credible deterrence', a school virtually founded by Wohlstetter," 1731 which differed primarily on how nuclear war could be prevented: "For Brodie, as for most European thinkers, the mere possibility of nuclear retaliation, irrespective of target, was deterrence enough: the explosion of a hydrogen bomb over a single city would be a catastrophe beyond imagination, and no sane statesman would contemplate running any risk of it happening. Brodie rejected Wohlstetter's contention that the mere feasibility of a Soviet pre-emptive strike made the balance of terror 'delicate'. Such a belief, he maintained, 'took no account whatever of the inhibitory political and psychological imponderables that might and in fact must affect the conditions implied by that word "delicate".... Many things are feasible that we have quite good reason to believe will not happen'." 1732 Adds Howard, "In fact, strategic thinking, Brodie believed by 1955, 'had reached a dead end' because nuclear war could no longer serve its Clausewitzian purpose as an instrument of policy. Some manipulation of nuclear risk would still be necessary, he agreed, to deter a Soviet attack on Western Europe, where he saw tactical nuclear weapons as having continued utility. Beyond that, he dissociated himself from the kind of detailed analysis that occupied his colleagues at The Rand Corporation, where his comments were increasingly sardonic and destructive. 'A plan and a policy which offers a good promise of deterring war', he wrote, 'is by orders of magnitude better in every way than one which depreciates the objective of deterrence in order to improve somewhat the chances of winning'." <sup>1733</sup> Brodie feared the 'warfighters' – as one wing of the credible-deterrence camp would come to be called – inadvertently undermined deterrence by signalling a lack of resolve, watering down the threat and thereby diluting the policy's effectiveness.

Howard has more sympathy, it seems, for the Wohlstetter school, writing that "such a criticism was to misunderstand, if not to misrepresent, what Wohlstetter and his col-

<sup>1729.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 110.

<sup>1730.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 110.

<sup>1731.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 110-11.

<sup>1732.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 111.

<sup>1733.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 111.

leagues were trying to do. Rightly or wrongly, they denied that 'existential deterrence' was enough. The Soviet Union, they maintained, would not be deterred by implausible threats; and threats to attack its cities, when it had the capacity to retaliate in kind against the West, were entirely implausible. (Brodie, incidentally, remained vague about what targets should be attacked if his own rules for the limitation of nuclear war prohibited attacks on cities.)"<sup>1734</sup> Wohlstetter, Howard explains, "believed that it was necessary to present the adversary with a strategy that was not only feasible but credible: to maintain invulnerable retaliatory forces targeted in such a way that intrawar deterrence could be preserved by ensuring that whatever the Soviets did would be seen to result in greater suffering for themselves than they would be able to inflict on the United States and its allies. This was not, as Brodie depicted it and as some strategists have demanded of it, a 'war-fighting' strategy, much less a 'strategy for victory'. It was, rather, a sustained effort to map out the nightmarish territory that lay between the failure of deterrence and the escalation to extremes that Clausewitz had described and Brodie so much feared."

Adds Howard: "Careful Jominian reasoning, argued Brodie and his followers, would be torn to shreds by Clausewitzian friction the moment the first missile landed. It was a valid critique, but not a very helpful one,"1736 and one that left the military without guidance. And so, as the years passed, they would turn less and less to Brodie, finding his brand of Clausewitzian theory quite unhelpful when it came to making hard choices over weapons systems and targeting plans. And so, notes Howard, "At the end of his life, Brodie despaired of strategy because nuclear war could never, in his view, be an instrument of policy. Wohlstetter would not have dissented from that conclusion, but he saw that nuclear weapons could be instruments of policy. Whether consciously or unconsciously, the United States used them as such" 1737 — and it may be argued that America's continuously evolving efforts to maintain the nuclear balance that Wohlstetter once called "delicate" contributed to the swift, largely unexpected, and markedly nonviolent conclusion of the Cold War, and the ultimate triumph of the very policies that embraced the bomb, forcing strategists of the Cold War to wrestle with the unthinkable.

<sup>1734.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 111.

<sup>1735.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 111.

<sup>1736.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 112.

<sup>1737.</sup> Howard, "Brodie, Wohlstetter and American Nuclear Strategy," 116.

## **Chapter Six**

# Bernard Brodie: A Clausewitz for the Nuclear Age? The 'Absolute' Imperative: Reuniting War and Politics in the Age of Absolute War

Bruce Fleming, in his Spring 2004 Parameters article, "Can Reading Clausewitz Save Us from Future Mistakes?" observed that, "Perhaps most important among the recent commentators seeing *On War* as a book that, read properly, would have saved us from many mistakes was Bernard Brodie, the 'dean of American civilian strategists' - as he is called in the jacket copy for his magisterial War and Politics." <sup>1738</sup> Fleming continues: "Brodie takes Clausewitz's most famous assertion as central for War and Politics. Its cover gives a visual equivalent of the title, as well as of Brodie's understanding of Clausewitz's famous assertion. The cover shows a soldier's combat helmet side-byside with a diplomat's silken top hat. Brodie's summary of Clausewitz's concept is that 'war takes place within a political milieu from which it derives all its purposes.' Brodie comments: 'This understanding has never fully got across to the great majority of those people who think or write about war, and even less to those who fight it.' Brodie recommends, as a result, civilian control of the military – more specifically, control by civilians who know something about the capabilities of the military and who themselves have taken to heart Clausewitz's central perception, what Brodie calls 'genuine civilian control.' In arriving at this last notion, Brodie evokes and rejects what he considers the simplistic and wrongheaded view of a relation between civilian control and the military: 'a simple 'stop-go' approach, so that the actual outbreak of war was the occasion for instituting completely new sets of values and objectives, especially the objective of winning the war for the sake simply of winning. . . . The disposition towards this attitude is especially a mark of the military profession. . . . All the more reason for genuine civilian control."1739

On Clausewitz's most famous dictum, that war is a continuation of policy by other means, Fleming observes that Brodie believed "Clausewitz is offering a statement in the form of 'should' rather than 'is.' War should be the continuation of policy, but all too often is not. All we have to do is pay attention to Clausewitz to save ourselves a lot of trouble. Brodie quotes from the final chapter of *On War*: 'The subordination of the political point of view to the military would be unreasonable, for policy has created the war. . . . The subordination of the military point of view to the political is, therefore, the only thing which is possible.' . . . In Brodie's view, a careful reading

<sup>1738.</sup> Bruce Fleming, "Can Reading Clausewitz Save Us from Future Mistakes?" Parameters (Spring 2004): 65-66.

<sup>1739.</sup> Fleming, "Can Reading Clausewitz Save Us from Future Mistakes?" 66.

of Clausewitz can explain our failures in the past; at the same time there is hope that taking our principles to heart can prevent such debacles in the future." <sup>1740</sup> As Fleming writes, "We should therefore ask, When Clausewitz offers as a dictum 'war is the continuation of policy by other means,' should we understand this as a definition valid for all time? Or is it a goal to aim for? Perhaps, as a third alternative, a generalization about most situations? Is it an expression of his Kantian side, or his pragmatic one? And this means that we must ask the larger question: What is the relation between theory and practice in this work as a whole?" Fleming notes "the fact is that On War is a deeply ambivalent work as regards the relation it proposes between theory and practice. . . . The text itself is a theoretical mess. . . . For this reason, commentators should go slowly in claiming that dipping into On War helps to 'prove' their particular position. It can be used just as easily to 'prove' the opposite. Brodie's invocation of Kant makes clear some of the pitfalls of any author with one foot in the ideal and one foot in the real, and shows us the difference between an author, Kant, who consciously set up two disparate realms, and another, Clausewitz, who alternated between them and never was able to relate them."1742

Brodie seems to intuitively grasp Clausewitz's fundamental challenge, the use of philosophy, a practice of the mind, to probe the depths of the reality of war, and to somehow bridge the gap between action and thought, between reality and the philosophical abstractions used to contemplate it. Brodie takes his cue and his inspiration from the master philosopher of war, and in the course of his journey confronts the self-same ambiguities and contradictions. Clausewitz tried to comprehend, and wholly explain, the new contours of total war, and Brodie sought the same of nuclear war, and both struggled with their audiences, particularly the desire in military circles for clarity and certainty, two seeming impossibilities in a world obscured by fog and riddle with inherent ambiguity. In his 1959 lecture on "Strategy as an Art and a Science," Brodie writes that Clausewitz "represents what we might call the 'philosophic interpretation of military history,' and who is certainly the greatest figure in that tradition." 1743

<sup>1740.</sup> Fleming, "Can Reading Clausewitz Save Us from Future Mistakes?" 66-67.

<sup>1741.</sup> Fleming, "Can Reading Clausewitz Save Us from Future Mistakes?" 68-69.

<sup>1742.</sup> Fleming, "Can Reading Clausewitz Save Us from Future Mistakes?" 69.

<sup>1743.</sup> Bernard Brodie, "Strategy as an Art and a Science," February 1959, http://www.maxwell.af.mil/au/awc/awcgate/theorists/brodie1.htm. At this point in his speech, he said the following words that I have edited out for space considerations: "Clausewitz was himself a professional officer and also a profound student not only of war but of the science and philosophy of his times. He was a great admirer, for example, of the philosopher Hegel, who was ten years older than he and who died in the same cholera epidemic of 1831. His admiration caused him, unfortunately, to imitate the characteristic Hegelian dialectic in his own writing. Thus, like Hegel, he presents first the thesis of his argument; then, the antithesis; and, finally, the synthesis. This is the characteristic which makes Hegel so difficult to read, and such is also the case with Clausewitz. We see it, for example, in the first chapter of his book entitled On War – the only chapter he edited and considered completed before his death – in which he sets forth, first, the proposition that war in its pure form scorns any modifications of violence. This is the theme on which the book opens, and it is developed with considerable eloquence. Then, suddenly, after a few pages, he begins to develop the opposite theme: that war, however, never exists in its pure form

As Brodie points out, "Clausewitz has been called 'the prophet of total war,' when in fact he is almost the very opposite: he is almost 'the prophet of limited war.' His deductions on strategy were derived from a close reading of the military history especially of his own times, which embraced the Napoleonic wars, but also the wars of the preceding two centuries. Of the ten volumes into which his posthumous works were gathered, seven are devoted to monographs in history. His treatment of military history is comprehensive, careful, and, above all, objective. This, I submit, is still the key to the good utilization of history and strategic studies." <sup>1744</sup> Brodie adds that "the qualities that make Clausewitz great" include "his philosophic penetration and breadth, which make him examine the place of war in the lives of nations and which thus save him from the error which is common to so many lesser figures in the field – the error of considering war as though it were an isolated act, serving no purpose outside itself," as well as "his insistence upon looking at the particular subject he is discussing from all sides. He is just as determined to make clear the exceptions to any rule as he is to set down the rule itself. It is for the latter reason that Clausewitz insists that there are no principles of war; that is, there is no system of rules which, if pursued, will guarantee success. His contemporary Jomini scolded him for that position. Clausewitz has been criticized on the grounds that he left no "system" of strategy, no method which can be indoctrinated by teachers and learned by students. The observation is true, but I consider it to his great credit rather than a ground for criticism." 1745

In the nuclear age, the tension between the Clausewitzian and the Jominian approach to war theory would be echoed in the field of nuclear strategy, as the "nuclear warfighters" (largely, but not exclusively, within the military services) and the pure "deterrence theorists" (largely civilians, but not exclusively so – mostly in academia, government, and the many policy research organizations with a foot in both worlds) faced off, presenting two distinct visions of order for the nuclear age: one primarily emphasizing action, the other primarily thought, with reality nestled somewhere in between. While they shared much in common, including an appreciation of the destructive magnitude of nuclear weaponry, and like Jomini and Clausewitz possessed great knowledge of the roots of contemporary conflict, their theoretical styles differed much like Jomini's and Clausewitz's did. In the case of Kahn and Brodie, each wrote about the same phenomena (the impact of the bomb on international security, the

but is rather a phase in the political activity of states. This brings him to qualify considerably everything he said previously about war being pure violence. ecause of his dialectical method, Clausewitz is very difficult to understand by anyone who tries to read him casually. But he is easy enough to quote, and some of the sentences in his opening pages have quite a lot of blood and thunder in them. The authority of his words has therefore been used to underline the absurdity of trying to moderate war when, in fact, the whole tenor of his book is that war is a political act and must therefore be governed by the political objective. He returns to this theme again and again throughout the book."

<sup>1744.</sup> Brodie, "Strategy as an Art and a Science," February 1959.

<sup>1745.</sup> Brodie, "Strategy as an Art and a Science," February 1959.

dynamics of escalation, the nature of limited war, and the necessity for thinking about the unthinkable), much like both Jomini and Clausewitz wrote about the impact of Napoleon on European security, and how he transformed not just the nature of war but the entire strategic landscape. So similar were Brodie's and Kahn's interests that they twice authored volumes that deeply influenced the strategic debate within a year of each other; first with Brodie's 1959 Strategy in the Missile Age and Kahn's 1960 On Thermonuclear War, and next with their sequential texts in the mid-1960s on the topic of escalation, with Kahn's 1965 On Escalation: Metaphors and Scenarios and Brodie's 1966 Escalation and the Nuclear Option written at nearly the same time and thus without reference to the other. And yet, despite their many notable similarities, their philosophical approaches, and their styles of theorizing, were markedly different.

Ken Booth, in his chapter profiling Brodie in Makers of Nuclear Strategy, suggests that "[s]trategic history will acclaim Brodie as the Clausewitz of the age of nuclear deterrence," even if, during his lifetime, he was "somewhat overshadowed in fame by more prolific, protagonistic and precocious members of his profession" and thus "failed to have Albert Wohlstetter's direct influence on policy;" "never displayed Herman Kahn's inflated virtuosity;" "did not exhibit Thomas Schelling's formal reasoning;" and "lacked Henry Kissinger's experience in the practice as well as the theory of great power."1746 But despite lacking these qualities associated with his better known colleagues, Brodie's "reputation has been secure in the minds of the most distinguished of his profession," with Michael Howard having "described him as 'quite the wisest strategic thinker of our generation" and Thomas Schelling, saluting him upon his passing as being "first – both in time and in distinction" among his peers. 1747 As John Baylis and John C. Garnett, editors of Makers of Nuclear Strategy, note in their introduction, "Edward Meade Earle's classic *Makers of Modern* provided us with a model," and add that it was "fitting that the first chapter should focus on the work of Bernard Brodie, who edited *The Absolute Weapon*, a "major landmark in the story of thinking about nuclear weapons," and whose contribution argued that the "unique destructiveness of the new weapons meant the avoidance of war was now all-important ... opened the debate and set down an agenda for deterrence which became the main preoccupation for nuclear strategists for decades ahead."1748 Echoing Booth, they laud Brodie's work as being "outstanding in the way it explained the new and frequently ambiguous interrelationship between war, politics, and strategy," and predict that "[f]uture generations of are likely to acclaim Brodie as 'the Clausewitz of the age of

<sup>1746.</sup> Ken Booth, "Bernard Brodie," in John Baylis and John Garnett, eds., Makers of Nuclear Strategy (London: Pinters Press, 1991), 19.

<sup>1747.</sup> Booth, "Bernard Brodie," 19.

<sup>1748.</sup> John Baylis and John C. Garnett, eds., Makers of Nuclear Strategy (London: Pinters Press, 1991), 4.

nuclear deterrence." They further argue that "Brodie's contribution to strategic studies is profound. Students of the subject, Booth argues, have more to learn from 'a silent dialogue with a major thinker of the past,' like Brodie, than with 'the loudest talkers of the present," and according to Booth, "there has been no one to match him since." Indeed, Booth recognizes Brodie as "the quintessential strategist of the first generation of the nuclear age," and "[a] bove all he was concerned to nurture the roots of strategic thinking," which Brodie believed "had been most comprehensively expressed by Carl von Clausewitz." And so, "Brodie attempted to develop Clausewitz's legacy for the first nuclear generation," and "explained the novel and frequently paradoxical interrelationships between war, politics, and strategy." 1752

### **Bringing Clausewitz to America: The Clausewitz Project**

Brodie himself would come to realize that there was really only one prior theorist of war who shared with him the very same objective – that of bringing wisdom, in the form of philosophical inquiry, to the study of war, its nature, and its conduct, and to thereby constrain its otherwise natural tendency to escalate toward absolute warfare – and that was Clausewitz. In the early 1960s, Brodie commenced participation in a long-term project associated with Princeton University Press known as the "Clausewitz Project," a collaboration with renown Clausewitz scholars Peter Paret and Michael Howard which continued for more than a decade that aimed to bring to the Anglo-American audience all of Clausewitz's works, including some never before translated into English. As originally envisioned, the project would have yielded six volumes to be published over several years. But various issues including problems with translation and ongoing delays eventually caused the project to be cancelled, but not before it produced an important contribution to the Clausewitz literature with Princeton's seminal 1976 translation of *On War*.

In his foreword to Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the 21st Century*, Howard recalls that the "idea of a new translation of *On War* originated in the late 1950s when Peter Paret and I were working together at King's College London," while Paret was "studying the connection between military and political ideas in eighteenth-century Prussia for his thesis on Yorck von Wartenburg" and Howard was "devising my first courses for the new Department of War Studies." While Paret

<sup>1749.</sup> Baylis and Garnett, eds., Makers of Nuclear Strategy, 5.

<sup>1750.</sup> Baylis and Garnett, eds., Makers of Nuclear Strategy, 6.

<sup>1751.</sup> Booth, "Bernard Brodie," 19.

<sup>1752.</sup> Booth, "Bernard Brodie," 19.

<sup>1753.</sup> Michael Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," in Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the 21st Century* (Oxford: Oxford University Press, 2007), v.

"was particularly concerned with the inaccuracies and misinterpretations in the existing English translations of On War, I was more interested in the continuing value of the text as a didactic tool for both civilian and professional students of war, particularly its insight into the concept of 'friction' and the central importance of 'moral forces', of which, during my own military service, I had become very aware." <sup>1754</sup> Back in Princeton in 1961, Paret "took up the matter with historian Gordon Craig and the political scientist Klaus Knorr," which together "persuaded the Princeton University Press to sponsor am ambitious project for a translation of all Clausewitz's military and political writings in six volumes, each with a separate editor and translator," and a "meeting of those interested took place in Berlin in June 1962 [sic.], attended by Werner Hahlweg, whose edition of On War would provide the basis for the English translation; the American historian John Shy, Knorr, Craig, and in addition to Peter and myself, the strategic thinker Bernard Brodie," who "had just published his work Strategy in the Nuclear [sic.] Age and was particularly interested in Clausewitz's thinking about 'limited war'." 1755 Howard recalls that both Knorr and Princeton University Press "were very anxious to enlist his cooperation, since they considered, quite rightly, that his name would give the project credibility with a far wider audience," though the result was that a "certain tension developed between the historians on the panel, who saw me as the appropriate editor ... and the political scientists and representatives of the Press, who preferred Brodie. The problem was resolved by appointing both of us," but "[s]ince neither had sufficient command of German to undertake the translation, I undertook to find a professional translator, while Peter, who was virtually bilingual, would exercise a droit de regard over all six volumes."1756

Howard writes that he "was fortune in finding an excellent translator in Angus Malcolm" who "was a former member of the British Foreign Office who, having recently completed a translation of Karl Demeter's *The German Officer Corps*, was broadly familiar with the subject matter" and who "had the further advantage of living within easy walking distance of me in London," though nonetheless "the work made slow progress." As Howard recalls, "Malcolm and I, working in London, produced drafts that we tried to make as close to contemporary English usage as possible," and "then checked these, first with Peter, who by now was teaching at the University of California; then with Brodie in Los Angeles; and finally with the Princeton University Press in New Jersey whose translators found much of the Malcolm-Howard version too colloquial for their liking; all this in an era before either fax machines or email

<sup>1754.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," v.

<sup>1755.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," v. The Berlin meeting actually took place in June 1964, with Brodie's participation in the project commencing in 1963.

<sup>1756.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," v.

<sup>1757.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," vi.

had been invented. By 1970, the task was still not complete, and poor Malcolm died while still at work on the project." 1758 Howard added that "even less progress had been made on the other volumes in the projected series," and that "[i]n fact, none of them got off the ground at all. Understandably, Princeton University Press cancelled the original project." 1759 Howard credits Brodie for saving what remained, and ensuring that the now famous 1976 Princeton edition of On War came to press: "That On War survived owed much to the continuing enthusiasm and influence of Bernard Brodie - whose enthusiasm, indeed, was so great that his introductory essay swelled to such a length that much of it had to be detached and printed as a separate afterword. In 1974, Brodie persuaded the Press to sign a new contract," and Paret and Howard "then undertook a revision of the entire text, and the volume finally appeared in 1976."1760 Howard notes that this proved "timely," as the "Vietnam War had interested both military leaders and political scientists in the relations between political and military leadership," while the "continuing menace of nuclear weapons made the distinction between 'absolute' and 'limited' war alarmingly relevant; while Clausewitz's emphasis on friction, moral forces, and leadership qualities gave him credibility with professional soldiers who might otherwise have found much of his writing either excessively abstract or out of date. It was our good fortune to be able to present his work in a text that was accessible both to military colleges and to university students." 1761

By the spring of 1963, after the idea of the Clausewitz Project had taken root, Paret mentioned the project to Brodie; then in a follow-up letter the next fall, written on Princeton University Center of International Studies letterhead on November 7, 1963 while a visiting scholar there, Paret wrote to Brodie: "You may recall our conversation last spring about the possibilities of preparing a scholarly edition of Clausewitz's writings in English. This project has now reached the final stage of planning. We are thinking of a number of volumes – perhaps as many as six – presenting a reliably translated text together with very substantial introductions and analyses. Some members of the editorial board are Gordon Craig, Klaus Knorr, Michael Howard,

<sup>1758.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," vi.

<sup>1759.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," vi.

<sup>1760.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," vi.

<sup>1761.</sup> Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," vi. Howard admits that there "still remain[ed] problems of translation that we had failed to iron out," most notable being the word Politik, which has been noted by subsequent critics of the translation effort, and which Howard asks, "should it be 'policy' or 'politics'" Neither carry the full grandeur of the original," while "both imply that soldiers were being instructed to subordinate themselves to the intrigues of mere 'politicians' and still remain a sticking point for such distinguished commentators as Sir John Keegan," with Howard contemplating that Paul Kennedy's favored term, grand strategy, "might have been better," though "no English word is really appropriate" This was also the case for wunderlich "which Clausewitz applied to his famous 'trinity' of government, military, and people. Earlier translators had used 'wondrous', an anachronism now found only in Christian hymns describing a different kind of Trinity. But was that perhaps what Clausewitz intended? Neither 'remarkable' nor 'paradoxical' carry the full weight of the original," and were Howard "starting over again," he thinks that he "might settle for 'amazing." Howard, "Foreword: Clausewitz On War: A History of the Howard-Paret Translation," vi-vii.

and myself."<sup>1762</sup> Paret added, "Klaus and I wonder whether we could persuade you to join us. Specifically we would like you to undertake the interpretation of On War. We recognize that this is the most important and most difficult task of all, and we know that is no-one as well qualified as to handle it. The analysis should, of course, not only place the work in its historical context, but also speculate on the meaning Clausewitz's approach may have for contemporary problems of war and strategy. At present our time-table is flexible, and – needless to say – there is no expectation that such a major piece of work could be done quickly. Please let me know how you feel about this. I look forward to your reactions with great interest."<sup>1763</sup>

Paret wrote again on January 13, 1964, providing some "early information about the organization of the Clausewitz project," and noting: "Gordon Craig and I will act as the general editors of the series, which will probably consist of six volumes," and other editors would include Basil Liddell Hart, Michael Howard, Klaus Knorr, John Shy, Karl Dietrich Erdmann and Werner Hahlweg.<sup>1764</sup> A meeting was planned for Europe, and Paret asked Brodie if he had any suggestions for a meeting place. He also noted he was seeking translators "who can turn Clausewitz's prose into clear and – I hope – reasonably elegant English."<sup>1765</sup> Noting he and Craig had met with the other editors already, they asked Brodie if they could get together "for a thorough exploration of the editorial and interpretive problems of your volume before the general meeting in June," perhaps out in the Bay Area closer to Brodie's Santa Monica location, since Paret was only in Princeton until the end of that month. <sup>1766</sup> On January 17, 1964 Brodie replied to Paret, noting he was "delighted to have further news about the Clausewitz project, especially the news that it is to include also people like Liddell Hart and Michael Howard." <sup>1767</sup>

With regard to a possible meeting place, Brodie felt "somewhere in Germany seems appropriate," and noted he had visited the Fuerungsakademie in Hamburg, and that he had been "greatly impressed with the attractive person and exceptional intelligence of the commandant, with the fine military library run by an unusually dedicated and knowledgeable director, and with the attractive physical plant located on the outskirts of the city near a very fine natural park. I am sure the group would be most welcome there and would find the environment a congenial one for the meeting. The German Defense Ministry would also be pleased with such a choice and would probably

<sup>1762.</sup> Paret, Letter to Brodie, November 7, 1963, Bernard Brodie Papers (Collection 1223), Department of Special Collections, UCLA.

<sup>1763.</sup> Paret, Letter to Brodie, November 7, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1764.</sup> Paret, Letter to Brodie, November 13, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1765.</sup> Paret, Letter to Brodie, November 13, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1766.</sup> Paret, Letter to Brodie, November 13, 1963, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1767.</sup> Brodie, Letter to Paret, Jan 17, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

find ways of being helpful."<sup>1768</sup> He also suggested "an even more pleasant locale for a meeting in the middle of June would be somewhere in southern France like Arles or Aix-en-Provence," and added, "Our British colleagues would probably appreciate a chance to warm up."<sup>1769</sup> Brodie also suggested two translators for the project: Ewald Schnitzer, a former RANDite then at UCLA, and Freda Mendershausen. And noting he promised his family a ski trip to Mammoth or Yosemite during Easter week, he suggested dropping in to Davis after for the meeting.

On January 22, 1964, Brodie authored a memo sent to C.A.H. Thomson, J.M. Goldsen, and R. McDermott titled "Participation in Clausewitz Project," noting he was invited by Paret to "participate in a project to be led by Paret and by Professor Gordon Craig of Princeton, which has as its purpose the preparation of a new edition of all the writings by Clausewitz," much of which "has never been translated into English, and this will now be done. Also a new translation will be prepared of his famous work, On War."1770 Brodie's "responsibility would be for editing On War, and that others in the project would be responsible for other portions of the work."1771 Brodie noted he had "accepted Paret's invitation (in a longhand letter written from home, of which I did not retain a copy) subject to the proviso that I could not begin work on it for another six months," which was accepted, so "I am now committed to the task." 1772 Brodie added. "My understanding is that there will be no fees or royalties of any kind; at least nothing of the sort has been mentioned. It is strictly a scholarly enterprise, obviously a worthy one, and my association with it will, I trust, reflect credit on RAND."1773 Brodie expected "to do the work on my own time, although I may wish at some future time to raise the question whether the project is not relevant enough to RAND to warrant my attending meetings of the project members on work time rather than on leave."1774

Klaus Knorr, at Princeton, wrote to Brodie on January 22, 1964 on the Clausewitz Project: "I am also delighted with the Clausewitz project, the way it is going, and your participation in it." And on January 24, 1964 Brodie replied to Knorr, praising

<sup>1768.</sup> Brodie, Letter to Paret, Jan 17, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1769.</sup> Brodie, Letter to Paret, Jan 17, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1770.</sup> Brodie, memo to C.A.H. Thomson, J.M. Goldsen, and R. McDermott , Jan 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1771.</sup> Brodie, memo to C.A.H. Thomson, J.M. Goldsen, and R. McDermott , Jan 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1772.</sup> Brodie, memo to C.A.H. Thomson, J.M. Goldsen, and R. McDermott , Jan 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1773.</sup> Brodie, memo to C.A.H. Thomson, J.M. Goldsen, and R. McDermott , Jan 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1774.</sup> Brodie, memo to C.A.H. Thomson, J.M. Goldsen, and R. McDermott , Jan 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1775.</sup> Klaus Knorr, Letter to Brodie, Jan 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

Knorr's recent article, in "Memorandum No. 28," saying he had "done quite a superb job, your arguments being right in every detail and also exceedingly well expressed."1776 But he also added, "I must rebuke you, however, for bowdlerizing (p. 26) the quotation of a former teacher of yours (and mine) in the late '30s. My recollection is that Viner said 'Pacifism is like manure, a fine thing if evenly spread.' Of course, it is somewhat dangerous to use the simile, because some people might think you mean to draw the correspondence between the two commodities even closer." Brodie added, "I am delighted that we are now going to be on the Clausewitz project together..."1777 A February 26, 1964 letter to Knorr raised some logistical issues including Brodie's desire to get hold of a "formal announcement of the new project from the Princeton University Press" to submit to RAND for consideration as "a legitimate part of what we call 'RAND-sponsored research," which would thus "make it possible for me to charge travel time on the project to RAND, and probably get some help on the travel expenses."1778 Knorr replied on March 2, noting the formal announcement was in the works, and would send a copy as soon as it became available. He added that "John Shy has procured finance from some other source," so Brodie should attend the June meeting as "it will be financed one way or other." 1779 He added that "If RAND should decide against a contribution I should be able to find the money somewhere."1780

On March 17, 1964 Brodie wrote to Paret with detailed information on available flights to Sacramento for their meeting with Craig. The next day, on March 18, 1964: Brodie wrote to Gordon Hubel, noting. "I am eagerly awaiting that announcement you are preparing for the Clausewitz project. In fact, more than eagerly. So is Peter Paret for similar reasons. We both need it in our business. We shall appreciate your sending it as soon as you can." The very next day, on March 19, Brodie wrote again, somewhat apologetically explaining, "I feel I owe you an explanation for my perhaps too-vehement request of yesterday," and explaining his need to document his request for "RAND-sponsored research," and adding he had been told by Herb Bailey that "the thing was in your hands." Brodie also noted "since I pledged myself to the project some time last November or December, I am embarrassed that I still don't have in my hands the kind of descriptive statement I need. It is, of course, not your fault; but, at any rate, you are the one we are now looking to produce the required words." The Paret Pare

<sup>1776.</sup> Brodie, Letter to Knorr, Jan 24, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1777.</sup> Brodie, Letter to Knorr, Jan 24, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1778.</sup> Brodie, Letter to Knorr, Feb 26, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1779.</sup> Knorr, Letter to Brodie, March 2, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1780.</sup> Knorr, Letter to Brodie, March 2, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1781.</sup> Brodie, Letter to Gordon Hubel, March 18, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1782.</sup> Brodie, Letter to Gordon Hubel, March 19, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1783.</sup> Brodie, Letter to Gordon Hubel, March 19, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

March 27, 1964: Brodie updated Knorr on the results of his meeting in Davis with Paret, noting the trip "turned out to be most fruitful. We talked in the main about the sorts of things that ought to be covered in my introduction to *Vom Kriege*; also about the possibilities of expanding the committee, perhaps by including one or two Frenchmen." As Brodie has not yet secured approval from RAND for the project, he "had to make the trip as part of my annual leave" and was "obliged also to send you the airlines receipt, for reimbursement of my travel expenses," which included \$43.79 for the return airfare and \$5 for ground transport including parking. Pross' Brodie reiterated he was still awaiting the formal announcement from Princeton University Press' Hubel and thus could not yet submit the project to RAND for consideration, so did not yet know whether they would support the project.

At last, on April 10, 1964, Princeton University's Department of Public Information announced: "A critical edition in English of the writings and correspondence of the 19th century political and military theorist, Carl von Clausewitz, is being prepared under the auspices of the Center for International Studies at Princeton University, Professor Klaus Knorr, Director of the Center, announced today," which was expected "to consist of six volumes" that "will require several years to complete." 1786 The announcement presented a brief synopsis of Clausewitz's contribution to the study of war, and noted "Not more than one-tenth of Clausewitz's writings have been in print at one time since his death in 1831. The new Princeton series will contain material that has never been published, and much that has been out of print even in Germany since the 19th century."1787 On May 1, 1964: Brodie wrote to Knorr, commiserating with him on his back treatment in hospital, as he was himself on the mend from back surgery earlier in the year. He also sought clarity on the timing and location of the June meeting. On April 25, 1964, Paret wrote to Brodie, confirming the press release had been sent to RAND, and incidentally noting that in his recent clearance investigation for a Top-Secret clearance, the issue of having "once been under psychiatric care" came up, when Paret had noted he had undergone analysis while in England and had even provided the name of his analyst to RAND security with "full authorization to question him," and that the RAF had in fact interviewed him. Paret told the Air Force investigators that "they had been misinformed, that I had never in my life seen a psychiatrist professionally, that I had been analyzed when I lived in England, and that I hoped they understood the difference between analysis and psychiatry. They nod-

<sup>1784.</sup> Brodie, Letter to Knorr, March 27, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1785.</sup> Brodie, Letter to Knorr, March 27, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1786.</sup> Princeton University Public Announcement, April 10, 1964, Department of Public Information, Princeton University, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1787.</sup> Princeton University Public Announcement, April 10, 1964, Department of Public Information, Princeton University, Bernard Brodie Papers (Collection 1223), UCLA.

ded – but rather doubtfully, I'm afraid. . . It is pointless, I am sure, to be irritated by the clearance process; but this episode did strike me as both inefficient and naïve." <sup>1788</sup>

On May 7, 1964, J.M. Goldsen sent a RAND Memo to George Clement on the subject of "RSR Grant for Bernard Brodie." It noted Brodie had been invited to participate in the Clausewitz Project, and to "edit the translation of On War, the most famous and the most important of Clausewitz's writings, and to provide an introductory essay." <sup>1789</sup> Brodie had "accepted while he was still on sick leave last Fall" and that "It did not appear to him that he would have to cut into any RAND time, or seek any RAND support for his participation," and that he had "expected that the expenses for the few conferences planned with members of the project would be reimbursed by the project and that he could carry on his own participation via annual leave. It now appears that the amount of time required will be somewhat greater than Bernard originally estimated. Moreover, Princeton did not allocate travel funds, and whatever funds for travel Klaus Knorr has available he groans to allocate to this purpose."1790 The Social Science Department reviewed with Brodie the amount of time he would need to spend on the project, and asked for funds to enable him to spend no more than 15 days on the project in each of the years 1964 and 1965 plus \$1,000 in travel funds in each of those years.

On May 15, 1964 Brodie wrote to Knorr, upbeat about the upcoming Berlin meeting in June and noting that Joe Goldsen had submitted a request for funding to RAND, but that he had not yet heard the result and could not predict the outcome due to "special problems within RAND at this time." Brodie budgeted his flight to Berlin at \$874.20 in economy class, with additional expenses to be no more than \$50 to \$75. He added he would "not wait to see you compare notes about broken backs. I will send you a letter on the subject next week." On May 22, 1964, Brodie wrote to Paret, noting he "will see you at the Hotel Am Zoo on Friday," near to the Tiergarten. After the meeting Brodie intended to fly to Paris for a nine or ten day tour of Burgundy, Provence, and Languedoc, and asked: "Would you like to come along?" and adding, "I am looking forward to our meeting in Berlin, which is now really quite close." On May 28, 1964, Brodie wrote to Paret, asking for clarity on Berlin meeting date and whether it was scheduled for 13-14 June, or 12-13 June; he also noted

<sup>1788.</sup> Paret, Letter to Brodie, April 25, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1789.</sup> J.M. Goldsen, RAND memo to George Clement, May 7, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1790.</sup> J.M. Goldsen, RAND memo to George Clement, May 7, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1791.</sup> Brodie, Letter to Knorr, May 15, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1792.</sup> Brodie, Letter to Knorr, May 15, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1793.</sup> Brodie, Letter to Paret, May 22, 1964, Brodie, Letter to Paret, May 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1794.</sup> Brodie, Letter to Paret, May 22, 1964, Brodie, Letter to Paret, May 22, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

he had found a good translator in Washington whose "writing style in English is quite elegant," in addition to the two persons he had mentioned earlier. Not having more details on the terms of employment he suggested waiting until Berlin before taking any further initiatives on this matter. On May 31, 1964, Paret wrote to Brodie, noting he too was looking forward to the Berlin meeting and to Europe generally, and adding his thanks for the travel invitation, "It is just what I should like to do, and I wish I could join you; but I am giving a lecture in Hamburg on the  $22^{nd}$  just the wrong time." Noted Craig had "invited some interesting people from the University, RIAS, etc., to join us for dinner on Saturday. It should be very pleasant."

On July 29, 1964, Gordon Hubel, the executive assistant at Princeton University Press, wrote to Brodie, noting he had received the minutes of the editorial board meeting on the Clausewitz project, "as well as a note from Peter Paret. Everything seems to be going along well, which gives me great pleasure. This is going to be a really important publishing event, and I am glad you are so closely connected with it."1797 The minutes of the "13-14 June 1964 Meeting of the Editorial Board" noted the project "intends to make available to the Anglo-American reader the significant historical, political, and theoretical works of a writer whose pioneering role in the development of modern military and political thought is not yet fully understood," and which would include multiple volumes including volumes on military history, the Prussian Reform era combing history and strategic theory, political writings and letters, and one volume containing *On War*. <sup>1798</sup> The organization of each to include "a carefully translated text, based on the best German original, whether published or unpublished, accompanied by a critical apparatus and an extensive analytic introduction," as well as a "brief general introduction that describes the edition as a whole and places the particular volume within it." <sup>1799</sup> Gordon Craig had begun work on his political writings; John Shy on the campaign of 1796; Peter Paret on the Prussian Reform era; and the "special and diverse problems posed by On War can be most effectively managed by two editors, and Bernard Brodie and Michael Howard have agreed to share responsibility for this volume – each writing a separate essay." <sup>1800</sup> Possibly expanding the project was discussed, such as including the later Napoleonic campaigns, such as the 1799 and the 1812-15 campaigns. Translation, and additional editorial problems

<sup>1795.</sup> Brodie, Letter to Paret, May 28, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1796.</sup> Paret, Letter to Brodie, May 31, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1797.</sup> Gordon Hubel, Letter to Brodie, July 29, 1964, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1798.</sup> Minutes from 13-14 June 1964 Meeting of the Editorial Board, Princeton University Press, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1799.</sup> Minutes from 13-14 June 1964 Meeting of the Editorial Board, Princeton University Press, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1800.</sup> Minutes from 13-14 June 1964 Meeting of the Editorial Board, Princeton University Press, Bernard Brodie Papers (Collection 1223), UCLA.

such as footnotes and bibliographies discussed; administrative and financial matters "are in the hands of Klaus Knorr," as CIS at Princeton "sponsors the project," and the first two or three volumes were expected to be ready in 1965. 1801

But reality set in, and it was not until April 23, 1967 that Paret wrote to Brodie, at long last, that: "Enclosed is a revised translation of ch. 1 of On War. I'd be very glad to have your comments on I, particularly since it is one the most important theoretical parts of the whole work. I would have sent it to you much earlier, but in going over the typescript of the translation before sending it to the printer, the P.U.P. editor and I discovered so many misspellings, deletions, and plain mistakes (on the part of the translator as well as of the various typists) that we have had to go very carefully over the entire ms once more. It has been a very time-consuming process, but a necessary one, and I believe the result is worth the effort."1802 Paret added, "Michael Howard, who was in Princeton for a few days, discussed the outline of his introduction with me. Klaus unfortunately was in the hospital, and could not share in our talk. Michael believes, and I agree with him, that a historical introduction would be meaningless without some analysis of the text. This would relieve you of the need to analyze ON WAR in detail, and instead give you the opportunity of using the work as a basis for a discussion of the possibilities and methodological problems, and limitations of systematic analyses of conflict in general. In this connection I would again be very glad to have your views on the enclosed chapter. We are returning to California around the middle of June, and I hope it will be possible for, you and me to get together during the summer. Until then, with all good wishes."1803 On May 11, 1967, Brodie wrote to Paret, noting receipt of the revised translations of Chapter 1 of On War on April 23, 1967: "The translation looks to me to be superb. Knowing of your own considerable intervention, I am naturally assured of its complete accuracy, and it reads exceedingly well. Simply on the merits of the translation it will obviously be a great advance over the Modern Library version by Jolles. Klaus Knorr was here in the latter part of last week and told me of the great amount of work you had to do on it personally after it had left the hands of the translator. It is too bad you had to spend so much time on it, but I hope you will feel that the results are rewarding enough to justify your effort. I get a positively electric effect out of reading this chapter. It is the stimulation one gets from witnessing a really great mind at work. It leaves me in no doubt that there will be much to say concerning the present utility of Clausewitz – a question about which I wondered. ... I might say the two issues which interest me the most at present are: a) Clausewitz's great and ubiquitous emphasis on the dominance of the political

<sup>1801.</sup> Minutes from 13-14 June 1964 Meeting of the Editorial Board, Princeton University Press, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1802.</sup> Paret, Letter to Brodie April 23, 1967, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1803.</sup> Paret, Letter to Brodie April 23, 1967, Bernard Brodie Papers (Collection 1223), UCLA.

aim (which is what makes his work so modern and alive), and b) the contrast of his methodology with the types presently in vogue." 1804

Brodie also raised the question of Paret's planned departure from U.C. Davis' faculty: "Let me now ask you a few questions about yourself. I hear you are thinking of going to England, and that you might accept an academic appointment at LSE. If you are interested in leaving Davis, would you consider UCLA a sufficient improvement? . . . The history department here clearly needs building up, and getting you here would be the best way I know for starting that process. The university itself has very much to commend it, and the area ought to be congenial to both you and especially your wife, with her special interest in psychoanalysis."  $^{1805}$ 

Brodie's concern – expressed in his May 1, 1967 letter to Paret – that Howard's comments had left him with the impression that apart from their progress on the translation of *On War*, the bulk of the multi-volume Clausewitz project "lay much in the future," would prove to be well placed; while the translation of *On War* would resume and successfully march toward completion over the coming years, the rest of the Clausewitz Project would not. The fate of the project would be described by PUP editor Herb Bailey in a letter to Brodie on January 12, 1973: "I want to come back to the eight-volume edition of Clausewitz that we once agreed to do, and that we finally and regretfully felt that we couldn't sustain as a continuing commitment. I don't know what happened to that, but I want to say again that our decision not to carry the project as a continuing commitment did not mean that we felt that we could never do it. In particular, if and when the new translation of ON WAR is completed and ready for publication, we would like very much to consider it. Perhaps other volumes too, if one could project them on a reasonably sure schedule. How does the matter stand? I hope you will keep our interest in mind." 1806

## Clausewitz's Passion for the Study of War

In January 1973 – the year Brodie would publish his own Clausewitzian treatise on war, *War and Politics* – Brodie penned a book review of Roger Parkinson's 1971 *Clausewitz: A Biography* in *World Politics*, where he goes well beyond reviewing Parkinson's

<sup>1804.</sup> Brodie, Letter to Paret, May 1, 1967, Bernard Brodie Papers (Collection 1223), UCLA. Brodie further comments, "I agree in principle that Michael Howard should in his historical introduction be free to make some analysis of the content. But I would like to have a better idea just how far in that direction he plans to go. I am not concerned with having my own thoughts pre-empted, but I do worry about how many pages devoted to introduction the book can stand. Two long essays would probably be too much. Michael was down here a couple of weeks ago; but when I raised the subject of the Clausewitz project, he brushed it aside by saying his conversation with you had led him to feel that the task still lay much in the future. I was therefore surprised to get your letter and its enclosure so soon after that discussion. Perhaps when the piece is farther along, he and I can get together again and do some real planning."

<sup>1805.</sup> Brodie, Letter to Paret, May 1, 1967, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1806.</sup> Bailey, Letter to Brodie, January 12, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

work, presenting his own thoughts on Clausewitz, which would be further developed in *War and Politics* as well as in his contributions to the 1976 Princeton edition of *On War*. Brodie writes that we are "especially indebted to the author of this book because of the extraordinary paucity of biographies of the great man who is its subject," who, as the author's mentor, Michael Howard, noted in the foreword, "remains almost completely unknown." Brodie recognizes the book's "notable virtue" but also points out that its author had "within a rather short span of years published two books prior to this one and already another one since, and none of the others bears any relation in period, and very little in locale or field of interest, to the matter of this book. To slip in and out of a subject like Carl von Clausewitz betrays to any thorough historical scholar an undue note of bravura. Clearly the author is not a specialist on the period of the Prussian military reforms, and one should not expect from him the kind of primary scholarship in the field that one gets from a Peter Paret, or, for a later date, from Howard himself." 1809

But to the author's credit, Brodie adds that his vocation "seems to be that of a war correspondent (there have indeed been enough wars to keep a man going between scholarly pursuits), in which respect he stands in some excellent historical and contemporary company - beginning, I suppose, with Friedrich Engels. ... Parkinson belongs with the best of this breed, and his vocation has no doubt assisted him in developing a talent which would in itself make him a worthy pupil of Howard's: he writes extremely well. The present book is a pleasure to read, and if the author is not as insightful about the challenging psychological aspects of Clausewitz's nature as he ought to be – one should be able to recognize deep depression as a morbid symptom - he does at least as well in that area as the great majority of scholarly specialists in the field could do." 1810 Brodie finds that Parkinson "has done what might be called a 'sufficiency' of research, to which I will try to give meaning by suggesting that he could profitably have done more, but for the present it will do. ... and while he may have skipped an item or two, what he has read he has read perceptively, and he has been deft in weaving the resulting insights into his narrative," marred only by the occasional "dubious conjecture or evidence of carelessness or outright error" that "pops up." 1811 Among such doubtful elements of Parkinson's work is his "observation (derived from Karl Schwarz, Clausewitz's chief German biographer) that it was Kant who should be or at least has been 'held responsible for the logical methods and dialectical sharpness in Clausewitz's own work" when it is Brodie's firm belief that "the one he obviously

<sup>1807.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," World Politics 25, No. 2 (January 1973), 288-308.

<sup>1808.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 288.

<sup>1809.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 288.

<sup>1810.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 289.

<sup>1811.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 288.

followed with the most respect and whose dialectical method he unfortunately adopted, however superficially, was clearly Hegel, who is not mentioned in Parkinson's book at all." Brodie adds that "Hegel's philosophy of history and of the state was certainly more congenial to Clausewitz than the entire teaching of Kant, who was after all the author of the tract on Perpetual Peace (1795), where in his moral scheme of things war has no place-an idea that Hegel explicitly and emphatically rejected." He further notes the "well-known Hegelian troika of thesis, antithesis, and synthesis is apparent in Clausewitz's presentation, especially in the 'finished' first chapter of On War." 1814

Brodie seizes upon Parkinson's sensitive description of Clausewitz – with his "high forehead; the large, intelligent, rather mournful eyes; the sensitive and faintly humorous mouth: this might be a poet or composer of the early Romantic period rather than a man who had first put on uniform at the age of twelve and who served as a professional soldier from beginning to end of the Revolutionary Wars of 1792-1815" - writing "one should add, as the man who wrote Vom Kriege, not simply the greatest book on war but the one truly great book on that subject yet written. The fact that he looked intelligent should not surprise us, because he was in truth a genius."1815 Brodie describes this projection onto Clausewitz's soft appearance of an almost Kantian belief in his sensitivity as not inaccurate, but incomplete, writing: "Looks in these matters are notoriously deceiving, but we do know ... that tenderness and compassion were truly in him, but, as we shall see, they were in conflict with something else. It is this conflict, mostly shut out of his awareness but resulting in melancholy and depression, that becomes an important key to understanding Clausewitz the man." Noting Clausewitz's "unfortunate admiration and imitation of the Hegelian style," which "committed him to statements which, especially when read out of context, have him breathing words of fire as though he felt a perverse love for them," Brodie concedes "there is no doubt that there was something about war which Clausewitz found deeply exciting, and it may well have been not the glory in it but the violence. He may indeed have had a perverse love for those fiery words and the thoughts they conjured up."1817 But importantly, Clausewitz proceeds throughout On War to "introduce modifying principles, and he continues to do so throughout the book," but as Brodie describes, "By his own conscious choice of formal logic there is no inconsistency in his doing so. For he points out that it is only in 'the abstract realm of pure conception' (that is, in the 'idealistic' realm of Plato and his too numerous followers, including Hegel) that

<sup>1812.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 290.

<sup>1813.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 290.

<sup>1814.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 290-91.

<sup>1815.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 291.

<sup>1816.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 291.

<sup>1817.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 292.

war permits of no modifying principles; in the real world, in which war is a political act to achieve a valid political purpose or else quite meaningless in an altogether abhorrent fashion, we are dealing with a quite different brew. It is still a devil's brew, but that is neither Clausewitz's fault nor his intellectual concern. He lived, like the rest of us, in a world he never made; but unlike many living today, he could not really imagine an alternative world and likely did not want to." 1818

While Brodie identifies a closer affinity between Clausewitz and Hegel than with Kant, in contrast to Parkinson (among others including his more recent biographer of our generation, Hew Strachan), he also notes the Prussian's unique respect for Machiavelli, "who had written, besides his more famous II Principe, the Arte delta Guerra and the Discorsi, the first being obviously and the second quite largely on the art of war. Clausewitz treated Machiavelli with respect because, like him," citing the words of Felix Gilbert's chapter in Makers of Modern Strategy, "'he was convinced that the validity of any special analysis of military problems depended on a general perception, on a correct concept of the nature of war." Brodie marvels on how Clausewitz, "whose whole life from boyhood on was spent in military service and who as a scholar and philosopher was totally self-taught, was able to grasp the essence of the issue, the nexus between politics and strategy, so much more clearly than virtually all of his contemporaries and successors," which Brodie attributes primarily to "his native intellectual prowess, the extraordinary power and reach of his mind" but that as a catalyst, Clausewitz "also had some bitter personal experiences to help him along the way," as "[h]is entry into the Prussian army coincided with the beginning, in France, of the Terror" and "[h]e was to be deeply immersed in the whole vast Napoleonic cataclysm" and "soon came to look upon Napoleon (whom he always referred to as 'Bonaparte') about as our own generation looked upon Hitler-the enemy of Europe and of mankind."1820 Brodie notes with approval that Clausewitz "was nevertheless objective enough always to credit this detested man with being a superlative general." 1821

It was the "searing experiences" at war against Napoleon that "burnt the idea of the necessary unity of war with its objective deeply into the consciousness of this sensitive, retiring, and deeply emotional man," and which illuminated his theoretical endeavors during the "sixteen years of life remaining to him," which "were externally uneventful – no doubt a good thing for his literary production – but left him ever more deeply dissatisfied." He was soon "promoted to Major-General in 1818, at the age of 38, and made director of the Allegmeine Kriegsschule in Berlin," where

<sup>1818.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 292.

<sup>1819.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 293.

<sup>1820.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 293-94.

<sup>1821.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 294.

<sup>1822.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 299.

"his duties excluded teaching and were confined to administration," which "gave him more time for his writing but heightened his gloom. ... He was again made military tutor to the Crown Prince, which certainly showed some mark of royal favor, and in 1827 his noble status and that of his brothers was at last fully authorized. But Clausewitz still felt not sufficiently noticed. And he was always sad." 1823 But his melancholy did not impede his theoretical and analytical output, and Clausewitz "had already written and privately circulated a substantial amount and even published some of it; almost all of it was well received. Within the next decade he would write much more, all of it obviously having high value in his own eyes and those of the few others who saw it." 1824

Brodie speculates that Clausewitz's depression was fueled in part by the relative ennui of peace and notes that in 1830, "events occurred that caused Clausewitz to spring to animated life and, for a while, to become almost deliriously happy. The troubles that broke out all over Europe in that year, and especially the new revolution in France ... seemed to bring the likelihood of a new war. His father-in-law reported Clausewitz as being positively cheerful at the thought of war, which was expected to break out with his own old enemy, France." But in the end, "there were no military operations, and 'Clausewitz's depression returned far deeper than ever before." Brodie writes, "We must confront the fact that this man, who had seen so much of the worst horrors of war, whose face still bore the marks of the frostbite he had acquired in the Russian campaign, had been brought from chronic depression into positive exultation at the thought of going to war again, especially against the French. When he found this was not to be, that there was going to be no war at all, he was plunged back into the deepest gloom." 1827

Brodie looks inward to a psychological explanation to explain Clausewitz's depressed response to the continuation of peace: "Why this relapse? To a chief of staff aged fifty, who must have known in his heart that he was cut out to be a staff officer and not a commander, a new war could bring no special honors. Did he really have a passion for glory, or did he feel that as a soldier his real fulfillment in life could only be found in campaigning? Or did he simply love war? If the latter, we must again ask, why? Someone who loves war must love, among other things, aggression and violence, terrible violence, which he can both witness and partake of. Such a taste is common enough, but is by no means to be considered normal. It argues some inner rage-repressed, unconscious, but alive. We can no longer hide our thoughts and

<sup>1823.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 299-300.

<sup>1824.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 301.

<sup>1825.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 301.

<sup>1826.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 302.

<sup>1827.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 302.

questions behind 'thesis' and 'antithesis.' The bloody phrases so often quoted out of context from his great posthumous work burn with their own fierce fire. They are kindled by something within." 1828 Brodie notes that this 'inner rage' is "indeed countered and, on intellectual balance, overcome with other words in which the intellect is at work rather than passion; and the intellect in this case is tremendously strong," but concludes that: "We are dealing here with a deep internal conflict, and there can be no doubt that this conflict is directly linked to his growing depression. That is about all we can say on the basis of what we know, and it is really not very much. Let those who take fright at the thought of "analyzing" the dead notice that our speculative thrust has not penetrated very deep, and that it is based on tell-tale signs of the most unquestionable singularity and importance. Chronic depression as Clausewitz knew it, only fitfully interrupted by rather odd stimuli, does not suggest a state of emotional health." 1829 Brodie adds, "One wonders also how a man in the throes of such conflict and depression could produce as much writing as Clausewitz did. He did speak about feeling 'paralyzed,' and such a feeling and also the connected behavior are the common consequence of attempting to cope with strong unconscious conflicts. But he was not paralyzed in actuality." <sup>1830</sup> Indeed, Brodie suggests that "[p] erhaps the fact that the writing was always about war gave him the needed release. Just as Machiavelli's great work was inevitably a projection of himself acting as a prince, and as a prince who knows when and how to refrain from mercy (which is just about always), so Clausewitz's was a projection of himself acting not as chief of staff but as a field marshal, and the occupation contemplated was not statecraft but war. In his case, however, the slaughter and destructiveness inherent in war were made good by the fact that a superb intelligence was guiding everything towards a politically wise end. Slaughter can at least be dedicated to statecraft, and the use of intelligence can achieve economies in the necessary acts of destruction."1831

When Clausewitz succumbed to cholera in 1831, at 51, just nine hours after showing his first symptoms, Brodie observes that his "doctors said he had died because he lacked the will to live, and Marie agreed with this. Cholera can take the lives also of those who want to live, and can do so very fast; but it is significant that the doctors and Marie could entertain their own special convictions on the matter." Brodie shares Parkinson's observation, that: "Marie knew very well the reason for her husband's death. 'Life for him was a nearly uninterrupted succession of disappointments, of suffering, of mortification. … Oh yes, on the whole, he had achieved much more than he

<sup>1828.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 302.

<sup>1829.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 303.

<sup>1830.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 303-04.

<sup>1831.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 304.

<sup>1832.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 304-05.

could expect when it started. He was well aware of that, and grateful. But nevertheless, he never reached the summit. And every satisfaction always had a thorn in it, to add pain to the pleasure. He had friendship, to a rare degree, with the excellent men of his period. But not recognition." 1833 While sympathetic with Marie's sentiment, Brodie notes "Clausewitz had indeed 'achieved much more than he could expect when it started,' and if that left him with a feeling of 'a nearly uninterrupted succession of disappointments,' then, as one would put it today, he had a problem-one that was internal to himself and not external. And how characteristic of such a problem that 'every satisfaction always had a thorn in it.' It is most certainly not true that he lacked recognition." 1834 Indeed, Brodie adds: "The King and the Crown Prince, incidentally, did not omit to express their condolences publicly as well as privately to Marie on her husband's death. And why, in heaven's name, should he have expected to reach "the summit"? As Clausewitz had said over and over again, she, Marie, would publish his work after his death. Back in Berlin she had packets of papers, his Hinterlassene Werke (posthumous works), which would ultimately reach ten volumes, the first three of which would be On War. In the scarcely more than four years remaining to her, Marie would herself prepare and edit eight of these ten volumes. At the time of Clausewitz's death, few if any had read this great bulk of writing. He did in fact reach the summit, in the only way possible to a man whose gifts are mainly if not exclusively intellectual, but he was bound to reach it posthumously."1835

Brodie closes his discussion of Clausewitz – and to a lesser degree, of Parkinson's work – with an examination of Clausewitz's most famous dictum, that war is a continuation of policy by other means, which in the years that immediately followed Clausewitz's death seems to have been lost on military practitioners, the result, in part, of the unfinished state of Clausewitz's writing, which obscured this central thesis from all but the first and final books of his multi-volume opus. As Brodie writes, the "most important single idea in *On War*, the one that suffuses so much of it and makes it great, is the idea that war must never be an act of blind violence but must be dedicated to achieving the supreme goals of statecraft and must therefore be controlled by that dedication. Parkinson shares the view that this is Clausewitz's basic contribution, and he cites some appropriate passages from the work to underline it." 1836 Brodie writes that "[w]e have long known that Clausewitz too shared the view that this was his most important contribution," and recalls that "Marie's brother, Heinrich von Briihl, in helping his sister to edit her late husband's work, came upon a note written by Clausewitz in 1827 that read as follows: 'I regard the first six books,

<sup>1833.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 305.

<sup>1834.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 305.

<sup>1835.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 305.

<sup>1836.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 306.

of which a fair copy has now been made, as only a rather formless mass which will be thoroughly revised once more.' Clausewitz stressed in this note the primary importance he attached to the conception according to which war is regarded as 'nothing but the continuation of state policy with other means" but "then added: 'This point of view, everywhere maintained, will bring much more unity into our investigation, and everything will be easier to disentangle. Although this point of view will chiefly find its application in Book VIII, nevertheless it must be fully explained in Book I and also contribute to the revision of the first six Books. By such a revision the first six Books will be freed from many a piece of dross; many a fissure and gap will be closed; and many a generality can be converted into more definite thoughts and forms." 1837 Brodie notes that Clausewitz later wrote that, "If by the revision of Book VIII [where his ideas on political control of military action are mainly developed] I have cleared up my ideas, and the main features of war will be properly established, it will then be the easier for me to infuse the same spirit into the first six Books, and there, too, to make those features everywhere visible." 1838 But Brodie adds: "All this Clausewitz failed to do before his death; however, the first chapter of the first book, which is the only chapter he considered completed, does bring in very prominently and almost at once the idea mentioned above as his basic conception, and in the later pages of that same chapter it is developed considerably. It is then virtually lost to view until the last part, Book VIII, where it comes to the fore again and is developed much further. We know now that he would have suffused the relevant ideas through the remainder of the book, where it would have been much less easy to lose sight of them-and much less easy also for later editors deliberately to blur or delete them." 1839

But because Clausewitz died before completing his revisions, the "bulk of the work in its present state is devoted to describing how to win wars," and Brodie wonders, "What would have been the results if he had accomplished his goal? We know that the military profession has always been, at least until quite recently, allergic to the idea which Clausewitz considered his most important one. The elder von Moltke, who had been a student officer at the Berlin War Academy while Clausewitz was director of it and who subsequently read *On War* fervently, was nevertheless able, as a field marshal, to declare: 'The politician should fall silent the moment that mobilization begins.' That was certainly the idea of the generals who prepared for and who fought World War I." Thus, "In the various condensations of *On War* that were published under military auspices in the nineteenth century and down to World War II, the sections which contain Clausewitz's thoughts on the primacy of the political objective – the

<sup>1837.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 306.

<sup>1838.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 306.

<sup>1839.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 306-07.

<sup>1840.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 307.

basic idea that war is too important to be left to the generals – are either obscured, corrupted, or entirely eliminated." <sup>1841</sup>

And the price of this would prove high. As Brodie concludes: "Well, one might say, what can one expect of the military, who, among other things, don't like to have control taken away from them? But the fact is that even so distinguished a German military scholar as the late Dr. Herbert Rosinski was able to make substantially the same error. He asserts that the basic teaching of Clausewitz (as he puts it: it was only when 'he turned back to seek his foundations in the inner logic of his subject that he found himself on firm ground at last') is – what? That the aim of war is 'the overthrow of the enemy's power of resistance.' That is what Rosinski calls Clausewitz's 'unique achievement.' Achievement it may be, unique it certainly is not. And if is not unique, it is hardly much of an achievement, although it makes more sense than 'winning ground' or gaining 'the honor of the battlefield.' Rosinski certainly saw a great deal more in Clausewitz than these few words of his indicate, but the basic message passed him by. Clausewitz, had he lived to finish his work, would at least have caught the Rosinskis of this world. And even the military would have found it more difficult to escape. His book would also be more alive today for scholars. "1842

## War and Politics: A Tribute to Clausewitzian Theory

In his January 12, 1973 letter to Brodie reaffirming his interest in publishing the new translation of *On War* if and when it was completed, Princeton University Press editor Herbert S. Bailey congratulated Brodie on his recently published review-article, "Review: On Clausewitz: A Passion for War," in the January 1973 edition of *World Politics*. As Bailey described, "I have just finished reading your review-article on Clausewitz in the current issue of *World Politics*, with great pleasure and interest, and it brings on a flood of thoughts. First, the article is written with such clarity and force that it makes me again most regretful that we aren't publishing your new book" 1843 – Brodie's 1973 *War and Politics*, his effort to apply Clausewitz's most famous dictum linking war and politics to the historical experience of modern warfare. Bailey continued, "It also suggests other things, the first being that you yourself ought to write the book on Clausewitz that Parkinson didn't write. Your article is full of knowledge of Clausewitz in depth and detail, combined with the kind of feeling for the man and the situation that would yield the kind of book on Clausewitz that is needed. Why don't you do

<sup>1841.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 308.

<sup>1842.</sup> Bernard Brodie, "Review: On Clausewitz: A Passion for War," 308.

<sup>1843.</sup> Bailey, Letter to Brodie, January 12, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

it? It would be a big project, but an absorbing one, and obviously the subject appeals to you."1844

But if taking on another big Clausewitz project, so soon after the last one had collapsed, did not appeal, Bailey offered that "[t]here is another possibility that comes to mind, a shorter book on Clausewitz, not a biography but an appreciation of his intellectual contribution, relating it to twentieth-century experience. You refer in your article to the preparations for World War I, and there is a brief reference to Hitler, but in reading it I couldn't help thinking about the experience of Korea and Viet Nam. It is possible that, in terms of putting knowledge to work, an interpretative work of this kind might be more effective, and it could also be done in briefer compass." Ironically, that was precisely Brodie's objective in *War and Politics*, which indeed reflected upon the Korean and Vietnam experiences from a Clausewitzian perspective, from which Brodie would attribute the Vietnam war's ultimate strategic failure. Perhaps unaware that Brodie's forthcoming *War and Politics* was already at heart a tribute to Clausewitz, Bailey suggested, "I would love to hear how all this strikes you. In any case, congratulations on an excellent article." 1846

Brodie's thinking about Clausewitz was not limited to his role introducing the new translation of *On War* but would also serve to frame a separate volume on strategy that is indebted to Clausewitz's most famous dictum on the interconnection of war and policy and which came to press several years before the much anticipated translation of *On War*. Indeed, Brodie's 1973 *War and Politics* showed how deep an inspiration Clausewitz was to Brodie, inspiring not only the title, but permeating its very essence, in which he sought to apply this most fundamental component of Clausewitz's theory of war to his own era, and more so than in *Strategy in the Missile Age*, and to explain the interconnection of war and politics, not just nuclear war, but all the wars of the nuclear age, through an historical analysis of World War II and in particular its strategic bombing, which transformed in that war's closing days into the world's first and so far only nuclear war; Korea; and Vietnam (and its failure), and a theoretical discussion about war not only in the nuclear era but the humbled, post-Vietnam era.

After departing RAND, Newell Bringhurst recounts that Brodie "carried on his research and writing in the one-thousand-square-foot study the Brodies had built in 1970 on a small bluff of their Pacific Palisades property, just above the main house," and there he "had completed his last book-length work, *War and Politics*, published in 1973. Reflecting Bernard's continuing interest in American foreign policy, the book was clearly influenced by American failure in the Vietnam War. The author

<sup>1844.</sup> Bailey, Letter to Brodie, January 12, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1845.</sup> Bailey, Letter to Brodie, January 12, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1846.</sup> Bailey, Letter to Brodie, January 12, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

took note of the failure of the United States to deal effectively with the relationship between strategy and politics in the last four wars in which the country had been engaged. Brodie maintained that a military force should always be subservient to a nation's political goals and purposes, a dictum the United States had not followed in prosecuting its wars in the twentieth century, particularly the Vietnam War." 1847 But despite his best efforts, Bringhurst observes: "Unfortunately, War and Politics, which Bernard regarded as his most important work, was not initially well received, although in time it did gain the recognition it deserved. The book's early failure was due, at least in part, to the fact that neither Bernard nor his ideas were attracting the attention of important foreign policy experts. Contributing to Bernard's diminished visibility since the forties and fifties was his physical condition, as well as the 'writer's block' he had suffered during the 1960s. Removed from the public spotlight, he had lost the prominence he had once enjoyed in the field of American foreign policy."1848 Added Bringhurst in a footnote, "In presenting this thesis, Bernard utilized concepts developed in the nineteenth century by the great German military strategist, Carl von Clausewitz – whom Bernard greatly admired and with whom he strongly identified, both on a personal and an intellectual level."1849

While War and Politics is a heart a tribute to Clausewitz, Brodie also pays tribute to two of his most influential professors who had recently died. Brodie is said to have been Quincy Wright's protégé, as reported by Kaplan in Wizards of Armageddon among others, but he was also greatly influenced by the economist Jacob Viner, as Kaplan has also noted. But in Brodie's preface to War and Politics in 1973, he credits Viner first and foremost, saluting him for his enduring intellectual influence, writing "I would like to pay my grateful respects to the memory of my greatest teacher, Jacob Viner, who at the time I was his student in graduate school over thirty years ago was Professor of Economics at the University of Chicago. Whatever is good in my work owes something to him, and I was especially conscious of his eyes over my shoulder in writing chapter 7."1850 This glowing attribution of a lifelong influence is in marked contrast to his tribute to Wright: "I also offer my respects to another dedicated and scholarly teacher of whom I was very fond, Quincy Wright, formerly Professor of International Law and Political Science at the University of Chicago. Both were friends and colleagues as well as former teachers."1851 From the language Brodie uses to present these two tributes it is clear he is acknowledging a deep intellectual debt to Viner, and merely a close fondness for Wright, quite a distinction. That Viner is said

<sup>1847.</sup> Newell G. Bringhurst, Fawn McKay Brodie: A Biographer's Life (Norman: University of Oklahoma Press, 1999), 221.

<sup>1848.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 221.

<sup>1849.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 330, n. 107.

<sup>1850.</sup> Bernard Brodie, War and Politics (New York: Macmillan, 1973), viii.

<sup>1851.</sup> Brodie, War and Politics, viii.

to have helped Brodie come to the important realization that nuclear weapons were a stabilizing force in the world, and from this derived an enduring faith in the strategy of deterrence – putting him at odds with colleagues who would question their faith along the Cold War's half-century long turbulent journey, but providing a consistency to his work as he repeatedly chastised doubters on the underlying mechanisms of deterrence when they lost sight of them – helping to thereby direct Brodie along a trajectory he would follow for another three decades, and providing the intellectual seed that was perhaps the ultimate foundation for Brodie of his formulation of deterrence, something that was yet fully developed to any degree of certainty when he first addressed the new weapon in 1945, but which was firmly resolved by 1946 and remained resolved in Brodie's mind for the rest of his life.

It is interesting to note that chapter 7 is the only chapter that Brodie attributes in his preface to a prior publication even though War and Politics is not unlike Strategy in the Missile Age in being largely an anthology of Brodie's works, with a substantial portion of his chapters having appeared earlier as papers, articles or lectures – sometimes with whole passages verbatim, while others are updated with additional information. A quick glance reveals chapters (and there subsections) sharing titles with past work, and a closer look reveals identical paragraphs flowing at times in identical sequence with other identical paragraphs, having been largely pasted from past work into the present work – but not universally, as often new paragraphs are inserted, and at other times, new sentences are added to pre-existing paragraphs. But Brodie only acknowledges in his preface that, "An earlier version of Chapter 7, 'Some Theories of the Causes of War," appeared in the two-volume Festschrift published in Paris in 1971 in honor of a friend and a great contributor to insight on matters of war and peace," Raymond Aron; "I have, however, entirely rewritten it and greatly expanded it for this book. The rest is almost entirely new." 1852 While it is true that Brodie has "greatly expanded" and largely rewritten his earlier chapter, it is hard to argue that it was "entirely rewritten" – nor, moreover, to overlook that he published in Security Studies Paper No. 17, Bureaucracy, Politics, and Strategy co-edited by Brodie and Henry Kissinger (with one chapter from Kissinger and four from Brodie), a chapter (more aptly a paper, since the Security Studies Papers were collections of shorter works that included newspaper articles, lectures and speeches, conference papers, and other brief works) with the title "Theories on the Causes of War," differing only in the absence of the word "Some" from the chapter in War and Politics. 1853

<sup>1852.</sup> Brodie, War and Politics, viii.

<sup>1853.</sup> See Henry A. Kissinger and Bernard Brodie, eds., *Bureaucracy, Politics, and Strategy,* Security Studies Paper No. 17 (Los Angeles: University of California, Los Angeles, 1968), particularly its fifth chapter/paper, "Theories on the Causes of Wat." 46-60.

Because Brodie was the series editor as well as the paper author, it seems curious that its origins were overlooked, and for the sake of historical accuracy – of the origins of that 1973 chapter within the very structure and substance of the earlier 1968 paper, which covers much similar ground - recognition of this fact by Brodie would have been helpful to later scholars. But Brodie's claim that the rest of War and Politics "is almost entirely new" rings somewhat hollow upon realization that not just chapter 7, to which he gratefully credits Viner for his seemingly watchful and protective eye looking over Brodie's shoulder from the great beyond, but many other chapters had their origins elsewhere - including chapter 8, "Vital Interests: What Are They and Who Says So?" which is derived in large part (though not entirely), and with much verbatim (including many paragraphs in identical sequence, albeit not all), from his 1971 booklet, Strategy and National Interests: Reflections for the Future - which we discussed at the end of chapter five of this work – published by the National Strategy Information Center, whose third chapter is "Vital Interests: By Whom and How Determined?" on pages 11-24. Further, in Chapter 10, "Strategic Thinkers, Planners, Decision-Makers," in War and Politics, one sees many echoes of his earlier work, including a section on the "Scientific Strategists" that bears much in common with his chapter of the same name in Robert Gilpin and Christopher Wright, eds., Scientists and National Policy-Making published by Columbia University Press in 1964 and the longer version of that chapter with the slightly elongated title, "The American Scientific Strategists" that appeared as a RAND working paper in October 1964 but which also includes elements that bear a similarity to his discussion in his 1971 Foreign Policy article, "Why Were We So (Strategically) Wrong?" as well as his discussion of systems theory and the *scientization* of national security decisionmaking and over-dependence on systems theory causing a tragic neglect of more fundamental political issues in his 1971 Strategy and National Interests: Reflections for the Future. 1854

Brodie does credit Michael Howard for his assistance with Brodie's first chapter ("De quoi s'agit-il?") on the meaning of Clausewitz's notion that war has its own language but not its own logic, which is defined by the political objective (boiled down into the more famous Clausewitzian dictum, war is a continuation of policy by other means), though the ideas presented therein can be traced back to numerous articles, papers, chapters and reviews by Brodie on and about Clausewitz including reviews of Howard's work on Clausewitz and their joint collaboration with Peter Paret on the decade-long Clausewitz Project that yielded the seminal Princeton translation of *On War* in 1976; and similarly, among the six scholars Brodie credits for their assistance on his chapters on Vietnam is William Gerberding, with whom he co-edited and jointly contributed

<sup>1854.</sup> See: Bernard Brodie, "Why Were We So (Strategically) Wrong?" Foreign Policy 5 (Winter 1971-72), 151-161 and Bernard Brodie, Strategy and National Interests: Reflections for the Future (New York: National Strategy Information Center, 1971).

chapters to their 1968 UCLA Security Studies Paper No. 13, *The Political Dimension in National Strategy: Five Papers* – whose title is at heart Clausewitzian – and which included Brodie's article, "Learning to Fight a Limited War" which discussed Vietnam in critical detail, paving the way forward to Brodie's later 1971 article in *Foreign Policy*.

So while there is much that is new and certainly updated in War and Politics, there are so many connective threads to his earlier work that one can define the book as less a *new* contribution to Brodie's vast canon, and *more* a synthesis of his work since Escalation and the Nuclear Option and an effort to reframe his work that followed Strategy in the Missile Age, re-asserting the importance of (and challenges inherent in) limiting war and reflecting on the dangers of divorcing the dynamic of escalation from its important, Clausewitzian political context. Brodie dueled with Kahn on the nature of escalation, and sought to embed escalation in its political context – but his voice of restraint was overshadowed by the towering voices of his colleagues, including Kahn (and also the highly influential Schelling), whose ideas on a separate logic of escalation appealed to the architects of American defense policy during the Kennedy and Johnson administrations and whose legacy was the humbling, and Brodie believes, preventable debacle, of Vietnam. But as tragic as Vietnam was, as Brodie had noted in his December 3, 1967 article in the Los Angeles Times, "Learning to Fight a Limited War," "At least we can be grateful that thus far nuclear weapons have been kept out of a business that is unfortunate enough already." <sup>1855</sup> And even with the tragic inevitability of the Vietnam defeat approaching its final act, Brodie, as noted in War and Politics, finds reassuring that the underlying global stability predicated upon mutual nuclear deterrence held firm, suggesting "one argument against skepticism with respect to American nuclear reliability is that it reflects a gross exaggeration of the adversary's proclivity for going to the nuclear brink," and adding: "Thus far, there has been none of that reckless playing of 'chicken,' of swift resort to brinksmanship, that filled so many of the fantasies of Herman Kahn and others in the 1960s." 1856 At least with regard to nuclear war, a Clausewitzian balance held, and with it the recognition that war must remain rational.

This is perhaps why Brodie feels so passionate about revisiting Clausewitz's tragically ignored counsel; Brodie thus starts off *War and Politics* with Clausewitz's profound but often overlooked insight that war "has its own language but not its own logic," something the escalation theorists as well as the firebreak theorists who advocated CWE failed to grasp as they logically proceeded up the escalation ladder, seeking to convey a language of war without being cognizant of the foundational political logic – and

<sup>1855.</sup> Bernard Brodie, "Learning to Fight a Limited War," in *The Political Dimension in National Strategy: Five Papers*, Security Studies Paper No. 13 (Los Angeles: UCLA, 1968), 32.

<sup>1856.</sup> Brodie, War and Politics, 364.

<sup>1857.</sup> Brodie, War and Politics, 1.

fighting an unnecessary and costly (albeit limited) war, not only to a conventional stalemate fought well below the nuclear firebreak, but ultimately to a self-imposed defeat, leaving the field of battle to its opponent without really having ever been defeated at the tactical level. Vietnam, in its tragedy and wasted effort, would prove Brodie correct – that the firebreak theorists who advocated CWE had completely misunderstood how deterrence worked, and the all-important, intimate connection of war to politics (and the supremacy of the political objective), which Brodie sought to re-assert in War and Politics, his final synthesis of the many smaller pieces he had written to a very wide audience, from classified military briefings to college lectures and conference panels; from esoteric academic journals and small student-run university newspapers to major urban dailies. Brodie knew war and politics were connected, and so he spoke to all of its pillars, from the civilian to the military, from the lay-public to the highest levels of strategic command. With Vietnam on his mind but the final defeat still yet to come, Brodie would conclude his 1973 work with an allusion to the Clausewitzian principle that he started with some 496 pages earlier, writing in his final sentence: "Yet 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." 1858

War and Politics also reflects something a synthesis for Brodie of his very first reflections on Socrates as a young student in 1932 and Socrates' best known student and biographer, Plato with his later philosophical mentor, Clausewitz; whom he noted in 1945 but would not fully embrace for another half-decade, when the advent of thermonuclear weapons forced a reassessment of the Prussian's relevance . Plato in many ways turned Brodie on to knowledge and its strategic importance (as well as the challenge of its ambiguities) – while Clausewitz taught him to use that knowledge to understand, as much as possible, the causes and dynamics of war, to better prevent war and, if prevention was no longer possible, restrain war from its own absolute and terrible logic. Brodie recalls how there was "a tradition among scholars going back at least to Plato that considered it a corruption of the best fruits of the human mind to try to put them to practical use," and that the "glory of knowledge for its own sake perhaps explains why Plato was so intent on having the rulers of states study geometry, which might be of use to an engineer or an architect but hardly to a king." 1859 Brodie would turns to both Plato and Clausewitz to understand the failure of Vietnam; first, Clausewitz showed how to extract meaningful lessons from history: "We have, after

<sup>1858.</sup> Brodie, War and Politics, 496.

<sup>1859.</sup> Brodie, *War and Politics*, 240. What Brodie may have overlooked is that Plato wanted the ruler to comprehend, and sustain, the foundational geometry of state since the just city was a balanced one, and balance required a geometrical understanding. And so geometry, as Thomas Hobbes would later also recognize, became an essential tool of statecraft and governance as rulers sought to maintain a domestic equilibrium while at the same time endeavoring to do the same within the international realm. In more modern times, balance of power politics and geopolitics would reflect a geometrical conception of world politics.

all, in all these pages been lauding the modernity of Clausewitz," but "[i]t is, however, the kind of modernity that will not give us the answers to our contemporary problems but which, at its best, will sharpen our receptivity to appropriate insights about those problems."1860 Thus, Brodie writes, "We noted Clausewitz's explanation why Napoleon, to defeat Russia, had to go to Moscow. As it happens, the same reasoning goes far to explain the motivation for the North Vietnamese Tet offensive of 1968. But it is a similarity with enormous differences." 1861 While "Clausewitz would have had a lively appreciation for both the similarities and the differences" of these two events that span a century and a half, Brodie observes: "We do not, of course, have to read Clausewitz to understand the latter campaign. It may be that the recognition that his comments do in fact bear upon that campaign provides us little more than a titillation of scholarly delight, just as reading in Plato some sharp insight into human nature gives us today, some 2,400 years later, a twinge of delight that is really one solely of recognition that he saw things as we do. It is not that Plato adds to our understanding; we can feel the pleasure only because that understanding already exists." <sup>1862</sup> In contrast, "We do in fact learn something from Clausewitz - a good deal more, I think, than we ever learn from Plato. Yet, without some measure of sensibility to begin with, the reading of Clausewitz or of Plato, will confer neither delight nor advantage. Still, what we get from Clausewitz is a deepening of sensibility or insight rather than a body of rules, because insofar as he does offer us rules he is at once avid to show us all the qualifications and historical exceptions to them."1863

As he explained in his preface, Brodie pays ultimate tribute to Clausewitz, the guiding inspiration throughout *War and Politics* from its first page to its last: "The central idea of this book I have borrowed from Clausewitz who, as a seventeenth-century writer said of Machiavelli, 'hath been too often taxed for his impieties.' It is a simple idea, and the novice would justly imagine it to be commonplace – that the question of *why* we fight must dominate any consideration of means. Yet this absurdly simple theme has been mostly ignored, and when not ignored usually denied." Brodie wrote that Clausewitz's effort to develop his thesis contextualizing war in policy was "an accomplishment against perennial resistance, indicated by the fact that this understanding has never fully got across to the great majority of those people who think or write about war, and even less to those who fight it." Brodie believes when Clausewitz argued his "often quoted but constantly misrepresented dictum" positing

<sup>1860.</sup> Brodie, War and Politics, 451.

<sup>1861.</sup> Brodie, War and Politics, 451.

<sup>1862.</sup> Brodie, War and Politics, 452.

<sup>1863.</sup> Brodie, War and Politics, 452.

<sup>1864.</sup> Brodie, War and Politics, vii.

<sup>1865.</sup> Brodie, War and Politics, 2.

war's interconnection with policy that the theorist was "very far from intending this remark cynically, as is often supposed," and in fact "intended to make, had he lived" it "the central organizing thesis of the whole." Brodie in *War and Politics* seeks to present much the same central thesis, applying it to the world that was twice embroiled in world war, and was now confronting not only "the advent of nuclear weapons" but also America's "particularly perplexing and tragic involvement in a distant and hitherto obscure peninsula in Southeast Asia," which revealed a global scale of conflict that greatly eclipsed the nineteenth-century warfare that Clausewitz had intuited totality from, but which did not achieve true totality until Brodie's era.

### The Clausewitz Project Concludes

On February 22, 1973, Princeton University Press editor Bailey again wrote to Brodie, starting off with a word of encouraging clarification on the new letterhead used by the press: "Dear Bernard, I want to assure you that I am still here at dear old PUP. The names at the top of the letterhead list are our Board of Trustees, and Harold W. McGraw, Jr. (whose full-time job is being president of McGraw-Hill) is the president of our Trustees. I go by the title of director – a fine distinction." 1867 And so, Bailey had not defected to McGraw-Hill; instead, its president was serving as president of the board at PUP. Bailey thanked Brodie "for telling me about Peter Paret's and Michael Howard's reaction to my letter on the Clausewitz project," explaining, "I'm not sure how well informed you were, since our dealings were through Cy Black in his capacity as director of the Center of International Studies here. The Clausewitz project ran far beyond the deadlines originally agreed to, and constituted a heavy financial commitment at a time when publishing is difficult. Therefore we informed Cy that in accordance with the provisions in the contract we could no longer consider ourselves bound, though we would be willing to reconsider the project if and when manuscripts could be presented. I guess I'll have to straighten it out with Paret and Howard, so that there won't be any misunderstanding."1868

On May 19, 1973, Brodie wrote to Bailey, providing him with an update of the soon to be completed translation of *On War*, on the hope that PUP would still be interested in publishing it despite the collapse of the more ambitious multi-volume project that the press had given up on, writing that "Peter Paret and Michael Howard, having now completed their translation of Clausewitz's ON WAR, have authorized me to write you to inquire whether you are still interested in securing its publication

<sup>1866.</sup> Brodie, War and Politics, 2.

<sup>1867.</sup> Bailey, Letter to Brodie, February 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1868.</sup> Bailey, Letter to Brodie, February 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

for Princeton University Press." 1869 Brodie added, "I sincerely hope you are, and I say that with no proprietary interest in the matter," and explained that "[t]his is the first complete translation into English of this great work from the original uncorrupted text, and the extraordinary competence of this team of translators would guarantee its being a superb translation. Both men are distinguished historians, both are thoroughly at home in German, especially Paret, and both write extremely well in English, especially Howard, whom I would nominate as perhaps the best stylist among historians writing today in the English language." 1870 Brodie noted, with prescience that would anticipate the high regard and enduring reputation of what generations of students would come to know as the seminal translation of On War, that it "will not be improved upon as a translation" and "reads extremely well in English," and "incidentally reads quite differently from the next best translation - that produced by Jolles in the Modern Library Edition of 1943, which has been long out of print. The version which Penguin Books is currently circulating is a truncated edition of the old Graham translation, with a perfectly awful introduction by Anatole Rappaport. Thus, the competition in the field is strikingly surpassed." 1871 Added Brodie, "I need not go into the reasons why I think you should publish it. You have shown yourself quite well aware of those reasons, especially in your letter to me following my review-article on Clausewitz in World Politics last January, in which I called Clausewitz's work the only truly great book on war ever written. In your letter you expressed a keen desire to have a chance to bid again on this particular work when it was completed."1872

Describing the status of the translation project, Brodie noted he had in his "possession Xerox copies of only a few chapters of the work, though enough to give me a feeling for the quality of the translation. Peter Paret has what I believe is the only copy of the whole translation, and because the money in the original grant has long since run out, it would be up to the publisher to produce one or more Xerox copies for the three persons – the two translators and myself – who are committed to writing introductory essays." He added that it was "of course a very long book, about as long as the Jolles translation, which runs to 631 pages sans index in the Modern Library edition, each page having at least half again as many words as any of the books of mine published by PUP. The plan is to have in addition three introductory essays, probably of unequal length, by Paret, Howard, and myself, dealing respectively with (a) a note on the present translation and on the person of Clausewitz, (b) the place of *On War* in the history of strategic thought, and (c) the value of the book to the

<sup>1869.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1870.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1871.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1872.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1873.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

modern reader. Plans for these essays have not proceeded very far, and our thought was that if you undertake to publish it, we should be most interested in your views about how much space to devote to the three essays." <sup>1874</sup> Brodie concluded that, "In sum, this translation represents a scholarly accomplishment of the first importance by an international team which also commands an exceptional degree of prestige. Paret is well known for his writings on Prussian military reforms at the time of Clausewitz, and of Howard one can justly use the word 'famous' for his work on the Franco-Prussian War. He has also just won a much coveted prize in Britain - the Wolfson Prize I believe it is called - for his writing of Grand Strategy, which is Vol. 4 of the official British history of World War II," and humbly added, "I expect to derive more glory from being associated with this production than I could possibly lend to it with my own name."1875 Brodie closed his letter with a discussion of communication protocols, on the expectation the project would be embraced once again by PUP: "Peter Paret suggests that I should communicate to him your reply, but if I am right in assuming that that reply will be favorable, I propose instead that you write directly to him at Stanford – with a copy to me and also one to Michael Howard at All Souls, Oxford. It will be Peter who signs whatever contract is concluded, on behalf of himself and Michael Howard. My own contribution will not be even remotely sufficient to warrant my being a party to the contract. I am here functioning simply as a special friend of this one publisher and also of the translators. The latter agree with me that Princeton University Press would be unquestionably the best American publisher to handle it, bearing in mind also PUP's affiliation with Oxford University Press." 1876 In a P.S., Brodie added that he had "finally got some extra copies of my own new book, War and Politics, and I am putting one in the mails for you this very day."1877

Just three days later, on May 22, 1973, Bailey wrote directly to Peter Paret as Brodie had suggested, explaining the demise of the multi-year, multi-volume Clausewitz Project, while reaffirming his interest in bringing to press the new translation of *On War*. He referenced the May 19 letter from Brodie that he enclosed with his letter to Paret, and observed, "Bernard is certainly right; we would like very much to see the manuscript of the translation of Clausewitz's ON WAR that you and Professor Howard have prepared. If it lives up to Bernard's advance billing, which I don't doubt, it will surely be a book we want to do." He added that "of course you know that we have been interested in this project since it was started at the Center for International Studies at Princeton, and we canceled the overall contract for the Clausewitz volumes

<sup>1874.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1875.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1876.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1877.</sup> Brodie, Letter to Bailey, May 19, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1878.</sup> Bailey, Letter to Paret, May 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

only long after the deadline had been passed and when we felt that circumstances did not permit us carry that series as a continuing commitment. Thus I am particularly pleased that the translation of ON WAR can be made available to us, and I hope that you will send it at the first opportunity. Then, assuming that after examination we are able to proceed, we shall be glad to provide the Xerox copies required for the three editors. We shall also perhaps have some ideas about the introductory essays." 1879

Bailey noted that Princeton's "long-standing relationship to Oxford University Press will be discontinued after August 1 of this year, and we are making independent arrangements to sell our books in the British Commonwealth," and while "[t]his will include, where appropriate, selling editions or rights to individual British publishers, including in some instances Oxford," he explained that "there will no longer be the automatic flow of Princeton books through Oxford." Bailey concluded that "the main thing is the book itself, and I shall hope to be receiving the manuscript from you. Many thanks for remembering our interest." In a letter dated the same day, Bailey wrote to Brodie, enclosing a copy of his letter to Paret, noting "As you can see from the enclosed copy to Peter, I was delighted to receive your letter about the translation of Clausewitz's ON WAR. Your comments on the translation are most helpful, and I trust that we shall be able to go ahead with it. Many thanks for keeping us in touch." He added, "I was glad to hear that a copy of your new book WAR AND POLITICS is on its way to me, and I shall look forward to reading it. Many thanks in advance. I just wish it were on our list."

With PUP and the original team of translators and contributors re-engaged, a smaller version of the once massive Clausewitz Project would continue, involving the new translation by Howard and Paret of *On War* with commentary and analysis by Brodie. In a brief letter from September 14, 1973, PUP associate director and editor R. Miriam Brokaw wrote to Brodie, noting that Bailey had passed along to her Brodie's "letter of September 7, with the description of what you plan to do in your introduction to the Clausewitz. This is fine, and I want to thank you for it. As soon as we have all of the outlines, we will give the manuscript to a reader." And just two days later, Bailey wrote to Brodie, noting he had that day "received both your general introduction entitled 'Why Read On War Today?' and the detailed chapter-by-chapter analysis," and while "[o]bviously I haven't had a chance to read any of the material yet, though I will as soon as I can," he explained that the "purpose of

<sup>1879.</sup> Bailey, Letter to Paret, May 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1880.</sup> Bailey, Letter to Paret, May 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1881.</sup> Bailey, Letter to Paret, May 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1882.</sup> Bailey, Letter to Brodie, May 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1883.</sup> Bailey, Letter to Brodie, May 22, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1884.</sup> R. Miriam Brokaw, Letter to Brodie, September 14, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

this letter is mainly to acknowledge receipt."<sup>1885</sup> Bailey added, "From a quick look, it seems to me desirable to separate the general introduction from the detailed analysis, with the detailed analysis as an appendix," which is in fact how they were ultimately presented; and while Bailey had not "yet received the introductions from Peter Paret and Michael Howard," he was "expecting them by the end of the month. Then we'll start the book into the editorial process and production, and it will be good to have it under way here at last. <sup>1886</sup> As for Brodie's *War and Politics*, Bailey added, "Did I tell you that I am enjoying your book WAR AND POLITICS, which I didn't quite finish before returning to the Press from my summer's leave. I am a great admirer of the Brody style, and I keep wishing that the book had a Princeton imprint." <sup>1887</sup>All the elements for the new translation of *On War* ultimately arrived, and the project was put under contract by PUP on February 24, 1974; when finally published two years later, complete with supplemental analysis by Howard, Paret and Brodie, it would contribute greatly to the resurgence in Clausewitz studies, gaining a wide and enduring readership among scholars, strategic analysts, and professional soldiers.

Prior to publication, the project participants considered the best manner for dividing book royalties, and a draft contract for a three-way split between Paret, Howard and Brodie struck Brodie as being overly generous to him given the substantial amount of time and effort that Paret and Howard devoted to the project, and to the challenge of their translation effort. As Brodie explained in a letter to Paret written on January 21, 1974, "I am sorry to be flagging down a train which seems at last to be moving so smoothly, but I am returning the contract forms because I cannot sign them in their present form." 1888 As he explained, "Of course I appreciate your generosity, but that is exactly what is wrong with the present contract. I have always felt that I ought not even be a party to the contract, if for no other reason than that it tends to bind you to accepting my contribution, which you have not yet seen and may not approve of."1889 Brodie added, "I have no idea how many copies will be sold, but I don't doubt that neither you nor Herb expects it to be a run-away bestseller. Under the present terms, if the total royalties come to \$1500 or thereabouts, I share equally with you and Michael. In view of the tremendous work that you and he have done on the translation, in addition to which you both are also going to write introductory

<sup>1885.</sup> Bailey, Letter to Brodie, September 16, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1886.</sup> Bailey, Letter to Brodie, September 16, 1973, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1887.</sup> Bailey, Letter to Brodie, September 16, 1973, Bernard Brodie Papers (Collection 1223), UCLA. Note spelling of Brodie's last name is "Brody," which is in fact the correct spelling of Brodie's actual surname. According to Newell G. Bringhurst, biographer of Brodie's wife Fawn and author of *Fawn McKay Brodie: A Biographer's Life* (Norman: University of Oklahoma Press, 1999), Brodie changed the spelling of his last name from Brody to Brodie to reduce the perception of his Jewish ancestry in response to widespread antisemitism in academia during the 1930s and 1940s.

<sup>1888.</sup> Brodie, Letter to Paret, Jan 21, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1889.</sup> Brodie, Letter to Paret, Jan 21, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

essays, I consider that quite unfair and something I cannot accept." Indeed, Brodie suggests he "should be happy to be included simply for the glory of the thing, but if you feel happier with my getting remuneration, I suggest the following: 10 per cent of the royalties to go to me from the beginning, the other 90 per cent to be divided equally between you and Michael. That still seems generous to me. I will not make an issue of whether or not I am a signatory to the contract but I repeat that I consider it unnecessary that I should be." 1891 The final terms of the contract, titled "Princeton Press Contract for Clausewitz" and dated February 28, 1974, included among its many details item number "5. Delivery of Manuscript," with a commitment that the authors will "agree to deliver the complete manuscript, together with all illustrations, maps, charts, drawings, or other material (except index) to be included in the work, not later than June 1, 1974," and item number "10. Royalties," which committed to the following royalty stream, "On regular hardback book sales within the United States (except for the special cases listed below), the following stipulated percentage of the list price: 10% on the first 5,000 copies sold; 12-1/2% on the next 5,000 copies sold; and 15% thereafter," with item number "14. Additional Provisions" identifying a royalty split along the lines proposed by Brodie to Paret: "The royalties shall be divided as follows: 10% to Professor Brodie, 45% each to Professors Howard and Paret." 1892 All three signed the contract, bringing the long-gestating project one step closer to fruition. In the coming months, the project participants would discuss their respective introductory materials.

On May 30, 1974, Brodie wrote to Paret and enclosed some samples from his evolving "Guide" to reading *On War*. "I am sending you herewith another portion, where some of the examples I give in the commentary to individual chapters are drawn from quite recent events. I don't know whether this is good or bad." Brodie continued, "Let me explain how I got to where I am. When I first began my essay, I had (as is usually the case with me when I begin writing a piece) only a very vague and tentative idea of where I wanted to go. I knew I wanted to make the point that ON WAR deserves reading for what it conveys of perennial importance about war. I also had a somewhat banal but very pragmatic objective, which was that of trying to help the person reading ON WAR for the first time to understand it." Brodie added that the "latter objective was sparked by a number of things, but mainly by my two visits to the Naval War College at Newport, R.I. during the last year. There,

<sup>1890.</sup> Brodie, Letter to Paret, Jan 21, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1891.</sup> Brodie, Letter to Paret, Jan 21, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1892. &</sup>quot;Princeton Press Contract for Clausewitz" and dated February 28, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1893.</sup> Brodie, Letter to Paret, May 30, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1894.</sup> Brodie, Letter to Paret, May 30, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

as you know, they truncated and in the horrible Graham translation. It also has the useless and obnoxious introduction by Anatole Rapoport. It was clear [the] student officers were quite restive under the obligation to read the book, and simply weren't getting anything out of it. They could not see that it was saying anything of value to them. This struck me as a waste and a pity. Naturally, a good number of those people are probably not bright enough to appreciate Clausewitz on any terms, but some among them are." 1895

Brodie explained that he "did not intend to get into a detailed commentary, but after finishing my general remarks in thirteen pages, I felt that someone had to help the reader get into and understand that marvelous first chapter. Some of the commentaries I have seen by experts do the very opposite. So many writers talk about how esoteric and metaphysical is the Clausewitzian approach. What the reader needs to have pointed out to him is that the metaphysical touch is quite superficial and confined mostly to the first chapter, and that he should not let himself be bugged by it. [It] is profound, but the profundity is entirely pragmatic, and that's what I try to bring out." 1896 As Brodie noted, "Naturally, after finishing the first chapter and then the rest of Book I, the mold seemed set for going on. I recalled vaguely that you or Michael was going to include something of a synopsis with his contribution, and I certainly did not want to compete. But I do want to be sure that the task of helping the novice reader to understand what is in this book does not fall between those three stools. However, I am not psychologically or emotionally committed to anything. It is clear to me that I must finish going through the book again, which for me will be the fourth or fifth time, and the commentary I am writing is really a set of notes on what I am reading. Then, if you think it best, I can use the material which is now in book-by-book commentary to flesh out what is now in the first thirteen pages, so that I will finish with an essay of perhaps forty to fifty pages. That would also mean shortening my entire piece." 1897 So while Brodie agreed with Paret that "the original scheme continues to make sense," he added "I also submit that a synopsis is not integral to any of the three headings you list under Paret, Howard, and Brodie, and also that a simple synopsis is not of much value" – and "[b]y 'simple synopsis'" he meant "something that is essentially an outline without commentary" – Brodie informed Paret, "I shall proceed as I am going until I hear further from you, but I am quite prepared for a drastic change in course."1898

On August 23, 1974, Michael Howard wrote to Brodie, enclosing "both the draft of my Clausewitz introduction and a copy of my review of *War and Politics*. The latter

<sup>1895.</sup> Brodie, Letter to Paret, May 30, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1896.</sup> Brodie, Letter to Paret, May 30, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1897.</sup> Brodie, Letter to Paret, May 30, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1898.</sup> Brodie, Letter to Paret, May 30, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

may be quite extensively revised in proof, but as it may be some little time before it appears I thought you would like to see at least my preliminary reflections. They are not, as you will observe, entirely unfavourable!"1899 As Howard explained, "We seem to disagree only about Churchill's strategy. In almost the only book I have written to which you have not made a flattering reference, The Mediterranean Strategy in the Second World War, I tried to show that Churchill's strategy did not, except on one or two exceptional occasions and at the very end of the war, have any 'power political' considerations in mind, and in so far as it had they were concerned to assert British independence and prestige quite as much against the United States as against the Soviet Union. Still, this is a very minor difference: on the whole I thought the book quite splendid, and full of marvelously quotable quotes."1900 Howard noted he had reduced his introductory essay on Clausewitz from around 9000 to 6000 words, and explained that he "would not like to see the edition expand to two volumes," since "[i]n so doing, I think it would lose much of its point. But I would like to explore the possibility of including your comments in small print at the beginning of each book. This should not take up a great deal of space and would give us the best of both worlds. I agree that serving officers do need some guide through the jungle, especially in Book V!"1901 Howard closed by welcoming Brodie's comments on his enclosed draft. Brodie replied on September 1, 1974 with a long list of notes and suggestions, including numerous typographical and grammatical comments. Upon further reflection, Howard decided against breaking apart Brodie's "Guide," coming to the very same conclusion that Paret and Brodie came to.

Brodie also wrote to Howard on September 1, 1974, following up on his earlier letter "containing my general (not unfavorable) comments on your Clausewitz piece," with this new letter containing "the specific notes I promised you," adding "I have considered nothing that crossed my mind too trivial to mention." On the trivial, Brodie suggested, for consistency's sake that perhaps Howard will not "want to use the 'von' before Clausewitz if you do not use his first name," as that "seems not to accord with recent usage — or be consistent with Peter's or mine in the same book." On a matter of substance from a footnote on page three, Brodie mentions that "Neither you nor, I think, Peter anywhere mentions why Count von Bruhl made changes in the wording between the first and second editions. Were they printer's errors? Was Cl.'s handwriting difficult to read? Or was von Bruhl being simply arbitrary? You might

<sup>1899.</sup> Michael Howard, Letter to Brodie, August 23, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1900.</sup> Michael Howard, Letter to Brodie, August 23, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1901.</sup> Michael Howard, Letter to Brodie, August 23, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1902.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1903.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

not have the answer, but if you do it should certainly be included." <sup>1904</sup> On a matter of historical interpretation, Brodie noted that on page four, "in exact middle of page, you have the following sentence: 'In France General Foch, who was in other respects the most outstanding follower of Clausewitz, wrote in 1903 in his principles of war... etc."1905 Brodie challenges Howard on this point: "Now, it has been a long time since I read Foch, though I have the book in my possession and will look through it again the first chance I get. However, my strong recollection about his book leads me to feel that what you say about him in the portion I have quoted above is unjustified. My strong conviction is that his book stands in the most striking contrast to just about everything Clausewitz said he stood for, your own immediately following quotation from him being but one example. He is unreflective, full of dogmatic principles, given to extraordinary errors in his historical examples, etc. I know that Foch paid lip service to Cl., but he was in no sense a follower, deriving much more from the tradition of Jomini via du Picq and adding his own arrogant, unthinking, boastful machismo. If I may say so, I wrote an essay on Foch right after reading his book, and you will find it in my Strategy in the Missile Age, pp. 40-55."1906 Back to the trivial, Brodie adds, "Incidentally, you don't have a comma where I put one above after 'Clausewitz' (your words are run together at that point)," and on a matter of historical accuracy, Brodie adds, "and in 1903 he was not a general but a colonel (I think)." 1907

Brodie engages Howard in a debate on who best interprets the strategic environment on the eve of World War I, noting: "Same page, a few lines further down, you speak of Col. Colin's book ranking as 'the outstanding summary of the military situation in Europe on the eve of the Great War.' Are you not forgetting Ivan Block? To be sure, Block wrote in the 1890s, but he certainly predicted the character of W.W.I infinitely better than the Foch's and the Colin's. Colin's book I read very long ago and Block's I reread only recently, but I do not remember being at all impressed with Colin." Brodie added, "In general, I think you let Foch and Colin get away with too much. True, they were children of their time, as in some respects Clausewitz was a child of his, but in the respect that matters here Cl. went counter to his own time and thus became timeless, where Foch and Colin reject the idea that the strategy of a war must conform to the political aim they were doing their part to making, capped by an empty victory. The only one I can see on the eve of World War I who was truly Clausewitzian is Schlieffen – the concept of the plan is lifted bodily out of the last chapter of Book VIII – and I think Schlieffen is on record as writing that if the Plan

<sup>1904.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1905.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1906.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1907.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1908.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

fails, Germany must at once seek a negotiated peace." 1909 Brodie concludes this point by adding, "As you know, I speak briefly about Foch in my piece, and I plan to say something about Schlieffen too in the revision, and while I am not worried at all about you and me overlapping, I do think we need to be concerned about gross inconsistency between us. I shall therefore appreciate your letting me know what modifications if any you make in your remarks – and I shall of course send you a copy of my revised version."1910 Brodie engages Howard in further debate over Clausewitzian doctrine, noting: "Page 6, second Paragraph. You speak of Cl.'s 'doctrine of the two kinds of war' and ask whether one did not 'imply a valid alternative objective in the attrition of the enemy.' I suspect that Cl.'s answer would be a resounding 'no,' if by attrition you mean what happened in W.W.I. That attrition was after all Vernichtungsstrategie in slow motion, and was clearly different from what Cl. was talking about in Par. 2 of the 'Notice' and throughout On War. You translate Delbruck's Ermattungsstrategie as 'strategy of exhaustion' and find that it characterized the warfare of the 18th C. 'and the campaigns of Frederick the Great.' My German dictionary translates Ermattung as 'exhaustion,' but also as 'lassitude,' and the verb form as 'growing weary'. It is in this latter sense, it seems to me, that Cl. speaks of 18th C. warfare and of Frederick's enemies. Frederick himself was willing enough to fight desperately to achieve his end, but he clearly counted (according to Cl.) on his enemies *not* doing so. Clausewitz may condemn Austrian generals for not showing enough enterprise, but he never criticizes Austrian governments for dispensing with ultimate strategies."1911

On page seven, at the end of the first paragraph, Brodie comments, "You are quite right in saying that Cl. was 'intensely parochial' in the sense that he paid not the slightest attention to sea power, despite the role it played in the Peninsular War," but counters that "it seems too much to charge him with bequeathing this 'most disastrous legacy' to the German Army. After all, the Prussia of his time did not have the High Seas Fleet that Germany had in 1914, and one would expect 20th C. Germans to do some thinking for themselves. And to mention a war with which you have more than passing acquaintance, the Franco-Prussian war was affected not at all by the fact that France had absolute naval superiority." 1912

Brodie continues the debate on Foch, commenting on page eight, paragraph two, that: "This continues a point I have made above. Your first sentence ends with the words 'perhaps a little misleading,' which I think is a considerable short-fall from what needs saying. I agree with your comment about Liddell Hart putting it well (about Foch) but disagree strongly with your sentence that Foch 'borrows heavily' from Cl.'s ideas.

<sup>1909.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1910.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1911.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1912.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

What you quote is not substantial enough to warrant such a remark, and, incidentally, I would not castigate Foch for failing to make attribution for an idea that has entered the domain. We all frequently use ideas the source of which we have forgotten." Also on page eight, in the final full paragraph on that page, Brodie challenges Howard's interpretation of the influence of Clausewitz on French doctrine: "Your quote from the French F.S.R. of 1895 does not seem to me to bear out your remark that 'the French Army had become as totally imbued with Clausewitzian ideas as had its German adversaries.' It seems to me your account for this quote in your own excellent statement which begins at the bottom of your page 1 with the words: '...many of the ideas which we now think of as peculiarly Clausewitzian...etc.' A short quote like that on your page 8 really proves nothing except that a certain catch phrase has caught on, like that concerning 'imposing one's will on the enemy.' You and I have heard many people use that expression who didn't have the slightest idea what Clausewitz was all about. The sense of what you quote could just as well have come from Jomini, and I refer again to your statement beginning at the bottom of your page 1." 1914

Brodie comments on page ten, at the end of paragraph three, noting to Howard: "You quote Liddell Hart's 'Not one reader in a hundred' statement and follow it with your own: 'The reader will have to judge for himself as to the correctness of this verdict." 1915 Brodie concludes, "I come down on the side of L.H., which is why I think my Baedecker's guide is so necessary. It was particularly that first chapter that made me embark on it. It certainly confused me the first time I read it, and I had studied philosophy as an undergraduate, which the great majority of readers will not have done."1916 On the next page, Brodie corrects Howard for exaggerating Clausewitz, noting on page eleven, paragraph two, "You very aptly cite L.H.'s critique of Clausewitz with approval, and include the phrase 'the contempt for manoevre.' [sic.] I do not see a 'contempt for manoeuvre' in Cl. He certainly condemned 18th C. fascination with it, but he also at every opportunity warned against direct frontal attacks, and talked about the necessity for outflanking or enveloping the opposing army, and how one can do that without 'manoeuver' [sic.] I don't know. One could perhaps speak of 'a seeming contempt for manoeuvre." 1917 Brodie added, in a note on the inconsistency of spelling of the word manoeuvre, "By the way, one way in which British spelling differs from American is in that word which you call 'manoeuvre' and which modern American dictionaries call 'maneuver,'" though this does not account for the wide range of spelling employed by Brodie in his letter. Brodie's final comment is from page

<sup>1913.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1914.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1915.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1916.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1917.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

twelve, paragraph two, noting "where you quote the U.S. Army F.S.R. for 1923. My comment is the same as that of the top paragraph on this sheet, relative to the French F.S.R. of 1895, only more so." He closes by writing, "Zu Ende. Despite my above comments, I still think yours is a magnificent essay." As a P.S. he added a further compliment, noting "I very much enjoyed your review of the Hoopes book on Palles in the TLS," the *Time Literary Supplement*. 1920

Paret wrote to Brodie on September 11, 1974, noting "I talked with Herb [Bailey], and before I had a chance to suggest the solution you and I had discussed" with regard to placement of Brodie's "Guide," Bailey himself had "suggested it on his own. He thinks that it would be a shame to cut up your detailed analytic commentary, and feels that the proper way of handling it would be to print it as a block at the back of the volume." Howard described this solution in his own words in a letter on September 18, 1974 to Brodie, beginning his letter as per his usual manner with "My Dear Bernard," noting receipt of both Brodie's August 31 and his more thorough and critical September 1 letters as well as Brodie's "final draft of your introduction and guide to ON WAR." He added, "Also today a letter from Peter with his comments on my introduction and his proposed solution to your bulk problem – i.e. printing your guide at the end of the volume. To this I am entirely agreeable. I also think that your introduction would be printed first." (Brodie's introduction was ultimately placed third after Paret's and Howard's.)

Howard next addressed the issue of his review of Brodie's *War and Politics* in the *Time Literary Supplement*, noting, "First, the TLS rushed my review of War and Politics into print while I was away and before I could even correct the proofs. I hope that you have by now seen it in the issue of September 4th, with a very good photograph of yourself to grace it. In the light of this I won't take up any of the points you made except to say that my Mediterranean Strategy in the Second World War is not the same as Vol IV in Grand Strategy. It was a short book I wrote earlier, specifically dealing with the (in my view mistaken) belief that Churchill's strategy was 'politically' inspired. I am putting a copy in the post to you." Next, Howard took up a point by point response to Brodie's many critical responses to his introductory essay, both the trivial and the substantive – agreeing with many but not all of Brodie's points. "As for my Clausewitz introduction, I shall deal with your points seriatim," after which he addressed just a

<sup>1918.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1919.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1920.</sup> Brodie, Letter to Howard, September 1, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1921.</sup> Paret, Letter to Brodie, September 11, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1922.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1923.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1924.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

single issue of substance in Brodie's "excellent introduction." 1925 Howard agreed with Brodie on the issue of the 'von', conceding, "All right: not 'von' Clausewitz." 1926 On the matter of "Von Bruhl's corrections. Having waded through the first edition one can see why they were necessary. There are innumerable misprints and obscurities which frequently defeated even Peter. Since the original manuscripts have disappeared one cannot now say whether this was due to illegible handwriting or clumsy phraseology. But you are right: the point must be clear."1927 As for "Foch: again you are right. To describe him as 'a disciple of Clausewitz' tout court is very misleading, and I shall omit the phrase entirely."1928 On the matter of Jean Lambert Alphonse Colin, author of the 1912 The Transformations of War: "Our first disagreement. A lot happened between 1899 when Block wrote and 1912, when Colin did, and Colin gave the last general conspectus of what armies were like and what their doctrines were before war broke out in 1914. He certainly did not attempt the kind of forecasting which made Block so outstanding, but he gave a very sound and thorough summary of 'the conventional wisdom' of his time. I don't think it is a matter of 'letting him get away' with anything. He wrote what he wrote: I try to explain why he wrote it, rather than make the rather obvious point that he, in common with nearly every one else, got it wrong. NB my quotation of what I consider to be one of Clausewitz's wisest remarks at the bottom of page 4. Clausewitz was a timeless genius: Colin and Foch were not – they were in different ways very typical of their generation. I don't think that there is any difference to resolve between us over this."1929 As for "The two kinds of war.' The controversy in the periodicals was over precisely the point that you make. I could have a long footnote describing it but, as I said in my text, it did not bear at all on contemporary military thinking and so I have spared the reader. Gordon Craig deals with it very well in his essay on Delbruck in Makers of Modern Strategy."1930 On "Clausewitz and sea power. Yes: it is worth making the point that Clausewitz wrote in and for a land-locked Prussia. Incidentally French command of the sea did have a noticeable effect on the second half of the Franco-Prussian War. Gambetta was able to re-equip the French forces very largely because of foreign arms importations and the continuation of trade kept French credit high." 1931 Howard noted, "I am prepared to modify what I say about Foch's debt to Clausewitz by saying this his borrowings were extremely selective, but the passages I quote are pure Clausewitz. Even if they were by then idées reçues that makes them

<sup>1925.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1926.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1927.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1928.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1929.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1930.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1931.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

none the less Clausewitzian. I suspect that Foch got them from his Ecole de Guerre lecture notes rather than from reading the text; but since these are virtually the only general ideas (apart from his obsession with the offensive) that are to be found in his Principles of War, and since one finds really nothing comparable in Jomini, I am afraid that I see no reason to change my mind over this. The same applies to the French FSRs – and I could find you many such quotations. The concept of war as a clash of wills and its object being to impose ones will on the enemy which ultimately could be done only by taking the offensive- one does not find this kind of thing in Jomini and his followers. They are not perhaps the passages in On War which do Clausewitz the greatest credit, but they are certainly those which had the greatest influence at the time."1932 As for "Liddell Hart on Clausewitz's obscurity. I think he exaggerates this but, as I say, the reader must decide for himself." 1933 Howard proceeded to British versus American spelling conventions, noting: "For 'contempt for manoeuvre' read 'apparent downgrading of manoeuvre'. The English spelling of this and other words will no doubt be picked up by the copy editor." 1934 And on "US Army FSR. Again, I could back this up by many quotations from Marshall's directives and Eisenhower's correspondence about the need to break the enemy will to fight by defeating his main forces in battle. Perhaps I should expand this paragraph."1935

Howard next turned Brodie's introduction, writing: "About your own excellent introduction I have only one quibble: your giving Schlieffen the accolade of being a true disciple of Clausewitz on the strength of one reported statement (tu quoque!) that, if the Schlieffen plan failed, Germany should make peace. Now I accept that he was a follower of Clausewitz in the sense that I have described on page 5 of my text, but so far as politics was concerned he was, according to Gerhard Ritter, an agnostic in that he just didn't want to know: he did his job and the politicians did theirs. He would no doubt have scrapped the plan if his Kriegsherr had told him it was politically unacceptable, but he did not see it as his job to worry about such things. This was not really a Clausewitzian attitude. In any case it is not really enough to say that Schlieffen was 'on record' with such a statement. When did he make it, how often, and under what circumstances? It certainly does not come through as an intrinsic part of his military doctrines, and I have not come across it myself." Howard closed by noting "that is literally my only criticism" and adding, "You will pick up the mistypings for yourself. All best wishes to you both, Michael." 1937

<sup>1932.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1933.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1934.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1935.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1936.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1937.</sup> Howard, Letter to Brodie, September 18, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

Howard sent Brodie an additional, but undated letter, written by hand and in response to an earlier letter from Brodie dated September 23, 1974, addressing additional issues of substance and historical interpretation, and after a kind salute to "My dear Bernard," explained, "I have not replied sooner to your kind and useful letter of September 23rd since I have been ploughing through the proofs of the text before getting to your appendix, in the hope that I could repay you in kind. All I can offer, apart from some obvious misprints which you will certainly have picked up, is a. a contradiction between the introduction, when you give Clausewitz's age on first seeing service as 12, and the appendix, when you give it as 13 (the latter I think is right); b. a slight inaccuracy in your introduction when you suggest that Clausewitz died on the Polish Frontier rather than after his return to take up his new post vide. Paret's introduction. Your comment on galleys 41-2 about Clausewitz's limited experience of mountain warfare is of course correct, but one must bear in mind that his first experience of war was in the Vosges in Alsace, and he had three years of it at rather a formative period of his life."1938 He added, "Incidentally I cannot agree with you that the low German casualty figures on the Western Front in World War I compared with those of the Allies indicated that they had absorbed the Clausewitzian doctrine of the defensive. The whole of German military literature from about 1890 until 1915 argues the contrary, as does their record in the war itself. After the failure of the Schlieffen Plan they launched three major offensives in the West, all at heavy cost: 1st Ypres in November 1914, 2nd Ypres in spring 1915, and Verdun in 1916. It was then very largely the ascendancy of the "Easterners," Hindenture and Ludendorf, in OHL, which led to the decision to stand on the defensive in the West, but only in order to take the offensive in the East. Once the Eastern Front was liquidated they resumed the offensive in the West in March 1918. If you were to look at comparative casualty figures August 1914 until June 1916 I think you get a fairer picture; and even then one must take into account such variables as tactical doctrine, training levels and feed back from experience. Still, we can argue this one out privately!"1939

On October 3, 1974, Brodie wrote to Howard, presenting "Comments on new draft (2<sup>nd</sup> version) of 'The Influence of Clausewitz," noting "All are picayune except the last." While trivial, they are nonetheless of interest to historians of Clausewitz as well as of Brodie and his generation of strategic thinkers. On page one, Brodie comments, "The very long first paragraph can be divided into two or three. My own suggestion would to be to put paragraph markings at lines 12 and 22. You might go through the

<sup>1938.</sup> Howard, Letter to Brodie, in response to Brodie's September 23, 1974 letter, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1939.</sup> Howard, Letter to Brodie, in response to Brodie's September 23, 1974 letter, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1940.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

MS and check the length of all paragraphs."<sup>1941</sup> Also on page one, with regard to the second line from the bottom, Brodie writes the "[w]ord 'Jominian' is all right if my essay comes first, because I mention Jomini by full name and say something about who he was. I should nevertheless prefer to see: 'with the dogmatism of a Jomini.'"<sup>1942</sup>

As for page two, the second full paragraph, Brodie comments, "The third sentence bothers me slightly. What you are saying may have been true when Cl. wrote the notice of 1827. But as I read *On War* now, the contrast between books 7 and 8 is quite marked. Bk. 7 is very clearly still a rough draft, but Bk. 8 looks to be very much more finished. Chapters 6 and 9 are among the greatest in the whole work. I suspect he did a good deal of work on Bk VIII after writing the 1827 document, though there are still evidences of its being other than completely finished." Of a more picayune nature, in the same paragraph Brodie writes, "You mention a 'first theme' and a 'second theme,' but in the following paragraph you refer to 'the above three elements.' So I went back looking for the third theme, which I finally found in the very last clause of the par. It should be clearly marked as 'third theme.'" 1943

On page four, line four, Brodie comments substantively, "I think that word 'only' is a little extreme and perhaps unjustified. 'Almost exclusively' would be better. It is true that Bk. I, Ch. 1 and Bk. VIII, Ch. 6 bear almost the whole burden of the argument, but my recollection is that he at least speaks of it several times elsewhere. For example, in describing the necessary qualifications of the commander-in-chief he says that he also has to be something of a statesman, to understand the political objective of the war and conform to them." On page six, line ten, Brodie reverts to the trivial: "Title *Nation in Arms* should be underlined. (In general I believe in not reposing any confidence in the copy editor, at least until you know who the creature is going to be and how competent he or she is. The one I had for *War and Politics* was unbelievably bad)." In a similar vein, he writes of the second to last line in this same paragraph on page six, "The word 'fewer' seems to me to be slightly better than 'less.' It's like the difference between 'paucity' and 'dearth': one refers to numbers and the other to quantities other than numerical." And on historical interpretation, Brodie comments on page eight, paragraph two, line six: "I suggest changing the date '1870' to

<sup>1941.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1942.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1943.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1944.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1945.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1946.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

'1815.' There were a great may developments along the lines you mention between 1815 and 1870." And on page eleven, on the line in the middle of that page with the word "presciently," that the "remark you quote of Schlieffen's strikes me as being the very reverse of prescient. What happened in W.W.I is that it did prove possible to conduct a strategy of attrition 'when the support of millions of combatants runs into milliards of marks.' Schlieffen, like so many others, was entirely off the mark on that argument. Bloch, incidentally, was one of the very, very few who understood what resources the state could mobilize." And, on the trivial, on "Same page, seventh line from bottom: Word 'his' strikes me as slightly better than 'its." Similarly picayune, "Page 12, line second from end of first par. A dash should be substituted for the semicolon."

This brings Brodie to what he describes as "the one truly substantive comment, which I hesitate to make because I made it on your first draft. After one intervention one should be prepared to agree to disagree. However, the point is an important one and what you say about it bothers me very much, especially because I consider the 'strategy' of W.W.I., if it can be called that, so blind, so stupid, and so loathsome."<sup>1951</sup> As Brodie describes: "It first comes up at the bottom of your page 10, which is, I think, close to or identical with what you had before. All I will say about it now is that the word "valid" (4<sup>th</sup> line from bottom) is at the very least ambiguous. The real issue arises with what you say at the bottom of p. 14 and the top of p. 15. The two points I object to are 1. That there is any significant similarity between the attrition strategies of W.W.I and what could be called (with considerable license) the attrition strategies of the 18<sup>th</sup> century, and 2. That one can find in Clausewitz any significant justification for the kind of prolonged insane slugging that went on, especially on the

<sup>1947.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1948.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1949.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1950.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1951.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

western front, for over four long years."<sup>1952</sup> After presenting such detailed feedback on Howard's interpretation of Clausewitz's applicability to World War I, Brodie closes with a positively upbeat general assessment of Howard's introductory essay: "Having said all this I must assure you again that my admiration for your paper is (with the sole exception of the point made just above) absolutely unbounded."<sup>1953</sup>

On October 10, 1974, Herb Bailey wrote to Brodie, enclosing a copy of a letter to Paret that he authored on the same date, addressing Brodie's lengthy "Guide" for the reading of Clausewitz's *On War.* Bailey noted that the "enclosed copy of a letter to Peter is self-explanatory. It answers some of the questions in your letter of October 5," and explaining that "Much as I like your Reading Guide, I think it is just too much to add to the introductions before the reader gets to the text. I hope you will like the solution I have proposed. The paragraph referring to the Guide is obviously only a draft, and you may want to rewrite it entirely." Bailey also mentioned his intervention in a dispute between Brodie's wife Fawn and her publisher, regretting his involvement in the matter: "Finally, a last word on the Julian Boyd-Fawn M. Brodie

<sup>1952.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA. Brodie further elaborates on these two points:

Concerning point 1: You know much more than I about 18th c. warfare, and also about 19th and 20th c. warfare for that matter. However, I have just finished studying very carefully a fine, new translation of Clausewitz, who throughout his work makes frequent comparisons between 18th c. warfare and what he calls the "modern" style, which he identifies with the Napoleonic. His comments are usually to the effect that 18th c. warfare was "lacking in energy," and "incoherent," with the campaign of one year bearing little relation to the campaign of the next, etc. I enclose a couple of paragraphs selected almost at random, but these happen to be from Bk. IV, Ch. 12, which I shall be quoting in the essay I am writing for Klaus Knorr. Concerning point 2: The key sentence is what you say at the top of p. 15. Your wording has changed somewhat, but you speak now of Cl.'s alleged "disdain for strategic maneuver." I see no evidence of such disdain in On War, and I see plenty of evidence of the opposite. I see evidence of concern with strategic and tactical maneuver. As I think I said previously, he shows over and over again a real hatred of frontal attacks (an attitude he shared with Wellington) which I think to be pretty significant considering his times as compared with W.W.I and also considering the attitudes he might have been expected to have about the "pushes" of W.W.I.

When you talk about Cl's alleged advocacy of compelling the enemy "to use up his reserves at a greater rate than one is expending one's own," I think that word "compel" is not really justified, but more to the point, Cl. is describing a decisive battle which begins and ends in one day, and where the real victory, meaning the real destructed of the enemy's forces, comes in the pursuit during the night following the battle. He makes quite a point of the fact that during the battle the losses tend to be approximately equivalent on both sides (which is bad but acceptable because of what follows) but it is during the pursuit following the battle that the enemy's army suffers the great losses and one's own suffers almost none. Naturally, one can say that a one-day battle was out of the question by 1914, but one of the reasons I said in my last letter that Schlieffen comes closest among his contemporaries to being Clausewitzian in his ideas was that he wanted to condense into several days (rather than several months or years) the kind of battle that Clausewitz was specifically describing as taking place within one day. And the kind of maneuver (strategic) that Schlieffen set up for the execution of his plan comes straight out of Bk. VIII, Ch. 9 of On War.

I think you would be justified in saying that only by the most superficial (hence unwarranted) analogies could the generals of W.W.I claim to find some inspiration in Clausewitz.

Concerning Cl's "dogged refusal to be put off by heavy casualties," we simply cannot know from his attitudes concerning Napoleonic-type wars what they would have been for W.W.I. After all, he was the one who insisted that strategy must conform to the political objective, and I wonder whether he would not have found the casualties accepted in WWI as being in conflict with that basic principle.

<sup>1953.</sup> Brodie, Letter to Howard, October 3, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1954.</sup> Bailey, Letter to Brodie, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

dispute. I wish I had never gotten into it, since I don't think I accomplished much and I succeeded only in alienating both parties. Although I think I was right in my general perception of the situation, I did not take enough care with the letters I wrote, and so it would have been better if they had not been written at all. Really I should have left the whole thing to Julian and Fawn, and stayed out of it myself altogether." 1955 He closed his letter by reaffirming his admiration for Brodie's "Guide," writing: "To get back to ON WAR, I think that I have not sufficiently expressed my admiration for your Reading Guide. I think it is a superb contribution, and it will surely help to make our edition the one that is the most widely used."1956 He included as an attachment a draft paragraph for insertion at the end of the three introductory essays, alerting readers to the "Guide" in the book's back matter, with the note, "Insert at end of Brodie introduction, p. 23."1957 The proposed text stated: "It may seem odd at the end of these three introductions, dealing with the genesis of ON WAR, its influence, and its relevance today, to refer the reader to the Appendix: A Guide to the Reading of ON WAR. Thinking that we have already interposed perhaps more than enough comment between the title page and the text, we have placed this guide at the end of the book. We do not want to direct attention away from Clausewitz's text, but we suggest that the use of the Guide, before, during, or after reading, will enable most readers to gain more from Clausewitz's rich and profound work." 1958 In the end, this text would be boiled down to a more concise "Thinking that we have interposed enough comment between the title and the text, we have placed at the end of the book 'A Guide to the Reading of On War.' Eds." 1959 This abbreviated note appears on page 58 of the published edition.

In Bailey's letter to Paret, also penned on October 10, 1974, he noted that he had "now read the three introductions, and I want to say first of all that I am most enthusiastic about them. Although there are some repetitions, and perhaps cross-references should be inserted as you suggest, they fit together very nicely. I happened to read Bernard's introduction first, and I liked it so much that I immediately felt it should be the first in order. But now, having read the other two introductions, I think it would be better to go back to the original order: Paret, Howard, Brodie. They provide a logical sequence, and it would be hard to choose among them on any other basis." <sup>1960</sup> As well, Bailey noted he had "also read Bernard's Guide, which I think is very illuminating and helpful, and I am delighted that it is going to be in the book. However I'm concerned

<sup>1955.</sup> Bailey, Letter to Brodie, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1956.</sup> Bailey, Letter to Brodie, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1957.</sup> Bailey, Letter to Brodie, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1958.</sup> Bailey, Letter to Brodie, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1959.</sup> Bailey, Letter to Brodie, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1960.</sup> Bailey, Letter to Paret, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

about putting too much material before the beginning of the Clausewitz text, and so I come back to the idea that the Guide should be put at the end of the book, as an appendix. I don't want it to be overlooked, though, so in addition to listing it in the contents, I have prepared a paragraph to be added at the end of Bernard's essay (after the asterisks), calling the reader's attention to the Guide. Bernard may want to say it differently, but this draft at least suggests a direction. A copy is enclosed." Bailey presented some feedback on the introductory essays, noting "It would be false and misleading to give the impression that Clausewitz had said the last word on all types of warfare, but one gets the strong feeling from the Howard and Paret essays and from the first part of the Brodie essay that Clausewitz really is very relevant today." 1962

On September 22, 1975, Paret wrote to Brodie, noting although Howard and he had "agreed that he would do the proofreading of the entire opus," that "[n]ow that we have galleys I have of course gone over my introduction (and found quite a few errors in the process) and have also read the other two introductions and your guide. I am sending Michael my corrections and suggestions for his piece, and am doing the same with yours. Enclosed are those galleys that I have marked – as you see, there are only a few." Paret added, "Let me also suggest that you check your quotations with the final text. It would be embarrassing if any discrepancies slip through." Paret concluded, "Having read the three introductions and your guide I feel certain that we have produced a useful piece of work. Readers will take different things from our various analyses, but everything dovetails nicely, and I do think the total effect

<sup>1961.</sup> Bailey, Letter to Paret, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1962.</sup> Bailey, Letter to Paret, October 10, 1974, Bernard Brodie Papers (Collection 1223), UCLA. The full text of Bailey's comments to Paret follows: "On first reading I had the impression that Peter's essay was a little longer than it needed to be, and that there were some unnecessary repetitions. I didn't mark them, and last night I went back through the essay to try to see where it could be easily cut. Frankly I didn't find the sort of cutting that I thought might be possible, so perhaps my first impression was wrong. At any rate I think that the essay might be looked at again in this light, and I'll ask Lewis to keep this in mind also when he goes through it. I thoroughly enjoyed Michael Howard's piece on the influence of ON WAR, but I had a little feeling of letdown at the end, with the brief reference to MacArthur's dismissal during the Korean war. Was there no influence of Clausewitz on the Viet Nam War or on the Arab-Israeli conflict? Bernard refers to Viet Nam on page 12 of his essay. Perhaps it was planned to leave these more modern references to Bernard, but I kept wondering whether there ought not to be at least references to such events as the war of attrition during negotiations in Korea, the concept of limited war in the nuclear age, the development of political control and political officers in the Communist military doctrine, and the emergence of guerilla warfare as a significant modern variety. I would like to see a little more said about these topics either in the Howard essay or in Brodie's. It would be false and misleading to give the impression that Clausewitz had said the last word on all types of warfare, but one gets the strong feeling from the Howard and Paret essays and from the first part of the Brodie essay that Clausewitz really is very relevant today. But on page 15 of Bernard's essay he says, "Nevertheless, we must now really confront this issue of datedness, and consider to what extent this factor detracts from the utility of reading Clausewitz today." Then through page 19 there follows a series of rather weak arguments, with several "fall-back positions," that are almost enough to convince one that reading Clausewitz is hardly worth the trouble. I wonder whether this can't be stated more positively without being false to the material. This concludes my observations on the essays, though I want to finish by saying that I thoroughly enjoyed them and believe they will serve as excellent introductions to the Clausewitz text. I shall look forward to hearing what you think about all this."

<sup>1963.</sup> Paret, Letter to Brodie, September 22, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1964.</sup> Paret, Letter to Brodie, September 22, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

is enlightening rather than obscurantist." <sup>1965</sup> Brodie and Howard traded several letters offering corrections to each other's work. Final proofs of the manuscript became available in December, during which Brodie and Lewis Bateman, the editor assigned to the project, clashed over the presentation of Brodie's "Guide," whose placement in the back matter of the book seems to have caused Brodie some offense, a condition worsened by the editor's decision not to provide *special typographical recognition* in the contents, which Brodie had sought. As Bateman wrote in a letter to Brodie on December 19, 1975, "While I agree with you that your 'guide' is more than an appendix, its quality alone will indicate this. Thus, I do not think that it needs special typographical recognition in the contents. In any case, as you know, the display of this element in the contents is a question for the designer who, while considering your request, will make the final decision."1966 Brodie responded by bringing the matter to Bailey's attention, and in his Christmas day letter to Bailey wrote, "I feel it is time for me to go direct (sic.) to the boss, for which I trust Mr. Bateman will forgive me. I am sending him a copy of this letter anyway." Noting Bateman's response to the presentation in the contents of Brodie's "Guide," he explained to Bailey that: "This was in reply to a letter of mine pointing out that with my Guide now at the back of the book, the mousy way in which it is indicated in the "Contents" permits it to be quite lost to view. This concern is doubly warranted by the fact that the title page as presently structured, a copy of which was enclosed with Bateman's letter, makes no mention of the Guide – unless it is submitted under "with commentaries by" Peter, Michael, and myself. It seems to me that that promise is quite fulfilled by the three introductory essays. In other words, I am not worried about the reader's thoughts on the Guide when he reads it (i.e., concerning Bateman's reference to "its quality"), nor am I worried about the careful reader missing it."1968

<sup>1965.</sup> Paret, Letter to Brodie, September 22, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1966.</sup> Lewis Bateman, letter to Brodie, December 19, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1967.</sup> Brodie, letter to Bailey, December 25, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1968.</sup> Brodie, letter to Bailey, December 25, 1975, Bernard Brodie Papers (Collection 1223), UCLA. Brodie continued, "What I am worried about is that its very existence will be overlooked by all sorts of casual reviewers and browsers, yes, all eighty-odd pages of it. I am not putting an exaggerated value on my own work; it is enough that others besides myself thought it worth including in this volume. I am only saying that so long as it is there, its presence ought to be adequately signaled. Let me not be vain about it, but it might even help to sell the book. The type size in which it is presently given is the same as that for the individual chapters of ON WAR, some of which will be only one page long and none over about twenty-five pages. . . . I think that the Guide, and for that matter also the three introductory 'commentaries', should be set off in a type of a size approximating that used for the titles of the eight books of ON WAR, which individually happen to average about the length of my Guide (though I well understand that length is not all there is to it). In any case it seems to me a strange notion, indeed an absurd one, that in a matter of this importance the designer 'will make the final decision.' This is the first time I've encountered that idea. Bateman seems to have anticipated my disappointment with the title pages, because he suggests that any reservations I might have be taken up by Peter Paret. This I shall do by sending Peter a copy of this letter. I do not feel that any special display is indicated but I do feel strongly that a separate mention is necessary – separate, that is, from the reference to the 'commentaries' by M., P., and B."

Brodie raised a second concern, which while "of much less importance" was "nevertheless not trivial." 1969 Brodie had asked Bateman "to consult with you [Bailey] on whether I could have my contribution bound separately (that is, introductory commentary and guide) for presentation to friends and colleagues," and "got back an answer that seemed rather arbitrary. I was told I could buy the whole book, which of course I knew in advance. Now it happens that for most of the persons I have in mind, it would not only be too costly but inappropriate. I don't know what it says about them, but I actually have friends who are more interested in Brodie than in Clausewitz."1970 Brodie added that "Unfortunately, I do not normally make copies of my own letters when I type them myself, so I don't know just how I put the matter originally. Anyway, no one asked me whether I was prepared for thirty to fifty copies, which, if for the price were within reason, I would. By the way, I do not know yet what the whole book will cost. And am I wrong in assuming that you are not intending to put it out in paperback?"1971 Bailey responded to Brodie on December 31, 1975, noting "I have your letter of December 25," and commenting, "Let me say immediately that I have confidence in Mr. Bateman as an editor, and I think you should too," while at the same time agreeing with Brodie that "there is a real problem of emphasis here, and some changes should be made in the direction that you suggest."1972

Bailey further agreed that "it is also significant, especially from a publishing point of view, that commentaries have been provided by three such well-known scholars," and also "that a Guide by Bernard Brodie is included. These are things that readers will want to know, and that we as publishers want to convey to readers in order to sell the book." And so, Bailey noted, "I am again alerting our sales department to the fact that the presence of the commentaries and Guide will sell the book as much as the existence of a new and improved translation. And this of course should be reflected in the typography of both the jacket and the book itself. I have been over the proofs with Mr. Bateman, and we have agreed on some changes. The title page will be properly descriptive, stating that the translation is by Paret and Howard, the commentaries are by Paret, Howard, and Brodie, and the Guide is by Brodie. Mr. Bateman is sending a draft title page to Peter for his approval, since he has handled all the arrangements. I am also sending Peter a copy of this letter." Bailey added that "In the text of the book, the commentaries and the Guide will each be set off by a separate half title, and appropriate changes of emphasis will be made in the table of contents. The exact typography will of

<sup>1969.</sup> Brodie, letter to Bailey, December 25, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1970.</sup> Brodie, letter to Bailey, December 25, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1971.</sup> Brodie, letter to Bailey, December 25, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1972.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1973.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1974.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

course be worked out by the designer, but Mr. Bateman as editor will oversee the work to make sure that the typographical emphasis is appropriate."1975 Bailey added, "I'm glad that you brought this matter to my attention, because I really think that we were not sufficiently emphasizing some of the most attractive aspects of this volume. It will be relatively easy at this point to make the necessary changes. I hope that you and the other editors will be pleased."1976 As for the pricing, Bailey noted "we are planning a list price of \$17.50," and that "Promotion plans are already under way, the book is included among the leading titles in our spring catalogue, and at about the time of publication we will let you know in detail what advertisements will appear, etc." 1977 With regard to Brodie's desire for printed excerpts of his contributions to the work, Bailey wrote: "Mr. Bateman asked me earlier about the idea of providing separates of the Guide, and I told him (as he wrote to you) that we would greatly prefer not to provide them, even at cost. The reasons he gave are genuine, and in addition it does cost a good deal of disruption in the production process to have to provide separates of sections of a book." 1978 Bailey added, "I hope you won't think that this is an arbitrary decision; indeed there would be no reason to make such a decision arbitrarily when we would much prefer to please you and the other editors. I know that it is common to provide separates of journal articles, where the routines are set up for it, but it is a different matter with books."1979

In the final production of the long-awaited translation of *On War*, Bailey's described changes were made largely as described with only minor modifications. The front cover started with "CARL VON CLAUSEWITZ," in bold type followed by "ON WAR" in larger bold type sandwiched between two horizontal lines, underneath which appeared "Edited and Translated by" in non-bold italicized type, beneath which came in three lines "MICHAEL HOWARD and PETER PARET," followed in turn by "Introductory Essays by PETER PARET, MICHAEL D. HOWARD, and BERNARD BRODIE; with a Commentary by BERNARD BRODIE" in smaller type. (A 1984 edition was published with an index added, that resulted in a modification to the front cover, with the words "Indexed Edition" added in non-bold, italicized text of an even smaller type. The inside cover was presented much the same, but instead of "Indexed Edition" up top, at the very bottom of the page appear "Index by ROSALIE WEST," in the same sized type as the three lines describing the introductory essays and commentary.) In the table of contents, "A Commentary" is presented after Book Eight, "War Plans" in the same sized type, and the title to Brodie's "Guide," officially "A Guide to the Reading of On War," is in the same sized type as the sections of each of Clausewitz's

<sup>1975.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1976.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1977.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1978.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1979.</sup> Bailey, letter to Brodie, December 31, 1975, Bernard Brodie Papers (Collection 1223), UCLA.

chapters. And so, after over a decade, the Clausewitz Project, in a greatly reduced and far less ambitious form, came to press.

On July 29, 1976, with the new translation of *On War* ready to be release, PUP's publicity and promotions coordinator, Marcia Brubeck, wrote to Brodie on the matter of promotional copies: "Now that ON WAR is almost out, we are completing the lists of people to receive complimentary copies. We are asking you, Mr. Howard, and Professor Paret each to suggest three individuals to receive promotional copies. Mr. Bateman has given me your letter of March 19 suggesting Admiral Turner and Major Winton. Would you like to add the name and address of a political scientist?" Brubeck again wrote on October 6, 1976, confirming that PUP had "sent a copy of *On War* to International Security" and that the requested "copy of *The Role of Providence in the Social Order* will be sent to you as soon as it is available. Unfortunately, I must report that your 40% author's discount does not apply to the *Papers of Thomas Jefferson*, but you may of course buy copies at the list price of \$22.50" per copy, adding, "I hope this is helpful." 1982

With the much truncated Clausewitz Project now finally completed with the publication of the Princeton edition of On War, Bailey wrote to Brodie on October 14, 1976, observing that "ON WAR is off to a good start, I think, and I trust that you are pleased with the appearance of the book, even after all the discussion of the arrangement of materials, the title page, etc. It's hard to please everyone, but I think we came out with a reasonable solution. Certainly I think your own contribution to the book is going to be recognized as invaluable."1983 Bailey planted the seed for a new Brodie project on strategy, noting that the "problem of nuclear proliferation is on everyone's mind these days, along with the special problems of new types of war heads and missiles. Ed Tenner, our science editor, and I have been wondering whether it isn't time for a new book to put these subjects in perspective from several points of view – military strategy, economic implications, technology exchange, the problem of intelligence, and so forth." 1984 Bailey added: "Perhaps the principles haven't changed much since your STRATEGY IN THE MISSILE AGE, but the circumstances certainly have. We also now have behind us the experience of Vietnam, greater knowledge of biological warfare, etc. In short, perhaps it is time for a reassessment of the broad question of strategy today, or at least the question is worth asking? What do you think? Is it something that you yourself would want to undertake, or would you suggest someone else? At any rate I'd be grateful to have your thoughts on the subject."1985

<sup>1980.</sup> Marcia Brubeck, letter to Brodie, July 29, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1981.</sup> Brubeck, letter to Brodie, October 6, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1982.</sup> Brubeck, letter to Brodie, October 6, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1983.</sup> Bailey, letter to Brodie, October 14, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1984.</sup> Bailey, letter to Brodie, October 14, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1985.</sup> Bailey, letter to Brodie, October 14, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

Brodie responded favorably to Bailey's suggestion, and on October 29, 1976, Bailey again wrote to Brodie, in which he observed being "delighted that my letter suggesting that the time is ripe for a new overall look at the general question of military strategy, which of course relates to international politics (vide Clausewitz), caught you at the right time. There aren't many people who have been immersed in this subject as long as you have, or have made such contributions to it, and a new book from you now is a most pleasing prospect." Bailey added that he "shall be looking forward to hearing how your ideas progress and how the work goes along. Obviously something like this is going to take time, but you will be drawing on years of thinking about the problems." Bailey closed his letter by reiterating, "I really am glad that my letter struck the right note with you." 1988

## Brodie on the Continuing Relevance of On War

Brodie had first heard of Princeton's effort to bring forth a modern translation of Clausewitz's work for the Anglo-American world in a conversation with Peter Paret in the spring of 1963, and participated in the project for the better part of a decade before the project would be cancelled owing to its many challenges. But one major portion of the project, the translation of Clausewitz's classic tome, *On War*, was completed and came to press, at last, in 1976, with both a brief, fourteen-page introductory essay ("The Continuing Relevance of *On War*"), and a lengthier, seventy-page commentary presented as a commentary in the book's back matter ("A Guide to the Reading of *On War*"). As the editors finally agreed, the "Guide" was presented immediately following Brodie's introductory essay with these brief words: "Thinking that we have interpreted enough comment between the title page and the text, we have placed at the end of the book, 'A Guide to the Reading of *On War*." 1989

In "The Continuing Relevance of *On War*," Brodie contemplated Clausewitz's seminal tome's relevance to the world after Hiroshima. Not only might the reader wonder if "a book written a century and a half ago, and on war of all things, is really worth his time? That question would arise even if nuclear weapons had never been invented, but those weapons do indeed seem to make a totally new universe. Or do they?" While this question would percolate beneath Brodie's words for many more years, and would in fact define his efforts as a theorist stretching from the dawn of the

<sup>1986.</sup> Bailey, letter to Brodie, October 29, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1987.</sup> Bailey, letter to Brodie, October 29, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1988.</sup> Bailey, letter to Brodie, October 29, 1976, Bernard Brodie Papers (Collection 1223), UCLA.

<sup>1989.</sup> Introduction to Carl von Clausewitz, *On War*, translated and edited by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976).

<sup>1990.</sup> Brodie, "The Continuing Relevance of On War," 49.

nuclear age to the immediate post-Vietnam era, he attempts to address it head on in this introductory essay to On War: "There has been a good deal of fighting without nuclear weapons since the two were used on Japan in 1945, including wars which for some of the participants represented total commitment. Still, if it is not yet an established fact it is at minimum a strong possibility that, at least between the great powers who possess nuclear weapons, the whole character of war as a means of settling differences has been transformed beyond recognition. Why then read Clausewitz?"1991 Brodie contends that "Clausewitz's work stands out among those very few older books which have presented profound and original insights that have not been adequately absorbed in later literature," and while "there are other books including some dealing with contemporary and especially nuclear weapons issues," he believes that "none can equal it in importance or displace it in its timeliness."1992 Indeed, Clausewitz's work stands in marked contrast to such important military theorists as Foch and Douhet, whose influence was widespread in their own time, but whose longevity proved much more limited, without, in Brodie's estimation, any lasting utility. Clausewitz, Brodie believes, "is probably as pertinent to our times as most of the literature specifically written about nuclear war," and while the latter present "a good deal of useful technological and other lore," they also suffer from "the absence of that depth and scope which are particularly the hallmark of Clausewitz. We miss especially his tough-minded pursuit of the idea that war in all its phases must be rationally guided by meaningful political purposes."1993

Brodie specifically castigates his increasingly popular colleague Herman Kahn for this very reason: "That insight is quite lost in most of the contemporary books, including one which bears a title that boldly invites comparison with the earlier classic, Herman Kahn's *On Thermonuclear War*. Kahn incidentally based his main argument – that the United States could survive and therefore ought not too much fear a thermonuclear war with its chief rival – on technical premises that are certainly obsolete today, whether or not they were realistic when his book was published in the not-so-distant year of 1960. Also, Kahn's book does not, as Clausewitz's does, have much to say of relevance to the Vietnam War which has intervened since and which caused the United States so much soul-searching and agony, though far less of the latter than that borne by the nation it set out to save. Kahn may still usefully supplement Clausewitz, but only in a limited sense is he more timely, and he does not in any way help to supplant him." This goal, perhaps, was Brodie's very own inner aspiration, as he pursued a path toward philosophical greatness much like the enigmatic Socrates that he explored as a young

<sup>1991.</sup> Brodie, "The Continuing Relevance of On War," 49.

<sup>1992.</sup> Brodie, "The Continuing Relevance of On War," 50.

<sup>1993.</sup> Brodie, "The Continuing Relevance of On War," 51-52.

<sup>1994.</sup> Brodie, "The Continuing Relevance of On War," 52.

student in 1932, and Kahn's failure to supplant Clausewitz may well have kept this prize unclaimed for Brodie to pursue with his fullest vigor.

Brodie reflects on Clausewitz's undogmatic style, noting he was "often intent upon demonstrating the pitfalls of such axioms, which is the quality chiefly in distinguishing him from Jomini, as well as from virtually all his successors. That is one of the chief reasons why military people are so often disappointed with Clausewitz, for they are particularly accustomed in their training to absorbing against a tight schedule of time specific rules for conduct, a practice reflected in their broad use of the term "indoctrination." Clausewitz, on the contrary, invites his readers to ruminate with him on the complex nature of war, where any rule that admits of no exceptions is usually too obvious to be worth much discourse." 1995 As for the post-World War I efforts to "encapsulate centuries of experience and volumes of reflection into a few tersely worded and usually numbered 'principles of war," as reflected in the proliferation of field manuals, very much in the Jominian tradition, Brodie believes "Clausewitz would have been appalled," and no doubt "not surprised at some of the terrible blunders that have been perpetrated in the name of those 'principles," much like those contemporaries of his whom Clausewitz described as "the scribblers of systems and compendia." 1996

However, Brodie is aware (and later came to personally experience) that the "price of admission to the Clausewitzian alternative of intense rumination, sometimes in pages most densely packed with sharp insights, is a commitment to be responsive. This requires a different kind of reading from what we are normally accustomed to," and in contrast to the speed reading suitable to "the great masses of stuff" facing most professionals: "With Clausewitz, however, one should be prepared to tarry, to pause frequently for reflection." 1997

## In Ouest of the Unknown Clausewitz

Brodie would revisit Clausewitz one last time during his final year of life, in a review of Peter Paret's 1976 Oxford University Press book, *Clausewitz and the State*, in the Winter 1978 edition of the *Journal of Interdisciplinary History*, one of Brodie's very final publications, and incidentally, his second review of Paret's book – his first appearing

<sup>1995.</sup> Brodie, "The Continuing Relevance of On War," 57. Brodie continued, "This quality is seen especially in his attitude toward such notions as were already beginning to be called 'principles of war.' Though he could hardly avoid establishing certain generalizations, which is inevitably the result and the purpose of analytical study, he specifically and vehemently rejected the notion that the conduct of war can reasonably be guided by a small number of pithy axioms. It was Jomini, not Clausewitz, who has been responsible for the endlessly quoted remark that 'methods change but principles are unchanging,' and it is largely for that reason that Jomini had far greater influence on military thinking in his own and later times, at least among non-Germans. It was Jomini who was looked to for guidance by both sides in the American Civil War, which in his very long life he lived to see concluded. And, as we have seen, it was Jomini whom Mahan called 'my best military friend.'"

<sup>1996.</sup> Brodie, "The Continuing Relevance of On War," 57.

<sup>1997.</sup> Brodie, "The Continuing Relevance of On War," 58.

a year earlier in the Winter 1977 edition of International Security, "In Quest of the Unknown Clausewitz: A review of Paret's Clausewitz and the State," International Security 1, No.3 (Winter 1977). 1998 Brodie and Paret had engaged in a long dialogue on Clausewitz dating back many years, and while they did not always agree on all things Clausewitz, Brodie's review found Paret's contribution to the literature to be "a distinguished book, and it would be a magnificent example of the historian's art at its best even if its subject were a person of less significance than Carl von Clausewitz." 1999 Brodie observes that Paret's work "gives us access, in English, to the mind and work of one whose name is a byword but whose life and thought are virtually unknown to all but a small handful of scholars, most of them German or of German origin. And for these few Clausewitzian scholars, in whatever language they write, it is an original contribution of first importance."2000 Brodie notes that "Paret not only analyzes and clarifies Clausewitz's philosophy in its final bloom but also traces its development from early adult-hood," and that he is "keenly attuned to the influences upon Clausewitz's development of the philosophical thought and the military and political events of the frenzied and volatile period in which Clausewitz lived his two lives, the active military one and the scholarly one."2001 Brodie adds that "[i]t might also be relevant in this age of psychohistory to point to something not altogether evident from the book itself," and that is "Paret comes from a family of psychoanalysts, and his wife is one," and Paret "himself has devoted a good deal of study to the work of Freud and his followers, and he is clearly sympathetic to that work."2002

Brodie notes Paret "acknowledges that he has deliberately 'understated' those aspects of his subject's inner life that might have occurred to him as he read Clausewitz's voluminous personal documents, such as his letters to his wife and others," adding that "[p]erhaps he does so excessively, and he admits as much. But in his last chapter, where he makes a calm assessment of Clausewitz's character and personality, mostly

<sup>1998.</sup> Bernard Brodie, "In Quest of the Unknown Clausewitz: A review of Paret's Clausewitz and the State," *International Security* 1, No.3 (Winter 1977).

<sup>1999.</sup> Bernard Brodie, "Review of Clausewitz and the State by Peter Paret," *Journal of Interdisciplinary History* 8, No. 3 (Winter, 1978), 572.

<sup>2000.</sup> Bernard Brodie, "Review of Clausewitz and the State by Peter Paret," *Journal of Interdisciplinary History* 8, No. 3 (Winter, 1978), 572.

<sup>2001.</sup> Brodie, "Review of Clausewitz and the State," 573. Brodie added, "As the title indicates, Clausewitz's changing concept of the state is selected as the central organizing thesis, for it is the basic idea in the Clausewitzian philosophical structure that war has meaning only as it carries out the policy of the state. Fortunately, however, Paret does not permit this theme too exclusive a dominance. Paret has the advantage through birth and rearing of being completely at home in three languages, including German, in which he does most of his research, and English, in which he writes smoothly and with a flawless clarity. To that he adds a capacity for meticulous scholarship, which is marked also by extraordinary breadth and depth. He seems to have read and absorbed everything of even the most modest relevance to his work. The connections he reveals between persons, writings, and events bear witness both to a penetrating insight and to the most fastidious care for the correctness of his factual detail. Such a level of historical scholarship is rarely attained."

<sup>2002.</sup> Brodie, "Review of Clausewitz and the State," 573.

to refute what he regards as unfounded assertions by others, he explains his caution. It is a brief chapter, but unusually important, even apart from its centering on Clausewitz. Paret apparently believes, with Freud, that the door to the unconscious does not open easily."2003 As Brodie elaborates: "'Historians,' he says, 'may consider it useful to attempt interpretations of the psychological elements and dynamics of their subjects. But unless they and their readers are content with purely subjective speculations, their interpretations will . . . have to deal critically with all the evidence, and be prepared to admit ignorance when necessary evidence is lacking' Paret, in short, though with no less knowledge of the relevant discipline, is at the opposite end of the spectrum from a Mazlish, who in a recent 'psycho-biography' of Henry Kissinger, based entirely on open sources and one pro-forma interview, declared that he knew Kissinger better than Kissinger knew himself."2004 Brodie finds that the "reputation of Clausewitz is great enough to warrant his being the subject of Paret's largest and finest work thus far," and he notes its publication "has come just prior to that of the new and superior translation of *On War* by Paret and Michael Howard," published by Princeton University Press, that Brodie contributed to by means of both a foreword and an afterword and which "happens also to coincide with the publication in Paris of the two-volume work on Clausewitz by Aron."2005

Brodie describes the riddle of Clausewitz's endurance stemming from the complexity of his thinking and the inability to boil his philosophy down to simple maxims, noting: "Yet what a strangely ambiguous thing is the Clausewitzian reputation, resting on a base that is solid in merit but projected through a century and a half mostly on the strength of hearsay. As one who sedulously avoided the propounding of precepts or 'principles' in the manner of his contemporary Antoine Henri Jomini, or of later writers such as Alfred Thayer Mahan, Ferdinand Foch, or Giulio Douhet, Clausewitz is not likely to have had any indirect influence. The basic ideas of each among the others could be summed up more or less adequately in relatively few words and transmitted, usually with an aura of revealed truth, to many who have never read him or possibly have never heard of him. That could not be done with Clausewitz. He could influence only those who carefully and thoughtfully read at least his major work, first published posthumously in 1832. To do this was long impossible to anyone not at home in the German language."2006 Brodie rhetorically asks, "If his influence was so clearly limited outside Germany and somewhat questionable even inside that country, why does he, at this late date, merit so much attention?"2007 The answer to

<sup>2003.</sup> Brodie, "Review of Clausewitz and the State," 573-74.

<sup>2004.</sup> Brodie, "Review of Clausewitz and the State," 574.

<sup>2005.</sup> Brodie, "Review of Clausewitz and the State," 572.

<sup>2006.</sup> Brodie, "Review of Clausewitz and the State," 572.

<sup>2007.</sup> Brodie, "Review of Clausewitz and the State," 572.

this question of Clausewitz's long influence, Brodie offers, is: "Simply because his has been the one truly great mind throughout man's warring history to have committed itself to developing a comprehensive theory of the essential character and purposes of war and of the means of studying it," and that Clausewitz "succeeded sufficiently to produce a profound work with strong claims to timelessness. In short, one reads Clausewitz today not because of his real or alleged influence in the past or because certain modern ideas about war are supposed to be traceable mainly to him, but because of his continuing intrinsic value." 2008

<sup>2008.</sup> Brodie, "Review of Clausewitz and the State," 573.

## **Chapter Seven**

## After Brodie: The Continuing Evolution of Clausewitz Studies An American Renaissance in Clausewitz Studies

Just as fighting men embraced Jomini for many decades after Napoleon's eventual defeat, and welcomed the precision of his maxims (which left little in doubt), it would be mostly men of letters – historians, theorists, analysts, and philosophers of war – who first embraced Clausewitz and his classic *On War* in post-World War II America, at least before the humbling defeat in Vietnam inspired American soldiers and their commanders to plough through the Prussian's long and convoluted opus. War, to Clausewitz, was an extreme but natural expression of policy. He fought against Napoleon and saw in the extreme chaos of his time a compelling justification to fight. The moral imperative of war from his perspective was so profound, so obvious, that it needed little explanation or justification in his work. Indeed, Napoleon was such a gathering threat to European security that war against him, as a necessary and continuing response to his imperial threat, justified itself in Clausewitz's mind, even when his King would make a separate peace.

Raymond Aron aptly captures the spirit of Clausewitz with the title to the English translation of his book on the Prussian: Clausewitz: Philosopher of War. If Clausewitz presents us with his new paradigm of strategy as an art, then the study of war becomes something beyond theorems and other scientific pretense, just as Brodie himself would later conceive of the study of war in the nuclear age. As Aron described: "Over a period of some fifteen years he sought to formulate a conceptual system, a theory (in the sense that we speak of economic theory today) which enables the concept of war (or real wars) to be thought out with lucidity. At the age of 25, influenced by Scharnhorst and events, he already knew which types of theory to reject as being contrary to the nature of things and as offering bad advice: namely those which failed to recognize the role of emotion, of military virtues and of passions; in short, of the human side of war and its conduct, those which put forward strict rules and claim to have discovered one rule amongst them all which is responsible for victory or defeat, those which failed to take heed of the singularity of each combination of events, and exclude the part played by accident and good or bad luck. But of what worth is a theory that bears no resemblance to unilateral, pseudo-rational, illusory, deadly doctrines? Clausewitz pondered for fifteen years before he gave a definitive answer which none the less remains ambiguous in certain respects. He, too, could have quoted after Montesquieu the Latin adage: proles sine matre creata. Like the author of De l'esprit des lois, who perhaps influenced him more than the Germans thought, he sought the

theory of a praxis amenable to changes in history, to the hazards of fate and to human passions."2009 And yet, Aron noted, "[w]hile the purpose is not in doubt, the same cannot be said for the unfinished work," which remained riddled with contradiction, as "Clausewitz himself never succeeded in entirely clarifying his own ideas."2010 This may account, in part, for why Clausewitz's "masterpiece remained unfinished," and why "he did not want it published in his lifetime."2011

And so unlike his mentor Scharnhorst, Clausewitz kept his work largely to himself, apart from three anonymous articles that he published. As Aron described, Clausewitz "never perfected the Treatise and he wrote, before sealing the manuscript, that the latter in its existing form lent itself to all sorts of misunderstandings." Clausewitz therefore did not, as in his early work destined for the young and future king, write directly to his peers or even to win the favor of the Crown. Aron believes he wrote instead "for himself" and "for those who would be prepared to study him" in later ages. Not unlike the classical realists, from Thucydides on up, he wrote for posterity, participating by intent in a grand dialogue with and across history. But in his lifetime, he otherwise "never dreamt of publication because he was aware of the grandeur of his work and because he suffered in advance from the criticisms that he foresaw. Too sensitive to face the lack of understanding without bitterness, too proud to defend his writings, he wrote for posterity." 2014

Since Clausewitz wrote for the future, more so it seems than for the present, Aron believes it is "legitimate" to attempt a more contemporary "interpretation of Clausewitz in the light of Lenin or of Mao Tse-Tung, or in relation to the nuclear age," as has so often been done by theorists of war in later ages — so long as we "respect the prerequisites of historical knowledge," and that we do not confuse "what Clausewitz meant to say to those who belonged to his world, to those who shared the same historical experience and who gave the same meanings to words" with "the interpretation of the meaning or meanings which his work and system retain or take on for us, in terms of our own world and our own experiences." Adds Aron, "Whoever confuses the two tasks violates the rules of historical dialogue." The tradition established by Clausewitz, that's now so well established in the contemporary strategic thinker's mind, and in recent years has cast as strong an influence on the mind of the military

<sup>2009.</sup> Raymond Aron, Clausewitz: Philosopher of War (New York: Simon & Schuster, 1986), 5.

<sup>2010.</sup> Aron, Clausewitz: Philosopher of War, 5-6.

<sup>2011.</sup> Aron, Clausewitz: Philosopher of War, 1.

<sup>2012.</sup> Aron, Clausewitz: Philosopher of War, 9.

<sup>2013.</sup> Aron, Clausewitz: Philosopher of War, 1.

<sup>2014.</sup> Aron, Clausewitz: Philosopher of War, 1.

<sup>2015.</sup> Aron, Clausewitz: Philosopher of War, 6.

<sup>2016.</sup> Aron, Clausewitz: Philosopher of War, 6.

commander as Jomini's approach had for generations before, looks at war as a chaotic realm on par with Plato's world of fleeting sense, a world so difficult to understand that only through philosophy, a dialectical inquiry between reality and mind, between war's pervasive fog and the ingenious commander's mind's instinctual clarity, will reveal underlying cause and effect.

Clausewitz emerged from the very same Napoleonic revolution in warfare that brought forth Jomini, but not at the Emperor's side where Jomini had stood but instead standing in his path. Clausewitz's determined effort to understand, and through understanding, to defeat Napoleon became a quest that nearly cost him his career, as he became an outspoken advocate of military reform, new popular militia forces, and briefly took up arms in opposition to his very own King. Clausewitz practiced what he preached, and this perhaps has contributed to the endurance of his voice across the ages. For a time, his determination and his undying sense of commitment to the struggle helped to set back his career. But in the end, his wisdom and his preeminent reputation helped to restore his success even in the face of such adversity. And yet despite standing on the opposite side of the battlefield, Clausewitz was much like Jomini, the man who lived in the shadow of Napoleon and whose theoretical response never quite broke free from this shadow.

While clearly on the other side, Clausewitz was not so far removed from this other father of modern strategic thought who is sometimes juxtaposed as Clausewitz's nemesis and who enjoyed, in his own lifetime, far greater influence than the Prussian theorist so beloved in our own time. Jomini looked more to science than art and philosophy to help elucidate some fundamental maxims from the Napoleonic experience, and to thereby help harness the objectivity and power of modern scientific theory to help to reshape military history, and influence the way we view the events of his era. Jomini thus became our eyes and ears as we travel through the Napoleonic period. As Thucydides used the decline of Athenian military power during the long war of the Peloponnesus as his explanatory model, fueling his eventual rise to global, indeed millennial, fame as The Historian, Jomini used the rise of Napoleon as his model to become The Scientist of Strategy or the founding father of modern military science – while Clausewitz used the eventual fall of Napoleon (coupled with his stunning rise), to construct a dynamic and complex model, becoming along the way *The Philosopher* of War. Historian, scientist and philosopher – each on a mission to leave in our minds his image of reality, in the hope that this will help us move more securely from present to future, illuminated by the lessons of the past.

In his study of Clausewitz's impact on Anglo-American strategic thought, *Clausewitz in English: The Reception of Clausewitz in Britain and America, 1815-1945*, Christopher Bassford wrote that "Clausewitz himself was skeptical of the role of theory in forming the character of military leaders, although he hoped it could educate their

judgment, and *On War*'s intended audience is unclear. Clausewitz wrote essentially for the 'military analyst.' In practice, that probably means staff officers and military historians rather than commanders." Bassford has found that on both sides of the Atlantic, "Clausewitz's admirers were generally military reformers, or at least persons seriously dissatisfied with any status quo;" and often, especially so in the nineteenth century, they were "social reformers" and "maverick' personalities." His admirers tended to include military professionals "during those rare periods – generally brought on by severe military embarrassments – when military reform was in fashion," as the "tendency toward philosophical hairsplitting necessary in the application of Clausewitz's methods is rather alien to the spirit of military organizational culture." <sup>2019</sup>

When it came to Clausewitz's linkage of war and politics, Bassford found the British to be generally accepting of this premise, being "quite aware of the connection" from their own historical and strategic experiences. But in America, he found, "professional soldiers bitterly resisted the idea that politics had any relevance to military strategy or operations," and despite the constitutional subordination of the military to civilian control, "the U.S. Army as an institution continued to argue that politics ceased when war began," a view shared by the Air Force, but one the Navy, under the influence of A.T. Mahan and later George Meyers, rejected with its view that diplomacy and external international politics "drove naval policy in both peace and war." Bassford observes that the "Truman-MacArthur crisis over Korea settled this issue in a practical sense, but it was undoubtedly the Vietnam experience that finally drove home to the army as an institution the inherent interaction of war, politics, and policy." The post-Vietnam era thus saw the "official adoption of Clausewitz as a guiding light in most of the American armed services."

As one can see immediately in Book I of *On* War, in the chapter on "Danger," Clausewitz was no apologist for the horror of warfare, with his portrait of total war reminiscent of other students of chaos, like Thucydides and Hobbes. War's terror was familiar to him: he first experienced battle at the young age of twelve, very likely before his very first wet dream (with sexual maturation occurring later then than it does now): thus war was perhaps his first encounter with intimacy and passion, his first exposure to the blood and sweat of others, his first venture into adulthood. It was likely his first love just as it was no doubt his first hate. He did not glorify and simplify what Sherman (not likely the first) called Hell. He did not strip it of its uniqueness

<sup>2017.</sup> Christopher Bassford, Clausewitz in English: The Reception of Clausewitz in Britain and America, 1815-1945 (Oxford: Oxford University Press, 1994), 220.

<sup>2018.</sup> Bassford, Clausewitz in English, 212-13.

<sup>2019.</sup> Bassford, Clausewitz in English, 213.

<sup>2020.</sup> Bassford, Clausewitz in English, 216-17.

<sup>2021.</sup> Bassford, Clausewitz in English, 216.

not rob it of its sophistication. Instead he tried to understand its troubled soul. He sought to master it, much like Machiavelli sought to master *fortuna*. He looked into its womb for its very origins, and did not turn away from its secrets no matter how intimate. Instead he revealed what it truly was, as seen through his eyes, described in his words, bringing his observations of war directly to us many years later. Indeed, over a century later, we still read his account of war with fascination. It rolls across our visual fields like Tolstoy. It does not lose its relevance, because his questions were so basic that the answers even today make sense, good sense. Though his answers are not simple, they are good, provocative, and deep.

That is why Clausewitz has come into fashion as we entered our age of complexity and asymmetry – and in particular, after America's humiliation in Vietnam, when his talk of friction and uncertainty struck a chord with bloodied, and humbled, military commanders. Paret tells us that Clausewitz's classic had less noble beginnings. As one might expect from the literature of his period, he began with an inquiry into the underlying scientific principles of strategy, much like Jomini. Like Jomini, he wanted to "set down [his] conclusions on the principal elements of this topic [strategy] in short, precise, compact statements." <sup>2022</sup>

But this was soon abandoned, and the result of his search for truth became his sprawling, uncompleted, and quite difficult to fully digest magnum opus, On War. As Bassford describes: "On War is often less a window into reality than a mirror for its reader, perhaps necessarily so. This has been my own experience with it. When I first read it as an undergraduate at the College of William and Mary, it was the abstract discussion of 'absolute war' and the idea of war as a rational continuation of policy that seemed to me to be its essence. When I read it during my military service, it was the discussion of friction, chance, and moral factors that most struck me. Today, when I work as a historian, it is Clausewitz's historicist philosophy that provides the key to understanding. Every time I had read it, it has seemed a different book, but it is only myself who has changed. Thus it is little wonder that the survivors of trench warfare of 1914-18 saw their experiences in On War's pages, just as Vietnam veterans tend to see in it a textbook on what went wrong in their war. That this is the case would not have surprised Clausewitz, who insisted that personal experience was essential to any understanding of the phenomenon of war. . . . Like the finest tools available to artists, scientists, or soldiers, the product of a Clausewitzian approach is very much dependent on the peculiarities of the mind that wields it. However the predispositions of the reader may affect his or her view of war, the lens offered by Clausewitz provides for a much more distinct vision."2023

<sup>2022.</sup> Paret et al., Makers of Modern Strategy (1986), 187.

<sup>2023.</sup> Bassford, Clausewitz in English, 220-221.

Often when Clausewitz is discussed, it is in done with comparative reference that other theorist of his generation who became in many ways his primary rival with regard to asserting a lasting historical influence, Baron Antoine Henri de Jomini. As Hew Strachan has observed, "If modern strategic thought finds its roots in the nineteenth century, Jomini has a much greater claim to be its father than Clausewitz;" having "served as a staff officer with the French army of Napoleon between 1805 and 1813, writing as he went, and then devoting the rest of his career to redefining his thoughts about warfare." <sup>2024</sup>

Hew Strachan, in Clausewitz's On War: A Biography, notes "Clausewitz's specific blows against Jomini in On War were few and glancing, rebutting what Jomini laid down as general principles," but his critique of Jomini was "much more forthright in his other works, and became more so as he grew older," as the rivalry gained traction – such as in an historical analysis of the French campaign against the Austrians in Italy in 1796 which rebuked Jomini's analysis as "insufficient, full of gaps, obscure, contradictory - in short it is everything that an overall account of events and their relationships should not be."2025 While "[i]n all probability Clausewitz had not even crossed Jomini's horizon until these words were published in 1833, two years after Clausewitz's death," Strachan noted Jomini "rose to the challenge" and in the preface to his 1838 Precis de l'art de la guerre claimed to "have been able to find in [Clausewitz's] labyrinthine intellect only a few insights and noteworthy points." 2026 Adds Strachan: "Jomini's criticisms of Clausewitz are worth quoting at length, precisely because they have never been wholly dismissed," and it took fifteen years before Clausewitz's On War was translated into French, limiting its early readership, and once translated, it received a critical response from French military instructor La Barre Duparcq whose "reactions mirrored those of Jomini." Further, when On War was revised and reissued in 1853, its first edition of 1,500 copies had not yet sold out, even though the third and final volume had been published nearly twenty years before. Strachan also cites Wilhelm Rustow's 1857 reaction, who, "while comparing Clausewitz to Thucydides and saying he was 'good for all times', confessed that he 'has become well known, but is very little read."2028

And, he added, "Like Jomini's judgment, Rustow's has never lost its force," at least until "Prussia's stunning and rapid victories over Austria in 1866 and France in 1870-71, culminating in the unification of Germany," which "inaugurated the first true discovery of Clausewitz," after which "[t]he German army now became the model for

<sup>2024.</sup> Strachan, Clausewitz's On War: A Biography, 7.

<sup>2025.</sup> Strachan, Clausewitz's On War: A Biography, 7-8.

<sup>2026.</sup> Strachan, Clausewitz's On War: A Biography, 8-9.

<sup>2027.</sup> Strachan, Clausewitz's On War: A Biography, 9.

<sup>2028.</sup> Strachan, Clausewitz's On War: A Biography, 9-10.

Europe, and Clausewitz was cast as its intellectual father."2029 This culminated in the strategic thinking of Erich Ludendorff, whose 1935 Der totale Krieg was not about Clausewitz's "total war" but a more modern, and in the end destructive, "totalitarian war" that focused on "how to mobilize the whole state for war," with war no longer a continuation of policy, but policy now subordinated to war.<sup>2030</sup> It was Ludendorff who "therefore acted as a bridge between the ideas of the German General Staff in 1914-18 and the rhetoric of Fascism," with its erosion of "the distinctions between war and peace" and definition of "politics as an existential struggle for survival." The Nazis thus breathed new life into Clausewitz, and Hitler found in *On War* a model for German recovery from its "heroic collapse." 2032 Interestingly, Clausewitz also appealed to the Communists, finding supportive readers in Marx, Lenin, and Trotsky, though initially rejected by Stalin as obsolete in "the machine age of war" before being rehabilitated by Khrushchev and integrated with Marxist-Leninist doctrine. 2033 Noting that "[e]ach generation has read Clausewitz differently, often selectively," Strachan concludes that "neither Hitler nor Marx was wrong," and that "there was something in Clausewitz for each of them." 2034 Strachan points out how: "Every generation has tended to look at what Clausewitz wrote in the light of its own preoccupations, but in using his thoughts in this way is always in danger of treating the text selectively. That in itself is neither illegitimate nor inappropriate, but by the same token no one school can claim the monopoly of wisdom in its interpretation of Clausewitz's work."2035

Bassford also considers the enduring appeal of Clausewitz to future generations of strategic theorists, as well as the recent resurrection of Jomini – in part to counter the growing influence of the new generation of theorists inspired in part by Clausewitz, often called the "neo-Clausewitzians," in his paper, "Jomini and Clausewitz: Their Interaction," presented to the 23rd Meeting of the Consortium on Revolutionary Europe at Georgia State University on February 26, 1993. He probes the relationship of these two pivotal interpreters of the Napoleonic experience, their rivalry as well as their common perspectives. <sup>2036</sup> Bassford notes the two theorists are often perceived to be, and presented as, adversaries representing opposing views, but he finds that they share much in common: "Most frequently, Jomini is treated as being somehow

<sup>2029.</sup> Strachan, Clausewitz's On War: A Biography, 9-10.

<sup>2030.</sup> Strachan, Clausewitz's On War: A Biography, 19.

<sup>2031.</sup> Strachan, Clausewitz's On War: A Biography, 20.

<sup>2032.</sup> Strachan, Clausewitz's On War: A Biography, 21.

<sup>2033.</sup> Strachan, Clausewitz's On War: A Biography, 21-22.

<sup>2034.</sup> Strachan, Clausewitz's On War: A Biography, 27.

<sup>2035.</sup> Strachan, Clausewitz's On War: A Biography, 193-194.

<sup>2036.</sup> Bassford, "Jomini and Clausewitz: Their Interaction," *The Clausewitz Homepage*, http://www.clausewitz.com/CW-ZHOME/Jomini/JOMINIX.htm.

the opposite of Clausewitz: military educators often hurl the epithets 'Jominian' and 'Clausewitzian' at one another as if those single words somehow summed up their opponents' fallacious world-views and defects of personal character."2037 But this is not always the case, as "a number of thoughtful observers have considered the differences between Jomini and Clausewitz to be rather inconsequential," such as the American naval strategist, Alfred Thayer Mahan, whose "father, military educator Dennis Hart Mahan, is generally considered to have been a devout Jominian, and so is his son." 2038 Bassford notes both Mahans were "creative thinkers in their own right, and calling them 'Jominians' is an unfair characterization," 2039 not just because the term is sometimes applied pejoratively, but because its overlooks the influence of Clausewitz on their strategic thinking. Indeed, as Bassford notes, "[t]he younger Mahan eventually became familiar with Clausewitz, calling him 'one of the first of authorities';" but finding "Clausewitz to be in essential agreement with Jomini in all significant respects," Mahan "continued to put forth his arguments in largely Jominian terminology." 2040 Bassford also notes that the "great British Clausewitzian Spenser Wilkinson thought that Mahan and Clausewitz were in general accord" while "[i]n Germany, Albrecht von Boguslawski also argued that Jomini and Clausewitz were saying the same thing," and at the "U.S. Naval War College Professor Michael Handel has sought to reconcile the two theorists."2041

Clausewitz and Jomini "often appear either as opposites or as twins," but Bassford suggests "the truth lies somewhere else," and that "[i]n reality, Jomini and Clausewitz saw much the same things in war, but saw them through very different eyes."<sup>2042</sup> Bassford traces their commonalities to their shared interest in Frederick the Great's campaign, their shared experiences of the Napoleonic Wars (albeit on opposing sides), and their mutual awareness of each other's works. Despite these shared experiences, Bassford observes "their approaches to military theory were fundamentally different, and the source of these differences can be found in their very different personalities."<sup>2043</sup> Bassford notes that "[a]side from their differing relationships to Napoleon, the fundamental differences between Clausewitz and Jomini are rooted in their differing concepts of the historical process and of the nature and role of military theory."<sup>2044</sup> As he elaborates: "Clausewitz saw history in relative terms, rejecting absolute categories,

<sup>2037.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2038.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2039.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2040.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2041.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2042.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2043.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2044.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

standards, and values. The past had to be accepted on its own terms. ... In contrast, Jomini's view of history and of war was static and simplistic. He saw war as a "great drama," a stage for heroes and military geniuses whose talents were beyond the comprehension of mere mortals. ... The purpose of his theory was to teach practical lessons to "officers of a superior grade." Accordingly, Jomini's aim was utilitarian and his tone didactic. His writing thus appealed more readily to military educators. His later work, Summary of the Art of War (Precis de l'Art de la Guerre, 1838), became, in various translations, popularizations, and commentaries, the premier military-educational text of the mid-nineteenth century." Bassford believes that "[m]uch of the contrast between Jomini and Clausewitz can be traced to such philosophical factors – and to the frequent abridgement of *On War*, which makes it appear much more abstract than Jomini's work when in fact they often discussed the same practical subject matter." 2046

Though the two famed theorists of war never met in person, Bassford speculates that they "may have caught a glimpse of one another from opposite sides during the tragic crossing of the Beresina river during the French retreat from Moscow," and adds that "they interacted intellectually, influencing one another's thinking over a long period of time."2047 Indeed, Bassford notes that "[w]hen the young Clausewitz wrote his Principles of War (1812) for his student the Prussian crown prince, he seems to have been rather taken with Jomini and his argument about interior lines," referring to Jomini throughout while utilizing his "geometric vocabulary," even though the older Clausewitz who penned On War "would be quite skeptical on all these matters." 2048 And while he "accepted Jomini's fundamental strategic theme," that "[t]he theory of warfare tries to discover how we may gain a preponderance of physical forces and material advantages at the decisive point," he qualified it in a manner that would now think of as signature Clausewitzian, adding "As this is not always possible, theory also teaches us to calculate moral factors: the likely mistakes of the enemy, the impression created by a daring action, . . . yes, even our own desperation." <sup>2049</sup> Bassford finds the older Clausewitz of On War "became extremely skeptical of Jomini," and his "sweeping critique of the state of military theory appears to have been aimed in large part" at Jomini, in particular his insistence upon "fixed values" when "in war everything is uncertain, and calculations have to be made with variable quantities;" his focus "exclusively toward physical quantities" when "all military action is intertwined with psychological forces and effects;" his consideration of "only unilateral action, whereas war consists of a continuous interaction of opposites," as well as "the 'lopsided char-

<sup>2045.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2046.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2047.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2048.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2049.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

acter' of the theory of interior lines."<sup>2050</sup> And yet, Bassford notes, "[a]nyone who reads Jomini's most famous work – and if you think few people actually read *On War*, there are even fewer who read the *Summary* – will notice quite readily that Clausewitz's remarks seem unduly harsh and misleading," and that "Jomini's prefatory comments seem quite reasonable and entirely compatible with a Clausewitzian understanding of war, despite Jomini's personal barbs at Clausewitz."<sup>2051</sup>

Indeed, Bassford points out that Jomini does indeed comment "on the importance of morale; the impossibility of fixed rules (save perhaps in tactics); the need to assign limits to the role of theory; skepticism of mathematical calculations (and a denial that Jomini's own work - despite all the geometrical terminology and diagrams - was based on math); the disclaimer of any belief that war is 'a positive science;' and the clear differentiation between mere military knowledge and actual battlefield skill."2052 Moreover, Bassford writes that "Jomini acknowledged the truth of Clausewitz's strong connection between politics and war," and his "Summary is full of references to 'politique' - the same term as Clausewitz's Politik." Bassford notes one reason for the perceived gulf between the two theorists is their "similarity" on the relationship of war to politics "is hidden by the standard English translation, which substitutes the term 'diplomacy'." 2053 Nonetheless, "Jomini's recognition of the validity of many of Clausewitz's points did not lead him to genuinely adopt Clausewitz's philosophy," and "he found the Prussian's approach intellectually arrogant, overly metaphysical, and simply too damned difficult to digest," preferring "simplicity and clarity" over "a 'pretentious' search for deeper truths." <sup>2054</sup> On a personal level, Bassford notes that Jomini felt "deeply wounded by the criticisms in On War," resulting in "a number of sneers," even if he nonetheless makes "concessions on theoretical issues" to his Prussian rival. 2055

Bassford chronicles the "return of Jomini" to a position of influence among military theorists, and notes "certain recent attempts to revive Jomini" have arisen as "reaction against the predominance of Clausewitzian theory in this country since the Vietnam war," as well as his influence among the nuclear theorists – in addition to what retired U.S. Army Colonel Arthur Lykke, a professor of strategy at the Army War College, called the "excessive influence of 'Clausewitz nuts'," and what was described by U.S. Army Colonel Lloyd Matthews, editor of *Parameters*, as "the prostitution of Clausewitz since 1981, particularly in [the U.S. Army's] FM 1005 and its various degenerate off-

<sup>2050.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2051.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2052.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2053.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2054.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2055.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

spring," in a July 17, 1989 letter. Both of these complaints, cited by Joel Achenbach in his December 6, 1990 *Washington Post* article, "War and the Cult of Clausewitz: How a Long Dead Prussian Shaped US Thinking on the Persian Gulf," Bassford believes "have some justification." Bassford is sympathetic to Jomini's re-emergence, and believes "most of what Jomini had to contribute that was of real value – which was a great deal – has long since been absorbed into the way we write practical doctrine," while "Clausewitz's contributions, on the other hand, have not. Indeed, given the brilliance and subtlety of many of Clausewitz's concepts, it is hard to see how they could ever become the 'conventional wisdom." by Joel Achenbach in his December 1990 Washington Post article, "War and the Cult of Clausewitz's the Cult of Clausewitz's concepts, and believes have a property of the brilliance and subtlety of many of Clausewitz's concepts, it is hard to see how they could ever become the 'conventional wisdom."

And yet, even amidst a Jominian resurgence, Clausewitz's influence remains strong, and since the end of the Cold War has appeared to re-intensify, permeating both the halls of academia as well as the military services, cross-pollinating both strategic theory and doctrine, even making something of a cameo appearance in America's re-articulated counterinsurgency doctrine, FM 3-24, in December 2006, again precipitating a neo-Jominian backlash against its population-centric focus which, like the first wave of Cold War strategists a generation earlier, seemed to over-emphasize the primacy of policy and underemphasized the centrality of battle in war. In addition to a brief reference in chapter one of FM 3-24 rebutting Clausewitz's belief that insurgency could only play a role in defensive operations, <sup>2058</sup> a prominent quotation from Clausewitz introduces the fourth chapter, "Designing Counterinsurgency Campaigns and Operations." Drawn from chapter one, section twenty-seven of On War on "The Effects of This Point of View on the Understanding of Military History and the Foundation of Theory," which followed section twenty-six reiterating that "All Wars Can Be Considered Acts of Policy," Clausewitz is cited as saying: "The first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish . . . the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature. This is the first of all strategic questions and the most comprehensive." 2059

Clausewitz would be proud to discover that he would ultimately cast such an enduring influence on military thought across the ages. And so would his close partner in life, his beloved wife Marie. In her introduction to the posthumous publication of her husband's *On War*, she wrote: "The work to which these lines serve as a preface occupied almost entirely the last twelve years of the life of my inexpressibly beloved

<sup>2056.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2057.</sup> Bassford, "Jomini and Clausewitz: Their Interaction."

<sup>2058. &</sup>quot;Clausewitz thought that wars by an armed populace could only serve as a strategic defense; however, theorists after World War II realized that insurgency could be a decisive form of warfare." David H. Petraeus and James F. Amos, eds., FM 3-24/MCWP 3-33.5: Counterinsurgency (Washington, DC: Headquarters, Department of the Army and Headquarters, Marine Corps Combat Development Command, December 2006), 1-20.

<sup>2059.</sup> FM 3-24, 4-1.

husband, who has unfortunately been torn too soon from myself and his country. To complete it was his most earnest desire; but it was not his intention that it should be published during his life; and if I tried to persuade him to alter that intention, he often answered, half in jest, but also, perhaps, half in a foreboding of early death: "Thou shalt publish it." These words (which in those happy days often drew tears from me, little as I was inclined to attach a serious meaning to them) make it now, in the opinion of my friends, a duty incumbent on me to introduce the posthumous works of my beloved husband, with a few prefatory lines from myself; and although here may be a difference of opinion on this point, still I am sure there will be no mistake as to the feeling which has prompted me to overcome the timidity which makes any such appearance, even in a subordinate part, so difficult for a woman. It will be understood, as a matter of course, that I cannot have the most remote intention of considering myself as the real editress of a work which is far above the scope of my capacity: I only stand at its side as an affectionate companion on its entrance into the world." 2060

While the loss of her beloved life partner was tremendous, the profound happiness she felt at his side for over two decades was sustained "by the treasure of my recollections and of my hopes, by the rich legacy of sympathy and friendship which I owe the beloved departed, by the elevating feeling which I experience at seeing his rare worth so generally and honourably acknowledged."2061 It is interesting to note that in her final years, she gained in her own professional services a proximity to power that seems fitting, much like that which Machiavelli had long desired, a desire that seems to have similarly frustrated her husband, an admirer of Machiavelli who felt a certain kinship to the earlier theorist (quite similar to that which Brodie would later feel toward Clausewitz.) Clausewitz had toiled at some distance from such power, and from the influence he had hoped to one day gain. But like Socrates, whose millennial endurance resulted from his pupil's machinations, and his willing exit from the earthly stage so that his ideas could take an ideational form upon his passing, as the literary transformation of Socrates from teacher to a metaphorical persona constructed by his ablest of students took place, upon the untimely passing of Clausewitz from his own earthly stage, his ideas later re-emerged on a higher plain, as enduring philosophical illuminations of man's darkest art.

It took Marie von Clausewitz's intervention, persistence, editorial stewardship, and undying belief in and eternal love for her beloved husband to bring Clausewitz's writings to life, and to join the pantheon of great constructive realists whose dialogue has continued for posterity. Perhaps her gaining the ear of the Crown Prince was part of her grand design to bring Clausewitz's influence to bear upon future generations. In

<sup>2060.</sup> Marie von Clausewitz, "Preface to the First Edition," Carl von Clausewitz, *On War*, translated by Col. J.J. Graham, London, 1873, . http://www.gutenberg.org/files/1946/1946-h/1946-h.htm#2H\_4\_0004.

<sup>2061.</sup> Marie von Clausewitz, "Preface to the First Edition," Carl von Clausewitz, On War (1873).

any event, he would no doubt have been pleased, to learn of the "trust confided to me by a Royal Couple" that enabled Marie to become Governess to Prince Friedrich Wilhelm, who would one day come to power as Emperor Frederick III – but who, because of his father's longevity, would end up reigning for a brief 99 days. In his short rule, however, Frederick III was renowned for his liberalism, and had he lived may well have nurtured forth a less bellicose Germany into the European family of nations. His liberal instincts and his close ties to England were things he shared with the previous century's youthfully idealistic Frederick, the aptly-named Frederick the Great, whose *Anti-Machiavel* rejected so many of realism's cold, hard truths, nearly all of which would be renounced by the older, empowered Frederick when he became a veritable Philosopher-King, displaying unprecedented military boldness upon gaining the throne, and whose legacy would inspire Napoleon, whom Clausewitz famously dubbed the "God of War."

Marie von Clausewitz viewed her fortune in gaining this position, and the trust of the royal family, to be "a fresh benefit for which I have to thank the Almighty, as it opens to me an honourable occupation, to which I devote myself. May this occupation be blessed, and may the dear little Prince who is now entrusted to my care, some day read this book, and be animated by it to deeds like those of his glorious ancestors." <sup>2063</sup> This allowed her to serve the very state that her beloved had dedicated his life to preserving, and enabled her to present his work with an introduction that was "Written at the Marble Palace, Potsdam" on June 30, 1832, imbuing *On War* with an official imprimatur. And so, through the undiminished love of Marie von Clausewitz, her husband's philosophical treatise, unfinished but nonetheless edited and re-organized, posthumously came into the world, fueled by the intensity of her faith that it would not just influence the young prince under her care, but the countless legions of unborn princes and future warrior kings yet to come.

## Clausewitz's 'Reception': The Ambiguities of Enduring Influence

It is interesting to note in recent years, numerous Clausewitz scholars have shifted their emphasis to what Bassford described as the Prussian's "reception" from the much harder to measure though more widely discussed "influence," as if taking their cue from Brodie's final thoughts on the endurance of the Prussian's ideas across such a vast stretch of history. Bassford can be credited for continuing this shift in our time, well after Brodie's exit from the earthly stage. His 1994 work, *Clausewitz in English: The Reception of Clausewitz in Britain and America*, 1815-1945, set the tone for this shift.

<sup>2062.</sup> Marie von Clausewitz, "Preface to the First Edition," Carl von Clausewitz, On War (1873).

<sup>2063.</sup> Marie von Clausewitz, "Preface to the First Edition," Carl von Clausewitz, On War (1873).

In an email to this author, Bassford explained his approach: "My experience is that the 'influence' of a thinker is impossible to trace/quantify/characterize. That's why I went with the 'reception' of Clausewitz, for which there is actually evidence." <sup>2064</sup>And yet, while difficult to measure in a strictly quantitative manner, intellectual history is all about *influence* and how ideas transmit across time. While the shift to "reception" is admirable in its humility, it tends to obscure the direct intellectual connections conveyed by the word "influence," and with regard to Clausewitz, his influence has been indisputably significant even if without a tangible metric, and even if each generation tends to interpret the Prussian altogether differently.

Much the same can, of course, be said of Brodie. As demonstrated in the pages above, it is obvious Brodie's "influence" quickly rose and then later declined, causing him to feel a great frustration on his descent that may very well have paralleled that felt by Clausewitz at the end of his life. Like Clausewitz, Brodie's ideas have penetrated deeply and have had a lasting impact, not only on the world of theory, but that of doctrine as well, as chronicled by Steiner in his biography of Brodie. In time, Brodie's bountiful and thoughtful writings, which resisted short-term trends and specialized terminology to a large degree as compared to his peers whose works appear to be more a taxonomy of labels (i.e., "Type I" and "Type II" deterrence, terms that are seldom ever used any more), may thus again resonate with future scholars as well as strategists. Brodie aimed for a clarity of expression and analysis that was largely free of overly specialized jargon, and he strived for deeper historical connections that help place his ideas within the longer narrative of Western military history. We may yet witness a "Brodie renaissance" on par with the renaissance in Clausewitz studies that intensified after the 1976 culmination of the Clausewitz project, which Michael Howard credits in no small part to Brodie.

While perhaps not as grand as the Clausewitz renaissance Brodie helped to precipitate, perhaps among young nuclear states, as well as mature nuclear states rethinking both conventional and nuclear strategies in an increasingly nuclear world, his ideas and writings will enjoy a second wind. A posthumous renaissance in Brodie studies would in many ways help to offset the bitterness felt by Brodie during his decline as his more colorful colleagues saw their influence rise – including Henry Kissinger, who rose to great power, and Herman Kahn, who enjoyed widespread celebrity and would go on to found his own think tank, the Hudson Institute – as has been noted in the pages above by several scholars, including Newell Bringhurst, Ken Booth, and Barry Steiner, among others.

As Hew Strachan has described Clausewitz's comparable situation: "When Carl von Clausewitz died in 1831, he was a disappointed and frustrated man" who had

<sup>2064.</sup> Chris Bassford, E-mail to the Author, February 26, 2012.

"aspired to fame, but thought he had not achieved it." 2065 Fame would eventually come to Clausewitz, much like many great artists whose ideas were ahead of their time, resulting in their posthumous rehabilitation and celebrity. As Benoit Durieux has described, "One of the most striking features of the Clausewitzian bibliography is the contrast between the perennial fame of the Prussian general and the recurrent judgement that his ideas are outdated, useless, incomprehensible, or dangerous." 2066 Helping to explain the selective and often self-serving interpretations of the Prussian, Durieux explains: "Quite naturally, the first readers devoted much attention to the recipes they found in the book that would enable them to achieve operational success," whether the French School which "emphasized the importance of moral forces in war" or the Marxists who "used Clausewitz's ideas about the people in arms to elaborate their theory of revolutionary war," or the post-Vietnam American theorists of war "led by Colonel Harry Summers" who "were the first to underline the importance of the paradoxical trinity and the fog of war." 2067

Excluded from Durieux's list is the group most central to this present work, the nuclear strategists – who in contrast to the post-Vietnam theorists that emphasized Clausewitz's trinity and who continue to wield great influence in the literature – focused their attention on Clausewitz's most famous but perhaps least complicated dictum of all: that "was is a continuation of policy other means." But this particular group would be thoroughly examined by a contemporary of Durieux, Antulio J. Echevarria II, in his chapter in Andreas Herberg-Rothe, Jan Willem Honig and Daniel Moran, eds., 2011 *Clausewitz, the State and War* entitled "The Cold War Clausewitz: Reconsidering the Primacy of Policy in *On War*," as well as in his book-length work, *Clausewitz and Contemporary War*, which like the above-noted work edited by Strachan and Herberg-Rothe, was published by Oxford University Press in 2007.

<sup>2065.</sup> Hew Strachan, "Clausewitz and the Dialectics of War," in Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the Twenty-First Century* (Oxford: Oxford University Press, 2007), 14.

<sup>2066.</sup> Benoit Durieux, "Clausewitz and the Two Temptations of Modern Strategic Thinking," in Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the Twenty-First Century* (Oxford: Oxford University Press, 2007), 250.

<sup>2067.</sup> Durieux, "Clausewitz and the Two Temptations of Modern Strategic Thinking," 251.

<sup>2068.</sup> For instance, see the work of Christopher Bassford, such as his chapter in *Clausewitz in the Twenty-First Century*, "The Primacy of Policy and the 'Trinity' in Clausewitz's Mature Thought," in which he argues that "the trinity is the central concept in On War," and is "the concept that ties all of Clausewitz's many ideas and binds them into a meaningful whole," and despite the academic debate over whether or not the trinity concept came late to Clausewitz – which Bassford deems "largely irrelevant" – Bassford instead argues that the centrality of the trinity to Clausewitz's theory of war "remains true whether Clausewitz conceived his theoretical universe with this construct in mind, or instead discovered only at the end of his efforts that the seemingly divergent roads he had been travelling all led, inexorably, to this particular intersection." And more importantly with regard to the primacy of policy, Bassford argues the trinity "represents the synthesis of [Clausewitz's] dialectical process" and in so doing "incorporates but also supersedes Clausewitz's antithesis, that is, the famous dictum that war is 'merely the continuation of Politik by other means," which earlier theorists including Brodie and many of his nuclear-era peers perceived to be "the pinnacle and summary of On War's argument." Christopher Bassford, "The Primacy of Policy and the 'Trinity' in Clausewitz's Mature Thought," in Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the Twenty-First Century* (Oxford: Oxford University Press, 2007), 74-75.

<sup>.</sup> Durieux, "Clausewitz and the Two Temptations of Modern Strategic Thinking," 251.

Since Brodie's exploration of Clausewitz coincided with the dawn of the nuclear age, and his focus was first and foremost on the prevention of "absolute" war, one can forgive his seeming disinterest in Clausewitz's "wondrous Trinity," though to be fair, the interconnection of war and politics does to a large degree encapsulate some of the key inter-relationships that define the trinity – especially in the democratic West where politics itself is comprised of two of the trinity's pillars: the people and the government, and which asserts constitutional control over the third, the armed forces. In Brodie's political context, then, one can reasonably argue that a focus on the war-policy nexus is not necessarily a dismissal of the trinity but perhaps an embrace of the trinity by another name, and that the real shift that took place with the post-Vietnam interest in Clausewitz's trinity, and the dynamics of Trinitarian warfare, was largely one of semantics. Of course, some theorists of Trinitarian warfare would be as guilty of simplifying Clausewitz as some critics such as Echevarria suggest Brodie and his nuclear-era colleagues were by focusing seemingly exclusively on the primacy of policy and the war-policy nexus, and would initially, as seen in the work of Summers, conflate the trinity with the three institutional pillars that most commonly embodied the trinity: people, state, and military, when in fact the trinity is more commonly understood to reflect the underlying social forces that in some cases correspond with these three institutional pillars, albeit not necessarily exclusively: passion, reason and chance. Durieux points out that there is "not one single Clausewitzian theory, but several, elaborated at different periods in close conjunction with the prevalent political, strategic and military context," and further explains that this "is completely consonant with Clausewitz's original conception of his own work."2069

Jon Tetsuro Sumida, in *Decoding Clausewitz: A New Approach to On War*, also takes a long view to Clausewitz's influence, tracing Clausewitzian currents in the work of prominent strategists and scholars including Julian Corbett, B.H. Liddell Hart, Raymond Aron, and Peter Paret, all Clausewitz scholars in their own right. The very widespread and enduring support for *On War*, both its influence upon and its so-called "reception" by theorists of war across the many years since the Prussian's death, is recounted by Jon Tetsuro Sumida in *Decoding Clausewitz: A New Approach to On War* (Lawrence, Kansas: University Press of Kansas, 2008). As he recounts: "General Helmuth von Moltke, the architect of victory in the major conflicts that unified Germany between 1864 and 1871, regarded Clausewitz's *On War* as comparable in importance to *The Iliad* and the Bible. In 1911, Julian Corbett, Britain's preeminent naval strategic theorist, observed that *On War* was 'more firmly established than ever as the necessary basis of all strategical thought.' The distinguished German military and naval historian Herbert Rosinksi maintained more than half a century later, in

<sup>2069.</sup> Durieux, "Clausewitz and the Two Temptations of Modern Strategic Thinking," 252.

1966, that Clausewitz's masterpiece was 'the most profound, comprehensive, and systematic examination of war and its conduct' in existence, and then declared, 'It towers above the rest of military and naval literature, penetrating into regions no other military thinker has ever approached.' In 1976, Bernard Brodie, America's pioneering theorist of nuclear strategy, argued that *On War* was 'not simply the greatest but the only truly great book on war.'"<sup>2070</sup>

According to Jon Tetsuro Sumida, in *Decoding Clausewitz: A New Approach to On War*, "For Clausewitzian studies, 1976 was a seminal year. Michael Howard and Peter Paret published a new English translation of *On War*, which was more accurate and much more readable than its predecessors. Paret also published *Clausewitz and the State*" and "Raymond Aron published *Thinking About War: Clausewitz*," known in English as *Clausewitz: Philosopher of War*." But this "rich harvest of 1976 did not result in a consensus view of the general meaning of *On War*; indeed, interpretations of the work have varied widely and its meaning remains open to debate," as "none of these thinkers achieved complete command of *On War*. Nor has anyone since their time produced a satisfactory explanation of Clausewitz's thought."<sup>2072</sup>

In his 2007 Clausewitz's On War: A Biography, Hew Strachan comments on the renewal of interest in Clausewitz precipitated in part by the 1976 publication of the Princeton translation of On War: "Two of the most distinguished historians of their generation, Michael Howard and Peter Paret, were responsible for the translation. Howard had fought with distinction in the Second World War: Clausewitz appealed to him as a soldier writing for other soldiers. His aim was an English version that soldiers themselves would read, and, just in case they did not, Bernard Brodie, a star of the strategic studies firmament of the nuclear age, concluded the volume with a short summary of the text. The Princeton edition of On War has proved far more successful than the German original ever was."2073 Strachan continues: "Over the last thirty years American soldiers in particular have responded to Howard's hopes. One of them was Colonel [Colin] Powell" who "described On War as 'a beam of light from the past still illuminating present-day military quandaries'. Confused by the disintegration in Vietnam of the army he loved, and alarmed by the gulf that had opened between it and the society it served, he found explanations for what had gone wrong in *On War*. 'Clausewitz's greatest lesson for my profession was that the soldier, for all his patriotism, valor, and skill, forms just one leg in a triad. Without all three legs engaged, the

<sup>2070.</sup> Jon Tetsuro Sumida, *Decoding Clausewitz: A New Approach to On War* (Lawrence, Kansas: University Press of Kansas, 2008), i.

<sup>2071.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 36.

<sup>2072.</sup> Sumida, Decoding Clausewitz, 36-37.

<sup>2073.</sup> Hew Strachan, Clausewitz's On War: A Biography (New York: Atlantic Monthly Press, 2007), 1.

military, the government, and the people, the enterprise cannot stand." <sup>2074</sup> For Powell, it was Clausewitz's trinity that proved most salient, in marked contrast to the earlier strategic theorists who focused more upon the primacy of policy, as Brodie and his Cold War colleagues tended to do. As well, Colonel Harry Summers, Jr., "like Powell, highlighted Clausewitz's 'trinity', which he, also like Powell, maintained was made up of army, government and people." <sup>2075</sup> Though both Powell and Summers can be said to have oversimplified the trinity, perhaps as much as critics of the Cold War theorists overstated the importance of Clausewitz's famous war-policy dictum, their embrace of the trinity reflects the emergence, post-Princeton translation, of a new focus for Clausewitz scholars, on a theme that perhaps better suited the complexity and asymmetry of the post-Vietnam period, much the way it continues to do so.

Hugh Smith also addresses the issue of Clausewitz's influence, writing: "Since the publication of On War between 1832 and 1834 Clausewitz has become a key figure in understanding war – at times ignored, condemned or canonized, his ideas sometimes merely misunderstood, sometimes deliberately distorted. His actual influence over strategy, whether for good or ill, has also been debated, though the topic is so elusive that scholars have preferred to focus on his 'reception' - the ways in which others have understood his ideas and reacted to them."2076 Smith recalls how: "At the outset On War attracted some immediate criticism, not least from Jomini whose reputation as an analyst of military affairs outshone that of Clausewitz for much of the century. In his Summary published in 1838 Jomini aimed numerous barbs at his rival, while adjusting many of his ideas to Clausewitz's analysis. On War also won ardent supporters who sensed that it was a work of intellectual significance," including Engels who "recommended him to Marx," and yet "with the initial print run of 1500 copies still not fully sold it is fair to say that Clausewitz had fallen into 'respectful oblivion'." 2077 But this would change in time and by a third edition in 1880, "Clausewitz now enjoyed a strong following, even reverence, in Germany, though many readers complained of his obscure philosophy."2078 "Clausewitz's wider reputation also grew," and after French and later English translations, "[m]ilitary colleges in Europe and North America adopted On War as a major text." 2079 After World War I, a new wave of critics emerged – namely Liddell Hart and General J.F.C. Fuller, the former who "was determined to pain him as 'the apostle of total war' and the antithesis of his own strategic nostrum, the indirect approach to victory. The concept of absolute war, he argued, encouraged a focus on

<sup>2074.</sup> Strachan, Clausewitz's On War: A Biography, 2.

<sup>2075.</sup> Strachan, Clausewitz's On War: A Biography, 2.

<sup>2076.</sup> Hugh Smith, On Clausewitz: A Study of Military and Political Ideas (New York: Palgrave MacMillan, 2005), 237.

<sup>2077.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 237.

<sup>2078.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 238.

<sup>2079.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 238.

mass and battle to the exclusion of all else," and Liddell Hart came to believe that "On War and its theory of unlimited war ... had 'gone far to wreck civilization." And "General Fuller picked up the theme of obscurantism, dismissing On War as 'little more than a mass of notes, a cloud of flame and smoke' and Clausewitz himself as outmoded, an obsolete 'general of the agricultural period of war." 2081

And yet, Smith asks, "But how could such a work be so influential? For both Fuller and Liddell Hart, Clausewitz had failed to distinguish the moderating elements in his philosophy from inflammatory ideas such as absolute war and the importance of mass. Ordinary soldiers could not be expected to follow a text that was 'too metaphysical' and whose 'generalizations made more impression than his careful qualifications'. Not even generals could understand his subtle logic and 'philosophical jugglery'. To fully grasp On War required 'a mind already developed by years of study and reflection'; it simply 'befogged the plain soldier'. In a continent arming for war Clausewitz's ideas had simple been too dangerous."2082 In contrast to Liddell Hart's and Fuller's strenuous criticism of Clausewitz, Captain T.E. Lawrence (famously known as "Lawrence of Arabia") "was a great admirer of On War, finding it 'logical and fascinating', and considered Clausewitz the intellectual master of all writers on war. Lawrence shared his emphasis on the political and social context of military action." <sup>2083</sup> Clausewitz also asserted much influence in the Soviet Union, where "Lenin, who grasped the linkage between war and politics better than most, urged senior officers of the Red Army to study the Prussian general," and three themes in particular "struck a chord in communist ideology. First was Clausewitz's historicism, his belief that war reflected changing social and material conditions. Second was Clausewitz's rejection of war as a subject that would yield to scientific analysis. Struggle – whether in war or revolution – could not be reduced to mere technique. Third was Clausewitz's insistence that policy must control military action."2084 And though Stalin "later dismissed Clausewitz's ideas as relevant only to the 'hand-tool period of warfare' rather than the machine age, more serious thinkers in Russia argued for recognition of the progressive features in his work."2085

In his chapter on Clausewitz in his sweeping *A History of Military Thought*, Azar Gat writes of how "interest in Clausewitz, after an eclipse between the two World Wars (except in Germany), was revived in the 1950s, predominantly owing to the significance that his treatment of the relationship between policy and war and of limited war bore

<sup>2080.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 240.

<sup>2081.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 240.

<sup>2082.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 240.

<sup>2083.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 240.

<sup>2084.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 241-42.

<sup>2085.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 242.

on the political and military problems of the nuclear age. A 'Clausewitz renaissance' has developed in strategic and political literature, perhaps no less popularized and selective in nature than the attitudes to Clausewitz in the nineteenth century, though, ironically, with opposing emphases."2086 Gat writes that prior to 1827, Clausewitz's thinking greatly differed from his later thoughts on the nature of war: "The nature of war is fighting; hence all the characteristics of its 'lasting spirit': the primacy of the engagement and of the major battle, aided by a massive concentration of forces and aggressive conduct, and aiming at the total overthrow of the enemy. Throughout his life, this conception was the centre-piece of Clausewitz's military outlook. It reflected the overwhelming impact of the Napoleonic experience, was the source of Clausewitz's attacks on the war of manoeuvre in all periods and particularly in the eighteenth century, and formed the basis for his belief in a universal theory of war."2087 But then his ideas changed: "Ironically, in 1827, this whole military outlook fell into a deep crisis. In the middle of composing On War, Clausewitz's line of thought underwent a drastic change of direction, the only revolutionary transformation in the otherwise steady evolution of his ideas. In a note on the state of his work dated 10 July of that year, Clausewitz announced his intention to revise On War on the basis of two guiding ideas: firstly, that there are two types of war: all-out war and limited war; and secondly that war is the continuation of policy by other means." <sup>2088</sup> Continues Gat, "The crisis of his conception of the nature of war was equally destructive for Clausewitz's lifelong conception of theory. In his efforts to resolve this comprehensive crisis, he transformed but did not abandon his old military outlook, and resorted to completely new theoretical devices. He was occupied with this during his last three working years."2089 Gat adds with regret that "the origins and nature of Clausewitz's new theoretical framework have remained a mystery," as has been "the exact nature of the transformation in his thought."2090 And, Gat adds: "This explains why Clausewitz's ideas could be interpreted so differently by successive generations" and why "the men of the nineteenth century emphasized the place of the major battle and the element of destruction in Clausewitz's thought" while "modern readers, contending with the problem of limited war and seeking out the full complexity of the link between political and military activity, have stressed theme sin his later thought."2091

<sup>2086.</sup> Azar Gat, A History of Military Thought: From the Enlightenment to the Cold War (Oxford: Oxford University Press, 2001), 170.

<sup>2087.</sup> Gat, A History of Military Thought, 201.

<sup>2088.</sup> Gat, A History of Military Thought, 201.

<sup>2089.</sup> Gat, A History of Military Thought, 201.

<sup>2090.</sup> Gat, A History of Military Thought, 201.

<sup>2091.</sup> Gat, A History of Military Thought, 202.

Fueled in part by the rejection of "the military and political legacy of the German Reich, a new, 'good' Clausewitz has had to be created, set apart from his 'bad' successors."<sup>2092</sup> And, as suggested by Echevarria, Gat writes: "While blaming their discredited predecessors for being tendentious and one-sided, modern interpreters have therefore themselves failed to recognize that the imperative of destruction was the basis of Clausewitz's conception of war," and "some have even denied that he held such an idea at all."<sup>2093</sup> But for the "men of the nineteenth century, the heyday of the idea of all-out war, elevated Clausewitz to the pantheon of classics for his outlook on war described above. But for the present-day reader, after the collapse of the dogma of destruction in the First World War and the renaissance of limited war in the nuclear age, this outlook should have raised questions had its real nature not been obscured by Clausewitz's later development and the difficulties of interpreting it."<sup>2094</sup>

Not unlike Brodie whose embrace of deterrence was at heart prescriptive, Clausewitz also embedded prescription into his theorizing, quite contrary to the popular view. As Gat describes: "Much has been written to the effect that Clausewitz totally rejected prescriptive theory, and as we have seen, this interpretation does have roots in Clausewitz's conception of theory. However, this is only a partial understanding of his approach as a whole. He maintained that the theory of war was not prescriptive only in the sense that any doctrine derived from it would always be partial and require judgment in application. But he did believe that the true theory of war provided lessons which the genera; had to bear in mind. Theory was by no means divorced from praxis; on the contrary, it had to be translated into praxis. Now we have also seen what concrete ideas he had in mind: to aim for great objectives, to achieve the utmost concentration of force, to act as aggressively as possible in order to annihilate the enemy army in a major decisive battle, and to destroy the ability of the enemy state to resist. He believed that 'unnecessary' manoeuvres, preference for indirect military means, and evading decision in battle contradicted the spirit of war, were bound to lead to failure, and thus had to be avoided. These ideas are highly imperative; Clausewitz had no interest in empty truths."2095 While his prescriptions did not differ notably from those of his rival Jomini, and as Gat noted earlier, his earlier thinking in 1804 revealed "a strikingly similar conception to the one that Jomini developed that very same year but had not yet published,"2096 and would be "again fully revealed in Clausewitz's next comprehensive work, Principles of War for the Crown Prince (1812)."2097 Gat later identi-

<sup>2092.</sup> Gat, A History of Military Thought, 202.

<sup>2093.</sup> Gat, A History of Military Thought, 202.

<sup>2094.</sup> Gat, A History of Military Thought, 211.

<sup>2095.</sup> Gat, A History of Military Thought, 213.

<sup>2096.</sup> Gat, A History of Military Thought, 205.

<sup>2097.</sup> Gat, A History of Military Thought, 207.

fies a key differentiator: "In opposition to Jomini in particular, Clausewitz stressed the diversity of historical experience, and asserted that the theoretician must not elevate himself above the times by the force of standards of measurement which he regarded to be universal. Every period's particular form of warfare stemmed from its unique political, social, cultural, and personal conditions," or as Clausewitz himself put it, "Each period, therefore, would have held to its own theory of war." 2098

Gat writes that: "It was nevertheless Clausewitz's sensitivity to the diversity of historical experience that, in 1827, when most of On War was already drafted, led to the crisis in his outlook on war and conception of theory," and which first become evident in Book VI on defense. "This is no coincidence. Since the aim of defence is to preserve the status quo, the defender may choose to delay operations, withdraw, and avoid confrontation in the hope of wearing the enemy down. This may lead to what Clausewitz called a 'war of observation': a prolonged, indecisive struggle which lacks energy and involves almost no fighting. In truth, the attacker too, sometimes appears to 'ignore the strict logical necessity of pressing on to the goal.' This realization leads to a wider one: 'There is no denying that a great majority of wars and campaigns are more a state of observation than a struggle for life and death – a struggle, that is, in which at least one of the parties is determined to gain a decision. A theory based on this idea could be applied only to the wars of the nineteenth century."2099 Further, Gat cites Clausewitz, who realizes that: "To be of any practical use,' theory must take into account that, apart from 'the kind of war that is completely governed and saturated by the urge for a decision – of true war', there exists a second kind of war. Moreover, 'the history of war, in every age and country, shows not only that most campaigns are of this type, but that the majority is so overwhelming as to make all other campaigns seem more like exceptions to the rule'."2100 And so, as Gat observes, "Clausewitz's view of the nature of war as all-out fighting, centring on the engagement, fell into crisis," which precipitated the "celebrated transformation in his thought with which he was to struggle in the writing of Book VIII and revision of Book I of On War," as recalled by his note of 10 July 1827.<sup>2101</sup>

Gat further cites Clausewitz: "One might wonder whether there is any truth at all in our concept of the absolute character of war were it not for the fact that with our own eyes we have seen warfare achieve this state of absolute perfection. ... Are we then to take this as the standard, and judge all wars by it, however much they may diverge? ... But in that case, what are we to say about all the wars that have been fought since the days of Alexander ... We would be bound to say ... that our theory, though

<sup>2098.</sup> Gat, A History of Military Thought, 214.

<sup>2099.</sup> Gat, A History of Military Thought, 215.

<sup>2100.</sup> Gat, A History of Military Thought, 215.

<sup>2101.</sup> Gat, A History of Military Thought, 215.

strictly logical, would not apply to reality."<sup>2102</sup> As Gat describes, "This dilemma shatters Clausewitz's lifelong conception of theory," as Clausewitz came to realize that "theory conflicted with reality; the 'concept of war' did not withstand the 'test of experience'; the universal contradicted the historical; the unity of the phenomena of war, based on a 'lasting spirit' that encompassed the diversity of 'forms', disintegrated; and the practical imperatives derived from this 'spirit' – the significant content of theory – lost their validity."<sup>2103</sup> This leads to the emergence of Clausewitz's famous dictum, the interconnection of war and politics and what Cold War theorists would elevate to the primacy of policy (much against the interpretative wisdom of Echevarria who felt this disregarded Clausewitz's intended balance as encapsulated by his "wondrous trinity"); and, it leads Gat to Clausewitz's effort to resolve this contradiction between theory and reality, universality and history, with his new synthesis (and the cornerstone to the Cold War theorists' renewed interest in and sympathetic embrace of the famed Prussian.)

And so as Gat recounts, "The relationship between politics and war dominated Clausewitz's thought during his last years, generated a revision in his theory of war, and had attracted most of the attention in our time."2104 In his effort to resolve this contradiction between theory and reality, Gat turns to Aron, and writes that "the late development of Clausewitz's thought can only be understood within the context of his attempt to bridge the gulf in his theory of war by reconciling his old conceptions of the nature of war which he did not abandon, with his new awareness of the diversity of wars in reality. As largely noticed by Aron, the revision in Clausewitz's thought took shape in two main stages. Beginning at the end of Book VI and continuing in Book VIII, the last book of *On War*, it was further developed in Book I, the only one that Clausewitz succeeded in addressing in his plan to revise the whole of the work."2105 Gat notes, "At the end of Book VI Clausewitz realizes that the war of destruction is not the exclusive form of war, and that by ignoring that which does not conform to it, theory becomes cut off from historical reality. We have seen the devastating threat that this growing realization posed to his conception of the nature of war, which was dominated by the Napoleonic experience. What was now to become of this conception? Initially, Clausewitz was unprepared to abandon it. It was therefore necessary for him to devise an intellectual structure which would accommodate it together with his new ideas. He therefore recognizes the existence of two types of war, but claims that the war of destruction expresses the nature of war and thus takes priority; against half-hearted war, an all-out one would always gain the upper hand. A new concept now becomes necessary: 'the urge for decision' is true war, or absolute war

<sup>2102.</sup> Gat, A History of Military Thought, 216.

<sup>2103.</sup> Gat, A History of Military Thought, 216.

<sup>2104.</sup> Gat, A History of Military Thought, 217.

<sup>2105.</sup> Gat, A History of Military Thought, 220.

if we may call it that'. Limited wars are not a genuine form of war but the results of various factors which exercise counter-influences on the real, absolute nature of war and modify it." "2106 Gat notes "In Book VIII, Clausewitz examines the problem extensively and compromises with the same solution," and "since theory cannot ignore reality, one must leave 'room for every sort of extraneous matter. We must allow for natural inertia, for all the friction of its parts, for all the inconsistency, imprecision, and timidity of man; and finally we must face the fact that war and its forms result from ideas, emotions, and conditions prevailing at the time ... Theory must concede all this; but it has the duty to give priority to the absolute form of war'."2107 As Gat writes, "All these factors, interior and exterior, are alien to the nature of war, but limit its intensity in practice. Limited wars, which include most of the wars in history, are therefore the result."2108 Continues Gat: "Hence the relationship between war and politics, which encompasses most of the exterior factors," since in "most cases, war is not the dominant activity in the life of nations. A variety of other values, goals, and considerations guide nations and prevent a maximization of the conduct of war."2109 And so in Book VIII, on War Plans, Gat notes Clausewitz "expounds upon the full implications of his new ideas, asserting that the scale, character, and objectives of the military operations result largely from an interplay with ther scope and nature of the political aims. The explication of this point in particular was an original contribution of Clausewitz, to be further developed only with the modern study of international relations. The influence of the political aim on the objective of operations, he wrote, 'will set its [the war's] course, prescribe the scale of means and effort which is required, and make its influence felt throughout down to the smallest operational detail."2110 This ultimately leads to Clausewitz's "celebrated chapter entitled 'War Is an Instrument of Policy'."2111

Gat writes that this chapter "marked a further shift" in Clausewitz's thinking and his effort to close the gap between theory and reality: "If the understanding of war was dominated by its political function, the primacy given to absolute war lost much of its point. In the dilemma between his lifelong view of war on the one hand, and the diversity of political aims and military operations in historical reality on the other, Clausewitz was moving a further step towards the latter," even though "he did not altogether abandon the core of his old conception. ... This was the basis for the amended compromise of Book I, which Clausewitz revised, as he had planned in July 1827, after

<sup>2106.</sup> Gat, A History of Military Thought, 221.

<sup>2107.</sup> Gat, A History of Military Thought, 221.

<sup>2108.</sup> Gat, A History of Military Thought, 222.

<sup>2109.</sup> Gat, A History of Military Thought, 222.

<sup>2110.</sup> Gat, A History of Military Thought, 222.

<sup>2111.</sup> Gat, A History of Military Thought, 223.

he completed Book VIII, the last book of *On War*."<sup>2112</sup> Here Clausewitz recognizes that "Napoleonic warfare is no longer perceived as the only correct form of war. Violence in war is now presented in connection with tendencies towards escalation which are inherent in the interplay between the belligerents' aims and efforts."<sup>2113</sup> By the time Clausewitz revises Book I, he "elaborates the argument put forward in Book VIII ... with one significant change; the lulls in military activity are no longer seen in a negative light, and the factors which explain them no longer include man's imperfection and timidity. War is not discharged in a single explosion due to the activity of various factors within war which are summarized for the most part by the concept of friction, and owing to influences, mainly political, which are exterior to war. ... Politics thus places itself above war and modifies it to suit its needs."<sup>2114</sup>

Gat later writes that, "In the famous chapter 'War Is an Instrument of Policy', Clausewitz finally resolves the contradiction in his mind between war as the all-out use of force and the varying degrees of limited war revealed in historical experience, without relinquishing either of these ideas. War as a political and multi-faceted phenomenon is the unity that fuses the pure nature of war, which constitutes merely a partial understanding of reality, with the political conditions and requirements: 'Up to now, we have considered the difference that distinguishes the nature of war from every other human interest, individual or social .... Now we must seek out the unity into which these contradictory elements combine in real life, which they do by partly neutralizing one another ... Being incomplete and self-contradictory it [war] cannot follow its own laws, but has to be treated as part of some other whole; the name of which is policy ... Thus the contradictions in which war involves ... man, are resolved."2115 As Gat writes, "The unity of the phenomenon of war ... is salvaged. The 'primordial violence, hatred, and enmity' of the nature of war are directed by the 'commander's creative spirit' through the 'play of chance and probability' to achieve the political aim. This is the 'remarkable trinity' which is presented by Clausewitz at the end of the first chapter of Book I."2116 And so, a "new intellectual tool assisted him in devising what he regarded as an adequate solution to the crisis into which his universal theory of war had fallen in 1827."2117 We thus come full circle, to the primacy of policy, and the effects of friction, on war. It is the former that would dominate Brodie's thinking about war in the nuclear age and upon which he would pin his hopes for man's salvation, and the latter which would come to define one of

<sup>2112.</sup> Gat, A History of Military Thought, 225.

<sup>2113.</sup> Gat, A History of Military Thought, 225.

<sup>2114.</sup> Gat, A History of Military Thought, 226.

<sup>2115.</sup> Gat, A History of Military Thought, 237.

<sup>2116.</sup> Gat, A History of Military Thought, 238.

<sup>2117.</sup> Gat, A History of Military Thought, 238.

the most common complaints about Brodie's reasoning: that deterrence, to succeed, would have to in essence operate in a friction-free manner, as there was no room for error or miscalculation. Later critics would point to the broader balance of the trinity, and criticize Brodie and his generation for focusing on the primacy of policy; but ultimately, it was the primacy of policy that brought Brodie and his colleagues to Clausewitz's doorstep and motivated them as they devoted considerable time and effort to launch what would become a renaissance in Clausewitz studies, one result of which would be the emergence a generation later of critics of Brodie and the first generation for the one-dimensionality of their analysis.

Gat looks to Clausewitz's rediscovery after World War II, writing: "National selfexamination after the Second World War led the German historians to Clausewitz, whose conception of the relationship between political leadership and military command could be integrated into the new liberal-democratic model. This conception, divorced from its actual historical and intellectual context, and sharply contrasted with the legacy of the Second Reich, became one of the major reasons for Clausewitz's revival. In the United States, the complex problems of controlling the military machinery in a superpower democracy led to a similar trend. [97] A certain compatibility in viewing the relationship between political leadership and military command was thus responsible for the fact that the conceptions of a Prussian thinker, whose political thought centred on adapting the tradition of Prussian etatisme to the conditions of nationalist post-Revolutionary Europe, were enlisted to serve the political and ideological code of the liberal Western democracies."2118 Curiously, Clausewitz's own behavior early on was at odds with his later view that subordinated war to politics: "Yet, Clausewitz's own life story not only sets this conception into its historical context but also places it in an ironic light. Throughout the great events of his period, the struggle for independence against Napoleon and the reform of the Prussian state, Clausewitz, the military man, bitterly opposed the political aims and even the declared policy of his king. He and his fellow reformers in the army, who comprised a 'purely military body', took part not merely in discussions on the adjustment of aims and means, but in formidable power struggle within the Prussian leadership, which stemmed from conflicting class interests and contending social and political visions, and which centred on no less than the reshaping of Prussia's social structure and foreign policy. At a time of crisis, Clausewitz left for Russia to fight Napoleon, acting against government policy and his king's orders. The fundamental controversies in reality encompassed a much wider scope than could be resolved by raisons d'etat, and cut across institutional lines of political leadership and military command. This irony has escaped those who today have raised

<sup>2118.</sup> Gat, A History of Military Thought, 251-52. In note 97 (above, after the word 'trend), Gat adds: "The most notable example for the renaissance of Clausewitz's ideas in this context is Bernard Brodie's War and Politics (New York, 1973).

to prominence Clausewitz's conception of the relationship between political leadership and military command. They have in mind the controversies between Bismark and Moltke, and Truman and MacArthur, where a rejection of the particular positions held by the military command was happily in union with our contemporary political outlook that postulates the supremacy of the political leadership."<sup>2119</sup>

Gat notes one advantage enjoyed by the current generation of Clausewitz scholars that the first generation largely lacked. "We now have the advantage of possessing a sequence of Clausewitz's early works which provide an almost continuous picture of the development of his thought from 1804. Equally helpful is the fact that Clausewitz did not live to finish the revision of *On War*, and that the book we possess is therefore a draft that provides a history of the course of the work, almost linearly documenting the development of his thought, the problems he encountered, and his attempts to resolve them. Yet, the objective difficulties of the subject and biased approaches to it have reinforced each other in obscuring the nature and development of Clausewitz's idea." <sup>2120</sup>

## Looking Beyond the 'Primacy of Policy' to the 'Wondrous Trinity'

There has been some scholarly criticism in recent years of the first wave of post-World War II Clausewitz scholars and their tendency to overlook some of the more complex and contradictory dimensions of Clausewitz's *On War* that are currently in vogue, and instead focus on one or two major (and often simple) themes, the most popular being Clausewitz's famous dictum, that "war is a continuation of policy by other means," with some other Clausewitzian themes being friction, center of gravity, and escalation. Such a critique has been leveled by some against Brodie's work, though generally not without an appreciation of, and recognition for, his pioneering efforts to stimulate a "Clausewitz renaissance" in America.

Brodie, as part of the first wave of post-World War II Clausewitz scholars in America, can be viewed to be dated, and but to a large degree his emphasis of what Antulio J. Echevarria II has described as the "primacy of policy" can be attributed to the intense strategic challenges of the early nuclear age, when re-asserting the primacy of policy was considered by many to be a one of the most essential imperatives of the era, as well as to the fact that Brodie and his colleagues were to a large degree pioneers in the newly emergent field in the American academy of Clausewitz studies. As Echevarria describes: "Since the beginning of the Cold War, historians and political scientists in the United States and elsewhere have given considerable privilege to Clausewitz's

<sup>2119.</sup> Gat, A History of Military Thought, 250-251.

<sup>2120.</sup> Gat, A History of Military Thought, 229.

expression that war is the 'mere continuation of policy (*Politik*) by other means," and "Michael Howard, one of the translators of the 1976 edition of *On War*, referred to it as 'Clausewitz's famous dictum," while the "eminent American scholar and strategic logician, Bernard Brodie, called it the Prussian theorist's 'great dictum," while Raymond Aron "labeled it 'Clausewitz's famous formula." 2121

Echevarria concedes that "several statements in *On War* seem to support the idea that the primacy of policy constitutes the core of Clausewitz's thinking. ... Taken together, these and similar statements in On War were interpreted by Cold War scholars to mean that the central principle in Clausewitz's thinking was the primacy of policy."2122 But as Echevarria argues, "that interpretation does not fully account for the more balanced relationship Clausewitz described in his much discussed trinity of hostility, chance, and purpose. Nor does it adequately address the political determinism Clausewitz succumbed to in book VIII, as he attempted to reconcile the apparent conflicting tendencies he observed in war's nature."2123 Echevarria traces the "roots of the Cold War emphasis on the primacy of policy ... at least to Brodie, who in 1946, edited a short volume entitles *The Absolute Weapon*" in which he "essentially argued that the advent of atomic weapons required a revolution in the way people thought about war," and his belief that from that point forward "the purpose of military establishments" must no longer be "to win wars" but instead "to avert them," an argument that "quickly gained currency among defense intellectuals." <sup>2124</sup> Echevarria writes that: "It was thus but a small step to move from the 'absolute weapon' to 'absolute war," and "[f]or Brodie, the essence of this move was 'the decline in rational control of war situations by those responsible for state policy.' While Clausewitz pointed primarily to social and political changes wrought by the French Revolution as the reasons for a decline, Brodie insisted that the 'great increase in the volume and power of the means of fighting also had much to do with it.' Quoting directly from Clausewitz, he stated: 'the means available - the efforts that might be called forth - had no longer any definable limits; the energy with which the war itself could be conducted had no longer any counterpoise, and consequently the danger for the adversary had risen to the extreme.' A war without definable limits, a war of extremes, seemed to fit the definition of absolute war."2125

<sup>2121.</sup> Antulio J. Echevarria II, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," in Andreas Herberg-Rothe, Jan Willem Honig and Daniel Moran, eds., *Clausewitz, the State and War* (Stuttgart: Franz Steiner Verlag, 2011). 129

<sup>2122.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 130.

<sup>2123.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 130.

<sup>2124.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 130.

<sup>2125.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 131.

Brodie was not alone in emphasizing the primacy of policy; Echevarria noted that "Robert Osgood, perhaps the leading American theorist of limited war during the period, made extensive use of certain parts of *On War* to build a case for the primacy of policy,"2126 adding that Osgood's limited war theory "was stimulated by two considerations, the first being what he understood to be Clausewitz's principle that armed force must serve national policy, and the second being the general imperative to contain military violence in the nuclear age."2127 As well, Raymond Aron also "displayed this same tendency, emphasizing the need to subordinate 'war to policy as a means to an end," and he "used the concept of 'absolute war' as a negative, to warn that all 'real wars' could approach it, if 'violence escapes the control of the chief of state." 2128 Echevarria writes that "[w]hile in the opening chapter of *On War* it might appear that Clausewitz is arguing that war tends to escalate out of control, this is not his argument. Nor is he maintaining that war should only be waged with maximum aim and effort. Instead, Clausewitz's point is that a war's escalation is rooted in uncertainty, which is best described by the laws of probability, and not by anything intrinsic to war itself. There is no law or imperative intrinsic to war's nature that would necessarily cause it to escalate. Real war, as history shows, can either wind down or escalate."2129 But Echevarria adds that a "number of nuclear strategists who purported to understand the pitfalls of escalation made the same error" and "took Clausewitz's concept of absolute war as an ideal, believing that his basic argument was that all wars tend to escalate toward the extreme seemingly represented by this ideal," and as such "the correlation between Brodie's 'absolute weapon' and Clausewitz's 'absolute war' was obvious and unproblematic for many military strategists and academics," when Echevarria believes "Clausewitz's point actually was that absolute war was *not* an ideal in that sense, but rather an absurdity, an impossibility, and, in fact, all but inconceivable. It is war stripped of all realities, and thus can neither be achieved nor approached. The term absolute war has, over the decades, taken on a life of its own, or rather many lives, quite independent of Clausewitz's final formulation," which is of concern to Echevarria "to the extent that absolute war was so readily, and so inappropriately, equated to nuclear war in the minds of political theorists."2130

Citing Brodie's guide to reading *On War*, which many now view to be dated, Echevarria credits Brodie for explaining that "the idea that policy was supreme was itself likely to be misunderstood, if not rejected outright," and that it "suffers this fate

<sup>2126.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 131.

<sup>2127.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 132.

<sup>2128.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 132.

<sup>2129.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 133.

<sup>2130.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 133.

<sup>2131.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 133.

for a number of reasons, one being that war does arouse passions, usually very strong ones, and another being that generals like to win decisively whatever contests they are engaged in, and do not like to be trammeled by a political authority imposing considerations that might modify that aim."<sup>2132</sup> And yet, Echevarria notes, "the idea of the primacy of policy became almost fundamental for American political theorists of the Cold War era," and it became so pervasive an ideas that some adherents, like Thomas Schelling, "used it without necessarily referring to Clausewitz."<sup>2133</sup> Echevarria suggests that "concluding that the primacy of policy was the key ingredient in Clausewitz's theory was an obvious and justifiable observation for Cold War thinkers to make," since "the primacy of policy actually equated to firm and unrestrained control over the use of violence," and the "one constant they recognized in any 'rational' policy was that the level of violence must be restricted so as to avoid risk of escalation, even if by so doing the original objective could not be achieved," owing to the gravity of the dangers posed by nuclear weapons.<sup>2134</sup>

Echevarria finds that the "idea of the primacy of policy is still reflected in much of modern American literature on war, including the memoirs of prominent US military commanders, and was reinforced by the post-Vietnam renaissance of Clausewitz in military and scholars publications, though its source has become somewhat obscured."2135 But Echevarria nonetheless believes that "to represent Clausewitz in this way is ultimately as misleading as depicting him as the 'Mahdi of Mass' or the 'apostle of total war,' as Liddell Hart and others have done. Both interpretations, in fact, destroy the balanced theory Clausewitz tried to construct. At first blush, the distortion produced by Brodie and others seems merely to correct the view of Clausewitz as an advocate of absolute war. Yet a closer examination reveals that this correction goes too far" and "willfully overlooks the basic premise and logical flaw in Clausewitz's argument, as well as the limits he placed on policy," though Echevarria recognizes (if not fully appreciating) that this "overcorrection was shaped in no small war by the presentist concerns of historians and political and social scientists writing under the shadow of the Cold War," where "apprehensions regarding the threat of a devastating nuclear exchange ... induced scholars to stress the role of policy in limiting war. From there it was but a small step to Osgood's concept of limited war. ... Clausewitz's many statements regarding the relationship between war and policy provided welcome support for this view," and provided a welcome "counterweight to such dangerous claims as General Douglas MacArthur's of-repeated assertion that in war there is 'no substitute for victory.' Such claims seemed to pervade the military

<sup>2132.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 134.

<sup>2133.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 134.

<sup>2134.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 134.

<sup>2135.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 134-35.

mind. If left unchecked under the strategic circumstances of the Cold War, they could well lead to catastrophic escalation."<sup>2136</sup>

Echevarria seems harsh in his equation of the primacy of policy to the earlier view of Clausewitz as an apostle of total war; the latter is certainly untrue while the former is not only partly true, for many scholars of Clausewitz, especially the first wave of post-World War II strategic theorists like Brodie, Paret and Howard who grappled with the new challenges of a nuclear world (for the first time in human history), and who were rightly concerned about the risks, particularly in light of the devastation of World War II which was fought, until its final few days, conventionally. That they emphasized the primacy of policy as Brodie did is not, in my view, an overcorrection; it was a necessary correction, enabling scholars and soldiers alike to embrace Clausewitz and not reject as Liddell Hart and his disciples did. Echevarria seems to comprehend this, occasionally showing sympathy to the context. But in the end, he finds the emphasis by Brodie and many others of his generation of the primacy of policy to be unbalanced, and to disregard the other pillars that balance Clausewitz's trinity. Interestingly, such a view was shared by Michael Howard, co-translator of the 1976 Princeton edition of On War, who took aim at Brodie's rival Herman Kahn among others (dubbed by Anatol Rapoport the "neo-Clausewitzians") "for ignoring 'all three elements in the Clausewitzian trinity: popular passion, the risks and uncertainties of the military environment, and the political purpose for which the war was fought."2137

It's not just the neglect of the other elements of what Colin Powell would describe as the "triad" that defined Clausewitz's trinity that concerns Echevarria. He is also concerned by the neglect of Clausewitz's own "significant limits regarding the extent to which policy should influence military operations," though Echevarria again recognizes "these limits are somewhat overshadowed by the number of times his revelation concerning the importance of politics is repeated." Echevarria adds that "Clausewitz does indeed provide a number of significant caveats regarding political control over the use of force," which in "most cases ... refer both directly and indirectly to the nature of war," which Echevarria earlier notes is defined by Clausewitz "explicitly" as "a dynamic activity that involves opposing wills, each reacting to or attempting to preempt the other." This dynamic nature is key to Echevarria, who explains that since "war involves living forces rather than static elements, it can change quickly and significantly in ways the logic of policy may not expect." Echevarria further explains that: "Accordingly, when Clausewitz wrote that policy should not ask war to

<sup>2136.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 135.

<sup>2137.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 137

<sup>2138.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 139

<sup>2139.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 144

<sup>2140.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 146

accomplish something against its nature, he spoke volumes," and this "becomes clearer when we examine his 'wondrous' (*wunderliche*) Trinity" that "consists of three dynamic forces: a subordinating or guiding influence, the play of chance and probability, and the force of basic hostility," and "these three tendencies manifest themselves, more or less, through three institutions surveyed in Book VIII" of *On War*: "the government, which attempts to subordinate war for some purpose; military institutions, which must deal with the violence, chance, and unpredictability of combat; and the populace, through which the force of basic hostility is expressed," though "the divisions between government, military, and people are artificial" in that "[g]overnments can display hostility as much as militaries or peoples, if not more." Echevarria surmises that Clausewitz's use of the term "Trinity" may well have been "deliberate" in that "it conveys the sense that the three forces intrinsic to war are separate, yet part of an indivisible whole." <sup>2142</sup>

According to Echevarria, the "three institutions" that embody the Trinity "have assumed various forms over time and among different cultures,"2143 which explains how war itself could be unchanging even back before the modern state itself had evolved, and how in the future, wars would be fought in largely stateless vacuums by tribes and other non-state entities and still be subject to the same intrinsic forces. Echevarria explains that: "These forces, in fact, come into play in every war, though the role of one is sometimes more pronounced or influential than the others. The Trinity thus tells us that no tendency is a priori more influential in determining the shape and course of war than any other. Thus, to single out policy or politics as the central element of war's nature is to distort the intrinsic balance of the Trinity, and ultimately to compromise is dynamism." <sup>2144</sup> Echevarria thus concludes that "Clausewitz's wondrous Trinity thus negates the notion of the primacy of policy," which is "just as important as chance and hostility,"2145 but to Echevarria, not fundamentally or universally more so – though Clausewitz's own recognition of the changing balance in the influence of the three pillars of the trinity suggests that policy can be a primary influence, much as Brodie and his colleagues hoped it would be throughout the dangerous nuclear stand-off that defined the Cold War. Thus Echevarria's primary criticism of Brodie and his colleagues appears to collapse upon a closer reading of Clausewitz; Brodie may not have necessarily argued that policy was or must always achieve primacy; just that during the nuclear age, as he crafted his strategy of deterrence and helped shape its evolution, he *prescribed* its primacy. Again during the Vietnam War, he found war

<sup>2141.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 146.

<sup>2142.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 146.

<sup>2143.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 147.

<sup>2144.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 147.

<sup>2145.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 148.

and policy to again diverge, dangerously so – one more reminder for the necessity in the nuclear world to strive to ensure the primacy of policy, even if this would not always be the case, as Echevarria would find to be true in the post-Cold War world, a world largely unforeseen by Brodie before his death in 1978 when the Cold War was at its peak.

And so Echevarria argues, "Only when viewed historically... would we be able to determine how influential each of those forces was on the actual course of events."2146 Looking back on the Cold War, and its unique dangers, we can now see with clarity that policy achieved the primacy so desperately sought by Brodie and his colleagues; so while Echevarria criticizes them for their overcorrection to earlier images of Clausewitz as an apostle of total war, he also seems to appreciate how central the goal of prescription was to their theoretical work, bridging the world of political and military action with the aspiration to influence doctrine, and to shape the very policy they hoped would achieve a decisive primacy. As Echevarria put it, "as a reconstruction of his wondrous Trinity has shown, a theory of war would have to remain suspended above the dynamic forces of purpose, chance, and hostility. In other words, a theory that insists on the primacy of policy is ultimately one-dimensional, and thus not suitable in Clausewitz's eye," or perhaps one should qualify, universally suitable. 2147 But Echevarria adds, "All this is not to say that the United States should not insist on the primacy of policy whenever it conducts its wars, or that it should refrain from requiring strict civilian control over the military in order to preserve its core democratic values. It is only to say that Clausewitz finally settled on a different approach."2148 Brodie did precisely that, emphasizing the primacy of policy as the one glimmer of hope in an otherwise perilous nuclear world, one chance for reason to outshine chance or hostility, and ensure our survival. But because of this emphasis on primacy at the exclusion of other elements of Clausewitz's complex thinking, elements now more in vogue, Brodie and his generation of Clausewitz theorists appear to be somewhat dated, and as Echevarria describes, uni-dimensional.

Echevarria revisits these issues in his book on Clausewitz, *Clausewitz and Contemporary War*, where Brodie again has a substantial presence, particularly in its section revisiting "The Primacy of Policy." Here, he writes that: "Readers will find a number of statements in *On War* which lend credence to the belief that the primacy of policy became the core of Clausewitz's thinking," and thus "since 'the conduct of war in its major aspects is thus policy itself, which takes up the sword in place of the pen', the subordination of the 'military point of view to the political one' is the only relation-

<sup>2146.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 148.

<sup>2147.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 148.

<sup>2148.</sup> Echevarria, "The Cold War Clausewitz: Reconsidering the Primacy of Policy in On War," 148.

ship that makes sense."2149 But adds Echevarria: "Aside from a few exceptions, such statements seem to have made little impression on theorists and practitioners through the first half of the twentieth century," a situation that would change dramatically as a result of "the experience of two devastating world wars, and threat of runaway escalation during the Cold War."2150 He thus noted Robert Osgood, "perhaps the leading American theorist of limited war between the 1950s and the 1970s, made extensive use of certain parts of *On War* to build a case for the primacy of politics as a basis for his theory."2151 And, Echevarria adds, "Other American political theorists of the Cold War era, such as Thomas Schelling, adopted the idea of the primacy of politics without necessarily referring to Clausewitz," though Brodie, much like Osgood, explicitly embedded his theories within a Clausewitzian framework.<sup>2152</sup> But Brodie did question the military's willingness to surrender to political supremacy during war time. Writes Echevarria: "As Brodie later explained, the idea that policy was supreme was itself likely to be misunderstood, if not rejected outright: 'It suffers this fate for a number of reasons, one being that war does arouse passions, usually very strong ones, and another being that generals like to win decisively whatever contests they are engaged in, and do not like to be trammeled by a political authority imposing considerations that might modify that aim."2153

Echevarria further writes that "Brodie and other scholars of his generation, in short, overemphasized the significance of the primacy of policy in the Prussian's theories, though they did so with good intentions. For instance, in considering such expressions as, 'policy will permeate all military operations and, in so far as their violent nature will admit, it will have a continuous influence on them', these scholars stressed the first part of the statement, namely, that policy will pervade military operations, while downplaying the important qualification – 'in so far as their violent nature will admit'." But, continues Echevarria: "Good intentions notwithstanding, representing Clausewitz in this way is ultimately as misleading as depicting him as the 'Mahdi of Mass' or the 'apostle of total war', as Liddell Hart and others did decades earlier. Both interpretations, in effect, destroy the balanced theory, and body of knowledge, Clausewitz sought to construct. As we saw in the previous chapter, his theory settled on a tripartite explication of war. At first blush, this distortion produced by Brodie and others seems merely to correct the erroneous view that Clausewitz was an advocate of absolute war. Yet a closer examination reveals that this correction, in effect,

<sup>2149.</sup> Antulio J. Echevarria II, Clausewitz and Contemporary War (Oxford: Oxford University Press, 2007), 85.

<sup>2150.</sup> Echevarria, Clausewitz and Contemporary War, 85-86.

<sup>2151.</sup> Echevarria, Clausewitz and Contemporary War, 86.

<sup>2152.</sup> Echevarria, Clausewitz and Contemporary War, 86.

<sup>2153.</sup> Echevarria, Clausewitz and Contemporary War, 86.

<sup>2154.</sup> Echevarria, Clausewitz and Contemporary War, 86.

goes too far; it willfully overlooks the basic premise of Clausewitz's argument, as well as the limits he placed on policy. This overcorrection was shaped in no small way by the presentist concerns of historians and political and social scientists writing after the ruinous world wars of the twentieth century, and under the threatening shadow of the Cold War."<sup>2155</sup>

Indeed, Echevarria adds that "apprehensions regarding the threat of a devastating nuclear exchange or of a major military escalation in a conventional sense between the two powerful alliances – perhaps the most powerful the world had seen to that point - induced scholars to stress the role of policy in limited war." <sup>2156</sup> This was certainly the case for Brodie. Echevarria is sympathetic to the risks and dangers of the nuclear world, and why theorists of war in the nuclear era came to overemphasize the supremacy of policy, but he feels it fundamentally overstates one pillar of the tri-partite trinity. As he puts it in his discussion of "Policy Versus the Trinity," Echevarria writes that "the wondrous trinity tells us that no tendency is a priori more influential in determining the shape and course of war than any other. Thus to single out policy or politics as the central element of war's nature is to distort the intrinsic balance of the trinity, and ultimately to compromise its dynamism."<sup>2157</sup> Echevarria further writes: "Clausewitz's wondrous trinity, thus, negates the notion of the primacy of policy; it renders policy as purpose, and holds it a priori just as important as chance and hostility."2158 For Clausewitz, "a theory of war would have to remain suspended above the dynamic forces of purpose, chance, and hostility," and thus "a theory that insisted on the primacy of policy was ultimately one-dimensional, and thus unrealistic in Clausewitz's eyes."2159

Echevarria dramatically starts his book off by first noting how Brodie, "the renowned American scholar of strategic thinking, once claimed that *On War*'s ideas, 'though densely packed in, are generally simple and are for the most part clearly expressed in jargon-free language."<sup>2160</sup> But Echevarria quickly counterattacks, writing: "Perhaps no other statement regarding Carl von Clausewitz's work has been so completely misleading. Understanding *On War* is a difficult and at times genuinely frustrating task. Most of its ideas are not simple, but complex: like a finely woven cloth, the significance of each thought depends on its relation to the others."<sup>2161</sup> Echevarria's blistering assault on Brodie continues: "At times the overall pattern is ambiguous,

<sup>2155.</sup> Echevarria, Clausewitz and Contemporary War, 86-87.

<sup>2156.</sup> Echevarria, Clausewitz and Contemporary War, 87.

<sup>2157.</sup> Echevarria, Clausewitz and Contemporary War, 94.

<sup>2158.</sup> Echevarria, Clausewitz and Contemporary War, 95.

<sup>2159.</sup> Echevarria, Clausewitz and Contemporary War, 96.

<sup>2160.</sup> Echevarria, *Clausewitz and Contemporary War*, 1, n2, citing Brodie's "Continuing Relevance of War," 45, in the 1976 translation of *On War* on which Brodie worked collaboratively with Howard and Paret for many years.

<sup>2161.</sup> Echevarria, Clausewitz and Contemporary War, 1.

indicating that Clausewitz himself was not always sure where he stood. At other times, the pattern changes, sometimes abruptly and at others more subtly, leaving readers with conflicting impressions. The language he used to develop his thoughts, moreover, is at times sewn together with an outmoded philosophical jargon, all but impenetrable to modern readers. However, that jargon, like his frequent use of metaphor, serves important purposes, for he considered the form of an expression as essential as the content. Overlooking form for substance thus runs the risk of misinterpreting *On War* altogether. In short, taking Clausewitz's ideas to be simple and jargon-free is a sure step toward misunderstanding them." <sup>2162</sup> Brodie's belief in the ultimate accessibility of Clausewitz, and inherent elegance of his thought, has been noted by Azar Gat as well; Gat, who describes Brodie as "one of the chief contributors to the 'Clausewitz renaissance'," recalls in a footnote how, when responding to the complaint from Hubert Camon that Clausewitz was the "most German of Germans ... In reading him one constantly has the feeling of being in a metaphysical fog," that Brodie "dismissed this complaint with the words: 'This is simply nonsense'." <sup>2163</sup>

One cannot help, after having explored Brodie's decades-long commitment to Clausewitz scholarship, his long and largely under-appreciated contribution to the decade-long Clausewitz Project and its best known published product, the widely read 1976 "Princeton translation" of Clausewitz's On War, his untiring promotion of Clausewitz studies, and his lifelong effort to reconcile Clausewitz's theories with the new challenges of the nuclear age, but to find this immediate assault on Brodie at the outset of Echevarria's otherwise thoughtful book, to quite misrepresent the breadth, subtlety, and depth of Brodie's comprehension of Clausewitz. Brodie's introductory and concluding essays to the Princeton translation of *On War* were meant not to be the final word on Clausewitz's legacy but instead to serve as both an introductory welcome to new students of Clausewitz, and to encourage, not discourage, one's entry into the world of Clausewitzian theory, akin to the reassurance of a teacher to a first-year student, and not the combative words of a young scholar engaging in a sneak attack on an important but now deceased scholar who was no longer around to defend himself. The record, as presented in the pages above, show that Brodie's views on Clausewitz were much more nuanced than this singular, and seemingly decontextualized, quotation selected by Echevarria to start his book with a bold but quite unfair bang.

One might expect given this prominence on page one of his book that Brodie would perhaps be a central part of his story, but Brodie is mentioned only re-enters the scene as one of several Cold War scholars that Echevarria, more sympathetically than one would expect from his first page assault, describes as over-emphasizing "policy" at the

<sup>2162.</sup> Echevarria, Clausewitz and Contemporary War, 1.

<sup>2163.</sup> Gat, A History of Military Thought, 229, n33, citing page 18 of Brodie's guide to reading On War.

expense of other equally important components of Clausewitz's "wondrous trinity," reiterating his argument as put forth in his chapter in Clausewitz, the State and War. That Brodie appears on only a handful of pages, and is not as central to the plot as one might therefore expect, suggests that Echevarria's initial assault on Brodie is without context, and perhaps inappropriate in its overstatement. In the index, Brodie appears only three times, the second (on page 8) being a footnote associated with his first appearance on page one as discussed above. But after noting how difficult and complex Clausewitz can be, Echevarria steps back somewhat and adds: "This is not to say that Clausewitz's masterwork is too difficult to grasp: it is not. However, Brodie's miscues underscore the need for an approach that offers readers an introductory knowledge of On War's form, it purpose, and methodology. As Clausewitz himself warned, unless one's observations are rendered in proper form, readers may understand the individual concepts, 'but the overall thought will remain incomprehensible'. To be sure, several efforts to guide readers through On War's concepts already exist. However, none of them explains the book's form adequately. Brodie's own guide, which has the advantage of accompanying the justly celebrated English translation of *On War* by Sir Michael Howard and Peter Paret, is a chapter-by-chapter analysis all but bereft of any consideration for the form in which the ideas appear."<sup>2164</sup> This, of course, is the very purpose behind Echevarria's work; so perhaps it is fortuitous for him that Brodie's efforts a generation earlier had proved so disappointing to Echevarria.

But it remains important to recall that Brodie, a celebrated theorist of war, was one of the first of his generation to call for a renaissance in Clausewitz studies, and worked harder than most to ensure future generations would have a solid platform to begin their studies of the famed Prussian. For a long time, it was Clausewitz's contemporary and in many ways rival Jomini that dominated strategic studies. When Brodie and his colleagues made their bid to restore Clausewitz to his rightful spot at the center of the study of war, they were doing a great service to future generations of scholars who might otherwise be debating Jomini's focus on decisive points and the geometry of interior and exterior operations today. It is fair to critique Brodie's effort, and to note that it is dated with the passage of time and the profound transformations in world politics, notably the Cold War's end. And, it is fair to note Brodie's seeming disinterest in Clausewitz's "trinity" and his efforts to both simplify and clarify, and neither to embrace nor to surrender to complexity as scholars of our time tend to do. And, it is fair to suggest as Echevarria does that Brodie's over-emphasis of Clausewitz's dictum that "war is a continuation of policy by other means" which subordinates war to policy came at the cost of de-emphasizing the rest of his "wondrous trinity." But this was not necessarily a failure by either Brodie or his peers. As Echevarria himself

<sup>2164.</sup> Echevarria, Clausewitz and Contemporary War, 1-2.

later notes, the scholars of the nuclear age faced enormous risks and dangers, and one can hardly blame them for their effort to subordinate war to policy, especially after the serial calamities of World War I and World War II. Brodie and his peers were literally trying to save humanity from extinction. The pressures of their time were this heavy. It was not necessarily a safe time for complexity theory, which is better suited to our current era of asymmetric and considerably less lethal warfare, where we no longer face an existential threat of such an enormously destructive magnitude as was faced by Brodie and his peers, often with great courage as well as originality of thought.

Our broad look at Brodie's enduring interest in, interpretation of, and inspiration by Clausewitz as made in the pages above shows that Brodie's approach to the Prussian was in fact less uni-dimensional than Echevarria and others suggest. True, his language is naturally dated by his historical context, and his conceptual vocabulary does emphasize simpler concepts such as the primacy of politics rather than more complex elements such as Clausewitz's trinity (and when discussing the trinity, he does not employ a more contemporary language infused by complexity theory or non-linearity, since these disciplines had not yet been fully developed) But he does approach Clausewitz with great breadth and insight, borrowing concepts from disciplines as varied as psychology, history, and strategy. Thus this primary critique may instead be understood as something of a cross-disciplinary misperception, akin to a political scientist criticizing an historian for being too historical, or a philosopher for dwelling too much on philosophy and not enough on more social-scientific methods.

A more nuanced presentation of Brodie's understanding of Clausewitz is made by Beatrice Heuser in *Reading Clausewitz*, which among the more recent contributions to the Clausewitz literature is less reflexively critical of Brodie and more appreciative of his full breadth of effort in all their detail and presents one of the most in-depth descriptions of the role played by Brodie in the renewal of interest in Clausewitz studies by post-World War II scholars. She also identifies two distinct currents in Clausewitz's thought that describes as the "two Clausewitz's," one an idealist and the other a realist, the former evident in his earlier writings prior to 1827 and the latter emerging in his final four years of life. As Heuser describes, Heuser writes: "Even after hus great insight of 1827, Clausewitz regarded absolute war as more true to the essence of war (he uses the term *Begriff*), and merely finds in politics, friction and circumstances the reasons why a particular war stops short of becoming absolute war." Adds Heuser: "We have to remind ourselves ... that Clausewitz not only did not complete the revision of his work, but that he was only happy with the sole revised book, Book I, by the time he stopped working on the *opus*." Heuser recalls that

<sup>2165.</sup> Heuser, Reading Clausewitz (London: Pimlico, 2002), 41.

<sup>2166.</sup> Heuser, Reading Clausewitz, 41.

"in his earlier work -- the first draft of Book I and Books II-VI - Clausewitz wrote mainly with 'absolute' war in mind, war that unfailingly aims to shatter the enemy in a major, decisive battle, to bring down his state, occupy his territory and break his will to resist. In Book VIII he described it as the wars he experienced in his time, wars that Napoleon brought 'to their absolute perfection'. In the first version [of] Book I he wrote of 'absolute' war more as of an ideal, a theoretical concept (Begriff), which reality can come close to but which mostly remains an abstract, the extreme idea of what war could be like. In Books VII, VIII and the revised Book I, written after 1827, Clausewitz extended his theory of war to encompass not only 'absolute' war but the many more limited manifestations of war that he had found in history. Only here did he introduce the famous tenet of war as a function of the political variable, for which he is so famous, into his work in the last four years of his life." <sup>2167</sup> As Heuser further describes, "Clausewitz's work, although unfinished, and even though it lent itself to misinterpretation with most devastating consequences, is outstanding in its strength and even in its confusion. For even in his initial blindness to the importance of politics in war, Clausewitz understood something very important: namely, the boundless horror of war and its potential to 'explode', to get out of hand, due to its intrinsically violent nature, even when the political purpose is clearly defined and discipline prevails in the armed forces."2168 Heuser thus sees two Clausewitzes, "Clausewitz the idealist" and "Clausewitz the realist," and thus two distinct kinds of war: "Both the teachings of Clausewitz the Idealist on 'absolute' war, and of Clausewitz the Realist on war as a function of politics, apply to the phenomenon of war, but they must be applied discriminatingly, with an eye to all the variables involved."2169 Brodie would himself be fascinated by, and would thus endeavor to wrestle with, "absolute" war, the concept that was first articulated by the earlier Clausewitz, "Clausewitz the Idealist," but which, after the splitting of the atom, would become a very real and dangerous dimension of war in the atomic age, forever transforming the nature of warfare. But because of this, Brodie's primary interest in Clausewitz would be in the Prussian's now necessary primacy of policy, and thus in the later Clausewitz whom Heuser would describe as "Clausewitz the Realist."

In her first chapter, "The Story of the Man and the Book," Heuser recalled that: "it was only in the late 1950s and early 1960s that American strategists widely began to base their reflections on Clausewitz's tenets," and citing Brodie's *Strategy in the Missile Age*, adds that: "One of them, Bernard Brodie, wrote, 'Clausewitz's appeal is limited, for he is much more given than Jomini to 'undogmatic elasticity' in his opinions, and

<sup>2167.</sup> Heuser, Reading Clausewitz, 41.

<sup>2168.</sup> Heuser, Reading Clausewitz, 41-42.

<sup>2169.</sup> Heuser, Reading Clausewitz, 43.

he is more metaphysical in his approach'." 2170 And yet, Heuser adds that "Brodie elsewhere called Clausewitz's book 'not simply the greatest but the only truly great book on war," and who would himself "[a]long with Herman Kahn, the Wohlstetters, and others" go on to lead "the American 'Neo-Clausewitzian' school of the early Cold War period."2171 In her third chapter, "Politics, the Trinity and Civil-Military Relations," Heuser describes in detail Brodie's great interest in Clausewitz's most famous dictum that war was a "continuation of politics by other means," and how Brodie looked to military history in his lifetime much the way Clausewitz had a century before for insight into the relationship of war to politics: "Brodie pointed out that the military leaders on all sides of the First World War had aimed for military victory without thinking about the political purpose of such a victory, and on the whole looked down upon their political leaders as ignorant of the military preconditions for such a victory and all too concerned with winning their next election."2172 Yet World War II did not necessarily improve the situation, and Brodie found that "the predominance of politicians over military leaders did not guarantee the predominance of political purpose over the military aim of 'fighting to win'," as political leaders "were all too often convinced by the military leaders that military requirements – 'the exigencies of war' - had to come first," and with it the need for "a substantial margin of superiority over the enemy" as well as "the aim of a clear-cut – 'absolute' – victory." <sup>2173</sup> Brodie's thinking on about the relationship of military and civilian leaders and the connection of war to politics came together in his 1973 War and Politics, where "Brodie gave his interpretation of European and American military policy from World War I to Vietnam on the basis of Clausewitz's paradigm of the 'intimate and pervasive connections between politics and strategy', highlighting amongst other things the relations between civilian government and military leadership;" and also "quoted at length Clausewitz's views on the need for military advice in the formulation of war plans, and the need for understanding what the military can do on the part of governing politicians, but added also Clausewitz's caveat about the need to subordinate the military point of view to the political one."2174

In her fifth chapter, "The Defensive – Offensive Debate, the Annihilation Battle and Total War," Heuser further probes Brodie's effort to rebut the generation of strategists who over-emphasized Clausewitz's themes relating to the defense, offense, the

<sup>2170.</sup> Beatrice Heuser, *Reading Clausewitz*, 17, citing Bernard Brodie, *Strategy in the Missile Age* (2nd ed., Princeton, New Jersey: PUP, 1965), 34, 36.

<sup>2171.</sup> Heuser, *Reading Clausewitz*, 18, citing Brodie, "The Continuing Relevance of On War" in Michael Howard and Peter Paret (eds), Carl von Clausewitz, *On War* (Princeton, NJ: PUP, 1976), 53.

<sup>2172.</sup> Heuser, Reading Clausewitz, 70.

<sup>2173.</sup> Heuser, Reading Clausewitz, 70.

<sup>2174.</sup> Heuser, Reading Clausewitz, 70.

battle of annihilation, and total war and who conflated Clausewitz's theorizing with an advocacy of these elements of war. In remarks critical of Ferdinand Foch, Brodie observed that the famed general "reflects only too faithfully the bent of his entire generation of soldiers. Lost completely is the cast of thought that makes Clausewitz both timeless and profound, his constant awareness that war is a political act, fought for a purpose outside itself. True, Clausewitz had cautioned against unduly tempering violence lest it render one weak against the ruthless, but he nevertheless insisted that the end must govern the means. The generation that was to fight World War I remembered only the injunction against tempering violence. 'Blood is the price of victory' was the one dictum of Clausewitz they quoted everlastingly. Less arresting, but infinitely wider, was the admonition they forgot: 'No war is begun, or at least no war should be begun if people acted wisely, without first finding an answer to the question: what is to be attained by and in war?' ... Foch gives little indication in his writing of having thought about the matter at all."<sup>2175</sup>

Heuser later cited Brodie on the tendency to quote Clausewitz out of context on the matter of total and absolute war: "It is ironical that some of the every quotations which are often cited to prove that [Clausewitz] was the prophet of total or 'absolute' war are wrenched from a chapter (Ch. 1, Bk. 1) in which he specifically insists that 'war is never an isolated act' and that the military method must always defer to the political object. Clausewitz, ambivalent [concerning victory] as in many other respects, can be and has often been quoted out of context to demonstrate his vehement rejection of restraint in war."2176 This is discussed further by Heuser in chapter seven, "Clausewitz in the Nuclear Age," particularly in a section on "Clausewitz and Western Cold-War Strategy" in a subsection on "Western Cold-War Strategists and Clausewitz's Heritage" where Brodie is again discussed: "Western strategists in the nuclear age tried to draw lessons from the two world wars" and Brodie, "for example, called World War I, 'the greatest catastrophe in modern times, [which] may have more lessons for the future than World War II, which was in fact its offspring.' 'World War I was the purposeless war, which no one seemed to know to prevent and which, once begun, no one seemed to know how to stop.' Could this catastrophe repeat itself in the nuclear age?"2177 Heuser continues: "Some argued that in Clausewitz's concept of absolute war as formulated in Book I of On War, where it is described as the abstract idea of a discharge of force without any friction, made him the 'prophet of the apocalypse', and the 'incredulous historian of an apocalyptic future', of an all-out nuclear World War III. More frequently, Clausewitz was evoked in a negative sense: how could war

<sup>2175.</sup> Heuser, Reading Clausewitz, 99, citing Brodie, Strategy in the Missile Age, 2nd ed. (Princeton: PUP, 1965), 52f.

<sup>2176.</sup> Heuser, Reading Clausewitz, 122, also citing Brodie, Strategy in the Missile Age, 37f, and 315.

<sup>2177.</sup> Heuser, Reading Clausewitz, 152.

still be a *rational* continuation of politics by other means if the consequence of war could not but be disproportionate to any political aim?"<sup>2178</sup> This is precisely what Brodie asked in 1945, famously concluding that after the bomb's fiery birth, that war's chief purpose could no longer be winning wars but must from now on be "to avert them."<sup>2179</sup> And, as Heuser further noted, Brodie explained that: "On the simple Clausewitzian premise ... – that war must have a reasonable political objective with which the military operations must be reasonably consonant – we have to work back from the assumption that 'general war' with thermonuclear weapons must never be permitted to begin, however much we find it necessary to make physical preparations as though it might begin. Working back from that premise is far from easy, and ... the idea of large-scale conventional war is simply no solution. There are requirements for a new diplomacy, the beginnings of which are in fact appearing.'<sup>2180</sup> Heuser adds that Brodie "argued repeatedly 'that nuclear weapons do by their very existence in large numbers make obsolete the use and hence need for conventional force on anything like the scale of either world war.'"<sup>2181</sup>

Interestingly, Heuser notes some critics noted the failure of the so-called "neo-Clausewitzians" to take into account Clausewitz's trinity, a view that may be fairly held of Brodie who did indeed emphasize some specific elements of Clausewitz, most notably the dictum linking war to politics and which would define one of his final works, his 1973 War and Politics, widely viewed as his tribute to Clausewitz (but not necessarily to Clausewitz's trinity, though as noted above, one need not necessarily view Brodie's emphasis on what Echevarria described as the "primacy of policy" to the Cold War-era Clausewitz scholars as disinterest in the trinity, since to the democratic West, much of the trinity could in fact be folded into the war-politics nexus.) Heuser writes that "not everybody was happy with these Clausewitzian attempts to think through the unthinkable. Anatol Rapoport criticized the enthusiasm of Herman Kahn, Raymond Aron and other 'Neo-Clausewitzians', who in Rapoport's views misunderstood the master in some important ways. They 'attempted to reduce nuclear war and deterrence to a matter of calculable rationality, susceptible to such mathematical technique as game theory. And ... it was precisely to this intellectualization of war, this reduction of a bloody tragedy to a mathematical problem, this elimination of all more and political content from the complex equation, that Clausewitz himself was objecting. Kahn and his colleagues in their studies achieved the remarkable result of ignoring all three elements in the Clausewitzian trinity: popular passion, the risks and uncertainties of the military environment, and the political purpose for which the war was fought. Their

<sup>2178.</sup> Heuser, Reading Clausewitz, 152.

<sup>2179.</sup> Heuser, Reading Clausewitz, 152.

<sup>2180.</sup> Heuser, Reading Clausewitz, 152.

<sup>2181.</sup> Heuser, Reading Clausewitz, 153.

calculations bore no relation to war as mankind has known it throughout history."<sup>2182</sup> But because Kahn, to a large degree, epitomizes neo-Jominian thinking in the nuclear age and not really neo-Clausewitzianism, this critique of Kahn for neglecting the trinity in fact can be viewed as a reprieve for Brodie who took a notably different approach to the challenge of nuclear strategy from his rival and long-time colleague, better reflecting Clausewitz in both form and substance.

Heuser also noted an interesting shift in Colin Gray's thinking during the Cold War, one from pure theory (absent the goal of prescription) to a more applied theoretical approach that welcome the prescriptive art, along the way becoming a neo-Clausewitzian in contrast to his earlier work: "Ironically, it was Colin Gray – who a decade later was to become a policy adviser of the Reagan administration – who in 1971 argued that civilian strategists should seek only the truth, not of 'policy prescription' or 'the advocacy of viable solutions'. He argued that in the US they had 'fallen between the two extremes', over-impressed as they were 'with the potential transferability of theory to the world of action.'"<sup>2183</sup> But, adds Heuser, "Bernard Brodie took issue with this point, invoking Clausewitz to argue that 'strategic theory is a theory for action'. Brodie thought that Gray's attitude was a 'sad retrogression from Clausewitz', and himself claimed that 'strategy is a field where truth is sought in pursuit of viable solutions. In that respect it is like other branches of politics and like any of the applied sciences, and not all like pure science, where the function of theory is to describe, organize, and explain and not to prescribe.'"<sup>2184</sup>

Indeed, prescription was central to Brodie's life-long effort, since he accepted the full intellectual and moral responsibilities that came with being a strategist in the new, dangerous nuclear-armed world; not to prescribe a solution was akin to complicity in potential mass-murder, and after Hiroshima, a specter of violence greater than genocide that could result in the extinction of mankind and complete despoliation of planet Earth. Brodie's embrace of the prime Clausewitzian dictum uniting war with policy was part and parcel of his acceptance of the heavy responsibilities of his age, and of his distinctive profession as what Kaplan colorfully dubbed a "wizard of Armageddon." Heuser notes Gray, like Brodie, in his later work *Modern Strategy*, also "builds heavily on Clausewitz, whose *dicta* crop up throughout the text" and in his section on "Clausewitz and the Bomb" "asserts on the one hand that nuclear weapons have a strategic utility 'when the Clausewitzian language of 'the engagement' is interpreted to encompass 'deterrence action', which is to say threats and latent menaces at work in the minds of those intended to be deterred', but on the other hand that these are 'weapons that

<sup>2182.</sup> Heuser, Reading Clausewitz, 159.

<sup>2183.</sup> Heuser, Reading Clausewitz, 159.

<sup>2184.</sup> Heuser, Reading Clausewitz, 159.

could not reliably be tamed for good Clausewitzian purpose as tools of high policy' and writes that 'after the mid-1960s, the political leaders and the military professionals of East and West were appalled by the monster of nuclear armament that they had created which could not, *après* Clausewitz, be a *rational* instrument of state policy." <sup>2185</sup>

Heuser recalls that "Clausewitz's concept of limited war became popular among strategic thinkers in the nuclear age with the advent of the Korean War (1950-53) which was called by Bernard Brodie the 'first modern limited war.'"<sup>2186</sup> But it would prove a difficult concept to apply effectively, as witnessed in both Korea, which ended in a stalemate with a non-nuclear opponent, and Vietnam, which led to America's humbling defeat and a decisive communist victory. Heuser writes that the "Clausewitzian paradigm needed refinement: there was not merely the need to distinguish between wars of different intensity on a sliding scale of limited to unlimited, but the same war could be different things to the different contestants. Moreover, again in the words of Brodie, 'The United States is indeed a very great military power, but when it fights in a limited manner it automatically cuts itself down to a size that the opponent may be able to cope with, even if only temporarily, thus raising our costs and prolonging the war.' If pressure equals counter-pressure, then the result is not movement but a stalemate."<sup>2187</sup>

One of Heuser's final observations on Brodie and Clausewitz appears in her very last chapter, "Clausewitz's Relevance in the Twenty-First Century," in which she describes one of Clausewitz's most enduring ambiguities: "Clausewitz's dithering between the assertion that the true nature of war is eternal and the finding that in reality, every war is different, war is a true chameleon, makes him attractive to both 'International Relations Realists', who believe that strategy never changes (and that the basic patterns of international relations never change), and to those who stress the variability of war and strategy, as they are a function of political aims which in turn they see as a function of different cultures and values, threat perceptions and unique sets of circumstances."2188 Heuser again pits Brodie against Gray: "Thus on the one hand Colin Gray, who defines himself as a 'Realist', asserts that 'the need to use or threaten force for political objectives, the need to behave strategically, is perennial and universal.' (He for one would be unable to explain why the member states of the EU no longer obey this rule in their behavior towards each other.) On the other hand, inspired by Clausewitz's Book VIII of On War, Bernard Brodie in War and Politics devotes a chapter to changing attitudes towards war. While he overestimated the continuity in values and beliefs from antiquity until the French Revolution, he justly highlights the

<sup>2185.</sup> Heuser, Reading Clausewitz, 160.

<sup>2186.</sup> Heuser, Reading Clausewitz, 161.

<sup>2187.</sup> Heuser, Reading Clausewitz, 167.

<sup>2188.</sup> Heuser, Reading Clausewitz, 190.

changes that have occurred since then ... and concomitantly proves the inadequacy of all international relations theories which are posited on the immutability of interests, values and beliefs."<sup>2189</sup>

Brodie's embrace of change, whether in technology, or in attitudes toward war, set him apart, and while he did not write with the style familiar to today's complexity theorists, the breadth of his knowledge, the depth of his insight, and the dynamic nature of his thinking as the world evolved from its pre-nuclear state to the early atomic age (marked by America's atomic monopoly) to the latter atomic age (after that monopoly ended) to the thermonuclear era, punctuated by various limited wars of the Cold War era, revealed a complexity to his thought. That he sought clarity, and was drawn to simple precepts like Clausewitz's dictum on the war-policy nexus, this not mean he ignored complex realities, but rather that he felt his job was to help us navigate our way through them. Just as Brodie's ideas on the "absolute" nature of the atomic bomb would evolve as the new thermonuclear "superbomb" appeared, and his thinking about escalation and limited war would also evolve throughout the Cold War era, Clausewitz's ideas responded to the epochal changes of his time in a similarly dynamic and evolutionary manner.

Some theorists, like Heuser, thus describe the seeming existence of "two Clausewitzes," a distinct "early" (or as Heuser describes, an "Idealist") Clausewitz, and a distinct "late" (or "Realist") Clausewitz, and thus see a marked bifurcation in the evolution of his thinking (the earlier or Idealist seeming to favor the decisive battle, and emphasizing war's inherent tendency to violently escalate toward "absolute war", and the latter being more concerned with the political context that defined war's purpose, and which tended to restrain its means.) Others saw in Clausewitz's *On War* an "unfinished symphony" (as Echevarria has described it), riddled with contradiction and suffering from an inherent editorial inconsistency that leaves the Prussian vulnerable to misinterpretation (and diverse reinterpretations in each subsequent era), a tendency that Colin S. Gray noted in his 1999 tribute to Clausewitz, *Modern Strategy*.

As noted above, Stephen J. Cimbala presents a synthesis of the seemingly distinct (and to some degree contending) "early" and "late" Clausewitzes, arguing that instead of two separate Clausewitzes, that Clausewitz is instead describing two separate and contending forces in his theory of war: a "strong" and a "weak" force, the former including "those which propel war toward its absolute form," and the latter including "those which resist this trend." Another interesting and refreshing interpretation is presented by Andreas Herberg-Rothe in his 2007 *Clausewitz's Puzzle: The Political Theory of War*, where he describes a more dynamically evolutionary and theoretically

<sup>2189.</sup> Heuser, Reading Clausewitz, 190.

<sup>2190.</sup> Stephen J. Cimbala, Clausewitz and Escalation: Classical Perspective on Nuclear Strategy (London: Frank Cass, 1991), 15-16.

integrated Clausewitz. As Herberg-Rothe writes, "This new interpretation of On War tries to restructure Clausewitz's 'unfinished symphony' (Echevarria) on the basis of this methodological approach as well as his analysis of Jena, Moscow, and Waterloo."2191 Herberg-Rothe argues that the trinity is Clausewitz's principal legacy, a view that was not apparently shared by earlier theorists including Brodie who were more focused on reuniting war with political purpose, and thus to ensure that the Cold War's nuclear legacy did not result in mankind's extinction. As he argued in his prologue, "The Trinity, with all its problems, is the real legacy of Clausewitz and the real beginning of his theory, as he emphasized himself" when writing at the end of Chapter 1 that the Trinity that he "formulated casts a first ray of light on the basic structure of theory, and enables us to make an initial differentiation and identification of its major components."2192 Herberg-Rothe further writes that "Clausewitz's concept of the Trinity is explicitly differentiated from his famous formula of war, described as a continuation of politics by other means," and while "Clausewitz seems at first glance to repeat his formula in the Trinity, this is here only one of three tendencies which all have to be considered if one does not want to contradict reality immediately, as Clausewitz emphasized."2193 And, Herberg-Rothe adds, by "[l]ooking more closely at his formula, we can see that he describes war as a continuation of politics, but with other means those that belong to politics itself. These two parts of his statement constitute two extremes: war described either as a continuation of politics, or as something that mainly belongs to the military sphere. Clausewitz emphasizes that policy uses other, non-political means. This creates an implicit tension, between war's status as a continuation of policy, and the distinctive nature of its other means. Beatrice Heuser has demonstrated in her overview of Clausewitz's ideas and their historical impact, that resolving this tension in favour of one side has always led to a primacy of the military. This implicit tension is explicated in the Trinity."2194 As Herberg-Rothe further notes: "It is not accidental, and is indeed a characteristic feature of both the most emphatic critiques of Clausewitz published in the 1990s by Martin van Creveld and Sir John Keegan, that they nearly always quote only half of the formula, the part in which Clausewitz states that war is a continuation of politics. Their interpretations suppress, often explicitly and always implicitly, the second part of Clausewitz's determination that politics in warfare uses other means. The paradoxical aspect of the criticism of Clausewitz is that he himself is well equipped to respond to it. Keegan is obviously criticizing the early Clausewitz, the supporter of Napoleon's strategy and of the destruction principle as a military method. Van Creveld, on the other hand, is attacking the later Clausewitz, who emphasized the antithesis

<sup>2191.</sup> Andreas Herberg-Rothe, Clausewitz's Puzzle: The Political Theory of War (Oxford: Oxford University Press, 2007), 9.

<sup>2192.</sup> Herberg-Rothe, Clausewitz's Puzzle: The Political Theory of War, 4.

<sup>2193.</sup> Herberg-Rothe, Clausewitz's Puzzle: The Political Theory of War, 5.

<sup>2194.</sup> Herberg-Rothe, Clausewitz's Puzzle: The Political Theory of War, 5.

between limited and unlimited warfare, which became the critical point of his intention to revise his whole work."<sup>2195</sup> Herberg-Rothe argues there is but one Clausewitz, responding to three distinct phases of Napoleonic warfare, modifying his theory of war in response to each of these phases, and in the end recognizing the early and seemingly unlimited potential as well as the ultimate limits of Napoleonic strategy, much the way Brodie himself evolved to equally convulsive changes in the nature of war that he observed, as war stood poised to leap from the global catastrophe of "total war" to the hitherto theoretical abstraction but now seemingly manifest reality of "absolute war."

## Reconsidering Clausewitz's Influence: Measuring the Unmeasurable

Stuart Kinross takes a broad, historical approach in his 2008 Clausewitz and America: Strategic Thought and Practice from Vietnam to Iraq, part of Routledge's Strategy and History Series edited by Colin Gray and Williamson Murray, and a revision of Kinross' 1996 doctoral thesis at the University of Aberdeen on "the influence of Clausewitz on American strategic thought from Vietnam to the Gulf War of 1990-91," and updated a decade later "to include the tumultuous events of the past few years." Tackling the thorny issue of Clausewitz's "influence," a topic others have intentionally avoided (as was the case for Chris Bassford, who instead discussed Clausewitz's "reception.") As described in an abstract at the front, Kinross' "book demonstrates how Carl von Clausewitz's thought influenced American strategic thinking between the Vietnam War and the current conflict in Iraq," and how the Prussian's "thought played a part in the process of military reform and the transition in US policy that took place after the Vietnam War," and how by the time of the 1991 Gulf War, "American policymakers demonstrated that they understood the Clausewitzian notion of utilising military force to fulfill a clear political objective," and how the "US armed forces bridged the operational and strategic levels during that conflict in accordance with Clausewitz's conviction that war plans should be tailored to fulfill a political objective." 2196 With the end of the Cold War, Kinross observed, and "an increasing predilection for technological solutions, American policymakers and the military moved away from Clausewitz," and it was "only the events of 11 September 2001 that reminded Americans of his intrinsic value," though Kinross remained concerned, despite the potential accommodation of the GWOT and the war in Iraq "within the Clausewitzian paradigm" that "the lack of a clear policy for countering insurgency in Iraq suggests that the US may have returned full circle to the flawed strategic approach evident in Vietnam."2197

<sup>2195.</sup> Herberg-Rothe, Clausewitz's Puzzle: The Political Theory of War, 5.

<sup>2196.</sup> Stuart Kinross, Clausewitz and America: Strategic Thought and Practice from Vietnam to Iraq (London: Routledge, 2008), front matter.

<sup>2197.</sup> Kinross, Clausewitz and America, front matter.

Kinross, following in the footsteps of Bassford, recognized the problematic nature of defining Clausewitz's influence. His introduction starts out by quoting General Jacob Meckel of the Imperial German Army who said a century ago that: "Everyone who nowadays either makes or teaches war in a modern sense, bases himself upon Clausewitz, even if he is not conscious of it."2198 As Kinross himself describes: "One of the problems in examining the contemporary and historical influence of a writer who died in the early nineteenth century is the temptation to relate everything, past and present, to his way of thinking," and with regards to "addressing the influence of Clausewitz, one needs to be very careful about exactly what one means by that word."2199 Even Michael Howard, "rightly regarded as one of the world's foremost military historians," in an essay on "The Influence of Clausewitz" introducing the renown 1976 translation that Howard co-edited with Peter Paret, "did not explain what he meant by influence."2200 And Bassford, as noted above, "who prefers to write of Clausewitz's 'reception', has written: "Influence is rather hard to define. One can be influenced by a book without agreeing with it, without reading it, or without even being aware of its existence."2201

Citing Brodie, Kinross recalls how in "an essay written in 1959, Bernard Brodie argued that Clausewitz's contemporary and rival, Antoine-Henri Jomini, has exercised the greater influence of the two," basing this conclusion on "the basis that Jomini lived to witness the changes in warfare wrought by the Industrial Revolution, whereas Clausewitz did not, and that he wrote in French, a far more accessible language than Clausewitz's native German."2202 Adds Kinross, "Perhaps more pertinent, in the context of this work, is Daniel Moran's observation that Jomini's interpretation of Napoleon's achievements ignored their revolutionary roots and began a school of military theory that was politically and socially naive ... a tradition that the American military has generally embraced: 'Schooled to prefer formulaic answers, checklists, and school solutions, the American military is decidedly Jominian, not Clausewitzian."2203 And, on the perceived difficulty in reading Clausewitz, Kinross echoes Echevarria (who rejected, quite vehemently, Brodie's suggestion otherwise): "Another difficulty in interpreting the thoughts and actions of contemporaries in a Clausewitzian light is that Clausewitz, for all his wonderful use of language, is very difficult to read, especially if one does not take the time to reflect on what it is he is trying to say."2204

<sup>2198.</sup> Kinross, Clausewitz and America, 1.

<sup>2199.</sup> Kinross, Clausewitz and America, 1.

<sup>2200.</sup> Kinross, Clausewitz and America, 1.

<sup>2201.</sup> Kinross, Clausewitz and America, 1.

<sup>2202.</sup> Kinross, Clausewitz and America, 2.

<sup>2203.</sup> Kinross, Clausewitz and America, 2.

<sup>2204.</sup> Kinross, Clausewitz and America, 2.

Kinross traces Clausewitzian currents in US strategic thinking, looking at civilian leaders, thought leaders, military leaders, and evolving doctrine. As evident in several other recent works on Clausewitz, Brodie has a recurrent voice, though a limited one, appearing on just six pages of text, first commenting on the seemingly un-Clausewitzian strategic bombing during World War II: "In his analysis of American strategic bombing during the Second World War, Bernard Brodie criticised the air campaigns against Germany and Japan despite recognizing a certain operational efficacy in them. Strategically, however, he was far from convinced, believing that force had been employed out of all proportion to the objective being sought. One can criticise the bombing campaigns as being indiscriminate, despite the dedication of planners to military targeting. On the other hand, it can be argued that the desire of the Allies to save their own soldiers' lives, through hastening the end of the war via airpower, justified the campaigns. The argument applies especially to the atomic bombing of Japan."2205 And then, "In November 1945, Bernard Brodie responded to the challenge of the nuclear age by predicting that deterrence would now be the dominant strategic concept. This prediction swiftly became reality when, after the rapid demobilisation of its conventional forces, America's policy moved to threatening to utilise its atomic monopoly ... in retaliation for any attack upon its interests," which Kinross found to be 'Clausewitzian' in that "Clausewitz had written that strategy could have (and indeed frequently had) the negative object of making clear to the opponent 'the improbability of victory ... [and] its unacceptable cost."2206 While Clausewitzian, Kinross suggests it was nonetheless revolutionary, citing Weigley - who had "noted that the advent of deterrence was a turning point in American strategic thought" – that this "amounted to a revolution in the history of American military policy."2207

In his discussion of the legacy of Vietnam, Kinross again turns to Brodie and the guide that he authored to the 1976 "Paret/Howard edition of *On War*" in which Brodie "highlighted the problem that confronted the US in Vietnam" by quoting from Clausewitz, who wrote in On War that: "To discover how much of our resources must be mobilised for war, we must first examine our own political aim and that of the enemy. We must gauge the strength and situation of the opposing state. We must gauge the character and abilities of its government and people and do the same in regard to our own. Finally, we must evaluate the political sympathies of other states and the effect the war may have on them." Kinross suggests "that no such analysis was undertaken in the United States during the 1960s," and "[w]hat this illustrates

<sup>2205.</sup> Kinross, Clausewitz and America, 40.

<sup>2206.</sup> Kinross, Clausewitz and America, 41.

<sup>2207.</sup> Kinross, Clausewitz and America, 41.

<sup>2208.</sup> Kinross, *Clausewitz and America*, 67, n.55. Citing Clausewitz, VIII, 3b, pp585-86, from Bernard Brodie, "A Guide to the Reading of On War," p.702 in Paret and Howard, eds. and trans., *On War* (Princeton: PUP, 1976).

is that, given the infatuation with quantitative analysis during the McNamara years, a scientific approach to war is incompatible with treating war as an art as all successful strategists in history have."<sup>2209</sup> Brodie would, of course, famously butt heads with McNamara, as he was excluded from the "best and the brightest" who went on to lead America to military defeat. Kinross, like Brodie, came to believe ultimately that: "Clausewitz's most fundamental contribution to strategic thought is his analysis of the relationship between war and politics."<sup>2210</sup>

America's loss in Vietnam would, curiously, stimulate what Kinross described as the "renaissance of American strategic thought," the title to his fourth chapter. As he writes, "The traumatic effect of the Vietnam War upon the American military and upon society at large mirrored the impact of the First World War upon the democracies of Western Europe. Fortunately for the Americans, an intellectual effort began to absorb the lessons of Vietnam and therefore to prevent the slide into demoralisation and pacifism that had afflicted inter-war France, for example."2211 Kinross adds: "That the American armed forces did not slide into permanent decline owed much to the revival in strategic thought that originated during Admiral Stanfield Turner's tenure as president of the Naval War College after 1972," who "overhauled the College's curriculum by placing an emphasis on rigorous instruction based on historical examples ... such as Thucydides and Clausewitz," who "would provide students with valuable practical and theoretical lessons."2212 Interestingly, Turner "also criticised the 'increased reliance on civilians and on 'think tanks' to do our thinking for us [the military]. We must be able to produce military men who are a match for the best of the civilian strategists or we will abdicate control of our profession."2213

In the coming years, Clausewitz's *On War* would become required reading at military academies, first being adopted by the Naval War College in 1976, the very year of its translation and publication by Princeton University Press, followed in 1978 by the Air War College, and in 1981 by the Army War College. Adds Kinross: "At the US Military Academy, West Point, students also read this edition of *On War* and, in so doing, became aware of the political objectives of war." This may seem to be an overstatement, since cadets swear an oath of loyalty to the US Constitution and its Commander-in-Chief, both embodying civilian control over the military. But it is fair to say that reading Clausewitz surely reinforced student awareness of the political

<sup>2209.</sup> Kinross, Clausewitz and America, 68.

<sup>2210.</sup> Kinross, Clausewitz and America, 68.

<sup>2211.</sup> Kinross, Clausewitz and America, 75.

<sup>2212.</sup> Kinross, Clausewitz and America, 75.

<sup>2213.</sup> Kinross, Clausewitz and America, 75.

<sup>2214.</sup> Kinross, Clausewitz and America, 75-76.

<sup>2215.</sup> Kinross, Clausewitz and America, 76.

objectives of war. On Princeton University Press' Clausewitz project, Kinross recounts that: "The Howard and Paret translation has become the definitive edition of On War in the American military's schools. Paret was an expert on the period during which Clausewitz lived, while Howard was determined that the work should be available in comprehensible English. Bernard Brodie was also involved in the project. His concern was that Clausewitz should be available to the public and also be put into the hands of soldiers."2216 Kinross reiterates that Vietnam "had convinced some officers of the importance of the Clausewitzian relationship between war and policy."2217 He later added, in the conclusion to his chapter, "In the mid-1970s, the post-Vietnam military began to read Clausewitz more widely than ever before when a new generation of junior officers were introduced to On War at the various services' colleges. Almost simultaneously, a steady stream of articles began to appear in military journals that referred to Clausewitz as a guide in the debate over US strategic thinking and doctrine, whether through a historical evaluation of his thought or through its application to contemporary problems."2218 Kinross further noted: "At the strategic level, the Soviets had a firm grasp of the Clausewitzian relationship between war and policy, something the US armed forces would only slowly begin to appreciate."2219

Kinross reflects upon Clausewitz's contribution to American military thinking: "The articulation of the relationship between war and policy is one of those 'contributions of Clausewitz' that will always be relevant. Others of relevance today are those of friction, the centre of gravity, the concept of real war, and the fascinating trinity,"2220 the latter which has recently emerged as a current theme of interest to several Clausewitz scholars who find in the trinity a concept that seems particularly well-suited to the current era of asymmetric and complex warfare. Kinross further notes that "Clausewitz's most enduring legacy, aside from his interconnection of war and politics, lies in his rethinking on the nature of war: limited war can be just as effective as war waged at a higher level of intensity, something more apt than ever today."2221 But Clausewitz's voice has been just one voice; as Kinross wrote at the end of (chapter four), "it should be noted that the use of Clausewitz's ideas compared to other thinkers was by no means exclusive. Sun Tzu and Liddell Hart, in particular, were studied in some detail at the service schools."2222 And while Jomini may no longer be widely read, his influence endures, hard-wired into the American way of war; as Kinross writes in

<sup>2216.</sup> Kinross, Clausewitz and America, 76.

<sup>2217.</sup> Kinross, Clausewitz and America, 76.

<sup>2218.</sup> Kinross, Clausewitz and America, 102.

<sup>2219.</sup> Kinross, Clausewitz and America, 102.

<sup>2220.</sup> Kinross, Clausewitz and America, 231.

<sup>2221.</sup> Kinross, Clausewitz and America, 232.

<sup>2222.</sup> Kinross, Clausewitz and America, 103.

the conclusion of his book, "The Jominian approach is reflected in a continuation of the tradition of 'prescrib[ing] principles of war'. The result is that quality doctrinal manuals ... are the exception rather than the rule. Even joint publications ... tend to reflect the prescriptive tendencies of a Jominian 'cookbook'." 2223

Kinross thus sees in Clausewitz an important guide for America's continuing effort to reform its military after Vietnam: "The process of military reform that took place in the United States after the Vietnam War can be compared to the revival in the Prussian military after its defeat by Napoleon in 1806, a revival in which Clausewitz played a practical part. This work has shown that his thought played some part in the American revival. The US military found Clausewitz to be a theorist whose writings were compatible with its desire to adopt the operational level of war and to ensure a seamless link between tactics and strategy. Though he was not the only theorist to influence military doctrine during this period, Clausewitz's work was more commonly drawn upon than anyone else's. Politicians found in him, albeit mainly second hand, a theorist who articulated the requirement that military power should be seen as an instrument of policy that, if wisely used, would benefit the national interest."2224 Many challenges still remain, as Kinross pointed out at the Cold War's end: "Now American strategy had to adapt itself to the uncertain realities of a post-Cold War world. ... At a time when threats to national security range from terrorists and rogue states armed with weapons of mass destruction to recidivist nations armed with high-tech conventional weapons, US military and civilian leaders must develop a way of reconciling operations success with clear strategic objectives across the whole spectrum of conflict. A close reading of On War would serve as a sound point of departure."2225

It wasn't just the Cold War theorists who emphasized the primacy of policy when interpreting Clausewitz for their time and place. Consider the observations made by Jon Tetsuro Sumida in his *Decoding Clausewitz: A New Approach to On War*, which considered the influence of Clausewitz on several theorists who followed, including the famed British naval strategist, Julian Corbett, who like Brodie a generation later would focus upon the most famous of Clausewitz's dicta, that war was a "continuation of policy by other means." In fact, one of Corbett's contributions was to extend Clausewitzian theory into the naval realm, and it would be through this famous dictum that he would first bring Clausewitzian theory to sea. Recalling Corbett's increasing interest in the Prussian, Sumida writes: "In 1906, Corbett added a lecture on 'The System of Clausewitz' to his War College program," and that "Clausewitz's ideas are strongly evident in Corbett's 'Strategic Terms and Definitions Used in Lectures on

<sup>2223.</sup> Kinross, Clausewitz and America, 233.

<sup>2224.</sup> Kinross, Clausewitz and America, 233.

<sup>2225.</sup> Kinross, Clausewitz and America, 233-34.

Naval History' of 1906,"2226 also known as his "Green Pamphlet," and where Corbett, "like Clausewitz before him, identifies politics as an inhibitor of strategic action. The 'deflection of strategy by politics,' Corbett argues, though 'usually regarded as a disease,' is 'really a vital factor in every strategical problem," a view he maintains in the 1909 revision of the Green Pamphlet.<sup>2227</sup> He further recalls how, "In 1907, Corbett published his England in the Seven Years' War ... that to an even greater degree than England in *Mediterranean* focuses upon the interplay of diplomacy and naval and military power," and in which "Corbett justifies his approach with a direct reference to Clausewitz. In 'modern times,' Corbett observes, people habitually though that war and peace represented two distinct conditions that meant 'there was always a point where intercourse or diplomacy ended, and severance or strategy began.' 'Now Clausewitz,' he argues, 'with all the experiences of the Revolutionary and Napoleonic wars to guide him, long ago pointed out that this conception of international relations was false both in theory and practice.' Corbett then declares that the English statesmen who are the subject of his study drew 'no hard and fast line between diplomacy and strategy,' and that indeed 'every turn of hostilities presented itself diplomatically, and every diplomatic move as an aspect of strategy."2228 Adds Sumida: "Reference to Clausewitz's most famous aphorism is not, however, the only mark of the Prussian author's influence on Corbett. Although Corbett does not explicitly cite Clausewitz again in this work, to a remarkable degree it is clear that he chose his subject and cast his approach along lines that embodied some of the most important arguments that Clausewitz had put forward in On War. Corbett's style of writing about war changed, and it is not difficult to see that this is because he had begun to emulate Clausewitz."2229 It's interesting to note that Corbett emulates Clausewitz yet seeks to differentiate himself from the Prussian by advocating limited war theory that he wrongly believes contradicts Clausewitz; Sumida corrects the record, noting Clausewitz would surely have agreed with Corbett. The parallels to Brodie's comparable efforts after Hiroshima are intriguing, though in Brodie's case he recognizes limited war theory to be inherently Clausewitzian, with the means modified to reflect the more limited political objectives.

Sumida turns to a discussion of "Corbett's most famous book, *Some Principles of Maritime Strategy*," which "was published in 1911," and in which Corbett "provides a systematic presentation of his fundamental concepts of strategy." In this work, Sumida writes, "Corbett makes Clausewitz's writing both an authoritative source and

<sup>2226.</sup> Jon Tetsuro Sumida, *Decoding Clausewitz: A New Approach to On War* (Lawrence, Kansas: University Press of Kansas, 2008), 18.

<sup>2227.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 19.

<sup>2228.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 19.

<sup>2229.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 19.

<sup>2230.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 22.

a foil for his own arguments. Corbett claims Clausewitz's backing when he argues that the proper role of theory is to 'assist a capable man to acquire a broad outlook whereby he may with greater rapidity and certainty seize all the factors of a sudden situation.' He quotes Clausewitz to support the proposition that theory creates 'a common vehicle of expression and a common plane of thought' that makes efficient deliberations of a military staff or conference of the national leadership possible. Corbett identifies the concept that war is 'a continuation of policy by other means' as the prevailing fundamental theory of war. After naming Clausewitz as its inventor, he proceeds to explore the implications of the phrase, in so doing endorsing its validity and insisting upon its great significance. Corbett, as before, defines a proper defense in Clausewitzian terms, namely, as resisting enemy moves followed by counterattack, and he marshals a plethora of strong arguments in favor of the defense over the offense."2231

But Sumida notes that "Corbett does qualify his position, noting that he is 'not in whole-hearted agreement with Clausewitz's doctrine of the strength of the defense," and instead "founds his own advocacy of maritime strategy as an effective form of limited war on Clausewitz's writing on the subject, but claims his views are different on a critical point. Corbett maintains that, unlike Clausewitz, he believes that the destruction of the enemy's main forces, under the conditions of limited war, need not be the primary objective. Clausewitz is in fact of the same opinion. Corbett, however, appears to have thought otherwise – he is convinced that Clausewitz's position is that action should always be directed at the enemy army. Clausewitz's supposed failure to recognize that his own concept of limited war could require action against objectives other than the main fighting forces of the enemy prompts Corbett to observe, 'Clausewitz himself never apprehended the full significance of his brilliant theory." 2232 Sumida observes that Corbett's 1911 treatise "marks a retreat from the uncompromising declaration of agreement with Clausewitz in the Green Pamphlet," and suggests "Corbett's later writing was probably influenced by political expediency." 2233 Importantly, Sumida finds that "Corbett's representation of On War, while incomplete and occasionally faulty, nonetheless engages Clausewitz's thinking about the nature of strategic decision-making and about defense as the stronger form of war. His analysis is in many respects perceptive and his general evaluation highly favorable," but in the end his "judgments, however, were to be overshadowed by the work of a younger countryman who held On War responsible for what was universally believed to be the greatest catastrophe in modern European history."2234 And that would be B.H. Liddell Hart, whom Sumida next discusses.

<sup>2231.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 22.

<sup>2232.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 22-23.

<sup>2233.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 24.

<sup>2234.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 24-25.

After his discussion of Liddell Hart, Sumida turns to Raymond Aron, including his "direct critique of B.H. Liddell Hart, which ... in effect summarizes his general conclusions about why Clausewitz had been so badly misunderstood." As Sumida observes, Aron "begins by stating that Liddell Hart is 'too intelligent to fail to see that Clausewitz was greater than his disciples, and too English to devote months to unraveling his skein of logical and empirical propositions, of theory and doctrine.' Aron then makes four observations. First, he says that an 'attack on Clausewitz requires more attentive reading of the treatise, and less summary of historical analysis.' Second, he states that 'you can find what you want to find in the Treatise; all that you need is a selection of quotations, supported by personal prejudice.' Third, 'If the Treatise is read carefully, the conclusions that it reveals are contrary to those normally drawn from it.' And fourth, Clausewitz 'does not approve or disapprove, he merely takes note.' To these four admonitions he adds remarks that amount to an assertion that Clausewitz is a difficult read because of the contradictions between the first chapter of On War and what followed."2235 Aron in marked contrast to Liddell Hart sought "to portray his subject as 'a preacher of moderation, not excess." 2236

## Clausewitzian Theory Meets the Nuclear Age

How Clausewitzian theory responded to the post-Hiroshima world was discussed in detail by Hugh Smith in his 2005 *On Clausewitz: A Study of Military and Political Ideas.* Smith writes in his preface that: "*On War*— the lengthy and somewhat disjointed *magnum opus* of an otherwise obscure Prussian general of the Napoleonic era ... has occupied a critical place in Western thinking about war for over a century and a half. It has been both vilified and venerated. Detractors have dismissed it as the work of a pseudo-philosophical pedant, a narrow-minded Prussian, or an unabashed militarist committed to war as an instrument of policy. Clausewitz, others suggest, has been made redundant by successive revolutions in military technology that began after his death and still continue to transform war. The most radical critics argue that he makes the fundamental mistake of treating war as a rational act."<sup>2237</sup> But as Smith observes, introducing Brodie to his discussion, "Supporters of Clausewitz have also made extravagant claims. For Bernard Brodie *On War* is 'not simply the greatest book on war but the one truly great book on that subject yet written'. Only Sun Tzu's *The Art of War* might be mentioned in the same breath."<sup>2238</sup>

<sup>2235.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 50.

<sup>2236.</sup> Sumida, Decoding Clausewitz: A New Approach to On War, 49.

<sup>2237.</sup> Hugh Smith, On Clausewitz: A Study of Military and Political Ideas (New York: Palgrave MacMillan, 2005), viii

<sup>2238.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, viii.

At the end of Chapter 19, on "Clausewitz to 1945," Smith addresses the distinct challenges of the nuclear age: "In August 1945 a radically new weapon - the atomic bomb – brought about surrender in a matter of days. Japan was coerced by military force to yield to the will of another state but everything else seemed different. Nuclear weapons promised an unprecedented revolution in military and political affairs. Clausewitzian war, already stretched beyond the battlefield, might finally lose its relevance."2239 And so, Smith turns next in chapter 20 to "Hypermodern War," where he addresses the challenges posed by the nuclear age to Clausewitzian theory. He writes: "Only two nuclear weapons have ever been used in anger yet they dominated military thinking between 1945 and the end of the Cold War. Some believed Clausewitz's relevance lost once and for all since nuclear war would be so destructive it could never serve as an instrument of policy. Through a massive increase in destructive capacity modern war had reached its 'logical extreme', its hypermodern form. But others, focusing on the ends of policy, argued that Clausewitz's importance had increased since the need to understand the linkages between war and policy was greater than ever. In either case nuclear weapons promised a radical impact on strategy and international politics."2240

In his discussion on "The Nuclear Revolution," Smith further observes: "The striking parallel between Clausewitz's concept of absolute war and nuclear war was soon noticed. A nuclear war could be 'an isolated act' which 'breaks out unexpectedly', arising through a single irrational decision, a simple miscalculation or a mechanical accident. Fought only with weapons constructed before hostilities began, 'preparations would tend toward totality, for no omission could ever be rectified.' It could take the form of 'a single short blow', consisting 'of one decisive act, or of a set of simultaneous decisions' determined in advance. Nuclear war could 'be spread simultaneously', engulfing not only belligerents but also third parties fearing for their survival. And the outcome might be 'final' with the annihilation of the states involved and even civilization itself."2241 Smith adds that: "For Clausewitz, of course, absolute war could not exist in the real world. Extreme effort is a 'fantasy' while the nature of military resources 'means that they cannot all be deployed at the same moment'."2242 And yet, Smith further reflects, "Nuclear war, however, seemed to have overcome all the modifying factors in real war – from human frailties to political constraints. Maximum destructions was possible with minimal effort. But while Clausewitz's absolute war was a theoretical construct unachievable in practice, nuclear war seemed all too possible."2243 Smith reintroduces Brodie to his discussion, writing how: "Some strategists, notably

<sup>2239.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 242-43.

<sup>2240.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 244.

<sup>2241.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 244.

<sup>2242.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 245.

<sup>2243.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 245.

in the US Air Force, initially saw nuclear weapons as simply an extension of World War II 'strategic bombing'," but that "[a]s early as 1946, however, Bernard Brodie argued that the role of the military establishment could no longer be to win wars," and a "new field of inquiry, sweepingly labeled 'strategic studies', arose to tackle the problems of war in the nuclear age, examining options for nuclear arsenals, scenarios for employing nuclear weapons, and ways of deterring nuclear attack. As Clausewitz had observed with absolute war, so it was with nuclear war: 'the inquiring mind can never rest until it reaches the extreme'. But it was a field of inquiry lacking something he considered essential to strategy – historical experience. Weapons could be tested in the real world but strategies for their employment could not. Nuclear war remained war on paper."<sup>2244</sup>

Smith finds that "nuclear weapons challenged Clausewitz's four levels of war," which he defined to be "fighting, contest, national strategy and politics. All seemed totally confounded by the nuclear arsenal yet in each case some of Clausewitz's ideas appeared more relevant than ever." 2245 As Smith explained: "Most fundamentally, nuclear war seemed to have abolished fighting in the sense of an encounter between military forces on the battlefield with outcomes shaped by traditional soldierly virtues like courage, endurance, experience and leadership. An enemy's will to resist, indeed his entire country, could be destroyed without meeting and defeating his armed forces in battle. Where modern war sought to isolate fighting on a battlefield, hypermodern war made entire societies into targets, abolishing traditional distinctions between soldier and civilian, and between front and rear. Rather than a clash of arms nuclear war would be simply 'a process of mutual destruction without any combat'. Or, if one state prevailed by some good fortune, a unilateral campaign of devastation. Since fighting had disappeared the term 'nuclear exchange' was sometimes preferred to 'nuclear war." 2246 Another casualty of nuclear warfare, Smith suggested, was that of friction: "At the same time nuclear arsenals promised to eliminate friction. For Clausewitz friction normally slowed down action, a burden to be carries by the efforts and endurance of armies. But now all the internal restraints that shackled war and prevented realization of the extreme were thrown off. Where conventional war operates in a resistant medium, nuclear weapons had created a condition of superconductivity. ... A rapid, virtually instantaneous rise to extremes was the likely result."2247 But Smith pauses to question whether friction would in fact be eliminated in the event nuclear war took place: "But friction remained in Clausewitz's strict sense – the difference between war on paper and war in reality. In the nuclear context it might lead to greater violence than

<sup>2244.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 245.

<sup>2245.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 245.

<sup>2246.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 245.

<sup>2247.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 246.

intended or speed up the process of destruction – or it might retain its usual sense of degrading performance. Orders to fire missiles might be misunderstood or disobeyed, missiles might fail to work as intended, and targets might be missed. Nuclear war, like all war, could not escape mistakes, malfunctions and miscalculations. Aware of these dangers, nuclear powers cooperated to avoid such eventualities as mechanical accident, misreading radar screens and misunderstanding an opponent's intentions."2248

Smith next addresses the primacy of policy, or Clausewitz's famous dictum of "War as a Continuation of Policy," writing that: "Nuclear weapons also transformed campaign strategy, causing it to merge with both tactics and national strategy. A nuclear campaign would no longer take the form of generals maneuvering forces to threaten and give battle in a defined theatre of war. The use of even a single nuclear weapon was a matter for national leaders, not for the military alone. Efforts were made to restore campaign strategy by deploying 'tactical' (low-yield) nuclear weapons and delegating authority for their use to commanders in the field. This strategy promised effective deterrence, and effective war-fighting if deterrence failed. But few were confident that initial use of tactical nuclear weapons would not be followed by rapid escalation, controlled or uncontrolled, to the global level."2249 Smith continues, "The function of the military became instead to develop, maintain and deploy the nuclear arsenal in peacetime for use as required by government. Generals ceased to be commanders with a degree of independence in their own theatre of operations. The army consisted not of fighting soldiers, but of technicians and experts skilled in targeting and dispatching weapons against military and non-military targets alike. ... The army had lost its normal function of protecting civilians from attack and being the principal object of enemy attack."2250 And thus with these sweeping changes wrought by nuclear weapons, Smith writes that: "Nuclear weapons immediately prompted the question whether war could any longer serve as an instrument of policy. ... Finding a way to use nuclear weapons for positive purposes proved elusive. Even during major conventional conflicts no state has used nuclear weapons against either a nuclear or non-nuclear opponent. Nuclear war, many concluded, might be a continuation of politics arising from political rivalries or miscalculations, but could never be a rational continuation of policy."2251

But this was not necessarily the case with regard to *deterring* nuclear war, as Brodie had so quickly realized at the dawn of the atomic age: "For others, however, the point was to apply Clausewitz's formula while taking into account the changed values in the equation. The costs and risks of initiating nuclear war are manifestly enormous while prospective gains are dubious or simply illusory. The formula still applies — even, or

<sup>2248.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 246.

<sup>2249.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 246.

<sup>2250.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 246-47.

<sup>2251.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 247-48.

especially, at the extreme. It effectively rules our nuclear war since the costs have risen beyond all reason."<sup>2252</sup> Indeed, Smith continues: "Supporters of the formula also argue that it can accommodate the idea of using the *threat* of nuclear war as an instrument of policy. While actually fighting a nuclear was is 'devoid of sense', creating a finite risk of nuclear war to bolster nuclear deterrence can be rational policy. ... The rationality lies in making careful use of a 'threat that leaves something to chance' such a that a prospective attacker cannot be sure the victim will not respond. Even simple possession of nuclear weapons, for example, without explicit threats or doctrines — 'existential deterrence' — can be a rational and effective instrument of policy."<sup>2253</sup>

In Smith's concluding discussion, on "Clausewitz and Hypermodern War," he explains that: "Nuclear weapons threatened to abolish Clausewitz's structure of war as fighting, campaigning and an instrument of policy. For some the new means of war meant his relevance had been lost. Anatol Rapoport, for example, dubbed 'neo-Clausewitzians' those who continued to believe that war remained normal in international relations and could be managed as a rational means of policy. Critics argued that even to consider war and its attendant risk of nuclear escalation was to accept its legitimacy and the risk of catastrophe. Policy could not and should not be conducted with an admixture of military means."2254 And yet, Smith continued, "for others Clausewitz's formula still provided wise counsel to statesmen. It means the careful tailoring of war to meet the ends of policy and hence a natural reluctance to resort to force when its consequences were unknowable and potentially catastrophic. Though Clausewitz had said little about deterrence, he had pointed to the risks of escalation. His principle of political supremacy over the military reinforced the importance of ends over means. Like pure war, the idea of nuclear war might serve as a reference point for those concerned with national security – but as an extreme to be avoided, not an ideal to be pursued."2255

In *Reading Clausewitz*, Beatrice Heuser describes Colin S. Gray as one of "Clausewitz's greatest admirers,"<sup>2256</sup> but notes that Gray nonetheless recognizes the Prussian's inherent challenges and contradictions,<sup>2257</sup> as described in Gray's 1999 tribute to Clausewitz, *Modern Strategy*. It might seem that Gray's embrace of Clausewitz came late, but this is more a reflection of Clausewitz's own inconsistencies and the perception of a duel within Clausewitz between "absolute" and "limited" war, as reflected in the discussion in the literature of a seeming "early" and "late" (or "Idealist" and "Realist,"

<sup>2252.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 248.

<sup>2253.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 248.

<sup>2254.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 249-50.

<sup>2255.</sup> Smith, On Clausewitz: A Study of Military and Political Ideas, 250.

<sup>2256.</sup> Beatrice Heuser, Reading Clausewitz (London: Pimlico, 2002), 17.

<sup>2257.</sup> Heuser, Reading Clausewitz, 23.

or even "strong" and "weak") Clausewitz. Gray's Cold War nuclear thinking seemed more in tune with the "early" Clausewitz of "absolute" war fame, and only later would evolve to more closely align with what some describe as the "late" Clausewitz. Indeed, Heuser recalls Gray's Cold War embrace of warfighting as nuclear strategy, thus placing him on the other side of the strategic-theoretical fence from Brodie, and more in tune with the approach taken by Herman Kahn; as Heuser describes, the "war-fighting school of nuclear strategists, which included ... Gray, argued essentially that 'victory' had to be the aim of military planning while war was an instrument of policy" and that "military planners had no choice, even in the nuclear age, but to assume that it was," as would be reflected in America's 1980 "countervailing" nuclear strategy.<sup>2258</sup>

Heuser recalls with irony that Gray, "in 1971 argued that civilian strategists should seek only the pursuit of truth, not of 'policy prescription' or 'the advocacy of viable solutions" and rebuked American civilian strategists, "over-impressed as they were 'with the potential transferability of theory to the world of action'," an issue Brodie himself would strongly challenge, "invoking Clausewitz to argue that 'strategic theory is a theory for action" and who castigated Gray, finding his "attitude was a 'sad retrogression from Clausewitz'," and arguing instead that "strategy is a field where truth is sought in the pursuit of viable solutions ... like any of the applied sciences, and not at all like pure science, where the function of theory is to describe, organize, and explain and not to prescribe."2259 Heuser also notes that Michael Howard similarly "dismissed Colin Gray's call for a 'war-winning capacity' as irrational, arguing that Gray and like-minded strategists advocated it 'not because their masters have any serious political motive for extirpating the societies of their adversaries, but because in a grotesque inversion of logic the means now dictate the ends."2260 Stephen J. Cimbala presents a more moderate view of Gray and his fellow warfighters, writing that "scholars and other military strategists might refuse to consider nuclear war fighting as a serious subject for study, but policy makers and commanders would be tasked to produce policy guidance, plans, and forces for the conduct of nuclear warfare in case deterrence failed," and while the "point of deterrence, as Bernard Brodie said in 1946, was to avoid war," Cimbala explains - much like Colin S. Gray would have argued in the 1980s - that "[a]voiding war by means of deterrence meant being able to fight if war was forced upon you," and it was upon "this, if little else" that the "U.S. and Soviet militaries agreed."2261

Heuser observes that Gray would eventually come to agree with Howard and Brodie, as reflected in his 1999 *Modern Strategy*, where he recognized the important distinc-

<sup>2258.</sup> Heuser, Reading Clausewitz, 151.

<sup>2259.</sup> Heuser, Reading Clausewitz, 159.

<sup>2260.</sup> Heuser, Reading Clausewitz, 160.

<sup>2261.</sup> Stephen J. Cimbala, Clausewitz and Chaos: Friction in War and Military Policy (Westport, Praeger, 2001), 128.

tion between deterring war as strategic policy, in contrast to winning nuclear wars through fighting; thus, as Heuser writes, "Gray asserts on the one hand that nuclear weapons have a strategic utility 'when the Clausewitzian language of 'the engagement' is interpreted to encompass 'deterrence action'" but not otherwise, when they "could not reliably be tamed for good Clausewitzian purpose as tools of high policy'," and that "after the mid-1960s, the political leaders and the military professionals of East and West were appalled by the monster of nuclear armament that they had created which could not, après Clausewitz, be a rational instrument of state policy." 2262 But Heuser cautions that "there is no safety in Colin Gray's assumption that deterrence works in the same way between any 'pair' of nuclear adversaries, and that limited war is the only option open to them."2263 Indeed, Heuser turns to Stephen J. Cimbala, adding: "As Cimbala has reminded us, Clausewitz would urge anyone to beware of war's tendency towards escalation, to get out of hand, and of passions aroused by war. And it is worth reminding ourselves that while *ideally* all governments should follow Clausewitz's precept of thinking about the possible last step before venturing on the first, not all governments ... have always done so."2264 Heuser later notes both Gray and Brodie took inspiration from Clausewitz, albeit different portions of his work, with Gray among those who "believe that strategy never changes," in contrast to Brodie who finds himself among those who "stress the variability of war and strategy," 2265 though the late Gray (as reflected in his 1999 Modern Strategy) finds more common ground with his old sparring partner Brodie, and with the dimensions of Clausewitz that some describe as the "late Clausewitz" or even the "Realist" Clausewitz as Heuser so describes him - noting there were two distinct Clausewitzes or phases of Clausewitzian theory, an idealist and a realist, diverging on the issue of war's tendency to violently and passionately escalate toward the extreme of absolute war, and its actual inertial tendency to remain limited, contained by the logic of political objectives. <sup>2266</sup>

Gray's *Modern Strategy* is at heart a tribute to Clausewitz's enduring influence, but within this tribute to the Prussian can be found an implicit tribute to Brodie, evident in Gray's recurrent discussion of Brodie's ongoing effort to reconcile Clausewitzian theory with the nuclear age. Gray describes Clausewitz's influence throughout the work: in chapter two, he "explores the political and ethical dimensions of strategy and finds that politics (or policy), in Clausewitz's sense, is eternal, as is strategy," and "explains why strategy is more than just 'a continuation of political intercourse, with

<sup>2262.</sup> Heuser, *Reading Clausewitz*, 160, note 81, citing Gray, *Modern Strategy* (Oxford: Oxford University Press, 1999), pages 297, 316 and 322, respectively, with emphasis added by Heuser

<sup>2263.</sup> Heuser, Reading Clausewitz, 177.

<sup>2264.</sup> Heuser, Reading Clausewitz, 177-178.

<sup>2265.</sup> Heuser, Reading Clausewitz, 190.

<sup>2266.</sup> Heuser, Reading Clausewitz, 41-43.

the addition of other means" as Clausewitz wrote, and instead "ventures into a land where Clausewitz did not tread - the friction that can impede relations between the realms of policy and war." <sup>2267</sup> Chapters three and four, he notes, "examine critically the Clausewitzian legacy of strategic theory, with particular reference to the proposition that Clausewitz should retain the title of First Theorist of War," and adds: "Chapter 3 argues that, although the exceptionally violent twentieth century has bequeathed us many notable works of strategic importance, the continuing intellectual supremacy of On War is not hard to demonstrate," and "Chapter 4 advances and discusses many possible reasons for the relative (to On War) poverty of modern strategic theory worthy of the name," and while acknowledging that "it is too soon to judge which of the strategic theorists of the twentieth century wrote truly classic works, and which did not," Gray notes his fourth chapter "speculates that in some ways Clausewitz probably tackled an easier set of tasks in his dedication of On War fairly strictly to the nature and higher conduct of 'war proper' than would have been the case had he addressed rigorously the connections between the causes and the conduct of war, and the course and outcome of war."2268 Gray would later add, on page 361 of his book. That: "Clausewitz's most powerful claim to fame is that he spoke more eloquently than anyone else about the difficulties of his subject. It is standard to praise him for his determination not to offer a cookbook on war, a manual for the practical soldier," and yet, Gray adds, while "[s] uch self-abnegation is certainly praiseworthy," that the "fact remains that he left the most difficult terrain of his subject almost wholly unmapped, let alone untilled."2269

In his preface Gray embraces Clausewitz's definition of strategy, writing: "Above all others, my preferred definition of strategy ... is strictly Clausewitzian," and while Gray does "not claim that Clausewitz's definition of strategy is correct," noting that "a definition cannot be so described," he does make the "claim that Clausewitz's definition provides the path for superior strategic understanding to those wise enough to adopt it."2270 He later writes, "Much of whatever merit this book may have is attributable to the educational effect of the writings of Carl von Clausewitz. Whether I have been studying nuclear targeting, the leverage of seapower, or the strategic utility of special operations, Clausewitz's *On War* has been my constant companion and by far the most heavily used book in my library," and among the more recent scholars he credits for their "personal inspiration," he includes Donald G. Breenan, Herman Kahn, Bernard Brodie, and Albert Wohlstetter," each of whom "in his way was a giant in the field," and while "not uncritical" of them, he is likewise not "any more ... uncritical of

<sup>2267.</sup> Colin S. Gray, Modern Strategy (Oxford: Oxford University Press, 1999), 12.

<sup>2268.</sup> Gray, Modern Strategy, 12.

<sup>2269.</sup> Gray, Modern Strategy, 361.

<sup>2270.</sup> Gray, Modern Strategy, ix.

Clausewitz."2271 Indeed, after himself, Gray identifies Clausewitz as the second most responsible person "for the shape and even some of the detail of this work." 2272 Recalling the Cold War, he writes: "I do not try to argue that I – and theorists, officials, and soldiers who thought like me – was correct in my advice and theorizing about, say, nuclear strategy in the 1970s. But I do believe that many academics, particularly the younger ones, are apt to lack empathy with the policymakers of the superpowers who had to respond to the novelty of the nuclear challenge to strategy as best they could."2273 He thus has much sympathy with theorists like and including Brodie. He adds that, "In the writing of this book as honestly as I knew how, I found that while over thirty years I may sometimes have reached the wrong conclusions, and at other times sought to achieve the wrong objectives, the reasons for those errors were honourable."2274 Addressing the question, 'Why is strategy so difficult," as he does on page five, Gray writes: "Although modern technology is wonderful and many military establishments are characterized by a sophisticated professionalism, superior strategic performance is as difficult to achieve today as it was in 1900," and as "Clausewitz's comments: It might be thought that policy could make demands on war which war could not fulfill; but that hypothesis would challenge the natural and unavoidable assumption that *policy knows the instrument it means to use*. If policy reads the course of military events correctly, it is wholly and exclusively entitled to decide which events and trends are best for the objectives of war."2275

Chapter three of Gray's tome, "The Strategist's toolkit: The Legacy of Clausewitz," starts off with this tribute to the Prussian: "Most of what we need to know in order to understand modern strategy is on offer to the careful reader of Carl von Clausewitz's *On War*," and he agrees with Richard K. Betts' "claim that '[o]ne Clausewitz is still worth a busload of most other theorists." Just as he disagrees with one of Clausewitz's toughest critics: "John Keegan could hardly be more in error than when he judges Clausewitz to have promulgated 'the most pernicious philosophy of warmaking yet conceived." And, he adds, "Whether or not readers share my enthusiasm for Clausewitz, it is notable than an incomplete book manuscript first published in 1832 can inspire opinions today as diverse as those just quoted." And so, Gray explains, his third chapter "is devoted to the ideas of Carl von Clausewitz for the practical reason

<sup>2271.</sup> Gray, Modern Strategy, xi.

<sup>2272.</sup> Gray, Modern Strategy, xii.

<sup>2273.</sup> Gray, Modern Strategy, x.

<sup>2274.</sup> Gray, Modern Strategy, xi.

<sup>2275.</sup> Gray, Modern Strategy, 5.

<sup>2276.</sup> Gray, Modern Strategy, 75.

<sup>2277.</sup> Gray, Modern Strategy, 75.

<sup>2278.</sup> Gray, Modern Strategy, 75.

that he provides most of the conceptual tools needed for the strategist's toolkit," and in it he'll "explain the reason why the argument in *On War* remains the gold standard for theory about war and strategy," and demonstrate that "Clausewitz bequeathed to posterity a body of thought on war that is more persuasive by far than is any body of thought by a rival theorist, or even a rival camp of theorists."<sup>2279</sup> And while he admits that "[t]here can be no last word on war and strategy," and while "certainly there can be no sacred texts," he finds "Clausewitz, simply, is more persuasive than other theorists."<sup>2280</sup>

Gray turns to Brodie when contemplating whether there have yet arisen worthy successors to the Prussian, and writes: "To quote Bernard Brodie, 'Clausewitz's book [On War] is not simply the greatest but the only truly great book on war," and Brodie's "judgement is widely shared among the strategic theorists of many countries today, and indeed endured for much of the twentieth century."2281 And while Gray reiterates that his Modern Strategy is "about modern strategy, not about Clausewitz," he adds that, "Nonetheless, whatever one's view of the quality of On War, or its relevance to modern strategy, Clausewitz enjoys an intellectual near-hegemony as the leading general theorist of war and strategy," with Sun Tzu being "the only possible competitor" though noting "that competition would be ill-matched, as Art of War provides cook-book guidance for statecraft, rather than c comprehensive theory of war."2282 Gray further notes in chapter four that Brodie "also then argues, cleverly though not unchallengeably: 'While genius has scarcity value in every field of human endurance, in the field of strategic writing it has a special rarity. The reason is that soldiers are rarely scholars, and civilians are rarely students of strategy. Clausewitz's genius is indisputable, and also in his field unique."2283 This, in part due to the effort of Brodie and his peers who would foster the emergence of the contemporary field of strategic studies, may no longer be the case and today's civilian scholars of strategy, as is also the case for military scholars as well, define a large and growing demographic.

Gray further cites Brodie on Clausewitz's unique strategic genius: "In the process of praising and explaining Clausewitz, Brodie was not above exorcising some of the demons that impeded his own career, but his claim for the importance of history, a claim endorsed by Napoleon and Clausewitz, is as convincing as it is also self-serving: 'Our own generation is unique, but sadly so, in producing a school of thinkers who are allegedly experts in military strategy and who are certainly specialists in military studies but who know virtually nothing of military history, including the history of

<sup>2279.</sup> Gray, Modern Strategy, 75.

<sup>2280.</sup> Gray, Modern Strategy, 75.

<sup>2281.</sup> Gray, Modern Strategy, 84.

<sup>2282.</sup> Gray, Modern Strategy, 84.

<sup>2283.</sup> Gray, Modern Strategy, 120.

our most recent wars, and who seem not to care about their ignorance ... the only empirical data we have about how people conduct war and behave under its stresses is our experience with it in the past, however much we have to make adjustments for subsequent changes in conditions.' In this forceful and personal restatement of the viewpoint of the historical school of strategic thought, Brodie is arguing not only that history is 'the only empirical data we have' about war and strategy, but also that many influential modern strategic theorists are historically severely challenged and are content to remain such. This argument by Brodie is probably less true today than it was in the 1950s, 1960s, and 1970s, but it continues to warrant respect."<sup>2284</sup>

But like other recent theorists, Gray takes care to note that Clausewitz's relative greatness does not translate necessarily into influence. As he puts it, "To argue for the greatness of Clausewitz and for his continuing relevance is not necessarily to suggest that he has been notably influential. Great books need not be read; if read they need not be understood; and even if understood, they may not be allowed to help guide strategic behavior. Clausewitz has not been as influential as he should have been," and despite the "unique superiority of Clausewitz as a general strategic theorist" in both qualitative and quantitative terms, Gray like other has noted that "On War is pretty close to unreadable from beginning to end, given its lack of coherent intellectual or narrative trajectory," though "it rewards browsing readers with gemlike insights at almost any random opening of its pages."2285 Adding to the challenge, Gray notes that "Clausewitz provides uneasily both an Old Testament and a New Testament in On War," as his "intellectual crisis in 1827 obliged him to begin to write-in the revelation that political guidance ensures that real, which is to say limited, war almost always dampens the prospect for war to proceed to exhibit its ideal, absolute character. Not for nothing is the comment often made that *On War* is copiously quoted but much less frequently read, let alone read from cover to cover. It provides a general and considerably but still incompletely unified theory of war and strategy unmatched by the works of other theorists before or since. Furthermore, the partial theories of seapower, airpower, and nuclear strategy, all of which could draw upon the strengths of Clausewitzian general theory, have failed to come within close reach of Clausewitz's standard of excellence."2286

But other scholars question the degree to which these two distinct "testaments" contained in Clausewitz's treatise mark an abrupt conceptual break for the Prussian, and suggest that his core thinking on issues such as the political dimensions of war and their restraining effect on the conduct of war show a marked continuity between his

<sup>2284.</sup> Gray, Modern Strategy, 121.

<sup>2285.</sup> Gray, Modern Strategy, 85.

<sup>2286.</sup> Gray, Modern Strategy, 85.

so-called "early" and "late" phases. As Dan Moran writes in "Late Clausewitz," in the 2011 anthology, Clausewitz, the State and War, "The central interpretative challenge presented by Clausewitz's late work is not that it diverges so profoundly from what he had done before that we must start over. It is that Clausewitz's premature death makes it difficult to judge the full consequences that might have followed from his intention to subordinate war more systematically to politics," and Clausewitz, like Beethoven who also died in his fifties, "might have enjoyed an additional decade or more of vigorous, creative productivity, in which case the works we regard as 'late' would be viewed less conclusively, as stages toward further achievements whose nature we can only guess."2287 But in contrast to Beethoven, whose later work "does not require that Early Beethoven be re-evaluated," Clausewitz's works "are habitually seen as contributions toward a single Unfinished Symphony, whose final pages appear to have been written not merely in a different key, but in a different tonal system altogether. Clausewitz's failure to publish more than a few articles during his lifetime has encouraged this tendency, by inviting posterity to view the entirety of his oeuvre as a gigantic work in progress."2288 Moran adds this "issue is complicated by the difficulty of judging how far Clausewitz was able to execute his planned revisions of On War. Whatever feelings of catastrophe may have overtaken him in 1827, they did not lead to anything like intellectual paralysis" but instead "proved to be a spur to new productivity" that would be primarily channeled to his examination of "the theoretical challenges presented by the subordination of war to politics" which "reinvigorated his study of history, which he regarded as the fundamental ground of all theory."2289 Indeed, as Moran elucidates: "We know from correspondence and internal textual evidence that Clausewitz's histories of the campaigns of 1796, 1799, and 1815 all date from the last years of his life. Collectively these manuscripts are longer than On War itself, and exemplify the kind of integrated military-political analysis the July note promises," as is "true of Clausewitz's correspondence with a fellow officer, Karl von Roeder" in 1827, and of two 1831 articles by Clausewitz "in which the primacy of the state's interests, and the integrity of the international system, are the central concern."2290

What is less clear is how much of *On War* reflects Clausewitz's "more ambitious theoretical agenda [as] he set for himself in 1827,"<sup>2291</sup> particularly in the case of Book VI whose "subject is inherently political" but which "seems to have remained un-

<sup>2287.</sup> Dan Moran, "Late Clausewitz," in Andreas Herberg-Rothe, Jan Willem Honig and Daniel Moran, eds., *Clausewitz, the State and War* (Stuttgart: Franz Steiner Verlag, 2011), 91.

<sup>2288.</sup> Moran, "Late Clausewitz," 91.

<sup>2289.</sup> Moran, "Late Clausewitz," 91-92.

<sup>2290.</sup> Moran, "Late Clausewitz," 92.

<sup>2291.</sup> Moran, "Late Clausewitz," 92.

touched after 1827," and Moran suggests that "Clausewitz's determination, in what proved to be the last years of his life, to resolve his long pursuit of a unified theory of war by placing additional stress on its interaction with politics, does not mean that his understanding of politics had changed."2292 He adds that "[m]uch of the contention surrounding Clausewitz's work, as well as its reputation for abstruseness (which contention has amplified), arise from the question of how, and whether, his life-long study of war can or should be transposed into the new tonal register of his late texts; and, by extension, how far Clausewitz's understanding of politics, which define the new register, was limited by his concept of the state."2293 Moran finds that Clausewitz, even "after a lifetime of thinking about war ... had no idea how war might again be restricted to the relatively modest forms it had once assumed," but it was nonetheless "clear, however, that he expected that it would be a political, and not a social or cultural process," as "the state was the repository of reason within political communities" and thus "deserved its authority to the extent that its capacity to reach sounds judgments and learn from experience were superior to that of society as a whole. And while it may well be true, as Clausewitz says, that the maximum use of force is not compatible with the use of reason, it can never represent its triumph. For the triumph of reason, one must have peace, the ultimate public good – the ultimate aim of war, indeed – and the final measure of any polity's success. The ascendancy of the modern state had depended on its capacity to make war. Its future would depend on its ability to master war, which was something else entirely."2294 One could similarly view Brodie's contribution to the study of war in the nuclear age as quite similar to Clausewitz's, with only one minor caveat: rather than the future of the state depending upon its mastery of war, Brodie would argue strongly from the very dawn of the nuclear age that it would henceforth depend on war's avoidance, and the path to war's avoidance in an era of such destructive weapons would depend ultimately upon the mutuality of deterrence.

In his eleventh chapter of *Modern Strategy*, on "Second Thoughts on Nuclear Weapons," Colin Gray revisits his earlier view as articulated in his preface that there is "considerable danger that the making of nuclear strategy and the practice of nuclear deterrence will be misjudged by historians who lack empathy in their scholarly forays into the nuclear archives," and while he cautions that his chapter "should not be read as a prolonged apologia," he is nonetheless "appalled at the scale and character of the contingent nuclear threats that the US government embraced as its evolving nuclear strategy during the Cold War," a strategy to which Gray contributed – though he also

<sup>2292.</sup> Moran, "Late Clausewitz," 93.

<sup>2293.</sup> Moran, "Late Clausewitz," 93.

<sup>2294.</sup> Moran, "Late Clausewitz," 107.

finds "nonetheless that there was a method in the apparent madness, and that 'just' intentions hovered behind the contingent emergency action messages (EAMs – the signals for nuclear action). <sup>2295</sup> In his discussion of "A Second Look," Gray further writes that: "Modern strategists have been shaped by the challenges posed by nuclear weapons. For more than forty years the nuclear issue all but defined the domain of (Western) strategic studies. The intellectual heroes of modern strategic thought have been individuals who sought to make strategic sense of nuclear weapons. Bernard Brodie, Albert Wohlstetter, Thomas C. Schelling, Herman Kahn, and – with reservations – Henry A. Kissinger were soon recognized as giants not only because of the quality of their theorizing but also because they tackled the most pressing security problems of the era." <sup>2296</sup>

Nonetheless, Gray does criticize Brodie's presumption that the bomb was somehow an 'absolute' weapon, even though Brodie himself would prove quick to question this very presumption as nuclear weapons evolved in their destructiveness, and as the early atomic fission bomb was dwarfed by the thermonuclear superbomb. But as Gray argues, "Neither the atomic bomb nor even the hydrogen bomb was 'the absolute weapon'. That negative claim is not contradicted by the fact that thus far nuclear weapons have had the strategically unusual potential of being able to defeat a foe without first defeating that foe's armed forces. Furthermore, no less unusually, defeat of the foe could not guarantee that his undefeated armed forces would be unable or unwilling to deliver a fatal (nuclear) counterblow in retaliation. That, of course, is the familiar logic of mutual deterrence in the content of mutual assured destruction, or MAD. There is some sense in the proposition that holds that between the superpowers in the Cold War, MAD was simply a fact of military life: it was neither policy nor strategy." 2297

Gray emphasizes his belief that "an existential claim on behalf of an alleged absolute quality to nuclear arms is, strictly, fallacious. Nuclear weapons do not represent the end of strategic history. Quite the contrary: the raw physical potency of nuclear arms has stimulated energetic endeavours to sideline or 'marginalize' such arms. The arrival of atomic armament in 1945 opened a new chapter in strategic history, it did not write *finis* to strategy." Gray explains that, "When Brodie, and later Freedman, speculated to the effect that strategy had hit a 'dead end' with the age of nuclear plenty, their plausible claims had a rather narrow strategic writ. Specifically, the superpowers discovered that large-scale employment of nuclear weapons would most probably prove self-defeating, in fact would sunder the rational connection between military power

<sup>2295.</sup> Gray, Modern Strategy, 297.

<sup>2296.</sup> Gray, Modern Strategy, 298.

<sup>2297.</sup> Gray, Modern Strategy, 306.

<sup>2298.</sup> Gray, Modern Strategy, 307.

and political purpose that lies at the core of strategy"<sup>2299</sup> – the very point that Brodie himself would emphasize from the first hours of the atomic era through to the end of his life near the Cold War's peak in 1978. Indeed, as Gray recalls, "The American defence establishment sought to come to terms with this astrategic implication between approximately 1955 and 1965; the Soviet defence establishment grappled with its recognition of this same inconveniently astrategic fact between 1972 and 1982. Tactically, nuclear weapons could be rendered less than absolute by other nuclear, as well as by ever more precisely delivered conventional, weapons. Operationally, the potentially absolute character of nuclear weaponry may be evaded by provision of massive disincentives to nuclear war. Finally, politically one may so set the stage that some mix of taboos, 'lore', and net military and political disadvantage renders nuclear use all but unthinkable."<sup>2300</sup> In these ways, the primacy of policy in the nuclear age was restored, enabling strategy to continue, and transcend the strategic "dead end" whose perceived arrival Brodie had so feared.

Rather than being absolute, Gray emphasizes the relative nature of the bomb and its potential use - something that Brodie himself came to recognize with the advent of the H-bomb. As Gray comments, "Nuclear war must always be a terrible event. But there are degrees of terrible, and those degrees could matter," much as if World War III had erupted in 1948, which would then have likely "seen the use of 50-250 US atomic weapons," which "would have been a deeply regrettable but survivable catastrophe" for all involved, whether "the human race, for planet earth, for the United States, and even for Europe," in stark contrast to later on when its "result would most probably have been terminal for 'civilization as we know it'."2301 Thus writes Gray: "Given the blessed absence of historical evidence of nuclear use in battle after 1945, it is difficult to discipline theoretical discourse with regard to particular periods. Suffice it to say for now that much of the alleged strategic wisdom that supposedly explains state behaviour during the Cold War is distinctly ahistorical with reference to the military balance or, in Soviet terms, the correlation of forces. Nuclear weapons, like nuclear wars, come in a wide range of different possibilities, and the differences could matter profoundly."2302 On the other hand, Gray concedes: "The point is not to claim that Western strategists were correct in their determination to wage great arms competition with vigour in the 1980s. Rather, the argument is that Western strategists from the 1960s to the mid-1980s were obliged, on the evidence available, to assume that the USSR was a formidable foe ready, willing and able to take advantage of any slackening of will and effort on the part of the Western Alliance," and looking back

<sup>2299.</sup> Gray, Modern Strategy, 307.

<sup>2300.</sup> Gray, Modern Strategy, 307.

<sup>2301.</sup> Gray, Modern Strategy, 307-308.

<sup>2302.</sup> Gray, Modern Strategy, 308.

he finds that those "historical figures who conducted nuclear policy during the Cold War did so for reasons, and eventually according to all but codified principles and assumptions, that are surprisingly resilient to criticism from hindsight" – as they found themselves "propelled from outset to conclusion by tolerably accurate perceptions of political antagonism." <sup>2303</sup>

Gray salutes the pioneers of nuclear strategy and the architects of the nuclear order; as he writes: "Talented theorists as far apart in age and dates of authorship as Bernard Brodie and Robert Jervis have written persuasively of the nuclear revolution" <sup>2304</sup> – the former editing in 1946 The Absolute Weapon and the latter authoring in 1989 The Meaning of the Nuclear Revolution, as Gray adds in a footnote. 2305 As Gray further writes, "The case for a nuclear revolution in military and security affairs is paradoxically unanswerable, but not unarguable," with Jervis making the case that "it is mutual second-strike capability and not nuclear weapons per se that has generated the new situation," and Brodie arguing, as Lawrence Freedman would later echo in his 1989 second edition of The Evolution of Nuclear Strategy, that "strategic thought ... may have reached a dead end', because of the nuclear fact which commands a context wherein 'stability depends on something that is more the antithesis of strategy than its apotheosis.'"2306 Gray adds that "Brodie, and then - much later - Robert Jervis and Lawrence Freedman, to cite only three of the more cogent theorists, all write eloquently about the implications of *the* central organizing feature of the nuclear age. Specifically, nuclear weapons can transform the character of war and strategy because of their inability to deliver military victory at bearable cost to the 'victor'. In addition, nuclear weapons could deny the validity of the rule of classical strategy which holds that the enemy's armed forces, in one or several geographical mediums, have to be overcome before victory can be secured."2307

Citing Brodie's early and oft-quoted observation, Gray writes that: "Viewed in long retrospect, the following pronouncement by Bernard Brodie in 1946 appears uncannily prescient: '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.' This early celebration of the overwhelming importance of deterrence scores high on the scale of accurate focus on the greatest of problems, but

<sup>2303.</sup> Gray, *Modern Strategy*, 313. Gray does concede in a footnote that his 1981 Orbis article, "The Most Dangerous Decade: Historic Mission, Legitimacy, and Dynamics of the Soviet Empire in the 1980s," "would prove to be unduly alarmist" but adds his "article can be read today as an honest and even prudent 'period piece'." Gray, *Modern Strategy*, 313, citing his "The Most Dangerous Decade: Historic Mission, Legitimacy, and Dynamics of the Soviet Empire in the 1980s," *Orbis* 25 (1981), 13-28.

<sup>2304.</sup> Gray, Modern Strategy, 302.

<sup>2305.</sup> Gray, Modern Strategy, 302, n.16.

<sup>2306.</sup> Gray, Modern Strategy, 302.

<sup>2307.</sup> Gray, Modern Strategy, 303.

it missed the mark in other respects. Some of the historical commentary today on strategy in the Cold War is scarcely wiser with the advantage of hindsight than was Brodie, who was very largely in the realm of speculation in 1946."2308 Today's historians of the Cold War "cannot but know that a nuclear Third World War did not conclude the Cold War," while the strategists "on both sides who ran the statecraft and strategy of that famous struggle had no way of knowing that there was not a nuclear war in their near or medium-term future. ... Unlike the strategic historian, even the excellent strategic historian, the strategist and those who must advise him inhabit a world wherein the future has yet to happen, where information is often horribly uncertain, and, indeed, where all of Clausewitz's contributors to friction work overtime."2309 And so Gray finds himself "troubled lest historians provide distorted judgement on the past for reason of their superior knowledge."2310 Indeed, in contrast to today's historians of the nuclear age, Brodie and his peers did not have this luxury of hindsight – and had only their wits and theoretical instincts to safely guide them through the nuclear storm clouds that so ominously threatened their generation.

## Armageddon by Other Means: Challenges to Clausewitz, from the Age of Air Warfare to the Atomic Age

When two atomic bombs were dropped in rapid succession upon the Japanese cities of Hiroshima and Nagasaki at the end of World War II, ushering mankind into the new, uniquely dangerous nuclear era, the events were not entirely without precedent in their scale of destruction or loss of human life. Indeed, the evolution of air power, and the American way of waging air warfare, seemed to enjoy as much continuity with those infamous events in early August 1945 as discontinuity. While Brodie has been lauded for being amongst the first to recognize a strategic discontinuity with the advent of what has been called, at least briefly, the 'absolute weapon,' Brodie himself would come to recognize those first atomic devices dropped from strategic bombers in the closing days of World War II as less of a strategic revolution and more a tactical innovation, with the newer, far more destructive hydrogen bomb created a few years later fulfilling that role, particularly when coupled to intercontinental missiles.

But the atomic incineration of Hiroshima and Nagasaki did not greatly differ in destruction from that inflicted by the preceding incendiary missions, which used low-tech napalm canisters with equal devastation – albeit with much less efficiency, requiring hundreds of bombers in contrast to just one. As Michael S. Sherry explains

<sup>2308.</sup> Gray, Modern Strategy, 304.

<sup>2309.</sup> Gray, Modern Strategy, 305.

<sup>2310.</sup> Gray, Modern Strategy, 305.

in his preface to *The Rise of American Airpower: The Creation of Armageddon*, he has sought to redress what he has described as today's "fragile remembrance" of that time, exploring "the profound difficulties people faced in comprehending air war even as it unfolded, and the manner in which thinking about bombing before August 6, 1945, has shaped attitudes and approaches to the nuclear question." Indeed, as Sherry recalls: "Almost as soon as Hiroshima was destroyed, the reflex reaction of most observers was to regard the atomic age as revolutionary and the previous history of air war as irrelevant, just as earlier commentators on the bomber tended to dismiss the previous history of warfare. In both cases, declarations of the past's irrelevance masked the persistence of old habits. This book examines that persistence." 2312

Sherry observes continuities that link the pre- and post-atomic worlds, noting conventional strategic bombing had evolved during World War II to the point where conventional destruction had become qualitatively no less destructive than its atomic counterpart, evident in the firebombing of Hamburg during the second Hamburg raid in the summer of 1945, which Sherry described as "a meteorological phenomenon in its own right" - fueled by a lethal mix of incendiary and high-explosive bombs whose "greed for oxygen sucked in the fresher air from the fringes of the cauldron, the bellow-like draft creating terrific winds that sent bodies, trees, and parts of buildings flying through the air heated to 600 degrees centigrade."2313 Sherry recalls that the "firestorm erupted so rapidly that the population caught in it was trapped. Measures that were sensible in a high-explosive attack – rushing to shelters and basements – were disastrous because the fire drained these quarters of oxygen, asphyxiating inhabitants, then baking the bodies through radiant heat."2314 This was truly Apocalyptic war: "Not merely death but the manner of death, not merely destruction but its otherworldly suddenness and totality triggered among survivors a world-ending event, one 'transcending all human experience and imagination.' Theirs was a speechless horror, one usually identified later only with the victims of atomic bombing."2315

Sherry writes that not only did "few doubts about the wisdom of the Hamburg raids and their place in overall strategy" surface in Britain, but that the Americans looked to Hamburg not with complaint, but instead for instruction; "the firestorm was carefully studied by American experts, particularly with an eye to the bombing of Japan," and "Roosevelt saw in Hamburg 'an impressive demonstration' of what America might

<sup>2311.</sup> Michael S. Sherry, *The Rise of American Airpower: The Creation of Armageddon* (New Haven: Yale University Press, 1987), ix.

<sup>2312.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, ix.

<sup>2313.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 153.

<sup>2314.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 153.

<sup>2315.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 153.

<sup>2316.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 155.

achieve against Japan."<sup>2317</sup> The Manhattan Project would only further illustrate "how the disjunction between technical means and strategic ends ... perversely increased in proportion to a weapon's promise."<sup>2318</sup> Indeed, in his eighth chapter, "The Sources of Technological Fanaticism," Sherry recounts how Roosevelt's "declining energies" had led him to "put command of the Twentieth Air Force directly in [General Hap] Arnold's hands, thereby reaffirming that the aerial weapon was to play an independent, strategic role in defeating Japan."<sup>2319</sup> The strategy was "'to force the unconditional surrender of Japan by ... invading and seizing objectives in the industrial heart of Japan' after a campaign of blockade by air and sea; 'intensive air bombardment' was designed to lower the enemy's ability and will to resist."<sup>2320</sup> Sherry notes that the "origins of that strategy lay in both American military traditions and the circumstances of the moment," and the "'strategy of annihilation' aimed at engaging the enemy's main forces and seizing his territory and capital had deep roots in the American style of warfare, especially as it had developed since 1860."<sup>2321</sup>

Thus by December 1944, Sherry believes the "American government succumbed to a 'failure to distinguish between the problem of inflicting strategic defeat on the enemy and that of inducing him to surrender," and Sherry attributes this failure to a variety of factors, including "the newness of total war and of air power's role in such a war," "the cultural difference between the two enemies as well as the racism flowing from it," and "the indifference of strategic planners to the question of relating destruction to surrender and from the failure of political leaders to provide them leadership when they did become concerned."2322 So while it became evident that "[d]estruction would win the war," Sherry comments that "[w]ithout a clear and accurate model of how the enemy thought and how destruction might compel his surrender, little guided the course of bombing beyond its own internal dynamics and the fearsome prospect of invasion. Once again, intangible criteria invited ultimate destruction."2323 Sherry adds that the "formula for unconditional surrender has been faulted often enough for making the enemy fight on" but that, "[p]articularly in the American war against Japan, it provided few criteria for measuring the relationship of destruction to the attainment of political ends" and thereby "seemed only to indicate that the path to unconditional surrender lay through unconditional destruction,"2324 a surrendering –

<sup>2317.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 156.

<sup>2318.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 168.

<sup>2319.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 219.

<sup>2320.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 236.

<sup>2321.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 236.

<sup>2322.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 250-251.

<sup>2323.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 251.

<sup>2324.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 251.

in Clausewitzian terms – to war's coldest logic and tendency toward extremes, and a dissociation of the all-important Clausewitzian dictum that sought to web war and its means to the objectives of reasoned policy. As we will see in the chapters that follow, one nuclear strategist in particular, Bernard Brodie, would endeavor to re-establish this severed Clausewitzian connection between policy and war, and to restore policy's primacy; while later criticized by Clausewitz scholars for too narrow a focus on this singular dictum as the expense of Clausewitz's more holistic "trinity of war" or "wondrous trinity," Brodie's efforts responded to the profound breach between war and policy that Sherry has observed.

While eschewing a Clausewitzian language, the problem of "technological fanaticism" as Sherry described was the self-same problem that Brodie would grapple with from the very dawn of the nuclear era, as he challenged his peers to resist technological imperatives and the unthinking fanaticism they can breed, much like his colleague Herman Kahn who imagined logically waging war all the way up the ladder of thermonuclear destruction, driven by the same technological inertia as the aerial bombers of World War II. Indeed, Sherry argues the "leaders and technicians of the American air force were driven by technological fanaticism – a pursuit of destructive ends expressed, sanctioned, and disguised by the organization and application of technological means. Destruction was rarely the acknowledged final purpose for the men who made air war possible. rather they declared that it served the purpose of securing victory and that its forms were dictated by technological, organizational, and strategic imperatives. In practice, they often waged destruction as a functional end in itself, without a clear comprehension of its relationship to stated purpose."<sup>2325</sup>

Sherry takes care to explain why he applies the term fanatic here, noting that doing so "may defy the usual understanding of the terms, which sees in fanaticism the workings of a single-minded, frenzied emotional devotion to a cause," and also noting that the term, within the context of World War II, "usually refers to America's enemies." <sup>2326</sup> But Sherry counters that "fanatical acts are not always the product of frenzied or hateful individuals, as Hannah Arendt has shown in capturing the banality of Adolph Eichmann," and also observes that "there was a suggestion of the megalomaniacal among the practitioners of air war in their aspirations for technological omnipotence: over the natural universe for some of the scientists, over the geographic and political world for the airmen striving to achieve a 'global' air force." <sup>2327</sup> As Sherry describes: "The shared mentality of the fanatics of air war was their dedication to assembling and perfecting their methods of destruction, and the way that doing so overshadowed

<sup>2325.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 251-252.

<sup>2326.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 252.

<sup>2327.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 252-253.

the original purposes justifying destruction. Their coolness, their faith in rational problem-solving, did not easily appear fanatical because its language was the language of rationality and technique," but to Sherry it was fanatical nonetheless. Thus, "The lack of a proclaimed intent to destroy, the sense of being driven by the twin demands of bureaucracy and technology, distinguished America's technological fanaticism from its enemies' ideological fanaticism." And, fueled by this unprecedented power of destruction, Sherry writes that "[t]echnological fanaticism, long developing, could not be fully achieved." 2330

Sherry's next chapter, "The Triumphs of Technological Fanaticism," chronicles the rain of fire delivered to Japan, culminating in many ways with the unprecedented March 10 firebombing of Tokyo which lay waste to sixteen square miles and extinguished the lives of "at least eighty-four thousand people," leaving much of Tokyo a "smoking moonscape" punctuated by "fleshless hands or feet or bloody masks that once were faces"2331 on countless surviving burn victims, and a "sense of a horror transcending human capacity"2332 reminiscent of not only the forthcoming atomic attacks, but of the Hamburg firestorm as well. Sherry recounts how the "momentum of destruction" <sup>2333</sup> would continue, with unconditional surrender still the goal: "Without refinement of surrender terms, strategists saw little choice but to plan on applying every kind of force against Japan: conventional bombing, use of the atomic bomb, Soviet entry into the war, and of course invasion."2334 Citing Air Force staff records: "Unless a definition of unconditional surrender can be given which is acceptable to the Japanese, there is no alternative to annihilation and no prospect that the threat of absolute defeat will bring about capitulation. The accomplishment of the unconditional surrender objectives then must be entirely brought about by force of arms." In short, plans for invasion had to go forward. For the bombing effort the implications were perhaps less clear. But whereas revision of the surrender formula might have sanctioned resort to a more limited attack on lines of communication, the prospect of invasion justified the systematic destruction of all components of Japan's strength, including its cities."2335 And so, "LeMay was sent off to destroy more cities without a clear rationale for doing so."2336 In June, he recounts that when Arnold met LeMay for meetings in Guam,

<sup>2328.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 253.

<sup>2329.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 253.

<sup>2330.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 255.

<sup>2331.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 277.

<sup>2332.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 278.

<sup>2333.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 292.

 $<sup>2334.\</sup> Sherry,\ \textit{The Rise of American Airpower: The Creation of Armageddon},\ 298.$ 

<sup>2335.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 298.

<sup>2336.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 299-300.

"LeMay told Arnold that he would run out of targets by about September 1, and that 'with the targets gone we couldn't see much of any war going on." Sherry sees in this "a revelation of the air force approach to war, rich with the emptiness of strategic reasoning about how to win the war and of the desire even to formulate it. Destruction would win the war, and the war would have to end when the destruction was complete." In his tenth chapter, "The Persistence of Apocalyptic Fantasy," Sherry writes of the "Inversion of Dream and Reality," and recounts how, "In the last week of May 1945, American bombers almost fulfilled an old fantasy about air power, that a catastrophic attack on an enemy's capital would shock it into surrender." Though the bombers were instructed not to attack the imperial palace, bombs "either fell accidentally into the royal quarters" or flames "simple spread there," bringing "the air war ... home to the very seat of imperial authority." As Sherry describes, "Beyond increasing the intimidation and destruction, strategists had as much difficulty as ever expressing how present and future operations would bring about surrender." 2341

Nonetheless, Sherry observes that "Airmen were not naïve about the dangers of plunging into the next stage of the century's technological revolution. Arnold was reminded that because of rocketry and nuclear weapons, the United States and other nations 'will face destruction on a scale undreamed of in the wildest, most sensational fancies of fiction writers and comic strip artists,' ultimately 'endangering human survival."2342 As for the Japanese in the bombed-out cities, ultimate terror was already their reality: "Many Japanese had by now experienced the science-fiction fantasy. ... Scarcely less than the deindustrialization and deurbanization of modern Japanese was now taking place."2343 And yet, "all the bewilderment, anxiety, depression, and anger still did not add up to an immediate threat to the government or constitute the lever Americans could work to effect surrender. "2344 Sherry records how "LeMay's bombing campaign proceeded largely unmonitored and unnoticed by diplomats and statesmen in London and Washington," and in contrast to Berlin, whose "ruins could be viewed with a kind of sorrow and foreboding, as a crumpled monument to Western civilization"; Sherry observed that "Few Americans recognized much of value being lost in Japan."2345 Nonetheless: "Compared to other forms of warfare, the bombing

<sup>2337.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 300.

<sup>2338.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 300.

<sup>2339.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 301.

<sup>2340.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 301.

<sup>2341.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 312.

<sup>2342.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 313.

<sup>2343.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 313.

<sup>2344.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 314.

<sup>2345.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 316.

of cities retained an unmentionable and inexpressible quality, lying variously beyond or beneath description. With exceptions, that quality had characterized the predictive literature before the war, and it now persisted despite changed circumstances. Whereas in prospect bombing had been an almost unimaginable horror, by 1945 it was also a numbing but distant commonplace. Celebration and aversion, deliverance and doomsday remained the contrasting ways in which bombing was viewed, categories that allowed peoples and nations to avoid confronting the realities of mass destruction."2346

This would continue into the atomic age. Sherry turns his attention to "The Nuclear 'Apparition'" and recalls how "The tenacity of those categories was most tragically demonstrated in the final deliberations upon the atomic bomb, for in them the bomb's use was never seriously debated and its destructive consequences were barely examined." Indeed, as Sherry notes, "If the atomic bomb had little to add in the way of carnage and rubble except its singular efficiency, attention naturally turned to other dimensions of its novelty." Seeing continuity with the air war prior to the bomb, Sherry notes: "The apparent similarity between atomic bombing and firebombing caused anxiety as well as uncertainty, a fear that the incendiary attacks would eliminate the virgin targets led to surprising misconceptions. … It was all too easy for some to see Fat Man and Little Boy as little more than bigger bombs." And, while "Firebombing was a crude standard of reference for measuring the atomic bomb," Sherry writes that in "retrospect at least, the destructiveness of incendiary attacks invited attention to the bomb's psychological effect and obliterated any perceptible moral difference between bombing in its old and new forms."

However, despite these moral continuities, Sherry points out: 'Clearly there was something different about nuclear weapons. The comparisons to firebombing later made to justify use of the atomic bomb revealed the difficulty scientists and politicians had in grasping that difference. Nuclear weapons had peculiar consequences, radiation and fallout, whose insidious and persistent potential the bomb's managers understood poorly. But the bomb's uniqueness lay less in its lethality, either immediate or lasting, then in the certainty of its effects. An incendiary firestorm, its creation so dependent on the vagaries of both man's and nature's behavior, was not predictably repeatable. It also could not erupt without some warning to its victims. It was a kind of planned accident, like "a hole in one in a game of golf," as Freeman Dyson said. The atomic bomb was a planned certainty."<sup>2351</sup> Nonetheless, Sherry agrees that, "To be sure, when

<sup>2346.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 316.

<sup>2347.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 316.

<sup>2348.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 320.

<sup>2349.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 320.

<sup>2350.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 321.

<sup>2351.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 321.

the planned accident did occur, the horror for its victims approached that visited upon the cities hit with the atomic device. As a discrete event, March 10 neatly balanced the scales of cruelty. But in the grim game of air war, it was only a chance event."2352 In contrast to the a-bomb, "Firebombing was a well-established and nearly perfected technique of war," and its associated casualties "were still commensurate with losses inflicted by more conventional forms of warfare." <sup>2353</sup>Sherry writes that the "legacy of firebombing was not technical, for the atomic bomb still involved a quantum leap in that regard. It lay instead in the ways of thinking about bombing that it perpetuated. The persistent focus of the bomb's visual and psychological effect fell squarely in the long tradition of regarding bombing more as an idea, an "apparition", than as a reality of war. The technology was revolutionary, as the bomb's managers appreciated to a degree, but the perspective was traditional. Imagined as conventional bombing had been, the atomic bomb would smite the enemy and reorder the affairs of man because the very appearance of it, over a city and the globe, would be awesome. As such, it would establish at last the validity of powerful fantasies about the shock value of bombing."2354 Adds Sherry: "After years of bombing cities and after the creation of rationalizations and euphemisms to mark the terror, the distinction between 'military target' and 'city' had totally collapsed. The attention to Kyoto indicated that the shell of a distinction remained, but not its substance, reflecting less a confrontation with the moral issue than a wish it need not even arise. That failure shaped not only the fact but the manner of the bomb's use."2355 He continues, "Just as almost all of Tokyo could be regarded as a military target, so could Hiroshima and Nagasaki. Just as workers could be 'dehoused' without being killed, they and their leaders could be impressed without being incinerated. Just as it had rarely been clear whether conventional bombing aimed to achieve practical effect against the enemy's war-making power or psychological impact on his 'will' to fight, so too was the distinction blurred in rationales for the bomb's use."2356

<sup>2352.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 322.

<sup>2353.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 322.

<sup>2354.</sup> Sherry, *The Rise of American Airpower: The Creation of Armageddon*, 322-323. But furthermore, Sherry points out: "Just how far men went to deny the physical reality of the atomic bomb – and in doing so draw on the legacy of earlier bombing – was evident in their language. Even as nuclear policymakers played down the value of the bomb against military or industrial targets, they labored successfully to convince themselves that indeed those targets were their objective The Interim Committee's initial formulation, stated by Stimson, was ambiguous enough to satisfy a diversity of consciences. The committee agreed 'that we could not concentrate on a civilian area' while at the same time the bomb should make as 'profound psychological impression on as many of the inhabitants as possible.' The target should 'be a vital war plant employing a large number of workers and closely surrounded by workers' houses.' It was as if the workers could just watch, and any harm done to them would be incidental or inadvertent."

<sup>2355.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 323.

<sup>2356.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 324.

The bomb was thus viewed as a "transcendent force," one that could "mean the doom of civilization or it might mean the perfection of civilization."2357 Indeed, he observes that "the awesomeness of the new weapon made the past seem irrelevant even as men unconsciously drew upon it. The bomb was seen as severing rather than unfolding familiar patterns in modern technology and international relations." 2358 Added Sherry: "Like the bomber had been earlier, the atomic weapon was recognized as a transcendent form of power, only to be conceived and used in the familiar ways."2359 But, Sherry observed, "There was another, even more familiar use of the doomsday-or-deliverance dichotomy. Frightening as it was, the bomb would also liberate the warring nations and perhaps all of mankind from the horror of conventional warfare."2360 With the atomic attacks, "Like countless others, two cities had been destroyed, but in seconds rather than hours or days."2361 And, "The psychic scars that survivors carried were in many ways similar to those which Germans in Dresden or countrymen in Tokyo had suffered ... what decisively distinguished the atomic bomb survivors was their reactions in the months and years to follow. Knowledge of the long-term lethality of radiation, of their special place in the inauguration of nuclear technology, and of the special attention given them fed a lasting sense of experiencing a life-ending trauma with global implications."2362

With the atomic attacks, "The fantasy that had ebbed and flowed for decades – that of a new weapon that transcended and thereby ended war – had been realized." <sup>2363</sup> In the epilogue to his book Sherry writes that the "sin of atomic bombing, like the sin of the whole war's bombing, certainly resulted from choices but not from a moment of choice. Both were products of a slow accretion of large fears, thoughtless assumptions, and incremental decisions. If anything characterized the earlier era, it was the capacity of leaders to avoid the appearance of choice." <sup>2364</sup> He adds, "Just as one generation learned to accept bombing as the terror that could not happen, so too has this generation accepted the bomb itself. The parallel, hardly comforting, may be instructive." <sup>2365</sup>

Striking in Sherry's historical analysis of the evolution of air war and its parallels with atomic warfare, is the marked lack of interest in or recognition of Clausewitz (or even formal strategy) by the Air Force commanders who architected the air war over Japan,

<sup>2357.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 324.

<sup>2358.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 325.

<sup>2359.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 330...

<sup>2360.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 325.

<sup>2361.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 344.

<sup>2362.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 344.

<sup>2363.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 355-356.

<sup>2364.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 363.

<sup>2365.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 363.

Generals Henry Harley "Hap" Arnold and Curtis LeMay: "The airmen differed from the army generals in one important way, however. Marshall and Eisenhower knew history, and by virtue of long association with military and political leaders, they understood politics. They preferred, as the deepest traditions of American civil-military relations taught them, to ground their decisions in arguments from military utility; but they comprehended Clausewitz's precepts about war as an extension of politics, and they willingly responded when civil authority altered strategy to fit political needs. ... Similarly, LeMay and Arnold lacked a strong sense of the political and ideological meaning of war, the one being fought in 1944 or the ones that might come in the future." Indeed, Sherry observes, "Fascism, genocide, hegemony, freedom, national interests – these were simply not in their vocabularies. The task, not the purpose, of winning governed." Moreover, "War penalized the ideologues and rewarded the pragmatists, the men who maximized the number of trained crews, bombers in the air, targets hit." 2368

Indeed, Stephen Cimbala, in his 1991 Clausewitz and Escalation: Classical Perspective on Nuclear Strategy, writes that we "now know with the advantage of hindsight that the assumption of a decisive war-winning strategy solely by strategic bombardment was not proved valid in the Second World War," and yet he suggests, ironically - and perhaps potentially tragically, that the "result was not the burial of airpower doctrine of this kind, but its revival in the form of U.S. nuclear strategy following the use of the atomic bombs against Japan."2369 Indeed, with the arrival of ICBMs, "which threatened destruction of targets within thirty or fifteen minutes of launch," there was even greater impetus for assuming "strategy was now a totally one-sided affair." 2370 In Cimbala's terms, the "strong" force in war now appeared to greatly outweigh the "weak" force responsible for "restraining war from its absolute form," 2371 as nuclear weapons and ballistic missile delivery systems looked to be increasingly shifting war toward the absolute, and in so doing, challenging efforts to re-assert the primacy of policy - which Brodie embraced as his central challenge as a theorist. As Cimbala describes: "The disproportionate effects of nuclear weapons, relative to their use in total or general war, argued for restriction of their role in deterrence, as Bernard Brodie noted" – and "to make this connection between nuclear deterrence and policy objectives, strategists were required to address both sides of Clausewitz's relationships between force and policy."2372

<sup>2366.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 179.

<sup>2367.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 180.

<sup>2368.</sup> Sherry, The Rise of American Airpower: The Creation of Armageddon, 181.

<sup>2369.</sup> Stephen J. Cimbala, Clausewitz and Escalation: Classical Perspective on Nuclear Strategy (London: Frank Cass, 1991), 25.

<sup>2370.</sup> Cimbala, Clausewitz and Escalation, 25.

<sup>2371.</sup> Cimbala, Clausewitz and Escalation, 37.

<sup>2372.</sup> Cimbala, Clausewitz and Escalation, 37-38.

It would fall to the post-war diplomats, strategists, and theorists to wrestle with this paradox of the bomb, and find a way to embed it into a theory of war that restored its essential interconnection to the ends of policy, and in so doing, the strategists (Brode foremost among them) would ultimately wed nuclear weapons with a theory of war that had been formed in an earlier time – by the Napoleonic-era theorist, Carl von Clausewitz.

# War and Theory: The 'Overlooked Characteristic' in American Strategic Culture

What Sherry has described as "technological fanaticism" has been described more favorably by Antulio J. Echevarria II as "technological romanticism," or "fascination with technology," which he observes is one of three principal defining characteristics recurrent in the literature on American strategic culture, as he discusses in his chapter, "American Strategic Culture: Problems and Prospects," in Hew Strachan and Sibylle Scheipers, eds., The Changing Character of War. 2373 The two other commonly recognized defining characteristics are casualty aversion, and the preference for fighting wars as battles, which Echevarria notes more accurately describe "traits [that] pertain to the waging of war" and "thus describe a 'way of war' more than a strategic culture, per se,"2374 and, upon reflection, are not "uniquely American" but could be thought of as reflective of "a larger Western way of war." 2375 Moreover, none of these three purported components of American strategic culture "appears to have the quality of permanence of semi-permanence" but instead "seem contingent on political objectives and conditions rather than enduring or established biases,"2376 with "fighting wars as battles" counterbalanced by military professionals having "generally been made to submit to the logic of politics,"2377 and technological romanticism likewise counterbalanced "by a certain dread or anxiety about how technology itself was changing society in dramatic and apparently irreversible ways."2378 Even casualty aversion, on closer look, "cannot be considered to be a unique or enduring part of American strategic culture," particularly with regard to wars of necessity, which have consistently demanded high sacrifices in casualties to achieve victory, though "casualty aversion is a critical element in any war of choice." 2379

<sup>2373.</sup> Antulio J. Echevarria II, "American Strategic Culture: Problems and Prospects," in Hew Strachan and Sibylle Scheipers, eds., *The Changing Character of War* (Oxford: Oxford University Press, 2011), 433

<sup>2374.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 433-434.

<sup>2375.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 434.

<sup>2376.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 434.

<sup>2377.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 435.

<sup>2378.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 435.

<sup>2379.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 436.

But Echevarria posits there is "an overlooked characteristic" of the American way of war and that is "theory." <sup>2380</sup> As he writes, "[T]he American penchant for theorizing when it comes to military affairs ... has long been overlooked because the prevailing assumption has been that American tend to emphasize practice over theory."2381 One could argue that in fact there is an inherent tension between American theorizing about war, and American waging of war -- much like the schism between Clausewitzian and Jominian responses to the Napoleonic wars, with the former emphasizing reflection and a more complex and nuanced intellectual reaction while the latter boiled down the experience to a set of actionable maxims, a schism that would resurface during the Cold War between deterrence theorists and warfighting strategists. The schism was more a dialectical boundary line between thesis and antithesis, with the synthesis drawing from both sides of the line and interpolating between theory and reality as thought drove action, which in turn was checked by reality, in turn revising thought. This was suggested by Hew Strachan and Sibylle Scheipers in their introduction to *The* Changing Character of War, who looked back to Clausewitz and observed, "Because Clausewitz was not sure that all wars in the future would conform to the pattern of the Napoleonic wars, just as wars in the past had not, he used paradox to probe for truth," and thus On War "uses dialectic to reveal war's nature more than it uses unequivocal assertion," an approach that the Changing Character of War program found "suits our academic natures, just as it revealed the tension in Clausewitz between the man of action, the soldier and aspirant field commander, and the reflective product of the enlightenment."2382 They explain that "the essence of a dialectical approach to the study of war may reside less in the pairing of dichotomies and more in their fusion. For Clausewitz, this was part of the interplay between theory and reality; the former sets up alternative propositions, but the latter shows how much they react off each other in practice."2383

Historically, Echevarria notes, military theory took root in Europe but over time would be fully embraced by American thinkers, particularly after World War II. As Echevarria describes, "While early in their history, Americans copied a great deal from their European counterparts, by the Cold War, American military theories, proffered by civilians and military professionals alike, came into their own," 2384 with Brodie playing no small part. But in his recounting of America's Cold War strategic-theoretical emergence, Echevarria focuses instead on the work of Brodie's contemporaries - lim-

<sup>2380.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 438.

<sup>2381.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 438.

<sup>2382.</sup> Hew Strachan and Sibylle Scheipers, "Introduction: The Changing Character of War," in Hew Strachan and Sibylle Scheipers, eds., *The Changing Character of War* (Oxford: Oxford University Press, 2011), 12.

<sup>2383.</sup> Strachan and Scheipers, "Introduction: The Changing Character of War," 13.

<sup>2384.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 438.

ited war theorist Robert Osgood; coercive diplomacy theorist Thomas Schelling; and escalation theorist (and famed warfighting strategist) Herman Kahn.

On a spectrum from "the ridiculous to the sublime," Echevarria places Osgood and Schelling on the sublime side, noting they both "promoted the idea that the use of military force could still be a rational extension of policy even in the nuclear age," while on the ridiculous side goes "the escalation ladder of Herman Kahn." <sup>2385</sup> Ironically, Brodie is neither mentioned here nor cited in his chapter, and in fact, Echevarria suggests that "Herman Kahn was perhaps the most well known" among the "so-called nuclear strategists," and notes Kahn "argued that there were a number of scenarios in which 'limited' nuclear exchanges could take place between states without necessarily ending in global destruction."2386 His neglect of Brodie here, whose work both predated and on many levels surpassed that of Kahn, and his elevation of Osgood and Schelling to the "sublime" without noting Brodie's prior contributions – which were in fact graciously acknowledged by Schelling – is curious, and reinforces this author's belief that knowledge of Brodie's important contributions have been in decline since the Cold War's sudden end – but Echevarria's principal argument, that "the penchant for theorizing about war and warfare is relatively consistent in American military history,"2387 and that theorizing about war is thus an oft-overlooked and thus under-appreciated dimension of American strategic culture, presents us with additional context for understanding Brodie's contribution, and his important place in this strategic culture.

Further, that Echevarria also notes the "number of sound theories may, however, be a minority compared to those which are not," this too reinforces an argument of this thesis, that Brodie stood out amongst his peers for the soundness of his theoretical efforts, and for the wisdom he brought to the study of war. Brodie would look to the long-dead Prussian for inspiration throughout his career, endeavoring to update the Prussian's theoretical framework for each new technological innovation of the atomic age. And while Brodie's efforts to wed Clausewitz to the bomb look dated today, they were well ahead of their time, in marked contrast to the efforts of his peer Herman Kahn, whose own work appear to be more inspired by Jomini than Clausewitz and their separation of warmaking from the political context of war.

## 'Cross of Iron': The Rise of the U.S. National Security State

Further helping us to re-contextualize the nuclear era in which Bernard Brodie's theoretical efforts would come to prominence and help define the strategic discourse

<sup>2385.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 439.

<sup>2386.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 440.

<sup>2387.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 439.

<sup>2388.</sup> Echevarria, "American Strategic Culture: Problems and Prospects," 439.

(and architecture) for the coming Cold War with the Soviet Union is the cultural and intellectual history of the "national security state" as it began to emerge in post-World War II America, and which has been chronicled by Michael J. Hogan in his 1998 treatise, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954.

Rooted in part in the "insights of Clifford Geertz, especially his view of ideologies as formal, coherent systems of belief that usually emerge in periods of crisis, influence the way people make sense of the world, and enable them to act politically," Hogan looks at the "debate over national security initiatives as one between two broad groups - those who believed in a new ideology of national security and those who adhered to values rooted in an older political culture." <sup>2389</sup> He explains that the new "ideology of national security refers to a set of assumptions that emerged from the crises of World War II and the Cold War," and that this ideology "laid the groundwork for a more internationalist foreign policy and for a supportive program of state making, both of which challenged such received traditions as isolationism, antimilitarism, and antistatism." Hogan writes, "Much that happened in American state making during the first decade of the Cold War can be viewed as a struggle between these new and residual ways of thinking, between the national security ideology and the old political culture, with the outcome in many cases being a program of action that reconciled the differences between them." 2390 Hogan's book examines "the struggle between these two groups, which was fundamentally a struggle to shape the nation's political identity and postwar purpose."2391

While this struggle would echo "the persistence of themes in a political discourse that predates the Cold War," Hogan observes that after 1945, as America "had emerged from World War II as the leader of a 'free world' coalition, with global obligations and responsibilities it had not shouldered before," there is "no doubt that new responsibilities and perceived threats led to an unprecedented peacetime allocation of resources to the military arm of the state, and to the creation of powerful government agencies that had not existed before," including a "peacetime national security establishment" that "added enormously to the size and power of the state." Counterbalancing those who feared the emergence of a "garrison state that would undermine alternative centers of authority, destroy democracy, and militarize American life" were those who understood that America "had entered an era of total war in which the line between

<sup>2389.</sup> Michael J. Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954 (Cambridge, UK: Cambridge University Press, 1998), ix.

<sup>2390.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, x.

<sup>2391.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 1.

<sup>2392.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 463.

<sup>2393.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 463-464.

citizen and soldier, civilian and military, war and peace, had disappeared forever," and for whom "it was no longer possible to separate the defense of American liberties from the defense of liberty everywhere." This new era "inspired demands for a larger pool of military manpower, for a permanent peacetime military establishment, for the military mobilization of science and industry, and for new agencies, such as the Atomic Energy Commission and the National Security Council, that could bring the resources of the nation to bear in the struggle against communism."2394 As Hogan recounts: "American leaders emerged from the Second World War absolutely convinced that science had saved the day by achieving dramatic breakthroughs in military technology. With government support, scientists had developed or improved systems of navigation, bomb targeting, and submarine detection, not to mention the atomic bomb, which became the preeminent symbol of the successful wartime partnership between science and the state. No group was more impressed with science as an instrument of national power than were military leaders, and none was more determined to harness that power to its own purposes in the postwar period."2395 He further observes that this new "partnership between science and the state, between university labs and Pentagon policy makers, was particularly important and especially helpful to a handful of elite universities" including MIT and Stanford, and "made it possible for universities to attract new faculty, build new facilities, and recruit good students," even if it ultimately "compromised the independence of university scientists, allowed the military to establish research priorities, and diverted scientific talent and energy from more productive peacetime purposes." Hogan notes, however, that the "benefits of the new partnership between science and the state pilled from the university into the private sector," stimulating the electronics industry in Boston, the aviation industry in Los Angeles, and even the creation of the Silicon Valley, 2396 in addition to fueling a mining rush in strategic minerals across the American West after the Korean War began.<sup>2397</sup>

As Hogan describes, even in the face of numerous corrosive anti-democratic pressures – most notable being "McCarthy's wild assault on civil liberties" but also including "the loss of economic resources to military investment" and the "increasing concentration of power in the executive branch" – he finds that "the most important constraints on the national security state were those built into the country's democratic institutions and political culture," and in the end, "the desire to adapt national security needs to the country's democratic traditions also drove Truman and then Eisenhower to seek better control over military leaders, to protect their own prerogatives, and to worry

<sup>2394.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 465.

<sup>2395.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 220.

<sup>2396.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 470.

<sup>2397.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 472.

about diverting too much of the country's resources to national security purposes."2398 Thus, Hogan concludes, the "American people and their leaders, or least the best of them, would go so far and no further, lest a reckless abandon destroy the very Republic they sought to protect."2399

Brodie, once more, found himself at a fascinating nexus, as a new corps of civilian academic advisors came to unique prominence, advisors to the new national security apparatus of the world's first nuclear state, and briefly its only superpower. His embrace of Clausewitz, as we will shortly observe, and in particular Clausewitz's famous (if perhaps, as argued by several recent Clausewitz scholars, overstated) emphasis of the fundamental interconnection between war and policy, would become part of Brodie's intellectual tool kit to ensure that the bomb neither destroyed the republic he sought to protect nor overwhelm those who would be entrusted with the responsibility of integrating the new weapon into American strategic policy. Just as the new generation of national security experts would juggle the dueling imperatives of defending America with the preservation of its democratic traditions and spirit, Brodie would try to maintain balance between the ends and means of the nuclear peace, and to ensure that this precarious balance was maintained.

Responding perhaps to the seeming banality of aerial bombardment that came to define the airmen of World War II, as chronicled by Sherry, and noting the inherent risks to the republic of ends and means remained out of sync, Brodie would step up to the new and unique responsibilities inherent in being a civilian strategist, literally at the nexus of the civilian and the military worlds. Brodie would in the end spend less time on the inside of the military establishment or along its periphery than many of his peers, and in the end would retreat to the very academy he first left as a young man when America found itself at war and Brodie's first ideas on naval power found an appreciative audience among the new generation of sailors entrusted to roll Japanese naval power back across the Pacific; there, in the civilian academy once more, Brodie would continue to wrestle with the dilemmas of the new nuclear world, and to advocate the importance of preserving the delicate balance between war and policy that enabled the bomb to serve a rational political objective, and preventing it from becoming a tool of wanton destruction disproportionate to the objectives being sought, as Sherry suggests happened during the air war in the Pacific.

<sup>2398.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 475.

<sup>2399.</sup> Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954, 482.

#### Before and After Hiroshima: Strategic Continuities and Discontinuities

As noted above, there were both continuities and discontinuities evident in the transition from conventional air warfare to atomic warfare at the end of World War II. as Sherry has chronicled, just as there were when the Cold War commenced when a new set of tensions emerged as the architects of the new national security state collided full-on with those who sought to preserve America's more traditional civilian and democratic values. This presents us with an intriguing parallel and one that helps to further re-contextualize the strategic environment in which Brodie emerged, with its own contradictory set of strategic continuities and discontinuities. A wellknown observer of the continuing historical duel between forces of continuity and discontinuity is the intellectual historian and theorist of war, Azar Gat, whose work has looked closely and comparatively at the context in which Carl von Clausewitz – Brodie's principal theoretical inspiration - emerged, in addition to Machiavelli and B.H. Liddell Hart, each of whom contributed to the evolution of military theory, each representative of his own age and whose combined stories illustrate, in a grand historical narrative, how the theory of war has evolved from ancient to modern times. As gat recounts, each theorist, and each associated era, presents its own clash of continuities and discontinuities. Gat describes his sweeping 2001 work of historical synthesis, A History of Military Thought: From the Enlightenment to the Cold War, as bringing "together in one volume [his earlier] trilogy on the evolution of modern military thought" published separately in 1989, 1992, and 1998, presenting what he describes as "a panoramic but clearly-focused view of the wider conceptions of war, strategy, and military theory" in the West.<sup>2400</sup>

Gat observed that the "idea that war could be studied systematically by historical observation, by the selection of successful forms of organization, and by the limitation of stratagems emerged in antiquity, and was powerfully revived – with a strong practical tendency – in the Renaissance," taking the form of a "counterpart to the tradition of classical political philosophy" that "stemmed from historical experience in which fundamental change was hardly recognized and the basic features of human reality were perceived as enduring and recurring in numerous ways in different periods and societies."<sup>2401</sup> Gat further explained that "[m]ilitary theory was then simply a synthesis of the best military models of the known cultural past, whether in Greece or Rome," and "[r]oughly speaking, very little had changed from the classical era to Machiavelli's time in what can today be called the technological dimension of war,

<sup>2400.</sup> Azar Gat, A History of Military Thought: From the Enlightenment to the Cold War (Oxford: Oxford University Press, 2001), vii.

<sup>2401.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 3.

nor consequently in the character of war itself." And while the tools of war would evolve, as the "foot soldier, horse, armour, manual weapons, fortifications, and siege-machinery undeniably underwent considerable developments and transformations, and the importance of each fluctuated in a diversity of military establishments," Gat observes that on the whole "these weapon-systems remained remarkably similar, and the diversity of military models which were based upon them also revealed the fundamental recurring characteristics." As a consequence, "Historical experience thus offered an extensive testing ground of a relatively limited number of military systems, exposing their strong and weak points in multifarious circumstances." 2404

Gat recalls how in the Renaissance, "Machiavelli attempted a synthesis of the whole of military experience" based upon his "basic assumption ... that despite historical change, man and society remained 'in essence' the same at all times and cultures," and because of the immutability of human nature across time and culture, history "could thus teach us lessons which were valid in every period."2405 This would change during the Enlightenment, during which "a new attitude to the past, including military history, took shape,"2406 with the "emergence of historicism with its supreme sensitivity to the diversity of historical experience and the uniqueness of every period."2407 Thus Clausewitz, "who introduced the historicist outlook into military thought, wrote: '... The further back you go, the less useful military history becomes ... The history of Antiquity is without doubt the most useless."2408 And so, Gat tells us, "the relative uniformity of historical experience as the basis for a theory of war which could be derived by direct observation, analysis, and critical analogy from the major military models of the past, and applied to the similar conditions of the present, was therefore gradually breaking down in the early modern period. Yet, this development was more than matched by the growth of a powerful, new theoretical ideal to subject all spheres of reality, including war, to the rule of reason ... [an ideal that] was greatly stimulated by the vision and achievements of the natural sciences which also put forth a new systematical model: to reveal the universal principles that dominate the diversity of phenomena. The overwhelming success of this enterprise, culminating in Newtonian science, was one of the principal driving forces of the Enlightenment and generated a corresponding awakening of military thought."2409 Gat later writes, in the second

<sup>2402.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 3.

<sup>2403.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 3.

<sup>2404.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 3-4.

<sup>2405.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 4.

<sup>2406.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 10.

<sup>2407.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 10-11.

<sup>2408.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 11.

<sup>2409.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 11.

part of his tome – originally the second volume in his trilogy – on Clausewitz, that "[o]ne of the most striking impressions in reading the works of the military thinkers of the Enlightenment is the all-embracing uniformity of their historical outlook. ... War, like all fields of nature and human activity, was susceptible to a comprehensive and systematic theoretical study. In part, it could be reduced to rules and principles of universal validity and possibly even mathematical certainty, for which Newtonian mechanics set the example. However, like the arts, it was also partly in flux, constantly changing, dependent on circumstances, affected by the unforeseen and incalculable, and therefore always requiring application through the general's creative genius."<sup>2410</sup>

Their outlook would reign supreme for half a century, and it was within this context that Clausewitz, who would become a dominant intellectual influence and inspiration to Brodie – both of whom are thus discussed in greater detail in the chapters that follow – "began to formulate the most comprehensive and sophisticated expression of new ideas in the field of military thought, thus laying the intellectual foundations for what was to be a new German military school," an expression that would over time come to overshadow the Enlightenment military thinkers like Jomini who preceded him, and which, even in in our own, contemporary time would continue to dominate military theorizing. Indeed, as Gat describes, "the domination of this school over the field of military theory secured the 'canonization' of Clausewitz in the late nineteenth and early twentieth centuries, albeit with a somewhat popular and selective interpretation of his thought," and "this imbalance has only been exacerbated in our times."

#### **Concluding Observations**

While his embrace of Clausewitz came relatively early in this process of the Prussian's canonization, Brodie greatly contributed to the Prussian's resurrection in military studies, particularly in the United States during and after its Vietnam trauma. Because Brodie stood at the front end of a wave of interest in Clausewitz that continues to this very day, he lacked the many benefits of a diverse and contemporary body of Clausewitz literature to be infused and inspired by, and was in fact amajor player in the effort to bring forth a contemporary translation of Clausewitz, so that the Prussian's ideas might take root in postwar American military studies. Indeed, with his role in Princeton Universty Press' Clausewitz Project, Brodie was in many ways present at this rebirth of Clausewitz studies in America, and as such brought to this nascent field his limited armory of intellectual tools shaped primarly by his prewar research

<sup>2410.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 141.

<sup>2411.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 142.

<sup>2412.</sup> Gat, A History of Military Thought: From the Enlightenment to the Cold War, 170.

on the study of war conceived before the bomb had been invented. With these limitations in mind, Brodie ably ushered Clausewitz forth into the new and dangerous nuclear era, finding much of value in the Prussian's work to draw upon in his effort to wrestle with the challenges of the bomb. With time the body of Clausewitz scholarship would grow, becoming more diverse and even more contemporary as additional concepts including those from the emergent field of complexity theory, and numerous revisionist interpretations of Clausewitz's role in the history of military theory, were introduced to the literature.

Brodie's life would come to an end in 1978, only two years after the publication – with Brodie's enthusiastic participation – of the 1976 edition and translation of *On War* published by Princeton University Press, still relatively early in America's postwar renaissance in Clausewitz studies. It is this barometer of time that we should keep in mind when endeavoring to measure Brodie's contribution, and assessing his limitations. Later scholars would become increasingly vocal in their criticism of Brodie's approach to Clausewitz, finding it increasingly dated and simplistic. But it was Brodie's promotion of Clausewitz, and his longstanding effort to awaken interest in the Prussian's ideas as America responded to the new challenges of the nuclear world and grappled with new military issues ranging from limited warfare in the nuclear age to maintaining a proper and (to as much a degree as possible) stable nuclear strategic balance with its Soviet opponent, that must not be forgotten – and which contributed immeasurably to the modernization of strategic studies as America emerged as a global power after World War II, and into the new, and little understood, nuclear world.

Helping us to further contextualize Brodie's place in the intellectual and strategic history of his time, we can briefly consider the many recent intellectual histories and strategic biographies that place leading realist thinkers within their historical-cultural contexts in order to elucidate the intellectual and philosophical influences that were acting upon them, such as Quentin Skinner's 2002 three-volume treatise, *Visions of Politics*, which chronicles the evolution of humanistic theories of self-government in the Renaissance – and then in its third and final volume turns its attention to Thomas Hobbes, and in particular his repudiation of those very "fundamental tenets of humanist political thought" that were examined in the first two volumes, and in which Hobbes himself had been "nurtured," but which he came to ultimately – and infamously – reject. <sup>2413</sup> A fusion of Hobbes's writing, correspondence with contemporaries, and secondary sources, this literature establishes in many ways the high-water mark that I aspire to with this thesis, even if falling short of the distinctive comprehensiveness achieved by Skinner in his sweeping work. In addition to Skinner's paradigmatic work are several of intellectual histories and reinterpretations o the ideas of Thomas Hobbes,

<sup>2413.</sup> Quentin Skinner, Visions of Politics (Cambridge, UK: Cambridge University Press, 2002), p.1

such as Richard Tuck's 1989 *Hobbes: A Very Short Introduction*, and Noel Malcolm's 2002 *Aspects of Hobbes*. <sup>2414</sup> One can also turn to the growing number of intellectual histories of Brodie's own contemporaries, such as Hans Morgenthau, one of the principal contributors to the modernization and Americanization of realist political theory and its extension to twentieth-century international relations theory, albeit not the subfield of strategic theory – though Morgenthau's ideas did address some of the very same fundamental strategic challenges that the strategists like Brodie confronted, including the challenge presented by nuclear weapons to man's continued ability to survive in a structureless world of international anarchy, in which sovereign states struggle to survive, each seeking to maximize its own power and leading Morgenthau to dub the now-ubiquitous but easily misunderstood – and perhaps unnecessarily oversimplified – phrase "power politics."

Several theorists have contributed to a contemporary reinterpretation of Morgenthau, who has come back to prominence with the end of the Cold War and the collapse of its bipolar system, which had become associated with the now widely critiqued theory of neorealism. Michael C. Williams has been a leading theorist involved in this Morgenthauian renaissance, with his anthology, Realism Reconsidered: The Legacy of Hans Morgenthau in International Relations as well as his own monograph, The Realist Tradition and the Limits of International Relations which reinterprets Morgenthau within the tradition described by Williams as "wilful realism" - a tradition to which both Rousseau and Hobbes, often viewed as contending theorists, have contributed, and which restores realism to a more ethical, ideational, and humanistic universe.<sup>2415</sup> Also exploring the evolution of Morgenthau's ideas across the stage of twentieth-century history is William Scheuerman's 2009 biography, Hans Morgenthau: Realism and Beyond, in which he shows the "conventional picture" of Morgenthau to be "badly flawed." Scheuerman describes Morgenthau as "a blunt writer who loved rhetorical flourishes" which "made his work accessible" but also "allowed readers to overlook the richness and nuances of his highly idiosyncratic international theory."2416 Scheuerman's reinterpretation presents Morgenthau as a complex, nuanced and moral thinker who "recognized that contemporary conditions required a novel global order as well as new ways of thinking about international politics," and who believed these must "represent more than politically unrealistic and morally painless escapes from

<sup>2414.</sup> Richard Tuck, *Hobbes: A Very Short Introduction* (Oxford: Oxford University Press, 1989), and Noel Malcolm, Aspects of Hobbes (Oxford: Clarendon Press, 2002).

<sup>2415.</sup> Michael C. Williams, *The Realist Tradition and the Limits of International Relations* (Cambridge, UK: Cambridge University Press, 2005). A briefer exposition by Williams is presented in his 2004 *International Organization* article, "Why Ideas Matter in International Relations: Hans Morgenthau, Classical Realism, and the Moral Construction of Power Politics," *International Organization* 58, No. 4 (Autumn, 2004), 633-665.

<sup>2416.</sup> William E. Scheuerman, Hans Morgenthau: Realism and Beyond (Cambridge, UK: Polity Press, 2009), 4.

pressing domestic reforms."<sup>2417</sup> His realism was not without hope, nor without an underlying moral fabric. Much the same can be said of Bernard Brodie.

With the Cold War's end came a rapid end to bipolarity and a return of global complexity, whose own dangers became apparent on 9/11; and though that day's attacks were conventional mass-terror attacks, it refocused attention on how the bomb had continued to proliferate after the Cold War's end, and this renewed concern with nuclear proliferation led to a recommitment to counterproliferation policies by the great powers, as well as one very misconceived war of counterproliferation in Iraq (which in the end had neither an active WMD program, nor weaponized stocks of existing WMDs). This new nuclear anxiety in the years since 9/11 and renewed fears of nuclear proliferation reveal a notable under-appreciation of the predicted moderating effect of nuclear weapons on state behavior, a moderation that many believe led to the Cold War's relative calm and its absence of general war between the two nuclear-armed principal opponents. 2419

The nuclear strategists, and their associated international relations theorists (the structural realists, or neorealists) erected a theoretical framework for the Cold War predicated upon the mutuality of restraint that nuclear weapons would instill in their possessors, and with the end of bipolarity, not only has interest in the nuclear strategists waned, but their counterparts in the field of international relations theory would experience a devastating assault within the academy upon their predominance as alternate theories and worldviews, most notably by neoliberal and constructivist theorists (as well as postclassical or neoclassical realists who likewise rejected structuralism), came to prominence.<sup>2420</sup> As Richard Ned Lebow recalled in "Texts, Paradigms,

<sup>2417.</sup> Scheuerman, Hans Morgenthau: Realism and Beyond, 198.

<sup>2418.</sup> See the following: The White House, *The National Security Strategy of the United States of America*, September 2002, http://www.globalsecurity.org/military/library/policy/national/nss-020920.pdf, especially Section V, "Prevent Our Enemies from Threatening Us, Our Allies, and Our Friends with Weapons of Mass Destruction," http://georgewbush-whitehouse. archives.gov/nsc/nss/2002/nss5.html; The White House, *National Strategy to Combat Weapons of Mass Destruction*, December 2002, http://www.state.gov/documents/organization/16092.pdf; and General Richard B. Myers, Chairman, Joint Chiefs of Staff. "An update on the global war on terror," SecurityInnovator.com, November 24, 2002; Andrew Gray, "Iran nuclear bomb would be calamitous - US military," Reuters, May 21, 2009, http://uk.reuters.com/article/idUKN2140020320090521; Voice of America, "Clinton: Middle East May Start Arms Race If Iran Gets Nukes," *Voice of America*, May 20, 2009, http://www.voanews.com/english/news/a-13-2009-05-20-voa59-68786472.html; Barry Zellen, "Countdown to a Nuclear Iran," *SecurityInnovator.com*, May 1, 2009, http://securityinnovator.com/index.php?articleID=15839&sectionID=29; John R. Bolton, "Beyond the Axis of Evil: Additional Threats from Weapons of Mass Destruction," Speech delivered at the Heritage Foundation, Washington, DC, May 2, 2002, http://www.disam.dsca.mil/pubs/V24-4%20PDF%20Files%20By%20 Author/Bolton,%20John%20R.,%20Axis%20of%20Evil.pdf.; Charles V. Peña, "Axis of Evil: Threat or Chimera?" CATO Institute, Summer 2002, http://www.cato.org/research/articles/pena-020905.html.

<sup>2419.</sup> This has been noted in Colin S. Gray, Modern Strategy (Oxford: Oxford University Press, 1999).

<sup>2420.</sup> There's a rich and diverse literature on the relationship of neorealism and the nuclear order. See: Kenneth N. Waltz, "The Emerging Structure of International Politics," *International Security* 18, No. 2 (Fall 1993; Kenneth N. Waltz, Theory of International Politics (New York: McGraw-Hill, 1979); Kenneth N. Waltz, "The Spread of Nuclear Weapons: More May Better," Adelphi Papers, No. 171 (London: International Institute for Strategic Studies, 1981); Campbell Craig, *Glimmer of a New Leviathan: Total War in the Realism of Niebuln; Morgenthau, and Waltz* (New York: Columbia University Press, 2003); Robert O. Keohane, ed., *Neorealism and Its Critics* (New York: Columbia University Press, 1986); Ashley J. Tellis, "Reconstructing

and Political Change," his chapter in Williams' 2007 Realism Reconsidered: The Legacy of Hans Morgenthau in International Relations, "The end of the Cold War provided critics of realism with both an opportunity and need to go on the offensive," and "for some was the need to dethrone realism as the reigning paradigm to make room for other approaches" such as neoliberalism and constructivism. <sup>2421</sup> Thus the "battle lines" for post-Cold War international relations theory were drawn: "Realists of all stripes maintained that anarchy was the defining characteristic of the international system, and that it was impossible and downright dangerous to pretend that war was not the final arbiter of international disputes," while neoliberals and constructivists, "by contrast, thought it possible to escape from, or at least, to mitigate, the worst features of anarchy through a dense network of institutions or a robust international society." <sup>2422</sup>

Lebow has also observed that both the "[c]ritics of realism and realist critics of neorealism have displayed increasing interest in earlier realist texts, works that predate neorealism," including "growing interest in mid twentieth century writings, including those of Hans Morgenthau, John Herz, and E.H. Carr," who in a refreshing "contrast to Waltz ... distinguish material capabilities from power and power from influence," and who "understand that their theories are products of the epoch and culture that produced them." <sup>2423</sup>

The Cold War's end was "not the first major international transformation or upheaval to provoke a return to older texts with the goal of the rethinking of contemporary ideas and approaches and developing alternatives to them";<sup>2424</sup> theorists have been doing this since as far back as the ancient Romans. Lebow writes that "Morgenthau, who speaks to use across the abyss of Weimar, the Nazi era, the Second World War, and

Political Realism: The long march to scientific theory," Security Studies 5, No. 2 (1995), 3-94; Richard Rosecrance, "International Theory Revisited," International Organization 35, No. 4 (Autumn, 1981), 691-713; Paul Schroeder, "Historical Reality vs. Neo-realist Theory," International Security 1 (Summer 1994), 108-148; Richard K. Ashley, "The Poverty of Neorealism," International Organization 38, No. 2 (Spring 1984), 225-286 (also reprinted in Robert O. Keohane, ed., Neorealism and Its Critics (New York: Columbia University Press, 1986), 257-300); Robert G. Gilpin, "The Richness of the Tradition of Political Realism," International Organization 38, No. 2 (Spring 1984), 287-304 (also reprinted in Robert O. Keohane, ed., Neorealism and Its Critics (New York: Columbia University Press, 1986), 301-321); Stephen G. Brooks, "Dueling Realisms," International Organization 51, No. 3 (Summer, 1997); Stefano Guzzini, Realism in International Relations and International Political Economy: The continuing story of a death foretold (New York and London: Routledge, 1998); Benno Teschke, The Myth of 1648: Class, Geopolitics, and the Making of Modern International Relations (London: Verso, 2003); Jonathan Haslam, No Virtue Like Necessity: Realist Thought in International Relations since Machiavelli (New Haven: Yale University Press, 2002); Sean M. Lynn-Jones, and Steven E. Miller, eds., The Perils of Anarchy: Contemporary Realism and International Security (Cambridge: MIT Press, 1995); Charles L. Glaser, "Realists as Optimists: Cooperation as Self-Help," International Security 19, No. 3 (Winter 1994/95), 50-90.

<sup>2421.</sup> Richard Ned Lebow, "Texts, Paradigms, and Political Change," in Michael C. Williams' *Realism Reconsidered: The Legacy of Hans Morgenthau in International Relations* (Oxford: Oxford University Press, 2007), 244.

<sup>2422.</sup> Lebow, "Texts, Paradigms, and Political Change," 244.

<sup>2423.</sup> Lebow, "Texts, Paradigms, and Political Change," 246.

<sup>2424.</sup> Lebow, "Texts, Paradigms, and Political Change," 246.

the Cold War, still has much to teach us,"2425 and Lebow's observations, in this tribute to Morgenthau, naturally turn to the subject of the tribute – but the words ascribed to Morgenthau could also be attributed to Brodie, whose reasoned approach to the challenge of the nuclear age appears rooted in a pragmatic sense of realism that mirrors Morgenthau's, even if his contribution to the erection of the mutually-annihilatory nuclear system would ultimately yield a new generation of structural realists wedded to that very system in contradistinction to the more classical "Morgenthauian" realism. As Lebow observed: "For Morgenthau, the absence of external constraints on state power was the defining characteristic of international politics at mid century," and with the superpowers "locked into an escalating conflict, made more ominous by the unrivalled destructive potential of nuclear weapons ... [r]estraint was needed more than anything else."2426 And thus realism "in the context of the Cold War was a plea for statesmen ... to recognize the need to coexist in a world of opposing interests and conflict," and "Morgenthau insisted that restraint and partial accommodation were the most practical short-term strategies for preserving the peace."2427 Morgenthau, writing in "the aftermath of destructive wars that undermined communities and conventions that had previously sustained order at home and abroad," sought "some combination of the old and the new that could accommodate the benefits of modernity while limiting its destructive potential,"2428 and thus "envisaged realism, with its emphasis on state interests, as a means of ultimately transcending the nation state."

This combination of wisdom and restraint is reminiscent of Brodie's own effort to foster a greater appreciation of the primacy of policy as the ultimate restraint upon war's dangerous tendency to approach the absolute, as Clausewitz had theorized long before Hiroshima. Similarly, in his introduction to *Realism Reconsidered*, Williams recalls how, "As the field of IR became increasingly dominated by the neorealism advocated by Kenneth Waltz, Morgenthau's realism came to be seen as ever more anachronistic – an interesting and important episode in the history of thinking about the subject, no doubt, but one scarcely to be seen as a serious contribution to the construction of the rigorously parsimonious scientific theory that was ... the goal of this mode of thinking about world politics." Williams had "seen a marked recovery of interest in Morgenthau's thinking, and indeed a renewed interest in 'classical realism' as a whole," and observed "there has been a notable re-engagement with the substance of

<sup>2425.</sup> Lebow, "Texts, Paradigms, and Political Change," 264.

<sup>2426.</sup> Lebow, "Texts, Paradigms, and Political Change," 253.

<sup>2427.</sup> Lebow, "Texts, Paradigms, and Political Change," 253.

<sup>2428.</sup> Lebow, "Texts, Paradigms, and Political Change," 254

<sup>2429.</sup> Lebow, "Texts, Paradigms, and Political Change," 255

<sup>2430.</sup> Michael C. Williams, Realism Reconsidered: The Legacy of Hans Morgenthau in International Relations (Oxford: Oxford University Press, 2007), 1.

Morgenthau's thinking, an engagement often allied to the claim that his realism is not only more complex than we have often been led to believe, but of considerably greater contemporary relevance than we have imagined."<sup>2431</sup> Williams' edited volume thus sought to demonstrate that Morgenthau and, one might add, his generation of more classically-inclined realists, had "more to tell IR today than has generally been recognized, and that to engage with his thinking raises a set of issues much broader than those usually considered under the rubric of realism today."<sup>2432</sup>

Much the same can be said of Brodie and his contribution to strategic studies, and in particular his effort to not only reawaken interest in Clausewitz studies but to effectively modernize Clausewitzian theory for the nuclear age. Like Morgenthau's decline during the ascendancy of neorealism, Brodie has similarly fallen from sight, and his bountiful contribution to the literature is seldom appreciated today. Brodie's decline in influence – while very hard to measure, as has been the case with Clausewitz as well and the topic of much discussion in the Clausewitz literature – began relatively early in his career, leading him to be perceived by strategic studies scholars much the way Morgenthau came to be perceived by late-Cold War international relations scholars, as a transitional figure but no longer a central one. And just as Williams and his colleagues participating in the recent renaissance in Morgenthau studes came to recognize in Morgenthau a more nuanced theorist whose ideas had been greatly oversimplified to the detriment of their full understanding, Brodie can be understood to be at a similar crossroads, mentioned briefly in passing, appreciated perhaps for his foundational contribution to deterrence theory, but largely unacknowledged any more by all but a few dedicated Clausewitz scholars for his efforts to re-engage with Clausewitz and in so doing to foster the modernization of Clausewitzian theory for the new, nuclear – and soon to become bipolar – world.

Uniting these above-mentioned works is the effort by contemporary scholars to reinterpret the lives and ideas of key philosophical and theoretical figures, and wed their works to the broader intellectual currents that shaped them, and from which they at times would famously deviate. I have thus sought to embed Brodie's work within his broader intellectual context, and to chronicle his search for inspiration that began with the iconic figure of Socrates, proceeded to the pioneering theorist of American naval strategy, Alfred Thayer Mahan, and finally settled upon the Prussian theorist of war, Carl von Clausewitz, who was only then being rediscovered by American scholars, a process of rediscovery to which Brodie would commit his full intellectual energy and efforts, resulting in the seminal 1976 Princeton translation of Clausewitz, which modernized *On War* for the contemporary Anglo-American community of scholars and soldiers alike.

<sup>2431.</sup> Williams, Realism Reconsidered, 1-2.

<sup>2432.</sup> Williams, Realism Reconsidered, 2.

That Brodie was also a leading theorist of nuclear strategy in addition to being an early advocate of Clausewitz studies presents us with a compelling convergence of two distinct currents that shaped Brodie's ideas: the broader tradition of western military theory, in which both his pre- and post-Hiroshima works find their place; and the more specific field of Clausewitz studies, to which Brodie not only contributed, but from which Brodie derived conceptual tools to guide his evolving – and in many ways foundational – ideas on nuclear strategy, and on strategic thought for the nuclear age.

Indeed, despite the contextual limitations on Brodie's methodology set by the nascent stage of Clausewitz studies in America that defined his times, one of Bernard Brodie's most enduring contributions to strategic theory is as a pioneer in what we now call complex warfare, in much the same way Alan D. Beyerchen argues that Carl von Clausewitz was a century before Brodie's birth, working with a similarly premature vocabulary and thus drawing upon a variety of adjacent (and sometimes not so adjacent) academic disciplines to articulate his ideas.<sup>2433</sup> Most analysts and scholars of Brodie, including his biographer Barry Steiner, would focus less upon the centrality of ambiguity and complexity to Brodie's strategic thought, and thus looked more linearly at the evolution of Brodie's strategic thinking over time. Brodie's head start in the literary dimensions of the nuclear arms race – the race to publish first, and thereby dominate the emerging discipline of nuclear strategic thought, evident in his editorship of The Absolute Weapon in 1946, which catapulted him to the front of the pack - did position him well in this linear contest between top scholars in the emergent field of nuclear strategy, and Steiner can be fairly credited for recognizing Brodie's important foundational role, as suggested by the title of his 1991 book about Brodie and his influence, Bernard Brodie and the Foundation of American Nuclear Strategy. But an important part of Brodie's journey was, at heart, nonlinear; indeed, as linear journeys go, Brodie's was somewhat backwards, starting out with a precocious bang but ending with a frustrating whimper, and a bitter sense of influence lost. As a young man, Brodie rose quickly, straight from the obscurity of graduate school to the highest echelons of American strategic thinking, thanks largely to his fortuitous timing in completing a dissertation on naval strategy just as America became embroiled in a global naval conflict that stretched from the Atlantic to the Pacific, quickly ushering Brodie from the expected anonymity of an early academic career to a position of intellectual and

<sup>2433.</sup> See Alan D. Beyerchen, Alan D. "Chapter 7: Clausewitz, Nonlinearity, and the Importance of Imagery," in David S. Alberts and Thomas J. Czerwinski, eds., *Complexity, Global Politics, and National Security.* Washington, DC: National Defense University Press, 1997, http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA460550. Also see Alan D. Beyerchen, "Clausewitz, Nonlinearity and the Unpredictability of War," Appendix 1, in Tom Czerwinski, ed., *Coping with the Bounds: Speculations on Nonlinearity in Military Affairs* (Washington, DC: National Defense University Press, 1998), 151-197, as posted on *The Clausewitz Homepage*, http://www.clausewitz.com/readings/Beyerchen/CWZandNonlinearity.htm.

doctrinal influence, first as a naval strategist and later as one of America's first nuclear strategists, all during his very first years out of graduate school.

But while Brodie kept theorizing, and continued prolifically publishing highly regarded if not necessarily best-selling works on strategy under prestigious imprints including Princeton University Press, he would come to feel a marginalization from the halls of power and from the nerve-centers of decisionmaking, alienating his military counterparts for his uncensored critique of the military mind and culture, while also losing influence among his civilian counterparts as well. His decline was not as a result of any shortfall in his theorizing, nor any criticism of his published work, which remained far and above the most sophisticated and faithful to the high bar set by Clausewitz when compared to his peers. Indeed, one might fairly speculate that his marginalization was the result of the distinct sophistication of his work, so complex that many failed to fully comprehend its many nuances as they gravitated toward those who advocated simpler and more actionable solutions to the profound challenges of the nuclear era, such as Herman Kahn. Indeed, Brodie's eclipse by lesser minds was neither the first nor the most offensive example of such a phenomenon – consider the tragic fate of Socrates, one of the greatest thinkers of all time who was unceremoniously executed by the seething Athenian demos on trumped up charges. One could conclude that the fate of poor Socrates presents us with a compelling, albeit dispiriting, metaphor for the fate that befalls great minds in an unappreciative world, one that extends up to our own time and thus includes the marginalization of America's pioneering nuclear theorist, Bernard Brodie. Clausewitz himself faced similar resistance to his novel ideas, persuading the Prussian that his work could only be appreciated post-mortem, by future generations - looking to posterity for an affirmation denied during hs lifetime, and thus yielding to his rival Jomini, who would cast a more immediate influence over military education, training, and doctrine for a century before Clausewitz's eventual resurrection.

It is intriguing, and perhaps no coincidence, that Brodie himself would grapple with the riddle of Socrates – his life, death, and legacy – early on as a student, when in his later years he would experience something metaphorically quite similar; not an unjust execution but an alienation more subtle, leaving Brodie feeling embittered and alone. Indeed, Brodie's earliest known writing starts with a quest for understanding the legacy of Socrates, the founder of western philosophy, revealing a willingness to embrace complexity and ambiguity and accept the dualities inherent in political and strategic reality. Later, as Brodie sought to harness his intellect and apply it to the challenges of strategic thought, he would turn to Mahan, America's very own "Clausewitz of sea power," a towering figure in not just naval strategy but in the broader intellectual history of war. But after Hiroshima, Brodie recognized that Mahan's insights, so useful for navigating America's emergence as a global maritime and naval power, had reached

the limit of their utility. As he gazed into what Joseph Nye has called the "crystal ball" of the nuclear age, recognizing an "absoluteness" in contemporary warfare that knew no earlier parallel, Brodie realized that there was at least a template that could guide him forward theoretcally – and that was provided by the famed Prussian theorist, Carl von Clausewitz, who grappled with the emergence in his time of "total war" on an historically unprecedented scale.

While the "total war" of the Napoleonic era was an order of magnitude less destructive than that of the atomic era, which was again an order of magnitude less destructive than that of the thermonuclear era that would soon follow, the theoretical framework provided by Clausewitz offered Brodie a starting point for his own analysis, and in particular to arm him as he challenged the more doctrinaire solutions offered by his peers and colleagues, civilian and military, as they staked out their own positions in the nuclear doctrinal debates that took place from 1945 until the Cold War's end nearly a half century later. Clausewitz would thus become Brodie's constant, and while this never meant a simple or elegant solution to the riddles of the nuclear age, the Prussian at least provided Brodie with a starting point for debate, and a reference point to drive forth a dialectic, as thesis was countered by a series of antitheses in the hope that at the end, something like a synthesis might emerge. Brodie's contribution to the nuclear debate was often perceived to be advocacy of one thesis or another, and at times he came out stridently for or against a certain policy, but he would later adapt and respond to changes in technology and the military balance on the ground, amending his viewpoints as required; as such, his enduring contribution was in the provision of a framework that offered his colleagues the best hope for attaining synthesis, including the occasional kick by way of antithesis to a popular thesis of the day, thereby helping the pendulum to continue its swing. With both the end of America's atomic monopoly, and the advent of thermonuclear weapons in the arsenals of both superpowers, the already dangerous art of nuclear strategy became ever more lethal. The "absolute weapon" kept getting more absolute, forcing a rethinking with each new level of destructive potential.

In many ways, Brodie represented a pole of sorts, a more theoretical, more philosophical pole opposite his colleagues such as Herman Kahn, the celebrity author of the Cold War who came to be parodied in *Dr. Strangelove*, and even the more widely respected escalation and bargaining theorist, Thomas Schelling, with Brodie's rivals representing an opposing pole, one that tended toward an elegant simplicity and prescriptive clarity that proved more suitable to *action* (and not the *inaction* the undergirded Brodie's doctrinal adaptations, such as basic deterrence (MAD) and later his 'no-cities' notion of *withholding* countervalue attacks and limiting strategic retaliation in order to keep hostilities below escalation thresholds and thereby reduce the risks of uncontrolled escalation beyond "total war" and thus avoiding the hitherto

only-theoretical but now much too real potential for "absolute war." So while more popular and better known nuclear thinkers like Kahn looked lucidly but simplistically at the "escalation ladder" as a linear metaphor whose every rung represented an opportunity for escalation dominance and hence for military victory – mirroring the work of Schelling and others of his era whose emphasis on linearity and logic and de-emphasis of the philosophical and psychological would contribute to America's Vietnam tragedy by conflating tactics with strategy and allowing logical increments of escalation to become divorced from the political connectivity that defines Clausewitzian strategy by embedding war's violence within an inherent ends-means balance - Brodie questioned the strategic logic and wisdom of escalation itself, hence his RAND Research Memorandum as well as his published book on escalation, Escalation and the Nuclear Option, which came out around the same time as Kahn's more widely read On Escalation: Metaphors and Scenarios. Brodie's approach to escalation offers something of a rebuttal to Kahn's (and others') dependence upon escalation ladders, which enshrined within their structure their own escalatory dynamic up the ladder. Brodie instead "stresses the importance, in making any choice of strategies, including the decision to use or refrain from using nuclear weapons, of gauging the *intent* behind the opponent's military moves." <sup>2434</sup> Brodie's approach to escalation offers some telling insights, including a fascinating, if unusual, sidebar on the psychology of war included in the published book version, but not included in his Rand Research Memorandum, of Escalation and the Nuclear Option.

Many strategic studies scholars credit Brodie for being one of America's greatest strategic thinkers, on that rare and distinguished historical level epitomized Clausewitz, often noting Brodie's passionate embrace of Clausewitz's most famous dictum unifying war and politics, and Brodie's recognition as early as *The Absolute Weapon* that with the splitting of the atom, real war had become what Clausewitz had considered only a theoretical maximum, necessitating Brodie's impassioned (if not subtle or nuanced) reaffirmation of the primacy of policy. But with few exceptions – such as Barry Steiner's recognition of the personal connection Brodie felt with Clausewitz's frustration (and possible clinical depression) and Ken Booth's nuanced appreciation of the parallels that bound these two great philosophers of total war - most scholarly treatments of Brodie do not convey how thoroughly imbued Brodie's work and thought became with the very spirit of Clausewitz, from their shared abhorrence of total war to their mutual recognition of the omnipresence of friction and fog and their joint conclusion that strategic guidance and vision must be provided by true strategic ingenuity – for Clausewitz, this meant a brilliant practitioner of war like Napoleon or before him Frederick II, but for Brodie it meant neither the military nor political leadership of

<sup>2434.</sup> Bernard Brodie, Escalation and the Nuclear Option, RAND Research Memorandum, RM-4544-PR, June 1965, iii.

his day whom he routinely lambasted for their parochial thinking, but instead the *strategic theorist*, in the new form of the civilian defense intellectual whose very ascent he helped to foster, even if in the end he proved unable to ascend along with the more successful strategic thinkers of his day who came to stand at the nexus of war and policy. Brodie would find himself on the sidelines of power, while his ideas would take root at the foundation of the new field of strategic studies that would elevate his peers to more prominent positions of influence. As pointed out at the start of this thesis, Ken Booth once observed of Brodie's declining influence on the making of strategic policy precisely what Brodie had earlier observed of Clausewitz: "Who now worries whether Clausewitz had any influence? What counts is the enduring worth of what he wrote." Brodie marveled at how "the startling insights that leap up at us from so many pages of [Clausewitz's] great work are still often directly applicable to our own times," how there had "been no one to match him since." As Booth has so aptly put it: "Among the first generation of nuclear strategists, these words could be Brodie's own epitaph." 2437

#### Brodie Remembered: A 'Gardener in the Fields of the Mind'

Just a few months after the decade-long Clausewitz Project came to its conclusion in 1976, Brodie would be forced to confront the challenge of posthumous influence in a very personal way. Just as Brodie had originally hoped, the project would help to stimulate a renaissance in Clausewitz studies. In November 1977, shortly after retiring from UCLA, Brodie was diagnosed with cancer, derailing his ambition to "focus his creative energies on research and writing" and to further explore his interests in Clausewitz "who had been a major focus in his recently published War and Politics," and to "edit a number of von Clausewitz's writings" in addition to being "urged by the University of Indiana Press to revise and update From Crossbow to H-Bomb."2438 As early as 1963, Brodie had been "plagued by back problems resulting from deteriorating disks, which had affected him for a number of years. As the condition became increasingly debilitating, he sought relief through a surgical procedure performed in November 1963. The surgery eased the pain somewhat, but he would have the problem for the remainder of his life." 2439 Ten years later, his health problems intensified, and as Newell Bringhurst recounts, "Bernard, who had undergone back surgery in 1963 to relieve chronic back pain, was again suffering" and "a neurological surgeon with the [UCLA]

<sup>2435.</sup> Booth, "Bernard Brodie," 51.

<sup>2436.</sup> Booth, "Bernard Brodie," 52.

<sup>2437.</sup> Booth, "Bernard Brodie," 52.

<sup>2438.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 235.

<sup>2439.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 168.

Medical Center suggested that Bernard's condition was the early stages of Lou Gehrig's disease. The Brodies sought other opinions. After further evaluation, two other doctors ruled out Lou Gehrig's disease, much to the couple's relief. Following treatment, Bernard's condition improved to the point that more surgery appeared unnecessary."<sup>2440</sup>

But as Bringhurst chronicles, "such relief was only temporary and Bernard's back problems continued to grow worse with the deterioration of his disks and the involvement of arthritic nodes on his spine. Ultimately, he was compelled to undergo a second major operation in the fall of 1974. The surgery appeared to go well. But this operation, like the first, brought only temporary relief; it was, in fact, less successful. Bernard continued to teach his classes at UCLA campus, though he walked bent over in order to alleviate the back pain."2441 Bringhurst recounts Brodie's struggle with cancer, noting: "Initially, Bernard responded well to chemotherapy treatment" and "was almost back to normal" by January 1978, and his "improvement also prompted plans for a visit to Japan in June" where he and Fawn had both "been invited to lecture at Japan's National Defense Academy" but they were ultimately "forced to cancel their Japanese journey" when Brodie's "lymphoma returned, despite six months of chemotherapy and one month of radiation treatments," and Brodie "became bedridden." 2442 Brodie was hospitalized in July, and in "early August he was given radiation treatments on his spine where the original cancerous lesion was belatedly located, lending hope for remission. He recovered the use of his left leg and was able to walk with a cane and some help," but these "[i]mprovements were short-lived" and his "condition deteriorated," with "no real hope for remission, let alone recovery. By late October, he was paralyzed from the waist down and was experiencing weakness in his arms and hands."2443

Brodie "hated the idea of dying and could not even talk about it until the final week of his life – by which time he was so crippled and weak that he actually welcomed the thought of escape. His only consolation seemed to come from directing the planting of daffodil bulbs and lilies in his beloved garden – and from listening to music, in particular, to Richard Strauss's 'Death and Transfiguration,' which he played over and over again. He refused to eat or to take medication, though at the end he begged for chemotherapy in the forlorn hope for recovery." <sup>2444</sup> As Bringhurst recounts Brodie's wife Fawn describing in a letter to Alexander and Juliette George, "'We both felt terribly cheated ... there were times of black despair," and then on November 24<sup>th</sup>, "one day after Thanksgiving, Bernard Brodie died. He was sixty-eight years old." <sup>2445</sup>

<sup>2440.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 220-221.

<sup>2441.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 221.

<sup>2442.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 236.

<sup>2443.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 237.

<sup>2444.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 237.

<sup>2445.</sup> Bringhurst, Fawn McKay Brodie: A Biographer's Life, 237.

In its obituary marking the passing of Bernard Brodie on November 24, 1978, *Arms Control Today* recalled in its February 1979 issue how five years earlier, in her dedication of *Thomas Jefferson: An Intimate History*, Fawn Brodie wrote, "to Bernard, ever the young gardener," and explained that Bernard Brodie, "like Jefferson, took joy in working the soil of his garden," and under his attentive care, the "Brodie hilltop ... dripped color and fragrance under Bernard's hands." 1t was "[w]ith the same attentiveness – and the same fecundity" that he "gardened in the fields of the mind," and across his "twenty-years of teaching, writing and lecturing, he left those who think about military history, strategy and arms control a good deal to ponder." Further, the "richness of Bernard Brodie's work came from his sensible bias against lifting problems of strategy from their contexts in human history and human psychology," as he "spent a lifetime cautioning against what he called 'the temptation to throw the past out the window." 2448

Saluting his foresight, Arms Control Today noted that Brodie "wrote The Absolute Weapon in 1946, just a year after the use of the first atomic bomb at Hiroshima, when debates were still raging about what exactly were the physical effects of an atomic blast," while "[t]oday the paragraphs" of that work "seem extraordinarily prescient." 2449 As foreseen by Brodie, the "gravest danger ... would result from a failure of U.S. military and political leaders to adjust to the atomic bomb in their thinking and planning," and was one of the very first to foresee "the nature of mutual deterrence" between the superpowers.<sup>2450</sup> Brodie thus "shaped as well as predicted the U.S. approach to strategy in the atomic age," and was a "technical advisor to the U.S. delegation at the United Nations Conference in 1945, a RAND Corporation thinker, a teacher at Dartmouth, Yale and [the] University of California at Los Angeles, a visiting scholar at Princeton and the Carnegie Endowment, and a frequent lecturer to the military at the National War College in Washington, and elsewhere," and further "supplemented the influence of his writing with the imprint he left upon three generations of students, colleagues, military officers and friends."2451 Importantly, Brodie's "word always carried an optimism that through logic and rationality mankind could cut through the darkness of the atomic age." And so, Arms Control Today concluded, "Many, many generations of students of defense will look to Bernard Brodie's lifetime of thought as a touchstone of reasoned thinking, persuasive argumentation, rich contextuality, and great wisdom."2452

<sup>2446. &</sup>quot;Bernard Brodie 1910-1978," Arms Control Today, February 1979, 10.

<sup>2447. &</sup>quot;Bernard Brodie 1910-1978," Arms Control Today, February 1979, 10.

<sup>2448. &</sup>quot;Bernard Brodie 1910-1978," Arms Control Today, February 1979, 10.

<sup>2449. &</sup>quot;Bernard Brodie 1910-1978," Arms Control Today, February 1979, 10.

<sup>2450. &</sup>quot;Bernard Brodie 1910-1978," Arms Control Today, February 1979, 10.

<sup>2451. &</sup>quot;Bernard Brodie 1910-1978," Arms Control Today, February 1979, 10.

<sup>2452. &</sup>quot;Bernard Brodie 1910-1978," Arms Control Today, February 1979, 10.

A survey of Brodie's contribution to the strategic literature was presented in the 1981 article in the U.S. Army War College's journal, *Parameters*, by Col. (ret.) William P. Snyder and Col. John A. MacIntyre, Jr., who conclude that Brodie "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." <sup>2453</sup>

Several months after Brodie's death, Thomas Schelling published "A Tribute to Bernard Brodie and (Incidentally) to RAND" in the Winter 1978/79 edition of International Security 3, No. 3, which was reissued as a RAND paper in July 1979. In it he noted "The 1950s were the first time in at least a century that Americans became professionally concerned, in peacetime, with military strategy," and "[a]mong the originators of that academic profession, Bernard Brodie was first - both in time and in distinction," and in addition to his early works on naval strategy, as "editor and one of the chief contributors to *The Absolute Weapon* (1946), he set standards for thinking about nuclear strategy;" and "his articles on limited war, deterrence, and strategy as science . . . culminating in Strategy in the Missile Age (1959), were of an analytical and literary distinction that set him apart," making him a "central figure in the RAND 'oral tradition' that gave shape to strategic thinking as it emerged in the 1960s and – it is still about all we have – the 1970s."2454 Schelling wrote that by the mid-1960s, Brodie "had to change sides on a number of policies to oppose 'carrying an intrinsically good idea so much too far,' publishing the brief and slightly polemical Escalation and the Nuclear Option,"2455 followed by in 1973 his War and Politics, which revisited the very real wars fought in his lifetime "rather than the hypothetical nuclear wars that his own work, I truly believe, has helped us to avoid." As Schelling saluted his esteemed colleague and close friend: "He, more than anyone else, helped us to learn to think about how to survive in a world with nuclear weapons."2456

<sup>2453.</sup> William P. Snyder and John A. MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," Parameters Vol XI, No. 4, 2. At the time of publication, Snyder served as Associate Professor of Political Science at Texas A&M University, whose faculty he joined in 1975 upon retirement from the U.S. Army as a Colonel. He was a 1952 West Point graduate who earned his Ph.D. in political science at Princeton University in 1963, and a graduate of the U.S. Army War College in 1971. He is the author of The Politics of British Defense Policy, 1945-1962 (1964), Case Studies in Military Systems Analysis (1967), in addition to numerous articles and reviews. Colonel John A. MacIntyre, Jr. was, at the time of the article's publication, assigned to the Office of the Surgeon General in the Department of the Army. A graduate of Pennsylvania Military College, he earned master's degrees from George Washington University in international business in 1971 and from Trinity University in health care administration in 1975. Colonel MacIntyre graduated from the U.S. Army Command and General Staff College in 1976 and the U.S. Army War College in 1980.

<sup>2454.</sup> Schelling, "A Tribute to Bernard Brodie and (Incidentally) to RAND," RAND, July 1979, 1.

<sup>2455.</sup> Schelling, "A Tribute to Bernard Brodie and (Incidentally) to RAND," 2.

<sup>2456.</sup> Schelling, "A Tribute to Bernard Brodie and (Incidentally) to RAND," 2.

- Abella, Alex. Soldiers of Reason: The RAND Corporation and the Rise of the American Empire. New York: Houghton Mifflin Harcourt, 2008.
- Alberts David S., and Thomas J. Czerwinski, eds., *Complexity, Global Politics, and National Security*. Washington, DC: National Defense University Press, 1997.
- Aldridge, Robert. Counterforce Syndrome. Washington, D.C.: Transnational Institute, 1978.
- Aligica, Paul Dragos and Kenneth R. Weinstein, eds., *The Essential Herman Kahn*. Lanham, MD: Lexington Books, 2009.
- Arms Control Today (G.D.), "Bernard Brodie 1910-1978," Arms Control Today (February 1979), 10.
- Aron, Raymond. *Clausewitz: Philosopher of War*, tr. Christine Booker and Norman Stone. Englewood Cliffs, NJ: Prentice Hall, 1985.
- Aron, Raymond. *Clausewitz: Philosopher of* War, tr. Christine Booker and Norman Stone. New York: Simon & Schuster, 1986.
- Aron, Raymond. "Modern Strategic Thought," tr. J. E. Gabriel, *Problems of Modern Strategy*. New York: Praeger, 1970.
- Ashley, Richard K. "The Poverty of Neorealism," *International Organization* 38, No. 2 (Spring 1984), 225-286.
- Bailey, Herbert S. Letter to DeHaven, February 16, 1959, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Bailey, Herbert S. Letter to Vaughan, March 6, 1958, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Bailey, Herbert S. Letters to Brodie, January 29, 1958; March 22, 1958; March 31, 1958; December 8, 1958; December 16, 1958; January 2, 1959; February 3, 1959; February 10, 1959; March 13, 1959; March 25, 1959; August 21, 1959; September 15, 1959; January 20, 1960; February 11, 1960; February 23, 1960; January 12, 1973; February 22, 1973; May 22, 1973; September 16, 1973; October 10, 1974; December 31, 1975; October 14, 1976; October 29, 1976, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Bailey, Herbert S. Letters to Paret, May 22, 1973; October 10, 1974, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Barnett, Frank R. "Preface," *Towards a New Defense for NATO: The Case for Tactical Nuclear Weapons.* New York: National Strategy Information Center, July 1976, vii-viii.
- Bassford, Christopher. Clausewitz in English: The Reception of Clausewitz in Britain and America, 1815-1945 (Oxford: Oxford University Press, 1994).
- Bassford, Chris. E-mail to the Author, February 26, 2012.
- Bassford, Christopher. "Jomini and Clausewitz: Their Interaction," The Clausewitz Homepage, http://www.clausewitz.com/CWZHOME/Jomini/JOMINIX.htm, an edited version of a paper presented to the 23rd Meeting of the Consortium on Revolutionary Europe at Georgia State University, 26 February 1993.

Bassford, Christopher. "Review Essay: Carl von Clausewitz, *On War* (Berlin, 1832)," posted online at: http://www.clausewitz.com/readings/Bassford/DefAnReview.htm, originally published in *Defense Analysis*, June 1996.

- Bateman, Lewis. Letter to Brodie, December 19, 1975, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Baylis, John and John C. Garnett, eds., Makers of Nuclear Strategy. London: Pinters Press, 1991.
- Bayne, M.G., U.S. Navy Vice Admiral and Commandant. Letter to Brodie, August 28, 1974, Bernard Brodie Papers (Collection 1223). Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Betts, Richard K. "Should Strategic Studies Survive?", World Politics, 50, No. 1, Fiftieth Anniversary Special Issue (October 1997), 7-33.
- Beyerchen, Alan D. "Chapter 7: Clausewitz, Nonlinearity, and the Importance of Imagery," in David S. Alberts and Thomas J. Czerwinski, eds., *Complexity, Global Politics, and National Security*. Washington, DC: National Defense University Press, 1997, http://www.dtic.mil/cgi-bin/Get TRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA460550.
- Beyerchen, Alan D. Clausewitz, "Nonlinearity and the Unpredictability of War," Appendix 1, in Tom Czerwinski, ed., *Coping with the Bounds: Speculations on Nonlinearity in Military Affairs* (Washington, DC: National Defense University Press, 1998), 151-197, as posted on The Clausewitz Homepage, http://www.clausewitz.com/readings/Beyerchen/CWZandNonlinearity.htm.
- Bobbitt, Philip, Lawrence Freedman, and Gregory F. Treverton. *U.S. Nuclear Strategy: A Reader*. London: Macmillan, 1989.
- Bobbitt, Philip. The Shield of Achilles: War, Peace and the Course of History. New York: Alfred A. Knopf, 2002.
- Bolton, John R. "Beyond the Axis of Evil: Additional Threats from Weapons of Mass Destruction," Speech delivered at the Heritage Foundation, Washington, DC, May 2, 2002, http://www.disam.dsca.mil/pubs/V24-4%20PDF%20Files%20By%20Author/Bolton,%20John%20R.,%20Axis%20of%20Evil.pdf.
- Bonaparte, Napoleon. *Napoleon's Maxims of War* with notes by General Burnod. Translated from French by Lieut.General Sir G.C. D'Aguilar, C.B., and published by David McKay of Philadelphia in 1902. Available online: http://www.pvv.ntnu.no/~madsb/home/war/napoleon/.
- Booth, Ken. "Bernard Brodie," in John Baylis and John Garnett, eds., *Makers of Nuclear Strategy* (London: Pinters Press, 1991), 19-54.
- Boyd, John R. "Destruction and Creation," Unpublished Paper, September 3, 1976, 6-7. A copy is available online at: http://www.goalsys.com/books/documents/DESTRUCTION\_AND\_CREATION.pdf.
- Bringhurst, Newell G. Fawn McKay Brodie: A Biographer's Life. Norman: University of Oklahoma Press, 1999.
- Brodie, Bernard. "A Comment on the Hoag Doctrine," RAND Working Paper, July 17, 1962.
- Brodie, Bernard. "A Commentary on the Preventive War Doctrine," RAND Working Paper, June 11, 1953.
- Brodie, Bernard. "A Critique of Army and Navy Thinking on the Atomic Bomb," *The Bulletin of the Atomic Scientists*, August 1947, 207-210.

- Brodie, Bernard. "A Critique of the Doctrine of Conventional War in Europe (CWE)," RAND Working Paper, September 24, 1962.
- Brodie, Bernard. A Guide to Naval Strategy. New York: Praeger, 1965, Fifth Edition.
- Brodie, Bernard. A Layman's Guide to Naval Strategy. Princeton: Princeton University Press, 1942.
- Brodie, Bernard. "A Slightly Revised Proposal for the Underemployment of SAC in an H-Bomb Era," RAND Working Paper, January 23, 1953.
- Brodie, Bernard and Fawn Brodie, *From Crossbow to H-Bomb*, Revised Edition. Bloomington: Indiana University Press, 1973. Originally published by New York: Dell Books, 1962.
- Brodie, Bernard. "Can Peaceful Change Prevent War?" Term Paper Submitted to Political Science 363, Spring 1938, University of Chicago.
- Brodie, Bernard. "Changing Attitudes Towards War," Chapter 6, in *War and* Politics. New York: Macmillan, 1973, 223-275.
- Brodie, Bernard. "Changing Attitudes Towards War," in Henry A. Kissinger and Bernard Brodie, eds., *Bureaucracy, Politics, and Strategy*, Security Studies Paper Number 17 (Los Angeles: UCLA Security Studies Project, 1968), 15-26.
- Brodie, Bernard. "Changing Attitudes Towards War," Paper Presented at the Studies in Violence Symposium, UCLA, June 1-2, 1968, 1-16.
- Brodie, Bernard. "Changing Capabilities and War Objectives," Lecture to the Air War College, April 17, 1952, 1-20.
- Brodie, Bernard. "Characteristics of a Sound Strategy," Lecture Delivered to the Naval War College, March 17, 1952, 1-24.
- Brodie, Bernard, C.J. Hitch, and A.W. Marshall, "The Next Ten Years," RAND Working Paper, December 30, 1954.
- Brodie, Bernard, "Conclusion: The Future of Deterrence," in Bernard Brodie, ed., *The Future of Deterrence in U. S. Strategy*, UCLA Security Studies Project (Los Angeles: UCLA, 1968).
- Brodie, Bernard. "Defense Policy and the Possibility of Total War." *Daedalus* 91, No. 4, American Foreign Policy: Freedoms and Restraints (Fall 1962), 733-748.
- Brodie, Bernard. "Defense Strategy in its Political Context," a paper delivered to the Fifth International Wehrkunde Conference sponsored by the Verlag Europaisch Wehrkunde, Munich, Germany, February 10-11, 1968, in William P. Gerberding and Bernard Brodie, *The Political Dimension in National Strategy*, Security Studies Paper No. 13 (Los Angeles: UCLA, 1968), 36-47.
- Brodie, Bernard, ed., *The Absolute Weapon: Atomic Power and World Order*. New York. Harcourt, Brace and Company. 1946. See in particular, Part I: The Weapon, Chapter One, "War in the Atomic Age," and Chapter Two, "Implications for Military Policy."
- Brodie, Bernard, ed., *The Future of Deterrence in U. S. Strategy*, UCLA Security Studies Project (Los Angeles: UCLA, 1968), in particular, "Conclusion: The Future of Deterrence," 126-134.
- Brodie, Bernard. "Ending a War: Is the Korean Lesson Valid for Vietnam?" in Henry A. Kissinger and Bernard Brodie, eds., *Bureaucracy, Politics, and Strategy*, Security Studies Paper Number 17 (Los Angeles: UCLA Security Studies Project, 1968), 41-45 under the original title of
- Brodie, Bernard. Escalation and the Nuclear Option (Princeton: Princeton University Press, 1966).
- Brodie, Bernard. *Escalation and the Nuclear Option*, RAND Memorandum RM-4544-PR. Santa Monica: RAND Corporation, June 1965.

Brodie, Bernard et al., "Discussion of the Eastern Europe," in Quincy Wright, ed. *A Foreign Policy for the United States* (Chicago: University of Chicago Press, 1947), 202-223.

- Brodie, Bernard et al., "Discussion of the Far East," in Quincy Wright, ed. *A Foreign Policy for the United States* (Chicago: University of Chicago Press, 1947), 139-161.
- Brodie, Bernard et al., "Discussion of General Security," in Quincy Wright, ed. *A Foreign Policy for the United States* (Chicago: University of Chicago Press, 1947), 97-125.
- Brodie, Bernard et al., "Discussion of Great-Power Relationships," in Quincy Wright, ed. *A Foreign Policy for the United States* (Chicago: University of Chicago Press, 1947), 34-71.
- Brodie, Bernard et al., "Discussion of International Economic Policies," in Quincy Wright, ed. A Foreign Policy for the United States (Chicago: University of Chicago Press, 1947), 292-310.
- Brodie, Bernard et al., "Discussion of International Informational Policies," in Quincy Wright, ed. *A Foreign Policy for the United States* (Chicago: University of Chicago Press, 1947), 349-392.
- Brodie, Bernard et al., "Discussion of the Latin America," in Quincy Wright, ed. *A Foreign Policy for the United States* (Chicago: University of Chicago Press, 1947), 234-255.
- Brodie, Bernard et al., "Discussion of the Near East," in Quincy Wright, ed. *A Foreign Policy for the United States* (Chicago: University of Chicago Press, 1947), 170-193.
- Brodie, Bernard. "How Much Conventional Force Do We Need?" *Foreign Service Journal*, April 1973, 18-22.
- Brodie, Bernard. "How Not to Lead an Alliance," The Reporter, March 9, 1967, 18-24.
- Brodie, Bernard. "How Strong Is Britain?" Foreign Affairs 26, No. 3 (April 1948), 432-449.
- Brodie, Bernard. "Implications of Nuclear Weapons in Total War," RAND Paper (P-1118), July 8, 1957, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=AD606443&Location=U2&doc=Get TRDoc.pdf.
- Brodie, Bernard. "In Quest of Socrates: Man and Philosopher," Paper Submitted to Course 101, Department of Philosophy, University of Chicago, December 1932. Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young, Research Library, UCLA.
- Brodie, Bernard. "In Quest of the Unknown Clausewitz." [A review of Paret's Clausewitz and the State.] *International Security* 1, No.3 (Winter 1977), 63-66.
- Brodie, Bernard. "Influence of Mass Destruction Weapons on Strategy," Lecture, Naval War College, February 6, 1956.
- Brodie, Bernard. "Introduction," *Towards a New Defense for NATO: The Case for Tactical Nuclear Weapons.* New York: National Strategy Information Center, July 1976, 1-9.
- Brodie, Bernard. "Introduction," Carl von Clausewitz, *On War*, translated and edited by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976).
- Brodie, Bernard. "Learning to Fight a Limited War," originally published in the *Los Angeles Times*, December 3, 1967, reprinted in *The Political Dimension in National Strategy: Five Papers*, ed. William P. Gerberding and Bernard Brodie, Security Studies Paper No. 13 (Los Angeles: University of California Security Studies Project, 1968), 26-32.
- Brodie, Bernard. Letter to Hans Speier, November 23, 1954, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Brodie, Bernard. Letter to Hans Speier, November 5, 1954, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.

- Brodie, Bernard. Letter to Klaus Knorr, January 24, 1964; February 26, 1964; March 27, 1964; May 15, 1964, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brodie, Bernard. Letter to Michael Howard, September 1, 1974; October 3, 1974, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Brodie, Bernard. Letters to Bailey, February 6, 1958; March 28, 1958; July 17, 1958; December 29, 1958; January 30, 1959; February 16, 1959; March 20, 1959; August 25, 1959; February 4, 1960; February 18, 1960; May 19, 1973; December 25, 1975, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Brodie, Bernard. Letters to Gordon Hubel, March 20, 1959; April 8, 1959; March 18, 1964; March 19, 1964; Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brodie, Bernard. Letters to Herman Kahn, January 4, 1962; January 12, 1962; January 19, 1962; January 25, 1962; January 31, 1962; February 9, 1962; February 16, 1962; September 18, 1963, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brodie, Bernard. Letters to Max Singer, November 9, 1963; November 11, 1964, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brodie, Bernard. Letters to Peter Paret, January 17, 1964; May 22, 1964; May 28, 1964; May 1, 1967; January 21, 1974; May 30, 1974, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brodie, Bernard, Michael Intriligator, and Roman Kolkowicz, eds. *National Security and International Stability* (Cambridge: Oelgeschlager, Gunn & Hain, 1983).
- Brodie, Bernard. "Morals and Strategy: Distinguishing Virtue from Ignorance in Problems of National Defense," *Worldview Magazine*, Carnegie Council for Ethics in International Affairs, September 1964, 4-8.
- Brodie, Bernard. "More About Limited War," World Politics 10, No. 1 (October 1957), 112-122.
- Brodie, Bernard. "Must We Shoot from the Hip?" RAND Working Paper, September 4, 1951.
- Brodie, Bernard. "Navy Department Thinking on the Atomic Bomb," *The Bulletin of the Atomic Scientists*, July 1947, 177-180, 198-200.
- Brodie, Bernard. "New Preface for Paperback Edition of 'Strategy in the Missile Age'," RAND Paper (P-3033), Santa Monica: RAND, December 30, 1964.
- Brodie, Bernard. "New Tactics in Naval Warfare," Foreign Affairs 24, no. 2 (January 1946).
- Brodie, Bernard. "New Technologies of War and National Policies," *Technology and International Relations* (Chicago: University of Chicago Press, 1949).
- Brodie, Bernard. "Nuclear Strategy in its Political Context" Box 20, Bernard Brodie Papers at the UCLA Library Special Collections, reprinted in Marc Trachtenberg's *The Development of American Strategic Thought: Writings on Strategy, 1961-1969* (New York: Garland Press, 1988), 353-368.
- Brodie, Bernard. "Nuclear Weapons and Changing Strategic Outlooks," Lecture, U.S. Army War College, Carlisle Barracks, Pennsylvania, February 20, 1956.

Brodie, Bernard. "Nuclear Weapons and Changing Strategic Outlooks," RAND Paper P-811, February 27, 1956.

- Brodie, Bernard. "Nuclear Weapons and Changing Strategic Outlooks," February 1957 edition of *The Bulletin of the Atomic Scientists*, 56-61.
- Brodie, Bernard. "Nuclear Weapons and Changing Strategic Outlooks," Lecture, Dartmouth College, Great Issues," March 1956.
- Brodie, Bernard. "Nuclear Weapons: Strategic or Tactical?" Foreign Affairs 32, No. 2 (January 1954).
- Brodie, Bernard. "On the Objectives of Arms Control, Bernard Brodie," *International Security* 1, No. 1 (Summer 1976), 17-36.
- Brodie, Bernard. "Paying in Full for a Limited War," L.A. Times, Part II, October 17, 1968.
- Brodie, Bernard. "Political Consequences of the H-bomb," RAND Working Paper, November 7, 1952.
- Brodie, Bernard. "Political Impact of U.S. Forces," Air Force Advisory Group (AFAG) Talk, RAND, May 28, 1963.
- Brodie, Bernard. "RAND Memo to Thomas W. Wolfe, March 24, 1965, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brodie, Bernard. "Review of Clausewitz and the State by Peter Paret," *Journal of Interdisciplinary History* 8, No. 3 (Winter, 1978), 572-574.
- Brodie, Bernard. "Review: On Clausewitz: A Passion for War," World Politics 25, No. 2 (January 1973), 288-308.
- Brodie, Bernard. Sea Power in the Machine Age (Princeton: Princeton University Press, 1941).
- Brodie, Bernard. "Some Notes on the Evolution of Air Doctrine," *World Politics* 7, No. 3 (April 1955), 349-370.
- Brodie, Bernard. "Some Preliminary Observations on Escalation," RAND Working Paper, September 13, 1962.
- Brodie, Bernard. "Some Strategic Implications of the Nuclear Revolution," RAND Working Paper, P-1111, May 14, 1957.
- Brodie, Bernard. "Strategic Bombing: What It Can Do," The Reporter, August 15, 1950, 28-31.
- Brodie, Bernard. "Strategic Objectives and the Determination of Force Composition," RAND Working Paper, June 9, 1959.
- Brodie, Bernard. Strategy and National Interests: Reflections for the Future (New York: National Strategy Information Center, January 1971).
- Brodie, Bernard. "Strategy as a Science," World Politics 1, No. 4 (July 1949), 467-488.
- Brodie, Bernard. "Strategy as an Art and a Science," Naval War College Lecture, September 18, 1958., reprinted in the *Naval War College Review*, February 1959. Online at: http://www.au.af.mil/au/awc/awcgate/theorists/brodie1.htm.
- Brodie, Bernard. "Strategy Hits a Dead End," *Harper's*, October 1955, 33-37.
- Brodie, Bernard. Strategy in the Missile Age (Princeton: Princeton University Press, 1959).
- Brodie, Bernard. Strategy in the Missile Age. Santa Monica: RAND Corporation Report R-335, January 15, 1959.

- Brodie, Bernard. "Tactical Effects of H-Bombs," RAND Working Paper, November 7, 1952.
- Brodie, Bernard. "Technology, Politics, and Strategy," Adelphi Papers 9, No.:55 (1969), 21-29.
- Brodie, Bernard. "Technology, Politics, and Strategy," in Henry A. Kissinger and Bernard Brodie, eds., *Bureaucracy, Politics, and Strategy*, Security Studies Paper Number 17 (Los Angeles: UCLA Security Studies Project, 1968), 27-40.
- Brodie, Bernard. "Technology, Politics, and Strategy," Paper Presented to the Tenth Annual Conference of the Institute for Strategic Studies at St. Catherine's College in Oxford, September 19-22, 1968, 2.
- Brodie, Bernard. "The American Scientific Strategists," RAND Working Paper (P-2979), October 1964.
- Brodie, Bernard. "The Anatomy of Deterrence," RAND Research Memorandum (RM-2218), July 23, 1958.
- Brodie, Bernard. "The Anatomy of Deterrence" World Politics 11, No. 2 (January 1959), 173-191.
- Brodie, Bernard. "The Atom Bomb as Policy Maker," *Foreign Affairs* 27, No. 1 (October 1948), 17-33.
- Brodie, Bernard. "The Atomic Bomb and American Security," in Philip Bobbitt, Lawrence Freedman, and Gregory F. Treverton, eds., *U.S. Nuclear Strategy: A Reader* (London: Macmillan, 1989).
- Brodie, Bernard. "The Atomic Bomb and American Security," Memorandum Number Eighteen, Yale Institute of International Studies, New Haven, Connecticut, November 1, 1945,
- Brodie, Bernard. "The Atomic Dilemma," *Annals of the American Academy of Political and Social Science* 249, Social Implications of Modern Science (January 1947), 32-41.
- Brodie, Bernard. "The Continuing Relevance of *On War*," in Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1976, 45-58.
- Brodie, Bernard. "The Development of Nuclear Strategy," Advanced Concepts and Information Strategy (ACIS) Working Paper, UCLA, 1976.
- Brodie, Bernard. "The Development of Nuclear Strategy," Chapter 2 in *National Security and International Stability* (Cambridge: Oelgeschlager, Gunn & Hain, 1983) eds. Bernard Brodie, Michael D. Intriligator and Roman Kolkowicz, 5-21.
- Brodie, Bernard. "The Development of Nuclear Strategy," *International Security* 2, No. 4 (Spring, 1978), 65-83.
- Brodie, Bernard. "The Heritage of Douhet," RAND Research Memorandum (RM-1013), December 31, 1952.
- Brodie, Bernard. *The Intractability of States: A Distinctive Problem*, RAND Paper P-2970 (Santa Monica: RAND Corporation, September 1964).
- Brodie, Bernard. "The McNamara Phenomenon," *World Politics* 17, No. 4 (July 1965), 672-686, a review article of William W. Kaufmann, *The McNamara Strategy* (New York, Harper & Row, 1964).
- Brodie, Bernard. "The Missing Middle Tactical Nuclear War," RAND Working Paper, May 8, 1964 (a revised version of his April 9, 1964 speech to RAND's Air Force Advisory Group (AFAG) of the same title).

Bernard Brodie, "The Scientific Strategists," in Robert Gilpin and Christopher Wright, eds., *Scientists and National Policy-Making*. New York: Columbia University Press, 1964, 240-266.

- Brodie, Bernard. "The Security Problem in the Light of Atomic Energy," in Quincy Wright, ed. A Foreign Policy for the United States (Chicago: University of Chicago Press, 1947), 89-96.
- Brodie, Bernard. "Theories on the Causes of War," in Henry A. Kissinger and Bernard Brodie, eds., *Bureaucracy, Politics, and Strategy*, Security Studies Paper Number 17. Los Angeles: UCLA Security Studies Project, 1968, 46-60.
- Brodie, Bernard. "Theories on the Causes of War," Presented at Royce Hall, UCLA, on November 11, 1968 as part of the Faculty Lecture Series on "War and the Human Race," 1-20.
- Brodie, Bernard. "U.S. Political Objectives in a Context of Strategic Bombing," RAND Corporation Working Paper, February 19, 1953.
- Brodie, Bernard. "Unlimited Weapons and Limited War," The Reporter, November 18, 1954, 16-21.
- Brodie, Bernard. "Unlimited Weapons Choices and Limited Budgets," Public Lecture at Berkeley, November 18, 1954, 1-31.
- Brodie, Bernard. War and Politics. New York: Macmillan, 1973.
- Brodie, Bernard. "War Department Thinking on the Atomic Bomb," *The Bulletin of the Atomic Scientists*, June 1947, 150-155, 168.
- Brodie, Bernard. "What Price Conventional Capabilities in Europe?" *The Reporter*, May 23, 1963, 25-33.
- Brodie, Bernard. "Why Were We So (Strategically) Wrong?" *Foreign Policy* 5 (Winter 1971-72): 151-161.
- Brodie, Memo to C.A.H. Thomson, J.M. Goldsen, and R. McDermott , Jan 22, 1964, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brodie, Memo to Max Ascoli, September 6, 1957, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Brokaw, R. Miriam. Letter to Brodie, September 14, 1973, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Brooks, Stephen G. "Dueling Realisms," International Organization 51, No. 3 (Summer, 1997).
- Brubeck, Marcia. Letter to Brodie, July 29, 1976, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Brubeck, Marcia. Letter to Brodie, October 6, 1976, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Bryant, Stewart F. "Review of Sea Power in the Machine Age," Annals of the American Academy of Political and Social Science 218, Public Policy in a World at War (November 1941), 202.
- Buchan, Alastair. "Review: War and Politics," *The American Political Science Review* 69, No. 2 (June 1975), 731.
- Calder, Nigel. Nuclear Nightmares. New York: Viking Press, 1980.
- Calder, Nigel. *Nuclear Nightmares: An investigation into possible wars.* London: British Broadcasting Corporation, 1979.
- Cannon, Michael W. "Clausewitz for Beginners," Air Power Journal (Summer 1989).

- Carnesale, Albert, Paul Doty, Stanley Hoffmann, Samuel P. Huntington, Joseph S. Nye, Jr., Scott D. Sagan, Derek Bok (Harvard Nuclear Study Group), *Living with Nuclear Weapons*. Cambridge: Harvard University Press, 1983.
- Cavell, R. G. "Review of *The Absolute Weapon*," edited by Bernard Brodie," *Pacific Affairs* 19, No. 4 (December 1946), 450-51.
- Chapman, John W. "American Strategic Thinking," *Air University Review* 18, January-February 1967, 25-33, http://www.airpower.au.af.mil/airchronicles/aureview/1967/jan-feb/chapman.html.
- Chapman, John W. Letter to Brodie, January 6, 1966, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Choice. "Review: Escalation and the Nuclear Option," *Choice*, June 1967, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Cimbala, Stephen J. Clausewitz and Chaos: Friction in War and Military Policy. Westport, CT: Praeger, 2001.
- Cimbala, Stephen J. Clausewitz and Escalation: Classical Perspective on Nuclear Strategy. London: Frank Cass, 1991.
- Claude Jr., I.L. Swords into Plowshares: The Problems and Progress of International Organization 4th edition (New York: Random House, 1971)
- Clausewitz, Carl von. "Chapter 1, Strategy," Book III, Of Strategy in General, *On War* (London: N. Trübner, 1873), tr. Colonel J.J. Graham, posted on the Clausewitz Homepage, http://www.clausewitz.com/readings/OnWar1873/BK3ch01.html.
- Clausewitz, Carl von. *On War*, translated by J.J. Graham, 1873, http://www.clausewitz.com/readings/OnWar1873/BK2ch01.html.
- Clausewitz, Carl von. *On War*. Princeton: Princeton University Press, 1976, edited by Michael Howard and Peter Paret.
- Clausewitz, Carl von. *Principles of War* were translated and edited by Hans W. Gatzke, and republished in 1942 by The Military Service Publishing Company, http://www.clausewitz.com/CWZHOME/PrincWar/Princwr1.htm.
- Clausewitz, Carl von. "The Introduction of the Author," *On War*, translated by Col. James .John Graham. London; N. Trubner, 1873, http://www.clausewitz.com/readings/OnWar1873/Intro.htm.
- Clausewitz, Marie von. "Preface to the First Edition," Carl von Clausewitz, *On War*, translated by Col. J.J. Graham, London, 1873, http://www.gutenberg.org/files/1946/1946-h/1946-h. htm#2H\_4\_0004.
- Cody, Edward. "After 43 Years, France to Rejoin NATO as Full Member," *Washington Post*, March 12, 2009.
- Craig, Campbell. *Glimmer of a New Leviathan: Total War in the Realism of Niebuhr, Morgenthau, and Waltz.* New York: Columbia University Press, 2003.
- Curl, Richard L. "Strategic Doctrine in the Nuclear Age," Strategic Review 3 (Winter 1975), 46-56.
- DeHaven, James C. Letters to Herbert Bailey, January 2, 1959; January 26, 1959, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.

Dulles, John Foster. "The Evolution of Foreign Policy," Department of State Bulletin 30 (January 25, 1962): 107-10.

- Dunn, Frederick S. "Foreword," in Bernard Brodie, The Atomic Bomb and American Security," Memorandum Number Eighteen, Yale Institute of International Studies, New Haven, Connecticut, November 1, 1945.
- Dunn, Frederick S. "Law and Peaceful Change," *American Society of International Law Proceedings* 38 (1944)
- Durieux, Benoit. "Clausewitz and the Two Temptations of Modern Strategic Thinking," in Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the Twenty-First Century*. Oxford: Oxford University Press, 2007, 251-265.
- Echevarria II, Antulio J. "American Strategic Culture: Problems and Prospects," in Hew Strachan and Sibylle Scheipers, eds., *The Changing Character of War*. Oxford: Oxford University Press, 2011, 431-445.
- Echevarria II, Antulio J. Clausewitz and Contemporary War. Oxford: Oxford University Press, 2007.
- Echevarria II, Antulio J. "The Cold War Clausewitz: Reconsidering the Primacy of Policy in *On War*," in Andreas Herberg-Rothe, Jan Willem Honig and Daniel Moran, eds., *Clausewitz, the State and War*. Stuttgart: Franz Steiner Verlag, 2011, 129-148.
- English, John A. Marching Through Chaos: The descent of armies in theory and practice. Wesport: Praeger 1996.
- Fleming, Bruce. "Can Reading Clausewitz Save Us from Future Mistakes?" *Parameters* (Spring 2004): 65-69.
- Ford, Daniel. "When Sun-tzu met Clausewitz: John Boyd, the OODA Loop, and the Invasion of Iraq," 2009.
- French, Bevan M. "Brodie Discusses 'Limited' Conflicts, Says All-Out War is 'Meaningless'," *The Dartmouth* CXV, No. 126 (March 20, 1956), 1.
- Gat, Azar. A History of Military Thought: From the Enlightenment to the Cold War. Oxford: Oxford University Press, 2001.
- Gerberding, William P. and Bernard Brodie, eds. *The Political Dimension in National Strategy: Five Papers*. Security Studies Paper Number 13. Los Angeles: UCLA Security Studies Project, 1968.
- Ghamari-Tabrizi, Sharon. *The Worlds of Herman Kahn*. Cambridge: Harvard University Press, 2005.
- Ghamari-Tabrizi, Sharon. Website of Sharon Ghamari-Tabrizi, www.sharonghamari.com/excerpt/GhamariExcerpt.pdf.
- Glaser, Charles L. "Realists as Optimists: Cooperation as Self-Help," *International Security* 19, No. 3 (Winter 1994/95), 50-90.
- Goldsen, J.M. RAND memo to George Clement, May 7, 1964, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Gray, Andrew. "Iran nuclear bomb would be calamitous US military," *Reuters*, May 21, 2009, http://uk.reuters.com/article/idUKN2140020320090521.
- Gray, Colin S. Modern Strategy. Oxford: Oxford University Press, 1999.
- Gray, Colin S. *Strategic Studies and Public Policy: The American Experience*. Lexington, Kentucky: University Press of Kentucky. 1982.

- Gray, Colin S. Strategy And History: Essays on Theory And Practice. New York: Taylor & Francis, 2006.
- Gray, Colin S. "What RAND Hath Wrought," Foreign Policy No. 4 (Autumn 1971), 111-112.
- Guzzini, Stefano. Realism in International Relations and International Political Economy: The continuing story of a death foretold. New York and London: Routledge, 1998.
- Harknett, Richard J. "State Preferences, Systemic Constraints, and the Absolute Weapon," in T.V. Paul, Richard J. Harknett and James J. Wirtz, eds., *The Absolute Weapon Revisited: Nuclear Arms and the Emerging International Order* (Ann Arbor: University of Michigan Press, 1998), 47-72.
- Hart, B.H. Liddell. Strategy. New York: Frederick A. Praeger, 1968.
- Haslam Jonathan. No Virtue Like Necessity: Realist Thought in International Relations since Machiavelli. New Haven: Yale University Press, 2002.
- Herberg-Rothe, Andreas. *Clausewitz's Puzzle: The Political Theory of War.* Oxford: Oxford University Press, 2007.
- Herberg-Rothe, Andreas, Jan Willem Honig and Daniel Moran, eds., *Clausewitz, the State and War.* Stuttgart: Franz Steiner Verlag, 2011.
- Herken, Gregg. Brotherhood of the Bomb: The Tangled Lives and Loyalties of Robert Oppenheimer, Ernest Lawrence, and Edward Teller. New York: Henry Holt, 2002.
- Herken, Gregg. *Cardinal Choices: Presidential Science Advising from the Atomic Bomb to SDI*. Oxford: Oxford University Press, 1992.
- Herken, Gregg. Counsels of War (New York: Knopf, 1985).
- Herken, Gregg. "The Not-Quite-Absolute Weapon: Deterrence and the Legacy of Bernard Brodie," Roman Kolkowicz, ed., *Dilemmas of Nuclear Strategy* (London: Frank Cass & Co., 1987), 15-24.
- Herken, Gregg. *The Winning Weapon: The Atomic Bomb in the Cold War, 1945-1950.* New York: Alfred A. Knopf, 1980.
- Heuser, Beatrice. Reading Clausewitz. London: Pimlico, 2002.
- Heuser, Beatrice. *The Strategy Makers: Thoughts on War and Society from Machiavelli to Clausewitz*. Santa Barbara: Praeger Security International, 2010.
- Hirsch, Susan. Letter to Brodie, Feb. 28, 1962, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954. Cambridge, UK: Cambridge University Press, 1998.
- Holst, Johan Jorgen. *Norwegian Military Review (Norsk Militaert Tidsskrift*), tr. N. Bertelsen, Volume 5 (1967), Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Howard, Michael. "Brodie, Wohlstetter and American Nuclear Strategy." *Survival* 34, No. 2 (Summer 1992), 107-116.
- Howard, Michael. Letters to Bernard Brodie, August 23, 1974; September 18, 1974; September 23, 1974, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Hubel, Gordon. Letters to Bernard Brodie, March 25, 1959; February 22, 1960; July 29, 1964, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.

Huntington, Samuel P. "Review: Strategy in the Missile Age by Bernard Brodie," *The American Political Science Review* 54, No. 2 (June 1960), 505-506.

- Huntington, William. "Clausewitz and Strategy in the Missile Age: A Critique of Bernard Brodie's Strategic Thought," Unpublished Paper Submitted to Foundations of National Security Strategy, National War College, October 9, 1990, 1-6.
- Hutchins, Robert M. "Scholarly Opinions on Atomic Energy and its Control," *New York Times*, June 9, 1946, 6.
- Iklé, Fred Charles. "When the Fighting has to Stop: The Arguments about Escalation," *World Politics* 19, No. 4 (July 1967), 692-707.
- Jane, Frederick T. Heresies of Sea Power. London: Longmans, Green, 1906.
- Jervis, Robert. "Security Regimes," International Organization 36, No.2 (Spring 1982), 357-378.
- Jomini, Baron Henri-Antoine, *Art of War.* G. H. Mendell and W. P. Craighill, trs. Philadelphia: Lippicott, 1892.
- Jomini, Baron Henri-Antoine, The Art of War: A New Edition with Appendices and Maps, Translated from the French by Capt. G.H. Mendell, Corps of Topographical Engineers, U.S. Army, and Lieut. W. P. Craighill, Corps of Engineers, U.S. Army. Philadelphia: J. B. Lippincott & Co., 1862.
- Kahn, Herman. Letters to Bernard Brodie, February 22, 1962; October 3, 1963, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Kahn, Herman. "Major Implications of a Current Non-Military Defense Study" (P-1497-RC), RAND, November 7, 1958.
- Kahn, Herman. On Escalation: Metaphors and Scenarios. New York: Frederick A. Praeger, 1965.
- Kahn, Herman. On Escalation: Metaphors and Scenarios. New York: Transaction Publishers, 2009.

Kahn, Herman. On Thermonuclear War. Westport, CT: Greenwood Press, 1978.

Kahn, Herman. Thinking About the Unthinkable in the 1980s. New York: Simon and Schuster, 1984.

Kahn, Herman. Thinking About the Unthinkable. New York: Avon Library, 1966.

Kahn, Herman. Thinking About the Unthinkable. New York: Horizon Press, 1962.

Kaplan, Fred and Martin J. Sherwin. *The Wizards of Armageddon*. Stanford: Stanford University Press, 1991.

Kaplan, Fred. 1959: The Year Everything Changed. Hoboken, NJ: John Wiley & Sons, 2000.

Kaplan, Fred. *The Wizards of Armageddon* (New York: Simon and Schuster, 1983.)

Kaplan, Morton A. Justice, Human Nature and Political Obligation. New York: The Free Press, 1976.

Kaplan, Morton A. Macropolitics: Selected Essays on the Philosophy of Science. Chicago: Aldine, 1969.

Kaplan, Morton A. Towards Professionalism in International Theory: Macrosystem Analysis. New York: The Free Press, 1979.

Kinross, Stuart. Clausewitz and America: Strategic Thought and Practice from Vietnam to Iraq. London: Routledge, 2008.

Kissinger, Henry A. Nuclear Weapons and Foreign Policy. New York: Harper & Brothers, 1957.

- Kissinger, Henry A. and Bernard Brodie, eds., *Bureaucracy, Politics, and Strategy*, Security Studies Paper No. 17 (Los Angeles: University of California, Los Angeles, 1968).
- Knorr, Klaus. Letters to Bernard Brodie, January 22, 1964; March 2, 1964, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Kolkowicz, Roman, ed. Dilemmas of Nuclear Strategy. London: Frank Cass, 1987.
- Krasner, Stephen D., ed., International Regimes. Ithaca: Cornell University Press, 1983.
- Lebow, Richard Ned. "Texts, Paradigms, and Political Change," in Michael C. Williams. *Realism Reconsidered: The Legacy of Hans Morgenthau in International Relations*. Oxford: Oxford University Press, 2007.
- Leonard, L. Larry. "Review: Escalation and the Nuclear Option," Current Thought on Peace and War, Summer 1967, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Lewis, Charles Lee. "Review of Sea Power in the Machine Age," The Mississippi Valley Historical Review 28, No. 2 (September 1941), 273-74.
- Lynn-Jones, Sean M. and Steven E. Miller, eds., *The Perils of Anarchy: Contemporary Realism and International Security* (Cambridge: MIT Press, 1995).
- Malcolm, Noel. Aspects of Hobbes. Oxford: Clarendon Press, 2002.
- McDonnell, Captain Robert H. "Clausewitz and Strategic Bombing," *Air University Quarterly Review* VI, No. 1 (Spring 1953), 43-54.
- McGray, Douglas. "The Marshall Plan," *Wired* 11, No. 02 (February 2003), http://www.wired.com/wired/archive/11.02/marshall.html.
- McNamara, Robert. "The Military Role of Nuclear Weapons: Perceptions and Misperceptions," Foreign Affairs 62 (1983): 59-81.
- Menand, Louis. "Fat Man: Herman Kahn and the nuclear age," New Yorker, June 27, 2005.
- Meyers, Richard B. Chairman, Joint Chiefs of Staff. "An update on the global war on terror," SecurityInnovator.com, November 24, 2002
- Mochalov, Vladimir. Introduction to the Russian Edition, *Strategy in the Missile Age*. Moscow: Soviet Ministry of Defense, 1961; English translation of Russian introduction as preserved in the Bernard Brodie Papers at the UCLA special collections.
- Montross, Lynn. War Through the Ages. New York: Harper and Bros., 1946.
- Montross, Lynn. War Through the Ages, Third Edition. New York: Harper and Row, 1960.
- Moran, Dan. "Late Clausewitz," in Andreas Herberg-Rothe, Jan Willem Honig and Daniel Moran, eds., *Clausewitz, the State and War.* Stuttgart: Franz Steiner Verlag, 2011, 91-207.
- Morgenthau, Hans. Politics Among Nations. New York: Knopf, 1985, 6th ed.
- Nelson, Jean Ware. Letter to Brodie, May 2, 1960, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Nelson, Keith L. "Review: War and Politics," *Pacific Historical Review* 45, No. 1 (February 1976), 152.
- Ogburn, William Fielding, ed., *Technology and International Relations*. Chicago: University of Chicago Press, 1949.

Osgood, Robert E. "Review: Strategy in the Missile Age by Bernard Brodie," *The Journal of Modern History* 32, No. 4 (December 1960), 426.

- Owada, Hisashi. "Peaceful Change," *Max Planck Encyclopedia of Public International Law*, Section 3, http://www.mpepil.com/sample\_article?id=/epil/entries/law-9780199231690-e1452&recno=19&
- Pacific Historical Review, "Review of *A Guide to Naval Strategy, Pacific Historical Review* 13, No. 4 (December 1944), 484.
- Paret, Peter. "Carl von Clausewitz: Biographical article for the International Encyclopedia of the Social Sciences," Center for International Studies, Princeton University, from September 16, 1963.
- Paret, Peter. "Guerre et Politique selon Clausewitz," Revue Française de Science Politique V, No. 2 (Avril-Juin 1955): 291-314.
- Paret, Peter. Letters to Bernard Brodie April 23, 1967; April 25, 1964; May 31, 1964; November 7, 1963; November 13, 1963; September 11, 1974; September 22, 1975, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Paret, Peter. "Napoleon and the Revolution in War," in Peter Paret, Gordon Alexander, and Felix Gilbert, eds., *Makers of Modern Strategy: From Machiavelli to the Nuclear Age.* Princeton: Princeton University Press, 1986, 123-142.
- Paret, Peter. "The Political Ideas of Clausewitz," Paper Submitted to the Annual Meeting of the American Historical Association, December 29, 1962, 1-9.
- Parks, Eric R. Letter to Brodie, n.d., Bernard Brodie Papers (Collection 1223). Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Paul, T.V., Richard J. Harknett and James J. Wirtz, eds., *The Absolute Weapon Revisited: Nuclear Arms and the Emerging International Order*. Ann Arbor: University of Michigan Press, 1998.
- Peña, Charles V. "Axis of Evil: Threat or Chimera?" CATO Institute, Summer 2002, http://www.cato.org/research/articles/pena-020905.html.
- Petraeus, David H. and James F. Amos, eds., FM 3-24/MCWP 3-33.5: Counterinsurgency. Washington, DC: Headquarters, Department of the Army and Headquarters, Marine Corps Combat Development Command, December 2006.
- Phillips, Thomas R., ed. *Roots of Strategy: A Collection of Military Classics*. Harrisburg, PA, Military Service Publishing Co., 1940.
- Porro, Jeffrey D. "The Policy War: Brodie vs. Kahn," *The Bulletin of the Atomic Scientists* 38, No. 6 (June/July 1982), 16-20.
- Posvar, Wesley W., Chancellor of the University of Pittsburgh. Letter to Brodie, September 24, 1968, Bernard Brodie Papers (Collection 1223). Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Princeton University Press Editorial Board. Minutes from 13-14 June 1964 Meeting of the Editorial Board, Princeton University Press, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Princeton University Press. Contract for Clausewitz, February 28, 1974, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.

- Princeton University, Public Announcement, April 10, 1964, Department of Public Information, Princeton University, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Reagan, Ronald. Speech on the Strategic Defense Initiative, December 28, 1984. A transcript of President Reagan's speech is available online at the website of NuclearFiles.org: http://www.nuclearfiles.org/menu/key-issues/missile-defense/history/reagan\_on-strategic-defense-iniative.htm.
- Reid, Julian. "Foucault on Clausewitz: Conceptualizing the Relationship between War and Power," *Alternatives: Global, Local, Political* 28, No. 1 (January 1, 2003), http://findarticles.com/p/articles/mi\_hb3225/is\_1\_28/ai\_n28987201/?tag=content;col1.
- Rodgers, William L. Greek and Roman Naval Warfare: A Study of Strategy, Tactics, and Ship Design from Salamis (480 B.C.) to Actium. Annapolis: Naval Institute Press, 1937.
- Rodgers, William L. Naval Warfare Under Oars, 4th to 16th Centuries: A Study of Strategy, Tactics and Ship Design. Annapolis: Naval Institute Press, 1939.
- Romer, Alfred. "Review of Sea Power in the Machine Age," Isis 34, No. 3 (Winter 1943), 230-231.
- Ropp, Theodore. "Review of *Sea Power in the Machine Age*," *The American Historical Review* 47, No. 4 (July 1942), 821-22.
- Rosecrance, Richard. "International Theory Revisited," *International Organization* 35, No. 4 (Autumn, 1981), 691-713.
- Rosen, S. McKee. "Review of *Sea Power in the Machine Age*," *The American Journal of Sociology* 48, No. 2 (September 1942), 292.
- RUSI. "Review: Escalation and the Nuclear Option," Royal United Service Institution, *RUSI Journal*, May 1967, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Saxon, David S. Letter to Brodie, July 18, 1977, Bernard Brodie Papers (Collection 1223). Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Schelling, Thomas. A Tribute to Bernard Brodie and (Incidentally) to RAND, RAND Paper P-6355, Santa Monica: RAND, July 1979, http://www.rand.org/content/dam/rand/pubs/papers/2006/P6355.pdf.
- Scheuerman, William. Hans Morgenthau: Realism and Beyond. Cambridge, UK: Polity Press, 2009.
- Schlatter, Richard. "Thomas Hobbes and Thucydides." *Journal of the History of Ideas*, Vol. 6, No. 3 (June 1945), 350.
- Schmidt, Brian C. "Realism as Tragedy: Review of *The Tragedy of Great Power Politics* by John J. Mearsheimer," *Cambridge Review of International Studies* 30, No. 3 (July 2004).
- Schmidt, Brian C. *The Political Discourse of Anarchy: A Disciplinary History of International Relations.* Albany: SUNY Press, 1998.
- Schroeder, Paul. "Historical Reality vs. Neo-realist Theory," *International Security* 1 (Summer 1994), 108-148.
- Schelling, Thomas. "Brodie (1910-1978): A Tribute to Bernard Brodie and (Incidentally) to RAND," *International Security* 3, No. 3 (Winter 1978/79), 23.
- Sherry, Michael S. *The Rise of American Airpower: The Creation of Armageddon*. New Haven: Yale University Press, 1987.

Shy, John. "Jomini," in Peter Paret, ed. *Makers of Modern Strategy: From Machiavelli to the Nuclear Age.* Princeton: Princeton University Press, 1986.

- Shy, John. "Jomini," in Peter Paret, Gordon A. Craig, and Felix Gilbert, eds., *Makers of Modern Strategy*. Oxford: Oxford University Press, 2000, 143-185.
- Skinner, Quentin. Visions of Politics. Cambridge, UK: Cambridge University Press, 2002.
- Singer, Max. Letter to Brodie, Feb. 22, 1962, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Singer, Max. Letter to Brodie, November 12, 1964, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Singer, Max. Letter to Brodie, November 4, 1963, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Smith, George H. E. "Review of *Sea Power in the Machine Age,*" *The American Political Science Review* 35, No. 5 (October 1941), 1002-1003.
- Smith, Hugh. On Clausewitz: A Study of Military and Political Ideas. New York: Palgrave MacMillan, 2005.
- Smith, Peter D. Doomsday Men. New York: Macmillan, 2007.
- Smith, Peter D. Doomsday Men. New York: Penguin, 2008.
- Snyder, William P. and John A. MacIntyre, Jr., "Bernard Brodie: America's Prophetic Strategic Thinker," *Parameters* XI, No. 4 (1981), http://www.carlisle.army.mil/usawc/parameters/Articles/1981/1981%20snyder%20and%20macintyre.pdf.
- Speier, Hans. Letters to Bernard Brodie, November 19, 1954; November 30, 1954, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Steiner, Barry H. *Bernard Brodie and the Foundations of American Nuclear Strategy*. Lawrence, Kansas: University Press of Kansas, 1991.
- Steiner, Barry. "Using the Absolute Weapon: Early Ideas of Bernard Brodie on Atomic Strategy," *Journal of Strategic Studies* 7, No. 4 (1984), 365-393.
- Steiner, Barry. "Using the Absolute Weapon: Early Ideas of Bernard Brodie on Atomic Strategy," ACIS Working Paper No. 44 (January 1984), Center for International and Strategic Affairs, UCLA.
- Strachan, Hew. "Clausewitz and the Dialectics of War," in Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the Twenty-First Century*. Oxford: Oxford University Press, 2007, 14-44.
- Strachan, Hew. Clausewitz's On War: A Biography. New York: Atlantic Monthly Press, 2007.
- Strachan, Hew and Andreas Herberg-Rothe, eds., *Clausewitz in the Twenty-First Century*. Oxford: Oxford University Press, 2007.
- Strachan, Hew and Sibylle Scheipers, eds. *The Changing Character of War.* Oxford: Oxford University Press, 2011.
- Strachan, Hew and Sibylle Scheipers, "Introduction: The Changing Character of War," in Hew Strachan and Sibylle Scheipers, eds., *The Changing Character of War.* Oxford: Oxford University Press, 2011, 1-24.

- Strausz-Hupé, Robert. "Review of The Absolute Weapon by Bernard Brodie," Annals of the American Academy of Political and Social Science 249, Social Implications of Modern Science (January 1947), 177-78.
- Stuart, Reginald C. "Clausewitz and the Americans: Bernard Brodie and Others on War and Policy," in *War and Society: A Yearbook of Military History*, Volume 2. New York: Holmes and Meier, 1977, ed. Brian Bond and Ian Roy, 166-172.
- Sumida, Jon Tetsuro. *Decoding Clausewitz: A New Approach to On War.* Lawrence, Kansas: University Press of Kansas, 2008.
- Tellis, Ashley J. "Reconstructing Political Realism: The long march to scientific theory," *Security Studies* 5, No. 2, 1995, 3-94.
- Teschke, Benno. The Myth of 1648: Class, Geopolitics, and the Making of Modern International Relations. London: Verso, 2003.
- The Key Reporter. "Review: Escalation and the Nuclear Option," *The Key Reporter*, Spring 1967, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Thomas, Roy E. Letter to Brodie, August 29, 1969, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young. Research Library, UCLA.
- Time Magazine, "ATOMIC AGE: Absolute Weapon?" *Time*, June 10, 1946, http://www.time.com/time/magazine/article/0,9171,793035,00.html.
- Trachtenberg, Marc, ed., *The Development of American Strategic Thought: Writings on Strategy,* 1945-1951 (New York and London: Garland Publishing, 1987).
- Trachtenberg, Marc, ed., *The Development of American Strategic Thought: Writings on Strategy,* 1952-1960 (New York and London: Garland Publishing, 1988).
- Trachtenberg, Marc, ed., *The Development of American Strategic Thought: Writings on Strategy, 1961-1969, and Retrospectives* (New York and London: Garland Publishing, 1988).
- Trachtenberg, Marc. History and Strategy. Princeton: Princeton University Press, 1991.
- Trachtenberg, Marc. "Strategic Thought in America, 1952-1966," *Political Science Quarterly* 104, No. 2 (Summer 1989), 301-334.
- Tuck, Richard. Hobbes: A Very Short Introduction. Oxford: Oxford University Press, 1989.
- Voice of America. "Clinton: Middle East May Start Arms Race If Iran Gets Nukes," *Voice of America*, May 20, 2009, http://www.voanews.com/english/news/a-13-2009-05-20-voa59-68786472. html.
- Waltz, Kenneth N. Man, the State, and War. New York: Columbia University Press, 1954.
- Waltz, Kenneth N. "The Emerging Structure of International Politics," *International Security* 18, No. 2 (Fall 1993).
- Waltz, Kenneth N. Theory of International Politics. New York: McGraw-Hill, 1979.
- Waltz, Kenneth N. "The Spread of Nuclear Weapons: More May Better," *Adelphi Papers*, No. 171. London: International Institute for Strategic Studies, 1981, http://www.mtholyoke.edu/acad/intrel/waltz1.htm.
- Watts, Barry D. *The Foundations of U.S. Air Doctrine: The Problem of Friction in War* (Maxwell AFB, Alabama: Air University Press, December 1984).

The White House. *National Security Strategy of the United States of America*, September 2002, http://www.globalsecurity.org/military/library/policy/national/nss-020920.pdf.

- The White House. *National Strategy to Combat Weapons of Mass Destruction*, December 2002, http://www.state.gov/documents/organization/16092.pdf.
- Wildrick, Craig D, Capt. "Bernard Brodie: Pioneer of the Strategy of Deterrence," *Military Review*, October 1983, 39-45, http://usacac.army.mil/cac2/militaryreview/index.asp.
- Williams, Michael C. Realism Reconsidered: The Legacy of Hans Morgenthau in International Relations. Oxford: Oxford University Press, 2007.
- Williams, Michael C. *The Realist Tradition and the Limits of International Relations*. Cambridge, UK: Cambridge University Press, 2005.
- Williams, Michael C. "Why Ideas Matter in International Relations: Hans Morgenthau, Classical Realism, and the Moral Construction of Power Politics," *International Organization* 58, No. 4 (Autumn, 2004), 633-665.
- Wolfe, Thomas W. "The Levels of Nuclear Strategy," The Reporter, January 12, 1967, 63-64.
- Wolfe, Thomas W. Comments on 'Escalation and the Nuclear Option,'" RAND Memo to Brodie, March 16, 1965, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.
- Wolk, Herman S. "Politicians, Generals, and Strategists," *Air University Review*, January-February 1974, http://www.airpower.au.af.mil/airchronicles/aureview/1974/jan-feb/wolk.html.
- Wright, Quincy, ed. A Foreign Policy for the United States. Chicago: University of Chicago Press, 1947.
- Wright, Quincy. "Modern Technology and the World Order," in Ogburn, ed., *Technology and International Relations*, 177-198.
- Young, Elizabeth. "On War in Europe," *The Guardian*, March 31, 1967, Bernard Brodie Papers (Collection 1223), Department of Special Collections, Charles E. Young Research Library, UCLA.