Hybrid Warfare

Fighting Complex Opponents from the Ancient World to the Present

Edited by

WILLIAMSON MURRAY

Professor Emeritus The Ohio State University

PETER R. MANSOOR

The Ohio State University



CAMBRIDGE UNIVERSITY PRESS Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press 32 Avenue of the Americas, New York, NY 10013-2473, USA

www.cambridge.org Information on this title: www.cambridge.org/9781107643338

© Cambridge University Press 2012

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2012

Printed in the United States of America

A catalog record for this publication is available from the British Library.

Library of Congress Cataloging in Publication Data

Murray, Williamson.

Hybrid warfare: fighting complex opponents from the ancient world to the present / Williamson Murray, Peter R. Mansoor.

p. cm. Includes index.

ISBN 978-1-107-02608-7 (hardback)

Asymmetric warfare.
 Asymmetric warfare – History.
 In Mansoor, Peter R., 1960 – II. Title.

U163.M87 2012 355.4'2-dc23 2012002139

ISBN 978-1-107-02608-7 Hardback ISBN 978-1-107-64333-8 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet Web sites referred to in this publication and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.

Contents

Fig	ures	page vii
Со	ntributors	ix
Acknowledgment		xi
1	Introduction: Hybrid Warfare in History Peter R. Mansoor	I
2	Conquering Germania: A Province Too Far James Lacey	18
3	Keeping the Irish Down and the Spanish Out: English Strategies of Submission in Ireland, 1594–1603 Wayne E. Lee	45
4	The American Revolution: Hybrid War in America's Past Williamson Murray	72
5	That Accursed Spanish War: The Peninsular War, 1807–1814 Richard Hart Sinnreich	104
6	The Union's Counterguerrilla War, 1861–1865 Daniel E. Sutherland	151
7	Fighting "this nation of liars to the very end": The German Army in the Franco-Prussian War, 1870–1871 <i>Marcus Jones</i>	171
8	Small Wars and Great Games: The British Empire and Hybrid Warfare, 1700–1970 John Ferris	199

vi Contents

9	An Unexpected Encounter with Hybrid Warfare:	
	The Japanese Experience in North China, 1937–1945	225
	Noboru Yamaguchi	
10	Hybrid War in Vietnam Karl Lowe	254
ΙΙ	Conclusion: What the Past Suggests Williamson Murray	289
Index		309

Introduction

Hybrid Warfare in History

Peter R. Mansoor

In his magisterial work *On War*, Prussian military philosopher Carl von Clausewitz writes, "War is more than a true chameleon that slightly adapts its characteristics to the given case." He goes on to state that "war is a remarkable trinity" composed of violence and hatred, chance and probability, and political considerations – elements that play out through the interaction of people, military forces, and governments. These factors have been a part of war since the dawn of recorded history. Nevertheless, as war in the twenty-first century morphs into seemingly unfamiliar forms that combine regular and irregular forces on the same battlefields, some defense analysts have posited the emergence of a new type of war – hybrid war.

That buzz word has become fashionable among both civilian and military leaders in the Pentagon and elsewhere. However, as Clausewitz stated nearly two centuries ago, although war changes its characteristics in various circumstances, in whatever way it manifests itself, war is still war. War in the twenty-first century has been and will remain a complex phenomenon, but its essence has not and will not change. Through a careful examination of history, this study illustrates that although there is little new in hybrid war as a concept, it is a useful means of thinking about war's past, present, and future.

The lines of warfare in the twenty-first century are becoming increasingly blurred. America's security challenges include state-on-state wars, counterinsurgency conflicts, terrorism, and combinations thereof.

¹ Carl von Clausewitz, On War, ed. and trans. Michael Howard and Peter Paret (Princeton, 1976), p. 89; originally published as Vom Kriege, 1832.

U.S. conventional military superiority, at least for the immediate future, will force potential opponents to develop alternate means to achieve their goals and oppose American power. Increasingly, those means will include conventional as well as irregular – or hybrid – forces working in tandem.² Potential enemies will blend various approaches to war to fit them within their strategic cultures, historical legacies, geographic realities, and economic means. Against such enemies, technological superiority is useful but insufficient. As the wars in Iraq and Afghanistan have underlined, turning battlefield victories into long-term strategic gains also requires an understanding of history and culture, in other words "the other," as well as adequate numbers of troops with the requisite military skills and cultural savvy to secure populations and deal with the root causes of societal violence.

Hybrid warfare will be a critical challenge to the United States and its allies in the twenty-first century, a challenge openly recognized by the U.S. defense establishment.³ To counter hybrid opponents, however, the United States and its allies must first understand the characteristics of hybrid warfare. Regrettably, the intellectual apparatus of the American military, namely the staff and war colleges, has on the whole failed to understand the future by reference not only to the distant past but to the immediate past as well. We have compiled this collection of essays, the result of a conference at the Mershon Center for International Security Studies at The Ohio State University in May 2010, because we believe that history has a great deal to say about hybrid warfare as well as other issues. The sooner not only historians but also the larger defense intellectual community examine past examples of hybrid warfare as well as present ones, the better will be the prospects for the future utilization of U.S. military power.

This collection of essays represents a first step toward examining the nature of hybrid conflicts more closely. We have defined hybrid warfare as conflict involving a combination of conventional military forces and irregulars (guerrillas, insurgents, and terrorists), which could include both state and nonstate actors, aimed at achieving a common political purpose. Irregular forces need not be centrally directed, although in many cases

² Frank G. Hoffman, "Hybrid Warfare and Challenges," *Joint Forces Quarterly* 52, First Quarter 2009, pp. 34–39; Max Boot, *War Made New: Technology, Warfare, and the Course of History* 1500 to Today (New York, 2006), pp. 472–473.

³ "'Hybrid War' to Pull US Military in Two Directions, Flournoy Says," *Defence Talk*, May 6, 2009, accessed at http://www.defencetalk.com/hybrid-war-to-pull-us-military-18521/.

they form part of a coherent strategy used to oppose an invader or occupation force.⁴ Hybrid warfare also plays out at all levels of war, from the tactical, to the operational, to the strategic. In particular, military organizations must not ignore the political framework and its narrative within which all wars occur. At the strategic level, nations might choose to support insurgent movements with conventional forces to weaken an adversary, much as the French did when they allied with the Americans in 1778 to weaken the British. At the operational level, a commander might use guerrilla forces to harass enemy lines of communication or prevent the enemy from massing forces, as General Nathanael Greene did in the Southern campaign in 1780–1781 in the American Revolution. Finally, regular and irregular forces might occasionally join tactically, as they did at the Battle of Cowpens in 1781.

"Hybrid threats," writes Frank Hoffman, "blend the lethality of state conflict with the fanatical and protracted fervor of irregular warfare." Hybrid war does not change the nature of war; it merely changes the way forces engage in its conduct. However it is waged, war is war. Much as the term "combined arms" describes the tactical combination of infantry, armor, artillery, engineers, and other branches of service in battle, the term "hybrid warfare" is a useful construct to analyze conflicts involving regular and irregular forces engaged in both symmetric and asymmetric combat. Although there may be some slight differences in how our authors define the term "hybrid warfare," we have allowed them to pursue these scholarly variations because such an approach further underlines the complexity of the subject.

Despite its prominence as the latest buzz word in Washington, hybrid warfare is not new. Its historical pedigree goes back at least as far as the Peloponnesian War in the fifth century BC. During the conflict between Athens and Sparta, the Spartans recognized they needed to keep significant forces in Laconia and Messenia to prevent an uprising by the Helots, upon whose backs their agricultural and military systems rested. Athenian stratagems such as the move to build an expeditionary base at Pylos rested in part on the aim of creating the conditions for a Helot

⁴ Some historians and analysts create a distinction between "hybrid" and "compound wars," stating that the latter involve regular and irregular forces fighting under unified strategic direction, whereas the former is a special case in which regular and irregular capabilities are fused into a single force. See Frank G. Hoffman, "Hybrid vs. Compound War," *Armed Forces Journal*, October 2009. For this study, we make no such distinction between hybrid and compound war.

⁵ Hoffman, "Hybrid Threats," p. 5.

uprising, which would then add an irregular dimension to the conventional conflict. After Athenian forces fortified Pylos on the southwest coast of the Peloponnese in 425 BC, they garrisoned the outpost with Messenians of Naupactus, whose ancestors the Spartans had expelled from the area after the great Helot uprising of 464 BC. The Messenians began a series of incursions into Laconia, aided by their ability to speak the local dialect. Helots soon began to desert to Pylos, thereby creating a national emergency in Sparta. This insurgency represented a form of war for which the exceptional Spartan phalanxes were ill suited. The Athenian historian Thucydides records, "The Spartans, hitherto without experience of incursions or a warfare of the kind, finding the Helots deserting, and fearing the march of revolution in their country, began to be seriously uneasy, and in spite of their unwillingness to betray this to the Athenians began to send envoys to Athens, and tried to recover Pylos and the prisoners." The mere threat of hybrid war had brought the Spartans to terms.

As examples throughout history suggest, hybrid opponents form a difficult and often powerful combination. Simply put, the existence of conventional forces requires a military force to mass against them, but doing so makes logistical lifelines and contested areas vulnerable to insurgents, guerrillas, and other irregular forces. The German Army on the Eastern Front during World War II suffered continual disruptions to its lines of communication as a result of the activity of tens of thousands of Soviet partisans and other irregulars, many remnants of conventional forces bypassed during the opening phases of Operation Barbarossa. The brutality of German *Einsatzgruppen*, SS police units, and other security forces could not suppress the partisans, despite the mass murder of hundreds of thousands of Soviet citizens in attempts to do so. Moreover, because of the strength of Soviet conventional forces, the Wehrmacht could not afford to release units from the front to deal with the threat to its rear.⁸

Prime Minister Winston Churchill also recognized the power of using irregular forces to combat the Wehrmacht in conjunction with regular military operations. In July 1940, he charged a new organization, the

⁶ The Landmark Thucydides, ed. Robert B. Strassler (New York, 1996), pp. 245–246.

Regrettably, the Athenian assembly refused the Spartan peace overture and the war continued. Thebes eventually ended Spartan hegemony over Greece after the Battle of Leuctra (371 BC) by reestablishing the independence of Messenia, thereby freeing the Helots and devastating the Spartan economy.

⁸ Leonid Grenkevich, The Soviet Partisan Movement, 1941–1944: A Critical Historiographical Analysis (London, 1999).

Special Operations Executive (SOE), with the mission to "set Europe ablaze." For the next several years, British agents assisted local resistance movements, British aircraft delivered arms and ammunition to partisan forces, and SOE operatives engaged in sabotage of Nazi facilities throughout Western Europe and the Balkans. In the end, Britain could not have won the war by using only a combination of strategic bombing, naval blockade, and the encouragement of revolts in Europe. Nonetheless, resistance movements provided a boost to Allied forces when they returned to Europe after D-Day, and they proved especially useful in delaying German reinforcements headed to the Normandy battlefront.¹⁰

Hybrid warfare is not just a Western phenomenon, as the Second Sino-Japanese War from 1937 to 1945 shows. Mao Tse Tung and his generals became experts on mixing regular and irregular forces to attack the enemy in both a symmetric and asymmetric manner. Indeed, Mao clearly viewed guerrilla and conventional forces as existing on the same continuum. After the Japanese surrender, his Communist forces used the techniques of hybrid warfare against their Nationalist enemies. Regular Communist divisions were very good, as they demonstrated in battle not just against the Nationalist forces of Chiang Kai-shek in China but also against U.S. forces in Korea in 1950. Nationalist forces actually outnumbered the Communists, but harassment by hundreds of thousands of guerrillas led to the dispersal of much of the Nationalist strength. Hybrid warfare enabled Mao's forces to gain superiority at critical points in China during the campaigns of 1948-1949, which ended with the ejection of the Nationalists from the mainland to Formosa (Taiwan). Communist victory in the Chinese Civil War further validated the effectiveness of hybrid warfare in the right geographic, historical, and cultural circumstances.11

There are also cases in which both sides in a conflict used hybrid warfare against their adversary. Perhaps the prime example of this was the French and Indian War in North America from 1755 to 1763. Initially, the French held the edge because of their use of Indian auxiliaries and

⁹ Gerhard L. Weinberg, A World at Arms: A Global History of World War II (Cambridge, 1994), p. 150.

Max Hastings, Das Reich: The March of the 2nd SS Panzer Division Through France (New York, 1981).

¹¹ Gary J. Bjorge, "Compound Warfare in the Military Thought and Practice of Mao Zedong and the Chinese People's Liberation Army's Huai Hai Campaign (November 1948 – January 1949)," in *Compound Warfare: That Fatal Knot*, ed. Thomas M. Huber (Leavenworth, KS, 2002), pp. 169–219.

unconventional methods, but by 1759, both sides were using a combination of regular military forces, colonial militias, and native irregulars to contend for mastery of the North American continent. British adaptation to French-Canadian methods doomed France to defeat as Indian scouts, American rangers, and British light infantry took their place alongside conventional Redcoat battalions. British commanders such as James Wolfe and Jeffrey Amherst even went so far as to use light infantry and rangers to raid French-Canadian settlements, thereby wreaking havoc on morale and causing desertions as militiamen left the ranks to protect their families.¹²

The French commander, the Marquis de Montcalm, actually degraded the capabilities of his forces by shunning the type of warfare practiced so successfully by the natives and French Canadians in earlier decades. Instead, he offered the British an opportunity to engage in a conventional war in which the side with the bigger battalions held all of the advantages. No longer possessing a conceptual or tactical advantage over their opponents, the 6,000 French soldiers in Canada and the Ohio River Valley had no hope of defeating 44,000 British and Colonial soldiers and sailors arrayed against them. ¹³ The British seizure of Quebec in 1759 and Montreal the next year sealed the French defeat.

Western militaries have occasionally used hybrid warfare to their advantage in the modern era. The British campaign against Ottoman Turkey during World War I benefited from an uprising of Arab tribes led by Grand Sherif Hussein bin Ali and aided by the talents of Captain T. E. Lawrence ("Lawrence of Arabia"). Arab irregular forces tied down thousands of Ottoman troops through continual attacks against the Hejaz railway and on occasion defeated Turkish forces in battle. Arab guerrillas provided intelligence on Ottoman positions and disrupted Turkish supply columns. The Turks struggled to come to grips with this seemingly invisible foe. "It seemed a regular soldier might be helpless without a target," wrote Lawrence, "owning only what he sat on, and subjugating only what, by order, he could poke his rifle at." By spreading Turkish forces thin across Arabia, these activities materially aided General Edmund Allenby's campaign against Turkish forces in Palestine,

Michael D. Pearlman, "The Wars of Colonial North America, 1690-1763," in Compound Warfare, p. 35.

¹³ Ibid., 12. For the most outstanding discussion of the conflict for North America during the Seven Years War, see Fred Anderson, *Crucible of War: The Seven Years War and the Fate of Empire in British North America*, 1754–1766 (New York, 2001).

¹⁴ T. E. Lawrence, Seven Pillars of Wisdom (London, 1962), p. 198.

which climaxed in the crushing British victory at Megiddo in September 1918.

Throughout history, hybrid adversaries have been willing and able to extend wars in time and space to achieve their goals over the long run. Unless great powers possess a deep commitment, time is on the side of their hybrid opponents. If the clock runs out, the side that possesses the ground wins by default. This temporal aspect has represented a major challenge to militaries engaged in conflict outside their homelands against hybrid adversaries, a point made by T. E. Lawrence when he wrote of the Arab revolt, "Final victory seemed certain, if the war lasted long enough for us to work it out." ¹⁵ Hybrid adversaries test the strategic patience of their opponents.

Despite the success of Allenby's campaign in the Middle East during World War I, hybrid war usually worked against Western military powers in the twentieth century, as the wars of colonial devolution attest. France's attempt to retain its empire after its resurrection after World War II illustrates the difficulty that Western powers have experienced in defeating hybrid adversaries willing to wait out the clock. In Indochina, the Viet Minh, under the political leadership of Ho Chi Minh, contested French control after the Japanese surrender in September 1945. Initially, French military forces outclassed their Vietnamese adversaries. For several years, Viet Minh guerrillas harassed French occupation troops, but lack of arms and ammunition limited their efforts. The victory of the Communists in the Chinese Civil War in 1949 dramatically altered the strategic balance. Chinese advisers, weapons, and training transformed the Viet Minh into a hybrid military force. With Chinese assistance, General Vo Nguyen Giap reorganized part of the Viet Minh irregular forces into five conventional infantry divisions (he would later add an artillery division to the mix). With this retooled force, the Viet Minh soon contested French control of the border region between Vietnam and China, while Viet Minh guerrillas harassed the French in the Red River Delta.16

The French, under the leadership of General Jean de Lattre de Tassigny, created a series of fortifications (the De Lattre Line) to shield the delta from the Viet Minh. For a time, the line held as Viet Minh divisions took heavy losses in efforts to breach the perimeter. Giap then withdrew his

¹⁵ Ibid., p. 202.

¹⁶ Bernard B. Fall, Street Without Joy: The French Debacle in Indochina (Harrisburg, PA, 1961).

divisions into the jungle and contested the Red River Delta by means of guerrilla operations. In an attempt to draw Viet Minh formations into a conventional battle, in 1952 the French began to deploy their formations in fortified positions beyond the De Lattre Line. French forces enjoyed some success during Operation Lorraine and the Battle of Na San (23 November to 4 December 1952), inflicting several thousand casualties on Giap's forces. He countered by expanding the war into Laos in 1953. To thwart the Viet Minh move, the new French commander, General Henri Navarre, created an air–land base at Dien Bien Phu, 175 miles west of Hanoi. Giap responded by moving several divisions to the area, where they seized the high ground surrounding the airstrip and systematically overran the French forces hilltop by hilltop. On 8 May 1954, the final French position, Strongpoint Isabelle, fell to Viet Minh forces and the remaining French forces entered captivity.¹⁷

The Viet Minh victory at Dien Bien Phu was a stunning blow to the French position in Indochina, but the fact is that the French still held Hanoi, the Red River Delta, and most of the southern part of Vietnam. The will of the French to continue the fight, however, had collapsed. They could not contest the Viet Minh in the battle of narratives that shaped the perceptions of the Vietnamese that this was a fight for their nation against foreign occupiers. Nor did the French create a satisfactory political alternative to the Viet Minh. The Vietnamese rejected efforts to empower the former Vietnamese Emperor Bao Dai, correctly sensing he was little more than a French puppet. Thus, when French political will collapsed, the Viet Minh emerged victorious. The best the French could do was to agree to a compromise peace that left the Viet Minh in possession of the northern part of the country, with vague promises of later nationwide elections. These never took place.

As the French experience in Indochina suggests, political will is a crucial component of hybrid warfare – as it is in all wars. Even had the French won at Dien Bien Phu, chances are that the Viet Minh would still have emerged victorious. One need look no further than Algeria, which most Frenchmen agreed in 1954 was an integral part of their country. Having learned its lessons from the Vietnam debacle, the French Army performed much better in a military sense in combating Algerian insurgents. Indeed, by the end of the decade, the Algerian insurgency was on the ropes. By then, however, the French will to continue the struggle

¹⁷ Bernard B. Fall, Hell in a Very Small Place: The Siege of Dien Bien Phu (New York, 1966).

had evaporated. In 1962, President Charles De Gaulle granted Algeria its independence.¹⁸

By extending conventional war to include the people, hybrid forces amplify their otherwise limited power and extend the conflict in both time and space, thereby providing a chance to win a protracted contest of wills when they could not otherwise achieve a conventional military victory. While regular military forces conduct conventional operations against the armed forces of their opponent, irregular forces work to achieve control over the population. This dichotomy is why the French failed so disastrously in Indochina; although they could defeat Viet Minh conventional divisions in most circumstances, they could not simultaneously control the Vietnamese people. In the end, the lack of a stable indigenous partner and sufficient local forces to assist in securing and stabilizing the population doomed the French effort.

The French lost the battle of narratives with their Vietnamese and Algerian opponents. To a certain extent, all war includes a battle of narratives, namely which side possesses the moral high ground or can convince the people of the justice of its cause. By bringing the population into the conflict, hybrid warfare magnifies the importance of perceptions. Although wartime propaganda is a time-honored tradition as far back as the ancient world, modern communications systems such as the Internet, satellite television, and radio radically amplify the transmission rates of propaganda and public information. Insurgents realize that military actions are but a supplement to the information war, by which they try to sway perceptions of both their own people and the enemy's population.

As counterinsurgency expert John McCuen points out, the battle over competing narratives plays out among three audiences: the indigenous population, the home front of the great power, and the wider international community.¹⁹ Great powers risk losing conflicts in which they fail to understand either the human terrain or the "decisive battlegrounds of public opinion at home and abroad."²⁰ In hybrid wars, conventional military forces conduct operations to defeat their regular opponents, while other military forces and interagency assets must work to clear areas of irregular forces, to control those areas over the long term, and to counterorganize the population in order to pacify it. Military success and the establishment of legitimacy among the population will lead to increased

¹⁸ Alistair Horne, A Savage War of Peace: Algeria, 1954–1962 (London, 1977).

¹⁹ John J. McCuen, "Hybrid Wars," Military Review, March-April 2008, pp. 107-113.

²⁰ Ibid., p. 107.

home-front and international support, without which great powers risk defeat.²¹

Sadly, America's enemies have, more often than not, proved more adept than the United States at harnessing the power of propaganda and influencing public perceptions. The land of Madison Avenue and Wall Street has found itself consistently outmaneuvered in the media space by al Qaeda operatives working with a laptop computer and an Internet connection. In the modern information environment of instantaneous communications and 24/7 news coverage, the United States must become more adept at engaging in the battle of narratives that can determine the difference between victory and defeat. Even when military forces of a great power enjoy enormous success, as U.S. forces did in destroying the bulk of the Viet Cong during the Tet Offensive in 1968, failure to win the battle for public perception will lead to defeat. In the world of hybrid war, it is not enough to destroy the enemy's armed forces; to win, the indigenous, home-front, and international audiences must believe that the war is over. In other words, military success must lead to a commensurate political outcome as perceived by the affected populations.

As these examples have illustrated, a foreign power rarely can generate the military forces, financial wherewithal, and political commitment required to prosecute a hybrid war to an acceptable conclusion. Overlapping conflicts and interests in these wars often create "wicked problems" that cannot be solved, only managed. Historians who in retrospect posit facile solutions to these conflicts misread their complexity. In the quest for decisive outcomes, great powers all too often have succeeded only in miring themselves in quagmires.

The recent history of the wars in Afghanistan and Iraq attest to the validity of this statement. After the terrorist attacks on the World Trade Center in New York and the Pentagon in Washington, DC, on II September 2001, U.S. forces attacked the Taliban regime and al Qaeda terrorist bases in Afghanistan by using hybrid means. U.S. Special Forces and Central Intelligence Agency operatives teamed up with indigenous Afghan irregular forces of the Northern Alliance to battle Taliban militia. The U.S. military bolstered the war effort with heavy doses of air power and a conventional infantry unit, the 10th Mountain Division. This hybrid combination proved extremely effective at destroying Taliban formations when they stood their ground, but it was less adept at pursuing fleeing al Qaeda remnants into the mountains or in the

²¹ Ibid., p. 111.

conduct of counterinsurgency operations since 2002. In December 2001, in a mountainous area of eastern Afghanistan known as Tora Bora, American commanders failed to deploy sufficient conventional military assets and instead relied on Afghan irregulars and air power to finish off al Qaeda. This decision doomed the mission to failure and allowed the escape of Osama bin Laden and his allies across the border into Pakistan. This was perhaps the most serious strategic and political error the United States made in the war against al Qaeda, only partially rectified by the 2011 raid that killed Osama bin Laden at a safe house in Pakistan. The insistence of Secretary of Defense Donald Rumsfeld on validating his "light footprint" approach to warfare allowed America's greatest enemy to escape to fight another day.²²

In Iraq, too, the U.S. military has learned about hybrid war the hard way. In just three weeks of combat in March and April 2003, the U.S. military and its coalition partners destroyed the armed forces of Iraq and toppled the regime of Saddam Hussein. For President George W. Bush, Secretary of Defense Donald Rumsfeld, and all too many defense analysts, the results of the war seemed to validate their vision of high-tech armed forces capable of engaging in rapid, decisive operations to achieve quick victories in conventional warfare.²³ Advocates of defense transformation rooted that vision in the American military's experiences from the end of the Vietnam War to the Iraq War - that is, a period of barely three decades, dominated by the end of the Cold War and the unipolar moment of U.S. superiority that followed. However, in the months after the seizure of Baghdad, the United States struggled to solidify its occupation of Iraq, an effort made more difficult by a growing insurgency that destabilized large portions of the country.²⁴ U.S. armed forces, organized, trained, and equipped to fight conventional enemies, were unprepared to counter a growing insurgency that by 2006 had pushed Iraq over the brink of civil war.

To understand why this happened, one needs to trace the history of doctrinal development in the U.S. Army from defeat in Vietnam to the

²² U.S. Senate Committee on Foreign Relations, Tora Bora Revisited: How We Failed to Get Bin Laden and Why It Matters Today, 111th Congress, 1st session, 30 November 2009, pp. 13–17, accessed at foreign.senate.gov/imo/media/doc/Tora_Bora_Report.pdf.

²³ United States Joint Forces Command, J9 Joint Futures Lab, "A Concept for Rapid, Decisive Operations," 9 August 2001.

²⁴ Tom Ricks, Fiasco: The American Military Adventure in Iraq, 2003 to 2005 (New York, 2007); Peter R. Mansoor, Baghdad at Sunrise: A Brigade Commander's War in Iraq (New Haven, CT, 2008).

beginning of the Iraq War in 2003. In the wake of defeat in Vietnam, the U.S. Army entered a period during which it almost totally ignored the lessons of the counterinsurgency war it had waged during the previous decade and instead turned its attention to the high-tech, conventional war it potentially faced against the Red Army in Europe.²⁵ Senior officers concluded that Vietnam represented an exception to the conflicts that U.S. forces would wage in the future. Moreover, they argued that the United States should avoid such conflicts. For its part, the institutional army did its best to forget Vietnam by ridding itself of material associated with the conflict and disregarding lessons learned in waging counterinsurgency in Southeast Asia.²⁶

For a time, events proved them correct. The army experienced a doctrinal renaissance in the late 1970s and 1980s, embodied first in the theory of active defense and later in the more successful concept of air–land battle. Army and marine forces fought mock conventional battles at combat training centers in California, Arkansas, Louisiana, and Germany that superbly prepared them for the realities of conventional combat. The stunning victory in the Gulf War of 1991 emboldened President George H. W. Bush to declare, "By God, we've kicked the Vietnam syndrome once and for all!"²⁷

Of course, part of the Vietnam syndrome was the avoidance of counterinsurgencies, and the Gulf War did nothing to convince the American military to abandon that attitude. During the 1980s, the United States had successfully supported a counterinsurgency campaign in El Salvador with just 55 military advisers – a light footprint of Special Forces replicated in the U.S. support of the Northern Alliance in Afghanistan in 2001. The lack of activity in this realm after the Cold War convinced one strategic analyst to write in 1995 that "the insurgents of the world are sleeping." ²⁸

The lack of insurgent threats to national security convinced most military analysts to focus their thinking on great power confrontation and a coming revolution in military affairs, the latter a reflection of the lopsided

²⁵ Many U.S. Army leaders never really understood counterinsurgency warfare, even after years of conflict in Vietnam. They preferred to treat the war as a conventional military operation rather than as a hybrid conflict with multiple dimensions. See Andrew F. Krepinevich, Jr., *The Army and Vietnam* (Baltimore, MD, 1986).

²⁶ Conrad C. Crane, Avoiding Vietnam: The U.S. Army's Response to Defeat in Southeast Asia (Carlisle, PA, 2002).

²⁷ George C. Herring, "America and Vietnam: The Unending War," *Foreign Affairs*, Winter 1991/1992.

²⁸ Steven Metz, Counterinsurgency: Strategy and the Phoenix of American Capability (Carlisle, PA, 1995), p. 1.

victory of the United States and its allies in the Gulf War. The combination of advanced intelligence, surveillance, and reconnaissance systems and precision-guided munitions would supposedly provide the American military a decisive edge in future conventional warfare. The key, these analysts believed, was to perfect the information-precision revolution in military affairs to ensure that the United States retained a decided advantage over potential conventional adversaries. Who those potential adversaries were, however, was an open question. No other nation in the world had developed conventional capabilities even approximating those of U.S. forces, nor were they likely to do so in the foreseeable future. Concepts such as network-centric warfare, therefore, aimed at destroying mirror-imaged enemies. By the turn of the millennium, the U.S. military was well on its way to developing a system perfectly suited to fight itself.²⁹

The descent of the U.S. Army and Marine Corps in Iraq between 2003 and 2006 into a morass partly of their own making convinced some to rethink the doctrinal basis for counterinsurgency operations. A number of mid-grade officers in Iraq instituted counterinsurgency tactics and procedures to guide the operations of their units, most notably Colonel H. R. McMaster in Tal Afar in 2005 and Colonel Sean MacFarland in Ramadi in 2006.3° Under the leadership of Lieutenant General David Petraeus and Lieutenant General James Mattis, the two services produced an updated doctrinal manual for counterinsurgency warfare, Field Manual 3–24, in December 2006.3¹ Despite the success of this doctrine during the surge of U.S. forces to Iraq in 2007–2008, some analysts worry that the doctrinal pendulum has swung too far away from conventional warfare and that the American military is in danger of losing critical war-fighting capabilities. Yet, the debate should not be an either—or proposition.3² Future wars

For proponents of network-centric warfare, see Admiral William A. Owens, The Emerging U.S. System-of-Systems (Washington, DC, 1996); Vice Admiral Arthur Cebrowski and John Gartska, "Network-Centric Warfare: Its Origin and Future," Naval Institute Proceedings, January 1998; and David S. Alberts, John Gartska, and Frederick P. Stein, Network Centric Warfare: Developing and Leveraging Information Superiority (Washington, DC, 1999). For some critiques, see Milan Vego, "Net-Centric Is Not Decisive," Proceedings, January 2003; and H. R. McMaster, "Learning from Contemporary Conflicts to Prepare for Future War," Orbis, Fall 2008, pp. 564–584.

³⁰ George Packer, "The Lesson of Tal Afar," New Yorker, April 10, 2006; Jim Michaels, A Chance in Hell (London, 2010).

³¹ Field Manual 3–24, "Counterinsurgency," Department of the Army, December 2006.

³² The either-or nature of the debate on force structure and doctrine is exemplified by John A. Nagl, "Let's Win the Wars We're In," and the response by Gian P. Gentile, "Let's Build an Army to Win All Wars," *Joint Force Quarterly* 52, First Quarter 2009, pp. 20–33.

will likely entail an increasingly vague distinction between the conventional and the irregular; indeed, these forms will meld into one, thereby creating a hybrid form of war that takes advantage of the most effective parts of conventional and irregular operations.³³

Hybrid warfare in the twenty-first century will prove to be even more dangerous as a result of the proliferation of advanced weaponry. Irregular forces are increasingly armed with the latest weapons and technology, making them more difficult to combat. In the Iraq War, Shi'a militias used Iranian-made rockets and explosively formed projectiles to battle American forces equipped with the latest military technologies.³⁴ Explosively formed projectiles have proven capable of destroying the most advanced armored vehicles, such as the M1A1 tank. Other nonstate groups in the Middle East are armed with advanced anti-tank missiles, rockets, cruise missiles, and unmanned aerial vehicles. Even this aspect of hybrid warfare, however, is not new. More than a century ago in the Boer War, Boer forces used 75-mm and 155-mm Creusot guns, 120-mm Krupp mortars, 37-mm Vickers-Maxim automatic "pompom" guns, Mauser rifles, and Maxim machine guns to outclass (or at least equal) their British opponents.³⁵

Informed observers should not have been surprised, then, by Hezbollah's use of advanced anti-tank missiles to destroy Merkava tanks during the Israeli invasion of southern Lebanon in 2006. Indeed, Israel's war against Hezbollah and its more successful operations against Hamas in 2008 in Gaza demonstrate some of the difficult challenges faced by conventional armed forces in combating hybrid adversaries. Responding to the kidnapping of an Israeli soldier in northern Israel on 12 July 2006, Israeli Prime Minister Ehud Olmert authorized military operations against Hezbollah targets in Lebanon. The Israeli Air Force pounded Hezbollah positions and command and control centers, but Hezbollah fighters responded by firing large numbers of rockets into northern Israel. When the Israeli Defense Forces (IDF) attacked into southern Lebanon to clear the area of Hezbollah rocket teams, they came up against well-armed and trained militia, which inflicted stinging losses against their Israeli

Frank Hoffman, "Hybrid Threats: Reconceptualizing the Evolving Character of Modern Conflict," Institute for National Strategic Studies Strategic Forum 240, April 2009, pp. 5-6.

³⁴ Richard Esposito and Maddy Sauer, "Iranian-Made IEDs Are the Most Deadly U.S. Forces Have Seen, and Their Use Is on the Rise," ABC News online, 30 January 2007, accessed at http://blogs.abcnews.com/theblotter/2007/01/iranianmade_ied.html.

³⁵ Byron Farwell, The Great Anglo-Boer War (New York, 1976), pp. 43-45.

opponents. Hezbollah fighters used advanced weaponry such as anti-tank missiles, anti-ship cruise missiles, rockets, and unmanned aerial vehicles to counter Israeli attacks. Meanwhile, Hezbollah skillfully employed the Internet and other media for its propaganda and to build a narrative that Hezbollah fighters were standing toe to toe against the IDF and winning.

The IDF, well trained for counterinsurgency operations on the West Bank and in the Gaza Strip, was not ready for the conventional fighting it encountered south of the Litani River. Theoretical concepts such as systemic operational design, developed over the preceding decade to guide Israeli doctrinal thinking, confused more than they clarified. For its part, the Israeli Air Force's reliance on the equally opaque effectsbased operations – a concept developed by the U.S. Air Force and at the time fully embraced by transformation advocates in the United States proved ill suited to achieving Israeli goals. Precision munitions directed by high-tech sensors proved useless without adequate intelligence with which to target the enemy, as Hezbollah forces camouflaged themselves exceptionally well. High-tech Israeli forces were often unable to locate their targets, and their operations failed to break Hezbollah's will to fight. In the event, precision munitions were not an effective substitute for sufficient numbers of well-trained infantry and effective combinedarms teams. At the strategic level, Hezbollah's adroit use of information and propaganda swaved world opinion from the early days of the conflict. After three weeks, Israel, commonly understood to have the most capable conventional armed forces in the Middle East, agreed to a cease fire without having achieved its objectives.³⁶

The Israeli military learned from its mistakes in Lebanon. Over the next two years, the IDF revisited its intellectual understanding of warfare and retrained its active and reserve forces to fight on both conventional and irregular battlefields. The Israelis rejected the use of effects-based operations that aimed to pound enemy targets with precision-guided munitions, while eschewing seemingly messy ground operations. Instead, the IDF sought ways to conduct combined-arms operations within the constraints of the hybrid battlefield. The Israelis also learned to compete in the realm of information warfare.

Thus, when the IDF invaded the Gaza Strip to combat Hamas fighters in January 2009 during Operation "Cast Lead," the Israeli forces

³⁶ Matt M. Matthews, We Were Caught Unprepared: The 2006 Hezbollah-Israeli War (Leavenworth, KS, 2008); Andrew Exum, Hizballah at War: A Military Assessment, Policy Focus #63 (Washington, DC, 2006).

were much better prepared to cope with hybrid challenges. They enjoyed improved intelligence and a better understanding of how the enemy would fight. Despite the profusion of mines, improvised explosive devices, tunnels, and other obstacles and fortifications, the IDF effectively used fire and maneuver to attain its objectives. It was particularly effective when fighting at night. Precision air strikes complemented but did not replace ground maneuver. Palestinian fighters attempted to replicate the success of Hezbollah militia in Lebanon and managed to fire dozens of rockets into Israel. Nevertheless, on every level, the Israelis decisively defeated Hamas in just under three weeks.³⁷

As this discussion and the following essays show, as the United States military prepares for the future, it would be a serious mistake to disregard the lessons of several thousand years of recorded history. The United States cannot merely focus on the wars it wants to fight and ignore the rest, for messy small wars have a way of challenging America despite U.S. conventional military superiority.³⁸ Indeed, as Williamson Murray notes in the chapter on the American Revolution, the United States was birthed in a hybrid war. It is all the more astonishing, then, that some policy makers in Washington look on the wars in which America is engaged today as something new. They are not.

American military forces must possess a wide range of means to combat hybrid opponents, from conventional power to counterinsurgency and counterterrorism capabilities. Combat power in hybrid war consists of more than just the tanks, artillery, infantry, aircraft, ships, and other weapons that a military force possesses. Intelligence, civil affairs, psychological operations, and interagency civilian capabilities are necessary to fight hybrid wars. A military force cannot fight one element of the enemy while ignoring the remainder. In this regard, the U.S. Army has acknowledged the simultaneity of combat and stability operations in its most current doctrine. Doctrine writers did well to eliminate the phased approach to combat and postcombat operations, for in the real world, they blur together.³⁹ The problem with the phased approach in Iraq in 2003, for instance, was a nearly singular focus on combat operations at the expense of so-called Phase IV stability operations. In the future, the U.S. military needs to prepare more effectively to fight irregular adversaries from the

³⁷ Scott C. Farquhar, *Back to Basics: A Study of the Second Lebanon War and Operations CAST LEAD* (Leavenworth, KS, May 2009).

³⁸ Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York, 2002).

³⁹ U.S. Army Field Manual 3-0, "Operations," Department of the Army, February 2008.

beginning, not just after a period of adjustment and adaptation. As the invasion of Afghanistan in 2001 underlined, the United States should also be ready to engage in hybrid warfare when conditions allow.

As the following chapters illustrate, effective political and military leadership is essential to victory in hybrid warfare. Political leaders set national objectives, work to bolster national will, and build and keep intact international coalitions to share resource burdens. They develop and explain the strategic narrative that maintains popular support for the war effort. Above all, they must understand the nature of their opponent as well as the extent of the commitment necessary to win the war. Military leaders must adjust existing doctrine to take into account the kind of war in which their forces engage, as well as to counter enemy strengths and exploit enemy weaknesses. Senior leaders must create viable operational concepts that link strategy to tactical actions. Leaders at all levels must gather lessons learned from ongoing military operations and alter doctrine, operational concepts, and strategy to meet unexpected challenges and opportunities. In a nutshell, leadership matters.⁴⁰

The nine case studies in this book are representative of the history of hybrid warfare from ancient times to the present. They span the ages from the Roman experience in Germania early in the first century AD, to the Nine Years' War in Ireland at the turn of the seventeenth century, to the American Revolutionary War, to Napoleon's war in Spain, to the U.S. Civil War, to the Franco-Prussian War, to the Boer War and the larger British experience with hybrid warfare over the centuries, to the Second Sino-Japanese War, and to America's hybrid struggle in the Vietnam War. This examination highlights the continuities of the historical experience; examines the changes wrought by new technology and doctrine; and analyzes the impact of geography, history, culture, religion, and other factors on hybrid warfare over the past two millennia. By shedding light on the past, we believe that this study will help as well to illuminate the future of warfare in the twenty-first century.

⁴⁰ For an examination of the crucial contribution of good leadership to success in counterinsurgency warfare, see Mark Moyar, A Question of Command: Counterinsurgency from the Civil War to Iraq (New Haven, CT, 2009).

Small Wars and Great Games

The British Empire and Hybrid Warfare, 1700–1970

John Ferris

One must begin by translating between two languages - modern American and old English. The contemporary term "hybrid warfare" refers to a struggle between a conventional force, perhaps with unconventional elements, against an enemy that combines regular and irregular components, usually assumed to be guerrillas. When applied to the British imperial experience between 1700 and 1970, that term takes a broader meaning. It refers to conflicts between a regular army (usually aided by paramilitary forces) against four kinds of enemy. Ranked in order of frequency, these foes include conventional forces, ranging from phalanxes resting on spear and shield to units using European weapons and tactics; some mixture of unconventional and conventional forces; irregular forces that avoided a guerrilla strategy, because it exposed their populations to attack, but instead battled English forces on their frontiers by using conventional weapons in unconventional ways; and guerrillas who harassed conventional forces whom they allowed to occupy their villages. Hybrid warfare is one of the few areas where Britain had anything approaching a modern conception of doctrine, complete with manuals that distilled experience and guided action. The British expressed its sense through ideas such as "small wars" or "imperial policing" and linked these technical matters to political ones, especially issues of colonial policy. The

¹ For classic views, cf. Lord Wolseley, *The Soldier's Pocket Book for Field Service* (London, 1869); Charles Calwell, *Small Wars, Their Principles and Practice* (1896); and C. W. Gwynn, *Imperial Policing* (London, 1934). The best recent studies of these matters are T. R. Moreman, "'Small Wars' and 'Imperial Policing': The British Army and the Theory and Practice of Colonial Warfare in the British Empire, 1919–1939," *The Journal of Strategic Studies* 19/4 (December 1996), pp. 105–131; and David French, "The British

British experience with hybrid warfare ranged from triumphant to incompetent. To illuminate past patterns and modern ideas, to reflect trends and variations while avoiding overgeneralization from any instance, this experience is best approached through a broad framework, combined with case studies.

These experiences stem from a context that runs like a thread across continents and centuries. European states developed armies unique on earth. Then they conquered it. From 1500 onward, they regularly fought major wars in which only the strongest survived, through a constant competition to produce armies and to improve them. State finances were honed to this end, as were administration and politics. Compromises between monarchs and nobles produced an officer corps, technically competent and politically loyal, with authority over the armies of the state. States maintained the best forces they could fund. They could become stronger simply by raising revenues and regiments. For non-European countries, conversely, to raise taxes was to create crisis, and to improve armies was to endanger the state. European polities became the most militarized and militarily effective on earth. Their armies were large, manned with specialist soldiers, dominated by heavy infantry and mobile firepower, disciplined, and slow moving, and they frequently changed tactics, weapons, and organization. They were designed for high-intensity combat or sieges and operations in territories with open terrain, large populations, and well-developed logistical infrastructure. These systems were suited only to certain environments - and not even to all of those in Europe, as Napoleonic armies found when confronting guerrillas in Spain, or Austrians discovered in their wars in the Balkans. European military systems were hard to export outside of Europe because of differences in terrain, politics, enemies, and infrastructure. To work elsewhere, the systems had to be adapted to local conditions.

This adaptation took many forms. British armies engaged in a number of strategic confrontations, roughly equal in moment, where irregular operations occurred regularly, hybrid enemies of various stripes were common, and hybridity was a way of war. In strategic terms, for Britain, hybridity meant the maintenance of forces able to manage all the

Army and the Empire, 1856–1956," in Greg Kennedy, ed., *Imperial Defence, The Old World Order*, 1856–1956 (London, 2008), pp. 91–110. For the RAF's role in such matters, cf. note 23; and for that of the navy, cf. John Ferris, "SSTR in Perspective: The British Imperial Experience, 1815–1945," in James J. Wirtz and Jeffrey A. Larsen, eds., *Naval Peacekeeping and Humanitarian Operations, Stability from the Sea* (London, 2009), pp. 26–41.

competitions that enmeshed the empire. In operational terms, it meant the ability to recalibrate forces from one competition to another, and then to combine their strengths so to defeat any competitor. Between the middle of the eighteenth and the nineteenth centuries, the need for hybridity increasingly marked all land forces of the Crown. They evolved to fill a strategic niche across continents, combining politics, power, and technology – areas in which they had superiority over most competitors. At various times between 1700 and 1970, these elements included general-purpose forces (the British and Indian armies) and scores of specialized (regional, paramilitary, or gendarmerie) units for particular areas, such as the battalions of African soldiers with European officers that policed the empire in Africa, or the 300 members of the North West Mounted Police who secured half a continent between 1870 and 1910.

The basic units of exchange in imperial power were battalions, which were sterling but above which expertise was mixed. Only in India and England did divisions really exist and hardly ever corps. Most specialized troops were raised, cheaply, from local populations, their loyalty secured by status and salary. This burden sharing reduced the financial and human cost of empire. Particular problems were handled through a hybrid fusion of political officers, paramilitary units, and regular forces. In practice, often 12 political officers, 100 British soldiers, and 800 paramilitary personnel controlled 10 million people, with the nearest regular force lying 1,000 miles away. From 1924 to 1937, 10,000 regular personnel and 200 aircraft controlled half the Middle East; 8,000 colonial troops governed British Africa; and only 45,000 European soldiers garrisoned India.

Never had so many been ruled by so few. Most British forces, whether coastal artillery or the Khyber Rifles, were designed for use in only one arena, but some (including warships or their crews, converted to naval brigades, or aircraft) were adaptable for many of them. Except during the periods from 1914 to 1918 and 1939 to 1957, deployable forces were tiny in number, rarely reaching 10,000 soldiers for any campaign. Britain could augment these forces in times of crisis, with their power multiplied by quality and technology.

For good and ill, this system limited Britain's ability to solve problems by power and instead drove the British to search for political solutions, which matched force as a weapon in imperial strategy. Britain's sensitivity to local politics was high, even when its understanding was not. Generally, British decision makers performed well in understanding and co-opting individuals, but they were merely good in handling movements

that linked elites and masses (whether open or conspiratorial). This approach led the British down a generally fruitful path. By working with local elites and interests, Britain created tolerance of and support for its presence. This approach, however, automatically created problems whenever Britain got the politics wrong. That outcome was especially true during revolutions, when allies and instruments turned suddenly and unexpectedly against it, denying the British the political and military expertise on which the system relied, as was the case with the 13 North American colonies in the 1770s, India or Palestine in the 1940s, and Arab countries afterward.

Characteristic, sometimes costly, problems emerged when forces were organized into formations or switched between competitions, from garrison to combat, or when they encountered a previously unknown difficulty. The British Empire ran on the cheap and often moved in mysterious ways. The usual rule in imperial strategy, such as the use of minimal force, stemming from the principle of minimum expense, was rejected whenever intimidation (what the ablest of Victorian soldiers, Garnet Wolseley, once called "signal chastisement") or exemplary terror seemed the better buy.² British leaders preferred to solve problems only when unavoidable. This approach allowed some dangers to arise without intervention and left Britain oversensitive, sometimes hostage, to the emergence of small threats, as when the army's strategic reserve was committed to Palestine during the Munich crisis or to the Canal Zone in 1953. It also increased the economy of the strategy, in terms of the allocation of resources and their effect, the specificity of the answers applied to questions, and the tendency to force solutions on problems using available, vice optimal, means.

Britain always had to balance between maintaining so much presence as to provoke local elites and too little to intimidate them. Its mechanisms to supply forces abroad for normal circumstances, such as the regimental and the Cardwell systems, were adequate.³ The British Empire, however, never developed effective machinery to redeploy large forces from one area to another for emergencies or to mobilize for mass wars; the costs of ad hoc measures were heavy against enemies with elaborate conscription systems in the great power wars of the twentieth century. Nevertheless,

² Wolseley to War Office, Dispatch 38, 13.10.73, WO 147/27.

³ David French, Military Identities: The Regimental System, the British Army, and the British People, c. 1870–2000 (Oxford, 2005).

British land forces were well suited to handle the problems of empire, both normal and unique. Across the board, from 1700 to 1970, they adjusted to different competitions better than any other contemporary forces.

One can describe Western superiority over armies outside of Europe in three stages: 1750–1860, 1860–1940, and 1940 to the present. The initial roots of that superiority were in organization. Western forces had better discipline, endurance, and ability to move tactically than most non-Western foes, and they had two unique attributes – an officer corps imbued with skill and self-sacrifice, and the socket bayonet, which enabled European infantry to move instantly from fire to shock. Beyond the bayonet, technology was irrelevant: European armies frequently had no edge in firepower over non-Western forces. Until 1880, the latter sometimes adopted Western systems, while irregular or hybrid forces often stalemated European armies outside of Europe. European militaries succeeded only by altering their systems of line and volley to fit local environments, in particular by downplaying fire and emphasizing shock – by developing hybridity. British experiences illustrate these observations.⁴

THE EIGHTEENTH AND NINETEENTH CENTURIES

By 1757, British infantry proved better in battle than any other forces in India and deployed techniques of siege and storm that broke a fundamental rule in Indian warfare – that fortresses fell slowly. Hence, Britain mastered northeastern India. Wealth and administration made the British the top bidder in the market for the mercenaries of the subcontinent, a locale where logistical and economic systems could support the European system of war with unusual ease. Britain had the largest effective army in India – mostly sepoys trained on British lines, with unified command, good officers, shrewd politics, and local support – but for decades its power remained constrained. In 1757, Indian armies consisted largely of clumsy infantry and light cavalry. None had infantry of contemporary Western style. Several, however, adapted to that danger in a long struggle

⁴ Pradeep Barua, The State at War in South Asia (University of Nebraska Press, 2005); Matthew Headrick, The Tools of Empire: Technology and European Imperialism in the Nineteenth Century (Oxford University Press, 1981); P. J. Marshall, "Western Arms in Maritime Asia in the Early Phases of Empire," Modern Asian Studies 14/1 (1980); David Ralston, Importing the European Army, The Introduction of European Military Techniques and Institutions to the Extra-European World (Chicago, 1991).

for mastery in India, which produced Britain's greatest challenges and triumphs in hybrid warfare.⁵

From 1767 to 1799, Britain fought four wars against two kings of Mysore in south India. Hyder Ali and Tipu Sultan's 20,000 disciplined but not Westernized infantry sometimes defeated secondary British contingents but always lost to the main British force. After suffering defeat, they adopted a hybrid strategy, avoiding pitched battle and holding towns while attacking British weaknesses (i.e., problems with logistics and occupation) by having their 18,000 irregular cavalry slash the supply lines of British besiegers, smash columns on the move, and raid British-controlled territories. For decades, Mysore deflected British blows long enough to force a draw in the contest for supremacy. In central India, the Mahratta Confederacy had identical success with the same strategy from 1775 to 1782. Mahrattas and Mysore also possessed and produced firearms equal to those of British forces. Britain crushed Mysore in 1799 only by concentrating all of its resources and bending politics in India to the task; through good generalship, focused on forcing decision by storming Tipu's cities; and by using allied Mahratta Horse to check Tipu's cavalry.

From 1803 to 1805, Britain deployed a similar strategy against the Mahrattas, who possessed good irregular cavalry, a Westernized army with more and better field guns than the British, and 56,000 infantryman as opposed to the Raj's 37,000. The Mahrattas failed to coordinate their cavalry and infantry in strategic terms, denying themselves the full advantages of irregular or hybrid warfare. Their leaders and their forces were divided and some were manipulated by the British, although on the whole they fought unexpectedly well. In major battles, British commanders concluded that they would lose a pounding match of firepower. Instead, they won by abandoning their plans and taking the initiative through bayonet assaults, which shattered the Mahratta regulars.⁶ Decades later, when asked to name his "best" battle, the Duke of Wellington replied "Assaye," his decisive victory against Mahrattas in 1803. The British also checked Mahratta strengths by raising 11,000 mercenary cavalry and subverting their enemy's command – especially by buying opposition battalion commanders, who mostly were European mercenaries. From

⁶ Second Duke of Wellington, The Supplementary Despatches and Memoranda of Field Marshal Arthur Duke of Wellington (London, 1834), vol. II, pp. 141, 354.

⁵ Randolph G. S. Cooper, *The Anglo-Mahratta Campaigns and the Contest for India:* The Struggle for the Mastery of the South Asian Military Economy (Cambridge, 2003); id., "Culture, Combat and Colonialism in Eighteenth and Nineteenth Century India," *International History Review* xxvii/3 (September 2005), pp. 534–549.

1817 to 1819, 120,000 Anglo-Indian soldiers crushed the Mahrattas and their irregular cavalry by using hybrid forces to master all of India outside the Punjab.

Finally, from 1845 to 1849, Britain engaged the Sikh kingdom in Punjab, which possessed 65,000 Westernized soldiers and guns to match the British. Victory rested on exploitation of political confusion within the Sikh kingdom – even so, success required the British to fight and win their two hardest battles between 1815 and 1914. In these subcontinental campaigns, Indian regular and irregular forces were good and hard to beat on their own, doubly so when combined in some hybrid fashion. Britain won only when the enemy failed to make this combination work, by forcing the enemy into engaging in decisive battles, and most important, when the British were able to manipulate Indian political divisions. British success enabled the greatest conquest of territory between 1750 and 1850.

During the eighteenth century, Britain's record was mediocre in several North American wars against an enemy with strategic hybridity: French regulars, who contained British colonies through their dominance of the inland water systems and fortification of key positions, allied with Amerindian confederacies.⁷ British forces, just beginning to confront the problems of hybridity, were unprepared for such an enemy. To attack French positions by land, colonial militia of mediocre quality or regular units trained for European warfare had to advance great distances over poor roads and trackless wilderness. Thus, in 1755, General Edward Braddock's five-mile-long column crawled six miles per day on its path to destruction. Amerindians ambushed slow columns in the wilderness, isolated forts, ravaged villages, and used terror to frighten soldiers and settlers. Yet, once it employed its maritime resources to the fullest, Britain shattered this strategy through a simple means. French America was fatally vulnerable to amphibious attacks on its fortified towns, while native forces were crippled when they were not bolstered by regular European forces. Native forces could win battles but did not capitalize upon them in a strategic sense - they could not besiege forts or fight for long. British and colonial victories were more fruitful.

In later decades, British and Amerindian forces deployed strategic and operational hybridity against Americans, who returned the favor.

W. J. Eccles, The Canadian Frontier, 1534–1760 (Albuquerque, NM, rev. ed., 1983); Richard White, The Middle Ground: Indians, Empires and Republics in the Great Lakes Region, 1650–1815 (Cambridge, 1991); Fred Anderson, Crucible of Empire, The Seven Years War and the Fate of Empire in British North America, 1754–1766 (New York, 2000).

Britain's performance was poor during the American Revolutionary War because it confronted a revolution that it found hard to understand or handle. Old allies and instruments turned against it. American rebels gained control over the Thirteen Colonies and their foundations for irregular and regular forces. Britain's enemies were its own local tools for war – administration and politics, working with some unity. The Americans created a new kind of battlefield, exploiting popular support while destroying any opposition and politically cleansing the loyalist population. Ideologically and organizationally, the revolutionaries created an armed citizenry that Britain found hard to contain.

Where the population remained true, as in Canada, Britain was secure, but it never could re-create loyalty once destroyed. Denied local specialists, British officers, experienced mostly in European operations, misconstrued the type of war they were fighting. They did well in deploying force to North America but were slow to recalibrate to local conditions or to handle a hybrid enemy. During the first years of the war, they won a number of victories, which yielded little control beyond the immediate battlefield. British forces never mastered counterinsurgency warfare, never found the means to sustain local allies, and failed to force their will on a hostile or neutral population (although some loyalists did create effective irregular forces, augmented by Amerindians). Meanwhile, the British edge in conventional warfare declined as the Continental Army gained experience and aid from French regular forces (which approached numerical equality with British battalions in the Thirteen Colonies). From 1778 onward, Britain's attention focused on European powers seeking to turn its danger into their opportunity. Ultimately, the British position in the Thirteen Colonies was destroyed by a classic hybrid force: a French fleet, a Franco-American army, and swarms of irregulars.

Conversely, during the War of 1812, Britain's performance in hybrid warfare was outstanding.⁹ Although outnumbered heavily, British forces and commanders outclassed their counterparts in quality and recalibrated better to hybrid warfare, while their Amerindian allies matched the

⁸ Cf. Williamson Murray, in the present volume, and the works it cites. The best account of Britain's predicament remains Piers Mackesy, *The War for America*, 1775–1783 (Lincoln, NB, 1993).

⁹ The War of 1812 remains an underresearched topic, and existing works are often marred by nationalism. The best of a mixed lot are Donald R. Hickey, *The War of 1812: A Forgotten Conflict* (Champaign, 1989); Charles Edward Skeene, *Citizen Soldiers in the War of 1812* (Lexington, KY, 1999); J. M. Hitsman (updated by Donald E. Graves), *The Incredible War of 1812: A Military History* (Toronto, 1999).

American forces that operated as irregulars. Britain had support from populations within its territory, ensuring political control. Its true strength in this war, however, was its enemy – American will remained divided and its military forces for the most part incompetent. The war taught Americans a lasting lesson – to attack British North America was risky and costly, although the war also enabled them to break the last resistance of eastern Amerindians to their westward expansion.

In the 1820s, Ashanti armies stalled a British expedition of a few thousand men equipped with rockets by using muskets, stockades, and natural cover to block lines of advance. Farther east, in one of Britain's greatest expeditions in Asia to date, 10,000 Anglo-Indian soldiers backed by steam-powered gunboats barely beat the Burmans. In 1873–1874, another British expedition against the Ashantis had mixed success. Even in 1882, Wolseley, the commander who opposed Egyptian forces at Tel el Kebir, described their entrenchments and firepower as formidable: "To have marched over this plateau upon the enemy's position by daylight, our troops would have had to advance over a glacis-like slope in full view of the enemy and under the fire of his well served artillery for about five miles. Such an operation would have entailed enormous losses from an enemy with men and guns well protected by entrenchments from any artillery fire we could have brought to bear upon them." Any attempt to turn this position would merely allow the enemy to withdraw to other positions. To achieve "the object I had in view, namely to grapple with the enemy at such close quarters that he should not be able to shake himself free from our clutches except by a general flight of all his army," Wolseley, like Wellington 80 years before, turned to surprise and unconventional tactics. Rather than relying on firepower, he negated it through a night attack and close assault, in which 11,000 British soldiers destroyed a force of 20,000 Egyptians for the price of 87 killed and missing. 10

Yet another trend was on the rise. By 1840, 4,000 British soldiers and 20 warships dictated terms to China, the largest country on earth. Western military superiority increasingly grew in scale and significance. Western forces were dominant on land. European armies, their advantages in training and discipline augmented by technology, had less need to adapt their tactics to those of local forces or conditions. Britain enthusiastically applied modern technology to war.

¹⁰ Wolseley War Office, Dispatch 8, 16.9.82, WO 32/6096.

From 1880 onward, it also strove to deny that technology to non-European peoples, which became a hidden element to its military superiority, as was the isolation of each theater through naval superiority and politics, and the ability to keep the dirty side of empire from public scrutiny. In East Asia, Western power was manifested through maritime and riverine forces. In Africa, quick-firing artillery, repeating rifles, and machine guns enabled tiny forces to crush native foes. African armies often were well organized, with upward of 20,000 to 30,000 regular soldiers, but they relied on spears, shields, bows, and flintlocks. The proud forces of these native states, used to fighting decisive battles, deployed their usual tactics against Western armies and were annihilated. At the apex of imperialism, African and Asian states rarely could pose a threat to European forces because of the limits to the power of their regular armies and political organization.

GUERRILLAS AND IRREGULARS

Before 1945, Europeans rarely confronted guerrillas because guerrilla warfare required forces and peoples that were too weak to avoid occupation yet too strong to be defeated when occupied. That combination was uncommon during the heyday of Britain's imperial supremacy. To mobilize guerrilla campaigns from peoples with loose social organizations required a general fear by local elites and the people of a threat to their way of life, and a common ideology, often religious, to unify resistance. The two greatest, if unsuccessful, struggles against Western conquest in the nineteenth century were led by masters of guerrilla warfare supported by Sufi Muslim brotherhoods: in Algeria by Abd el-Qadir, and in Chechnya by Imam Shamyl. If overrun, few adversaries could continue the struggle. Even in the case of states where British aggression confronted popular opposition with religious institutions to channel it, as in Punjab between 1846 and 1849 and in Egypt in 1882, once Britain smashed the opposing army, there was no guerrilla resistance; instead, there was acquiescence in conquest, however sullen. To use modern jargon, insurgents rarely could move from Mao's first to third stage of guerrilla warfare, but those starting from that upper level could mount ferocious resistance, centering on battle with Western forces rather than evading them. Guerrillas became common problems for the British only in the twentieth century

¹¹ Bruce Vandervoort, Wars of Imperial Conquest in Africa, 1830–1914 (London, 1998).

and only in occupied territories where political movements could emerge and invoke a military threat to British sovereignty.

Until then, irregular forces were more commonly used in an attempt to oppose Western invasion of tribal lands. Determined warriors sought to defeat Western armies in battle by using conventional weapons in unconventional, often innovative, ways by combining fire with terrain to create killing grounds. Maori riflemen in 1842 and Metis in 1885 used stockades and pits for cover, to bring crippling fire on attackers. 12 So, too, during the "Hut Tax" war in Sierra Leone in 1898, British flying columns had to attack one stockaded town after another, ambushed by snipers who focused on officers and porters. Britain suppressed the revolt, but this effort cost more than was needed to smash 30,000 Sokoto regulars in Nigeria during the same period. British officers disliked such enemies and hated the very idea of guerrilla war. In 1879, Wolseley heard a prediction that in a war with Britain, the Boers would adopt guerrilla tactics: "they will watch their opportunity & lay in wait for & attack small convoys, merely firing on them from behind cover & then bolting as hard as their horses will carry them." He interpreted that idea to mean "they intend becoming brigands & assassins. I can't believe this, for they have some sensible men amongst them who would warn them that such a policy would put the whole civilized world against them." Conversely, he praised enemies who fought (and died) in the open, like Zulus, describing one incident in the Ashanti war of 1873-1874 as "a hard fight that lasted all day. The enemy fought like men."13

Armies could defeat armed societies without a political center only through prolonged and ruthless campaigns. Britain generally achieved these aims, with partial exceptions in New Zealand and Somalia, and greater ones north of India. From 1838 to 1842, Afghans defeated 9,500 Anglo-Indian soldiers and 6,000 allies, killing half of them, largely as a result of a failure of British politics. The outcome was less one-sided or costly, but equally complex, during Britain's occupation of Afghanistan from 1878 to 1881. In this instance, the enemy, although politically divided, pursued an effective hybrid strategy that combined

¹² James Belich, *The New Zealand Wars and the Victorian Interpretation of Racial Conflict* (Auckland, 1986).

¹³ Garnet Wolseley, "South African Journal, 1879/80," entry 24.10.1879, WO 147/7; Garnet Wolseley, *Ashantee Journal*, "Ashanttee War of 1873–4," entry 31.1.74, WO 147/3.

¹⁴ Malcolm Yapp, Strategies of British India: Britain, Iran and Afghanistan, 1798–1850 (Oxford, 1980).

various tribal irregulars and a decent regular army; in muskets and artillery, they matched Britain in technology. This combination besieged a British brigade in Kabul during December 1879, broke another at Maiwand on 27 July 1880, and convinced Britain's leaders to alter their strategy and broker a political solution to the conflict.

Fortuitously, a solution was at hand in the form of Abdur Rahman, a leader strong enough to rule Afghanistan and smart enough not to bother British interests. Thus, Britain's military border in India came to rest on the Northwest Frontier, which was populated by large, fragmented, and warlike peoples. In 1897–1898, Pashtun snipers, often veterans of the Indian Army armed with excellent rifles, fought 59,000 British and Indian soldiers to a standstill, ambushing units and picking off officers. ¹⁵ Britain replied by finding political means to neutralize a problem that it could not solve through force, as it had done in Afghanistan. ¹⁶

THE INDIAN MUTINY, 1857-1858

In 1857, a revolt almost broke the Raj. ¹⁷ Two matters crippled the Indian mutiny from the start. It remained confined to the Bengal Army, just one of the three British armies in India. Although the British dared not use the Bombay and Madras Armies to suppress the mutiny, they did not have to use scarce resources to oppose them as well. Although British authorities believed India was ready to explode, the mutiny imploded. The mutineers started without strategy or command apparatus and never developed either. As General Wilson, the first British commander before Delhi noted, "Luckily the enemy have no head and no method." ¹⁸ The mutineers' great hope was to spread the revolt far and fast. Instead, the mutineers rallied on Delhi and Lucknow, the prestigious capitals of the deceased Mughal Empire, and Awadh, a recently annexed kingdom in northern India from which most sepoys of the Bengal Army were recruited. They concentrated

¹⁵ Tim Moreman, *The Army in India and the Development of Frontier Warfare* 1847–1947 (London, 1998).

John Ferris, "Invading Afghanistan, 1838–2006: Pacification and Politics," *The Journal of Military and Strategic Studies* 9/1 (Sep 2006), accessed at http://www.jmss.org/jmss/index.php/jmss/article/view/119.

¹⁷ Rudrangshu Mukharjee, Awadh in Revolt, 1857–58: A Study of Popular Resistance (Delhi, 1984); Eric Stokes, The Peasant Armed, The Indian Rebellion of 1857 (Oxford, 1986).

William Coldstream (ed.), Records of the Intelligence Department of the Government of the North-West Provinces of India during the Mutiny of 1857 (Edinburgh, 1902), p. 61.

at the center of the rebellion rather than on expanding it. The mutiny sparked many revolts but no national revolution. The mutineers instead turned for legitimacy to Mughal and Mahratta princes.

Mutineers and nobles played to religious sentiments and pursued a common front against Britain, but they failed to create one or to control the 100,000,000 people free of British rule. They made no effort to raise or rule the Indian masses. Local movements filled the vacuum. In Awadh and other areas, peasant insurgents attacked the British. Elsewhere, local groups fought each other while most regions remained quiet. This lack of unity reduced the guerrillas to a series of regional problems, which the British could crush, buy, contain, or ignore. Large armies of Indian princes stood uncertain for months and attacked British forces only after the sepoys were smashed. Britain would have lost without support from Indians. Allied Gurkha, Sikh, and Pashtun units provided half of their field forces. The mutiny was one of the few times in the existence of the empire in which British land forces overcame a revolution. They did so because the revolutionaries were divided and lacked several keys to power, the British did not lose complete control over local allies and instruments, and they found new tools to overcome the resistance to their rule.

Mutiny bred massacre. Most captured British officers and civilians were slaughtered. Few mutineers were murderers, but many paid for the sins of the few. The British, believing their rule rested on fear, killed perhaps 100 Indian civilians for every European slain. Soldiers acted spontaneously and officers tolerated or encouraged terror, which the government moved to squelch only once its rule was restored. Terror was less a tool of counterinsurgency than a substitute for it, occurring at a time when Britain had no other means to restore order. The effect was counterproductive; where it wished to make peace, instead British actions created a desert. One commander noted in late 1857, "We have established such a terror, that it is impossible to get anyone to come in." While British anger toward civilians ebbed, they attempted to exterminate every mutineer – with fair success.

At various stages in 1857, upward of 100,000 sepoys were in revolt as members of princely armies or as guerillas. British resources were scant – 53,000 white troops in India or within easy reach, including local European volunteers. Seventy-five percent of them were needed to watch the Bengal and Madras Armies, to cover the peripheries of the revolt,

¹⁹ Ibid., p. 180.

to disband Bengal Army units, and to control 300,000,000 Indians. The rest should have been used to hold the ring, wait for reinforcements, and strike with concentrated and coordinated power, but British commanders believed that quicker action was required. If they did not move fast, commanders believed, the revolt would spread; nor could they abandon civilians in isolated garrisons. Small forces immediately drove to save besieged civilians and to retake Delhi, reinforcements dribbling behind as they arrived. By July 1857, 5,000 British and allied troops stood before Delhi, held by 30,000 mutineers, while another 1,500 moved on Lucknow, against 13,000 enemies, which left just 4,000 British soldiers to garrison 25,000,000 Punjabis. In September 1857, barely 8,000 men, including 2,300 white infantry, were available to assault Delhi. Reinforcements, however, rose steadily – 30,000 British and Indian soldiers took Lucknow in March 1858.

The sepoys had large numbers but little leadership. Few mutineers had commanded 200 men in battle before; none more. Command within their forces was negotiated. Small units fought well, but the sepoys had no artillery and failed to maneuver their units tactically, and they did not establish a strategic conception for victory. They wasted their strength and lost the war. From June through July 1857, mutineers outnumbered British forces at Delhi six to one. But the sepoys failed to use their forces to crush the enemy or to cut British lines of communications. Instead, to prove its loyalty, as each body of mutineers reached Delhi, it marched before British artillery, stopped in the open, exchanged fire, and withdrew. Casualties were devastating and one-sided. British command was unimpaired and able to control new allies. Despite being thrown into ad hoc groupings, the British fought with fanaticism and overwhelming superiority in open combat. Several times on the road to Lucknow, British artillery and riflemen cut up sepoys in line as bayonet charges smashed their flanks and volunteer cavalry completed the slaughter. More effectively, soldiers of the Awadi ex-princely army used irregular tactics of snipers and ambush to force the British to abandon line and volley and launch costly assaults against strongpoints on the roads. By September 1857, mutineer losses were enormous. British losses were heavy as well, with British morale cracking and victory in assaults on towns uncertain. The first force that reached Lucknow on 25 September 1857 was so weak that it left a few reinforcements and withdrew to escort civilians to safety. On 14 September, the British attacked Delhi, shattering both its walls and the British army; 33 percent of assaulting British infantry were casualties. Discipline collapsed and men refused orders, while falling drunk against

the wall. A resolute enemy could have won the battle, but instead the mutineers collapsed.

After the reconquest of Delhi, scattered mutineers fought on while princely armies raised minor revolts, but with one exception the peasant insurgency subsided. In 1858, the British advanced again on Lucknow, this time carefully, to minimize casualties from irregulars and to reestablish rule on the ground. When they took Lucknow, its garrison of 15,000 sepoys and 50,000 irregulars simply withdrew into the countryside. The British commander wrote, "the enemy is as formidable after he has been beaten as he was before." Officials estimated that 75 percent of Awadi males fought in a "general, almost universal" revolt. ²⁰ Sepoys proved easier to defeat than guerrillas. Large in numbers, high in morale, and fighting in jungles dotted with forts, guerrillas used irregular tactics among a friendly population. Only ruthless pressure, combined with an amnesty to irregulars and a systematic effort to redress the socioeconomic causes for the rebellion in Awadh, suppressed the guerrillas. The rebels achieved a local victory. Britain won the greater prize.

THE BOER WAR, 1899-1902

The Boer War was not the greatest hybrid struggle the British Empire ever faced, if gauged simply by the enemy's quality in that sphere.²¹ It did expose the largest number of personnel, 450,000 men, including volunteer units from Britain and the Dominions, to hybrid warfare. The Boer War, second only to the two world wars among imperial mobilizations, combined conventional with counterinsurgency operations. It forced the British into complex, often new, organizational problems – combining military organizations into formations to conduct combined arms operations for conventional combat, decentralizing them into smaller units for counterguerrilla operations, training large numbers of recruits, radically changing tactics, and testing the most advanced kit of the day. In matters such as command, control, communications, and intelligence; direct and indirect firepower; and combined-arms operations, the battles fought in

²⁰ S. A. A. Rizvi and M. L. Bhargava, eds., Freedom Struggle in Uttar Pradesh, Vol. II, Awadh (Lucknow, 1958), p. 353, passim.

²¹ Thomas Pakenham, *The Boer War* (London, 1979), remains the classic account; cf. Bill Nasson, *The South African War*, 1899–1902 (London, Arnold, 1902); Denis Judd and Keith Surridge, *The Boer War* (London, 2002); John Gooch, ed., *The Boer War*, *Direction, Experience and Image* (London, 2000); Peter Dennis and Jeffrey Grey, eds., *The Boer War: Army, Nation and Empire* (Canberra, 2000).

January and February 1900 were as modern as any in the 20 years before August 1914.

Although the Boer War is remembered for a mediocre British performance, in truth its enemy was little better. The Boers had the opportunity to pursue victory by means of a hybrid strategy or to use conventional forces to overrun British-controlled territory before the British could bring the weight of the Empire to bear. They achieved neither. As the war began, Boers outnumbered the British in manpower and firepower. Although launching short offensives into British territory, the Boers remained strategically passive. They defeated the initial British attacks, but even though British military and political leaders believed that a "considerable section" of the Boer population under their rule would revolt if given the chance, the Boers failed to exploit the resultant opportunities by challenging Britain's hold across South Africa (Figure 7).²²

When reinforced British forces attacked again, the Boer army collapsed. The Boers recovered somewhat with an irregular campaign, which started well but ended rapidly, far faster than the guerrilla conflicts with the Algerians or Afghans decades before. British counterinsurgency was good; the Boer position was weak, and their command mediocre. From 1899 to 1902, Britain exported abroad more forces prepared for European warfare than it had at any time since the American Revolutionary War. Britain won the war in South Africa because the enemy's conventional forces were weak and its guerrillas vulnerable. Compared to the American Revolutionary War, the forces deployed from Europe were stronger; England retained most of its local military and political allies, instruments, and expertise, rather than losing them to a revolution. Unlike the period from 1776 to 1783, the British were able to insulate the theater from outside aid.

When the war began, the Boers attacked British forces with mixed success. At Mafeking and Kimberley, the Boers marooned 40 percent of their army in futile sieges against untrained paramilitary forces; elsewhere, they scored two minor victories and then waited. The Boer high command was politicized and incompetent. Its army used modern rifles well but, having imported 100 modern artillery pieces and European officers to train Boers in their use, failed to use them to best effect.²³ The Boers fought as they had for generations, which had advantages. They were mediocre at conventional war, finding it hard to coordinate units, let

Lord Roberts to War Office, Dispatch 126/1, 6.2.00, WO 105/5.

²³ Ian van der Waag, "Boer Generalship and the Politics of Command," War in History 12/1 (2005), pp. 15-43.

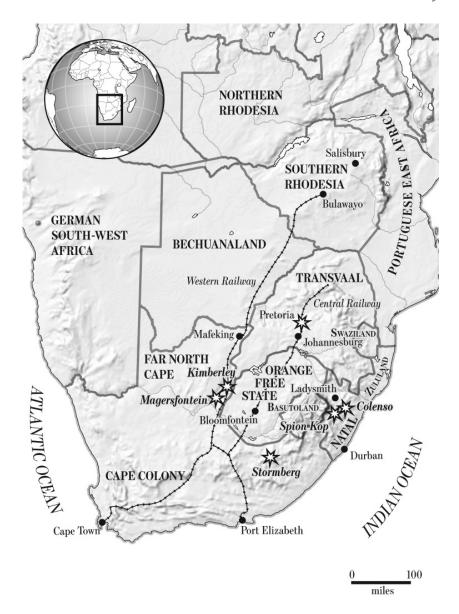


FIGURE 7. Boer War, 1899-1902.

alone formations, or to attack prepared defenses. Still, on the defense, they could put large numbers of riflemen in good (often entrenched) positions, forcing the British into attacks that required combined-arms coordination – a weak link in the British military system.

The British understood the Boer system of warfare, having been humiliated at Majuba in 1881. The Indian army understood the effect of defensive firepower, the need for dispersed order, and how to integrate fire and movement. However, the dominant experiences for forces based in Britain – attacking African phalanxes and unrealistic field maneuvers – convinced many commanders to believe that battle equaled throwing thick bodies of men straight at enemy positions, without coordination or support, under fire. General Buller, who commanded British forces in the initial debacle, had been criticized for precisely these errors during recent exercises in England.²⁴ These practices produced three humiliating and costly defeats during the "Black Week" from 10 to 17 December 1899.

The British recovered quickly. Capable imperial soldiers took over the forces in South Africa and beat the Boers, in large measure as a result of Boer weaknesses. Despite the ambiguous results of the war, the British implemented no systematic retraining or reappraisal of tactics: They simply doubled the army's strength to five divisions and adopted a new war plan.²⁵ Although the attacks of February to June 1900 were a success, the story was mixed - the British won where they were strong and the Boers weak, but they failed where the opposite was true. The real triumph was in strategy and operations. The new commanders, Lords Roberts and Kitchener, viewed the theater holistically and planned and executed operations to exploit their strengths and wreck the Boer armies. The breakthrough by one British cavalry division on 15 February 1900 and its exploitation shattered the entire Boer front in a few weeks. It also killed so many horses as to cripple units for months afterward and prevented Roberts from culminating the success with his "intention to follow them up as rapidly as possible and by taking full advantage of the shock which they have sustained to break up their organization as a fighting force."26

The failures were largely tactical. Formations did not cooperate well. Infantry understood the need for dispersed order and the integration of fire with movement, but the execution fell short of the understanding.

²⁴ D. M. Leeson, "Playing at War: The British Military Manoeuvres of 1898," War in History 15/4 (2008), pp. 432-461.

²⁵ For the debate on the performance of British forces in the war and their development between 1902 and 1914, cf. Stephen Badsey, "The Boer War (1899–1902) and British Cavalry Doctrine: A Re-Evaluation," *The Journal of Military History* 71 (January 2007), pp. 75–97; and Stephen M. Miller, *Lord Methuen and the British Army, Failure and Redemption in South Africa* (London, 1999).

²⁶ Roberts to War Office, Dispatch 126/6, 16.2.00, WO 105/6.

Untrained troops could not easily be made competent, although veterans recalibrated better. The debacle of a failed divisional assault against a smaller Boer force at Spion Kop on 23–24 January 1900 underlined the fact that battalions could not coordinate their activities nor commanders handle a complex battle, although the Boers almost cracked under the pressure and never dared such attacks themselves.²⁷

The Boer state was broken but not its people. Precisely as the conventional army melted away, its fragments were reformed into guerrilla units. One day soldiers tried to hold a front; the next, they turned to irregular battle, seeking combat through hit-and-run tactics. The Boers capitalized on their strengths. The commandoes, Boer adult males, operated among a friendly population – their families – which provided supplies and intelligence. Fast-moving and straight-shooting horsemen, who knew the terrain, struck precisely against an enemy scattered across a large theater and largely ignorant of the ground. Initially, the Boers scored sensational victories, which, combined with the British practice of burning farms in retaliation for guerrilla raids, drew several thousand Boers back into battle. Guerrillas threatened British logistics and launched their only strategic offensive, an abortive effort to raise Boers under British rule by sending forces to operate among them, too late to turn the tide of the war.

However, by the usual standards of counterinsurgency war, whether measured by force ratios or length of campaign, the British recovered with remarkable speed. Problems of leadership crippled Boer operations as younger men, able but divided, replaced older generals and struggled for position. Only naïve strategists could have thought the Boer population a good base for guerrillas. Instead of being an ocean through which the fish could swim, it was a pond, like the Chinese population during the Malayan insurgency of the 1950s, easy for the ruthless to drain. Rather than adapt to the environment, Kitchener transformed it.

The British credibly reorganized their military structure in South Africa for counterinsurgency warfare. Even though their mobile columns never matched the Boers at irregular warfare, they were good enough to hound the Boers into submission. In the first year of the guerrilla campaign, Boer successes drove British commanders rapidly and ruthlessly up the ladder of escalation. They burned farms as a means first to punish specific individuals or actions and then to coerce the population. Finally, to hasten "the process of exhaustion by capture," as Kitchener called it,

²⁷ Memorandum by General Warren, undated, c. 12.1899, "The Capture and Evacuation of Spion Kop," WO 132/18.

the British conducted a wholesale destruction of the economic resources available to the foe, aiming to force the *volk* onto the veldt, to burden the guerrillas, or else into internment camps, and thereby denying supplies and intelligence to Boer forces.²⁸

As a result of British incompetence and indifference, 28,000 Boer civilians (more than 10 percent of their population), along with 20,000 Africans, died in the camps. There were 50,000 British soldiers in blockhouses and another 50,000 in mobile columns that contained and harassed Boer forces, whose willingness to fight played into Kitchener's policy of attrition.²⁹ The Boers had no reinforcements; every man they lost was imprisoned or dead; and they could neither keep nor kill the thousands of prisoners they took or otherwise make a dent in overall British strength. During the guerrilla war, Boer strength fell from 45,000 to 20,000 men, with 30,000 more in prison camps, and 5,000 fighting in British columns. Many units focused on survival rather than war. Boer forces cracked, fearing, as their commanders agreed, that further resistance risked "the horrid probability" that "our whole nation may die out."30 The Boers surrendered 24 months after their irregular war began, although in political terms, they gained amnesty and the chance to recover their position. Britain won everything that could be achieved through force, but it proved less successful in exploiting these gains through politics.

THE TWENTIETH CENTURY

The interwar years marked the apogee of Western control over the world, as well as the moment when that control began to fade. Initially, weapons forged for total war bolstered the power of imperial states. Spain, Italy, and the Soviet Union used poison gas to subdue guerrillas. Aircraft routinely attacked opposition, whether warriors, villages, or flocks. British authorities expected "mechanical devices" to replace manpower in imperial policing, with economy and effect, but they were inhibited with their

²⁸ Kitchener to Chamberlain, telegram, 19.6.01, PRO 30/57/19.

S. B. Spies, Methods of Barbarism? Roberts and Kitchener and Civilians in the Boer Republics, January 1900–May 1902 (Cape Town, 1977); Fransjohan Pretorius, Scorched Earth (Cape Town, 2001); id., Life on Commando During the Anglo-Boer War, 1899–1902 (Cape Town, 1999); Owen Coetzer, Fire in the Sky: The Destruction of the Orange Free State, 1899–1902 (Johannesburg, 2000); and Alexander B. Downes, "Draining the Sea by Filling the Graves: Investigating the Effectiveness of Indiscriminate Violence as a Counterinsurgency Strategy," Civil Wars 9/4, pp. 420–444.

³⁰ Christiaan de Wet, *Three Year's War* (New York, 1902), Appendix C.

use. Britain never used poison gas in its imperial wars. British authorities applied air policing less ruthlessly than they could have, because they believed this might start more hostilities than it stopped, and because their public would not tolerate indiscriminate attacks on civilians.³¹

Nonetheless, Britain used the tool ruthlessly and precisely, more so than any other power. From 1904 to 1918, Britain lost control of central Somalia to Mohammed bin Abdullah Hassan, the "Mad Mullah of Somaliland." In 1919 and 1920, Britain struck back with 800 paramilitary soldiers, thousands of tribal auxiliaries, and nine aircraft. An air strike against Hassan's encampment wounded him, killed some of his lieutenants, and scattered his flocks, which hostile tribesmen seized. He fled and died. Air power was no more important to his defeat than politics, but it was significant to a hybrid campaign. Between 1921 and 1925, Britain contained a Kurdish rebellion in Iraq through air strikes on guerrillas mounted from garrisoned airfields, supplied by mechanized forces escorted on roads by armored cars. In 1927 and 1928, armored cars and aircraft ended assaults on Iraqi tribes from raiders in Saudi Arabia. In both cases, however, these forces were responsible for only part of the victory, and their limits were notable. In 1929, air policing collapsed in Palestine during riots between Arabs and Jews, and again during the Arab revolt from 1936 to 1939.32 Air power could not prevent revolts. When they occurred, aircraft became auxiliaries to armies.

Yet, technology and firepower are not everything in war. Britain's hold over its colonies declined from 1929, doubly so after 1945, because of changes in its capabilities and its will to deploy them. Britain's strength in great-power politics; its means to insulate colonies from each other, the world, and public opinion; and the political and diplomatic basis for its power – all of these declined. Britain lost its empire not to force or economics but rather to politics – less will at home, more opposition abroad. Attitudes inhibited actions, particularly rising doubts about the ethics of empire. Organized, sometimes mass, movements, which the British found difficult to comprehend or to defeat through force, subverted its central, political tools of control. Its enemies increasingly acquired modern weapons, raising the cost for any British use of force.

James Corum, "The RAF in Imperial Defence, 1919–1956," in Kennedy, Imperial Defence, pp. 152–176; John Ferris, The Evolution of British Strategic Policy, 1919–1926 (London, 1989); David Omissi, Air Power and Colonial Control, 1919–1939 (Manchester, 1990).

³² AOC Palestine to Governor, Palestine, 4.9.29, Lord Trenchard Papers, RAF Museum, Hendon, C.II/9; "Notes on Conversation with C.A.S." by S/L Slessor, 4.9.29, AIR 9/19.

More important was the impact of nationalism on native populations. Revolutions occurred across the empire, marked by rising challenges to Britain's presence and to the local leaders who cooperated with it and the loss of control over local levers of power such as police or paramilitary forces. The Indian Army shattered in Britain's hand as it enforced the partition of Punjab, the Jewish Agency subverted its rule in Palestine, and Free Officers movements turned Arab forces from auxiliaries to executioners of empire. By shaking British credibility, each revolution encouraged another, as British means and will to suppress them eroded – a process quickened as the burden and blame for empire were thrust on Britain alone.

British superiority in the strategic niche that underlay empire also declined. Although the real problem was the politics of decolonization, guerrillas were hard to fight. Compared to previous generations, they had better strategy and the means to raise military and political support through conspiratorial or mass movements, whereas Britain could not so easily escalate conflicts any longer with terror tactics or reinforcements from its crumbling empire. The British remained capable of tough actions – internment during counterinsurgencies in Kenya and Malaya may have killed tens of thousands of people – but not as often as before.³³

Empire no longer was a simple solution to troubles abroad – it was among their chief causes. Britain's problem was not conventional armies or, unlike Jiang Jieshi in China, France in Indochina and Algeria, and the United States in Vietnam, hybrid forces, but rather guerrillas – especially urban terrorists. The latter struck precisely at key vulnerabilities in Britain's system: its reliance on small numbers of specialist officers and local allies, on tolerance by and prestige among subjects, and on walking the fine line between too much and too little presence. Urban terrorists also aimed to enrage British forces so as to provoke overreactions that would prove politically counterproductive. Britain's recalibration of forces for counterinsurgency was good, well above average, as was its performance in the practice, but the rates of success and the return on investment were below that of the previous century. From 1942 to 1954, Britain had far more soldiers abroad than ever before, with better kit, but 100,000 men could not do what 1,000 could do in earlier

³³ Hew Bennett, "The Other Side of the COIN: Minimum and Exemplary Force in British Army Counterinsurgency in Kenya," Small Wars and Insurgencies 18/4 (December 2007).

decades.³⁴ Its solutions remained intelligent and adaptive, but the problems became harder.

LESSONS LEARNED

Contemporary strategists often use British history, implicitly and explicitly, as a source for data or models. As with all cases of the imperial analogy, Britain's experience with hybrid warfare is so influential, but subliminal, that if one does not examine it critically, then one will misunderstand the matter as a whole. Its successes were remarkable, but they often stemmed from circumstances that one cannot possibly replicate today. The power of some of its solutions declined over time, and simplistic explanations for its rise and fall prevent useful generalizations. Hybridity was not an abstract matter. It centered on specific competitions and competitors. Britain's experiences with hybridity were not universal, but they are illuminating. They pertain to many areas where irregular or hybrid enemies might be found today. They illuminate aspects of the matter such as the role of dominance in conventional forces; how the need to prepare for hybridity and means to do so affect a military institution; the difficulties that one or one's enemy faces in creating and applying hybrid forces; and the balance sheet.

For Britain, hybridity was both a problem and a solution. Often, the solution overcame a problem that was not hybrid, as when conventional forces were recalibrated to handle irregular warfare. In strategic and operational terms, hybrid war posed unique challenges to the British. No other nation fought so many different forces and won so frequently over such a long period of time. In terms of impact on world politics, the most significant army of modern history was not the German but rather the British. No matter how easy campaigns enabled by Maxim guns might seem, British forces recalibrated tactics, weapons, and leading-edge technology well. In 1879, for instance, as British forces drove up the Khyber Pass, advanced posts of observers on mountains used heliographs to direct guns in the valleys below firing at unseen targets, in an early use of indirect fire.

After 1917, Britain led the development of aerial strike forces in counterinsurgency warfare. The favor could be reversed. Experience

³⁴ John Gallagher, The Decline, Revival and Fall of the British Empire: The Ford Lectures and Other Essays (Cambridge, 1982); many of the essays in Kennedy, ed., Old World Order, illuminate this issue.

against Mysore and Mahrattas readied Wellington for the Peninsular campaign, where no one was better prepared to flog the French than a sepoy general. Britain adapted weapons fired against it by Mahrattas into Congreve rockets, providing the red glare over Baltimore in 1814, which inspired The Star Spangled Banner. The Boer War provided British officers useful experience in modern tactics, especially on the defense. From 1902 to 1914, the British improved their training and coordination between arms and units to a level better than it had been for generations. Through the development of the Territorial Force, spurred by mixed experiences with volunteer units during 1900–1902, Britain came as close as its system allowed to preparing reserve elements in peacetime. These lessons were fundamental to the quality of the British Expeditionary Force in the opening months of the First World War, when despite many problems, British forces performed better than any other in Europe - a remarkable feat for an army of mercenaries, and an imperial one at that.³⁵ The lessons of the Boer War also aided Britain's mobilization for total war in 1915–1916, when it had to recalibrate its hybrid system to handle a total and conventional war, in which its performance was surprisingly good.

The need for recalibration made British land forces adaptable. Experience in many conflicts gave officers a unique range of expertise, although much of it was not immediately transferable. The experience with counterinsurgency from the Boer War, for example, aided only those rare officers, such as Aylmer Haldane, commander during the Iraq revolt of 1920, who engaged in such conflicts. Britain did well in raising paramilitary forces and in maintaining specialist troops, which institutionalized solutions to problems. Even so, from 1930 onward, the power of its solutions to colonial challenges eroded, for reasons similar to those that afflict Western forces operating in those areas today. Britain had no magic bullet to solve the problem in which guerrillas relied on terrorism.

British forces did well when they had already learned to play an irregular or hybrid game; they did less well when they confronted a hybrid competitor for the first time. In strategic terms, adaptability had an expense: Preparation for colonial warfare hampered the British military's ability to handle conventional, industrialized warfare. British land forces adapted so well to hybrid warfare that their greatest problem became recalibrating to conventional operations. The need to prepare forces for hybrid conflicts, to maintain specialized units abroad, and to garrison the empire

³⁵ Nikolas Gardner, *Trial by Fire: Command and The British Expeditionary Force in* 1914 (Westport, CT, 2003).

sapped Britain's ability to concentrate its power and reinforced the army's tendency to decentralize down to battalions, thereby hampering preparation for high-intensity combat in Europe. The cost was notable in the period from 1939 to 1942.

One must take care in extrapolating lessons from the British historical experience with hybrid warfare. In important ways, the British approach to wars in non-Western countries was opposite to that of the United States today. Britain had strategic patience, but it was adamant that empire should pay for itself. So long as the expense, and therefore the relationship between cost and benefits, remained favorable, it could maintain stalemates for generations, as on the Northwest Frontier. In contrast, expensive and unnecessary wars always eroded British will. Britain conquered so much only because it cost so little. During the last days of the Empire, as cost–benefit assessments became bleaker, Britain's patience declined precipitously, reinforced by its increasing doubts about empire.

In recalibrating to so many environments and enemies, Britain's advantages were unified command, rational policy, greater resources, and the weakness and mistakes of its foes. The latter usually were divided and poor at strategy. They rarely possessed able conventional and guerrilla forces that comprise both halves of any hybrid force. Britain's strength stemmed less from technology than command, politics, and the quality of its units and officer corps, which outclassed virtually every enemy. Whether arrayed against Mahrattas or Boers, the primary strength of the British Army was its dominance in high-intensity battle. Often, it could force its foes into decisive battles and generally won when these occurred. Its record was less impressive against guerrillas or irregulars.

Hybrid capabilities were most useful in converting conventional forces to the exigencies of irregular war, as against fighting a hybrid foe, which really were common only in the eighteenth century. For Britain, the normal problem in hybridity was in recalibrating forces from one task to another rather than in handling two competitions at once. Failures occurred when enemy armies became organizationally effective or native peoples became politically stronger. British power, therefore, stemmed largely from matters beyond its control – the decisions of its competitors. Britain had a comparative advantage over its enemies in that it deliberately adopted a hybrid strategy. Its enemies did so only when their preferred solution failed, most often by adopting irregular strategies after their conventional forces were defeated. Britain's enemies did not prepare for hybrid warfare. This type of war was hard to execute, unless it came naturally, which occurred most easily with coalitions. That form

of hybridity stemmed not from one institution with two capabilities but rather from an alliance in which various forces specialized in different practices. For Britain's enemies, politics was the biggest bar to the effective use of hybrid capabilities, which were vulnerable not just to a kinetic attack on its constituent parts but also to assaults on its political cohesion. The British did not need to read Sun Tzu to know that attacking an enemy's alliance or strategy was the best, and cheapest, path to victory.