The Boundaries

# of War

Local and Global Perspectives in Military History

Edited by Lee L. Brice
and Timothy M. Roberts

The Boundaries of War

The Boundaries *of* War

Local and Global Perspectives in Military History

Edited by Lee L. Brice, PhD,
and Timothy M. Roberts, PhD

MCUP
MARINE CORPS UNIVERSITY PRESS

Quantico, Virginia
2024

THIS VOLUME IS FREELY AVAILABLE AT WWW.USMCU.EDU/MCUPRESS

*This book is dedicated to students of history
at Western Illinois University.*

Contents

Part 1: Local Perspectives

Part 2: Global Perspectives

Preface and Acknowledgments

We have a number of people and departments to thank for their contributions in bringing this volume and the conference on which it is based to fruition. The conference would not have occurred without the initiative of Professor Timothy M. Roberts, chair of the Department of History at Western Illinois University (WIU). It was his vision to organize and hold a military history conference at WIU. Throughout the organizing process he followed through on much of the heavy lifting. The other members of the organizing committee, Professors Lee L. Brice and Richard Filipink, also contributed time and energy to making the conference a success. Brice led the organization of this volume. A debt of gratitude is also owed to Cindy Arnett, office manager for the Department of History. Without her assistance, the entire effort may well have foundered.

Conferences seldom come to life without having endured any number of trials and tribulations. So it was with this one. The support of the WIU administration, especially Manoochehr Zoghi, then provost and vice president of academic affairs, and Kristi Mindrup, then vice president of the Quad Cities campus, made possible university-level funding to hold the conference. Additional financial support was provided by the College of Arts and Sciences, the Centennial Honors College, the Department of History, and the WIU Foundation. A conference grant from the Society for Military History was also critical and much appreciated.

The speakers and contributors—an international group of scholars, PhD candidates, and master's degree students—displayed remarkable patience and commitment to the cause. We are grateful for their support. We are especially thankful to our keynote speakers, Professor Lisa M. Brady of Boise State University and Professor Stephen Morillo of Wabash College. We acknowledge the assistance of

Professors Ute Chamberlin, Hal Friedman, Rosemary Moore, Febe Pamonag, and Georgia Tsouvala, all of whom chaired sessions at the conference. We also acknowledge our debt to Professor Jeremy Robinett and his graduate students, Steven Sierra and Nathaniel Hines, for their logistical support. The contributors for this volume were selected by the conference organizers and anonymous jurors as representing the best papers on a variety of topics. We thank them all for their patience during the process of bringing this volume to completion and Professor Emeritus Walter Kretchik for contributing the epilogue. The chapters were improved by comments from conference attendees and by anonymous peer reviewers, all of whom have made this volume all the more engaging. Angela Anderson and the team at Marine Corps University Press have been patient and steadfast in their support to ensure the best possible outcome.

Lee L. Brice, PhD, and Timothy M. Roberts, PhD
Macomb, Illinois, 2024

The Boundaries of War

Introduction

A Spectrum of Local and Global Perspectives in Military History

Lee L. Brice, PhD, and Timothy M. Roberts, PhD

"All politics is local" is a well-worn phrase in American politics attributed to Thomas P. "Tip" O'Neill Jr., Speaker of the U.S. House of Representatives (1977–87), although the phrase may date back to the 1930s. The political scientist Andrew Gelman notes that while this adage was true for most of U.S. history, since the 1960s politics "is less local than it used to be."[1] Has an analogous phenomenon happened in the study of military history? The expansion of trade and communication networks that has been going on since the fifteenth century has had an undeniable impact, connecting military activity around the world. This fact is visible in the historical record, but has it in the last several decades transformed the historiography of military history? As the editors of this volume phrased it in the call for contributors, "Does the transnational turn in historical scholarship suggest that all warfare is actually derivative of larger global patterns, or are there local, regional, or national 'ways of war' that differentiate conflict within that certain geographical space, which historians should acknowledge?" In other words, how much should military historians focus on local or idiosyncratic factors to explain their subject matter? How much should they consider global phenomena?

---

[1] Andrew Gelman, "All Politics Is Local? The Debate and the Graphs," *FiveThirtyEight* (blog), *New York Times*, 3 January 2011.

The question has both methodological and moral implications. Methodological, because military historians should consider how their subdiscipline relates to the broader discipline of history. In the last generation, many historians, particularly those interested in global history, have reconsidered the focus on nation-states, political bodies that, strictly speaking, can be dated from the Treaty of Westphalia in 1648, which set out laws of relations among sovereign states.[2] Nation-states clearly emerged from the early nineteenth century to the late twentieth century, and traditional historians assumed that they provided the most meaningful context for historical inquiry. Challenging nation-state-driven history, on the other hand, some historians have begun to study the past from a global or transnational perspective, an approach that one scholar, perhaps with some hyperbole, casts as "the most important development in the historical discipline."[3] In global history, the nation-state is not effaced, but it is interrogated within a broader context. In its discussion of global history, this introductory chapter intends two kinds of history. The first is comparative history, which, considering a 1928 work by French historian Marc Bloch as starting point, has a vast literature, though perhaps is a less common methodology in military history than in other historical fields. The second is connected history, which describes the movement of peoples, ideas, technologies, and institutions whose study "cannot be contained by national

---

[2] Ian Tyrrell, *Transnational Nation: United States History in Global Perspective since 1789* (New York: Palgrave Macmillan, 2007), 3. Tyrrell first described transnationalism in Ian Tyrrell, "American Exceptionalism in an Age of International History," *American Historical Review* 96, no. 4 (October 1991): 1031–55, https://doi.org/10.2307/2164993. For an earlier call for change, see Akira Iriye, "The Internationalization of History," *American Historical Review* 94, no. 1 (February 1989): 1–10, https://doi.org/10.1086/ahr/94.1.1.
[3] Mae M. Ngai, "Promises and Perils of Transnational History," *Perspectives on History* (1 December 2012): 52–54. The editors of this volume have chosen, for clarity, to use *global* rather than *transnational* here; with *global* to mean phenomena that affect or connect multiple parts of the world.

boundaries."[4] The contributions in this volume are a road marker for whether military history has taken a global turn in the last generation; as such, they provide a kind of spectrum of examples of how military historians currently adopt either local or global approaches to their work.

Precisely because the subject is military history, the question of methodology is not one merely of protocol and practicality. There is also a moral dimension. As John A. Lynn once wrote, "In the realm of military history . . . airy discussions tend to become foolish. Thousands of dead and wounded as a result of battle is the kind of hard fact that defies intellectual games."[5] Lynn was referring to what he considered the pitfalls of a "cultural approach to the study of war and combat."[6] Robert M. Citino paraphrased Lynn: "It would be hard to tour the battlefields of Gettysburg or the Somme or the Bulge—all sites of fierce fighting, horrendous bloodletting, and the mangled remains of human bodies—and come away with a sense that one had just visited a 'construct'."[7] Military historians should employ methodologies to suit their subject, not vice versa. To insist that all military history is local, perhaps to ensure all analysis peers through the "fog of war" à la Prussian military theorist Carl von Clausewitz; or, alternatively, to say that all military history is global, perhaps to ensure against the shibboleth of exceptionalism, risks in both cases a kind of methodological determinism, using experiences of individuals engaged in armed conflict to display a principle.

---

[4] Marc Bloch, *Pour une histoire comparée des sociétés européennes* [*For a Comparative History of European Societies*] (Paris: Renaissance du Livre, 1928); and Ngai, "Promises and Perils of Transnational History."

[5] John A. Lynn, *Battle: A History of Combat and Culture* (Boulder, CO: Westview Press, 2003), xx.

[6] Lynn, *Battle*, xiv.

[7] Robert M. Citino, "Military Histories Old and New: A Reintroduction," *American Historical Review* 112, no. 4 (October 2007): 1086, https://doi.org/10.1086/ahr.112.4.1070. It is worth noting that cultural history, when done well, has much to contribute to understanding military institutions and the history of conflict. See Wayne E. Lee, "Mind and Matter-Cultural Analysis in American Military History: A Look at the State of the Field," *Journal of American History* 93, no. 4 (March 2007): 1116–42, https://doi.org/10.2307/25094598; and Wayne E. Lee, ed., *Warfare and Culture in World History* (New York: New York University Press, 2020).

We may justifiably ask, "How are we to proceed?" How best, to paraphrase the Greek general Pericles, to recount the deeds of brave men?

The New Military History as Local History

Considering historiography since World War II, focus on local circumstances of historical phenomena, particularly military conflict and development, was established earlier than emphasis on global aspects of the subject. Local or "community" studies, a product of the new social history of the 1970s, focused on giving voice to previously ignored or forgotten groups and peoples. Implicit, or often explicit, in that approach was a challenge to the assumption that leaders are the only force that shapes institutions and society. New social history underlined the truth that all history happens to someone somewhere in a particular place. In the practice of military history, the social historical turn did several things. It displaced historiography dominated by top-down accounts of campaigns, battles, leaders, strategy, and operations. It also provided a basis for "war and society" history, encompassing the study of institutions necessary to prepare for war, how society impacted the ways in which wars were fought, and how wars impacted society.[8] "War and Society" is now a mainstream academic phrase, as well as the name of numerous university research centers and history department degree tracks.

A seminal military history study marking the discipline's embrace of new social history approaches was John Keegan's *The Face of Battle*.[9] Keegan sought to depict what the mass of common soldiers experienced in the battles of Agincourt, Waterloo, and the Somme. Continuing the ways of traditional operational historians,

---

[8] This is also labeled "New Military History." See Stephen Morillo and Michael Pavkovic, *What Is Military History?* (Cambridge, UK: Polity Press, 2018), 41; and Lee L. Brice, "Ancient Warfare and Moving Beyond 'New Military History'," in *New Approaches to Greek and Roman Warfare,* ed. Lee L. Brice (Hoboken, NJ: Wiley-Blackwell, 2020), 1–4.
[9] John Keegan, *The Face of Battle: A Study of Agincourt, Waterloo, and the Somme* (New York: Viking Press, 1976).

Keegan emphasized the centrality of actual warfare, particularly battle, although he drew on his knowledge of weaponry, terrain, and tactics to thicken descriptions of combat and its background. But he also emphasized the fundamental point that from the perspective of troops under fire, the combat experience of one individual might be quite different from another, even one nearby.[10] Keegan's skepticism about generalizing how soldiers fought broke even with the pioneer study of common soldiers, Bell Irvin Wiley's classic American Civil War works *The Life of Johnny Reb* and *The Life of Billy Yank*.[11] Wiley's social history of Civil War soldiers in some ways anticipated the social history turn. However, as the titles suggest, Wiley constructed a composite or universal Confederate and Union soldier, and he was concerned with far more than their experiences of combat. In the broad wake of Keegan, exemplary studies emphasizing soldiers' motivations that depended not only on their social backgrounds but whether and how they had experienced combat included studies of military troops of Europe's Old Regime, the French Revolution, and the American Civil War.[12] Representative of a different à la Keegan kind of study, John A. Lynn's *Battle: A History of Combat and Culture* narrated eight discrete eras of warfare that reflected particular cultural discourses prevailing at the time.[13]

---

[10] On Keegan's methodology, see Everett L. Wheeler, "Greece: Mad Hatters and March Hares," in *Recent Directions in the Military History of the Ancient World*, ed. Lee L. Brice and Jennifer T. Roberts (Claremont, CA: Regina Books, 2011), 10–12.

[11] Bell Irvin Wiley, *The Life of Johnny Reb: The Common Soldier of the Confederacy* (Baton Rouge: Louisiana State University Press, 1943); and Bell Irvin Wiley, *The Life of Billy Yank: The Common Soldier of the Union* (Baton Rouge: Louisiana State University Press, 1952).

[12] Ilya Berkovich, *Motivation in War: The Experience of Common Soldiers in Old-Regime Europe* (Cambridge, UK: Cambridge University Press, 2017), https://doi.org/10.1017/9781316711835; John A. Lynn, *The Bayonets of the Republic: Motivation and Tactics in the Army of Revolutionary France, 1791–94* (Champaign: University of Illinois Press, 1984); and James M. McPherson, *For Cause and Comrades: Why Men Fought in the Civil War* (New York: Oxford University Press, 1997).

[13] Lynn, *Battle*.

Ways of War as Local History

While one kind of new military history emphasized the local or particular aspects of soldiers' experience in fighting, another impact of the new social history was to incorporate military development into scholarship on the particular development of Western civilization, conceptualized during various chronological periods. This approach was not global, but it did emphasize continuity in Western military institutions, which was different from Keegan's illumination of discrete, epic battles. Again, before the development of a body of literature on the topic, there was a prototypical work: a published lecture of Michael Roberts's *The Military Revolution, 1560–1660*.[14] Subsequent scholars have debated the timing and duration of such a period of innovation, though they agree that its basis was the advent of gunpowder weapons and gunpowder's consequences for diminishing the mobility of infantry, enhanced firepower of artillery, stronger fortifications, and enlarged army sizes.[15] Satisfied that the military revolution constituted a European phenomenon, scholars have thereby asserted that the continent's military development assisted its ascendance in hegemonic power, particularly manifesting in regions where European colonial conquest occurred, first in the Americas and later in Africa.[16] In other words, the local aspects of

---

[14] Michael Roberts, *The Military Revolution, 1560–1660: An Inaugural Lecture Delivered before the Queen's University of Belfast* (Belfast: M. Boyd, 1956).

[15] Jeremy Black, *A Military Revolution?: Military Change and European Society, 1550–1800* (New York: Bloomsbury, 1990); Clifford J. Rogers, ed., *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe* (Boulder, CO: Westview Press, 1995); Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500–1800* (New York: Cambridge University Press, 1996); and Mark Charles Fissel, ed., *The Military Revolution and Revolutions in Military Affairs* (Berlin: DeGruyter, 2022).

[16] Historians have acknowledged military development in East Asia that rivaled the rise of military power in Europe, but they debate the extent of transfer of technology, weaponry, and doctrine. See Parker, *The Military Revolution*, 136–40. See also Tonio Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West* (Princeton, NJ: Princeton University Press, 2016), in which the author explains this reticence on account that, compared to Western Europe, there were fewer competing dynasties in China than in Western Europe; there was a commitment to agrarianism; and maritime trade could be conducted without resort to military force.

the military revolution that transpired in Europe enabled Europeans to have a global impact, and one at that of domination.

Spawned by or at least as a corollary to literature exploring the contours of a European military revolution, a related body of literature has emerged enunciating "ways of war" distinctive in nation-states and cultural zones. This literature offers a different expression of the idea that military history is local, not global, defined in terms of continuity of particular cultural ways over time rather than the uniqueness of conditions present on a particular battlefield or the critical confluence of factors that temporarily sparked a burst of military innovation at a historical moment in a particular place. The seminal work on this topic remains Russell F. Weigley's *The American Way of War*, first published in 1973.[17] Weigley offered a survey of Americans' rationale for conducting warfare but emphasized that, though shaped heavily by actual circumstances rather than by detached development of long-term policy, Americans consistently pursued a strategy of annihilation. This was fundamentally attributable, Weigley argued, to White Americans' heritage of plentiful natural resources and, by the mid-nineteenth century, a large human population. Sheer abundance made the entire destruction of an enemy feasible, though it also indirectly excused high casualty rates and, at times, incompetent leadership. Subsequent works inspired by Weigley's argument on American military traditions, as well as on other ostensibly national ways of war, have multiplied.[18]

---

[17] Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (New York: Macmillan, 1973).

[18] An overview of the former body of literature as of 2010 is provided in Brian McAllister Linn, "The American Way of War Debate: An Overview," *Historically Speaking* 11, no. 5 (November 2010): 22–23, https://doi.org/10.1353/hsp.2010.a405440. In Robert Citino, *The German Way of War: From the Thirty Years' War to the Third Reich* (Lawrence: University Press of Kansas, 2005), the author traced Prussian and German emphases on swift, powerful, and decisive military operations. More recently, in Daniel Whittingham, *Charles E. Callwell and the British Way in Warfare* (Cambridge, UK: Cambridge University Press, 2020), https://doi.org/10.1017/9781108628846, the author emphasized the writings of British Army major general Charles E. Callwell, better known as an architect of counterinsurgency, in articulating a distinctive British way of war on account of the country's naval power and experience in colonial India.

A corollary of Weigley's cultural study of American warfare has taken shape in interpreting a "Western way of war," emphasizing its local or parochial nature. In a study more than three decades ago of a supposed *longue durée* of Euro-American military history, Victor Davis Hanson traced a continuous warmaking thread from ancient times to the Vietnam War, demonstrated successively by forces representing a so-called Western civilization. Illustrated by landmark battles from the Greek naval victory over the larger Persian fleet at Salamis in 480 BCE to the pyrrhic U.S. repulse of the Vietnamese Tet Offensive in 1968, Hanson argued that forces representing a "Hellenic legacy" in the West demonstrated a penchant for close-order infantry combat made possible due to a shared civic militarism—democracy, restraint of religious influence, volunteerism, and individualism—that enabled them to dominate others. For him, the firearms revolution was more a road marker or accessory than a catalyst; Western forces' belief in themselves was behind the absolute carnage that ensued when they fought others—annihilation as an epic strategic narrative.[19] Hanson's explanation of two millennia of military conquest by Euro-Americans, ancient to modern, has been refuted as overly culturally and racially determined.[20] A 2020 multiauthored survey of the "Western way of war" assigned Hanson to write only the chapters on "the age of massed infantry" in classical Greece and Rome. There Hanson basically echoed his emphases on the roles of military

---

[19] Victor Davis Hanson, *Carnage and Culture: Landmark Battles in the Rise to Western Power* (New York: Anchor Books, 2002), 440. The author first emphasized the ancient Greek origins of a Western way of war in Victor Davis Hanson, *The Western Way of War: Infantry Battle in Classical Greece* (Berkeley: University of California Press, 1989). While this earlier book has a few strong points, Hanson's approach to the origins and culture of Greek warfare has not held up to scrutiny. See Hans van Wees, "The Myth of the Middle-Class Army: Military and Social Status in Ancient Athens," in *War as a Cultural and Social Force: Essays on Warfare in Antiquity*, ed. Tønnes Bekker-Nielsen and Lise Hannestad (Copenhagen: C. A. Reitzels Forlag, 2001), 45–71; and Roel Konijnendijk, *Classical Greek Tactics: A Cultural History* (Leiden, Netherlands: Brill, 2018), 19–23.

[20] For examples of this, see Lynn, *Battle*, xvi, 14; and Citino, "Military Histories," 1085–86.

forces' aggressiveness and discipline, adding to those the auspicious impacts of technology, finance, and adaptability ("eclecticism").[21]

A Global Turn?

Partly in response to concern about the exceptionalism that "ways of war" studies may imply or express, as well as the problem of invidious prototypes in comparative history, some recent scholarship has sought to narrate military history from a global perspective. Among his nearly 200 books, prolific historian Jeremy Black has produced several such notable works. But Black, ironically, is more interested in debunking than revealing chronological and spatial connections that other historians have explored. Originally a historian of early modern Britain, Black as a military historian has most successfully debunked Western centrism in the discipline, using a global focus to assert several corrections. His work emphasized that Western military forces were not always successful, and he showed that wars involving Western powers frequently were not the world's centers of armed conflict. As a measure to restore agency to non-Western military powers, Black reminded readers that Westerners, while unique in the modern era to carry military force by naval ships, were hardly the world's only conquerors; in Asia, the horse as transport was, rather than a marker of primitivity, a logical alternative to European maritime expansion.[22] Though sometimes titling his work "global," Black's trademark emphasis was specific historical context and dispute of claims about diffusion of paradigmatic practices or systems. For him, the dominant—perhaps the only?—sure theme in global military history was "the centrality of variety."[23] By directly challenging international settings in which military historians increasingly locate their work, Black called scholars to more often study intrastate

---

[21] Geoffrey Parker, ed., *The Cambridge History of Warfare*, 2d ed. (Cambridge, UK: Cambridge University Press, 2020), v, 1, https://doi.org/10.1017/9781316855089.
[22] Jeremy Black, *Rethinking Military History* (London: Routledge, 2004), 23, 69–72.
[23] Jeremy Black, *Beyond the Military Revolution: War in the Seventeenth-Century World* (New York: Palgrave, 2011), 195.

civil wars, modern cross-border military overt and covert operations, and domestic police actions—partly with an eye to the recent rise of vigilante resistance to government even in democratic regimes.[24]

Black's call for the latter kinds of subnational military history, in order for it not to become merely a new military history focused restrictively on local phenomena, invites a global perspective, accomplished by methodologies of either comparison or connection in order to avoid writing history given too much to compilation or typology. To be sure, Black's work is exhaustive—but perhaps also exhausting. In studies of insurgencies, for example, Black digressed to include civil wars and revolutions, a scope that is perhaps technically correct but overstretches the meaning of insurgency for modern understanding.[25] One reviewer of Black's multiedition *Introduction to Global Military History* remarked that it suffered from "a fundamental problem inherent to . . . global [military] histories." While "repeatedly stressed multiple perspectivity" can help transcend the problem of centrism, inadequate explanation of local historical backgrounds and diverse motives of local actors, particularly non-Western insur-

---

[24] Jeremy Black, *War: A Short History* (London: Continuum, 2009), 7–8; and Black, *Rethinking Military History*, ix, 19, 52, 133, 192.

[25] Jeremy Black, *Insurgency and Counterinsurgency: A Global History* (Lanham, MD: Rowman & Littlefield, 2016); and Jeremy Black, *Insurgency Warfare: A Global History to the Present* (Lanham, MD: Rowman & Littlefield, 2023). The best studies of civil wars in history and modern counterinsurgency warfare are, respectively, David Armitage, *Civil Wars: A History in Ideas* (New York: Palgrave, 2018); and Douglas Porch, *Counterinsurgency: Exposing the Myths of the New Way of War* (New York: Cambridge University Press, 2014), https://doi.org/10.1017/CBO9781139226301.

Introduction

gents, renders such comparative studies "analytically without conse-quence."[26]

There have been several examples of global military history that address issues that Black's work pointed toward. A strong work in comparative military history that engages military development and usages of force is Wayne E. Lee's *Waging War.* Lee offered both synchronous and asynchronous comparisons. Government central-ization occurred in both Europe and Japan during the seventeenth century but had different outcomes: Europe gained military ca-pacity, while Japan saw the confiscation of weapons from peasant forces and a corollary concern about strengthening military force. During the same period, European military cultures proved open to innovation in firearms usage, whereas the Ottoman military, while it possessed similar weaponry, resisted new drilling and training. Meanwhile, agrarian societies took centuries to solve the challenge of invasions by steppe horsemen, whereas industrializing societies in the nineteenth century converted ships from wind to steam power within a few decades. Lee's work builds on previous military histories in regions outside the Atlantic world, but his comparisons illustrate how comparative history can expose false assumptions about nation-

---

[26] Stefanie Schüler-Springorum, "Review: Perspectives on War in the Twentieth Century," *Contemporary European History* 17, no. 4 (November 2008): 568. This is an example of the ob-servation by Stephen Morillo and Michael Pavkovic that postcolonial theory has not shaped military history to the extent that it has impacted other history subdisciplines. See Morillo and Pavkovic, *What Is Military History?*, 46. As another example, while scholars of the last generation have studied how people of color particularly experienced warfare, the literature remains organized along national or imperial boundaries. See Joseph T. Glatthaar, *Forged in Battle: The Civil War Alliance of Black Soldiers and White Officers* (Baton Rouge: Louisiana State University Press, 1990); Richard Fogarty, *Race and War in France: Colonial Subjects in the French Army, 1914–1918* (Baltimore, MD: Johns Hopkins University Press, 2008); David Killingray, *Fighting for Britain: African Soldiers in the Second World War* (Rochester, NY: James Currey, 2010); and Ruth Ginio, *The French Army and Its African Soldiers: The Years of Decoloni-zation* (Lincoln: University of Nebraska Press, 2017).

al or cultural exceptionalism and reveal hidden similar or analogous patterns of development across national or cultural boundaries.[27]

Regarding global history considered as the study of substantive "cross-connections and reciprocal influence," other examples of histories tracing transfer of doctrine, technology, people, and trial-and-error practices across national or imperial boundaries come to mind.[28] Some of this work has already been noted. Geoffrey Parker asserted that military training manuals and instructors circulated around early modern Europe, explaining in different languages the components and advantages of new Dutch infantry formations.[29] Likewise, Clifford J. Rogers stated that Spanish and Portuguese military planners "easily" transferred knowledge of artillery gained from wars with the Umayyad Caliphate in Iberia to conquests in the Americas and, beginning in the nineteenth century, Africa and East Asia.[30] Disputing Parker, Jeremy Black declared that Japan indeed borrowed from Europe militarily and claimed that their military resembled new European national armies.[31] Additional scholarship might address *how* innovation spread or remained localized within Europe, across European and American colonial military forces, and across indigenous forces resisting Euro-American colonialism.[32]

---

[27] Wayne E. Lee, *Waging War: Conflict, Culture, and Innovation in World History* (Oxford, UK: Oxford University Press, 2016). On account of cultural or religious attitudes—or, as more recently argued, the face of a weak Ottoman sultanate—the Ottoman military effectively, and perhaps inadvertently, resisted innovation during the seventeenth century, unlike Europe. See Bernard Lewis, *The Muslim Discovery of Europe* (New York: W. W. Norton, 2001); Burak Kadercan, "Strong Armies, Slow Adaptation: Civil-Military Relations and the Diffusion of Military Power," *International Security* 38, no. 3 (Winter 2013–14): 117–52, https://doi.org/10.1162/ISEC_a_00146; and Stephen Morillo, "Guns and Government: A Comparative Study of Europe and Japan," *Journal of World History* 6, no. 1 (Spring 1995): 75–106.

[28] Schüler-Springorum, "Perspectives on War in the Twentieth Century," 568.

[29] Parker, *The Military Revolution*, 20–22.

[30] Rogers, *The Military Revolution Debate*, 92.

[31] Jeremy Black, *War and the World: Military Power and the Fate of Continents, 1450–2000* (New Haven, CT: Yale University Press, 2000), 50–53.

[32] A useful review of literature and suggestions for further research along these lines can be found in Emily O. Goldman, "Cultural Foundations of Military Diffusion," *Review of International Studies* 32, no. 1 (January 2006): 69–91, https://doi.org/10.1017/S0260210506006930.

Reviewing works recognized for excellence by the Society for Military History (SMH) in the last two decades, only a few books on the garlanded list indicate effective usages of a global approach.[33] Robert M. Citino's *Blitzkrieg to Desert Storm*, for example, was a study in comparative history of whether, since World War II, conventional forces' campaigns that were successful in furthering a country's strategic objectives shared certain characteristics. Citino studied German, Soviet, U.S., and British forces in World War II, the United Nations (UN) force at the beginning of the Korean War, Israeli-Arab conflicts, India's war with Pakistan over Bangladesh in 1971, the Iraq-Iran War of the 1980s, and the Persian Gulf War. Suggesting how global and local histories might overlap, Citino argued that the early successes of the German *Wehrmacht* in its fast, armored offensive influenced strategic planners until recent time, although circumstantial challenges could inhibit success of that way of war.[34]

In an example of connected history, meanwhile, John Lawrence Tone's prize-winning *War and Genocide in Cuba, 1895–1898*, using Spanish, Cuban, and American archives, drew attention to the little studied guerrilla war in the Spanish colony before U.S. intervention. Tone's research showed that Spanish domestic politics shaped colonial policy more than has been assumed, that widespread civilian deaths were nearly as attributable to Cuban insurgents' tactics as to those of Spanish general Valeriano Weyler y Nicolau, and that American outrage over the humanitarian crisis—though Cuban rebels were as responsible for it as the Spanish occupiers—was more important than American business interests in triggering U.S. intervention.[35]

---

[33] "Distinguished Book Awards," Society for Military History, accessed 5 December 2023.
[34] Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence: University Press of Kansas, 2004).
[35] John Lawrence Tone, *War and Genocide in Cuba, 1895–1898* (Chapel Hill: University of North Carolina Press, 2006).

Conversely, SMH-award-winning books devoted to national, or local, military history are relatively numerous. This observation holds even in studies of colonial and imperial military settings, such as in regions of North America, Asia, and Africa where, over three centuries, nationally identifiable authority, borders, and actors all were tenuous. Such works set in North America include John Grenier's *The First Way of War*, Andrew Jackson O'Shaughnessy's study of 10 British officials whose errors lost the North American colonies for the empire, and Samuel J. Watson's studies of the American frontier army.[36] In Asia, they include Edward J. Drea's study of Japan's Imperial Army, Brian McAllister Linn's study of U.S. military development in the Pacific between the Philippine-American War and World War II, and Carter Malkasian's recent poignant critique of the U.S. occupation of Afghanistan.[37] In Africa, the pattern also holds true for Thomas Dodman and Douglas Porch's respective books on French colonial forces.[38] The flourishing of these kinds of histories is no doubt a product of several factors: the public's appetite for national military histories, particularly American military history and biographies; the challenge of research in multiple languages important in comparative or connected history; and the reality that in the modern era most military forces have been constituted in service of

---

[36] John Grenier, *The First Way of War: American War Making on the Frontier, 1607–1814* (Cambridge, UK: Cambridge University Press, 2005), https://doi.org/10.1017/CBO9780511817847; Andrew Jackson O'Shaughnessy, *The Men Who Lost America: British Leadership, the American Revolution, and the Fate of the Empire* (New Haven, CT: Yale University Press, 2014); Samuel J. Watson, *Jackson's Sword: The Army Officer Corps on the American Frontier, 1810–1821* (Lawrence: University Press of Kansas, 2012); and Samuel J. Watson, *Peacekeepers and Conquerors: The Army Officer Corps on the American Frontier, 1821–1846* (Lawrence: University Press of Kansas, 2013).

[37] Edward J. Drea, *Japan's Imperial Army: Its Rise and Fall, 1853–1945* (Lawrence: University Press of Kansas, 2009); Brian MacAllister Linn, *Guardians of Empire: The U.S. Army and the Pacific, 1902–1940* (Chapel Hill: University of North Carolina Press, 1999); and Carter Malkasian, *The American War in Afghanistan: A History* (New York: Oxford University Press, 2021).

[38] Thomas Dodman, *What Nostalgia Was: War, Empire, and the Time of a Deadly Emotion* (Chicago: University of Chicago Press, 2017); and Douglas Porch, *The French Foreign Legion: A Complete History of the Legendary Fighting Force* (New York: Skyhorse Publishing, 2010).

nation-states, whose perspective scholars intentionally or unintentionally adopt.

Organization of This Volume

There are often multiple ways of organizing a volume such as this one. Given the chronological spread of the chapter topics, from Ancient Greece to the mid-twentieth century Korean War, the editors could have taken the easy road and deployed a chronological flow. Such an ordering would have demonstrated the breadth of the military history coverage herein, but at the same time it would have obscured the themes that were originally sought out during the planning process for the 2023 military history conference at Western Illinois University (WIU). Therefore, this volume has been organized along the lines of local and global perspectives.

Highlighting Local Approaches

A traditional approach to much military history has been to examine the preparation for and conduct of warfare and its results as a local phenomenon. The military histories of the Mongol, Roman, or British empires, for example, can be treated and seen as localized culturally or geographically; local history does not necessarily equate with compact geographic regions. Localized approaches, while traditional, also do not equate with antiquarian or obsolete methodologies. Such studies are a fundamental part of history; when done well, they have much to inform us. As demonstrated by a number of the chapters here, historians of "war as local" are generally aware of recent trends and new methodologies available for their studies and draw upon diverse sources. Part 1 of this volume includes chapters that can be characterized as localized in their perspective, but within that realm readers will find that several of the chapters branch out into broader perspectives.

Leadership is one of the oldest topics with which military history is concerned, but some studies herein demonstrate that there re-

mains much to study and to learn. In chapter 1, Rosemary L. Moore takes a localized cultural approach in her analysis of ancient authors' reports regarding aspects of Scipio Africanus's career. A famous Roman commander during the Second Punic War (218–201 BCE), Scipio's reputation among Romans was complicated. Moore uses these ancient accounts to explore Roman attitudes toward officers' use of severity and generosity toward their soldiers. In so doing, her discussion treats the complexities of Roman military discipline, how their work informs us about discipline in the Roman army of the late third century BCE, and why sources treated Scipio the way they did.

In chapter 2, Lieutenant Colonel Michael H. Taint demonstrates the usefulness of a local approach in his examination of an early American Army logistical command, the Quartermaster General, during the late eighteenth century. He shows how early American logistical efforts oscillated between failure and success. The lack of appreciation for systematic provisioning, coupled with the perceived "invisible" status of the position, repeatedly undermined American military efforts, owing to incompetence, corruption, and the "law of unintended consequences." There was plenty of blame to go around. Far from narrating an endless series of failures, Taint also discusses the successes that a few competent quartermasters were able to achieve and explains clearly why these efforts were temporarily successful. Through his consideration of eighteenth-century attitudes to provisioning and the status of supply officers, he provides an interesting window on the early American military.

Chapter 3 takes the reader to the mid-twentieth century with an examination of U.S. military institutional culture. Military historians are accustomed to discussing inter-Service rivalries. Internal factionalism has been a part of many militaries even as it has taken many forms. Hal M. Friedman flips this paradigm by presenting an interesting case of inter-Service cooperation. He examines how in the aftermath of World War II, generals in the U.S. Army, Navy, and Air Force came together to create a plan to defend the Pacific Coast

of the United States. Such a plan evolved out of necessity combined with mutual shared interests at several command levels. Friedman's approach, like that of Moore, may be characterized as local rather than global. But it highlights a problem common among many modern defense institutions around the world.

In chapter 4, Michael Burns' focus on the rivers of Northern Virginia during the early campaigns of the American Civil War bears in many respects the hallmarks of a local perspective on military history. Burns demonstrates that these rivers played several roles in the opposing armies' strategies and maneuvers due to geological and topographic realities. Burns also explores how the water from the rivers became spoiled through their lack of flow and heavy use, as well as the effects that this had on soldiers and officers. He reminds readers that the role rivers play in warfare is locally determined—a function of the environment. Burns sets this point up by beginning the chapter with a consideration of environment and warfare, drawing particular attention to Micah Muscolino's useful concept of military metabolism. Although primarily a history of local conflict, Burns's chapter links up with the global approach to military history since the environment is an understudied aspect of every military activity.

Likewise, Ryan Hom's discussion of Greek cavalry during the fifth century BCE in chapter 5 straddles the division between local and global perspectives. Hom demonstrates the pragmatism of using the term *glocal* to refer to a perspective in military history. His chapter takes a local perspective to examine the difference in Sicilian cavalry as opposed to Greek mainland cavalry tactics. Hom demonstrates that Sicilian riders were using tactics influenced by contact with groups outside the island, either in Italy or as far away as the Iberian Peninsula. Although we do not have explicit testimony from ancient authors, Hom makes a strong case, based in part on the archaeological excavations and material culture, that there were external military connections among western Mediterranean cavalries.

His chapter suggests the appropriateness of a *glocal* perspective in the military history of the ancient world.

Taking a Global Approach

The "global" approach to military history is a more recent development in the field and is well-represented in part 2 of this volume. The global perspective on military history encourages scholars and readers to make connections across different societies and regions. This could include ideas and practices as well as weapon technology and even environmental connections. In particular, the global approach highlights how ideas and practices from one region or institution were adopted by or influenced practices in other regions. While each of the chapters in part 2 takes a global approach, the last three take an even more expansive global approach to military history, as they consider some similar issues including identity, broad conflicts, military logistics, and periodization.

In chapter 6, Timothy M. Roberts brings a global approach to consideration of doctrine and tactics in the American Civil War. Insurgency and counterinsurgency are issues that have been in the news and popular consciousness frequently around the world since World War II, but military historians pay scant attention to the emergence of such tactics in the period before the twentieth century.[39] Roberts shows that despite the heavy emphasis in post-Napoleonic military volumes on war by maneuver and managing large bodies of troops, there is an underappreciated aspect of European thinking that influenced some American officers in the years before 1860. He examines how American officers encountered and studied French colonial policies recognized as counterinsurgency. Not only did American officers read military books and manuals by French officers, but a number of them also served with French units

---

[39] For more on early insurgency see, for example, Timothy Howe and Lee L. Brice, eds., *Brill's Companion to Insurgency and Terrorism in the Ancient Mediterranean* (Leiden, Netherlands: Brill, 2016).

that deployed these tactics during colonial revolts. In this way, these tactics made their way to the United States before the Civil War and became part of the tactical toolbox available to Union officers seeking ways to defeat Confederate guerrilla tactics and the civilian support that contributed to their longevity.

Commemoration of war and the appropriate treatment of war dead has been a concern of many military cultures, but as a topic of study it has expanded dramatically in the last 30 years. While most works about war dead consider the topic from the perspective of a single state or culture, Alexander Belovsky takes a more global approach in an unusual treatment of war dead in chapter 7.[40] Belovsky studies British harvesting of bones from battlefields to supplement fertilizer. Readers accustomed to the various ways in which states and peoples have commemorated conflicts may be surprised to learn of this late-nineteenth-century practice. By incorporating a discussion of French and German responses, Belovsky provides a fascinating consideration of different attitudes to war dead in Western Europe and the exploitation of them. Like commemoration, this is a topic with global implications. An additional aspect of this chapter that should be characterized as a global perspective is Belovsky's treatment of environmental history. By considering the impact of the British practices on agriculture, his study contributes to furthering the intersection of environmental history and military history. Belovsky's approach provides an unexpected demonstration of culture and identity as well as the environment as topics to be explored through military history.

---

[40] See, for example, Paul Gough, "Commemoration of War," in *The Routledge Research Companion to Heritage and Identity*, ed. Brian Graham and Peter Howard (New York: Routledge, 2008), 215–29; Polly Low, Graham Oliver, and P. J. Rhodes, eds., *Cultures of Commemoration: War Memorials, Ancient and Modern* (Oxford, UK: Oxford University Press, 2012); and Danielle Drozdzewski, Sarah De Nardi, and Emma Waterton, eds., *Memory, Place and Identity: Commemoration and Remembrance of War and Conflict* (New York: Routledge, 2016).

Chapter 8, in which Lisa M. Brady examines the environmental impact of the U.S. Navy's activity in the Korean War, is the second chapter in this volume to approach military activity from the perspective of environmental history. Her discussion provides an interesting combination of local and global approaches. Brady draws attention to the many avenues for considering the consequences of UN naval operations on Korea and its surrounding waters, as well as the ways in which the Korean environment impacted operations. Her examination is local in the sense that she narrows her historical gaze to the Korean War and limits her consideration to the naval side of the conflict. But she demonstrates how an environmental history approach to naval warfare has much to inform readers about military operations and their impact on land and sea worldwide as well as how environments affect and constrain conceptions of planning and operations. Brady consequently provides a case study for considering the opportunities provided to military historians by this approach.

Examination of ancient logistics generally calls for a more global approach, given both the territorial and chronological scope of such an undertaking. In chapter 9, Lee L. Brice takes just such a perspective in examining the topic of logistics in ancient contexts. Beginning with a historiographical consideration of the place of logistics in military history, he shows how as a topic its lack of drama and other biases have contributed to inattention by ancient and many modern authors. In the course of reviewing ancient logistics of diet (food and drink), Brice shows that in early Greek and Roman history provisioning should be approached from a local perspective, focusing on each region respectively. As they examine local powers that expanded territorially, however, historians must take a more global approach to appreciate the difficulties and adaptations required to maintain military campaigns. During the Roman Empire, for example, the state was contracting for provisions and distributing masses

of military materiel over long distances throughout the Mediterranean and northern European regions. In the last part of his contribution, Brice addresses several aspects of ancient provisioning in need of further work, including attention to noncombatant camp followers and also the intersection of logistics and environmental history. Although there is more to cover than the limits of a short chapter permit, Brice provides a sense of how much opportunity there is for exploration. Studies of ancient military logistics require a flexible, global approach.

When military historians have traditionally considered the Eastern Mediterranean and Ottoman Empire in the early twentieth century, the topic has often been narrated as a period broken into a series of often disconnected conflicts leading to the presumed inevitable collapse of the traditional order. In chapter 10, James N. Tallon provides a significant reconsideration of this period. By expanding his historical gaze to consider a broad swath of the Eastern Mediterranean not limited to the Balkans, Anatolia, or the Middle East, he is able to argue that historians need to see the regional conflicts of this period as interconnected warfare instead of separate wars. He additionally argues that readers should see the history and dissolution of the Ottoman and Austro-Hungarian empires as tied to these regional conflicts rather than merely to World War I. Tallon's global approach shows the connections between international and intrastate wars in the period between 1911 and 1923. This perspective is certainly applicable in other regions and periods.

Like the ancient world, the world of the Middle Ages is often overlooked in considerations of global military history, but this need not be the case. In chapter 11, Stephen Morillo succeeds in providing a strong corrective to this frequent oversight and in the process provides the most globally inclusive perspective of the chapters in the volume. In a wide-ranging chapter based on his most recent book, *War and Conflict in the Middle Ages: A Global Perspective*, Morillo looks

beyond Europe and traditional periodization in a consideration of a different approach to global military history. He argues that historians can approach postclassical warfare as a discourse among states or protostates about identity and these entities' place in the world. In the process of his discussion, Morillo presents the interconnections across the Afro-Eurasian landmass in the preindustrial world as agrarian groups harnessed the same limited capacity to make war. The chapter's perspective introduces a larger approach to global military history.

Conclusion

Despite the division of these chapters into topical parts defined by contrasting approaches to military history, there are numerous intersections among them. The roles of officers, inter-Service relations, planning, the impacts of war, and the environment are all military history subtopics that appear within multiple chapters. These shared topics are an important aspect of this volume and reinforce the interconnectedness of the approaches that were emphasized in the conference and are emphasized here.

The presence of the U.S. Army's Rock Island Arsenal in Western Illinois inspired multiple authors to include military logistics either as their primary focus or as an aspect of their chapter. These contributions draw attention to both local and global approaches to provisioning. The more local approach is represented by Taint's chapter on logistics in early American military history. Likewise, readers may not expect ancient military logistics to have been so complex, but Brice's chapter demonstrates the importance of being open to a mixture of local and more global or *glocal* approaches to the topic. Friedman's chapter on inter-Service cooperation and coordination suggests how logistics was entangled in these relationships. The more environmentally focused chapters by Burns and Brady demonstrate the close connection that sometimes exists between environmental history and military logistics. Brady also demonstrates the

need to be open to the global repercussions of modern naval operations.

Combat in most wars is not global, certainly in the perspectives of those people fighting and dying, but warfare, as broadly defined by historians in the last half-century, has been shown to be a global phenomenon. Significant aspects of most armed conflicts transcend national, regional, and cultural boundaries. Even the imperial powers of ancient Iranians, Romans, and later the Mongols all demonstrated that premodern warfare could be global in some of its aspects. Military history can no longer be limited to local approaches. Just as the field has branched out to draw methodologies and approaches from other fields such as anthropology, data analytics, economics, sociology, and zooarchaeology, to name a few, it needs to combine the local with an openness to global perspectives on warfare. That said, while military history incorporates new methods, it has not abandoned its traditional basis in the history of making war. What the 2023 WIU conference and the contributions to this volume demonstrate is that military history needs both the local and the global approaches.

PART 1
Local Perspectives

Chapter 1

Nihil mitius superiore Africano (Valerius Maximus 2.7.12)

Political Image and Military Discipline in the Middle Roman Republic

Rosemary L. Moore, PhD[1]

This chapter considers one of the Latin writer Valerius Maximus's *exempla* (2.7.12) on military discipline, that of the Roman commander Scipio Africanus' crucifixion of Roman deserters during the Second Punic War (218–201 BCE), as a starting point in examining the development of Roman military discipline.[2] Modern readers, especially those familiar with Roman history, are aware of the significance of discipline to the Roman army as well as the ideology of Roman power. *Exempla*, however, are better known to classicists and historians of ancient Rome. Literally translated as "examples," they served as a mainstay of Roman writing and were frequently employed to demonstrate a particular ethical point, often to justify a contemporary action or, as the historian Livy states in the preface to his history of Rome, models to persuade, justify, imitate, or avoid.[3]

Using *exempla* as historical evidence, however, is tricky. Their function drew on knowledge that readers brought to the text—

---

[1] This chapter is formatted in the first-person perspective to best represent the information presented at the 2023 military history conference at Western Illinois University.
[2] Except where indicated, all ancient dates in this chapter are BCE.
[3] The literature on the Roman use of *exempla* is extensive. Starting points in the literature are Matthew B. Roller, *Models from the Past in Roman Culture: A World of Exempla* (Cambridge, UK: Cambridge University Press, 2018), https://doi.org/10.1017/9781316677353; and Rebecca Langlands, *Exemplary Ethics in Ancient Rome* (Cambridge, UK: Cambridge University Press, 2018), https://doi.org/10.1017/9781139629164.

"collective memory"—and the genre of narrative history in Roman literature belonged to rhetoric.[4] In practice, this means that an *exemplum* must be considered in the context of how and why it was deployed before evaluating it in a historical argument. Therefore, this chapter begins with a consideration of Valerius Maximus' characterization of Scipio Africanus as by nature *mitis* (gentle or merciful) yet capable, at the right time, of *severitas* (strictness or sternness), as relevant to the time of writing as well as its consistency with other, earlier accounts. I will then proceed to a discussion of Scipio's decision to crucify deserters located in its own context—that is, at the conclusion of the most difficult war Rome had fought to that point—considering whether it reflected leadership practices of the Middle Republic. Valerius Maximus' observation that such drastically opposed qualities as kindness and sternness were both parts of the character of one of Rome's greatest commanders serves as a useful gateway into the place of these qualities in Roman military training and discipline.

Valerius Maximus wrote his collection of *exempla*, *Facta et Dicta Memorabilia* (*Memorable Doings and Sayings*) during the reign of the second Roman emperor, Tiberius (14–37 CE). No other work of his has survived, and practically nothing is known of his own background. *Memorable Doings and Sayings* consists of nine books organized loosely around Roman institutions, values, and practices. Book 2 of the work focuses on institutions, though not always as formally structured as the modern use of the word might suggest. Chapter 2.1, "On Ancient Institutions," for example, addresses older Roman practices that were preferable to the current situation, such as women not drinking wine (2.1.5b). The unspoken reference here is to what the Romans called the *mos maiorum*—that is, maintaining

---

[4] Rebecca Langlands, " 'Reading for the Moral' in Valerius Maximus: The Case of 'Severitas'," *Cambridge Classical Journal* 54 (2008): 161–63, https://doi.org/10.1017/S1750270500000610; and A. J. Woodman, *Rhetoric in Classical Historiography: Four Studies* (Oxford, UK: Oxford University Press, 1988).

Nihil mitius superiore Africano

tradition, particularly values and practices. The importance of the *mos maiorum* to the Romans cannot be understated; it was one of the foundations of individual morality, family, and good government (as the Romans had no formal written constitution).[5] The topic of 2.7 is military discipline, which should be understood through the same lens: a reflection of the personal behavior of the commander, who was responsible for maintaining it, and its connection to the success of the Roman state.

Valerius' framing of the *mos maiorum* in Book 2 does not draw clear lines between what is often more compartmentalized, at least in modern American culture: personal behavior, family, and large institutions. His focus on people and the consequences of their decisions as strengthening or weakening Rome is understandable based on this logic. In the case of military discipline, the consequences of failure are dire, because the peace and prosperity of Rome require discipline for their existence, as Valerius writes in the preface to 2.7:

> I come now to the chief glory and mainstay of Roman empire preserved intact and safe up to the present time with salutary steadfastness, the tenacious bond of military discipline, in the bosom and protection of which rests our serene and tranquil state of blessed peace.[6]

---

[5] For the absence of a formal constitution and the role of the *mos maiorum*, see T. Corey Brennan, "Power and Process under the Roman 'Constitution'," in *The Cambridge Companion to the Roman Republic*, ed. Harriett I. Flower (Cambridge, UK: Cambridge University Press, 2004), 31, 33, https://doi.org/10.1017/CCOL0521807948.003; and John A. North, "The Constitution of the Roman Republic," in *A Companion to the Roman Republic*, ed. Nathan Rosenstein and Robert Morstein-Marx (Newark, NJ: John Wiley & Sons, 2006), 270.

[6] All translations of Valerius Maximus in this chapter are from the Loeb edition of Valerius Maximus, *Memorable Doings and Sayings*, 2 vols., ed. and trans. D. R. Shackleton Bailey (Cambridge, MA: Harvard University Press, 2000), hereafter Val. Max. Abbreviations for all ancient sources in this chapter can be found in Simon Hornblower, Antony Spawforth, and Esther Eidinow, eds., *The Oxford Classical Dictionary*, 4th ed. (Oxford, UK: Oxford University Press, 2012), xxvii–liii, https://doi.org/10.1093/acref/9780199545568.001.0001.

In general, the *exempla* may be characterized by stern decisive action taken from above to correct the errors of those below, whether low-ranking citizens, fellow aristocrats, or even family. These actions restore the correct order to the world by subduing its unpredictability and inherent hostility to Roman order. The final sentence in 2.7.14 encapsulates this approach: "For military discipline requires a harsh, brusque sort of punishment because strength consists in arms, and when these stray from the right path they will crush unless they be crushed."

Severitas (severity) is therefore essential within this context, particularly for the Roman army. *Severitas* was an essential part of the Roman society, both in the Roman *familia*: one power of the *paterfamilias* was of life or death over every member of the *familia*, including one's own children, as well as in the broader societal context.[7] In *exemplum* 2.7.6, Valerius Maximus presents two Romans who executed their sons for military disobedience. In these cases, despite the glory and courage the young men had won, both had broken rules to do so. The decisions their fathers, who were also their commanders, made illustrated a classic conflict for Roman aristocrats: one between loyalty to family and loyalty to the state. The correct answer in these and other *exempla*—for example, in the early books of Livy—is that the state should take precedence. But there were deeper potential consequences in these *exempla* for favoring family. For one of these fathers, Titus Manlius Torquatus, the sacrifice of his son was preferable than that the "fatherland should lose military discipline."[8] In these *exempla*, the authority of the father intersects with that of the military commander, whose corresponding power, *imperium*, justified and supported the extreme strictness of his actions. If a son was

---

[7] Langlands, " 'Reading for the Moral' in Valerius Maximus," 166; and Melissa Barden Dowling, *Clemency & Cruelty in the Roman World* (Ann Arbor: University of Michigan Press, 2009), 7, https://doi.org/10.3998/mpub.145291.
[8] Val. Max. 2.7.6.

Nihil mitius superiore Africano

not to be spared, then no one was above the law. The stark outcome of this exemplum seems to leave little room for nuance.

However, recent work on Valerius Maximus as well as the nature of Roman *exempla* locates in them the ambiguity and difficult choices that ethical behavior presents. Should a father's love, as well as the glory to his son and family, outweigh the loss of order that forgiving his son would cause, Valerius Maximus asked his audience.[9] Rebecca Langlands's analysis of Valerius' characterization of *severitas* explores the emphasis on such decisions while also highlighting the nuance inherent to these *exempla*, particularly the possibility of Valerius' reading audience applying them to their own lives.[10] One of the obstacles in applying *severitas* was balancing appropriate and inappropriate use. At some points, it was a necessary corrective, but at others it was cruel and could contribute to a reputation for cruelty.

Yet, the historical aspect of *exempla* also mattered. Matthew B. Roller points out that part of the tension in applying an *exemplum* was the contrast between the idealized quality it represented and the degree to which it could be applied as values and practices changed: the *mos maiorum* did shift over time.[11] Recent work on the Roman army in the Middle Republic casts serious doubt on the application of severe punishment in general, and decimation in particular, suggesting that our understanding of the entire system of military disci-

---

[9] Val. Max. 2.7.6.
[10] Langlands, " 'Reading for the Moral' in Valerius Maximus," 168, 173–78.
[11] Roller, *Models from the Past in Roman Culture*, 17–23.

pline must be overhauled.[12] Moreover, the complexity that Langlands identifies is internal and psychologically focused, with the *exemplum* focusing on the decision point rather than the full contextual complexity of the world in which the decision was made.

The happy outcome of the harsh choices made to restore discipline also masks the broader scope of Roman military and political careers. Roman commanders, for example, did not always conquer, and defeat did not necessarily ruin their careers. The commander Mancinus, whose forced surrender to the people of Numantia in 137 was widely regarded as humiliating, was not ruined by defeat, and he eventually was elected to an important magistracy and restored to the Roman Senate.[13] And of course there was an undeniable change from the original military and political context of Valerius Maximus 2.7.12 and Valerius' contemporary audience. The Republic, the period in which this and many of the Roman *exempla* he chose were set had long ended by the time he wrote. His Roman audience was subject to the reign of the emperor Tiberius. Political values were and had been changing, especially during the turbulent transition to imperial rule. One value in particular—*clementia* (clemency, with the related adjective *clemens*)—mattered far more in this period and

---

[12] Recent scholarship views the *severitas* of military discipline with skepticism. See, for example, Lee L. Brice, "Commanders' Responses to Mutinies in the Roman Army," in *People and Institutions in the Roman Empire*, ed. Andrea F. Gatzke, Lee L. Brice, and Matthew Trundle (Leiden, Netherlands: Brill, 2020), 44–67, https://doi.org/10.1163/9789004441378_006, which concludes that mutinous soldiers were generally lightly punished; Michael J. Taylor, "*Decimatio*: Myth, Discipline, and Death in the Roman Republic," *Antichthon* 56 (2022): 105–20, https://doi.org/10.1017/ann.2022.9, which suggests that the relative infrequence of decimation, based on the evidence, reflects its weakness as a tool to enforce discipline; and Dominic Machado, "Deconstructing *Disciplina*: Disentangling Ancient and Modern Ideologies of Military Discipline in the Middle Republic," *American Journal of Philology* 142, no. 3 (Fall 2021): 406–7, https://doi.org/10.1353/ajp.2021.0013, which positions *disciplina militaris* as an imperial virtue.

[13] Nathan S. Rosenstein, *Imperatores Victi: Military Defeat and Aristocratic Competition in the Middle and Late Republic* (Berkeley: University of California Press, 1990), 148–51. For a more detailed analysis, see Nathan S. Rosenstein, " '*Imperatores Victi*': The Case of C. Hostilius Mancinus," *Classical Antiquity* 5, no. 2 (October 1986): 230–52, https://doi.org/10.2307/25010850.

was closely associated with imperial virtue; for Tiberius, it was to be joined with a "fitness to rule."[14]

The adjective that Valerius Maximus applied to Scipio, *mitis*, along with the related noun *misericordia* (gentleness or kindness) was very close in meaning to *clementia*, underlining Langlands's point on political context, though with an important difference: while *clementia* indicates mercy for an acknowledged offense, *misericordia*, by contrast, is the antonym of *saevitia* (cruelty) and indicates kindness to one "in a position of helplessness or difficulty, often through fate or inadvertence."[15] Since the emperor possessed such latitude in carrying out justice, it would surely be a concern for all under his power that it be done fairly but also with a sense of humanity. The clear and incontestable differential in power between emperor and subject was reinforced by a judicious application of clemency, which obligated those who received it to the one who granted it.

Still, *severitas* had a necessary place.[16] Kindness applied to the ungrateful could be dangerous; it left open the possibility of retaliation as well as imitation. The emperor Tiberius advertised *clementia* as well as *moderatio* (self-control) at several points during his reign, the latter underlining that his mercy was granted prudently and not guaranteed.[17] Therefore, more generally, a leader's ability to decide on the optimal response was at least as important as, and likely much more important than, the emphasis of *severitas* itself. Each quality gained effectiveness by the possibility of choosing between the two; *severitas* therefore provides a course of action, to which *clementia* provides a judicious alternative.

Let us look further into the appropriate use of *severitas*, here in the case of Scipio crucifying Roman deserters. Valerius makes an obvious contrast between kindness and harshness, and he suggests that

---

[14] Dowling, *Clemency & Cruelty in the Roman World*, 170.
[15] Dowling, *Clemency & Cruelty in the Roman World*, 6.
[16] See footnote 12.
[17] Dowling, *Clemency & Cruelty in the Roman World*, 176–77.

Scipio made the right decision, despite his inherently gentle nature. The distinctions Valerius makes regarding desertion matter: these Roman and Latin soldiers did not merely abandon the Roman army; they joined and fought for Carthage.[18]

> The elder Africanus was the mildest of men. Yet for the confirmation of military discipline he thought proper to borrow some harshness from a cruelty quite alien to himself. When he had conquered Carthage and brought into his power all those who had deserted from our armies to the Carthaginians, he punished the Roman deserters more severely than the Latins, crucifying the former as runaways from their country and beheading the latter as faithless allies. I shall not pursue this action farther, both because it is Scipio's and because there is no need to insult Roman blood that suffered the punishment of slaves, however well deserved, especially as I am free to pass to doings which can be narrated without injury to national sentiment.[19]

This passage accords with the general tone that Valerius strikes on discipline: its inherent harshness, but also the necessity of upholding it to keep the Roman world peaceful, protected, and, most of all, orderly and obedient. The first conflict Scipio needed to resolve was not of competing loyalties, but rather of the difficulty an inherently kind man had to carry out such a harsh judgment. And this punishment, as will be elaborated below, was notably severe, so much so that Valerius views it as harmful to the state.

---

[18] Catherine Wolff, "*desertor*," "*proditor*," and "*transfuga*," in *The Encyclopedia of the Roman Army*, ed. Yann Le Bohec et al. (Malden, MA: Wiley-Blackwell, 2015). I will use *transfuga* to refer to the soldiers who Scipio had executed. The English language does not have words that reflect the degrees of military loyalty that Latin could express.
[19] Val. Max. 2.7.12.

Scipio's second dilemma was in deciding on effective punishments for soldiers who had actively betrayed the Roman army. Both Romans and Latins (the latter not having full citizen rights) comprised each category. The more significant treachery was committed by the Roman citizens, both deserters and particularly *transfugae*.[20] Based on Valerius's logic of *severitas*, in this instance *misericordia* would have been misapplied to Romans who chose to fight for the enemy. Not only would it weaken the Roman ideology of power and order, but it also weakened bonds of obligation as well as *fides* (loyalty). *Clementia* would have been unwise: how could one trust deserters to be loyal to their benefactor?

Roman soldiers were not the only ones who deserted. Valerius reports that Latins (probably those possessing Latin rights, meaning noncitizen allies who possessed desirable legal privileges at Rome) did as well. The humiliation of Roman deserters being executed by crucifixion was compounded by Latin deserters being executed in a fashion reserved for those of higher status.[21]

Yet, in this *exemplum*, Valerius Maximus practically apologizes for the decision to crucify. He acknowledges that in general crucifixion was an inappropriate punishment for free Romans, and his

---

[20] Roman soldiers took an oath of loyalty (the *sacramentum*) to their commander when they entered service as well as at other times of their service; the content and occasion changed during the course of the Republic. For the oath during the Middle Republic, see Polyb. 6.21.1–3; Louis Rawlings, "Army and Battle during the Conquest of Italy (350–264 BC)," in *A Companion to the Roman Army*, ed. Paul Erdkamp (Oxford, UK: Blackwell, 2007), 51, 57, https://doi.org/10.1002/9780470996577.ch4; and Dexter Hoyos, "The Age of Overseas Expansion (246–146 BC)," in Erdkamp, *A Companion to the Roman Army*, 67, https://doi.org/10.1002/9780470996577.ch5. On the connection between the oath and obedience, see Nathan Rosenstein, "Military Command, Political Power, and the Republican Elite," in Erdkamp, *A Companion to the Roman Army*, 141, https://doi.org/10.1002/9780470996577.ch9; and Arthur Keaveney, *The Army in the Roman Revolution* (London: Routledge, 2007), 90–92.

[21] The text suggests this distinction. See also Jean-Jacques Aubert, "A Double Standard in Roman Criminal Law?: The Death Penalty and Social Structure in Late Republican and Early Imperial Rome," in *Speculum Iuris: Roman Law as a Reflection of Social and Economic Life in Antiquity*, ed. Jean-Jacques Aubert and Boudewijn Sirks (Ann Arbor: University of Michigan Press, 2002), 9, https://doi.org/10.3998/mpub.17128.

concern arises from who usually received it: slaves.[22] It is this aspect that particularly disturbs Valerius, for whom the basic distinction between Roman and slave seems essential though the Roman soldiers in the *exemplum* had in fact abandoned their citizenship and deserved their punishment, as Valerius does admit.

It is possible that Valerius wished to avoid associating the power of a Roman *imperator* to execute with the possibility of the emperor treating citizens, who in Valerius' period possessed varying degrees of privilege and prestige, as if they were slaves.[23] The passage, after all, does begin with an emphatic characterization of Scipio Africanus as "nothing was gentler than the elder Africanus" (*nihil mitius superiore Africano*) that equates him to the abstract quality of kindness.

Clearly Valerius Maximus' purpose complicates considerably a purely historical focus. That such an emphasis comes in *exempla* often in tension if not in conversation, with historical context is consistent with this *exemplum*, as will be elaborated below.[24] The flattening of *exempla* to demonstrate a quality or action rather narrowly sidesteps that much of the *exempla* are historical events framed as theory, meaning what Valerius and his audience might learn and apply. The practice, on the other hand, apropos to the topic of this chapter, has to do with the capacity of Roman military commanders to act in the field, where matters of military discipline were of primary and direct importance. This is *severitas* in the real world, so to speak (and to the

---

[22] John Granger Cook, "Roman Crucifixions: From the Second Punic War to Constantine," *Zeitschrift für die Neutestamentliche Wissenschaft und die kunde der älteren Kirche* [*Journal for New Testament Science and the Knowledge of the Older Church*] 104, no. 1 (January 2013): 1–32, https://doi.org/10.1515/znw-2013-0001. This article provides attestations of the use of crucifixion by the Romans, with Second Punic War attestations on pp. 4–5.

[23] *Imperator* was the title awarded to a victorious commander as well as one of the titles held by Roman emperors. Under Roman law, slaves did not possess personhood. See Tristan S. Taylor, "Social Status, Legal Status and Legal Privilege," in *The Oxford Handbook of Roman Law and Society*, ed. Paul J. du Plessis, Clifford Ando, and Kaius Tuori (Oxford, UK: Oxford University Press, 2016), 349–51, https://doi.org/10.1093/oxfordhb/9780198728689.013.27.

[24] See Matthew B. Roller, "The Exemplary Past in Roman Historiography and Culture," in *The Cambridge Companion to the Roman Historians*, ed. Andrew Feldherr (Cambridge, UK: Cambridge University Press, 2009), 214–17, https://doi.org/10.1017/CCOL9780521854535.014.

extent to which we can recover it). And so, the matter of temperament may be considered from a different perspective. In what regard could Scipio Africanus have been *mitis*, and, more importantly, could—or *should*—a Roman military commander ever be considered *mitis*? More broadly, what qualities did Scipio Africanus possess as a commander, and what connections do they have to later commanders such as Scipio Aemilianus, considered by later Romans as an exemplar of military discipline?[25] Was there room for anything beyond *severitas*? What follows is an initial foray into the development and practice of Roman military discipline at the very beginning of Rome being positioned as a Mediterranean-wide power.

Scipio Africanus was not the only Roman commander to execute Roman and allied deserters and *transfugae.* He was hardly the first, or only, Roman commander to execute Roman soldiers at all. Decimation was practiced (though infrequently) before and during the Second Punic War. The Greek historian Polybius' well-known account of the Roman army describes it as *fustuarium*: the former a unit punishment that began with the execution by the rest of the unit of every randomly selected 10th soldier; the latter the often-fatal consequences of a soldier's conviction for crimes such as theft.[26] Valerius' book on military discipline adds what at first glance appear to be a variety of innovatively humiliating punishments, designed by the commander to suit the nature of the original offense.

What often strikes modern observers is exactly what Valerius emphasizes: *severitas.* Many armies have executed their own soldiers for crimes such as desertion; the Romans not only advertised doing it at scale, but also in ways, as demonstrated in Valerius, designed to

---

[25] For more on Scipio Aemilianus and his restoration of order at Numantia, see Val. Max. 2.7.1.

[26] Polyb. 6.37–38. For recorded decimations, see Taylor, "*Decimatio*," 107–9. The infrequent use of this punishment strongly suggests that the rhetoric of Roman military discipline did not match practice. For more, see Val. Max. 2.7.1.

be painful and humiliating.[27] Yet, this view of military discipline is incomplete. His focus is entirely on exemplary punishments that are by nature harsh and unforgiving. This emphasis on extreme cases misrepresents the core of discipline and replaces it with the trope, still current, of it consisting primarily of strictness and punishment. A more holistic view places at least as equivalent *training*, which is at the etymological root of *disciplina* (to learn), and the army obedience and morale that is maintained as a result. Such a view incorporates more of a soldier's experience—the majority of which would be spent outside of combat and can contextualize the harsher and more extreme punishments that also occurred.[28]

Further, despite the awards given for individual actions of courage, many accounts of training as well as battle portray soldiers learning how to work together, which not only improved skills but mutual trust.[29] While soldiers were encouraged to compete for the commander's notice, as well as that of each other, regarding their displays of courage, at the same time collective coordinated military actions, whether on the battlefield or in setting up camp, were also emphasized.[30] To be clear, *severitas* did play a role in Roman mili-

---

[27] Valerius describes both group punishments as well as individualized—and apparently improvised—punishments for a variety of infractions in Val. Max. 2.7.1–2. On the lack of systematic punishments, see Brice "Commanders' Responses to Mutinies in the Roman Army," 46.

[28] See footnote 12. Discipline is also structured by, and refers to, military regulations, which in part instantiate cultural beliefs. See Sara Elise Phang, *Roman Military Service: Ideologies of Discipline in the Late Republic and Early Principate* (Cambridge, UK: Cambridge University Press, 2008), https://doi.org/10.1017/CBO9780511497872; and Lee L. Brice, "SPQR SNAFU: Indiscipline and Internal Conflict in the Late Republic," in *Romans at War: Soldiers, Citizens, and Society in the Roman Republic*, ed. Jeremy Armstrong and Michael P. Fronda (London: Routledge, 2020), 249–51. On the modern historiography, see Brice, "Commanders' Responses to Mutinies in the Roman Army," 46–47.

[29] Valerius Maximus provides a well-known example in 2.7.1, in which Scipio Aemilianus expelled nonmilitary personnel and began an extensive retraining period including coordinating camp construction.

[30] Valerie A. Maxfield, *The Military Decorations of the Roman Army* (London: Batsford, 1981), 114–16. Polybius (6.39) describes some Roman military awards, as well as the importance of competition for motivating soldiers. Commanders personally made the awards to the soldiers.

Nihil mitius superiore Africano

tary discipline, but it alone was inadequate for military operations. A more productive method is to frame discipline as a program of behavior modification, based on training, but also concerned with producing obedience and maintaining morale.

Let us now turn to the historical context of this *exemplum*. First, there is independent support of this incident, as seen in Livy:

> They surrendered their warships, elephants, deserters, runaway slaves, and four thousand prisoners of war, including the senator Quintus Terentius Culleo. Scipio had the ships taken out to sea and burned. Some authorities state they numbered five hundred and included every kind of oar-propelled vessel, and that suddenly seeing them on fire was as painful for the Carthaginians as if it were Carthage itself going up in flames. Punishment for the deserters was harsher than for the runaway slaves: Latins were beheaded and Romans crucified.[31]

Here, *perfuga* is Livy's synonym for *transfuga*, and it is used to refer to both Roman and Latin deserters. The crucifixion, though of how many Roman and Latin soldiers is unknown, took place after Carthage's surrender to Rome in 204. In addition to surrendering warships, elephants, and 4,000 prisoners, deserters, and *transfugae*, both Roman and Latin allies were handed over. Valerius' *exemplum* is consistent with Livy's details about the punishment that Scipio Africanus assigned to these two groups, with both authors noting the unusual decision to punish Romans more harshly than Latins.

There is no doubt that Scipio was well within his rights to execute soldiers for desertion and treason. As with many other powers that Roman military commanders held during this period, it was the

---

[31] Livy 30.43.13. All translations of Livy in this chapter are from the Loeb edition of Livy, *History of Rome*, vol. 8, ed. and trans. J. C. Yardley (Cambridge, MA: Harvard University Press, 2021).

right of the commander, in contrast with the modern-day procedure laid out by the Uniform Code of Military Justice, to judge as well as lay out the specific penalty for such infractions.[32] The Roman army in the Republic had nothing like a systematic code of military law, and in general magistrates and commanders during this period apparently had much latitude to make such decisions independently.[33] For reasons that must have to do with an unusually long and bitter war, as well as Rome's Carthaginian opponent, Scipio chose crucifixion.

Why crucifixion? Several reasons come to mind. First, these soldiers had deserted to fight for the enemy during a long and difficult war. Regardless of the origin of this punishment, it is likely that Rome first came into contact with it via the Carthaginians, who themselves made use of it.[34] As these soldiers had, in essence, not simply given up their status as Roman citizens but also actively fought against Rome, as such becoming Carthaginian themselves, such a punishment seems appropriate. Perhaps for similar reasons, in 208 the people of Scapae crucified 600 Roman deserters who had attempted to take the town for Carthage.[35] The less humiliating punishment that Scipio Africanus gave to the Latin deserters, beheading, therefore highlights the depth of the treason Roman soldiers committed.

It is also worth noting that Valerius Maximus' concern about this *servile supplicium* (punishment appropriate for slaves) being meted out to Romans was, considering the context, misplaced. If even Roman prisoners of war were considered as equivalent to slaves until their citizen rights were reinstated (under *postliminium*), then surely

---

[32] This was probably with practical limits, following Taylor, "*Decimatio.*" Article 85 of *The Uniform Code of Military Justice*, concerning desertion, specifies that during wartime, the penalty of execution is possible and that such cases are addressed by court-martial and are not adjudicated by the commanding officer alone.

[33] See footnote 12 and Brice, "Commanders' Responses to Mutinies in the Roman Army," in particular.

[34] The first attested use of this punishment by Romans was during the Second Punic War (see footnote 22), though the origin of crucifixion is not known. Felicity Harley, "Crucifixion in Roman Antiquity: The State of the Field," *Journal of Early Christian Studies* 27, no. 2 (Summer 2019): 307, https://doi.org/10.1353/earl.2019.0022.

[35] Livy 27.28.4–13; App. *Hann.* 51.218; and Frontin. *Strat.* 3.2–3.

Nihil mitius superiore Africano

those who fought for the enemy had no claim to citizen privileges.[36] Valerius overlooks this important distinction while framing it so that it better suits his purpose in the imperial context. Yet, there remains the issue of Scipio being *mitis.* Is that a fair or even possible characterization given this *exemplum*? And did it have a place in Roman military discipline?

Without doubt, many Roman commanders throughout the Republic chose to commit mass violence, not infrequently using it to achieve certain objectives, even when that violence might be against one's own soldiers.[37] Scipio Africanus, known for his caution and careful planning in ancient accounts, is more accurately understood to have calculated the likely effect of such actions rather than acting out of what the Romans would have perceived as cruelty. While mass execution today would likely be considered a war crime, no such legal sanctions existed in this period. At the same time, it is difficult for a modern audience to avoid considering Scipio and many other commanders as ruthless, at the very least.

I limit this investigation to Polybius' account of Scipio's Spanish campaign. Scipio Africanus, perhaps the most famous Roman commander until Gaius Marius, came custom-fit with his own legend, to be discussed in relation to discipline. More broadly, his generalship during this watershed period provided a precedent for later Roman commanders of longer-term overseas campaigns, which characterized much of Roman warfare from this period onwards. Specifically, I address Polybius' characterization of Scipio and then proceed to the capture of New Carthage in 209 and the Battle of Ilipa in 206. All deserve much fuller discussion than can be given here.

---

[36] Matthew Leigh, *Comedy and the Rise of Rome* (Oxford, UK: Oxford University Press, 2004), 61–66.

[37] Gabriel Baker, *Spare No One: Mass Violence in Roman Warfare* (New York: Rowman & Littlefield, 2021). Editor's note: Several chapters in a forthcoming study, *Brill's Companion to Courage and Cowardice in Ancient Warfare*, unavailable to the author as of this writing, will also address this issue and provide context as well as a corrective to Baker, *Spare No One*.

Historians such as H. H. Scullard rightly credit Scipio with tremendous tactical innovation, a level unmatched by previous Roman commanders. His plan at Ilipa, making use of coordinated flying columns, can be said to match the sophistication of Hannibal's Carthaginian infantry and cavalry maneuvers at Cannae in 216.[38] This can only come about through intensive training over time. Elements that will be seen later, during the commands of Scipio Aemilianus, Marius, Pompey, Julius Caesar, and others—such as the conscious modeling of proper behavior, including the observation and direction of many aspects of training, the careful centering of the army within the camp structure (supplemented, of course, by the camp walls and guards), to lessen the likelihood of soldiers deserting, for example—are also seen in Scipio's approach.[39] Notable aspects, according to Polybius, such as Scipio's careful attention to the details of planning prior to the assault of Carthago Nova and his conduct during the battle, indicate a deliberate self-fashioning intended to manipulate the response of both the enemy and his army.[40]

> Scipio, then, when the fleet arrived in due time, decided to call a meeting of his troops and address them, using no other arguments than those which had carried conviction to himself and which I have above stated in detail. After proving to them that the project was feasible and pointing out briefly what loss its success would entail on the enemy and what an advantage it would be to themselves, he went on to promise gold crowns to those who should be the first to mount the wall and the usual rewards to such as

---

[38] H. H. Scullard, *Scipio Africanus: Soldier and Politician* (Ithaca, NY: Cornell University Press, 1970), 90–95; and B. H. Liddell Hart, *A Greater than Napoleon: Scipio Africanus* (London: Blackwood and Sons, 1927), 56–66.

[39] For such aspects of military command, see Rosemary Moore, "Generalship: Leadership and Command," in *The Oxford Handbook of Warfare in the Classical World*, ed. Brian Campbell and Lawrence A. Tritle (Oxford, UK: Oxford University Press, 2013), 457–73, https://doi.org/10.1093/oxfordhb/9780195304657.013.0023.

[40] Polyb. 10.11–14.

Nihil mitius superiore Africano

displayed conspicuous courage. Finally, he told them that it was Neptune who had first suggested this plan to him, appearing to him in his sleep, and promising that when the time for the action came he would render such conspicuous aid that his intervention would be manifest to the whole army. The combination in this speech of accurate calculation, of the promise of gold crowns, and therewithal of confidence in the help of Providence created great enthusiasm and ardour among the lads.[41]

As to Scipio's reputation for kindness, as well as his moderation, caution, and hard work—this is the point of Polybius' narrative in 10.2-6. That these qualities mattered in the military, and not simply the political, context, is apparent at 10.5.6–10,

Now it was not a matter of a dream at all, but as he was kind and munificent and agreeable in his address he reckoned on his popularity with the people, and so by cleverly adapting his action to the actual sentiment of the people and of his mother he not only attained his object but was believed to have acted under a sort of divine inspiration.[42]

Part of Polybius's agenda here was not simply to acknowledge Scipio's reputation for piety and divine approval, but to connect it to his careful planning and intelligence, which was deliberately framed by this approval. This is part of the rhetoric of command and stratagem, notable, for example, in Frontinus 1.12, "On Dispelling the Fears Inspired in Soldiers by Adverse Omens." In

---

[41] Polyb. 10.13. All translations of Polybius in this chapter are from the Loeb edition of Polybius, *The Histories*, vol. 3, trans. W. R. Paton, rev. F. W. Walbank and Christian Habicht (Cambridge, MA: Harvard University Press, 2011).
[42] Polyb. 10.5.7.

the first stratagem, Scipio manages to reverse what would normally be seen as a bad omen, tripping while disembarking a ship, by a quick-witted response: "Africa, I have hit you hard!"[43] That this was reported as a success suggests not only a special connection to divinity but also its calculated use to manipulate army morale.

What Polybius portrays is a "hearts and minds" approach that drew on intrinsic and extrinsic motivation for soldiers to succeed, in addition to the promise of divine approval. He also appeared in battle, though well-protected, to observe as well as be seen by soldiers: his presence demonstrated a certain level of physical courage, adding to the reputation for it he already possessed, while also providing direct observation of soldiers' courage, valuable proof for the awards he would give in case of a Roman victory.[44]

Scipio's careful and knowledgeable planning and observation of training is in the same vein.[45] While he (and his subordinates, usually erased from these narratives) guided army preparation, their presence promoted unity of purpose, while also reminding soldiers of the military hierarchy. Such operations that are carried out with skill promote the credibility of higher ranks in the eyes of the army. At the same time, such a distinction fits well into Nathan Rosenstein's characterization of the Roman aristocracy in this period in *Imperatores Victi*, though with an important difference: soldiers were teachable and worthy of respect, despite their status. I also argue here that the competitions Scipio and many other commanders encouraged support this assumption.[46]

---

[43] Frontin. *Strat*. 1.12.1. All translations of Frontinus in this chapter are from the Loeb edition of Frontinus, *Stratagems. Aqueducts of Rome*, trans. Charles E. Bennett (Cambridge, MA: Harvard University Press, 1925).

[44] See Polyb. 10.13.1–3; and Livy 21.46. During the Battle of the Trebia, fought in 218 soon after Hannibal invaded Italy, Scipio, age 16, saved his father's life. On military awards and the commander's attestation of a soldier's courage, see Valerie Maxfield, *The Military Decorations of the Roman Army*, 114–16. See also, for example, Caes. *BGall* 5.44, among many other instances.

[45] Polyb. 10.20.

[46] Rosenstein, "'*Imperatores Victi*'," 114–52.

Nihil mitius superiore Africano

That Polybius follows the victory at Ilipa with his account of the Roman army mutiny demonstrates that Scipio Africanus' leadership alone could not overcome any number of reasons for an army to become disaffected. In this case, Polybius identifies pay as the primary cause, although many other factors must have been present.[47] Scipio's response was to execute the leaders of the mutiny, a solution that Polybius praises for stopping the problem before it became widespread.[48] This may well be true. It also allows us to see beneath a "great man"—or, more specifically for Rome, an aristocratic rhetoric of leadership—that despite the illusion of control Scipio and many subsequent Roman commanders wished to project, such control could never exist in any large organization. Much else must also be considered in understanding Scipio's leadership, beginning with Roman military tradition and the role of subordinate officers. But his leadership did matter, not only in planning but also in providing a personal example for soldiers to follow.[49] I suggest that Scipio may represent a development of the aristocratic myth of leadership, one that was fostered by large armies serving on long campaigns far from home, as was the case with Greek portrayals of mercenary commanders such as Xenophon as well as Philip II and Alexander the Great, but one that also drew on powerful elements of group psychology, meaning that it cannot be dismissed as rhetoric. These commanders managed to emphasize obedience through maintaining a sense of common identity and sympathy with their soldiers, among other structures. Such a rhetoric suited well the role of commanders in the late Republic as well as certain aspects of the emperor's image.

This is also where *severitas* plays a role—the positive example that the leader provided had to be counterbalanced by the always-present possibility of punishment. On a larger scale, this is the purpose of

---

[47] Polyb. 11.20–30; and Brice "Commanders' Responses to Mutinies in the Roman Army," 50.
[48] Polyb. 11.30.
[49] Moore, "Generalship"; and Rosenstein, "Military Command, Political Power, and the Republican Elite," 141.

the crucifixion of Roman soldiers at the conclusion of the Second Punic War. Similarly, the mass violence Roman soldiers committed against a wide range of the inhabitants of Carthago Nova must have been present in the minds of the hostages Scipio later treated with mercy and kindness after capturing the city.[50] Neither reaction could characterize the entire point of Scipio's manner of command, both regarding his opponents as well as his own soldiers, something that Polybius and Valerius Maximus also recognized.

While Scipio could not be called a *commilito* (fellow soldier) commander, in contrast to how Pompey, Julius Caesar, Mark Antony, and many emperors would later present themselves, his approach to leadership would also be drawn on in establishing a Roman approach to command, one that drew on more sophisticated and systematic approaches to all aspects of army operations and management as well as attention to matters of psychology and personal presence to shape army motivation and morale.[51] In future work, I plan to establish connections to Scipio's own models, particularly Greek, as well as how changes in the politics and society of Roman Italy were reflected in later Roman military leadership.[52]

---

[50] Polyb. 10.17.6–10.18. This offers a jarring contrast from the brutality of the army's treatment of the city. See also Adam Ziolkowski, "*Urbs direpta* or How the Romans Sacked Cities," in *War and Society in the Roman World*, ed. John Rich and Graham Shipley (London: Routledge, 1995), 69–91, https://doi.org/10.4324/9781003071341. See also Josh Levithan, *Roman Siege Warfare* (Ann Arbor: University of Michigan Press, 2013), https://doi.org/10.3998/mpub.4464415; and Baker, *Spare No One*, 119–21, which notes the pattern of mercy and cruelty.

[51] J. B. Campbell, *The Emperor and the Roman Army, 31 BC–AD 235* (Oxford, UK: Clarendon Press, 1984) 32–41. Although Augustus refused to use the word *commilito* on the grounds that it was detrimental to discipline, the general manner of the "fellow-soldier" remained an important aspect of the emperor's approach to the army. See also Christopher P. R. Pelling on Plutarch, *Life of Antony*, 43.3–6. See also R. G. M. Nisbet, "Aeneas Imperator: Roman Generalship in an Epic Content," *Augustan Age* 3 (1983): 54–72, which provides an insightful summary of the "good general." I have work in progress on the *commilito* and psychological elements of military leadership.

[52] I would like to thank Lee L. Brice, Timothy M. Roberts, and the Department of History at Western Illinois University for their organization and support of the conference, as well as the conference attendees, Lee L. Brice, and the anonymous reviewer for their comments on the manuscript.

Nihil mitius superiore Africano

Chapter 2

An Early Failure
in Privatizing Military Supply

St. Clair's Defeat in the Northwest Indian War

Lieutenant Colonel Michael H. Taint, USAF (Ret)

Supplying the Revolution:
From Mercantile Capitalism to Supply by Contract

How to supply an army? Logistics are called "the sinews of war" for good reason. No matter how plentiful the troops or how remarkable their leadership, without food, ammunition, transportation, equipment, and clothing, an army cannot survive, let alone fight.[1] This chapter will examine the failure of the early U.S. government to develop a workable approach to military supply, caused by an overreliance on contractors and other nonmilitary agents, which endangered not only the American Revolution but also the Northwest Indian War of the 1790s.

At the onset of the American Revolutionary War (1775–83), the legislators of the Continental Congress—none of whom possessed any significant military expertise—lacked the experience and knowledge to build the logistics base necessary to sustain a new national Continental Army of 40,000–80,000 troops in the field. After all, the new army was initially a mere patchwork of 13 state militias, small units designed for short-term operations at home (typically 30 days or less) using private arms, equipment, and clothing. The Continental Congress rapidly appointed a whole array of clothier gener-

---

[1] For more on logistics, see chapter 9 in this volume.

als, quartermasters, wagon masters, commissary generals, and more with overlapping and confusing roles and responsibilities to address these needs, but this organizational patchwork rarely solved logistical issues.

Further complicating the issue was the scope of responsibilities for eighteenth-century quartermasters, which was much larger than those of their counterparts today. The eighteenth-century quartermaster performed a wide variety of staff functions integral to not only the logistical support but also the day-to-day operations of an army in the field. The quartermaster established the line of march, opened roads and bridges, provided wagons and horses (and their forage) for transportation, and selected bivouac sites. The quartermaster also oversaw the storage and issue of all camp equipment and tents, ammunition, and often clothing, which they had to first procure. As the historian Erna Risch wrote, the quartermaster was the closest thing to a modern commander's chief of staff. The role demanded a hard-to-find combination of acumen: "the Quartermaster General had to be not only a competent military officer but also an able administrator and a versatile businessman, familiar with the resources of the country and capable of drawing them out."[2]

The first supply chiefs mostly fell well short of these qualifications. They were colonial merchants, operating according to the usual practices of mercantile capitalism of the day: using private business networks for creating and moving goods from one locale to another for a fixed fee, typically 2–2.5 percent.[3] Little acquainted with or interested in the actual and ever-changing supply requirements of an army in the field, they viewed their responsibilities as business transactions from offices far removed from the battlefield or camp. Moreover, the fixed fee on public money opened potential for waste,

---

[2] Erna Risch, *Supplying Washington's Army* (Washington, DC: U.S. Army Center of Military History, 1981), 29.
[3] Erna Risch, *Quartermaster Support of the Army: A History of the Corps, 1775–1939* (Washington DC: U.S. Army Center of Military History, 1962), 7.

An Early Failure in Privatizing Military Supply

corruption, and abuse. Relying on merchants rather than military officers also meant that several critical military functions of the quartermaster, such as supply movement on campaign, were neglected.

As early as 1775, General George Washington, commander-in-chief of the Continental Army, was forced to cancel or curtail military operations because his troops lacked the requisite supplies, a crisis that reached its fever point at Valley Forge in the winter of 1777.[4] By January 1778, Washington felt compelled to write Congress with specific reforms that were "absolutely necessary" for the continuation of the war.[5] He wrote that the position of quartermaster required "a military character, a man of abilities, business and activity, well versed in the resources of the country" who would—and this was critical—"be almost constantly with the army, to see and know its wants."[6] Washington claimed to have no candidate in mind, but certainly he was not disappointed when his finest senior officer, Major General Nathanael Greene, was appointed on 2 March 1778. Though completely unenthused by this assignment that removed him from "the line of splendor" of field command and denied him his place "in the golden pages of History, while I am confined to a series of drudgery to pave the way for it," Greene threw himself into his responsibilities completely for two and a half years.[7] He constantly accompanied the army in the field and immediately worked on supply issues, which was precisely what Washington needed. Problems abounded, with transportation caused by lack of horses (and forage) and vehicles being the greatest. Greene quickly realized that his department was massively understaffed and significantly increased the quartermaster's staff of purchasing agents (who still worked commission, causing ongoing allegations of corruption). Greene's focus

---

[4] Risch, *Supplying Washington's Army*, 417.
[5] Charles R. Shrader, ed., *United States Army Logistics, 1775–1992: An Anthology*, vol. 1 (Washington, DC: U.S. Army Center of Military History, 1997), 82.
[6] Shrader, *United States Army Logistics*, 83.
[7] Curtis F. Morgan Jr., "Nathaniel Greene as Quartermaster General," *Journal of the American Revolution* (November 2013).

on the military mission over monetary constraints put the army back on an operational footing, and a supply crisis such as Valley Forge was never seen again during his tenure. Unfortunately, this successful model of the military officer/quartermaster did not endure.

Greene's biggest obstacle was one beyond his control: hyperinflation in the American wartime economy. Massive wartime expenditures and lack of confidence in the new Continental dollar (made worse by British counterfeiting), coupled with the Continental Congress's inability to tax the people, resulted in a heavy reliance on government credit, and by September 1779 even that stopped. The escalation in supply costs was astounding—from $5.4 million in 1776 to more than $9.2 million in 1777 and $37 million in 1778.[8] News of a projected $200 million supply cost in 1779 as hyperinflation peaked caused Congress to make Greene the scapegoat, and a foolish reduction of the Quartermaster's Department finally compelled him to resign. Greene transferred to a field command in the war's Southern theater, where a series of brilliant operations cemented his reputation as a hero of the Revolution—unlike his years of service as quartermaster, which was just as he had predicted.

After finally leaving the quartermaster's office, Greene asked Washington for his assessment of his performance. The commander-in-chief knew very well exactly what Greene had accomplished:

> When you were prevailed on to undertake the Office in March 1778 it was in great disorder and confusion and by extraordinary exertions You so arranged it, as to enable the Army to take the Field the moment it was necessary, and to move with rapidity after the Enemy when they left Philadelphia.[9]

As the wartime American economy continued to struggle, the Continental Congress devised a new plan for a "system of specific sup-

---

[8] Morgan, "Nathaniel Greene as Quartermaster General."
[9] Morgan, "Nathaniel Greene as Quartermaster General."

plies," pushing supply responsibilities back on the individual states.[10] Rations and other supply requirements were requisitioned in a specified quantity from each state, an approach that failed from a lack of enforcement at the national level, the fatal flaw in the confederation. Once again, provisioning shortfalls caused turmoil in the army, even leading to the start of mutiny. America's wealthiest merchant, Robert Morris Jr., accepted an appointment as superintendent of finance of the United States in 1781 from a Congress desperate for a solution, and he implemented the very businesslike solution of "supply by contract." Relying neither on suppliers' patriotism nor states' cooperation, army supplies would be contracted out on the open market to the lowest bidder (much like today) by a centralized government office without any commission or fee for the government agent. Supply by contract was certainly an improvement over the disastrous "system of supply," but it was used late in the war when the Continental Army was largely in a holding position, where provisioning was a great deal simpler than on campaign.[11]

In 1784, after the war had ended, Congress created a Board of Treasury run by three civilian commissioners to continue the administration of army supply contracts until complete demobilization in 1785, when the quartermaster function, viewed as expensive and superfluous, was abolished. No military officer would be appointed quartermaster again until after the War of 1812; instead, civilians performed this function in tandem with contractors.

The Northwest Indian War
and the Failed Harmar Expedition

When George Washington took office as the first president of the United States in April 1789, he immediately faced a host of foreign and domestic policy challenges. One of the most pressing was the crisis in the Ohio Country, the easternmost region of the Northwest

[10] Risch, *Quartermaster Support of the Army*, 58.
[11] Risch, *Supplying Washington's Army*, chap. 8.

Territory that the Treaty of Paris had granted the new United States. Though true on paper, this was far from a *fait accompli*. Native Americans—primarily the Shawnee and Miami—refused to recognize U.S. sovereignty or treaties made by other tribes that permitted limited White settlement in what is now eastern Ohio. Moreover, they were armed and encouraged by the British, who stubbornly maintained Fort Miamis near what is now Toledo, Ohio.

To secure the Ohio Country, Washington ordered the governor of the Northwest Territory, General Arthur St. Clair, to consult with the U.S. Army's commandant, Brevet Brigadier General Josiah Harmar, and develop a military response to the Shawnee and Miami from the Army's base at Fort Washington (present-day Cincinnati, Ohio). On 15 July 1790, the two agreed on a plan that looked promising. It called for a two-pronged attack on the Miami tribe's largest settlement, Kekionga (present-day Fort Wayne, Indiana). Harmar would lead the main force of 320 regulars plus a few artillery pieces, supplemented by the Kentucky militia's Colonel Josh Hardin and 1,133 men. While Harmar was able to destroy Kekionga, two subsequent battles against the combined Miami and Shawnee nations resulted in disastrous defeats with heavy casualties for the Americans. When Washington heard the news—along with rumors that Harmar had been drinking on campaign—he was furious, and wrote to Henry Knox, the secretary of war:

> I expected little from the moment I heard he was a drunkard.—I expected less as soon as I heard that on this account no confidence was reposed in him by the people of the Western Country.—And I gave up all hope of success, as soon as I heard that there were disputes with him about command.—[I am] prepared for the worst;—that is—for expence [*sic*] without honor or profit.[12]

---

[12] George Washington, *The Writings of George Washington*, vol. 12, *1790–1974*, ed. Worthington Chauncey Ford (New York: G. P. Putnam's Sons, 1891), 586.

Map 2.1. Map of the Northwest Indian War

MAP OF THE INDIAN WAR.

Source: Thomas J. Summers, *History of Marietta*
(Marietta, OH: Leader Publishing, 1903), 91.

Scapegoating Harmar was a ready excuse for Washington, but it was hardly a fair one. Indeed, during the Revolutionary War, Washington had called him "personally known to me as [one] of the best officers who were in the army."[13] The problem was not the commander, but

---

[13] Alan S. Brown, "The Role of the Army in Western Settlement: Josiah Harmar's Command, 1785–1790," *Pennsylvania Magazine of History and Biography* 93, no. 2 (April 1969): 162.

his militia troops and their supplies. Harmar, like most Army regulars, would have preferred to never deal with the militia at all. When the state militia reported for service in mid-September 1790, their condition was even worse than Harmar could have feared:

> Amongst the Militia were a great many hardly able to bear Arms, such as old infirm men, and young boys. They were not such as might be expected from a frontier country, viz. The smart active woodsmen, well accustomed to arms, eager and alert to revenge the injuries done them and their connections: No, there were a great number of them substitutes [men sent in the place of the usual militia] who probably had never fired a gun. Major Paul of Pennsylva [*sic*] told me that many of his men were so awkward that they could not take their gun locks off to oil them and put them on again, nor could they put in their Flints so as to be useful.[14]

Later, in actual combat, the militia simply broke and ran. As one of Harmar's officers recounted later, "But on the Indians firing (which was at a great distance) the Militia run, numbers throwing away their arms, nor could he ever rally them."[15]

Supplies were in as dire a strait as the condition of the militia troops. Harmar had struggled with this issue continuously throughout his postwar service in the West up to his 1790 campaign. Though the supply by contract approach seemed straightforward enough in theory, practice was something else entirely. The problems started at the very top of the new government, as responsibility for the procurement of supplies was split between Knox's War Department and the Board of Treasury. The War Department was to define the

---

[14] Basil Meek, "General Harmar's Campaign," *Ohio History Journal* 20, no. 1 (January 1911): 74–108.
[15] Meek, "General Harmar's Campaign," 100.

An Early Failure in Privatizing Military Supply

supply requirements and provide storage of supplies and equipment, while the Board of Treasury did the actual negotiation and selection of the contractors, and without any military input. This interdepartmental interaction often resulted in considerable delays in awarding contracts and exacerbated the conflicting interests of the military commander (flexibility and quick response to changing supply requirements) and the treasury/contractor (cost).[16] Once the contract was awarded, the treasury's role, save payment, was finished, while the Army had no leverage to rectify any issues in the field. For example, when James O'Hara, who had served as assistant quartermaster under Greene during the Revolutionary War and performed "tolerably well" in supplying the Continental Army in the West, was underbid and replaced by Turnbull, Marmie & Company in 1786, the contractor's performance was so miserable that Harmar simply gave up on it, complaining to Knox that "I placed no dependence on supplies from them."[17] As recently as January 1790 at Fort Washington, the post commander complained to Knox that the contractor was so unresponsive that the troops there were bordering on starvation.[18] Complaint was the only recourse he had. The arrival of a thousand ill-equipped militia made the logistical situation considerably worse. Not only did Harmar have to provide rations for them but:

> these were very ill equipped [*sic*], being almost destitute of Camp Kittles and axes, nor could a supply of these essential articles be procured. Their arms were generally very bad and unfit for service. I being Commanding Officer of Artillery, they came under my inspection in making what repairs the time would permit, and as a specimen of their badness am to in-

---

[16] James K. Perrin Jr., " 'Knavish Charges, Numerous Contractors, and a Devouring Monster': The Supply of the U.S. Army and Its Impact upon Economic Policy, 1775–1815" (PhD diss., Ohio State University, 2016), 156–57.

[17] Perrin, " 'Knavish Charges, Numerous Contractors, and a Devouring Monster'," 162.

[18] Wiley Sword, *President Washington's Indian War* (Norman: University of Oklahoma Press, 1985), 91.

form the court, that a Riffle [*sic*] was brought to be re-
paired without a lock and another without a stock.[19]

There was no quick fix for these issues. The Army was now on a
western frontier in a tiny village with poor communications, with
little or no local economy to draw on, and reliant for transportation
on the Ohio River, which was prone to freezing in winter and had
unnavigable low waters in summer.

With no military quartermaster, no time to prepare, and shod-
dy equipment and weapons, Harmar and his officers did the best
they could in a few weeks to provision the militia troops. One saving
grace was a change in the execution of the supply by contract para-
digm that had come about when the new constitutional government
replaced the Articles of Confederation: the War Department now
exerted direct control of these contracts. The new contractors were
charged by Knox to take contractual direction directly from Harmar,
not from the contract document, making Harmar *de facto* quarter-
master. By working directly with the field commander, and extending
their personal credit line to the maximum, they managed to deliver
on time even more food rations than required. They also provided
the packhorses and wagons necessary to transport the provisions on
campaign.[20] Harmar also benefited from having a small force and a
short campaign timetable (this rather *ad hoc* approach was unlikely to
"scale up," though, for a larger force). Washington replaced Harmar
as commander with Governor St. Clair, a former major general in the
Revolutionary War. St. Clair was recommissioned on 4 March 1791
to lead a second attempt to pacify the Native Americans. It would
result in the worst tactical defeat in the history of the U.S. Army.

---

[19] Meek, "General Harmar's Campaign," 96.
[20] *American State Papers, 1789–1838: Indian Affairs*, vol. 1, *1789–1814* (Washington, DC: Gales
and Seaton, 1832), 56.

A Second, Greater Campaign Failure: St. Clair's Defeat

Harmar's defeat by the Miami and Shawnee stirred Congress to take action. Knox reported that the Harmar expedition failed due to a "deficient number of good troops" and "want of sufficient discipline," so for St. Clair's expedition there was a significant increase in the tiny army.[21] St. Clair would have the benefit of not only a second regiment of regular infantry but also two regiments of federal "levies" (draftees) enlisted for six months, plus the Kentucky militia. Altogether, St. Clair would command four times the force led by Harmar.

Congress also attempted to address the shortfalls in logistics with moves that superficially appeared to be a return to the successful military quartermaster model from the Revolutionary War. Though there was no quartermaster department per se, Congress appointed Samuel Hodgdon, a former commissary of military stores and a quartermaster during the Revolutionary War, as quartermaster, albeit with some odd provisos. Though paid at the grade of lieutenant colonel, Hodgdon was a civilian and therefore was outside the military chain of command. None of the critical staff duties that Greene performed for Washington during the Revolutionary War, such as conducting the campaign march and finding adequate camp sites, would be part of Hodgdon's responsibilities. Moreover, because supply requirements had changed significantly due to the size of the force plus the transportation needed on campaign, Knox directed Hodgdon to remain at the capitol and not travel to Fort Washington until all the necessary supply contract arrangements had been made back at Philadelphia.[22] As a result, Hodgdon was absent from Fort Washington in the critical few months available for preparation before the expected summer campaign. He held the title of quarter-

---

[21] Harry M. Ward, *The Department of War, 1781–1795* (Pittsburgh, PA: University of Pittsburgh Press, 1962), 131.

[22] Perrin, " 'Knavish Charges, Numerous Contractors, and a Devouring Monster'," 169.

master, but functionally Hodgdon was a mere coordinator with no real responsibility to the field commander, St. Clair.

Still, things might have worked out had the contractor been exemplary, or at least satisfactory. This was decidedly not the case. The contractor, William Duer, had performed considerable—and important—government service during the Revolutionary War, including serving in the Continental Congress, on the Board of War, and even as assistant to the secretary of the treasury, Alexander Hamilton, in 1789. Yet, Duer seemed more interested in using this service to further his extensive and complicated mercantile and land business interests. This was not unusual in the late eighteenth century; as the historian Robert F. Jones wrote, "Eighteenth-century business standards were quite elastic on the point of what would now be called 'conflict of interest,' a conflict perceived dimly, if at all, by merchants of the Revolutionary period."[23] But even by the lax standards of his day, Duer—nicknamed "King of the Alley" by Thomas Jefferson for his shady dealings—was notorious, eventually dying in a debtor's prison after being the principal cause of the Panic of 1792. As Jones wrote, "Considerations of service and patriotism took second place—one is tempted to say, a distant second place."[24]

In April 1790, Duer resigned his position in the Treasury, "To do better," in his words, but probably under pressure from Hamilton because his reputation as a reckless speculator was becoming a political liability.[25] Duer became deeply involved in several land companies in what is now Ohio. But land speculation is an unpredictable business, and he needed a steady cash flow. One was readily available: an ongoing contract from the Army for the supply of the "western" posts held by Theodosius Fowler, awarded in October 1790.

---

[23] Robert F. Jones, "William Duer and the Business of Government in the Era of the American Revolution," *William and Mary Quarterly* 32, no. 3 (July 1975): 393, https://doi.org/10.2307/1922131.

[24] Robert F. Jones, *King of the Alley: William Duer, Politician, Entrepreneur, and Speculator, 1768–1799* (Philadelphia, PA: American Philosophical Society, 1992), 80.

[25] Jones, *King of the Alley*, 133.

An Early Failure in Privatizing Military Supply

Fowler secretly was Duer's agent; using such agents to disguise the real identity of a contract holder was a favorite deception of Duer's. Why the deception? Most likely this was because Duer had several still unsettled contracts with the government from the Revolutionary War and was viewed as overextended financially and a risk.

By the time St. Clair was assigned command, Duer had "assumed" the Army supply contract, and he handled it with his typical lack of attention to detail, including frequently failing to respond to important correspondence.[26] Unlike previous Army contractors, Duer never even considered visiting the western posts, preferring to administer them from the comforts of home. Distracted constantly by his multiple land ventures—high-risk, high-reward affairs—his main interest in the Army supply contract was maximizing profitability by cutting costs, accomplished by substituting locally hunted venison and indigenous meal for the beef and flour that the contract specified.[27] He also hired the cheapest possible labor, regardless of expertise, with predictable results. For instance, in the critical area of transportation, Duer's horse master knew so little of this business that 70 horses were lost during transport to Fort Washington because they were not properly hobbled or belled while foraging and simply wandered off.[28] All this economizing was not caused by a miserly federal government; Congress provided more than adequate funding. Advanced $75,000 from the Treasury, Duer had sufficient funds, but he diverted at least $10,000 to support a secret land investment scheme in Maine along with his business partner, Secretary of War Knox. This speculation consumed much of their time from April to July 1791, just when full attention was most needed for planning and preparations for St. Clair's upcoming campaign.[29]

---

[26] Jones, *King of the Alley*, viii.
[27] Jones, *King of the Alley*, 156.
[28] Sword, *President Washington's Indian War*, 162.
[29] Sword, *President Washington's Indian War*, 149.

Under pressure from Washington to conduct the campaign that summer in 1791 to save money, St. Clair feverishly threw himself into preparations that quartermaster Hodgdon should have been doing on site all along. St. Clair had to direct the manufacture or repair of a wide assortment of equipment at Fort Washington, as much of the existing equipment and material from the contractor was either substandard or missing altogether. Everything from muskets and wagons to clothing, ammunition, cooking kettles, and tents had to be made or repaired on the spot. As St. Clair later observed, "Fort Washington had as much the appearance of a large manufactory on the inside, as it had of a military post on the outside."[30] One Major David Ziegler, a Prussian immigrant and highly experienced soldier who served under Frederick the Great and fought in the American Revolutionary War, summarized it best: "from my own experience, I never saw such a degree of trouble thrown on the shoulders of any other general that I have served with, as upon general St. Clair, from the absence of the quarter master, and the preparations that were necessary to be made in his department."[31]

St. Clair became so frustrated with Hodgdon, who ignored his orders, that he later wrote "I would have brought him to a court-martial that moment he set his foot on shore at Fort Washington"—except, of course, that Hodgdon was a civilian and therefore immune from military discipline.[32] Under orders from Washington and Knox to commence the campaign, St. Clair departed Fort Washington on 7 October 1791 and headed for the Miami tribe stronghold of Kekionga, just as Harmar had. Given the conditions of the troops and supplies, it was not difficult to see that the campaign was likely to fail.

---

[30] Arthur St. Clair, *A Narrative of the Manner in which the Campaign against the Indians, in the Year One Thousand Seven Hundred and Ninety-One, Was Conducted, under the Command of Major General St. Clair, Together with His Observations on the Statements of the Secretary of War and the Quarter Master General, Relative Thereto, and the Reports of the Committees Appointed to Inquire into the Causes of the Failure Thereof* (Philadelphia, PA: Jane Aitken, 1812), 13, hereafter St. Clair, *Narrative*.
[31] St. Clair, *Narrative*, 209.
[32] St. Clair, *Narrative*, 21.

Harmar, who was still at Fort Washington, observed a junior officer about to go on the campaign, "conversed frequently and freely with a few of his friends; on the probable result of the campaign predicted a defeat. He suspected a disposition in me to resign; discouraged the idea. 'You must,' said he, 'go on the campaign; some will escape, and you may be among the number'."[33]

The Army made its first bivouac less than 3 kilometers from Fort Washington, and already it was short of food. While on the campaign troops were often on half-rations, and everyone knew of the "Unpardonable mismanagement in the provisions department [that led to the] troops [being] put on half allowance of flour."[34] Tents were "truly infamous" and leaked; axes were so soft they bent "like a dumpling" when chopping wood; weapons misfired from poor gunpowder or mechanical failure; and hospital stores were "extremely bad." The clothing issued was too thin for the wet and chilly autumn weather in Ohio.[35] The impact on troop morale must have been devastating.

Supply issues on the campaign plus a lack of discipline among the levies—who had "no discipline at all," according to the Army inspector general—and militia set up the final disaster. At the end of October, a wave of militia desertions occurred. Even worse, they threatened to intercept and pillage a much-needed supply convoy. According to St. Clair's aide de camp, the militia "march off in despite of everything and swear they will stop the pack horses with provisions. The first regiment dispatched after them, not with an expectation of bringing them back, but with that idea and to prevent future desertions, and principally to protect the convoys."[36]

St. Clair set up camp near the Wabash River at present-day Fort Recovery on the night of 3 November 1791. More than 160 kilome-

---

[33] Ebeneezer Denny, *Military Journal of Major Ebeneezer Denny, an Officer in the Revolutionary and Indian Wars* (Philadelphia: Historical Society of Pennsylvania, 1859), 153.
[34] Denny, *Military Journal of Major Ebeneezer Denny*, 157.
[35] St. Clair, *Narrative*, 207.
[36] Denny, *Military Journal of Major Ebeneezer Denny*, 162–63. The contractor had, in fact, failed to dispatch the convoy as promised, so the mission was fruitless.

ters from his base camp at Fort Washington and without any intelligence on Native American movements, St. Clair failed to fortify his position properly. The next morning at breakfast, a combined Miami-Shawnee force attacked the Americans. The militia broke and ran, as did the levies, and with the only reliable and combat-tested regiment of regulars, the 1st Infantry (who were guarding supply convoys, mostly from their own militia's pillaging, kilometers in the rear) absent, a total rout followed. Approximately 95 percent of the American combatants were killed or wounded in action—the worst defeat in battle in the history of the U.S. Army.[37] St. Clair and the few remaining troops staggered back the way they came to Fort Washington and notified Washington and Knox of the disaster.

Congressional Investigation

After hearing the news at his residence, President Washington flew into a rage. Surprise attack was the very thing he had warned St. Clair about based on his own frontier experience years earlier in the French and Indian War (1754–63). Perhaps his anger was also triggered at the thought of the inevitable political fallout from a second failed expedition. In any case, Congress wasted no time in taking up an inquiry.

A House committee, chaired by Representative Thomas Fitzsimons of Pennsylvania, performed their task with great alacrity, completing their report in less than six weeks on 8 May 1792. After examining all relevant documents provided by the Washington administration, they completely vindicated St. Clair as the Army's commander.[38] The committee noted the unusual transfer of the Army supply contract to Duer "without any security whatsoever." They also noted that in correspondence to Knox "repeated complaints were

---

[37] Sword, *President Washington's Indian War*, 190–91.
[38] The committee report is overly favorable to St. Clair, ignoring significant errors he made on the campaign that also contributed to the defeat. Washington and Knox played a prominent role in the disaster as well.

made of fatal mismanagements and neglects, in the quartermaster's and military stores department, particularly as to tents, knapsacks, camp kettles, cartridge boxes, packsaddles etc. all of which were deficient in quantity and bad in quality." Hodgdon's presence at Fort Washington for campaign preparations had been delayed, but "no sufficient causes have appeared to the committee to justify this delay, and his presence with the army appears to have been essentially necessary." Most of the muskets were "totally out of repair." The contract with Duer for supplying horses, critical for the transportation of supplies, was "a total failure." Clothing "appears to have been a very inferior quality, particularly coats, hats and shoes." The committee also noted the poor training and discipline of the levies and especially the militia and how this contributed to the disaster. The committee unequivocally absolved St. Clair—and pointed a finger at Knox and Washington—by noting that St. Clair's orders to proceed with the campaign "were express and unequivocal" and removed from him "any discretion."[39]

The report concluded that the "principal causes" for the defeat were:

1. The Congress itself, for passing appropriations so late in the year as to make a summer campaign virtually impossible;
2. "[T]he gross and various mismanagements and neglects in the Quartermaster's and contractors' departments"; and
3. "[W]ant of discipline and experience in the troops."[40]

In his "Report to the Committee," which greatly influenced their findings, St. Clair made this point about the supply situation emphatically clear: "Every branch of the army, above all the provisions, should be under the absolute direction of the general, in every respect, and not in any manner left to a contractor, or any person, who

---

[39] St. Clair, *Narrative*, 113.
[40] St. Clair, *Narrative*, 77–78.

can only be punished by a pecuniary forfeit."[41] The message could not be clearer—the current supply by contract scheme simply was not working.

Congressional Actions

Congress's solution, however, was not a return to the military quartermaster model, but rather the opposite: to strip supply procurement responsibility from the War Department completely and transfer it to the Treasury Department, as Secretary Hamilton had advocated for years.[42] Passed on 8 May 1792 (along with the second part of the Militia Act, an attempt to remedy the deficiencies in the troops), it stated: "That all purchases and contracts for supplying the Army with provisions, clothing, supplies in the Quarter-Masters Department, military stores, Indian goods, and all other supplies or articles for use of the Department of War, be made by or under the direction of the Treasury Department."[43]

This action, along with the committee report, was a clear indictment of Knox's performance as secretary of war. Unable to immediately respond, as Congress had just adjourned its first session, both he and quartermaster Hodgdon took advantage of the recess to formulate a rebuttal to the committee's report by appealing to the speaker of the House, Jonathan Trumbull Jr. (a Knox political ally) to reopen the investigation, which the House did. The nefarious contractor Duer was far too occupied elsewhere to answer, and he would soon be sent to debtor's prison.[44]

Hodgdon's defense consisted of a "memorial" written to the House committee in November 1792. After an opening rhetorical flourish, in which he claimed to be merely an innocent scapegoat, he cited at length glowing testimonials to the sufficiency of quality

---

[41] St. Clair, *Narrative*, 28.
[42] Lt Frederick P. Schmitt, USN, "The Founding of the Supply Corps—February 1795," *Navy Supply Corps Newsletter*, February 1970.
[43] Schmitt, "The Founding of the Supply Corps."
[44] Jones, *King of the Alley*, 185–95.

An Early Failure in Privatizing Military Supply

and quantity of his provisions. Unfortunately, most of these came either from the suppliers or Hodgdon's own quartermaster's assistant at Fort Pitt. Other factors cited by Hodgdon had some truth to them: the troops abused the equipment, and orders received from St. Clair were themselves late or unclear. Hodgdon's statement did little to change anyone's mind about the deficiencies of the supplies or their role in the defeat.

Aftermath and Conclusion

The House committee, having read the written responses from their initial report and questioned multiple eyewitnesses (Knox, Hodgdon, and St. Clair were present and allowed to ask questions), issued a final "corrected" report on 26 February 1793 and then dissolved. The final report made a few changes regarding supply, save a few qualifiers on the state of muskets and gunpowder based on testimony from the army inspector general, who claimed to have seen no issues there. In April 1792, Washington replaced Hodgdon as quartermaster with James O'Hara, a former assistant quartermaster during the Revolutionary War and a former Army contractor in the Ohio Country. With this change, with the contractor Duer now publicly disgraced, and with the Treasury now selecting and funding Army contractors, Congress felt that the supply issues from "St. Clair's defeat," as the campaign was popularly known, had been adequately addressed.[45]

They were wrong. Although O'Hara had more experience and more scrupulousness than Hodgdon had ever shown, he had even less control of the logistical situation than his predecessor. The ever-penurious Treasury Department once again selected as the supply contractor the firm Elliot and Williams, despite poor past performance, and they had little motivation to be responsive to what O'Hara and the new field commander, Major General Anthony Wayne,

---

[45] Though cleared by Congress of wrongdoing, Washington had St. Clair relieved of command as well. St. Clair regarded this as unjust and spent much of his remaining life attempting to fully clear his name, without success.

desired.[46] Indeed, Wayne's successful campaign in 1795 experienced many of the same supply and other logistical issues that had plagued St. Clair and Harmar, even after two full years of preparation. Echoing St. Clair, Wayne wrote of "the absolute necessity of some effectual and certain mode of supplying the army rather than the private contract"[47] Unfortunately, his tactical success against the Shawnee-Miami coalition at the Battle of Fallen Timbers masked these issues, and supply by contract continued to limp along until the War of 1812, when large-scale operations finally made it evident that supply was too important to be left to contractors and the military officer quartermaster paradigm was firmly reestablished.

---

[46] Risch, *Quartermaster Support of the Army*, 105–7.
[47] Risch, *Quartermaster Support of the Army*, 108.

Chapter 3

Defending the Pacific Coastal Frontier

Army-Navy Cooperation in the Defense of the U.S. West Coast, 1946–47

Hal M. Friedman, PhD

The military historians of the United States will be very familiar with intense, vociferous, and even unprofessional conduct between the U.S. Armed Services as they competed in defining and delineating post-World War II roles and missions during attempts by the administration of President Harry Truman to deal with the U.S. national debt. For the most part, bitter conflict between the Services was the norm. However, in some ways they cooperated when it was in their interests. When it came to defending the West Coast of the United States—what the military called the Pacific Coastal Frontier—the Army and Navy locally cooperated in terms of determining roles and missions in various global threat scenarios to the nation. Studying this little-known aspect of the defense unification fight in the late 1940s indicates the variety and complexity of Service interaction as well as the different contexts in which these conflicts took place.

Context

Inter-Service rivalry over roles and missions between the U.S. military Services did not begin at the conclusion of World War II. In fact, it had been quite intense during the entire conflict and even predated back to the first years of the twentieth century. For the most part, inter-Service rivalry was a product of the development of

military aviation. Before the invention of the airplane, it was generally understood that the U.S. Navy was responsible for national defense up to American shores and the U.S. Army then became responsible for defense from the shoreline inward. The creation of the airplane and its development for military application skewed this understanding since aircraft could operate over the sea. While that ability took some time in terms of operational aspects such as aircraft durability, navigational capability, and ordnance delivery, once these technologies and abilities came into existence, the Army could and did argue that it could begin taking over as the nation's first line of defense from the Navy. Aerial bombing tests conducted by Brigadier General William L. Mitchell, assistant chief of the U.S. Army Air Service, against U.S. and German naval vessels off the Virginia Capes in 1921; Mitchell's later claims for land-based military airpower; and his court-martial pontificating exemplified some of this growing inter-Service rivalry.[1]

This inter-Service rivalry was largely tempered during the interwar period after Mitchell's court-martial by the Services again focusing on branch-specific roles and missions. The Navy, for instance, prepared for a largely naval war against Imperial Japan in the Pacific, while the Army and its junior branch—variously the Army Air Service, the Army Air Corps, and finally the Army Air Forces (AAF)—focused on ground and air warfare in continental Europe.[2] World War II, however, was seminal in many ways. First, each Service had to take on missions that had not been foreseen.

---

[1] For the concept of dividing U.S. defense responsibilities between the Army and Navy until the advent of the airplane, see Kenneth E. Hamburger, "Technology, Doctrine, and Politics of U.S. Coast Defenses, 1880–1945: A Case Study in U.S. Defense Planning" (PhD diss., Duke University, 1986). For an excellent account not only of Mitchell's conduct and court-martial but also the biography of the officer who salvaged the Army Air Service's interests in the wake of Mitchell, see Robert P. White, *Mason Patrick and the Fight for Air Service Independence* (Washington, DC: Smithsonian Institution Press, 2001), 44–131.

[2] For the Navy's interwar plans, see Edward S. Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897–1945* (Annapolis, MD: Naval Institute Press, 1991). For interwar plans by the Army and Army Air Corps, see Michael R. Matheny, *Carrying the War to the Enemy: American Operational Art to 1945* (Norman: University of Oklahoma Press, 2011), 45–120.

Accordingly, each Service strayed into the other Service's portfolios. The Navy, for example, had to fly AAF land-based bombers over the Atlantic to fully carry out its antisubmarine role while the AAF in the Pacific at times had to undertake tactical skip-bombing against enemy warships as opposed to its desired focus on high-level strategic bombing.[3]

Even more so, the use of the atomic bomb in August 1945 gave the AAF a temporary land-based bombing monopoly that allowed the Service component to argue for administrative independence from the Army. The atomic bomb also gave the AAF the ammunition to lobby for presidential and congressional recognition that land-based atomic airpower could be the United States' new first line of defense. In turn, these arguments led the AAF to assert that it could replace the Army, the Navy, and the Marine Corps in a new world of "clean" and cheap atomic air defense.[4]

The huge cut in the nation's defense budget that resulted from President Truman's attempt to deal with the national debt meant that the Services would bitterly fight over the assignment of roles

---

[3] For the Army Air Forces being forced into skip-bombing tactics that equated more with Navy tactical strikes at sea than strategic bombing, see Donald M. Goldstein, "Ennis C. Whitehead, Aerospace Commander and Pioneer" (PhD diss., University of Denver, 1970), 79–197; and Thomas Griffith, *MacArthur's Airman: General George C. Kenney and the War in the Southwestern Pacific* (Lawrence: University Press of Kansas, 1998), 82–83, 108. For the Navy having to employ Consolidated B-24 Liberator heavy bombers in the Battle of the Atlantic and for the larger debates over wartime roles becoming postwar political postures, see Paolo E. Coletta, *The United States Navy and Defense Unification, 1947–1953* (Newark: University of Delaware Press, 1981); and Jeffrey G. Barlow, *Revolt of the Admirals: The Fight for Naval Aviation, 1945–1950* (Washington, DC: Naval Historical Center, 1994).

[4] The historiography on U.S. military inter-Service rivalry between 1945 and 1950 is immense and cannot be fully documented here. However, a few key examples are Vincent Davis, *Postwar Defense Policy and the U.S. Navy, 1943–46* (Chapel Hill: University of North Carolina Press, 1966); Coletta, *The United States Navy and Defense Unification*; Harry R. Barowski, *A Hollow Threat: Strategic Air Power and Containment before Korea* (Westport, CT: Greenwood Press, 1982); Michael S. Sherry, *Preparing for the Next War: American Plans for Postwar Defense, 1941–45* (New Haven, CT: Yale University Press, 1977); Gordon W. Keiser, *The U.S. Marine Corps and Defense Unification, 1944–47: The Politics of Survival* (Washington, DC: National Defense University Press, 1982); Michael A. Palmer, *Origins of the Maritime Strategy: The Development of American Naval Strategy, 1945–1955* (Annapolis, MD: Naval Institute Press, 1988); and Barlow, *Revolt of the Admirals*.

and missions since such assignments would dictate force size, personnel levels, equipment, and budgets. All of these factors would then determine an individual Service's clout—or lack thereof—on Capitol Hill and in the White House as well as with the media and the public. Consequently, some of this bitter conflict also brought about some of the most unprofessional conduct by senior U.S. military personnel in the nation's history.[5] However, not all interaction was negative, bitter, or confrontational.

Given that divided command in the wartime Pacific theater of operations was the focal point of the postwar debate over unification, the Truman administration attempted to solve the problem by creating the Unified Command Plan of 1946, whereby all overseas U.S. forces were brought under a unified commander of one Service or the other. Conflicts over roles, missions, and command arrangements continued, but there was still some cooperation.[6]

The Pacific Coastal Frontier and the Western Sea Frontier Agreement

On 19 April 1946, Lieutenant General George E. Stratemeyer, commanding general of the AAF's Air Defense Command (ADC), sent a letter to General Carl A. Spaatz, commanding general of the AAF.[7] Stratemeyer told Spaatz that a secret urgent radio message was received that day from Major General Willis H. Hale, the commanding general of the Fourth Air Force. Hale told Stratemeyer that pursuant to a request from General Joseph W. Stilwell, the commanding general of the Sixth Army, Hale's headquarters was participating in preparations for interim Joint war plans for the de-

---

[5] Michael J. Hogan, *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945–1954* (Cambridge, UK: Cambridge University Press, 1998), https://doi.org/10.1017/CBO9780511664984.

[6] For context on Pacific War inter-Service rivalry that led to the Unified Command Plan of 1946, see Hal Friedman, *Arguing over the American Lake: Bureaucracy and Rivalry in the U.S. Pacific, 1945–1947* (College Station: Texas A&M University Press, 2009), 1–127.

[7] The officers involved in the events discussed in this chapter are listed in order of appearance in table 3.1.

fense of what he called the Pacific Coastal Frontier. Hale also told Stratemeyer that Army, Navy, and AAF representatives were meeting weekly for discussion and formulation of the plan. Hale further told Stratemeyer that principal consideration was being given to defense from air bombardment, airborne landings, and submarine attacks against coastal installations.[8]

Hale next informed Stratemeyer and Spaatz that the area under consideration corresponded approximately to the Fourth Air Force Area, with first priority given to the Pacific Northwest. According to Hale, the plan had progressed to the point where it was necessary to know what forces of all types were available for emergencies. Hale also needed to know the procedure for committing these forces to action. Although the Fourth Air Force was charged with the defense of what he at times called the Pacific Coastal Area, Hale reminded Stratemeyer and Spaatz that his command had no control over any air combat organizations. Hale therefore thought that it was essential that arrangements be made with the AAF's Tactical Air Command (TAC) to provide the forces that were necessary to meet the emergency conditions outlined above. He also noted that some of the problems requiring an immediate solution included the forces that could be made available and how soon those forces could meet the various situations. In addition, Hale needed to know what procedure was to be used to obtain these forces. Finally, Hale needed to know what headquarters exercised operational control over the air forces that were directly involved in the defense of the Pacific Coastal Area. He therefore requested all possible information relative to these questions be furnished to his headquarters prior to 24 April, the date of the next Joint Planning Board meeting.[9]

---

[8] LtGen George E. Stratemeyer, USAAF, to Gen Carl A. Spaatz, USAAF, "Air Defense, Pacific Coastal Frontier," 19 April 1946, Folder Tactical Air, April 1946, Special Planning Division, Postwar Division, 145.86-78, Air Force Historical Research Center, Maxwell AFB, AL, 1.
[9] Stratemeyer to Spaatz, "Air Defense, Pacific Coastal Frontier," 19 April 1946, 1.

Hale then suggested to Stratemeyer and Spaatz that a representative from Stratemeyer's command be present at the next meeting to obtain a "complete picture" concerning the problems of air defense in the Pacific Coastal Area. In connection with the above discussion, Hale "urgently" recommended that fighter units that were best suited for air defense—principally Lockheed P-80 Shooting Star units—be returned to the command jurisdiction of the ADC. Stratemeyer told Spaatz that he understood that he was responsible for air defense, but he also said that he did not yet have combat units under his control that could be allocated for this task. He further reminded Spaatz that the ADC had recently urged the assignment of a P-80 group at March Field in southern California to the ADC since this aircraft was primarily an interceptor type of "air weapon." Pending a "definite" decision on this matter, Stratemeyer recommended that action be taken to specify the combat air units in the United States that might be used for air defense in the event of an emergency.[10]

Stratemeyer further suggested that Major General Elwood R. Quesada, the commanding general of the TAC, and General George C. Kenney, the commanding general of the Strategic Air Command (SAC), be advised of the units that could be placed under Stratemeyer's ADC in the event of an emergency. Stratemeyer was including the units in air defense plans that had authority for "direct dealing" with Kenney and Quesada in formulating those plans. Stratemeyer also thought that it was "obvious" that the question of operational control over antiaircraft units had to be determined for the "proper" integration of all active defense measures. Stratemeyer concluded his communication to Spaatz by further requesting that necessary information be made available as a matter of urgency so that a reply could be made to Hale as the latter worked with

---

[10] Stratemeyer to Spaatz, "Air Defense, Pacific Coastal Frontier," 19 April 1946, 2.

Figure 3.1. The Pacific Coastal Frontier and Western Sea Frontier

Source: courtesy of the Navy Operational Archives.

Stilwell in the preparation of plans for the defense of the Pacific Coastal Frontier.[11]

While additional planning by the AAF took place later in April, the Navy entered the discussions on 22 October 1946, when a short office memorandum went from Rear Admiral Cato D. Glover Jr., the assistant chief of naval operations for strategic plans, to Vice Admiral Forrest P. Sherman, the deputy chief of naval operations for operations. Sherman had received an inquiry from Admiral Richard S. Edwards, commander of the Western Sea Frontier, about

---

[11] Stratemeyer to Spaatz, "Air Defense, Pacific Coastal Frontier," 19 April 1946, 2. For additional details on these potential deployments, especially the types of units to be deployed, see BGen Francis H. Griswold, USAAF, to LtGen George E. Stratemeyer, USAAF, "Air Defense, Pacific Coastal Frontier," 20 April 1946, Folder Tactical Air, April 1946, Special Planning Division, Postwar Division, 145.86-78, Air Force Historic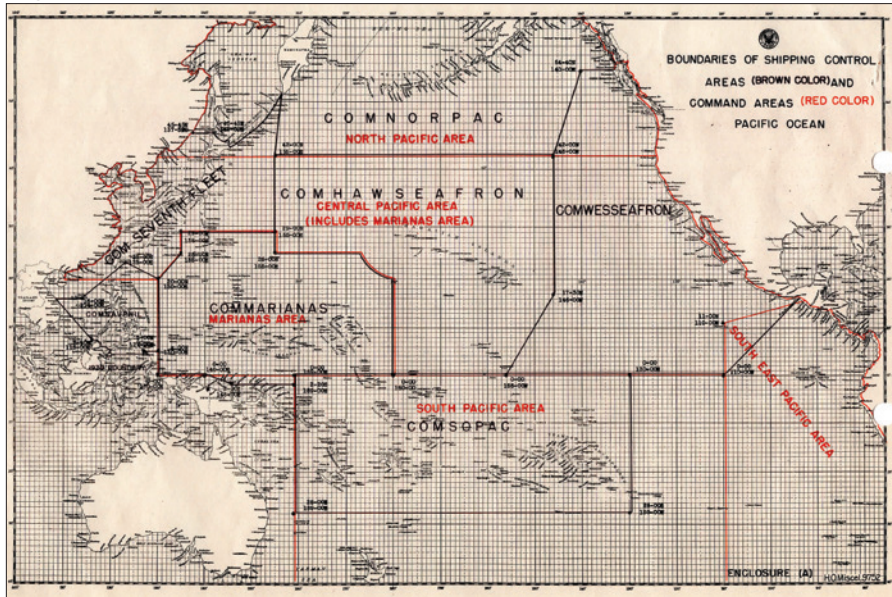al Research Center, Maxwell AFB, AL, 1. For an analysis of combat unit availability and effectiveness, see BGen Francis H. Griswold, USAAF, "Air Combat Unit and Supporting Services," no date, Folder Tactical Air, April 1946, Special Planning Division, Postwar Division, 145.86-78, Air Force Historical Research Center, Maxwell AFB, AL, 1–4.

Joint defense plans for the U.S. West Coast with the Army. Glover indicated to Sherman that along with the office memorandum was an attached reply prepared for Sherman to Edwards. Without going into detail about the memorandum, Glover concluded by recommending that Sherman sign the attached reply.[12] This seemingly inconclusive memo would mark the beginning of the inter-Service paper trail over the defense of the Pacific Coastal Frontier, the rare instance of Army-Navy cooperation taking place during the "Battle of the Potomac."

The next day, Sherman sent Fleet Admiral Chester W. Nimitz, the chief of naval operations, a memorandum on Joint planning for the defense of the Pacific Coastal Frontier. Sherman told Nimitz that two days before, Captain Paul L. DeVos, Western Sea Frontier planning officer, arrived from San Francisco, California, and brought with him an attached letter and plan for the Joint defense of the Pacific Coastal Frontier. The letter related how in May 1946, Admiral Edwards, General Stilwell, and Major General Hale signed a Joint Agreement that was to form the basis for planning to ensure the defense of the "Western Sea Coast." The Joint Agreement was almost entirely and exactly the same as the one that was signed between the War and Navy Departments in 1942 and had served as the guidance for national defense during the war. Sherman also

---

[12] RAdm Cato D. Glover Jr., USN, to VAdm Forrest P. Sherman, USN, "Western Sea Frontier—Joint Defense Plans," 22 October 1946, Folder A16-1, National Defense, 1/45–12/46, Box 106, Series 5, Strategic Plans Division Records, Record Group 38, Modern Military Records Branch, National Archives II, College Park, MD (hereafter Strategic Plans, RG 38, MMRB, NA II), 1. For an earlier example of Army-Navy cooperation when it came to the delineation of zones of operation in the Bering Sea Area, see VAdm Forrest P. Sherman, USN, to FAdm Chester W. Nimitz, USN, "Operation of Military Aircraft in the Bering Sea Area," 6 June 1946, Folder Serial File ("Spindles—Top Secret") 1-3/46, Box 85, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1. See also FAdm Chester W. Nimitz, USN, to GA Dwight D. Eisenhower, USA, "Operation of Military Aircraft in the Bering Sea Area," 7 June 1946, Folder Serial File ("Spindles—Top Secret") 1-3/46, Box 85, Series 4, Strategic Plans, RG 38, MMRB, NA II, MD, 1–2. For cooperation between the two Services over Joint amphibious exercises, see FAdm Chester W. Nimitz, USN, to Adm John H. Towers, USN, 121521Z, 13 August 1946, Folder A-2 Amphibious Warfare, Organization, Operations, Etc. (2/42–10/46), Box 154, Series 12, Strategic Plans, RG 38, MMRB, NA II, 1.

reminded Nimitz that the Joint Agreement led to the Joint Plan and was accepted by the three commanders, subject to approval by higher authority. He further reminded Nimitz that he had circulated the plan for review in the Office of the Chief of Naval Operations. To Sherman, the plan "appeared to be an excellent solution to the problem."[13]

Sherman also related that General Stillwell had forwarded the plan to General Jacob L. Devers, commanding general of the Army Ground Forces, with a strong recommendation that both the Joint Agreement as it applied to unity of command and the Joint Interim Plan be approved. In addition, Major General Hale sent the Joint Interim Plan to Lieutenant General Stratemeyer. Stratemeyer, however, rejected the plan. Consequently, Hale withdrew the Joint Agreement, stating several reasons for doing so. Stratemeyer's major objection to the plan was that it failed to recognize—at least to him—the Fourth Air Force on a "coordinate level" with the Western Sea Frontier and the Sixth Army. There were further objections to the use of the concepts such as "Unity of Command," "State of Non-Invasion," "Fleet-Opposed Invasion," and "Army-Opposed Invasion." Additionally, the responsibility for the air defense of the Fourth Air Force Area had already been delegated to the commanding general of the Fourth Air Force by the AAF. Even more so, Stratemeyer saw the major threat to the Pacific Coastal Frontier to be from air attack, and therefore air defense warranted "first priority." He further thought that the Joint Chiefs of Staff would appoint a theater commander at the outbreak of hostilities or an "imminent threat" of hostilities. Finally, Stratemeyer argued that Joint action by the Army and Navy did not provide for unity of command during peacetime as a method of coordination but merely prescribed "mutual cooperation." Sherman concluded by telling

---

[13] VAdm Forrest P. Sherman, USN, to FAdm Chester W. Nimitz, USN, "Joint Planning for Defense of Pacific Coastal Frontier," 23 October 1946, Folder Serial File ("Spindles—Secret") 1946, Box 85, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1.

Nimitz that the matter was "essentially" one involving command structures. Since this matter was currently under "active consideration" by the Joint Chiefs of Staff, he recommended that Nimitz discuss this particular phase of the problem with General of the Army Dwight D. Eisenhower, chief of staff of the Army, on an informal basis. Sherman's idea was that an informal discussion would find Eisenhower and Nimitz reaching a solution concurrently with a final decision reached on the overall problem. He concluded by telling Nimitz that the "war time agreements concerning command arrangements for the defense of the United States should remain in effect for the time being and until we have something better."[14]

The next day, Nimitz responded to a letter from Admiral Edwards. Several days before, Edwards had communicated with Nimitz about "workable" interim Joint agreements with the Army for the defense of the Pacific Coastal Frontier. Nimitz acknowledged receipt of this communication and told Edwards that the entire matter of Joint command structures and relations was under "active consideration." He also told Edwards that final agreements and decisions had not yet been reached but that "considerable" progress had been made. He additionally told Edwards that he appreciated that "difficulties will be encountered in efforts to solve the problem locally." Still, he approved of Edwards's current efforts in "pressing" for a workable local Interim Joint Agreement and Defense Plan and thought that they should be continued.[15]

On 29 October, Captain Adolph E. Becker Jr., the head of the Strategic Plans Section's War Plans Subsection in the Office of the Chief of Naval Operations, commented to Rear Admiral Glover on Joint agreements between the Army and Navy in the context of the various states of invasion readiness. Becker reminded Glover

---

[14] Sherman to Nimitz, "Joint Planning for Defense of Pacific Coastal Frontier," 23 October 1946, 1–2.
[15] FAdm Chester W. Nimitz, USN, to Adm Richard S. Edwards, USN, "Joint Interim Planning for the Defense of the Pacific Coastal Frontier," 24 October 1946, Folder Serial File ("Spindles—Confidential") 1946, Box 86, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1.

that in April 1942, Admiral Ernest J. King, then the commander in chief of the U.S. Fleet and chief of naval operations, and General George C. Marshall Jr., then the chief of staff of the Army, promulgated a Joint dispatch that set up a system of determining unity of command under various categories of opposition to an invasion. Marshall and King were to jointly declare the existence of these states of invasion. The three states of invasion were a state of non-invasion, in which coordination by "mutual cooperation" was to be undertaken in accordance with a publication entitled *Joint Action Army and Navy*; a state of fleet-opposed invasion, which would vest unity of command in the Navy; and a state of Army-opposed invasion, which would vest unity of command in the Army. Becker told Glover that there was now an additional state, to be known as "State of Air-Opposed Invasion," that was being considered. In this situation, unity of command would be vested in the local AAF commander.[16]

On the same day, Becker sent Glover another office memorandum about the same problem, but this time in the context of the Western Sea Frontier Agreement. Becker reminded Glover that in a repeat of the April 1942 Joint dispatch between Marshall and King, Admiral Edwards, General Stilwell, and Major General Hale had entered into the Joint Agreement mentioned above that established the categories for the postwar states of invasion. Becker then described those categories in greater detail for Glover. When it came to a state of noninvasion, this agreement also vested unity of command in the commanding general of the Sixth Army, such that he would command all Army forces attached or assigned to the Sixth Army. Also, in an emergency, the commanding general of the Sixth Army would have unity of command over all Army forces that were physically in the area and commanded by him except

---

[16] Capt Adolph E. Becker Jr., USN, to RAdm Cato D. Glover Jr., USN, "States of Invasion, Western Sea Frontier Agreement," 29 October 1946, Folder F-1 Memoranda (10/10/43–2/31/46), Box 68, Series 3, Strategic Plans, RG 38, MMRB, NA II, 1.

for those AAF units under the operational control of the Fourth Air Force that had been allocated by the commanding general of the Sixth Army to the commander of the Western Sea Frontier for operations over the sea. Navy unity of command was similarly vested in the commander of the Western Sea Frontier over all naval forces "duly allocated" to him and over all AAF units allocated to him by the commanding general of the Sixth Army for operations over the sea. The exception here applied to naval air units that had been allocated to the commanding general of the Sixth Army by the commander of the Western Sea Frontier for operations in direct defense of the West Coast.[17]

When it came to the state of fleet-opposed invasion, unity of command was again vested in the commanding general of the Sixth Army over all Army forces physically located within the Sixth Army's area of responsibility except for the AAF units under the Fourth Air Force's operational control that had been allocated by the commanding general of the Sixth Army to the commander of the Western Sea Frontier for operations over the sea as well as the commander of the Western Sea Frontier's jurisdiction over local naval defense forces. Unity of command was similarly vested in the commander of the Western Sea Frontier over all fleet and sea frontier forces except for local naval defense forces and naval air units that had been allocated to the commanding general of the Sixth Army for operations over land in direct defense of the coast and over AAF units allocated by the commanding general of the Sixth Army to the commander of the Western Sea Frontier for operations over the sea. When it came to a state of Army-opposed invasion, unity of command was once again vested in the commanding general of the Sixth Army over all Army forces physically located with the Sixth Army's area of responsibility, over all Western Sea

---

[17] Becker to Glover, "States of Invasion, Western Sea Frontier Agreement," 29 October 1946, 1.

Defending the Pacific Coastal Frontier

Frontier forces, and over all local naval defense forces of the naval district concerned.[18]

To cover the contingency of opposing a threat of or hostile attack by the "principal element" of an air attack, Becker reminded Glover that the additional category of "Air-Opposed Invasion" was being considered. In this state, unity of command would be vested in the commanding general of the Fourth Air Force, who would exercise command over all AAF units "duly allocated" to him as well as over Army Ground Forces units allocated to him by the commanding general of the Sixth Army and naval units allocated to him by the commander of the Western Sea Frontier. Glover went on to state that the naval units and control that were to be allocated to the commanding general of the Fourth Air Force would be those required for the air defense of the area, specifically the Navy and Marine Corps fighter planes in the area as well as "coordination" of warships' antiaircraft batteries in ports and harbors.[19]

A few days later, General Eisenhower sent Admiral Nimitz a short memo stating that he had noted the Western Sea Frontier agreement between Edwards, Stilwell, and Hale, now entitled the "Joint Agreement Covering Unity of Command and Deployment of Forces in the States of Non-Invasion, Fleet-Opposed Invasion, and Army-Opposed Invasion." The agreement had been proposed as the basis for similar Joint agreements among local commanders in other areas. In view of the Army's and Navy's "common interest" in matters relating to the Joint employment of land, sea, and air forces, Eisenhower was sending Nimitz a copy of the guidance that had been issued to major Army commands on this matter. He also told Nimitz that he hoped that the "unresolved problems" concerning the unification of the Armed Forces "may soon be settled to the

---

[18] Becker to Glover, "States of Invasion, Western Sea Frontier Agreement," 29 October 1946, 1–2.

[19] Becker to Glover, "States of Invasion, Western Sea Frontier Agreement," 29 October 1946, 2.

end that effective provision for joint action in emergency may be achieved."[20]

Several days later, the problem of unified command returned in a memorandum from Nimitz to Eisenhower. Nimitz was replying to Eisenhower's 5 November memorandum about the matter. To Nimitz, the "chief obstacle" to a "satisfactory" formulation of agreements by the commanders in the field was in the difficulty in selecting a basis for determining the responsibilities of unified command under various circumstances. Nimitz went on to say that since there appeared to be no "general formula" that was acceptable in all circumstances to all the Services, he suggested as an interim measure that the determination about unified command be made by the Joint Chiefs of Staff in each specific area. "However, there should be issued a basis for handling emergencies without reference to the Joint Chiefs of Staff." In "furtherance" of his plan, Nimitz suggested that the "appropriate" continental Sea Frontier commander assume unified command of local naval and air forces whenever coastal sea communications were threatened with attack by hostile forces, the latter to include submarines. He further asserted that a local Army commander—either ground or air—would assume unified command of all ground forces, local air forces, and local naval forces in any area in the continental United States whenever that area was threatened with air attack or invasion by a hostile force. If the continental United States was faced with simultaneous submarine and air attacks, the local Army commander would take over in the context of Nimitz's second scenario. He concluded by telling Eisenhower that the determination of command between the Army Ground Forces and the Army Air Forces that

---

[20] GA Dwight D. Eisenhower, USA, to FAdm Chester W. Nimitz, USN, "Joint Agreements to Effect Unified Command," 5 November 1946, Folder "Western Sea Frontier," Box 17, Series 14, Strategic Plans Division Records Group, Navy Operational Archives, Naval History and Heritage Command, Washington, DC, 1.

Defending the Pacific Coastal Frontier

were required for his last two scenarios "appears to be a matter for decision by the War Department."[21]

The problems of unified command in general and command in the defense of the Pacific Coastal Frontier in particular came up again in late March 1947. Captain John P. Cady, administrative assistant to the assistant chief of naval operations for strategic plans, drafted a letter to Vice Admiral Jesse B. Oldendorf, Admiral Richards' successor as both the commander of the Western Sea Frontier and the commander of the Pacific Reserve Fleet, about the division of defense responsibilities on the West Coast. The eventual author of the letter was intended to be Admiral DeWitt C. Ramsey, the vice chief of naval operations. In the draft, Ramsey told Oldendorf that he was pleased to hear of the progress that was being made in arriving at "working agreements" with Major General George P. Hays, the acting commanding general of the Sixth Army, and Major General Hale about the division of defense responsibilities. Ramsey concurred "in principle" to the proposal concerning the Fourth Air Force's missions. Ramsey understood this proposal to be that the Fourth Air Force would defend its area against hostile air attack. In addition, the Fourth Air Force would be prepared to operate against hostile surface and "under-surface" vessels as well as protect shipping in cooperation with naval forces or independently when naval forces were not involved. Ramsey also told Oldendorf that he had been assured that this wording was acceptable to Hale. In this connection, Ramsey was enclosing a copy of a recent letter

---

[21] FAdm Chester W. Nimitz, USN, to GA Dwight D. Eisenhower, USA, "Joint Agreements to Effect Unified Command in Continental United States," 9 November 1946, Folder Serial File ("Spindles—Confidential") 1946, Box 86, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1. Not all was agreement and professionalism. For continuing disagreements by naval officers as well as suspicions of both the Army and Army Air Forces' motives, see Capt Herbert D. Riley, USN, to Capt Ephraim McLean, USN, Office Memorandum, 15 November 1946, Folder A16-3 (2) Joint Agreements, 10/46–10/47, Box 111, Series 5, Strategic Plans, RG 38, MMRB, NA II, 1. See also Capt Kenneth D. Ringle, USN, to Capt. Thomas J. Hickey, USN, Office Memorandum, no date, Folder A16-3 (2) Joint Agreements, 10/46–10/47, Box 111, Series 5, Strategic Plans, RG 38, MMRB, NA II, 1.

from General Spaatz that Ramsey thought "should go far to clear the air." Ramsey concluded by telling Oldendorf that it was further understood that all negotiations were tentative pending final arrangements that might evolve in Washington, DC, under unified command concepts that were developed for the continental United States.[22] The final version of the letter from Ramsey was essentially the same except that Ramsey addressed Oldendorf as "Dear Olie" and told him that Admiral Nimitz would normally sign this letter. However, Ramsey was signing in Nimitz's place as Ramsey was "glad to report that he is off on a much needed vacation."[23]

Almost two months later, Ramsey sent a confidential serial to Oldendorf that was again about the coordination of military operations and planning in the event of an emergency. Ramsey told Oldendorf specifically that he was considering how to coordinate "arrangements" that facilitated the coordination of planning and operations between the naval forces under Oldendorf's command and those of the AAF. Relating that the matter had been explored "informally" on a "working" level, Ramsey next told Oldendorf that the thought "prevailed" that Oldendorf should deal directly with Major General Hale as the local representative to Lieutenant General Stratemeyer: "This appears to be in consonance with the spirit of our agreements with the War Department pending the enact-

---

[22] Capt John P. Cady, USN, to VAdm Jesse B. Oldendorf, USN, 21 March 1947, Folder Serial File ("Restricted Signed Letters") 1947, Box 87, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1.

[23] Adm DeWitt C. Ramsey, USN, to VAdm Jesse B. Oldendorf, USN, 21 March 1947, Folder Serial File ("Restricted Signed Letters") 1947, Box 87, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1. For the solutions to many of these remaining problems, see VAdm Forrest P. Sherman, USN, to Adm Thomas C. Kinkaid, USN, and Adm Louis E. Denfeld, USN, "Coordination of Defense Responsibilities," 25 March 1947, Folder Serial File ("Restricted Signed Letters") 1947, Box 87, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1. See also VAdm Forrest P. Sherman, USN, to Adm Thomas C. Kinkaid, USN, Adm Louis E. Denfeld, USN, and Adm William H. Blandy, USN, "Coordination of Defense Responsibilities," 31 March 1947, Folder Serial File ("Restricted Signed Letters") 1947, Box 87, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1.

Defending the Pacific Coastal Frontier

ment of legislation which is now under consideration of the Congress."[24]

Several months later, as the National Security Act of 1947 came into effect, Rear Admiral Charles W. Styer, the assistant chief of naval operations for operations and the coordinator of undersea warfare, sent a short letter to Rear Admiral John R. Redman, the deputy commander of the Western Sea Frontier, about underground installations in the San Francisco area. Styer thanked Redman for his "complete and detailed" information on the matter and then told him that it was "quite apparent" from the data furnished that the Western Sea Frontier had no "suitable" existing underground structure available as a Joint headquarters in the area. Styer reminded Redman that the whole problem of underground installations—especially the degrees of protection and dispersion—was under study by the Navy Shore Station Development Board. He also told Redman that he would send Redman's data to the board to augment the information that had been provided to it by the Western Sea Frontier in early August 1946. He further told Redman that regarding the Joint Interim Defense Plan for the Pacific Coastal Frontier, the Navy was "actively pursuing" approval from the Army "and I believe that we will at least smoke a statement out of them shortly."[25]

A few days later, however, the problem reappeared when Captain Ephraim McLean, the assistant to the assistant chief of naval operations for strategic plans, sent an office memorandum to Captain James B. Carter, now the assistant chief of naval operations for strategic plans, about a document negotiated between Vice Admiral Oldendorf; General Mark W. Clark, now the commanding general of the Sixth Army; and Major General Glenn O. Barcus, the com-

---

[24] Adm DeWitt C. Ramsey, USN, to VAdm Jesse B. Oldendorf, USN, 18 May 1947, Folder P Personnel, 1/47–12/47, Box 111, Series 5, Strategic Plans, RG 38, MMRB, NA II, 1.
[25] RAdm Charles W. Styer, USN, to RAdm John R. Redman, USN, 26 November 1947, Folder Serial File ("Secret Signed Letters") 1947, Box 86, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1.

manding general of the Twelfth Air Force, concerning the Joint agreement on the defense of the U.S. West Coast. McLean told Carter that Colonel Cecil E. Combs—who had been AAF air deputy in the Plans and Policy Group of the War Department General Staff's Plans and Operations Division and was now deputy chief of the Plans Division of the newly established U.S. Air Force—called and told McLean that the Plans and Operations Division had received word from the headquarters of the Army Ground Forces that the latter had on file a copy of a signed agreement between Oldendorf, Clark, and Barcus. Combs further said, however, that the War Department had no intention of formally approving the agreement between the three commanders. Nevertheless, according to McLean, Combs also said that so long as the agreement had not been disapproved, it could be considered a valid document.[26]

The final documentation found in the archives in the period covered by this article was from a day later, when Admiral Nimitz sent a secret letter to Vice Admiral Oldendorf about the Joint Interim Defense Plan for the Pacific Coastal Frontier referenced above by Rear Admiral Styer to Rear Admiral Redman. Oldendorf had inquired in late October to the Army about the status of approval of the plan. Nimitz had just obtained information that the Army had in turn inquired with General Devers. Nimitz had Devers's reply that a copy of the agreement between the Army and Navy about the defense plan was on file with Devers's headquarters and that the copy had been signed by the commander of the Western Sea Frontier, the commanding general of the Sixth Army, and the commanding general of the Fourth Air Force: "It was also stated that since no exception had been taken to the agreement it could be assumed that tacit approval was thereby given." Nimitz then told Oldendorf that the officer speaking for the Army—whom Nimitz

---

[26] Capt Ephraim McLean, USN, to Capt James B. Carter, USN, "Agreement between C.W.S.F., C.G. 6th Army, and C.G. 12th A.F.," 4 December 1947, Folder A16-3 (2) Joint Agreements, 10/46–10/47, Box 111, Series 5, Strategic Plans, RG 38, MMRB, NA II, 1.

Defending the Pacific Coastal Frontier

did not identify—asserted that the Army's position was that the procedure followed by General Devers was correct and that no further action was required for the agreement to be considered valid. Nimitz then authorized the transmission of this material by registered guard mail or U.S. registered mail in accordance with Navy regulations.[27]

Conclusion

The case of the Pacific Coastal Frontier offers historians of U.S. military history in general and historians of U.S. inter-Service rivalry in particular a rare example of general Service cooperation, especially at higher levels. In a highly contentious and bitter context of inter-Service rivalry, with the backdrop of the growing Cold War between the United States and the Soviet Union, Army and Navy commanders on the Pacific Coastal Frontier seemed to cooperate more with each other than conflict. This cooperation always coincided with their Services' interests, since conflict with Service interests as they were articulated in Washington, DC, would have brought obvious censure instead of approval of the Joint defense plans and agreements.

Still, agreement also came about because commanders from both Services on the Pacific Coastal Frontier found it convenient to create, articulate, and implement these war plans. At the same time, their superiors in Washington, DC, saw similar benefits. In addition, it could be that the Joint Chiefs of Staff were highly sensitive to any media or public criticism of military conduct at this time given that Congress's postwar investigation of the Japanese attack on Pearl Harbor, Hawaii, on 7 December 1941 had taken place in late 1945 and early 1946 and had illustrated the degree to which the Army and Navy had failed to cooperate in the prewar defense of Hawaii.[28]

---

[27] FAdm Chester W. Nimitz, USN, to VAdm Jesse B. Oldendorf, USN, "Joint Interim Defense Plan for Pacific Coastal Frontier—Status of Approval," 5 December 1947, Folder Serial File ("Secret Signed Letters") 1947, Box 86, Series 4, Strategic Plans, RG 38, MMRB, NA II, 1.
[28] See Friedman, *Arguing over the American Lake*, 43.

No matter the reason for the eventual approval of the agreement by their superiors, however, the planning for the Pacific Coastal Frontier provides historians with perhaps a new dimension of postwar inter-Service rivalry that complicates our understanding of that time period.

Table 3.1. Officer participants and command structure

Date	Officer	Position
1921	BGen William L. Mitchell, USAAS	Assistant Chief, U.S. Army Air Service
April 1942	Gen George C. Marshall Jr., USA	Chief of Staff of the Army
April 1942	Adm Ernest J. King, USN	Chief of Naval Operations and Commander in Chief, U.S. Fleet
19 April 1946	LtGen George E. Stratemeyer, USAAF	Commanding General, Air Defense Command
19 April 1946	Gen Joseph W. Stilwell, USA	Commanding General, Sixth Army
19 April 1946	MajGen Willis H. Hale, USAAF	Commanding General, Fourth Air Force
19 April 1946	MajGen Elwood R. Quesada, USAAF	Commanding General, Tactical Air Command
19 April 1946	Gen George C. Kenney, USAAF	Commanding General, Strategic Air Command
19 April 1946	BGen Francis H. Griswold, USAAF	Deputy Assistant Chief of the Air Staff for Operations
13 August 1946	Adm John H. Towers, USN	Commander in Chief, Pacific Fleet
22 October 1946	RAdm Cato D. Glover Jr., USN	Assistant Chief of Naval Operations for Strategic Plans
22 October 1946	VAdm Forrest P. Sherman, USN	Deputy Chief of Naval Operations for Operations
22 October 1946	Adm Richard S. Edwards, USN	Commander, Western Sea Frontier
23 October 1946	FAdm Chester W. Nimitz, USN	Chief of Naval Operations
23 October 1946	Capt Paul L. DeVos, USN	Planning Officer, Western Sea Frontier
23 October 1946	Gen Jacob L. Devers, USA	Commanding General, Army Ground Forces

Table 3.1. Officer participants and command structure (continued)

Date	Officer	Position
23 October 1946	GA Dwight D. Eisenhower, USA	Chief of Staff of the Army
29 October 1946	Capt Adolph E. Becker Jr., USN	Head, War Plans Subsection, Strategic Plans Section, Operations Division, Office of the Chief of Naval Operations
15 November 1946	Capt Herbert D. Riley, USN	Head, Air Liaison Subsection, Strategic Plans Section, Operations Division, Office of the Chief of Naval Operations
21 March 1947	Capt John P. Cady, USN	Administrative Assistant to the Assistant Chief of Naval Operations for Strategic Plans, Office of the Chief of Naval Operations
21 March 1947	VAdm Jesse B. Oldendorf, USN	Commander, Western Sea Frontier and Pacific Reserve Fleet
21 March 1947	Adm DeWitt C. Ramsey, USN	Vice Chief of Naval Operations
21 March 1947	MajGen George P. Hays, USA	Acting Commanding General, Sixth Army
25 March 1947	Adm Thomas C. Kinkaid, USN	Commander, Eastern Sea Frontier and Atlantic Reserve Fleet
25 March 1947	Adm Louis E. Denfield, USN	Commander in Chief, Pacific Command and Pacific Fleet
31 March 1947	Adm William H. P. Blandy, USN	Commander in Chief, Atlantic Fleet
26 November 1947	RAdm Charles W. Styer, USN	Assistant Chief of Naval Operations for Operations and Coordinator of Undersea Warfare
26 November 1947	RAdm John R. Redman, USN	Deputy Commander, Western Sea Frontier
4 December 1947	Capt James B. Carter, USN	Assistant Chief of Naval Operations for Strategic Plans
4 December 1947	Capt Ephraim McLean, USN	Assistant to the Assistant Chief of Naval Operations for Strategic Plans

Table 3.1. Officer participants and command structure (continued)

Date	Officer	Position
4 December 1947	Gen Mark W. Clark, USA	Commanding General, Sixth Army
4 December 1947	MajGen Glenn O. Barcus, USAF	Commanding General, Twelfth Air Force
4 December 1947	Col Cecil E. Combs, USAF	Deputy Chief, Plans Division, U.S. Air Force
Undated	Capt Kenneth D. Ringle, USN	Assistant, War Plans Subsection, Strategic Plans Section, Operations Division, Office of the Chief of Naval Operations
Undated	Capt Thomas J. Hickey, USN	Assistant, Sea Frontiers, Naval Districts, and Bases Subsection, Strategic Plans Section, Operations Division, Office of the Chief of Naval Operations

Source: courtesy of the author.

Defending the Pacific Coastal Frontier

Chapter 4

Local War, Natural War

The Role of Water and Waterways during the Second Bull Run Campaign

Michael Burns, PhD

When looking at a map today, most people tend to ignore the faint blue lines marking rivers. These ecological features have become less important as avenues of travel despite retaining their significance for other purposes, such as acting as sources of power and leisure activities. In the nineteenth-century United States, rivers dominated the transportation landscape. The invention of steamboats made sailing against river currents easier, turning rivers into massive boulevards. Never did this aspect become as clear as during the American Civil War. Between 1861 and 1865, the rivers that cut through the United States became a central focus of the commanders of both the U.S. and Confederate forces as they searched for ways to employ the waterways to their advantages. Despite this importance, the role that water played in a campaign depended entirely on the region where the forces operated.

Local natural elements constantly influenced the conduct of military operations. During the Civil War, regional aspects of those ecological pieces influenced the ways in which the U.S. and Confederate forces employed them. In some instances, U.S. and Confederate armies attacked available natural resources to deprive both their foes and the local civilians of their usefulness. In other cases, the two armies consumed all the ecological materials in their paths. In both

situations, the armies transformed the local ecology, turning most regions into wastelands. Water fits in both categories.[1]
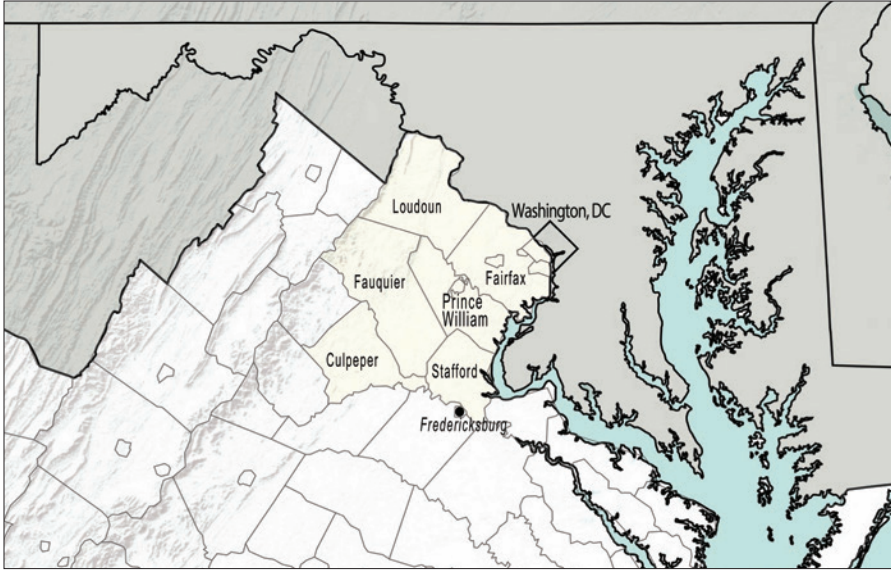
During the Second Bull Run campaign in the summer of 1862, the waters of Northern Virginia—specifically in Culpeper, Fairfax, Fauquier, Loudon, Prince William, and Stafford counties—played a central role at every level of the operations (map 4.1). Although most studies on water in military history have been restricted to the flowing waters of rivers, this natural resource more broadly—well water, rain, and even sweat—significantly affected Civil War operations. Although the way humans and the local environment interacted depended on a region's ecological variations, humans and the environment throughout the conflict maintained a cyclical relationship. During Second Bull Run, water, along with other environmental resources, both influenced and was influenced by human actions.[2]

Primarily, the human-environment relationship during the Civil War revolved around what historian Micah S. Muscolino calls the "military metabolism of an army." Although primarily extensions of

---

[1] This chapter builds on existing works on the environmental-military history of the Civil War. For examples of these studies, see Andrew McIlwaine Bell, *Mosquito Soldiers: Malaria, Yellow Fever, and the Course of the American Civil War* (Baton Rouge: Louisiana State University Press, 2010); Lisa M. Brady, *War upon the Land: Military Strategy and the Transformation of Southern Landscapes during the American Civil War* (Athens: University of Georgia Press, 2012); Megan Kate Nelson, *Ruin Nation: Destruction and the American Civil War* (Athens: University of Georgia Press, 2012); Kathryn Shively Meier, *Nature's Civil War: Common Soldiers and the Environment in 1862 Virginia* (Chapel Hill: University of North Carolina Press, 2013); Brian A. Drake, ed., *The Blue, the Gray, and the Green: Toward an Environmental History of the Civil War* (Athens: University of Georgia Press, 2015); Phillip R. Kemmerly, "Environment and the Course of Battle: Flooding at Shiloh (6–7 April 1862)," *Journal of Military History* 79, no. 4 (October 2015): 1079–1108; Matthew M. Stith, *Extreme Civil War: Guerrilla Warfare, Environment, and Race on the Trans-Mississippi Frontier* (Baton Rouge: Louisiana State University Press, 2016); Judkin Browning and Timothy Silver, *An Environmental History of the Civil War* (Chapel Hill: University of North Carolina Press, 2020); and Kenneth W. Noe, *The Howling Storm: Weather, Climate, and the American Civil War* (Baton Rouge: Louisiana State University Press, 2020).

[2] For more on the Second Bull Run campaign, see John J. Hennessy, *Return to Bull Run: The Campaign and Battle of Second Manassas* (New York: Simon and Schuster, 1993). For more on the Second Battle of Bull Run, see Alan D. Gaff, *Brave Men's Tears: The Iron Brigade at Brawner Farm* (Dayton, OH: Morningside Press, 1985); and Scott C. Patchan, *Second Manassas: Longstreet's Attack and the Struggle for Chinn Ridge* (Dulles, VA: Potomac Books, 2011).

Local War, Natural War

Map 4.1. The counties of Northern Virginia

political organizations, armies are not entirely political themselves. These forces, although meant to maintain and achieve certain political goals, also act as living organisms. Just like living organisms, armies require energy to function. Without it, they have no way to campaign or fight. Just as humans and animals do, an army must consume a certain amount of resources to maintain its metabolism.[3] Although food sources dominate an army's metabolic requirements, waterways also assist in maintaining military metabolisms. Rivers

---

[3] Micah S. Muscolino, *The Ecology of War in China: Henan Province, the Yellow River, and Beyond, 1938–1950* (New York: Cambridge University Press, 2015), https://doi.org/10.1017 /CBO9781107785274. Similarly, historians Richard White and William Cronon have examined the relationship between energy and commerce flows, respectively, and human populations. See Richard White, *Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995); and William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton, 1991).

and streams provided a form of energy that could either boost or retard an army's ability to act.[4]

By August 1862, military officers for both the United States and the Confederacy recognized this conundrum. During Second Bull Run, the U.S. command acknowledged that Northern Virginia's rivers, especially the Rappahannock River, did not provide the offensive power they initially expected. Instead, the waters of Virginia became natural defensive barriers as the waterways restricted both overland and waterborne movement. The waters were not simply barriers to military maneuvers. Natural water sources, especially waterways, also became targets of supplies for potable water. Stationary water sources, such as lakes, ponds, and wells, tended to provide significant drinking water for Civil War armies in other regions. In Northern Virginia, those same types of sources either did not exist or dried up by the summer of 1862, making local creeks, streams, and rivers the main source of drinking water. Yet, their mere presence transformed these water sources into veins of disease. Initially, officers and soldiers during Second Bull Run looked at the region's water to both move the armies and maintain their health. As the campaign progressed, the true role of the water became apparent. Instead of boosting military metabolism, the resource acted as barriers to both the armies' movements and, with the help of human actions, the soldiers' health.

The significant number of waterways in Virginia caused officers there to believe that they could employ the rivers for offensive operations. Military forces throughout the world used rivers to transport

---

[4] For discussions on waterways in warfare, see Michael W. Charney, "Shallow-draft Boats Guns, and the Aye-ra-wa-ti: Continuity and Change in Ship Structure and River Warfare in Precolonial Myanma," *Oriens Extremus* 40, no. 1 (1997): 16–63; Brian Campbell, *Rivers and the Power of Ancient Rome* (Chapel Hill: University of North Carolina Press, 2012), 160–99; Phillip R. Kemmerly, "Rivers, Rails, and Rebels: Logistics and Struggle to Supply U.S. Army Depot at Nashville, 1862–1865," *Journal of Military History* 84, no. 3 (July 2020): 713–46; Wicky W. K. Tse, "The Tactical Role of Rivers in Early Chinese Warfare," *Journal of Chinese Military History* 12, no. 1 (April 2023): 7–23, https://doi.org/10.1163/22127453-bja10017; and Muscolino, *The Ecology of War in China*.

and support troops dating to the earliest wars in recorded history. River valleys attracted populations as they provided the best land for farming, making them abundant in food sources for premechanized armies. Military leaders from early on also learned the importance of water's power when flowing through rivers and streams. The energy that waterways provide can reduce the amount of resources necessary to maintain significant movements, as they can carry enormous amounts of personnel and supplies with less effort than moving armies overland. Once steamboats became commonplace in the years before the Civil War, a river's directional flow no longer prevented waterborne movements, making rivers even more significant to transportation.[5]

With steamboats being the main types of ships used by both the U.S. and Confederate forces, the only barrier to moving on the river was the water's depth. Northern Virginia's geology greatly restricted that depth in its northern reaches. The commonwealth resides along a number of geological provinces with the eastern region of the state—east of the Blue Ridge Mountains—residing along the Tidewater and southern Piedmont areas (map 4.2). The Tidewater and Piedmont typically receive similar amounts of rainfall throughout the year, with an increase during the months of July and August. The two regions, however, retain the water differently. The Piedmont, the region most associated with Second Bull Run, is basically the oldest

---

[5] See Campbell, *Rivers and the Power of Ancient Rome*, 160–99; Charney, "Shallow-draft Boats Guns, and the Aye-ra-wa-ti"; Tse, "The Tactical Role of Rivers in Early Chinese Warfare"; Kemmerly, "Rivers, Rails, and Rebels"; Michael W. Charney, *Southeast Asian Warfare, 1300–1900* (Leiden, Netherlands: Brill, 2004), 104–30; J. Donald Hughes, "Warfare and Environment in the Ancient World," in *The Oxford Handbook of Warfare in the Classical World*, ed. Brian Campbell and Lawrence A. Tritle (Oxford, UK: Oxford University Press, 2013), 128–39, https://doi.org/10.1093/oxfordhb/9780195304657.013.0006; Terry Rugeley, *The River People in Flood Time: The Civil Wars in Tabasco, Spoiler of Empire* (Stanford, CA: Stanford University Press, 2014), 7–9, 20; Kaushik Roy, "Small Wars, Ecology, and Imperialism in Precolonial South Asia: A Case Study of Mughal-Ahom Conflict, 1615–1682," *Journal of Military History* 87, no. 1 (January 2023): 9–31; and Hayley Negrin, "Return to Yeokanta/River: Powhatan Women and Environmental Treaty Making in Early America," *Environmental History* 28, no. 3 (July 2023): 522–53, https://doi.org/10.1086/725422.
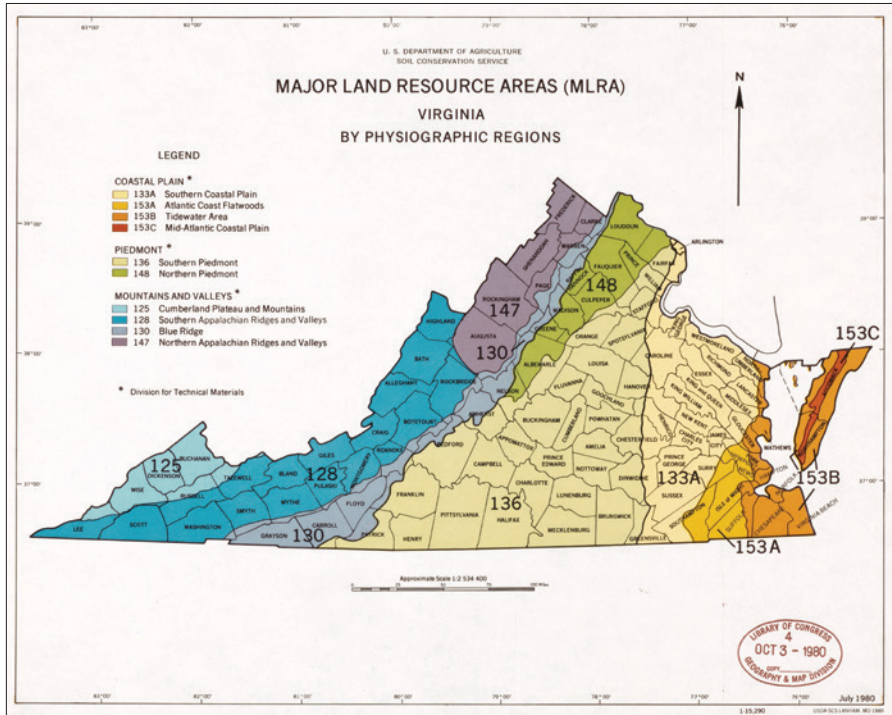
section of the Appalachian Mountain range. It has a shallow topsoil, leaving the less porous bedrock, composed of granite, greenstone, and Triassic stones, more exposed and preventing the region's water from being trapped and settling along the landscape. The harder bedrock also led to the streams cutting deep into the landscape after thousands of years, creating steep, sheer banks that made any waterway almost impossible to cross without a bridge let alone a passable ford. The demarcation between the Tidewater and the Piedmont also created the fall lines of Virginia's waterways, marking the farthest point of shipping into the state's interior and restricting the distance that the brown-water navy of the United States could go.[6] Indeed, some officers quickly recognized how Northern Virginia's streams could increase defensive capabilities in the region. By March 1862, the Confederate force in the region (which became more famously known as the Army of Northern Virginia in June 1862), then under the command of Confederate States Army (CSA) major general Joseph E. Johnston, abandoned its position east of Bull Run in response to new federal movements. Johnston retreated south to keep the army's supply and communication lines out of the Confederate capital of Richmond short and better protected.[7]

Eventually, Johnston fell back to Fredericksburg and the prominent Rappahannock River. He believed that he could place his troops in a stronger defensive position along the Rappahannock due to the river's physical geography. Having been cut off from its initial headwaters hundreds of thousands of years before the Civil War, the Rappahannock begins in the Blue Ridge Mountains along the eastern

---

[6] Charles A. Grymes, "Geology of the Fall Line," Virginia Places, accessed 26 April 2017; Stephen Adams, *The Best and Worst Country in the World: Perspectives on the Early Virginia Landscape* (Charlottesville: University of Virginia Press, 2001), 14–26; Thomas Jefferson, *Notes on the State of Virginia*, ed. Frank Shuffelton (New York: Penguin Books, 1999), 7–18; and N. C. Grover and R. H. Bolster, *Hydrography of Virginia*, Virginia Geological Survey Bulletin 3 (Richmond, VA: Board of Agriculture and Immigration, 1906).
[7] Joseph E. Johnston, *Narrative of Military Operations, Directed, during the Late War between the States* (New York: D. Appleton, 1874; reprint, Bloomington: Indiana University Press, 1959), 96–102.

Map 4.2. Geological regions of Virginia

edge of the famed Shenandoah Valley. From there, it trickles down from the mountains and primarily runs over the Piedmont region. Once it passes Fredericksburg, it enters the coastal plains, where it cuts deeper into the landscape, making it sailable for about 64 kilometers until draining into the Chesapeake.[8] Officers in both armies soon discovered that this stream could significantly disrupt their movements.

Recognizing how the waterway sharply cut into the land, the Confederates quickly set the standard for using the Rappahannock defensively. Receiving word that the Army of the Potomac, then un-

---

[8] Jefferson, *Notes on the State of Virginia*, 7–18; and Grover and Bolster, *Hydrography of Virginia*.

der the command of U.S. Army major general George B. McClellan, had landed at Fortress Monroe near Norfolk, Johnston retreated to protect Richmond. On 18 April 1862, as freedman John M. Washington remembered, the rebels abandoned the town and set fire to the two bridges crossing the river at Fredericksburg. To ensure that the bridges had no useable elements remaining, Confederate artillery near Fredericksburg fired on the bridge piles to prevent the U.S. units from constructing any makeshift crossing. In addition, Washington recalled, the retreating rebels burned all the vessels at a local wharf.[9] Such destructive action turned the river into a natural wall against federal movements (figure 4.1).

Between April and June 1862, the Army of the Potomac threatened Richmond during what became known as the Peninsula campaign. In late June, the administration of U.S. president Abraham Lincoln—under the watch of the general in chief of the Armies of the United States, Major General Henry W. Halleck—combined three small armies into a larger force named the Army of Virginia and placed U.S. Army major general John Pope in command. The Army of Virginia was first ordered to reinforce the Army of the Potomac and further to threaten Richmond. This objective changed after CSA general Robert E. Lee took command of the newly christened Army of Northern Virginia. In late June and early July, Lee launched a series of attacks known as the Seven Days Battles that pushed the Army of the Potomac away from the Confederate capital, allowing him to focus on Pope's young force. Soon, the conflict returned to Northern Virginia.[10]

Four months after Johnston's defensive attempt, Pope's Army of Virginia arrived in the same Rappahannock region that John-

---

[9] John M. Washington, "Memories of the Past," in David W. Blight, *A Slave No More: Two Men Who Escaped to Freedom, Including Their Own Narratives of Emancipation* (New York: Houghton Mifflin, 2007), 190.
[10] Stephen W. Sears, *To the Gates of Richmond: The Peninsula Campaign* (New York: Ticknor and Fields, 1992).

Figure 4.1. MajGen Irvin McDowell's corps of federal troops cross over pontoon bridges on the Rappahannock River after Confederate forces abandoned Fredericksburg in April 1862

ston tried to use for that purpose. Shortly after the Army of Virginia marched into the region in early August, Pope dispatched his army's II Corps under U.S. Army major general Nathaniel P. Banks to confront the approaching Confederate wing of CSA lieutenant general Thomas J. "Stonewall" Jackson near Culpeper Courthouse. At the same time, the Piedmont experienced higher than normal temperatures. During a 10-day stretch in early August, temperatures along the Piedmont hit at least 90 degrees Fahrenheit, with the highest temperature being 98 degrees on 9 August 1862, the same day as the first fight between the forces, the Battle of Cedar Mountain. Early that morning, the two forces struggled to supply water to their soldiers, an issue that persisted throughout the day and left the soldiers

vulnerable to dehydration. On the march to battle, one of Banks's brigade commanders, U.S. Army brigadier general John W. Geary, witnessed the impact of thirst on the soldiers. He reported that as early as 0900 or 1000, "the scarcity of water [caused] immense suffering among the men."[11]

Dehydration can devastate the human body. As an individual continues to lose liquids, they first feel an insatiable thirst before experiencing a "vague discomfort" that includes "the flushing of the skin, heat oppression, weariness, sleepiness, impatience, anorexia and dizziness." Eventually, the person develops shortness of breath, tingling, and even the discoloration of their skin before possibly developing involuntary muscle contractions, convulsions, and cramps. Finally, they become exceedingly lethargic.[12] After marching for about 10 kilometers, Geary noted this final step when he wrote that "the road on each side was full of men, who had been compelled to fall out from sheer exhaustion."[13] Once the battle commenced, trying to supply the soldiers with water became a dangerous endeavor and prevented most of the troops from replenishing their canteens. The increased activity of fighting the enemy increased the soldiers' sweating, making it even more likely they would suffer dehydration.

After the battle concluded, dehydration became increasingly evident as the soldiers still struggled to find potable water. U.S. Army brigadier general Alpheus S. Williams recounted his actions on the night of 9 August when he joined his corps commander, Banks, on an excursion to "the river [most likely Cedar Run] after water." Eventually, he fell asleep while feeding his horse. Much of the exhaustion that the troops experienced after the fighting came from this lack of hydration. Without water, the human body attempts to replenish

---

[11] BGen John W. Geary to Gen Christopher C. Augur, n.d., in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, 70 vols. (Washington, DC: War Department, 1880–1901), ser. 1, vol. 12, pt. 2, 160.
[12] Tim Noakes, *Waterlogged: The Serious Problem of Overhydration in Endurance Sports* (Champaign, IL: Human Kinetics, 2012), 47.
[13] Geary to Augur, n.d., in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 160.

its energy with rest or food, but it absolutely requires replenishing liquids to survive. Williams awoke, most likely due to his thirst, "after an hour or so" and continued his exploration for water. He never found it. After abandoning his search, he returned to his "old stand and dozed till daylight."[14] Williams implying that even as a general officer he had to wait until morning to rehydrate indicates that the foot soldiers suffered similar fates.

The oppressive heatwave caused many typical water sources to disappear. Samuel R. Beardsley of the 24th New York Infantry Regiment noted that on 10 August, the hot, dry weather had "dried up all the small streams and springs" as well as local wells.[15] Wyman S. White of the 2d U.S. Sharpshooters regiment recorded that during a march of almost 65 kilometers that same day, he went without consuming water "from eight o'clock in the morning to ten o'clock at night." He quickly suffered from dehydration and described some of his symptoms, writing that his "tongue would stick to the roof of my mouth and the thought of water was torture."[16] Without available sources, the members of both armies could only search for liquids to quench their thirsts.

Although the two forces fought to a draw, the federal command feared that the rebels would trap the U.S. units between the Rappahannock and one of its tributaries, the Rapidan River. Halleck swiftly ordered Pope back across the Rappahannock. Doing so, he hoped, would allow the Army of the Potomac to reinforce Pope's troops "more easily."[17] Halleck had a secondary motivation as well, believing

---

[14] Alpheus S. Williams to "My Darling Daughter," 17 August 1862, in *From the Cannon's Mouth: The Civil War Letters of General Alpheus S. Williams*, ed. Milo M. Quaife (Detroit, MI: Wayne State University Press, 1959), 102.

[15] Samuel Beardsley to "Did," 13 August 1862, Letters 9 April 1862, to 31 December 1862, Folder, Samuel R. Beardsley Papers, U.S. Army Heritage and Education Center, Carlisle, PA.

[16] Wyman Silas White, "The Civil War Diary of Wyman S. White, First Sergeant of Company 'F' of the 2nd U.S. Sharpshooter Regiment (New Hampshire Men) in the Army of the Potomac, 1861–1865," ed. Russel C. White (manuscript copy, Manassas National Battlefield Park Library, Manassas, VA), 42.

[17] MajGen Henry W. Halleck to Secretary of War Edwin M. Stanton, 25 November 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 6.

that Pope could incorporate the river into a new defensive position. Within a few days, Pope "had most of his forces behind that river, prepared to hold its passes as long as possible."[18] Halleck saw the river as a key part of the Army of Virginia's tactical plan just as Lee advanced with 30,000 soldiers under the command of CSA lieutenant general James Longstreet.

For the next two weeks, the two armies maneuvered to establish the strongest possible positions along the Rappahannock. As they did so, the water in the region never satisfied the soldiers' hydration needs. Even when not going through a miniature drought, Northern Virginia held little potable water in the nineteenth century due to its geology. According to a twentieth-century study of Northern Virginia's ground water, an individual must dig approximately 30 to 45 meters to find drinking water. The "trap or diabase" zones maintained "shallow wells" that possibly provided "moderate supplies in some places." For soldiers on the march, the process of digging and maintaining wells was impossible. If they could construct wells, they still most likely would not find much potable water. As one geologist notes, the water in the "Triassic rock [most of northern Virginia's bedrock] is hard and contains much iron," which makes the water almost undrinkable without modern purification technology.[19]

Instead, these marching armies looked to any available water. For those soldiers who marched through southeastern Virginia during the Peninsula campaign, water-related health problems emerged from the presence of mosquitoes, which carried yellow fever and malaria, as well as waterborne bacteria and viruses.[20] In Northern Virginia, an influx of humans and animals created a different health problem. Due to the impermeability of the Northern Virginia bed-

---

[18] Halleck to Stanton, 25 November 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 6.
[19] R. C. Cady, *Ground-water Resources of Northern Virginia; Prepared in Cooperation with the United States Geological Survey*, Virginia Geological Survey Bulletin 50 (Richmond: University of Virginia, 1938), 2; and E-an Zen and Alta Walker, *Rocks and War: Geology and the Civil War Campaign of Second Manassas* (Shippensburg, PA: White Mane Books, 2000), 14–16.
[20] Meier, *Nature's Civil War*, 111–12; and Bell, *Mosquito Soldiers*.

rock, little standing water was present. Few swamps and lakes were in Northern Virginia at the time of the Civil War, and the troops in the region had fewer encounters with mosquito-borne diseases. With few standing water sources, the soldiers relied on the streams and rivers of the region.[21]

Many Americans in the nineteenth century believed that flowing water removed any harmful microbes through a natural cycle of replenishment. With fresh water, either through snow melt or precipitation, replenishing streams and creeks, these Americans supposed, any possible contaminants should be replaced. The presence of hundreds of thousands of soldiers and animals, however, initiated a cycle of pollution that prevented any renewal of the waterways. As the armies moved, they naturally created waste—human, animal, and material—that entered the water. Northern Virginia's hard bedrock assisted in pushing this waste into the local water sources, which easily corrupted those waterways as well as the already undrinkable local water tables.[22]

The constant issue of contaminated drinking water created a second barrier to effective operations in Northern Virginia. The spoiling of water sources, which spread diseases quickly, further reduced soldiers' health. Human and animal waste, urine and feces among other bodily fluids, carried numerous diseases. Throughout human history, this waste created health crises that increased in times of war.[23] Predominately in Northern Virginia, the unstable positions and quick movements of the two armies especially exposed the sol-

---

[21] Cady, *Ground-water Resources of Northern Virginia*, 2–3; and Zen and Walker, *Rocks and War*, 14–16.

[22] Margaret Humphreys, *Marrow of Tragedy: The Health Crisis of the American Civil War* (Baltimore, MD: Johns Hopkins University Press, 2013), 98.

[23] For examples of the histories of these types of epidemics and pandemics, see Charles E. Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866* (Chicago: University of Chicago Press, 1962); William H. McNeill, *Plagues and Peoples* (New York: Anchor Books, 1977); Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (New York: Cambridge University Press, 1986); and Steven Johnson, *The Ghost Map: The Story of London's Most Terrifying Epidemic—and How It Changed Science, Cities, and the Modern World* (New York: Riverhead Books, 2006).

diers. Spoiled water was particularly dangerous, being the primary catalyst behind the deadliest disease in the conflict—dysentery. Human waste fluids carried the deadly organisms that caused dysentery. Despite the two sides' war departments having regulations for disposing of human and animal waste, the moving armies consistently ignored them. Exposed latrines, as well as soldiers and animals relieving themselves whenever and wherever necessary, left soldiers unprotected, causing the disease to quickly spread and creating a cycle of illness among the armies.[24]

During the conduct of operations, soldiers had no choice but to consume exposed water sources to avoid an agonizing death from dehydration. This desperation led soldiers to drink any water that they could find, as Confederate cavalry officer Charles M. Blackford illustrated. After arriving at the Rapidan River on 11 August 1862, Blackford shared a box of salty sardines with CSA brigadier general William N. Pendleton. Having satisfied their hunger, they looked to quench their thirst and surveyed the area for some water sources near the bottom of the hill where they had eaten. Unable to find any water in the dark, Blackford decided to drink from a "horse track sunk into the mud." The two men then returned to the hillside and fell asleep, with Blackford lying next to who he believed was a sleeping rebel. The following day, he awoke to find himself alone, as Pendleton had departed early. When he turned to his sleeping partner, Blackford discovered, to his horror, that he had spent the night next to a "dead Yankee soldier." After his realization, Blackford returned to the water-filled horse track and "found the water . . . much discolored by the blood which flowed from the dead Yankee." Now knowing what he had consumed the night before, Blackford suddenly felt "very sick." Although the feeling passed quickly according to Blackford, he recorded fighting with dysentery throughout the campaign, even taking multiple days to recover from the illness around a week after

---

[24] Humphreys, *Marrow of Tragedy*, 98.

drinking from the horse track. Blackford's experience was common. Although the officers and soldiers in both armies acknowledged the possible negative effects of drinking poor water, their desperation pushed them to consume many of those disgusting sources.[25]

After establishing their lines on the Rappahannock in the weeks after Cedar Mountain and despite Halleck's desire to remain on the defensive, Pope, being more aggressive in his nature, wanted to attack the Confederate line as soon as possible. Initially, he tested the region along his eastern flank when he ordered some of his units to cross along the fords near Fredericksburg. As his units initiated these movements on 22 August 1862, the skies opened. For the next two days, multiple thunderstorms brought down torrents that "rendered the fords of the river impassable for twenty-four hours."[26] The river rose so quickly, according to Yankee soldier Samuel D. Webster, that "two Parrott guns, and three companies" of the 11th Pennsylvania Infantry Regiment almost found itself trapped. They retreated across the Rappahannock right before "the upper bridge, just built, gave way, carrying the [railroad] bridge with it."[27]

Lee, also naturally aggressive in his tactical planning, similarly wanted to strike at Pope's line before the Army of the Potomac arrived. At least one brigade of his force successfully crossed the Rappahannock two days later. However, a sudden downpour caused a flash flood that destroyed the bridge that CSA major general Jubal A. Early's division had just crossed, leaving them stranded. This gave Pope a chance to capture a portion of the Confederate force, but the rain and Jackson successfully reinforcing Early's division by moving soldiers farther up the river to a passable crossing saved the stranded

---

[25] Susan Leigh Blackford and Charles Minor Blackford, *Letters from Lee's Army; Or Memoirs of Life in and out of the Army in Virginia during the War between the States* (New York: Scribner, 1947; reprint, New York: A. S. Barnes, 1962), 108, 114, 116–17.

[26] MajGen John Pope to MajGen Henry W. Halleck, 3 September 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 13.

[27] Samuel D. Webster, diary entry, 23 August 1862, Samuel Derrick Webster Collection, Huntington Library, San Marino, CA.

rebels. They soon crossed back over the river before more rains on 24 August caused both commanders to scrap any plans they had for an offensive.[28] Although Pope and Lee found the situation disappointing, Halleck saw the situation in a positive light. "The enemy made several attempts to cross at different points on the Rappahannock, but was always repulsed," he wrote about Pope's Rappahannock position, "and our troops succeeded in holding the line of this river for eight days."[29]

The employment of the Rappahannock as a defensive barrier bought time for the federal forces while waiting for reinforcements. During the stalemate between 22 and 24 August, the divisions of both U.S. Army brigadier generals Philip Kearney Jr. and John F. Reynolds from the Army of the Potomac landed at Fredericksburg. The rest of the Army of the Potomac was making its way north to reinforce Pope's force, although political infighting left most of those soldiers around Washington, DC, rather than involving them in the fighting. Still, the Army of Virginia outnumbered the Army of Northern Virginia.[30]

Recognizing the desperate situation, Lee made a bold, desperate maneuver that forced Pope's hand and moved his army away from the Rappahannock. With the rains relenting and the water receding, Lee ordered half his force—Jackson's wing of 25,000 soldiers—on a flanking maneuver around Pope's right while Longstreet's wing of 30,000 soldiers held the Yankees in place. With the grounds drying but the soil remaining compacted, Jackson's troops successfully outmaneuvered Pope's line without detection. The rebels marched

---

[28] Pope to Halleck, 3 September 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 13; James Longstreet, *From Manassas to Appomattox: Memoirs of the Civil War in America* (Philadelphia, PA: J. P. Lippincott, 1896; reprint, New York: Barnes & Noble, 2004), 135; and Blackford and Blackford, *Letters from Lee's Army*, 124–26.
[29] Halleck to Stanton, 25 November 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 6.
[30] Longstreet, *From Manassas to Appomattox*, 135–36. For more on the political infighting between the Army of Virginia and the Army of the Potomac, see Hennessy, *Return to Bull Run*.

more than 85 kilometers in less than 48 hours, capturing Pope's supply depot at Manassas Junction and enticing Pope to follow.[31]

While soldiers on both sides rarely understood the need for personal hygiene and its association with the spread or prevention of disease, they at times took the opportunity to wash up when not under fire. Without bathtubs readily available, the soldiers employed natural water sources for cleaning. After marching on Manassas Junction and then toward Centreville on the opposite side of Bull Run, Confederate lieutenant John Hampden Chamberlayne took advantage of a brief break from marching and fighting to clean up. When writing his mother about visiting a wounded friend in one of the local field hospitals, Chamberlayne mentioned that he provided his injured comrade with a clean shirt. He found his friend covered in "dust and blood but in good hands." Trying to provide his comrade some relief, Chamberlayne "took off my shirt and gave it to him," since he "happened by good luck to have a clean shirt on, having bathed in Bull Run on friday [sic] morning and changed my clothes."[32] While the water provided relief for Chamberlayne, he, in the process, also contaminated the creek, as any contaminants on his clothes or his person remained in the run after his bath. Similar to how troops tended to use the closest available water source as potential latrines, employing any water that other soldiers possibly drank for hygienic purposes added to the existing health crisis in Civil War armies.

Human contamination was not the only problem late in the operation. As the two armies marched through the region, they needed to dispose of dead animals as well. Usually, in the aftermath of a battle, the people tapped to clean up battlefields burned dead animal carcasses. In Northern Virginia, before the battle began on 28 August, however, Confederate forces used their dead horses to prevent Union

---

[31] Hennessy, *Return to Bull Run*, 96–154.
[32] John Hampden Chamberlayne to Martha Burwell Chamberlayne, 6 September 1862, Frederick City, Maryland, Folder 4, Section 1, Mss1C3552a, John Hampden Chamberlayne Papers, 1858–1877, Virginia Museum of History and Culture, Richmond, VA.

troops from keeping hydrated. Federal officer Jason V. Lawrence of the 2d New York Artillery Regiment reported that his unit maneuvered from Accotink, Virginia, just about 15 kilometers south of Alexandria, to the remnants of the Stone Bridge that crossed Bull Run along the Warrenton Turnpike (modern-day U.S. Route 29) in one day. Despite the troops needing water prior to reaching the creek, Lawrence reported that they could not halt in Centreville because the water was "so bad, on account of dead horses being thrown" in the nearby creek, most likely Cub Run. Instead, Lawrence continued, the artillery unit had to "march on to Bull Run before reaching good water."[33] Just as Blackford feared that the blood of the dead Yankee soldier could cause him to become sick and as Chamberlayne's bathing left behind contaminants, Lawrence recognized that dead horses tossed into the waters could, and most likely did, foul the water, which could deplete the soldiers' energy and leave them feeling sick or in pain constantly. Under those circumstances, the soldiers were never fully effective during the operation.

For 50 hours between 28 and 30 August, the two armies fought along the fields near Bull Run. Misinformation and poor communication between the U.S. commanders allowed the Confederates to outmaneuver and almost destroy the Army of Virginia.[34] After the fighting concluded on the night of 30 August, hydration and the soldiers' abilities to fight became the focus of battlefield reports. Numerous officers reported having soldiers straggle as a result of exhaustion, a sure sign of dehydration, or complained about lacking water sources for their troops. One officer reported to U.S. Army major general Fitz John Porter that he was willing to abandon his position due to the lack of water. "If left to me," he wrote, "I shall have to retire for food and water, which I cannot get here."[35] Pope also

---

[33] Lt James V. Lawrence to Gen Samuel D. Sturgis, 28 August 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 402–3.

[34] Hennessy, *Return to Bull Run*, 155–455; Gaff, *Brave Men's Tears*; and Patchan, *Second Manassas*.

[35] MajGen Irvin McDowell or BrigGen Rufus King to MajGen Fitz John Porter, 29 August 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 524.

cited the shortage of water for his forces as part of his purpose in re-
treating back to Alexandria in the days following his defeat. He had
already reported that the army was short on provisions by the night
of 29 August, stating that neither his soldiers nor his animals had
been fed for two or three days. The ignorance of dehydration also
emerges in Pope's report when he described his force as "broken and
exhausted" by 31 August.[36] As a result of the improper supplying of
water, troops experienced dehydration on a massive scale during the
operation. Both sides had similar experiences with the illness.

Just as the Rappahannock became a part of Pope's defensive po-
sition, the smaller runs of the region were recognized as an import-
ant piece of defensive operations as well. Confederate forces under
Johnston had destroyed the Stone Bridge that crossed Bull Run be-
fore retreating to the Rappahannock in March 1862. Likewise, Pope
employed the steep banks of Bull Run to prevent his army's destruc-
tion. After most of the Army of Virginia used the makeshift bridge
that replaced the Stone Bridge to retreat to Centreville on the night
of 30 August, the final federal elements to cross the structure dis-
mantled it, leaving only the stone tresses behind (figure 4.2). They
hoped that taking these actions would prevent a rebel crossing along
the Warrenton Turnpike and give their forces additional time to es-
tablish a new defensive position. Existing defenses outside of Cen-
treville provided a strong position, but the waterway, Pope and the
federals hoped, could restrict Confederate movements further.[37] Just
as the Rappahannock had done for him the week before, Pope hoped
that Bull Run could help him defend against the rebel movements.
Lee and his subordinates still found their way around Pope's posi-

---

[36] MajGen John Pope to MajGen Henry W. Halleck, 3 September 1862, in *The War of the
Rebellion*, ser. 1, vol. 12, pt. 2, 15–16.
[37] Pope to Halleck, 3 September 1862, in *The War of the Rebellion*, ser. 1, vol. 12, pt. 2, 16.

Figure 4.2. U.S. and Confederate forces left the tresses of the Stone Bridge behind when retreating from the creek in 1862

tion, setting the stage for the Battle of Ox Hill.[38] Even in defeat, Pope looked to the local waterway to help defend against the victorious Confederates.

Water supplies a significant source of sustenance and power in wartime. Throughout the nineteenth and into the twentieth centuries, the U.S. government tried to harness water's power for both economic and military purposes. During the Civil War, water provid-

---

[38] For more on the Battle of Ox Hill, see David A. Welker, *Tempest at Ox Hill: The Battle of Chantilly* (Cambridge, MA: Da Capo Press, 2002); and Paul Taylor, *He Hath Loosed the Fateful Lightning: The Battle of Ox Hill (Chantilly) September 1, 1862* (Shippensburg, PA: White Mane Publishing, 2003).

Local War, Natural War

ed the energy for movements in the western theater.[39] But the rivers of Northern Virginia, so close to Washington DC, played a different role.

In Northern Virginia in 1862, that power restricted the abilities of the U.S. and Confederate armies through both natural and human influences. The waterways did not possess the navigability necessary to move soldiers and supplies quickly. Unlike the western rivers, Virginia's waterways became defensive barriers, allowing the two armies to employ the streams in a different fashion. The soiling of the same waters also sapped the soldiers' energy, reducing their abilities to operate. The armies' contaminants of the creeks and rivers caused the troops to suffer from a cycle of illness from which they never fully recovered. Local circumstances—geologically, hydrographically, and biologically, among other aspects—during the Second Bull Run campaign influenced how this element affected operations. From the Piedmont being home predominantly to waterways rather than static water sources, to the bedrock making it easier for human and animal waste to spoil those sources, Northern Virginia's water influenced every level of Second Bull Run. The simple presence of human and animal actors alongside the local ecological situation created a cyclical human-ecological relationship that affected the outcome of the campaign, affected the experiences of the soldiers and officers, and transformed the local ecology in Northern Virginia. While human actions determined the outcome of the Civil War and altered the local environment in the process, both things did not happen without the input of nature.

---

[39] For example, see Stephen D. Engle, *Struggle for the Heartland: The Campaigns from Fort Henry to Corinth* (Lincoln: University of Nebraska Press, 2001), 1–26; and Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (New York: Pantheon Books, 1985).

Chapter 5

Gelon's Hippeis and the Battle of Himera, 480 BCE

Origins and Developments of Cavalry Traditions in Archaic Sicily

Ryan Hom

Introduction

In 480 BCE, outside the Greek city of Himera in northern Sicily, a massive battle took place between a Greek coalition under the command of the Greek tyrant Gelon and a Carthaginian army under the command of Hamilcar I.[1] The Greeks were ultimately victorious, and this allowed them to secure a sphere of influence over their portion of the island. This battle, while part of a long series of conflicts between the Greeks and their Punic neighbors, presents a unique look into the nature of Greek warfare outside of the mainland during the Greek Archaic Period. This chapter argues that the literary and archaeological evidence associated with the horsemen at Himera demonstrates a cavalry tradition that shows influence from beyond the Greek world. Specifically, the battlefield role performed by Gelon's cavalry was unique compared to how cavalry is thought to have operated in the rest of the Greek world during this period. Given that this cavalry "unit" emerged during the early reign of the Sicilian tyrants, who were known to rely heavily on foreign mercenaries, and that Sicily was located on the periphery of the Greek world and centrally within the Mediterranean world, it is within reason to pro-

---

[1] All ancient dates in this chapter are BCE unless otherwise indicated.

pose that this cavalry tradition came from outside the Greek world or, at the very least, did not come from within it. Furthermore, the value and significance placed on the horsemen and their mounts has no similar parallel within the Greek world at a contemporary time. This case study presents a localized representation of far more global trends concerning approaches and practices of warfare, especially by cavalry, in the Mediterranean world.

There is good scholarship concerning the use of cavalry in the Greek world. The trends and discussions, however, were relatively stagnant for several years. It was the consensus that in the Archaic and early Classical periods, cavalry was of a minimal number and importance on the battlefield.[2] The tendency of cavalries to have a robust, aristocratic makeup was in direct contrast to the more egalitarian ideology of the Archaic hoplite phalanx.[3] This, along with the topography of Southern Greece, is why in places with large hoplite forces, such as Athens, Sparta, Corinth, and Argos, we do not see strong cavalry traditions. As these urban centers tended to be placed center stage in the histories of ancient authors, their representation of warfare has been and still is understood to be a relative norm. Areas of the Greek mainland that did possess strong cavalry traditions, such as Thebes, Thessaly, and Macedonia, are seen as rare exceptions to the hoplite rule.[4] The cavalry that existed was of a light variety, skirmishing with javelins before wheeling away from the heavily armed infantry. Cavalry in the Archaic and Classical periods was of limited effectiveness and use, except in riding down retreating sol-

---

[2] Roel Konijnendijk, "Cavalry and the Character of Classical Warfare," in *Brill's Companion to Greek Land Warfare beyond the Phalanx*, ed. Roel Konijnendijk, Cezary Kucewicz, and Matthew Lloyd (Leiden, Netherlands: Brill, 2021), 169–71, https://doi.org/10.1163/9789004501751_008.

[3] Kurt A. Raaflaub, "Archaic and Classical Greece," in *War and Society in the Ancient and Medieval Worlds: Asia, the Mediterranean, Europe, and Mesoamerica*, ed. Kurt A. Raaflaub and Nathan Rosenstein (Cambridge, MA: Harvard University Press, 1999), 129–62.

[4] Leslie J. Worley, *Hippeis: The Cavalry of Ancient Greece* (New York: Routledge, 1994), 58.

diers or against infantry in broken formations.[5] It was also the consensus that prior to Philip II, cavalry could not operate alone on the battlefield or in a decisive manner.

Most of the information on Classical cavalry comes from the writings of the Greek philosopher Xenophon, and scholars who deal heavily in equestrian history have found his assessments to be in-depth. Many of his observations still hold true about modern equestrian practices.[6] Xenophon's influence, however, has caused a Atheno-centric lens on scholarship concerning cavalry in the ancient Greek world, especially concerning the Archaic and Classical periods.[7] This has further solidified the perspective that the practices of the Southern Greeks are the norm and that the closer to the peripheries of the Greek world one got, the more abnormal cavalry practices became, and that these practices should be seen as deviations from the norm rather than as equal alternatives.

Recently, the subjects of Greek cavalry and cavalry across the Mediterranean world have seen some major revisiting and reevaluation. Topics such as the cavalry of the Achaemenid-Persian Empire or cavalry in combined arms tactics, which have always been held

---

[5] Hans van Wees, *Greek Warfare: Myths and Realities* (New York: Bloomsbury Academic, 2004); John W. I. Lee, "Warfare in the Classical Age," in *A Companion to the Classical Greek World*, ed. Konrad H. Kinzl (Malden, MA: Blackwell, 2006), 480–508, https://doi.org /10.1002/9780470996799.ch23; and Graham Wrightson, *Combined Arms Warfare in Ancient Greece: From Homer to Alexander the Great and His Successors* (New York: Routledge, 2020).

[6] Annelies Koolen, "Of Horses and Men: Developments in Greek Cavalry Training and Warfare (550–350 BC) with a Focus on Athens and Xenophon" (PhD thesis, Radbound Universiteit, 2012); Ann Hyland, "The Development and Training of Cavalry in Greece and Rome," in *The Oxford Handbook of Warfare in the Classical World*, ed. Brian Campbell and Lawrence A. Tritle (Oxford, UK: Oxford University Press, 2013), 512–26, https://doi .org/10.1093/oxfordhb/9780195304657.013.0026; and Carolyn Willekes, *The Horse in the Ancient World: From Bucephalus to the Hippodrome* (New York: Bloomsbury Academic, 2016).

[7] Worley, *Hippeis*; Glenn R. Bugh, *The Horsemen of Athens* (Princeton, NJ: Princeton University Press, 1988); Polly Low, "Cavalry Identity and Democratic Ideology in Early Fourth-Century Athens," *Proceedings of the Cambridge Philological Society* 48 (2002): 102–22, https:// doi.org/10.1017/S0068673500000857; Iain Spence, "Cavalry, Democracy and Military Thinking in Classical Athens," in *War, Democracy and Culture in Classical Athens*, ed. David M. Pritchard (Cambridge, UK: Cambridge University Press, 2010), 111–38; and David M. Pritchard, *Athenian Democracy at War* (Cambridge, UK: Cambridge University Press, 2019), https://doi.org/10.1017/9781108525572.

in the shadow of Greek infantry, are now receiving greater attention within their own cultural and tactical contexts.[8] The narrative that cavalry was incapable of challenging infantry and unable to control the battlefield has also been reevaluated, although the concept of cavalries' "shock" ability is still intensely debated.[9] This chapter seeks to fit into these new emerging narratives concerning the battlefield role of cavalry in the Greek Archaic period and the implications of such a role.

Further enhancing the arguments of this study are the results of excavations of the necropolis of Himera. So far, two mass battlefield graves have been found. The first is associated with the battle in 480 and includes 30 horse skeletons.[10] The other one is associated with a later battle between the Greeks and Carthaginian in 409 but has little relevance to this study. Horse burials were not unheard of in the Archaic Greek world, especially in coastal regions. As seen in the Phaleron horse tombs, these animal burials can demonstrate deep cultural and civic ties between the animal and its owner or com-

---

[8] Wrightson, *Combined Arms Warfare in Ancient Greece*; and Christopher Tuplin, "All the King's Horse: In Search of Achaemenid Persian Cavalry," in *New Perspectives on Ancient Warfare*, ed. Garrett Fagan and Matthew Trundle (Leiden, Netherlands: Brill, 2010), 101–82, https://doi.org/10.1163/ej.9789004185982.i-391.26.

[9] Worley, *Hippeis*; Konijnendijk, "Cavalry and the Character of Classical Warfare"; and Matthew A. Sears and Carolyn Willekes, "Alexander's Cavalry Charge at Chaeronea, 338 BCE," *Journal of Military History* 80, no. 4 (2016): 1017–35.

[10] Serena Viva et al., "The Mass Burials from the Western Necropolis of the Greek Colony of Himera (Sicily) Related to the Battles of 480 and 409 BCE," *International Journal of Osteoarchaeology* 30, no. 3 (May/June 2020): 307–17, https://doi.org/10.1002/oa.2858; Veronica Groppo and Stefano Vassolo, "Le tombe ei morsi ad anello dei cavalli morti nella battaglia di Himera del 480 aC" [The Graves and Ring Bits of the Horses that Died in the Battle of Himera in 480 BC], *Notiziario Archeologico della Soprintendenza di Palermo* [*Archaeological Newsletter of the Superintendence of Palermo*] 52 (2020); Katherine L. Reinberger et al., "'Immortal, though He Lies under the Ground': Osteobiographies of Three Individuals from the First Battle of Himera (480 BCE)," *American Journal of Physical Anthropology* 171 (2020): 231–32; Britney Kyle et al., "Examining the Osteological Paradox: Skeletal Stress in Mass Graves versus Civilians at the Greek Colony of Himera (Sicily)," *American Journal of Physical Anthropology* 167, no. 1 (2018): 161–72, https://doi.org/10.1002/ajpa.23624; and Francesco Bertolino, Flavia Alaimo, and Stefano Vassollo, "Battles of Himera (480 and 409 BC): Analysis of Biological Finds and Historical Interpretation. Experiences of Restoration in the Ruins of Himera, 2008–2010," *Conservation Science in Cultural Heritage* 15, no. 2 (2015): 27–40, https://doi.org/10.6092/issn.1973-9494/7115.

munity.[11] However, almost every known horse burial from this time period in the Greek world should be seen as either civic or heroic in their find contexts, such as the horses in the Lefkandi Warrior Tomb.[12] Much like the literary account of Himera, the horse graves at Himera represent a novelty in that the find context of the graves are inherently martial and associated with a great cultural victory for the Sicilian Greeks.[13] These graves will be dealt with in greater detail later in this chapter.

The Literary Accounts

Concerning the account of the actual campaign of Himera, the Greek historians Herodotus and Diodorus Siculus provide the main literary accounts.[14] Herodotus, writing in the mid- to late fifth century, uses this Greco-Punic conflict as a mirror to the Greco-Persian wars that are central to his narrative. Despite being the author who was closer chronologically to the battle, there is some criticism of Herodotus. He seems to present a bias against Greek Sicily as a land of tyrannical wars and portrays the Sicilian Greeks as having more in common with "barbarians" than with mainland Greeks.[15] Furthermore, his account spends more time addressing the mysterious disappearance of the Carthaginian general Hamilcar and the establishment of his cult

---

[11] Stella Chrysoulaki and Ioannis Pappas, "About the Horses at the Phaleron Delta," in *Hippos: The Horse in Ancient Athens*, ed. Jenifer Neils and Shannon M. Dunn (Athens: American School of Classical Studies at Athens, 2022), 33–39.

[12] Carla Antonaccio, "Religion, *Basileis* and Heroes," in *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*, ed. Sigrid Deger-Jalkotzy and Irene S. Lemos (Edinburgh: University of Edinburgh Press, 2006), 381–96.

[13] Diodorus Siculus claims that the Battle of Himera took place on the same day as the Battle of Thermopylae: Diod. Sic. 11.24.1. Herodotus claims that it happened on the same day as the Battle of Salamis: Hdt. 7.116. In either case, Himera represents a great cultural victory in the Greek West to mirror the contemporary conflicts on the mainland. Abbreviations for all ancient sources in this chapter can be found in Simon Hornblower, Antony Spawforth, and Esther Eidinow, eds., *The Oxford Classical Dictionary*, 4th ed. (Oxford, UK: Oxford University Press, 2012), xxvii–liii, https://doi.org/10.1093/acref/9780199545568.001.0001.

[14] Hdt. 7.159–67; and Diod. Sic. 11.20–26.

[15] Rosario Vignolo Munson, "An Alternative World: Herodotus and Italy," in *The Cambridge Companion to Herodotus*, ed. Carolyn Dewald and John Marincola (Cambridge, UK: Cambridge University Press, 2006), 257–73, https://doi.org/10.1017/CCOL052183001X.018.

of worship than it does the actual battle.[16] Diodorus provides a deeper and more rich account of the battle but is not without his faults as well. He wrote his works in the mid-first century and did not have access to the same number of eyewitness accounts that Herodotus would have had access to. Instead, Diodorus had to rely on secondary sources, and many scholars of Diodorus have accused him of being nothing more than a copyist—and, at times, a bad one.[17]

Before reconstruction of the battle can be discussed, the character of Gelon the tyrant needs to be introduced. Herodotus writes that Gelon rose to power under the rule of the tyrant Hippocrates of Gela, where Gelon served as a member of the tyrant's bodyguard and as the commander of the cavalry.[18] Following the death of Hippocrates, Gelon took over the tyranny and soon conquered much of western Sicily, including Syracuse, becoming wealthy and powerful. In 480, the Greeks of the mainland sent a delegation to Gelon to request that he and his forces join in the defense against the Persians. Gelon initially offered to accept and provide a force of 200 triremes, 20,000 hoplites, 2,000 archers, 2,000 cavalry, 2,000 slingers, and 2,000 ἱπποδρόμοι ψιλοί. The phrase ἱπποδρόμοι ψιλοί has traditionally been translated to mean light infantry that runs with the cavalry. Recently it was argued, however, that this phrase means something similar to "light armed racehorses." This would imply a specialized subgroup of the cavalry and further supports the notion that the Greek cavalry was developed and specialized even in the Archaic period.[19] Additionally, Gelon promised to feed the entire Greek force until the war was over.[20] However, Gelon would only commit these forces if he were given overall command of the allied Greek armies and navies.

---

[16] Munson, "An Alternative World," 264–65.

[17] Franca Landucci Gattinoni, "Diodorus Siculus," in *Oxford Bibliographies-Classics* (Oxford, UK: Oxford University Press, 2018), https://doi.org/10.1093/OBO/9780195389661-0320.

[18] Hdt. 7.154.1–2.

[19] Joshua R. Hall, "The Western Greeks and the 'Greek Warfare' Narrative," in *Brill's Companion to Greek Land Warfare beyond the Phalanx*, 271–72, https://doi.org/10.1163/9789004501751_011.

[20] Hdt. 7.158.4–5.

This was refused by both the Spartan and Athenian envoys. As a result, Gelon and the Sicilian Greeks stayed out of the Persian wars, which was potentially another reason for Herodotus' relatively negative view of the Greeks of the west.[21]

Reconstructing the Battle

When the campaign for Himera began, the Carthaginian general Hamilcar was said to have crossed over to Sicily with an army numbering more than 300,000 warriors and a fleet of more than 200 warships, not counting the numerous transport and supply ships. However, during the crossing, a storm sunk all the horse transports and the ships carrying chariots.[22] Diodorus does not offer a makeup of these forces. Herodotus, however, writes that the Carthaginian army was comprised of Phoenicians, Libyans, Iberians, Ligurians, Elisykians, Sardinians, and Corsicans.[23] Frustratingly for this study, neither historian presents any information concerning the numbers or ethnic origins of the various troop types that would have made up the army (such as light infantry, heavy infantry, cavalry, etc.), so it is impossible to perceive where Carthage might have recruited their cavalry from. What is known is that the loss of the horse and chariot transports was significant enough for Hamilcar to request that his Sicilian allies send him cavalry reinforcements to make up for the loss.[24] Hamilcar arrived outside the city of Himera and set up camps for his navy and army before marching out and pushing the Himerans back behind their walls. Gelon responded to a call for aid by his ally Theron, the tyrant of Akragas (modern day Agrigento), and marched to relieve the city with a force of more than 50,000 infantry and 5,000 cavalry.[25] At this point, as was the case with many tyrants, Gelon was relying heavily on foreign mercenaries. During this cam-

---

[21] Hdt. 7.157–8.
[22] Diod. Sic. 11.20.3.
[23] Hdt. 7.165.
[24] Diod. Sic. 11.21.5.
[25] Diod. Sic. 11.21.1.

paign, Gelon had around 10,000 mercenaries whom he would later reward with citizenship.[26] At their arrival, Gelon sent out his entire cavalry force to harass the Carthaginians who were looting and foraging in the countryside. The Greek cavalry also intercepted Hamilcar's message for cavalry reinforcements. Gelon decided to send his cavalry around the Carthaginian camp to approach from the west and impersonate the reinforcements. The Greek cavalry was allowed into the Carthaginian naval camp, where they then charged to where Hamilcar was conducting sacrifices, slew him, and proceeded to loot the camp and set fire to the ships.[27]

Gelon had posted scouts that looked out over the Carthaginians camp and were under orders to raise a signal once the Greek cavalry had been admitted into the enemy palisade. After seeing the signal, the Greeks marched the rest of their army and arrayed them against the enemy camp. The Carthaginians marched their forces out, and they met the Greeks on the field. The two sides were evenly matched at this point, and the slaughter was great.[28] However, soon the fires from the burning ships became visible, and word that Hamilcar had been slain reached both armies. These events emboldened the Greeks and disheartened the Carthaginians, who soon turned and fled the field. Gelon, being victorious, ordered that no prisoners were to be taken, and more 150,000 Carthaginians were slaughtered in the retreat.[29] After the battle, Gelon is said to have richly rewarded the cavalry for their decisive role and killing Hamilcar.[30]

Concerning the Cavalry

The Sicilian cavalry, or Gelon's cavalry, take center stage in this account of the battle. Gelon, who is often portrayed as a brilliant tactician, strategist, and general, certainly played a very active role in

---

[26] Diod. Sic. 11.72.3.
[27] Diod. Sic. 11.21.6–22.2.
[28] Diod. Sic. 11.22.4.
[29] Diod. Sic. 11.22.1–5.
[30] Diod. Sic. 11.25.1.

developing and improving the cavalry.[31] Gelon first appears as the cavalry commander and bodyguard of the tyrant Hippocrates and would have fought closely and intimately alongside Hippocrates' mounted forces. Those early wars of expansion would have certainly influenced Gelon's personal understanding and doctrine concerning the role of cavalry, both on and off the battlefield.

Already, Sicily is a unique case for cavalry, as Herodotus' description of Gelon is one of first times in the literary tradition that there is mention of cavalry commander being an official position. When talking about the commanders on the Greek mainland, Herodotus uses the term *polemarch* (πολέμαρχος), and these commanders were leading almost exclusively infantry armies. This use of vocabulary displays a tactical appreciation for effective cavalry that was developed enough to be visible to an outside observer. That being said, there is no evidence to suggest that there was any kind of command structure or officer corps like the Greek military leader Xenophon's description in his *Cavalry Commander* later in the fourth century. Nevertheless, given the prominence of the use of cavalry in the wars of Sicilian tyrants, even before Gelon, it does make sense that they had developed a role to lead their horsemen efficiently. It would also make sense then that after Gelon took the position of tyrant, he would have placed one of his trusted and experienced companions as the new cavalry commander, meaning that his cavalry force was well-led, structured, and experienced. The Sicilian Greeks' familiarity and proficiency with cavalry already set them as different from most mainland Greeks.

What truly sets Gelon's cavalry apart from their contemporaries on the mainland, however, is the actual role that they played in the battle itself. After arriving on the battlefield, Gelon sent out his cavalry to harass the Carthaginian troops who were out looting, foraging, and scavenging in the countryside.[32] Diodorus says that the Carthag-

---

[31] Wrightston, *Combined Arms Warfare in Ancient Greece*, 114–15.
[32] Diod. Sic. 11.21.2.

inian troops were *διεσπαρμένοις ἀτάκτως*, or scattered and not in battle order, when the Sicilian cavalry fell on them. As a result, more than 10,000 prisoners were taken. This is the traditional role in which one expects Greek cavalry to excel, riding down infantry when they are in a loose and undisciplined formation, such as when foraging or flee-ing. However, this is not the only role that Gelon's horsemen played. After intercepting the dispatch from Hamilcar, Gelon sent his caval-ry to flank around the Carthaginian army, where they could imper-sonate the arriving Greco-Punic cavalry reinforcements and enter the Carthaginian naval camp. They were able to impersonate the Carthaginian's allied Greek cavalry, which points toward a degree of uniformity among the cavalry found in Greek Sicily, whether citizens or mercenaries. This could take the shape of shared appearance and gear, which could hint toward a collective Sicilian Greek cavalry tra-dition. The other option is that Gelon's cavalry was able to imperson-ate their enemies' reinforcements simply by being Greek speaking.

Once the cavalry was admitted into the naval camp, they attacked. The Sicilian cavalry was responsible for the death of Hamilcar and the burning of the Carthaginian ships. While the naval camp would not have been populated by the same quantity and quality of soldiers found in the Carthaginian army camp, the forces the Sicilians faced would not have been insignificant either. Though our sources do not say, Hamilcar surely would have been accompanied by his compan-ions and bodyguards, who would have put up a significant defense. The camp would have been walled and fortified and probably had a garrison or guard to protect it and the ships. Furthermore, the camp would have been filled with sailors. Diodorus claims Hamilcar came over with 200 warships. Depending on the class of ship, this could equate to potentially 40,000 rowers (not counting the transport and

support vessels), if not more.[33] Any camp for such a force would have been a packed and crowded. Certainly it would have been an ill-suited place for the ranged skirmishing role associated with mainland Greek cavalry, especially as the cavalry would have been hemmed in by the camp's palisade. Gelon also sent only his cavalry to attack the naval camp. There would have been no infantry to help protect and defend the cavalry in the resulting melee, which meant that this role fell to the horsemen. Gelon's cavalry was able to act decisively and independently. The combination of those two traits is very un-characteristic of mainland Greek cavalry. It lends to the theory that the Sicilian cavalry at Himera, or at least the manner in which they fought, did not come from the Greek world.

The Graves of Himera

The archaeological site of Himera is centered on the necropolis of Himera and contains the mass graves of two battles—the battle in 480, which is the focus of this chapter, and a battle that was fought later in 409—mixed in among civilian graves. The mass grave associated with the 480 battle differs from the 409 battle in that the age of the individuals buried in 480 spans across a much narrower range, with almost all the individuals being of a military age (with the majority being between the ages of 20 and 39) and being designated as career soldiers. Furthermore, the skeletons of the soldiers from the battle in 480 show a substantially lower level of premortem skeletal stress, the result of a diverse, robust, and nutrient-rich diet, suggesting that they were a more economically and socially privileged soldiering class.[34] Isotopic analysis of the two mass graves also shows

---

[33] The 40,000 figure comes from the assumption that the warships were all based on the Athenian trireme and held around 200 rowers when fully crewed. There is no evidence to suggest that Hamilcar's warships were triremes, and this number, which is the extreme highest, is only provided to give a sense of scale.

[34] Kyle et al., "Examining the Osteological Paradox"; and Viva et al., "The Mass Burials from the Western Necropolis of the Greek Colony of Himera (Sicily) Related to the Battles of 480 and 409 BCE."

that the grave associated with 409 is filled exclusively with local Himerans, while the mass grave from 480 contains a much more geographically varied population. An osteobiographical study of three skeletons chosen randomly from the 480 in mass grave found that two of the bodies were foreign and not native to Sicily. The third body had isotope levels that identified it as having a semisimilar diet to local Himerans and hints toward the individual having an origin around Syracuse or Agrigento.[35] More study needs to be done, but the available data points to an allied Greek army made up of military-age men who were of a social and economic class that afforded them a comparatively healthy lifestyle. Furthermore, many of the individuals of the Greek army were not native Sicilians but, based on their genetic and dietary isotopes, came from across the Mediterranean Basin.[36]

Let us now consider the 30 horse skeletons associated with the battle in 480, as these have more to inform us. These 30 horses were buried among the men in the mass grave. This proximity to the mass grave of soldiers in the strata, plus the arrowheads buried among the horse skeletons, heavily implies that the horse burials are tied to the battle. Unfortunately, no study has yet been carried out to search for trauma that might prove or disprove their connection to the battle. However, the inconsistencies concerning the placement of the individual horse bodies suggest that these horses were not ritually sacrificed. All the horse skeletons at Himera were found in individual graves, which would denote a high degree of importance associated with those mounts. Horse burials throughout the rest of the Mediterranean world were seen as an announcement of social and economic status. The horse's burial was associated with an owner, often being in the same tomb, marking it as a kind of grave good for an aristo-

---

[35] Reinberger et al., "'Immortal, though He Lies under the Ground'."
[36] Katherine L. Reinberger et al., "Isotopic Evidence for Geographic Heterogeneity in Ancient Greek Military Forces," *Plos One* 16, no. 5 (2021): e0248803, https://doi.org/10.1371/journal.pone.0248803.

cratic elite.[37] In these civic contexts, the horse is regarded as a luxury item that, with its significant connections to the spheres of warfare and leisure, was reserved for only the aristocratic and martial/heroic classes of society across the Mediterranean.[38] However, in most Archaic Greek graves, the horse is present to heighten the prestige of the individual or the community. At Himera, given the fact that these horses were buried individually among a mass grave of Greek soldiers at the site of a major cultural victory, some other meaning seems to be in play. Rather than serving to increase the importance of the fallen soldiers, these horses seem to be buried among them as equals and their inclusion in this sacred space proves that. Furthermore, horses, even the smaller breeds present in antiquity, are big and require a large grave. Through personal experience working on a horse farm, even when aided by heavy machinery, this author can say that burying a single horse is an all-day task that is both physically and emotionally draining. The fact that these 30 horses were not simply cremated or buried in a single mass equine grave speaks volumes to the cultural and emotional value that these horses had to the people who buried them. The fact that these horses were allowed to be buried in a Greek necropolis among the bodies of the fallen also points toward a degree of equal veneration for the two groups, a concept that seems incredibly foreign based on our understanding of "pure" Greek funerary practices during this time. The Athenians would not even share their funerary mound with the Plataeans after their joint victory over the Persians at Marathon, making them set up their own mound a distance away from the Athenian one. This

---

[37] Anne Marie Carstens, "To Bury a Ruler: The Meaning of the Horse in Aristocratic Burials," in *Tracing the Indo-Europeans: New Evidence from Archaeology and Historical Linguistics*, ed. Brigit Anette Olander, Thomas Olander, and Kristian Kristiansen (Oxford, UK: Oxbow Books, 2005), 165–84, https://doi.org/10.2307/j.ctvmx3k2h.14.
[38] Agata Mrva-Montoya, "Learning from Dead Animals: Horse Sacrifice in Ancient Salamis and the Hellenisation of Cyrus," in *Animal Death*, ed. Jay Johnston and Fiona Probyn-Rapsey (Sydney, Australia: Sydney University Press 2013), 114–22.

practice of equine burial alongside the fallen points strongly toward a culture influence coming from outside the Greek world.

Among two of the horse graves, two sets of metal tack have been found, and their construction places them as being of Iberian make.[39] While Iberians were known to fight for the Carthaginians, the fact that Diodorus is relatively straightforward that the Carthaginian cavalry was lost at sea, that the horses are found in a Greek necropolis, and that the battle was a Greek victory all point to the mounts coming from the Greek army. It is also impossible to know how those Iberian bits arrived in Sicily, as they could have come over with the rider, the mount, as a luxury trade good, or due to a combination of those possibilities. The fact that we are presented with osteological evidence that identifies soldiers associated with the 480 battle as coming from outside of Greek Sicily and foreign cavalry gear found in horse graves associated with the same battle, it all lends strength to the argument that Gelon's cavalry was not purely Greek. The evidence suggests that there was influence from outside of the Greek world. To further support or complicate this line of thinking, an Iberian greave (shin armor) was also excavated from the burial site of the mass grave. The current understanding is that this greave was a votive offering.[40] However, it seems that the combination of Iberian tack and the Iberian greave, in combination, are enough to challenge this line of thinking. More examinations of the human and horse skeletons need to be undertaken before any substantial claims can be made; however, the archaeological evidence points toward the possibility that Gelon's cavalry came from beyond the borders of the Greek world, with Iberia being a strong possibility.

---

[39] Groppo and Vassallo, "Le tombe ei morsi ad anello dei cavalli morti nella battaglia di Himera del 480 aC."

[40] Stefano Vassallo, "Un'offerta di schinieri di un mercenario Iberico nella Battaglia di Himera del 480 AC" [An Offering of Greaves from an Iberian Mercenary at the Battle of Himera in 480 BC], *Sicilia Antiqua: International Journal of Archaeology* 6 (2014): 533–40, https://doi.org/10.1400/226072.

Conclusion

The Battle of Himera in 480 had a lasting effect on the history of Greek Sicily and Greeks in the Western Mediterranean. Carthaginian expansion was stopped, and Gelon secured his position as the de facto leader of Greek Sicily, with Syracuse as his power base. His cavalry disappears in the literary record after the battle. Nevertheless, in that battle, the Sicilian cavalry established a legacy that would last long beyond the lives of any of the riders who fought on that day. In the year 415, the Athenian politician Nicias, in his speech to the Athenian assembly, tried to deter the people of Athens from launching an expedition to Sicily. In his speech, Nicias described the Sicilian city-states as being capable of fielding large numbers of hoplites, archers, dart-throwers, triremes, and crews to operate them, but stated that their strongest force was their cavalry.[41] He argued that even if the Athenians sent a superior hoplite force and defeat the Sicilians at sea, without their own substantial cavalry and light infantry to protect their hoplites from the Sicilian horse, the expedition would fail.[42] The Battle of Himera happened 65 years before Nicias gave this speech, but it shows the lasting reputation that was established. Nicias was one of the greatest generals that Athens fielded during the Peloponnesian Wars, and his caution concerning the cavalry of Sicily points towards the reality of their martial prowess. The Athenian expedition to Sicily would eventually fail, and much like Nicias predicted, the Sicilian cavalry would play a significant role in the defense of their island.[43] The reputation of the Sicilian cavalry continued into the Hellenistic period. Recent excavations of Syracuse have found funerary votive reliefs that depict "knights" and their mounts. Some of these knights are mounted, and others are standing in front of their mounts. All of the riders are depicted in richly decorated cui-

---

[41] Thuc. 6.20.4.
[42] Thuc. 6.23.
[43] Thuc. 6.70.3.

rasses, except for one who has his body covered by a shield.[44] These riders are hypothesized to be part of a heroic cult that venerated and wished to mirror the "ideal of aristocratic equestrian life central to Archaic Greek life" that was present in Greek Sicily.[45] Aristocratic equestrian life was not usually central to late Archaic Greek life, as the shift to hoplite warfare diminished the role and strength of aristocracies on the Greek mainland. That these reliefs were found in Syracuse points toward a unique relationship with their equestrian past, a past that might have started with Gelon, his cavalry, and the Battle of Himera.

This chapter suggests that the cavalry of Gelon, which fought at the Battle of Himera in 480 against Carthage, was unique compared to its contemporary cavalry on the Greek mainland. This uniqueness could possibly be the result of influence from an aristocratic cavalry tradition that existed outside the Greek world in the Western Mediterranean. Greek contact with key regions, such as Italy, Gaul, and Iberia, where such traditions existed could have provided avenues for adoption by the Sicilian Greeks. The use of mercenaries, which was a common practice for Sicilian tyrants, would have expedited adoption. This tradition prioritized melee engagements at close quarters, compared to the light, skirmishing, and largely support-oriented tradition found on the Greek mainland. This allowed Gelon's cavalry to carry out their attack on the Carthaginian naval camp and allowed them to act both decisively and independently from the main Greek army. This tradition was continued and venerated by the Sicilian Greeks through the Classical and Hellenistic periods.

---

[44] Giancarlo Bozzo, "Da ippeis ad equites: osservazioni sull'iconografia di alcuni rilievi funerari siracusani del III secolo a.C" [From Ippeis to Equites: Observations on the Iconography of Some Syracuse Funerary Reliefs from the 3rd Century BC], *Vexillum* 3 (2008).
[45] Davide Tanasi, Rosa Lanteri, and Stephan Hassam, "New Data on the Funerary Religion of the Greeks of Sicily," in *Philosopher Kings and Tragic Heroes: Essays on Images and Ideas from Western Greece*, ed. Heather L. Reid and Davide Tanasi (Sioux City, IA: Parnassos Press-Fonte Aretusa, 2016), 329–50, https://doi.org/10.2307/j.ctvbj7gjn.

This case study has demonstrated that it is often incorrect to assume that Greek warfare was predominantly Greek in its origin and resistant to outside influence during the Archaic period.[46] Rather, in the peripheries of the Greek world, approaches to warfare were far more fluid and dynamic, even in the Archaic period. This chapter will hopefully provide the groundwork for future scholarship concerning how the Greeks interacted with the outside world in terms of warfare and approaches to warfare.[47]

PART 2
Global Perspectives

Chapter 6

Influences of French Counterinsurgency Warfare on the American Civil War

Timothy M. Roberts, PhD

Introduction

On one hand, situated between two eras of frontier conquest in the United States, the American Civil War appears quite different from them. The war pitted large armies against one another, often relying on conventional formations and tactics. Most Union troops, and all Confederate troops, were White men. And in the Union's blockade of its coastline, the Confederacy gained de facto treatment as a nation-state. These attributes were uncharacteristic of the Indian wars during the early American republic and the late nineteenth century, which pitted opposing forces of different racial identity against each other, and in which the United States did not recognize American Indians as legitimate belligerents.

On the other hand, common conduct by the Union armies during the latter years of the Civil War illustrates that the war was shaped by "escalating and open-ended savagery" and was a legacy and forerunner of the United States' irregular colonial wars.[1] Other historians have emphasized that irregular warfare, practiced in the colonial era, was ingrained in U.S military doctrine, and that American "settler wars" against Native Americans, as well as conflicts in British colo-

---

[1] For an essay showing the continuity of warfare from the Civil War to Plains Wars, see Lance Janda, "Shutting the Gates of Mercy: The American Origins of Total War, 1860–1880," *Journal of Military History* 59, no. 1 (January 1995): 7–26, https://doi.org/10.2307/2944362.

nies and modern Israel, were similar.[2] This chapter adopts that transnational approach but uses it as a basis for interpreting the Civil War. Specifically, it shows how important aspects of the Union's military and legal actions during the sectional crisis echoed French ways of war in North Africa. Exploring that obscured history, this chapter augments literature highlighting transnational aspects of the American sectional conflict.[3] In the process, it shows how the U.S. military resembled and was in communication with its French counterpart, on the basis that both were intent to develop territorial, imperial spaces by force. Americans adopted tactics and rationales of the *razzia,* a term derived from the Bedouin word for "raid" (*ghazwa*), which became the hallmark of nineteenth-century French military counterinsurgency campaigns in North Africa and later Asia.[4] French counterinsurgency doctrine shaped not only American territorial wars and police actions but also Union practices during the Civil War.

Background in the Antebellum Era

Such borrowing and adaptation happened within the context of the influence of French military thought on the U.S. military during much of the nineteenth century. A prominent figure in this discourse was Antoine-Henri Jomini, a Swiss military officer who served as a French

---

[2] John Grenier, *The First Way of War: American War Making on the Frontier, 1607–1814* (Cambridge, UK: Cambridge University Press, 2005), https://doi.org/10.1017/CBO9780511817847; Walter L. Hixson, *American Settler Colonialism: A History* (New York: Palgrave Macmillan, 2013); and Jeremy Black, *Insurgency and Counterinsurgency: A Global History* (Lanham, MD: Rowman and Littlefield, 2016).

[3] Several approaches to studying the Civil War from a transnational perspective are demonstrated in Michael Geyer and Charles Bright, "Global Violence and Nationalizing Wars in Eurasia and America: The Geopolitics of War in the Mid-Nineteenth Century," *Comparative Studies in Society and History* 38, no. 4 (October 1996): 619–57, https://doi.org/10.1017/S001041750002048X; Don H. Doyle, *The Cause of All Nations: An International History of the American Civil War* (New York: Basic Books, 2013); David T. Gleeson and Simon Lewis, eds., *The Civil War as Global Conflict: Transnational Meanings of the American Civil War* (Columbia: University of South Carolina Press, 2014); and Aaron Sheehan-Dean, *Reckoning with Rebellion: War and Sovereignty in the Nineteenth Century* (Gainesville: University Press of Florida, 2020).

[4] Ludwig W. Adamec, *Historical Dictionary of Islam* (Lanham, MD: Scarecrow Press, 2009), 110.

general from 1807 to 1814. Jomini's *Summary of the Art of War* appeared in English in 1854. Maxims from his other works, derived from writings about the Napoleonic Wars (1803–15), were taught at the U.S. Military Academy at West Point, New York, beginning in 1817, principally by Dennis H. Mahan, a student of the French Military School and a West Point instructor for nearly 50 years. Americans were able to rely largely on Napoleonic military practices to win the war with Mexico in 1846–48, despite warnings before the war by critics that the conflict would degrade into irregular or even guerrilla warfare.[5]

Of course, some of Jomini's principles, especially an emphasis on offensive warfare, overlapped with counterinsurgency strategy and tactics that had been proven effective in French colonial warfare. On the other hand, based on the experience of guerrillas and partisans' effective harassment of Napoléon's troops during invasions of Spain and Russia, Jomini had warned against unconventional wars such as those that developed in French Algeria and in U.S. conflicts with Native Americans and during the American Civil War. In national or "civil wars," as Jomini called them, in which a whole people were called to fight, his principle that armies should mass their forces against a specific point in the opponent's force would be moot. For Jomini, guerrilla and even irregular warfare, besides presenting different challenges than conventional combat between armies, tested soldiers' commitment to behave chivalrously; civilians, in any case, he maintained, should be treated with courtesy and justice.[6]

Jomini's attitude toward *petite guerre* (petty warfare) contrasted with that of the French military leader Thomas Robert Bugeaud, the

---

[5] Edward Hagerman, *The American Civil War and the Origins of Modern Warfare: Ideas, Organization, and Field Command* (Bloomington: Indiana University Press, 1992), 5–13; Michael A. Bonura, *Under the Shadow of Napoleon: French Influence on the American Way of Warfare from the War of 1812 to the Outbreak of World War II* (New York: New York University Press, 2012), 80–113; and William C. Martel, *Victory in War: Foundations of Modern Strategy* (New York: Cambridge University Press, 2011), 77, https://doi.org/10.1017/CBO9780511842443.

[6] Antoine-Henri Jomini, *Summary of the Art of War*, trans. O. F. Winship and E. E. McLean (New York: Putnam, 1854), 47; and Walter Laqueur, *Guerrilla Warfare: A Historical and Critical Study* (New York: Routledge, 2017), 100–1.

influence of whose development of counterinsurgent strategy on the nineteenth-century U.S. military has gone unappreciated. With a background in the Napoleonic Wars and urban riot control for the July Monarchy (reign of Louis Philippe), Bugeaud, as France's governor-general in the new colony of Algeria, abandoned a predecessor's approach merely to maintain various small garrisons against assaults by the leader of Algerian forces, Emir Abdelkader. Bugeaud realized that various aspects of war in Europe had no place in North Africa: "[T]here were no enemy positions that could be attacked, no fortifications, no operationally relevant locations, no strategic deployments, no classical lines of communication, no adversarial army, [and] no decisive battles."[7] Bugeaud consequently adopted tactics of the *razzia*, marrying the lethality of European war technology with the unpredictability and moral ambiguity of colonial conflict.

Various American soldiers worked to bring Bugeaud's way of war to the United States; the informality of this transnational conveyance helps explain its historical obscurity. In 1845, U.S. Army first lieutenant Miner K. Knowlton, a West Point instructor of cavalry and artillery tactics, served as an aide-de-camp to Bugeaud in Algeria. The next year, he participated in the U.S. occupation of Texas that precipitated the Mexican-American War.[8] Stationed at Corpus Christi, Knowlton applied knowledge from North Africa in combating Mexican guerrillas who preyed on American supply lines. As in Algeria, the Americans held whole villages and towns responsible for insurgent attacks. Six additional U.S. officers, including future Civil War generals Philip Kearny Jr. and John E. Wool, studied at the French military school at Saumur in 1832–40 and brought similar lessons back to the United States. French veterans of the Algerian campaigns were teaching new tactics based on their experiences

---

[7] Thomas Rid, "The Nineteenth Century Origins of Counterinsurgency Doctrine," *Journal of Strategic Studies* 33, no. 5 (2010): 727–58, https://doi.org/10.1080/01402390.2010.498259.
[8] Matthew Moten, *The Delafield Commission and the American Military Profession* (College Station: Texas A&M University Press, 2000), 85.

fighting desert Bedouins and mountain tribes.[9] Kearny negotiated a
position for himself with the *Chasseurs d'Afrique*, a light cavalry corps
in the French Army of Africa, with whom he participated in several
combat engagements. He then returned to the United States with
a report that praised strategies that offset Abdelkader's penchant
to attack French troops "with the suddenness of our own Indians."
Kearny delivered a translated copy of the French cavalry manual,
which the U.S. War Department issued in 1841 as *Applied Caval-
ry Tactics as Illustrated in the French Campaign.*[10] Meanwhile, in the
Mexican-American War, Wool, like Knowlton, drew on his exposure
to counterinsurgency warfare with the French military. In charge of
suppressing guerrilla attacks, Wool enforced collective responsibility
for nearby depredations, organized protected hamlets for Mexicans
pledging neutrality, hanged Mexicans who killed discharged U.S.
soldiers, and enforced levies of money and livestock on villages near
U.S. forces.[11]

Kearny's was not the only antebellum U.S. military manual that
drew on lessons from French Algeria. There was also *The Prairie
Traveler*, published in 1859 by U.S. Army captain Randolph B. Marcy,
which was based on Marcy's decade of service in Texas and the Indian
Territory. *The Prairie Traveler*, despite its innocuous name, was the
most important work on frontier warfare published by the U.S. War
Department.[12] In it, Marcy highlighted the influence on his thinking

---

[9] James R. Arnold, *Jeff Davis's Own: Cavalry, Comanches, and the Battle for the Texas Frontier*
(New York: Wiley, 2000), 29; and Douglas Porch, "Bugeaud, Galliéni, Lyautey: The Devel-
opment of French Colonial Warfare," in *Makers of Modern Strategy: From Machiavelli to the
Nuclear Age*, ed. Peter Paret, Gordon Craig, and Felix Gilbert (Princeton, NJ: Princeton Uni-
versity Press, 1986), 376, https://doi.org/10.2307/j.ctv8xnhvw.18.

[10] Philip Kearny, *Service with the French Troops in Africa* (New York, 1844), 1; and Bruce Van-
devort, *Indian Wars of Mexico, Canada and the United States, 1812–1900* (New York: Routledge,
2006), 60.

[11] K. Jack Bauer, *The Mexican War, 1846–1848* (Lincoln: University of Nebraska Press, 1992),
223–25; and Harwood Hinton and Jerry Thompson, *Courage above All Things: General John
Ellis Wool and the U.S. Military, 1812–1863* (Norman: University of Oklahoma Press, 2020),
46–50.

[12] Andrew J. Birtle, *U.S. Army Counterinsurgency and Contingency Operations Doctrine, 1860–
1941* (Washington, DC: U.S. Army Center of Military History, 2004), 65.

of French Army general Eugène Daumas's *Le Grand Desert*, an 1848 memoir that mixed exotic tales of life in the Sahara with analyses of French ways of war developed there.[13] Daumas served in Algeria from 1835 to 1850 and in 1841 headed the Arab Bureau, established to collect data on Algeria's indigenous population. Marcy wrote that the "manner of making war" practiced by North African Arabs and "the wandering tribes that inhabit our Western prairies" were "almost precisely the same."[14] Marcy drew on Daumas's description of French *razzia* practices to prescribe how U.S. forces should travel through Native American-inhabited regions, use advance and rear guards, forge relationships with tribes, and track elusive enemies.

It was not only U.S. military officers who acknowledged French Algeria as a model for U.S. warfare before the Civil War. In a report to President Franklin Pierce in 1856, Secretary of War Jefferson F. Davis emphasized how the French experience on its African frontier shaped his interest in preparing U.S. forces for territorial duty. Davis recommended a system to administer the American frontier that had, he felt, "much parallelism" to Algeria. Beyond the fact that the American West and North Africa shared desert and mountainous terrain, other factors "afford[ed] us the opportunity of profiting by [French] experience." The American indigenous tribes of the Southwest, Davis anticipated, would prove susceptible to irregular tactics that the French had developed: the deployment of troops near settled areas in sizable garrisons capable of projecting force "wherever it is deserved." Such a strategy had instilled in "the [Algerian] native tribes," Davis erroneously noted, "such respect for [French] power that it has seldom been found necessary to chastise any tribe a second

---

[13] Benjamin Claude Brower, *A Desert Named Peace: The Violence of France's Empire in the Algerian Sahara, 1844–1902* (New York: Columbia University Press, 2011), 70–73.

[14] Randolph B. Marcy, *The Prairie Traveler: A Hand-book for Overland Expeditions, with Maps, Illustrations, and Itineraries of the Principal Routes between the Mississippi and the Pacific* (New York: Harper & Brothers, 1859), 183, 203. Marcy cited Eugène Daumas, *Le Grand désert itinéraire d'une caravane du Sahara au pays des Nègres, royaume de Haoussa* [*The Great Desert: Itinerary of a Caravan from the Sahara to the Land of the Negroes, Kingdom of Hausa*] (Paris: Michel Lévy Frères, 1856).

time."[15] Davis's anticipation of Americans' reliance on garrisons to house frontier soldiers, from which they would launch *razzias* against native tribes, reflected how U.S. officials seeking to build a territorial empire were adapting French colonial, not Napoleonic, military practices.[16] After the Civil War, it would be the U.S. conquerors of Davis's Confederacy who would deploy his counterinsurgency strategy in the Great Plains. But in the antebellum era, cosmopolitan Americans like him took Algeria as evidence that U.S. southwestern expansion fit with an international phenomenon of empire-building.[17]

Parallel to the post–Civil War American transfer of cavalry techniques from North Africa was a similar, more immediate transfer of infantry doctrine, again prioritizing the mobility of offensive maneuver.[18] Based on his study at Saumur, France, of skirmishing and hit-and-run tactics used by French light forces in Algeria, on combat warfare on the Texas frontier in 1849–51, and on the U.S. military's adoption of the rifled musket, William J. Hardee as a West Point instructor in 1855 would revise the Army's infantry tactics manual to increase the speed of soldiers' advance (introducing a double-quick time of 165 steps per minute) and to prepare for rapid reformation from a column to a firing line.[19] Hardee's reform would prove inadequate to protect advancing infantry against an enemy armed with either British Enfield or American Springfield rifles, both already

---

[15] Jefferson F. Davis to Franklin Pierce, 1 December 1856, in Jefferson F. Davis, *The Papers of Jefferson Davis*, vol. 6, *1856–1860*, ed. Lynda Lasswell Crist and Mary Seaton Dix (Baton Rouge: Louisiana State University Press, 1989), 68–69; and *Report of the Commission to Examine into the Organization, System of Discipline, and Course of Instruction of the United States Military Academy at West Point* (Washington, DC: Government Printing Office, 1860), 331.

[16] Davis studied French *razzias* at a time when, on account of their usage during the Crimean War, the term came to convey the destruction or looting of a countryside to deny its usage to the enemy. Anthony Dawson, *Letters from the Light Brigade: The British Cavalry in the Crimean War* (Barnsley, UK: Pen and Sword, 2014).

[17] Kevin Waite, "Jefferson Davis and Proslavery Visions of Empire in the Far West," *Journal of the Civil War Era* 6, no. 4 (December 2016): 536–65.

[18] Wayne Wei-siang Hsieh, *West Pointers and the Civil War: The Old Army in War and Peace* (Chapel Hill: University of North Carolina Press, 2009), 49.

[19] Grady McWhiney and Perry D. Jamieson, *Attack and Die: Civil War Military Tactics and the Southern Heritage* (Tuscaloosa: University of Alabama Press, 1984), 50.

available. However, although it would remain somewhat informal and undocumented, his emphasis on the speed of infantry would prove a harbinger for more effective tactics by the later years of the Civil War, as the Union military searched for adaptable and devastating ways to project force, against not only the Confederate military but also civilian supporters of the South's secession. It was in this capacity that the French experience in Algeria helped shape U.S. military doctrine during the Civil War.

The Flying Column

To be sure, Union generals early in the war adhered closely to Napoleonic methods. Most conspicuously, Major General George B. McClellan, commander of the Army of the Potomac, particularly focused on the capture of key places and, such as in the 1862 Peninsula campaign, sought to avoid costly battles, important emphases of Jomini.[20] In July 1862, even Major General William T. Sherman, commanding the Army of the Tennessee, ordered that it would be a "lasting disgrace" for any officer to be found ignorant of "the principles of the Art of War (Mahan and Jomini)."[21]

But novelties of the war eventually led innovative, and perhaps desperate, Union forces to eschew Jominian principles and widen the scope of the war, creating a logistical and moral context for a display of evidence that Union military and political officials adapted means of warfare honed by French forces in Algeria. In 1863, the Civil War, especially once the United Kingdom and France did not intervene on behalf of the Confederacy, intensified as a "national" struggle, heightening the role of civilians and civilian morale in the war's outcome. The nature and severity of Confederate guerrilla and partisan warfare in border areas of Missouri, Kentucky, Tennessee, and

---

[20] Carol Reardon, *With a Sword in One Hand and Jomini in the Other: The Problem of Military Thought in the Civil War North* (Chapel Hill: University of North Carolina Press, 2012), 26–69.
[21] William T. Sherman, General Orders No. 62, 24 July 1862, U.S. War Department, in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, ser. 1, vol. 17, pt. 2 (Washington, DC: Government Printing Office, 1887), 119.

Virginia blurred the distinction between soldiers and civilians and helped excuse Union forces' plunder of Southerners' private property and destruction of the Southern landscape far from the battlefield. And the Confederacy's response to the U.S. military's recruitment of former slaves, pursuant to the Emancipation Proclamation, that such troops, if captured, would be treated as fugitive slaves, provided Union officials a basis for declaring the war a conflict between forces of "civilization" and "savages."

A first step in the U.S. military's movement away from Jominian warfare was its turn in 1862 toward a more rapidly deployable force, the flying column. Flying columns were military units with ancient origins, but by the early nineteenth century they were a formation commonly deployed by armies against unconventional enemies, a relevant context in which to understand the Union military's eventual treatment of the South.[22] In Algeria, through experimental and harsh but ultimately successful combat against Abdelkader's insurgent forces in the 1840s, General Bugeaud embraced the Algerian *razzia* tactic—"the ruse, the raid, and the ambush"—and adapted it for usage by flying columns, which included a few battalions of infantry and squadrons of cavalry, one or two howitzers, and a small

---

[22] "A flying column is seldom used in regular warfare among civilised nations." "Life in a French Kitchen," *Once a Week* 2 (December 1859–June 1860), 197. The formation dated in the modern era to French and Austrian actions against guerrillas in Corsica in the 1730s. A Mexican flying column surprised and captured 300 Texans in March 1836. Treated as pirates by the Mexican government, the Texans were infamously executed at Goliad. U.S. Army general Zachary Taylor organized an American flying column against the Comanches and partisan Mexican forces near Reynosa, Mexico, in September 1846. See Charles E. Callwell, *Small Wars: Their Principles and Practice* (London: His Majesty's Stationary Office, 1906), 136; Spencer C. Tucker, *Almanac of American Military History*, vol. 1 (Santa Barbara, CA: ABC-Clio, 2013), 613; and Robert P. Broadwater, *General George H. Thomas: A Biography of the Union's "Rock of Chickamauga"* (Jefferson, NC: McFarland, 2009), 23.

transport train by mules or camels.[23] Bugeaud's goal was to increase the frequency of French contact with Algerian troops and to destroy Algerian people's sustenance, enabling superior French firepower to become more intimidating and decisive.

The U.S. military, of course, had previous experience with swift moving irregular forces, even as recently as the Crimean War (1853–56).[24] A *New York Times* reporter there attributed the superior performance of French troops to their experience in Algeria.[25] But the development of flying columns, and the eventual resorting to the brutal tactics of the French *razzia,* can be found in such evidence as a plan provided to the Union armies by Alexis Godillot, a French entrepreneur best known as an innovative tanner who first changed footwear from being identical on both feet to having a right foot and left foot. Since at least 1848, Godillot had supplied uniforms to the French Army, including its forces in Algeria, and in 1860 he wrote a study that documented Bugeaud's logistical innovations there.[26] Godillot sought to devise a means for French soldiers in the field to carry all necessary equipment with them, thereby dispensing with

---

[23] Robert B. Asprey, *War in the Shadows: The Guerrilla in History*, vol. 1 (Garden City, NJ: Doubleday, 1975), 168. The U.S. military actually experimented with a camel corps for desert warfare, which was successful but short-lived. In 1836, U.S. Army lieutenant George H. Crosman first recommended to the War Department the military usage of camels. In 1855, at the recommendation of Secretary of War Jefferson Davis and on the basis of the French Army's use of camels in the Sahara, Congress approved deployment of several dozen camels as beasts of burden. The camels outperformed horses and mules, but the Civil War ended the experiment. Lewis B. Lesley, "The Purchase and Importation of Camels by the United States Government, 1855–1857," *Southwestern Historical Quarterly* 33, no. 1 (July 1929): 18–33; and Thomas L. Connelly, "The American Camel Experiment: A Reappraisal," *Southwestern Historical Quarterly* 69, no. 4 (April 1966): 442–62.

[24] U.S. Army captain George B. McClellan, for example, observed the work of Russian Cossack forces in 1855 and recommended that their techniques be deployed against American indigenous tribes. Eufrosina Dvoichenko-Markov, "Americans in the Crimean War," *Russian Review* 13, no. 2 (April 1954): 143, https://doi.org/10.2307/125706.

[25] "The French in Algeria," *New York Times*, 13 March 1855.

[26] James J. Schneider, "The Loose Marble—and the Origins of Operational Art," *Parameters: The U.S. Army War College Quarterly* 19, no. 1 (1989): 92, https://doi.org/10.55540/0031-1723.1539; and Raymond Lassarat, *Alexis Godillot, 1816–1893* (Vincennes, France: Raymond Lassarat, 1984), 24–45.

supply trains entirely.[27] Frequently a visitor to the United States in the 1850s to purchase machinery for his textile factories, in October 1861 Godillot supplied the U.S. military equipment and uniforms modeled on the French light infantry *chasseur* for 10,000 soldiers.[28] He also provided a sketch of the organization of a French colonial flying column.

Brigadier General Montgomery C. Meigs, Quartermaster General of the U.S. Army, received Godillot's paper, and on 2 January 1862 he distributed it as a circular, conceptualizing columns of 2,000 infantry, 400 cavalry, 2 artillery pieces, and 50 horses. Troops were to be organized into squads of eight, each man carrying compressed rations and specific camp or medical supplies. Initially, wagons were replaced by mules, except for resupply after each march. As Meigs's translation of Godillot read, "Go on thus, advancing always. Alarm the enemy, break up his camps, and keep always advancing. These are the tactics which the French army employs with success."[29] On 7 March 1863, the Army of the Potomac distributed Special Order No. 85, calling for implementation of Godillot's plan, with the goal to create lighter, more agile forces that were less dependent on supply depots and wagons. A year later, that doctrine was foundational to Lieutenant General Ulysses S. Grant's adoption of "hard war" against the South. In giving Grant overall command of Union forces, President Abraham Lincoln ominously assured Grant that he

---

[27] Earl J. Hess, *Civil War Logistics: A Study of Military Transportation* (Baton Rouge: Louisiana State University Press, 2017), 171.

[28] Alain Cointat, *Les Souliers de la Gloire: Alexis Godillot (1816–1893)* (Toulon: Presses du Midi, 2006), 123; Montgomery C. Meigs to W. S. Pennington, 9 August 1861, in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, ser. 3, vol. 1 (Washington, DC: Government Printing Office, 1899), 393; and Don Troiani, *Regiments and Uniforms of the Civil War* (Mechanicsburg, PA: Stackpole Books, 2002), 64. In 1862, a U.S. military board recommended that the entire Union army adopt a uniform based on the French *chasseur* garb, although the recommendation was not adopted.

[29] Montgomery C. Meigs to Daniel A. Butterfield, 11 May 1863, in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, ser. 1, vol. 25, pt. 2 (Washington, DC: Government Printing Office, 1889), 490–91.

should prosecute the war without "any restraints."[30] To the extent that Union strategists adopted French military practices, Grant's orders culminated a pivot from the Napoleonic doctrine of Jomini to the counterinsurgency doctrine of Bugeaud.

While several Union commanders honed tactics in counterinsurgency against irregular Confederate forces, it was Major General Sherman's broad punitive warfare against the people of the Deep South that best illustrates adaptation of French warfare in North Africa. Tasked to hold territory and protect supply lines in the western theater earlier in the war than in the eastern theater, Sherman's forces were more vulnerable to guerrilla attacks. He consequently adopted harsh war techniques beginning in 1862 in Mississippi, subsequently moving through Tennessee, Alabama, Georgia, and the Carolinas. Sherman embraced the new Union military emphasis on troop mobility, and logically, he authorized his soldiers to supplement—and, in Georgia, replace—their rations with food confiscated from the countryside. Beyond that, as a rule, Sherman instructed his forces generally to treat all Southerners not aiding Union troops, "old and young, rich and poor," as the enemy, and to consume or destroy everything in their path as they moved.[31] Sherman's forces shelled towns without warning, razed villages, and destroyed farms and railroad lines. Sherman ordered the evacuation of Atlanta, stranding its residents in the countryside or deporting them out of the state by train. Elsewhere, to dissuade Confederate cavalry from mining railroad lines carrying Union supplies, he threatened to load prisoners and civilians on the trains. Approaching Savannah, prisoners were made to walk in front of Union soldiers to explode or detect and

---

[30] Abraham Lincoln to Ulysses S. Grant, 30 April 1864, in *The Collected Works of Abraham Lincoln*, vol. 7, *1863–1864* (New Brunswick, NJ: Rutgers University Press, 1953).

[31] Brooks D. Simpson and Jean V. Berlin, eds., *Sherman's Civil War: Selected Correspondence of William T. Sherman, 1860–1865* (Chapel Hill: University of North Carolina Press, 2014), 703.

dig up Confederate landmines.[32] At the end of 1864, Sherman would interpret these ways of war as markers of the Civil War's differences from conflicts in Europe, as Jomini had anticipated: "[T]his war differs from European wars in this particular: we are fighting not only hostile armies, but a hostile people, and must make young and old, rich and poor, feel the hard hand of war, as well as their organized armies."[33]

The Lieber Code

Union troops' prosecution of the "hard hand of war" clearly went beyond any prewar doctrine of warfare prescribed by Napoleonic French and U.S. military theorists. Some legal scholars have concluded that at least some elements of Sherman's brutal Deep South campaigns violated not only modern laws of war but even the contemporaneous Lieber Code, declared on 24 April 1863.[34] The Lieber Code's principal author, the Prussian-American jurist Francis Lieber, was, like Jomini, a veteran of the Napoleonic Wars. But the extent of the Civil War's casualties; its legal ambiguities regarding civilians, spies, prisoners, and partisan troops; and the Lincoln administration's interest in justifying the Emancipation Proclamation and sanctioning the status of former slaves sparked Lieber's authorship of a "modern law and usages of war" different from Jomini's prescriptions.[35] Lieber claimed that his goal was to differentiate the "modern regular wars of the Europeans, and their descendants in

---

[32] Samuel M. Bowman and Richard B. Irwin, *Sherman and His Campaigns: A Military Biography* (New York: Charles B. Richardson, 1865), 235; and William T. Sherman, *Memoirs of General William T. Sherman*, vol. 2 (New York: D. Appleton, 1886), 194.

[33] William T. Sherman to Henry W. Halleck, 24 December 1864, in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, ser. 1, vol. 44 (Washington, DC: Government Printing Office, 1893), 799.

[34] Erik Ringmar, "Francis Lieber, Terrorism, and the American Way of War," *Perspectives on Terrorism* 3, no. 4 (December 2009): 52–60; and Julian Ku and John Yoo, *Taming Globalization: International Law, the U.S. Constitution, and the New World Order* (New York: Oxford University Press, 2012), 147.

[35] Francis Lieber, *Instructions for the Government of Armies of the United States in the Field* (Washington, DC: Government Printing Office, 1898), 7.

other portions of the globe [including the U.S. military's]" from war-fare practiced by "uncivilized people" and "barbarous armies."[36] Lieber, in other words, sought to distinguish the American Civil War from European colonial wars.[37]

Couched in terms of differentiating between Europeans and their descendants and uncivilized people, however, the Lieber Code effectively licensed Sherman's harsh war measures in the Deep South, which were actually characteristic of European forces fighting outside European borders, particularly French warfare in Algeria. The code identified all "citizen[s] or native[s] of a hostile country" as the enemy.[38] Everyone was therefore susceptible to war's hardships. It allowed the execution of prisoners in retaliation against the enemy's unlawful behavior and the execution of spies and irregular fighters. It allowed the shooting on sight of individuals suspected of trying to commit sabotage. It allowed the starving of unarmed enemies and the bombardment of civilian areas without warning. It allowed destruction of all enemy property and "incidentally unavoidable" destruction of any person.[39] Ultimately, it held that the "paramount" consideration of legal warfare was the saving of the nation-state, which Lieber wrote "must be maintained at any price, under any circumstances."[40] Consequently, the Lieber Code sanctioned extreme violence against civilians, many of whom may have shared the perception of Alabamian John Parrish that U.S. forces "would extermi-

---

[36] Lieber, *Instructions for the Government of Armies*, 10.
[37] Recent scholarship has emphasized that the Lieber Code, as an "artifact of Native wars," reflected American settler colonial history. See, for example, Helen M. Kinsella, "Settler Empire and the United States: Francis Lieber on the Laws of War," *American Political Science Review* 117, no. 2 (May 2023): 629–42, https://doi.org/10.1017/S0003055422000569.
[38] Lieber, *Instructions for the Government of Armies*, 9.
[39] Lieber, *Instructions for the Government of Armies*, 7. Neither the Lieber Code, nor prior treatises on international law, nor the Hague Convention of 1907 provided for protection of the lives or property of *civilians*, a term not used in international law until 1949. Jeremy Rabkin, "Anglo-American Dissent from the European Law of War: A History with Contemporary Echoes," *San Diego International Law Journal* 16, no. 1 (2014): 5.
[40] Lieber, *Instructions for the Government of Armies*, 4; and Lieber quoted in Aaron Sheehan-Dean, *The Calculus of Violence: How Americans Fought the Civil War* (Baton Rouge: Louisiana State University Press, 2018), 65–66.

nate our race if they could. They will make it a war to annihilation if they can."[41] A Southern periodical's threat early in the war, that the people of the South "will become as savage as the Seminoles," was perhaps unintentionally prophetic.[42]

Apparently, neither Lieber nor Sherman had read specific literature on French colonial warfare as a source for shaping military doctrine or practice in the later years of the Civil War. Still, they each had opportunities to learn about French practices. Lieber had corresponded in the 1840s with the French diplomat Alexis de Tocqueville concerning the history of American westward expansion, the character of settlers, and their relationship with local and national political authorities. As a member of the French parliament, Tocqueville consulted Lieber to gather information to help formulate Algerian policy near the end of the July Monarchy.[43] Tocqueville, famous as the author of *Democracy in America*, actually hoped that Algeria could, like the American frontier, produce democratic opportunity and metropolitan renewal.[44] And Lieber wrote his code at the request of Major General Henry W. Halleck, general-in-chief of the Armies of the United States, who had visited France to study the French military before publishing the leading U.S. military science textbook, in which he recommended French forces' response to their "savage and undisciplined" Algerian enemy as a guide for the U.S. military's response to "the Indians in this country."[45]

Meanwhile, Bugeaud's commentaries on his Algerian war strategy appeared in English in 1863. In addition to principles of infantry tactics, the book also included a section called "International Law

---

[41] Quoted in Daniel E. Sutherland, *American Civil War Guerrillas: Changing the Rules of Warfare* (Santa Barbara: ABC-Clio, 2013), 94. Aaron Sheehan-Dean argues that the Lieber Code limited the Civil War's death toll. Sheehan-Dean, *The Calculus of Violence*, 181.

[42] Quoted in Hixson, *American Settler Colonialism*, 107.

[43] David Clinton, *Tocqueville, Lieber, and Bagehot: Liberalism Confronts the World* (New York: Palgrave Macmillan, 2003), 6.

[44] Timothy Mason Roberts, "The Role of French Algeria in American Expansion during the Early Republic," *Journal of the Western Society for French History* 43 (2015): 153–64.

[45] Henry W. Halleck, *Elements of Military Art and Science* (New York: D. Appleton, 1863), 321.

and Usages of War," which had not appeared in the book's earlier French version.[46] Bugeaud's laws of war were similar to those promulgated the same year by Lieber, pointing toward a convergence of doctrine shaped, on one hand, by unconventional colonial combat and, on the other, by warfare between conventional armies grappling with the usages of new technology and the degenerative nature of civil war "so terrible for the sake of humanity," as Jomini had warned after witnessing partisan warfare in France and Iberia.[47]

To be sure, both the Lieber Code and Bugeaud's description of international law affirmed that human rights bounded justifiable military action: the Lieber Code stated that principles of "humanity" governed the exercise of martial law and the treatment of prisoners; Bugeaud pledged that "rights of humanity" were "above necessity and rights of war."[48] However, like Lieber's statement that a soldier's obedience to laws of war was subject to whatever was necessary to save the country, Bugeaud declared, "Necessity knows no law. . . . [N]o general, loving his country, hesitates to put himself above ordinary rules." For Bugeaud, like Lieber, the vindication of the nation-state justified resort to various illicit war tactics.[49]

Therefore, wrote Bugeaud, unlike laws of "humanity," laws of war permitted "terrible" and "cruel" actions, including destruction by asphyxia, compulsion of civilians to house and feed soldiers, and taxation or confiscation of "all things appertaining to the enemy . . . [which] belong by right to the conqueror." Bugeaud distinguished, as did Lieber, between "civilized nations" and "barbarians" and indicated that *razzias* could be a legitimate means of war waged only against the latter group. Bugeaud did not define a *razzia*, but his de-

---

[46] Thomas Bugeaud, *The Practice of War: Being a Translation of a French Military Work Entitled "Maxims, Counsels and Instructions on the Art of War"* (Richmond, VA: West and Johnson, 1863), 145. The earlier French version was Thomas Bugeaud, *Instructions pratiques du maréchal Bugeaud* [*Practical Instructions from Marshal Bugeaud*] (Paris: Leveneu, 1854).
[47] Antoine-Henri Jomini, *Summary of the Art of War* (New York: Putnam, 1854), 42.
[48] Bugeaud, *The Practice of War*, 129.
[49] Bugeaud, *The Practice of War*, 128–29.

scription of acts of an enemy that could justify a *razzia* anticipated Sherman's rationale that all Southerners should suffer what he acknowledged was his forces' "barbarity and cruelty": Bugeaud asserted that *razzias* were justifiable "when the entire [enemy] population . . . participat[ed] generally in the acts of hostility."[50] Therefore, such a justification for Sherman's resorting to "hard war" could be found in the Confederate South as much as in French North Africa.

While Sherman officially prohibited his troops' theft and destruction of private property in the South, he echoed Bugeaud in his interpretation that Southerners collectively were savages: "all of the people are now guerrillas . . . the entire South, man, woman, and child are against us, armed and determined."[51] In consequence, Union forces needed to "imitate" Southerners' resort to terror, as the necessary means to "colonize the country."[52] Sherman anticipated that Southerners should "dread the passage of troops through their country."[53] The Union general here echoed Confederate president Jefferson Davis's antebellum praise for the French cavalry's power to instill "such respect . . . that it has seldom been found necessary to chastise" Algerian tribes more than once. More to the point, Sherman echoed Bugeaud's report of an attack on stubborn Kabyle tribes in Algeria's Tell Atlas mountains. For Bugeaud, the French troops' "appalling work of destruction is undoubtedly cruel," yet "the infor-

---

[50] Bugeaud, *The Practice of War*, 130–32; Sherman quoted in Thomas Robisch, "General William T. Sherman: Would the Georgia Campaigns of the First Commander of the Modern Era Comply with Current Law of War Standards?," *Emory International Law Review* 9, no. 2 (1995): 470. Both the Lieber Code and Bugeaud's pronouncement of international law forbade the execution of prisoners of war, torture, and usage of poison.

[51] Simpson and Berlin, *Sherman's Civil War,* 279, 311. In September 1863, Sherman wrote Henry W. Halleck: "[W]e will remove and destroy every obstacle, if need be, take every life, every acre of land, every particle of property, everything that to us seems proper. . . . [A]ll who do not aid us are enemies." William T. Sherman, *Memoirs of General William T. Sherman*, vol. 1 (New York: D. Appleton, 1875), 367.

[52] Quoted in John F. Marszalek, *Sherman: A Soldier's Passion for Order* (Carbondale: Southern Illinois University Press, 2007), 196.

[53] William T. Sherman to Ulysses S. Grant, 4 October 1862, in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, ser. 1, vol. 17, pt. 2 (Washington, DC: Government Printing Office, 1887), 260.

mation we have received suggests that this incursion has induced a sense of terror in all the Kabyle tribes because it has shown that we can go wherever we want. . . . [T]here are simply no other means of conquering this extraordinary people."[54] Broad acceptance of *razzia* warfare in the Atlantic military world by the 1860s, as well as the Lincoln administration's need to justify warfare against all Southern civilians, shaped Union forces' adaptation and rationalization of brutal counterinsurgency techniques honed in French North Africa to conquer the "savage" people of the South on account of their resistance to the preservation of the American nation-state.[55]

Conclusion

In 1870, Lieutenant General Philip H. Sheridan visited France as a military observer of the Franco-Prussian War on the Prussian side. Sheridan had been the chief practitioner of the Union's brutal warfare in Virginia during the Civil War's latter stages. In September 1864, for example, Grant instructed Sheridan to conduct raids into Virginia's Shenandoah Valley to turn the region into what Grant said should be a "barren waste."[56] On the principle that poverty, not death, was war's great punishment, Sheridan destroyed all food, forage, farms, and livestock, actions that a participating officer described as both "horrors" and "necessities of war."[57] Sheridan's order to raid Virginians suggested the suddenness with which Union forces were expected to attack anyone merely near insurgent activity and

---

[54] Bugeaud quoted in William Gallois, *A History of Violence in the Early Algerian Colony* (London: Palgrave Macmillan, 2013), 124–25.

[55] The leading military theorist of the early nineteenth century, the Prussian military strategist Carl von Clausewitz, emphasizing that certain kinds of warfare could be humane, specified that "wars between civilized nations are far less cruel and destructive than wars between savages." Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 76.

[56] Grant quoted in Mark E. Neely Jr., *The Civil War and the Limits of Destruction* (Cambridge, MA: Harvard University Press, 2009), 115.

[57] Quoted in Neely, *The Civil War and the Limits of Destruction*, 112.

to destroy their livelihood, an example of the principle of collective responsibility that had become central Union military doctrine.

In France, Sheridan advised Prussian chancellor Otto von Bismarck that he should take the lesson of Sheridan's Civil War Shenandoah campaign to deal with the *Francs-tireurs* who were carrying out guerrilla attacks on Prussian supply lines during the siege of Paris. Bismarck thereafter gave the order to burn all French villages and hang their male inhabitants found near guerrilla activity and to bombard Paris with heavy artillery despite the presence in the city of children. Witness to Sheridan's counsel of Bismarck, future chief of the Imperial German General Staff Alfred von Waldersee recalled Sheridan's comment that the Prussian Army had "hit" the French enemy but "not yet learned how to annihilate him. One must see more smoke of burning villages, otherwise you will not finish with the French."[58] The irony of Prussian forces' usage of counterinsurgency tactics to subdue the Second French Empire, prescribed by a U.S. general drawing on French practices in North Africa that U.S. forces had borrowed and adapted, was perhaps lost on Sheridan. On the other hand, the outcome illustrated how counterinsurgency warfare—from development in Algeria, to adaptation in the American South, to deployment in the suburbs of Paris—was transnational and "highly imitative" long before the turn of the twentieth century.[59] This example of a transnational, if contextualized and contingent,

---

[58] Quoted in Carl Degler, "American Civil War and German Wars of Unification: The Problem of Comparison," in *On the Road to Total War: The American Civil War and the German Wars of Unification, 1861–1871*, ed. Stig Förster and Jörg Nagler (New York: Cambridge University Press, 2002), 68, https://doi.org/10.1017/CBO9781139052474.003.

[59] Quoted in Douglas Porch, *Counterinsurgency: Exposing the Myths of the New Way of War* (Cambridge, UK: Cambridge University Press, 2013), 71, https://doi.org/10.1017/CBO 9781139226301.

military tradition bolsters arguments against a singular American "way of war" ingrained from early in the country's history.[60]

On this basis, the American Civil War did indeed become different from "all the wars of Europe," as William Sherman later characterized his campaigns.[61] It was, however, far more like a European colonial war in terms of the Union's development of strategy and legal treatment of the South than has been previously acknowledged.

---

[60] A traditional argument for a unique American approach to war focusing on attrition and annihilation can be found in Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (Bloomington: Indiana University Press, 1977). See also Brian McAllister Linn, *The Echo of Battle: The Army's War of War* (Cambridge, MA: Harvard University Press, 2007). Linn, disputing Weigley's thesis, argued that counterinsurgency was a part of Americans' adaptive approach to warfare.

[61] Sherman, *Memoirs of General William T. Sherman*, vol. 2, 183.

Chapter 7

The Nineteenth-Century Traffic in Soldiers' Bones

Europe's Controversial Opportunity to Enrich the Earth

Alexander Belovsky

Introduction

In the decades following Europe's return to peace in 1815, following the French Revolutionary and Napoleonic Wars, reports began appearing in European newspapers concerning an unexpected consequence of the continent's recent conflicts: the emergence of a trade in bones sourced from former battlefields. The economic opportunities offered by Europe's war dead challenged society to balance traditional rituals and morality with the effects of modern war and commerce. The ensuing controversy provided a context to reflect on how modern societies should relate to the dead in the wake of changing religious attitudes, emerging national identity, and solidifying class distinctions.[1] It also revealed how this was a long and confused transition in which national communities slowly reassessed the fallen soldiers, transforming them from a burden to a resource to a symbol.

As early as the 1820s, a growing demand for bones for use in fertilizers and various industries caused them to be imported from a variety of sources, including former battlefields. As it became "well

---

[1] Within this context, early reports on this so-called "traffic in human bones," such as "A ship from Hamburg arrived at [Lossiemouth] last week, laden with bones . . . collected from the plains and marches of Leipsic, and are part of the remains of the thousands who fell in the battles," were not just a trivial piece of news but the augur of an oncoming crisis in European identities. "Traffic in Human Bones," *Spectator*, 7 November 1829.

known" across the Western world that "many hundreds of tons of human bones" from famous battlefields had been caught up in this burgeoning international trade, intellectuals of every type attempted to make sense of this bizarre reality and understand the feelings that it provoked.[2] From the creative works of litterateurs and poets to the texts of agriculturalists, scientists, and encyclopedists, the trade in battlefield bones became subjected to cultural, moral, economic, and political critique.

Today, the claims of British merchants turning bones from Napoleonic battlefields into fertilizer have been mostly forgotten or overlooked as dubious apocrypha. Something so out of keeping with modern attitudes toward battlefields and military dead that it seemed almost unthinkable that there could be much truth behind these reports. However, the nineteenth-century contemporaries of these reports gave them far more attention and credence, suggesting that such presentist assumptions should be put aside. Contemporaries viewed reports of battlefield bones being exploited not as something outlandish but rather as something indicative of an ever-approaching modernity. Consequently, regardless of its veracity, the trade in soldiers' bones was treated as fact by nineteenth-century writers, and their readers were affected by the ensuring discourse.

Until recently, however, scholars have treated tales of nineteenth-century battlefield bone collection as inconsequential if not entirely fictitious; as a result, the practice has hardly been studied by historians.[3] This has begun to be rectified by ongoing archaeological

---

[2] Henry Colman, *European Agriculture and Rural Economy: From Personal Observation*, vol. 2 (Boston, MA: Charles C. Little and James Brown, 1849), 412.

[3] As recent years' scholarship has begun to touch on this issue, it has drawn significant public interest and been covered in the popular press. See, for example, Tony Pollard, "These Spots of Excavation Tell: Using Early Visitor Accounts to Map the Missing Graves of Waterloo," *Journal of Conflict Archaeology* 16, no. 2 (September 2021): 75–113, https://doi.org/10.1080/15740773.2021.2051895. According to Iain Banks, Pollard's article was "a paper that has had more press interest than anything" that had previously been covered in the *Journal of Conflict Archeology*. Iain Banks, "Editorial," *Journal of Conflict Archaeology* 16, no. 3 (September 2021): 65–68, https://doi.org/10.1080/15740773.2021.2052010.

excavations at the Waterloo battlefield in Belgium, where these often-forgotten reports have provided a plausible explanation for the battlefield's present-day lack of mass graves. Still, the discussion has centered on judging the veracity of these oft-doubted claims.[4] In contrast, this chapter is less concerned with the veracity of these claims than with their acceptance and discussion across Europe.

To this end, a transnational approach has been taken to investigate questions such as: What information about this practice was widely known? How was it rationalized? On what basis was it critiqued during the nineteenth century? By answering these questions, this century-long controversy reveals emergent national identities as well as competing visions of modernity, particularly its connections to economic change, social stratification, and the culture around death. Even if one rejects the veracity of the reports of the exploitation of battlefield remains, the discourse around it still provides an informative glimpse into European perceptions of their countries, rivalries, and futures.

By and large, the pertinent discussions of this topic were not found in the guidebooks and travel accounts that have been the staples of scholarship on battlefield memory. Rather, this was a discourse found in everything from encyclopedias and scientific journals to the satirical press and miscellanea sections of newspapers. These scattered discussions found in outdated academic texts and dated satire can teach us about far more than from whence fertilizer came. They also reveal how European societies characterized their own national identities and differentiated themselves during a period of profound societal change.

---

[4] Pollard, "These Spots of Excavation Tell." It should also be noted that a recent publication on Waterloo's "missing dead" points to the large role being played by local sugar refineries. However, based on the sources consulted for this chapter, the use of battlefield bones in fertilizer appears to have overshadowed the sugar industry's role in contemporary nineteenth-century discussions. See Arne Homann, Robin Schäfer, and Bernard Wilkin, "Die Toten von Waterloo" [The Dead of Waterloo], *Archäologie in Deutschland* [Archeology in Germany] 3 (July 2023): 44–45.

Economic Context:
A Creative Solution to a Mundane Problem

Within the economic context of the early nineteenth century, the exploitation of battlefield remains can be seen as a response to economic and demographic pressures. This was not only a period of industrial revolution but also a time of great agricultural change as agricultural science matured to a point where experimental findings were put into widespread practice. Advancements in fertilizers constituted a central part of this nineteenth-century revolution in agriculture—a revolution during which bone fertilizer emerged as a litmus test for agricultural modernization.[5] Many earlier innovations in agriculture changed how and what farmers planted, but modern fertilizers were a consumable product more than a new method. It was not just buying a new type of plow or variety of seed but committing to purchasing a substantial quantity of a formulated mixture on a recurring basis. In essence, this would be a new commodity. While scientific experimentation with fertilizers was a pan-European phenomenon, the British were recognized as being drastically more accepting of the application of these agricultural advancements during the early part of the century. This was especially true for bone fertilizer; continental observers noted how many British farmers and industrialists "regarded [it] as the finest discovery of modern agriculture."[6] As agriculturists increasingly established the fertilizing effects of bones and farmers changed methods, former battlefields began to be evaluated through this new lens.

---

[5] Bonemeal fertilizers were the first step in this process, and despite their benefits, their adoption was neither immediate nor universal. Like other technological changes, these new agricultural practices conflicted with traditional beliefs and methods, prompting significant backlash. However, by the middle of the century, resistance to agricultural change became increasingly marginalized, with those "clinging obstinately to old ways" being dismissed as "stand-still dunces" by their critics. "The Farmers' Note-Book No. XXXII," *Journal of Agriculture* 5 (1853): 46–47.

[6] M. Fouquet, *Traité des engrais et amendements* [*Fertilizers and Amendments Treaty*] (Paris: Libraire Agricole de Dusacq, 1855), 28.

Europe's Battlefields in the Center of a New Global Trade

The nineteenth century's unprecedented demographic expansion fostered anxieties that Europe would soon outstrip its ability to feed itself. An ever-increasing population necessitated ever-increasing harvests, and during the early decades of the century, bone fertilizer appeared to be a vital part of achieving this goal. Soon, "dispatches were sent out all over the world to collect bones," driven by "a great worry that the fields will be depleted." As a result, it was not long until "the trade in this strange article developed a tremendous magnificence."[7] Ultimately, the international trade in European bones proved to be a fleeting one; after a few decades of rapid growth, new advancements in fertilizers and an increasing difficulty in sourcing bones on the continent severely compromised it.

However, during the initial bonanza for bone fertilizers, the battle sites of recent decades took on unexpected economic significance. While bones were a resource that all nations had some natural supply of, battle sites emerged as particularly enticing sources for human and animal bones because of their shallow mass graves and proximity to major roads or rivers. Writers in the 1860s would later recall the "rich and lasting yields" provided by the European battlefields of the Napoleonic era and how they had been "immediately exploited" as "all concern for those who had fallen gave way to speculation."[8] The first half of the century had demonstrated that far from being sacrosanct, battlefields could be "exploited like mines" with surprisingly little resistance.[9]

As distasteful as the commodification of battlefield remains appeared to subsequent generations of more nationally conscious Eu-

---

[7] "Die Verarbeitung de Abfälle in der Industrie" [The Processing of Waste in Industry], *Aus der Natur: Die neuesten entdeckungen auf dem Gebiete der Naturwissenschaften* [*From Nature: The Latest Discoveries in the Field of Natural Sciences*] (Leipzig: A. Abel, 1863), 148.

[8] "Ueber Verwertung der Abfälle (Fortiebung)" [About Recycling of Waste (Forecast)], *Gewerbezeitung: Organ für die Interessen des Bayerischen Gewerbstandes* [*Commercial Newspaper: Organ for the Interests of the Bavarian Business Community*] 13, no. 17 (1863): 66.

[9] "Die Verarbeitung de Abfälle in der Industrie," 148.

ropeans, once the economic benefits were recognized, the process took on an air of inevitability. Still, what lessons should be taken from the entire episode continued to be an open question. One German writer considered if battlefield bone collection should be seen as a utilitarian model for the future. After all, if "freedom fighters and disciplined soldiers" were made "useful to mankind" by giving up "part of themselves to the earth when the rest of them ascended into the heavens," then it was reasonable to ask if the same practice should be applied to the disposal of civilian dead, which was becoming a pressing concern for increasingly overcrowded cities.[10] Turning battlefield remains into fertilizer confronted Europe's intellectuals with the strange face of economic modernity, and they were left pondering how malleable societal beliefs would be and whether moral implications could outweigh material benefits.

Monopolies and Unshared War Traumas: The Alienation of the British from Continental Europe

Despite the economic soundness of the idea, as one might expect, British prospecting for bones on Europe's battlefields was not without controversy. The commonalities in continental criticism of the British import of battlefield bones revealed that there were fundamental differences in the geographies of European war memory. Most broadly, it highlighted the differences between British wartime experiences during the Coalition Wars (French Revolutionary and Napoleonic) from those of its recent enemies and allies on the continent. When it came to sites of war memory, Austrians, Prussians, and Russians often had more in common with their French enemies than with their British allies sharing the same battlefields across Central and Eastern Europe. The result was a strange sense of

---

[10] Johann Carl Leuchs, *Zehn tausend Erfindungen und Ansichten aus einem Leben von 1797 bis Jezt: 1820 bis 1832* [*Ten Thousand Inventions and Views from a Life from 1797 to Now: 1820 to 1832*], vol. 2 (Nuremburg: Verlag Leuchs, 1870), 98.

shared wartime experiences and war memories among continental Europeans.[11]

The European discourse on the trade in battlefield remains can be divided into a few distinct phases that reflect the asynchronous engagement that European regions had with the topic. The earliest discussions were in the English press during the 1820s, but these were usually brief and initially treated the topic as a curiosity. Responding to these reports, German academics began a more thorough critique of the practice from the 1830s to the 1860s. As these German critiques were translated, British responses and French reflections emerged between the 1840s and 1870s. Finally, a late reassessment of these earlier discussions can be seen in Spanish texts during the 1870s and 1880s as that country confronted agricultural modernization a bit later. Each one of these stages and their associated discourses had their own emphases and arguments that reflected how they perceived the British, war memory, and their own national character.

Justus von Liebig and Continental Objections to British Bone Theft
Very quickly, any examination of the trade in battlefield bones reveals the distance between early-nineteenth-century and present-day war memory, as the issue of soldiers' remains was just as often treated as a property dispute as it was a question of morals or nationalist symbolism. One of the earliest and most influential critics of the British use of battlefield bones was the German chemist and agriculturist Justus, baron von Liebig. During the 1850s, Liebig repeatedly accused British agents of perpetrating a great theft on continental Europe through the transportation of bones. He saw the British as acting "like a vampire," feeding on the continent's dead, particular-

---

[11] This may well have been facilitated by the Coalition Wars' shifting alliances, which left soldiers' personal bravery and conduct often more significant than whether they had fought alongside or against the French. A quick survey of German Napoleonic veteran memoirs reveals that many of the popular ones were authored by soldiers who had spent more time serving alongside the French than against them.

ly those found on its battlefields, thereby reducing the fertility and mineral resources of European lands.[12] This practice was, according to Liebig, the centerpiece of a dangerous and unsustainable agricultural system that threatened to impoverish future generations of Europeans.

Liebig's condemnation of Britain's "agricultural vampirism" quickly drew British ire. The British press went beyond reporting Liebig's critiques and replied with passionate defenses of British practices and launched their own attacks on Liebig and his compatriots. Even less-opinionated publications took note of how "Liebig sternly rebukes England for her over-eagerness to buy up, in the form of bones, the phosphatic wealth of countries less advanced than herself in financial and industrial power, and for the apparent recklessness with which she squanders forth those treasures."[13] Moreover, Liebig's references to the exploitation of battlefield remains were identified as an "almost passionate invective" likely to offend British readers. The most antagonistic and emotional British responses to Liebig called his motives into question, suggesting that Liebig "hates England, with a bitterness passing common" for having prospered in the use of fertilizers without following his own practical advice on the subject.[14] Such critiques dismissed Liebig's criticisms as being born out of jealousy rather than science.[15]

---

[12] William H. Brock, *Justus Von Liebig: The Chemical Gatekeeper* (Cambridge, UK: Cambridge University Press, 2002), 178; Bertell Ollman and Kevin B. Anderson, eds., *Karl Marx* (New York: Routledge, 2017); John Bellamy Foster, *The Ecological Revolution: Making Peace with the Planet* (New York: Monthly Review Press, 2009), 145; Justus Liebig, *Die Chemie in ihrer Anwendung auf Agricultur und Physiologie* [*Chemistry in Its Application to Agriculture and Physiology*] (Braunschweig, Germany: Friedrich Vieweg, 1862), 133; and Justus Liebig, *Letters on Modern Agriculture* (New York: John Wiley & Sons, 1859), 246.

[13] "The Industry of Manures," *Gardeners' Chronicle and Agricultural Gazette* 24, 20 August 1864, 796.

[14] The author colorfully reminds readers that "[t]here is nothing more spiteful than a jealous woman or professor." "Notes upon Passing Events," *Journal of Gas Lighting, Water Supply and Sanitary Improvement* (2 December 1862): 749.

[15] "Notes upon Passing Events," 750.

Aside from the personalized vitriol aimed at Liebig, the British responses also emphasized British dissimilarity to continental Europe. First, this new controversy could be framed as a resurrection of old continental suspicions of the English; Liebig's words appeared to help "that small school of continental politicians who see in the simplest and even in the most generous actions of Englishmen some new profound plot of perfidious Albion."[16] However, the controversy could also foster new distinctions. Aside from defending Britain, British writers also leveled their own judgments on the German populace, arguing that German farmers were uninterested in modern agricultural methods and that German merchants also were complicit in the harvesting of bones from battlefields. Despite German scientists being at the forefront of advancements in modern fertilizers, some Englishmen were hesitant to see foreign farmers as their equals in modern agriculture, it being observed that "the Germans . . . are, as farmers, immeasurably below the English standard," particularly in regard to the purchasing of fertilizer.[17] The suggestion that continental Europeans were suffering from the British monopolizing of bones was likened to being accused of "depriving naked savages of furniture" simply because Europeans had imported South American mahogany.[18] It was even suggested that the true goal of Liebig's "malignant theory" was to "bring us back to the primitive and disgusting practices" employed by German farmers.[19] Finally, the role of German agents in providing the British with bones gave an opportunity for Liebig's condemnations to be reversed. It was observed that local German agents had played an increasing role in the bone trade and were therefore "answerable for turning the results of

---

[16] "Notes upon Passing Events," 750.
[17] German farmers' tendency to keep more livestock than their British counterparts provided another visible marker of their preference for traditional manure over other fertilizers. William Blackwood, ed., "Notes of a Recent Tour in Germany," *Journal of Agriculture* 5 (1853): 9.
[18] "Notes upon Passing Events," 750.
[19] "Notes upon Passing Events," 750.

battle-fields into merchandise" more than their British customers.[20] Expanding on this point, it was asserted that far from the British exhibiting mercenary tendencies, it was local Germans who, seeking to fulfill the British demand for bones, compromised their morals for money as they "preferred English gold to super-photic fertility."[21] Ultimately, British defenses seemed to have done little to dispel the skepticism of those who suspected the British of increasingly seeing themselves as superior and separate from the rest of Europe. Long after British dominance in the bone trade eroded, Liebig's controversial denunciation of British agriculture remained as the central text in this episode of agricultural history.[22] What had started as a disjointed collection of curious reports in British newspapers had become an enduring controversy within European intellectual circles and the public sphere.

Varied Reactions to the Controversial Treatment of European War Dead

German Self-Reflection and Lamentations over a Lost Opportunity
Combined with the Anglo-critical commentary, regional identification with local battle sites—and the dead contained within—further reinforced distinctions between countryman and foreigner when the threat of bone exportation was recognized by German writers. Early on, some German critics dismissed celebrations of bone fertilizer's merits as simple "English-windbaggery" and were placated by the belief that their own local battlefields had "not provided any

---

[20] "Notes upon Passing Events," 750.
[21] "Notes upon Passing Events," 750.
[22] Decades later, Liebig's arguments were still repeated almost verbatim as the starting point for any discussion of bone fertilizers. For a few examples, see André Sanson, "La loi d'extension des races" [The Law of Extension of Races], ed. Émile Littré and Grigory Wyrouboff, *La Philosophie Positive: Revue* [*Positive Philosophy: Review*] 13 (1874): 328–29; and Leopoldo José Maria Martinez Reguera, *Fauna de Sierra-Morena: catálogo descriptivo de los mamiferos del término de montoro* [*Fauna of Sierra-Morena: Descriptive Catalog of the Mammals of the Montoro Term*] (Madrid: M. Romero, 1881), 283–84.

bones" for such endeavors.[23] However, this solace was short-lived, with German commentators increasingly acknowledging that British bone-collecting had extended to battlefields well east of Waterloo.[24] In a 1835 guide on fertilizers, the Austro-Czech agriculturalist Johann Karl Nestler noted how it had become common knowledge that the English had taken "the bones of fallen heroes, slain horses, etc." from battlefields near Germany's navigable rivers to "work miracles" back in Britain.[25] German inaction in the face of this exploitation puzzled Nestler, who questioned how it was that "[t]he German let the piles [of bones] be taken away in front of his nose."[26] This "profound inattention" continued to be lamented decades later, albeit in primarily economic terms.[27] Instead of adapting, "[t]he German farmer clung to his inherited customs; he knew nothing but his stable dung and an enduring belief in it stood unshakably firm, while England spent millions on bones and increased the yield of a field threefold." It was recalled how "[i]n Germany, nobody had any idea

[23] "Kurze Anzeigen—Jahrbuch der neuesten und wichtigsten Entedkkeungen und Erfindungen" [Short Advertisement—Yearbook of the Latest and Most Important Discoveries and Inventions], *Leipziger Literaturzeitung* [*Leipzig Literary Newspaper*], 28 December 1827.

[24] For instance, in 1870 it was acknowledged that "[t]he fields of Leipzig were also the subject of such activities, partly to obtain teeth, partly to obtain powdered bones for fertilizing the wheat fields in England." Leuchs, *Zehn tausend Erfindungen und Ansichten aus einem Leben von 1797 bis Jezt*, 98.

[25] Specifically, Nestler stated that "[i]t has become fairly well known among us that for the last twenty years the English have claimed all the battlefields near the navigable rivers which flow into the North Sea, and several thousand ships filled with the bones of fallen heroes, slain horses, etc. go by sea to their land, in order to now work miracles as bone fertilizer and bring new wonders in the realms of the luxuriant goddess Flora, or grander yet the goddess Ceres. The remains of the combatants at Waterloo, near Leipzig, even those of the combatants on the Zissaberg and Weissen Berge near Prague, have recently been targeted by English speculators in the service of sugar cane and agriculture." Johann C. Nestler and Franz Diebl, *Mittheilungen über zweckmäßigste Wahl, Bereitung und Verwendung des Düngers: zwei von der k.k. mährisch-schlesischen Gesellschaft zur Beförderung des Ackerbaues, der Natur- und Landeskunde gekrönte Preisschriften* [*Information on the Most Appropriate Choice, Preparation and Use of Fertilizer*] (Brünn, Germany: Rudolph, 1835), 52–53.

[26] Nestler and Diebl, *Mittheilungen* über *zweckmäßigste Wahl, Bereitung und Verwendung des Düngers*, 52–53.

[27] "Ueber Verwertung der Abfälle (Fortiebung)," 66.

what an important, even indispensable treasure they were letting the sly English kidnap" during the first half of the century.[28]

Explaining why Germans had failed to recognize the danger and opportunities posed by soldiers' bones was a topic of careful reflection and instructive for understanding identities. Nestler asked what held Germans back from using these bones themselves. Was it simply a "holy dread of his brothers' ashes?"[29] Nestler argued that it would be better for Germans, both living and dead, for these bones to fertilize local fields instead of being taken by foreigners to distant lands. He called on his readers to "take the remains of those who died for our peace" and put them "in a grave where the hand of the trafficker can no longer desecrate them" by sprinkling them onto German fields.[30] After all, how could using soldiers' bones to "grow flowers . . . and fruit to feed the poor be more shameful than bartering these bones for a few pennies, behind the backs of the relatives left behind?"[31] By Nestler's logic, using soldiers' bones as a local source of fertilizer would not just help the living but also protect the dead from possible repatriation. Of course, this also had the benefit of enabling Germans to acquire "cheaply from nearby" a product that they would have to otherwise import in the future.[32] Overall, German-language commentary was characterized by this balancing of a German reverence toward their dead against a need for pragmatic action. Even with an appreciation for the pragmatic, German commentators still identified clear contrasts between British and German behaviors when it came to battlefield remains. It was observed that "[e]ven the battlefield of Waterloo, where children of their own coun-

---

[28] "Die Verarbeitung de Abfälle in der Industrie," 148.
[29] Nestler and Diebl, *Mittheilungen* über *zweckmäßigste Wahl, Bereitung und Verwendung des Düngers*, 52–53.
[30] Nestler and Diebl, *Mittheilungen* über *zweckmäßigste Wahl, Bereitung und Verwendung des Düngers*, 52–53.
[31] Nestler and Diebl, *Mittheilungen* über *zweckmäßigste Wahl, Bereitung und Verwendung des Düngers*, 52–53.
[32] Nestler and Diebl, *Mittheilungen* über *zweckmäßigste Wahl, Bereitung und Verwendung des Düngers*, 52–53.

try bled, found no mercy" from British avarice.[33] In contrast, "[i]n Germany, people had a keen sense of what was important," despite having allowed "the clever sons of Albion to kidnap" the "intangible treasure" contained in their own battlefields.[34] Here and elsewhere, German commentators framed the traffic in soldiers' bones as both material "theft" and the "kidnapping" of one's countrymen.[35] Somewhat paradoxically, the dead were simultaneously treated as both an object belonging to a community as well as human beings whose dignity needed protection.

This commentary sketched the outlines of national character through the virtues and vices of both parties. German critics had depicted the British as sly, unscrupulous violators of their familial duties to fallen sons and brothers, with some expressing horror at the very idea that "widows and orphans . . . must eat bread made with the bones of their fathers and husbands!"[36] In general, introspective German critiques reaffirmed their own people's commitment to familial ties while acknowledging the problems raised by their people's traditionalism, which had led to a failure to both protect their battlefields from foreign exploitation and take full advantage of these resources themselves. Ultimately, the British were simultaneously cast as both the morally inferior foreigner and an imperfect model for what may be required for economic modernity.

The French Perspective:
Historizing Innovation and Defending Past Glories
Although less vocal than German writers in the early stages of the debate, by the 1840s, French scientific circles were quite aware of

---

[33] "Ueber Verwertung der Abfälle (Fortiebung)," 66. Likewise, another report stated that "[t]hey did not even waste the battlefield of Waterloo where their own country's children had bled." "Die Verarbeitung de Abfälle in der Industrie," 148.

[34] "Ueber Verwertung der Abfälle (Fortiebung)," 66.

[35] Both suggest that it was the transportation of soldiers' bones rather than their exploitation, which was most objectionable.

[36] "Die Frühlings-Meetings in den Vereinigten Staaten" [The Spring Meetings in the United States], *Karlsruher Beobachter* [*Karlsruhe Observer*], 4 July 1847.

the rumored British exploitation of battlegrounds. Unlike the Germans, who saw the exporting of battlefield bones occurring right under their noses, the controversy often appeared more distant for the French. Most of the major battlefields containing French war dead were scattered across parts of Europe well outside French jurisdiction. Instead of focusing on a zero-sum agricultural conflict, French commentators focused on challenging the claims of British ingenuity and showing their rival's lack of respect for military dead. Rather than portraying the bone fertilizer that drove this novel exploitation of battlefields as a dramatic revolution in agricultural science, French writers were more likely to emphasize the much longer history of bone fertilizers.[37] Certainly these ideas were "eagerly developed upon by the farmers of Great Britain," but the British contribution was being an eager adopter whose success brought bone fertilizers "into much more general use" rather than being its inventor.[38] Even then, it was noted that the British were not to be seen as entirely unique, particularly by the middle of the century as areas in Germany and France increasingly applied the same methods.[39] At the same time, it should be noted that through the 1840s, bone fertilizer remained a "highly controversial" topic and some uncertainty of its utility persisted, with M. M. Wrède, Franz Körte, and Mathieu

---

[37] By framing the discussion in this way, the originality of bone fertilizers was downplayed and the use of bones for economic purposes was normalized. In one recounting of bone fertilizer's history, Adrien de Gasparin noted that such methods had been "[u]sed from time immemorial," with the British simply popularizing a modernized variation of it. Likewise, Fouquet reminded his readers that "[t]he idea to use the skeletal remains of animals as fertilizer does not come from recent days; it goes back to a time already very distant from us." Even when describing the rise of modern bone fertilizers, it was also made clear that although British industriousness had helped these fertilizers be "developed further" in recent decades, the modern breakthroughs were the work of continental agriculturalists such as Friedrich Kropp and not products of British ingenuity. See Adrien Étienne Pierre de Gasparin, *Cours d'agriculture* [*Agriculture Course*], 2d ed., vol. 1 (Paris: Librairie Agricole de la Maison Rustique, 1846), 525; and Fouquet, *Traité des engrais et amendements*, 27–28.

[38] Gasparin, *Cours d'agriculture*, 525.

[39] Specifically, it was noted as being "widespread in Auvergne, around Strasbourg, in the Grand Duchy of Baden, [and] in Württemberg." Jean-François-Marie Bertet-Dupiney de Vorepierre, *Dictionnaire français illustré et encyclopédie universelle* [*Illustrated French Dictionary and Universal Encyclopedia*], vol. 1 (Paris: Imprimerie de I. Martinet, 1857), 1106.

de Dombasle remaining skeptical of its universal usefulness.[40] This circumspect attitude dissipated by the middle of the century, as the effectiveness of British fertilizing methods were "quickly put beyond doubt" and Britain eagerly looked beyond its borders to "the continent, [and] exploited all the battlefields of Europe."[41]

Additionally, the importation of battlefield remains was read as a strange and surprising act of desperation. That the British "have even exploited the battlefields of the Empire" seemed to go beyond normal expectations.[42] Britain's combing of "the battlefields of Leipzig and Waterloo" were cited as proof of the "extreme measures" that were necessary to fulfill British demand for bone meal.[43] Although by the 1860s, Napoleonic battlefields should have already made their contribution to the world's bone supply, their exploitation continued to be discussed as a contemporary event caused by the pressures of an expanded and increasingly global fertilizer trade rather than a defunct practice of the industry's earliest days. In particular, the treatment of Waterloo was given special attention by French authors, often being singled out above some of France's own victories.[44] Partly, this could be explained by the mournful reverence the French had for Waterloo, but it was also true that the French were intrigued by the obsessive fascination that the British maintained for that particular battlefield. As a result, reading that the English had disturbed "even the glorious remains of the battle of Waterloo" seemed to reveal

---

[40] Gasparin, *Cours d'agriculture*, 525.

[41] Fouquet, *Traité des engrais et amendements*, 27–28.

[42] Vorepierre, *Dictionnaire Français illustré et encyclopédie Universelle*, 1106.

[43] J. Piccard, *L'Avenir de l'agriculture d'après M. de Liebig* [*The Future of Agriculture According to Mr. de Liebig*] (Lausanne, Switzerland: Imprimerie L. Vincent, 1863).

[44] D. Charbonnier, "Os (Technologie)" [The Technology], in *Nouveau dictionnaire de la conversation, ou, Répertoire universel* [*New Conversation Dictionary, or Universal Directory*] (Brussels: Librairie Historique-Artistique, 1843), 6; and Léon Renier, ed., *Encyclopédie moderne: dictionnaire abrégé des sciences, lettres, arts, de l'industrie, de l'agriculture et du commerce* [*Modern Encyclopedia: Abridged Dictionary of Sciences, Letters, Arts, Industry, Agriculture, and Commerce*], vol. 14 (Paris: Firmin Didot Frères, 1857), 137–38.

British hypocrisy.[45] Just as in Germany, the exploitative treatment of recent battlefields was taken by the French as being indicative of British character and an opportunity to define the contours of a moral superiority through the denunciation of the English's apparent elevation of commerce over honor. One French response to reports of the shipments of bones from Napoleonic battlefields was to assert that only the English were capable of such acts.[46] It was observed that as a rule "[t]he English . . . neglect nothing that can be the object of a . . . lucrative trade" and consequently "very quickly recognized all that bones could offer."[47]

> In all times and among all peoples, the remains of the brave dead on the battlefields have been an object of respect and worship, for England, it is an object of commerce. Such a mercantile idea could only come from the English. For thirty years, ugly second-hand dealers from Great Britain have traveled the sites of the titanic fights of the Republic and the Empire, and have exhumed the bones of dead warriors, in order to use them as fertilizer. Is it possible to imagine a more execrable and revolting profanation! So this John-Bull definitely has a big sou in the place of a heart?[48]

Although exemplifying the inherent commercialism of the English, the bone trade was also used to emphasize how the French should think differently and see the very idea of disturbing soldiers' remains as repugnant. That the news of such a practice was becoming nor-

---

[45] Gasparin, *Cours d'agriculture*, 525; and P. Rochette, "Les os.—utilité de les récolter pour l'industrie (1)" [Bones—Use of Harvesting Them for Industry (1)], *Moniteur d'hygiène et de salubrité publique* [*Hygiene and Public Health Monitor*] 3, no. 8 (August 1868): 293.

[46] "Vieux os a vendre" [Old Bones for Sale], *Le Charivari*, 7 December 1847, 2.

[47] J. Du Jonchay, "Des os et de leur emploi en agriculture (Annales Agricoles de l'Allier)" [Bones and Their Use in Agriculture (Agricultural Annals of Allier)], *Journal de la ville de Saint-Quentin et de l'arrondissement* [*Journal of the City of Saint-Quentin and the District*], 17 December 1848, 6.

[48] "Vieux os a vendre," 2.

malized was lamented as an erosion of French moral identity. After all, how could any member of the French nation "not be moved seeing the English sell as fertilizer the remains of Frenchmen," particularly those who had been part of past glories?[49] The invoking of past military glories and noting the indifferent treatment that all dead soldiers received at British hands were common features of French critiques.[50] For instance, in his concise recounting of British actions, one writer is able to convey both outrage as well as pride in France's past victories: "[t]he battlefields of Germany have not even been respected by them, and the bones of our warriors, those of the peoples whom we so often vanquished on the fields of Germany, and particularly those who cover the plain of Waterloo, have been removed." The need to protect and honor military glories of the past was made all the more acute by France's compromised geopolitical position during the first half of the century. Generally, French critics, unlike their German counterparts, objected less on the basis of ownership or possible economic theft but instead on the grounds of national honor.[51] Possibly, these debates around war dead even reveal a divergence between French and German conceptions of national belonging: German critiques were often based on familial duty, employing the language of brothers, mothers, sons, etc., while French critics fo-

---

[49] "Vieux os a vendre," 2.

[50] Du Jonchay, "Des os et de leur emploi en agriculture," 6. Similarly in 1850, Gustave Heuzé reminded his readers "that the battlefields of Germany, of Spain were not respected by English speculators, that the bones of our warriors, like those of the soldiers whom we had vanquished, have been removed from there, as well as those which covered the plain of Waterloo, to serve as fuel for the factories surrounding London." Gustave Heuzé, "Cours d'agriculture: Professé a L'Institut Agricole de Grand-Jouan" [Agriculture Course: Taught at the Agricultural Institute of Grand-Jouan], *L'agriculteur praticien revue de l'agriculture francaise et etrangere* [*The Practical Farmer Review of French and Foreign Agriculture*] (1850): 41.

[51] Simple geography can partially explain this; the battlefields at the center of this controversy were outside of France. Perhaps the emotional rhetoric of indignant disgust at the idea that "Albion must grow fat on both the living and the dead" reflected the fundamental inability of French citizens to neither exploit nor protect these war dead. "Vieux os a vendre," 2.

cused on the special place of the citizen-soldier.[52] When British bone imports finally slowed, the French breathed a sigh of relief that after having "searched all the battlefields of the continent" and used "the remains of our brave men to fatten their lands," the English would "finally leave us our bones."[53]

Anglophone Reception: Uncertainties and Religious Sensibilities
English-language discussions concerning the exploitation of soldiers' remains were diverse and included plenty of condemnations, rationalizations, and countercriticisms. The least damning recountings of the exploitation of soldiers' bones cast doubt on the extent and motives of the practice. The case was made that the use of human bones was a secondary and accidental consequence of innocent efforts to collect animal bones rather than a deliberate act. Readers of the *Cyclopedia of Agriculture* were informed that "the bones which are collected for the purposes of agriculture are of all sorts, and comprise parts of the skeletons of the highest and lowest orders of animals," and that "probably, some that have once been part of the human frame, and have been filched from the charnel-house, or gathered from the unconsecrated burial grounds of armies—the battlefields of Europe," were included in material collected.[54] Certainly, this accidental narrative provided English readers with a far less ominous explanation for why Britain's "wondering millers" found "amid the bone heaps fragments of shivered swords and rusty breastplates."[55] Another softening of criticisms of bone collecting in English sources came from how the battlefield was framed. Far from being a hal-

---

[52] These observations essentially conform to the long-term distinctions described in Rogers Brubaker, *Citizenship and Nationhood in France and Germany* (Cambridge, MA: Harvard University Press, 2009).
[53] Eugène Lacroix, ed., "Assainissement," in *Dictionnaire industriel à l'usage de tout le monde* [*Industrial Dictionary for Everyone*] (Saint-Denis: Eugène Lacroix, 1892), 104.
[54] John C. Morton, "Bone Manure," in *A Cyclopedia of Agriculture: Practical and Scientific*, vol. 1 (London: Blackie and Son, 1855), 272.
[55] William Blackwood, ed., "The Farmers' Note-Book.—No. XXXII—Johnston's Notes on North America," *Journal of Agriculture* 5 (1853): 46–47.

lowed resting place, the battlefield was cast as an unprotected space with its "unconsecrated" status being emphasized.[56] Other British depictions of bone collecting were far less forgiving or dismissive, acknowledging that Europe had been "ransacked for this new and potent agent of fertility" and informing readers of how numerous sites of "unforgotten strife" had been targeted by their countrymen.[57] "Leipsic, Waterloo, and far Borodino; Eylau, Lutzen, and Friedland, and many another bloody field of fight" were all admitted as being "opened for the sake of their hidden treasures."[58] When taken as a whole, whether these acts should be excused, lamented, or celebrated was not always apparent in the Anglosphere's recountings of the nineteenth-century exploitation of battlefield bones.

English-language discussions of the trade in soldiers' bones also provided an alternative angle for justifying the practice through religious interpretation. Despite challenging many Christian assumptions concerning proper burial, some Christians found in the use of soldiers' remains to enrich the earth a beautiful contrast between the sinful wastefulness of war and a dead soldier's unconditional "charity" in death. Rather than being condemned, such a practice could be celebrated as salvaging a Christian purpose for fallen soldiers who would otherwise be the discarded instruments of a most unchristian conflict. For instance, the American agriculturalist Henry Colman asserted that the use of Waterloo's bones for fertilizer was "a more rational, humane, and . . . Christian use, than that to which they were put in the bloody arena."[59] From a more strictly religious perspective, Kazlitt Arvine's *Cyclopedia of Moral and Religious Anecdote*, a publication providing preachers with stimulating real-world stories for their sermons, presented the trade in soldiers' bones as one such story which could "make an audience see and feel the argument" being

---

[56] Morton, "Bone Manure," 272.
[57] Blackwood, "The Farmers' Note-Book," 46–47.
[58] Blackwood, "The Farmers' Note-Book," 46–47.
[59] Colman, *European Agriculture and Rural Economy*, 412.

made by a pastor.[60] Specifically, it provided an ironic tale that deglorified war and demonstrated how tragedy could be put to positive use.[61] The only clear thing about the controversy around using military dead for material benefit that smoldered for most of the nineteenth century was that it often raised more questions than answers.

Conclusion

The discourse around war dead during the nineteenth century provides numerous cases in which material concerns coincided with the emergence of new symbols. During this transitional period, competing pressures exerted their influence on European identities. As a result, one observes economic arguments being expressed alongside nationalistic rhetoric and traditional moralism. Despite seeming to violate the sentimental rituals that are associated with the Occident's modern culture around death that has been traced to the nineteenth century, the traffic in bones showed another side of modernity's treatment of the dead.[62] Without the institutional tools, and often jurisdiction, needed to repatriate and/or reinter military dead or preserve a battle site in perpetuity, realistic alternatives to exploitation were difficult to imagine. However, this did not stop criticism of these exploitative practices, but it shifted the discourse to discovering what limits on the treatment of the dead were workable and honorable for the rapidly modernizing world of nineteenth-century Europe.

---

[60] Kazlitt Arvine, *Cyclopedia of Moral and Religious Anecdotes: A Collection of Nearly Three Thousand Facts, Incidents etc., Narratives, Examples, and Testimonies, Embracing the Best of the Kind in Most Former Collections and Some Hundreds in Addition, Original and Selected, the Whole Arranged and Classified on a New Plan with Copious Topical and Scriptural Indexes* (New York: Leavitt and Allen, 1857), 5.

[61] Arvine, *Cyclopedia of Moral and Religious Anecdotes*, 438.

[62] At the forefront are the conflicting trends of the democratization of the dead and the elevation of the soldier to a national symbol. For industrial use, the bones of a recently deceased soldier, a medieval peasant, or even an Egyptian mummy proved equivalent despite social distinctions and rank. While some took a romantic view of this equality, the development of a begrudging acceptance based on utilitarian inevitability appears to have been more common.

Chapter 8
Uncharted Depths

Making a Case for Naval Environmental Histories

Lisa M. Brady, PhD[1]

In September 2021, Australia, the United Kingdom, and the United States negotiated an agreement known as AUKUS, an awkward acronym composed of the initials of all three signatories. According to U.S. president Joseph R. Biden Jr., AUKUS established a "partnership where our technology, our scientists, our industry, our defense forces are all working together to deliver a safer and more secure region that ultimately benefits all." While the agreement included clauses about joint cyber capabilities, cooperation on artificial intelligence, and the sharing of quantum technologies, the primary purpose of AUKUS was to build and station a fleet of nuclear-powered submarines in Australia as part of an Indo-Pacific security arrangement. Based on U.S. and British technology, the boats would be Australian-built and would only be nuclear in terms of motive power, a point confirmed by then British prime minister Boris Johnson, who

---

[1] This chapter is formatted in the first-person perspective to best represent the information presented at the 2023 military history conference at Western Illinois University.

stated that the "work will be fully in line with our non-proliferation obligations."[2]

AUKUS immediately created a ruckus. France, which was already contracted to supply Australia with 12 submarines, recalled its ambassadors to the United States and Australia (but not the United Kingdom) "in an unprecedented show of anger," according to journalist Sylvie Corbet, over not being included in the negotiations and at having lost the lucrative contract.[3] China, which during the past several decades had built the world's largest navy, accused the three nations—but the United States and Australia in particular—of adopting a Cold War mentality that threatened global security and nuclear nonproliferation.[4] And New Zealand, which was not consulted despite being a critical partner in the region, reaffirmed its antinuclear stance by stating that it would not allow the new submarines into its internal waters.[5]

Anticipating such opposition, Biden claimed that AUKUS established "a partnership that seeks to engage, not to exclude; to contrib-

---

[2] These statements from both Biden and Johnson are recorded in "Remarks by President Biden, Prime Minister Morrison of Australia, and Prime Minister Johnson of the United Kingdom Announcing the Creation of AUKUS," White House Briefing Room, Speeches and Remarks, 15 September 2021. Official statements by Australia and the United Kingdom can be found in "AUKUS Joint Leaders' Statement," U.S. Embassy and Consulates in Australia, 14 March 2023; and "PM Statement on AUKUS Partnership: 15 September 2021," Government of the United Kingdom, 15 September 2021. The White House issued a follow-up statement in early 2023, updating the status of the agreement and outlining specific outcomes and a timeline for delivery of the technology. See "Joint Leaders Statement on AUKUS," White House Briefing Room, Statements and Releases, 13 March 2023.
[3] Sylvie Corbet, "France Recalls Ambassadors to US, Australia, over Sub Deal," AP News, 17 September 2021.
[4] Lily Kuo, "China Accuses New U.S.-Australian Submarine Deal of Stoking Arms Race, Threatening Regional Peace," *Washington Post*, 16 September 2021.
[5] Russell Palmer, "New Zealand a Winner in AUKUS Agreement, but Risks Remain—Experts," Radio New Zealand, 16 September 2021; and Tess McClure, "AUKUS Submarines Banned as Pact Exposes Divide between New Zealand and Western Allies," *Guardian*, 16 September 2021. New Zealand later indicated interest in becoming a signatory on at least the second pillar of the agreement—that of sharing technology and intelligence capabilities—while remaining firm on its refusal to host nuclear submarines in its waters or ports. See Renju Jose and Lucy Craymer, "New Zealand to Explore AUKUS Benefits, Boost Security Ties with Australia," Reuters, 19 December 2023.

ute, not take; and to enable and empower, not to control or coerce." But he also stated that the "initiative is about making sure that each of us has a modern capability—the most modern capabilities we need—to maneuver and defend against rapidly evolving threats."[6] Although China's rising power in the region was not mentioned directly in official statements by any signatory, given the state of regional and geopolitical affairs at the time the agreement was made, China's position was clearly part of the decision calculus.[7] Also missing from these statements was acknowledgment of the concerns from New Zealand about nuclear technology, which reflect that nation's history of opposition to French and American atomic testing in the Pacific in the 1960s and comport with the New Zealand Nuclear Free Zone, Disarmament, and Arms Control Act of 1987 that banned ships equipped with any type of nuclear power—motive or weapons—from its waters.[8]

Following two centuries of U.S. naval presence in the Pacific, AUKUS serves as a touchstone for understanding how U.S. naval power and environmental concerns collide. In this case, military preparedness took precedence over environmental worries, to the detriment of diplomatic and economic relations. The AUKUS signatories presented nuclear technology—which has a decidedly mixed history related to both humanitarian and environmental issues—as a necessary component of regional security, despite claims by some that it undermines that goal and accusations by others that it diverts at-

---

[6] "Remarks by President Biden, Prime Minister Morrison of Australia, and Prime Minister Johnson of the United Kingdom Announcing the Creation of AUKUS."

[7] While not part of the official statements made immediately after the signing, China was a significant topic in subsequent media and governmental releases. See, for example, Jim Garramone, "Karlin Says US Can Support AUKUS Submarine Builds," *DOD News*, 25 October 2023; and Mallory Shelbourne, "AUKUS Agreement Will Help Deter China from Taiwan Invasion, Says Former PACCOM CO," *U.S. Naval Institute News*, 20 March 2023.

[8] For the official history of New Zealand's antinuclear stance, see "Nuclear-free New Zealand," Ministry for Culture and Heritage, 2 October 2014.

tention and resources from fighting the climate crisis.[9] Through its specific diplomatic and environmental implications for the Pacific region, AUKUS more generally reveals the tension between military development and environmental anxieties, as well as elucidates the importance of understanding military activities within the historical context of both environmental change and environmental thought.

The environmental harm that critics associate with AUKUS remains somewhat speculative at the time of this writing (2024), though it is not unmoored from past experience.[10] Indeed, there are numerous examples that clearly elucidate how naval operations in the region have had demonstrable material consequences for human and natural communities alike, and yet few historical studies currently exist. This may be because watery environments have taken a backseat to terrestrial ones in most historical writing; as Helen M. Rozwadowski has noted, humans tend to spend more time on dry land than they do on the open seas, and therefore historians concentrate their analytical powers more fully on familiar environments.[11] But oceans long have served as lifelines for societies as they grow and develop. Exerting control over the Earth's fluid places has often resulted in control over people as well. Some of history's most

---

[9] On its potential environmental harm, see Jeff Sparrow, "The AUKUS Deal Is a Crime against the World's Climate Future. It Didn't Have to Be Like This," *Guardian*, 19 March 2023; and Kjølv Egeland, "Climate Security Reversed: The Implications of Alternative Security Policies for Global Warming," *Environmental Politics* 32, no. 5 (2023): 883–902, https://doi.org/10.1080/09644016.2022.2146934. On the strategic and geopolitical critiques, see Dechlan Brennan, "Pacific Responses to AUKUS a Mix of Unease and Understanding," *Diplomat*, 18 April 2023; Mingjiang Li, "ASEAN's Responses to AUKUS: Implications for Strategic Realignments in the Indo-Pacific," *China International Strategy Review* 4, no. 2 (2022): 268–87, https://doi.org/10.1007/s42533-022-00121-2; and Ian Storey and William Choong, "The AUKUS Announcement and Southeast Asia: An Assessment of Regional Responses and Concerns," ISEAS: Yusof Ishak Institute, 29 March 2023.

[10] See M. X. Mitchell, "Offshoring American Environmental Law: Land, Culture, and Marshall Islanders' Struggles for Self-Determination during the 1970s," *Environmental History* 22, no. 2 (April 2017): 209–34, https://doi.org/10.1093/envhis/emw101; and Laura J. Martin, "Proving Grounds: Ecological Fieldwork in the Pacific and the Materialization of Ecosystems," *Environmental History* 23, no. 3 (July 2018): 567–92, https://doi.org/10.1093/envhis/emy007.

[11] Helen M. Rozwadowski, *Vast Expanses: A History of the Oceans* (London: Reaktion Press, 2018), 7.

successful empires have been built and maintained through naval power.[12] Naval and maritime historians have done admirable work in this area, but they generally elide the natural environment as an agent of historical change and rarely explore how navies transform the environments in which they operate or from which they draw resources. Environmental historians have begun to explore the marine environment to excellent effect, but they have largely skirted questions of naval operations.[13] Consequently, very few historians of any persuasion have paid much attention to the confluence of naval operations and marine environments in the Pacific or elsewhere.[14]

Instead of spanning in a single essay this yawning historiographical gap, this chapter seeks to remedy this terrestrial bias in some small part through asking questions about United Nations (UN) naval operations during the Korean War (1950–53) from an environmental history perspective—that is, from the view that nature matters and that we improve our understanding of the human condition when we include nature in our investigation of the past. This chapter will

---

[12] Rolf Strootman, Floris van den Eijnde, and Roy van Wijk, eds., *Empires of the Sea: Maritime Power Networks in World History*, Cultural Interactions in the Mediterranean, vol. 4 (Leiden, Netherlands: Brill, 2019).

[13] Marine environmental history is a well-established and growing field of interest. For examples, see Jakobina K. Arch, *Bringing Whales Ashore: Oceans and the Environment of Early Modern Japan*, Weyerhaeuser Environmental Series (Seattle: University of Washington Press, 2018); Jacob Darwin Hamblin, *Poison in the Well: Radioactive Waste in the Oceans at the Dawn of the Nuclear Age* (New Brunswick, NJ: Rutgers University Press, 2008); Jacob Darwin Hamblin, *Oceanographers and the Cold War: Disciples of Marine Science* (Seattle: University of Washington Press, 2005); and Rozwadowski, *Vast Expanses*. In January 2013, the journal *Environmental History* published a series of articles in a "Marine Forum" to introduce readers to major debates within the field.

[14] Among the few who have, see Jason W. Smith, *To Master the Boundless Sea: The U.S. Navy, the Marine Environment, and the Cartography of Empire* (Chapel Hill: University of North Carolina Press, 2018). Curiously, a Google Scholar search for "naval environmental history" produces a single article with the promising title of "Building Environmental History for Naval Aircraft." After inspection, however, the article does not apply the methodologies of environmental history to naval developments, but instead attempts to understand the process of corrosion on naval aircraft and offer suggestions for avoiding that problem. See William C. Nickerson, Mehdi Amiri, and Nagaraja Iyyer, "Building Environmental History for Naval Aircraft," *Corrosion Reviews* 37, no. 5 (July 2019): 367, https://doi.org/10.1515/corrrev-2019-0022.

focus on three main areas of inquiry: first, logistical issues facing the UN naval command; second, material effects of naval actions on Korea's environment; and third, implications of naval operations on the UN's overarching development goals for the peninsula. While actions in the Pacific during World War II may seem a more fruitful arena for this study, Korea's war has the distinct advantage of being smaller in scale both geographically and temporally. It is also the conflict I have studied most deeply.

This chapter begins with logistics, the aspect of war concerned with planning, supply, and maintenance of the means to fight. During the Korean War, the U.S. Navy mobilized hundreds of vessels ranging from submarines to aircraft carriers and hospital ships to battleships. The primary missions of the U.S. Navy were, first, to neutralize the North Korean Navy—which it did early in the war—and, second, to provide logistical and tactical support for land-based operations.[15] Surrounded on three sides by water, the Korean peninsula presented logistical challenges because virtually all wartime plans and decisions had to account for this watery environment. Troop transport is an excellent case in point: the vast majority of U.S. forces involved in the war deployed to and from Korea by ship. This entailed a weeks-long journey by transport ship across the Pacific Ocean to Japan, from where they embarked again for the last leg to Korea. Memoirs and letters of U.S. troops often complained of these maritime experiences, noting, in the first instance, long bouts with seasickness and, in the second, more experience with seasickness.[16] The water, in their view, was the first obstacle to their success. To be sure, this was not an insurmountable problem and had few lasting consequences

---

[15] It is important to note that the UN command included military support from more than a dozen nations. However, the U.S. Navy contributed the greatest number of ships and sailors during the Korean War, so for practical purposes, I am conflating UN with U.S. naval operations here.

[16] This is distilled from hundreds of responses included in the Korean War Survey Collection, Military History Institute, U.S. Army Heritage Center and Museum, Carlisle, PA.

on troop effectiveness, but it does reveal that environmental conditions can affect even the most basic levels of wartime logistics.

Troops were not the only cargo that ships carried. A critical aspect of logistics is the supply of materiel—weapons, ordnance, vehicles, food, and medicine, to name a few—that also arrived mainly by ship, at least early in the war. The exchange of supplies and troops, mostly between Korea and Japan but also from much farther away, surely had environmental consequences for the Korean peninsula, both on land and in its surrounding waters. Here, I pose questions that are in need of further investigation. Were invasive species, for instance, transported on the supply ships, either on their hulls or in their cargo? This certainly occurred during World War II, as Judith Bennett has demonstrated, so it is to be expected as a consequence of the Korean War.[17] Supplies for U.S. operations in Korea came from across the globe, so stowaways could have come from any number of places. The massive scale of logistical operations raises questions about not only what may have come to either Japan or Korea but also what species may have been exchanged among any of the stops where supplies were obtained. In addition to the species carried along, there were the environmental effects of the lengthy transportation network, including fuel and oil spills. From this perspective, naval operations during the Korean War may have had environmental implications on a global scale.

It is important to remember that naval ships are also floating cities and that logistical considerations extend beyond the battlefield. When not engaged in battle, those serving aboard the ships continued their daily tasks, so to ascertain the complete picture of the environmental implications of UN naval operations during the war, we need to consider the more mundane aspects of naval operations as well. For example, what of the pollution caused by daily activity on the vessels—the release of sewage generated by thousands of sail-
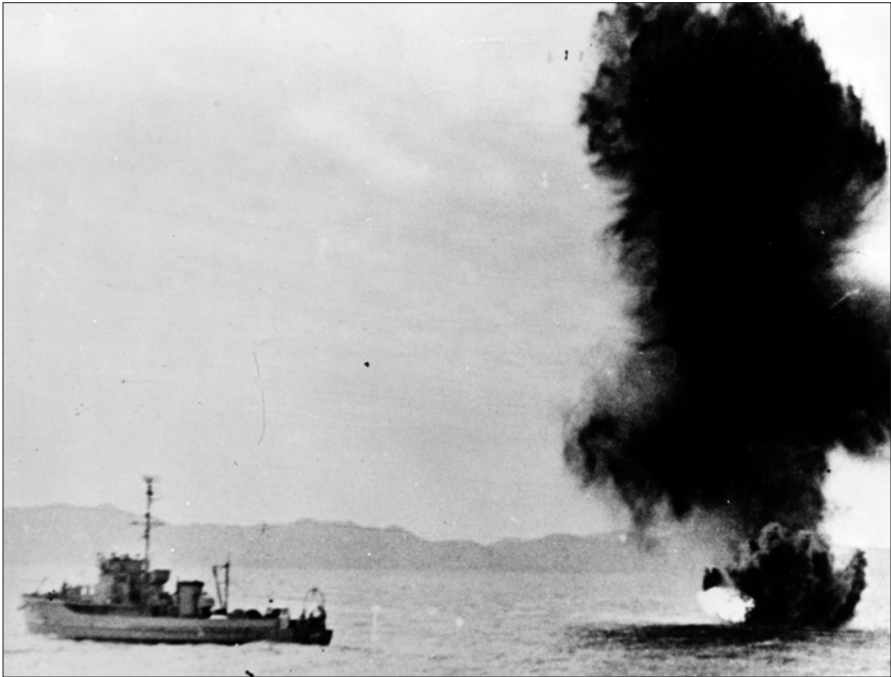
---

[17] Judith Bennett, *Natives and Exotics: World War II and Environment in the Southern Pacific* (Honolulu: University of Hawaii Press, 2009).

ors, for example, or of chemicals used in laundry services and other cleaning requirements on the ships? Did the dumping of food waste affect marine populations or their migratory patterns in response to new sources of food? While some of these topics may be difficult to track down at this point, there is much that can be learned about the environmental impact of naval activities from attempting to answer such questions. If history is, in part, a tool for decision making in the present, then these lines of inquiry do have currency for military practice today.

While logistical support was a key aspect of naval operations in the Korean War, combat support was also part of the U.S. naval command's mission. This activity took several forms. First, there were combat operations at sea, both between U.S. ships (and their aircraft) and North Korean vessels (until the latter's naval capacity was severely undermined) and in the form of laying and sweeping mines. Figure 8.1 shows a U.S. minesweeper clearing a section of the Yellow Sea. While this particular mine did not achieve its mission—the destruction of U.S. naval vessels—the installation and destruction of it and other mines likely had impact on the seabed and marine life in the area.

If logistics had environmental implications, so too did all types of combat. Sea-to-land artillery bombardments on major ports and industrial centers provide an excellent example of how naval operations transformed terrestrial spaces. The naval blockade of Wonsan Harbor—the longest such operation in modern military history—undoubtedly had an immense environmental impact well beyond the destruction of the port and the inhabitants. Figures 8.2 and 8.3 reveal the physical damage caused by the near-constant bombardment. The destruction was devastating, leaving the city devoid of infrastructure, its people bereft of shelter, and the landscape pockmarked with bomb craters. What we do not see is the soil and water pollution—let alone the air pollution—that must have coincided with this physical destruction. Also invisible in these images are the damaging effects

Figure 8.1. USS *Mockingbird* (AMS 27) successfully clears a North Korean mine in the Yellow Sea near Chinnampo (Nampo), a North Korean port approximately 50 kilometers southwest of Pyongyang, 3 March 1953

Source: official U.S. Navy photo,
now in the collections of the National Archives, catalog # 80-G-478497.

on nonhuman life—plant and animal, wild and domestic—both in the city and its broader environs, including the port's surrounding waters. While Wonsan is perhaps an outlier example in that the city endured during 861 days of bombardment, it nevertheless provides critically important insight into the environmental implications of conducting war on land from the sea.

Aircraft carriers provide another example of naval activity affecting the terrestrial and marine environments of Korea. Their very presence posed environmental harm, for carriers are enormous, with large crews and immense amounts of equipment. The potential for pollution from human waste and garbage is enormous, as is the po-

Figure 8.2. U.S. armed forces often used white phosphorous to clear areas of enemy troops and installations. This image, taken from a helicopter on 20 April 1951, shows a direct hit from such a shell fired by USS *Saint Paul* (CA 73) during the early stages of operations against Wonsan, North Korea

Source: official U.S. Navy photo,
now in the collections of the National Archives, catalog # 80-G-K-11864.

tential for lost or discarded material, including planes and ordnance as well as aviation fuels and lubricants. These environmental implications magnify when we include the escort vessels that always accompanied carrier groups. In their role of supporting land operations, carriers had even broader environmental effects. Aircraft launched from carriers destroyed inland transportation networks, industrial facilities, and dams. In this way, the activities of U.S. naval forces left an environmental footprint far inland. Figure 8.4 captures the moment when torpedoes deployed by U.S. Navy aircraft breached Hwacheon Dam on 1 May 1951. Built by the Japanese in 1944 on the Bukhan River in central Korea, the dam—which had both hydro-

Figure 8.3. This image, taken on 16 February 1952 from a USS *Valley Forge* (CV 45) aircraft, shows the damage after only one year of operations at Wonsan. The bombardment continued for another 500 days

electric and flood-control capabilities—became a major target for UN forces after North Korean and Chinese troops discharged water from the spillway in April 1951, damaging bridges in use by the UN command downstream. To prevent subsequent tactical use by the Koreans and Chinese, the UN chose to destroy the dam, thereby reducing its capacity to hold enough water to be dangerous. This damage, far from the sea, was nevertheless wrought by a navy plane launched from a ship at sea.

Beyond these initial queries, there are numerous other topics that require additional attention. For example, did ships sunk in battle or during major weather events affect the coastal or deeper

Figure 8.4. Water spills over the breached Hwacheon Dam, 1 May 1951. After capturing the dam from North Korean control, the UN command chose to bomb and torpedo the dam to release waters on its terms rather than risk future North Korean tactical use of the dam

Source: official U.S. Navy photo,
now in the collections of the National Archives, catalog # 80-G-428678.

marine ecologies surrounding the peninsula? A recent study in the *Marine Pollution Bulletin* shows that World War II-era wrecks in the Atlantic are prime breeding ground for an invasive coral species.[18] Might similar—detrimental or beneficial—species migrations be happening on or around Korean War-era shipwrecks? And what of toxic pollution? Contamination related to fueling ships could occur at supply sites, docking areas, or wherever ships operated or were sunk; similarly, toxic cargo—including chemical agents—that went

---

[18] Marcelo de Oliviera Soares et al., "Shipwrecks Help Invasive Coral to Expand Range in the Atlantic Ocean," *Marine Pollution Bulletin* 158 (September 2020): 111394, https://doi .org/10.1016/j.marpolbul.2020.111394.

down with ships would also be a source of pollution, as a 2006 *Ocean and Coastal Management* article, also examining World War II wrecks, this time in the Pacific, noted.[19] To get answers, we will need to turn both to military sources that reveal how many ships were deployed, what their cargo was, and if they were damaged or sunk, as well as to the work of marine scientists who study water quality and ecological changes in response to possible contaminants. We also need to look beyond chemical pollution to atmospheric noise and light pollution—these have documented ecological effects on land, so why not also at sea?—and to underwater sonic disturbances, which have been shown to have had negative effects on dolphins and whales in particular but may also have broader implications on sea life in general.[20] These topics in need of more work provide a sense of the scale of opportunities for further research and understanding.

It would be remiss to did not also address the larger goals of the UN in Korea. Military operations were only part of the UN's mission on the peninsula; another aim was to support the government of the Republic of Korea (ROK, or South Korea) and help ensure its success through supporting the nation's economic development. I have written about this elsewhere, tying agricultural and infrastructural projects to military success, and will extend that argument here to incorporate UN projects to promote South Korean fisheries.[21] This aspect of UN strategy predated the outbreak of war, as Robert

---

[19] Rean Monfils, Trevor Gilbert, and Sefanaia Nawadra, "Sunken WWII Shipwrecks of the Pacific and East Asia: The Need for Regional Collaboration to Address the Potential Marine Pollution Threat," *Ocean and Coastal Management* 49, nos. 9–10 (2006): 779–88, https://doi.org/10.1016/j.ocecoaman.2006.06.011. It would also be wise to explore the implications of solid waste dumped at sea, including aircraft, parts, and unexploded ordnances.

[20] On environmental issues connected to light pollution, see Sara B. Pritchard, "The Trouble with Darkness: NASA's Suomi Satellite Images of Earth at Night," *Environmental History* 22 (April 2017): 312–30, https://doi.org/10.1093/envhis/emw102. On noise pollution and its implications for marine life, see Jeremy Firestone and Christina Jarvis, "Response and Responsibility: Regulating Noise Pollution in the Marine Environment," *Journal of International Wildlife Law and Policy* 10, no. 2 (April 2007): 109–52, https://doi.org/10.1080/13880290701347408.

[21] Lisa M. Brady, "Sowing War, Reaping Peace: United Nations Resource Development Programs in the Republic of Korea, 1950–1953," *Journal of Asian Studies* 77, no. 2 (May 2018): 351–63, https://doi.org/10.1017/S0021911817001334.

Winstanley-Chesters has expertly shown in his book *Fish, Fishing, and Community in North Korea and Neighbors: Vibrant Matter(s)*. There is much to say about fisheries development in Korea generally, but here I confine my remarks to issues directly connected to the war and to UN naval operations. Winstanley-Chesters is certainly correct in his statement that the Korean fishing industry "was decimated by the destructive Korean War."[22] My own future work includes analyzing documents from the United Nations archive in New York that provide data on South Korea's fisheries industry and capacity, so my comments here are speculative. What strikes me most is that, even as the UN promised to rebuild the fisheries, its actions in the seas surrounding the peninsula could be nothing if not destructive. Recall the earlier questions about the effects of mines, battles, and effluence on marine life. How did the UN naval mandate to provide combat and logistical support counteract, or at least make more difficult, the UN political mandate to bolster the growth of South Korea's economy? How did its actions to undermine North Korean access to marine resources affect the ability of South Koreans to harvest the same? Here I offer up another image (figure 8.5) that is suggestive of larger consequences. One cannot help but wonder if the U.S. Navy frogmen depicted here could distinguish between fishing nets set by Koreans loyal to the Democratic People's Republic of Korea (DPRK, or North Korea) or to the ROK.

I conclude by tying UN naval operations in Korea to larger issues of concern to environmental historians. I have focused quite narrowly on the material side of the field—that is, the physical changes or implications associated with wartime developments. But environmental history is also concerned with how human communities (broadly defined) think about specific environments, so I will turn here to

---

[22] Robert Winstanley-Chesters, *Fish, Fishing, and Community in North Korea and Neighbors: Vibrant Matter(s)* (Berlin: Springer, 2020), 108. Winstanley-Chesters is referring specifically to North Korean fisheries and fishing capacity here, but it holds true for South Korea as well.

Figure 8.5. In this photograph dated 13 August 1952, two U.S. Navy Underwater Demolition Team frogmen engage in actions, according to the original caption, "to reduce enemy food supplies by destroying North Korean fishing nets"

Source: official U.S. Navy photo,
now in the collections of the National Archives, catalog # 80-G-478082.

some sweeping questions about how the United States was able to transport people and materiel around the globe with very little opposition. I believe that this is due in part to its ability to "control the seas"—that is, to maintain power over ocean routes to the exclusion of others. To achieve its naval goals, the UN command therefore had to exert control over local harbors and regional oceanic pathways to marshal resources from around the globe. But what does it mean to "control" the ocean? Through what means can that goal be attained? Is such control simply a matter of military prowess, or does it entail control over far-flung resources such as wood, oil, steel, fresh water, food, and labor? If the latter, which makes the most sense to me, then where do these resources come from? What other types of pow-

er must be exerted to maintain a steady source of necessary supplies to "control" the seas? What does this mean within the context of a relatively small, localized war? Did the strategic aims of the UN in Korea result in greater exploitation of local resources, or was that exploitation global in scale? Were the environmental effects concentrated in one area or diffused across many regions? If localized, how did demand for supplies by the UN affect food supplies, land use practices, and labor availability on the peninsula? What about in other localities that supplied the war effort? That is, did naval operations conducted in Korea in support of UN strategy materially affect local ecologies and economies there or elsewhere in ways that can be measured? And, finally, how can we possibly know what environmental effects arose from the naval operations in the war when, technically, the war has yet to end?

Chapter 9

Military Provisioning
in the *Glocal* Greco-Roman World

Lee L. Brice, PhD

Military diet and its provisioning have provided speakers, authors, and readers with a variety of relevant apothegms and pithy quotations, none of which seems more widely known and incorrectly quoted than the one probably originating with Thomas Carlyle's biography of the king of Prussia, Frederick II: "an army, like a serpent, goes upon its belly."[1] Through layers of misquoting, it has become "an army marches on its stomach." While this traditional apothegm might be popular, a related quotation from U.S. Marine Corps general Robert H. Barrow provides a more recent reflection on the importance of diet: "Amateurs talk about strategy and tactics. Professionals talk about logistics and sustainability in warfare."[2] The latter quotation, in a way, expresses the evolution of modern military thinking about an army's "diet" and highlights the relationship between it and other important aspects of military planning and activity. While General Barrow's observation is relatively recent compared to Carlyle, the idea that commanders must concern themselves with provisioning the army (i.e., logistics) is certainly not a recent phenomenon. Yet, as Edward N. Luttwak once observed, "to the modern

---

[1] Thomas Carlyle, *History of Friedrich II of Prussia, Called Frederick the Great*, vol. 1 (New York: Harper & Brothers, 1858), 83.
[2] Robert H. Barrow, "Q&A: Marines' Barrow Backs SALT—and Conventional Rearming," *San Diego (CA) Union*, 11 November 1979. The core of this quotation is variously attributed, most often to U.S. Army general Omar N. Bradley, but while he may have said something like it, there is no verifiable example of his using it.

reader, the very fact that pre-modern political entities . . . could supply armed forces at all raises a whole host of fascinating questions."[3] While we may think of ancient militaries with their preindustrial agriculture, networks, and economies as unconcerned with logistics, we would be wrong to make such an assumption. Regardless of whether it was local or long-distance warfare, logistics mattered in the ancient world just as much as it does in later periods. But if that is the case, why has it not received more attention?

The goal of this chapter is to provide the reader with a better sense of ancient logistics and consider why it has not received more attention. The discussion unfolds in two parts. The first part is historiographical, including examination of both modern and ancient authors' treatments of logistics. The chapter's second part focuses on the current state of research into ancient logistics. Modern scholarship relies on a mixture of local and global (*glocal*) perspectives in examinations of ancient provisioning as it restores logistics to studies of ancient warfare.

The Place of Logistics in Warfare
Defining Logistics
Having asserted that logistics was an important aspect of ancient warfare, it is useful to consider how it fits into our thinking about warfare generally. While diet (i.e., food and drink) or weapons are not topics that typically stir debates over potential anachronism, logistics has at times been perceived as such by ancient historians, for understandable reasons including but not limited to the comparative

---

[3] Edward N. Luttwak, "Logistics and the Aristocratic Idea of War," in *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present,* ed. John A. Lynn (Boulder, CO: Westview Press, 1993), 3.

lack of institutional complexity in the ancient state.[4] Already in the nineteenth century, military writers such as Carl von Clausewitz and Antoine-Henri Jomini thought of logistics as a natural outgrowth of the evolved complexity of contemporary militaries and the conduct of war.[5] Recent discussions of logistics with their tripartite classification of strategic, operational, and tactical logistics, combined with efforts to identify or initiate a "Revolution in Military Logistics" in recent years, certainly evoke a dense and multilayered military bureaucracy that simply did not exist in ancient Greece or Rome.[6] Debate over anachronism is unnecessary.

There may not have been a word in Greek or Latin that translates exactly as "logistics," but that does not mean that logistics did not exist. We should use the modern term where there is no ancient term that is equivalent, so long as we use an appropriate, clear definition.[7] As Moshe Kress writes, "The purpose of logistics is quite clear—to support military operations and sustain [those] who take part in it."[8] Such a definition is true, but it is too vague since it includes activities and institutions that are not part of provisioning. This chapter uses and recommends the definition of logistics from Henry E. Eccles:

---

[4] See Jakob Seibert, "Die Logistik der Feldzüge Alexanders des Großen" [The Logistics of Alexander the Great's Campaigns], in *Die Bedeutung der Logistik für die militärische Führung von der Antike bis in die neueste Zeit* [*The Importance of Logistics for Military Leadership from Ancient Times to Modern Times*], ed. Horst Boog (Herford, Germany: Mittler, 1986), 11–12; and Jonathan P. Roth, *The Logistics of the Roman Army at War (264 BC–AD 235)* (Leiden, Netherlands: Brill, 1999), 2fn5.

[5] Christopher Martin, *The UK as a Medium Maritime Power in the 21st Century: Logistics for Influence* (London: Palgrave, 2016), 78n17–18. Clausewitz and Jomini would probably not be surprised at the current complexity of military institutions.

[6] Matthew Uttley and Christopher Kinsey, "The Role of Logistics in War," in *The Oxford Handbook of War*, ed. Yves Boyer and Julian Lindley-French (Oxford, UK: Oxford University Press, 2012), 401–2; Martin, *The UK as a Medium Maritime Power in the 21st Century*, 77–78; and Thomas J. Edwards and Rick Eden, "Velocity Management and the Revolution in Military Logistics," *Army Logistician* 31, no. 1 (1999): 52.

[7] Seibert, "Die Logistik der Feldzüge Alexanders des Großen," 12; and Lee L. Brice, "Insurgency and Terrorism in the Ancient World, Grounding the Debate," in *Brill's Companion to Insurgency and Terrorism in the Ancient Mediterranean*, ed. Timothy Howe and Lee L. Brice (Leiden, Netherlands: Brill, 2016), 8–9, 18, https://doi.org/10.1163/9789004284739_002.

[8] Moshe Kress, *Operational Logistics: The Art and Science of Sustaining Military Operations*, 2d ed. (New York: Springer, 2015), 2.

"planning and providing the 'means of war,' including the movement, provisioning, and maintenance of military forces."[9] This definition functions just as well for ancient contexts as for modern, taking in a wide range of contributions to provisioning without casting too broad a net. In the case of this chapter, the discussion is focused primarily on the logistics of diet. Having established what logistics is, it is reasonable now to ask: What is the place of logistics in warfare?

Strategy, Tactics, and Logistics
A fundamental aspect of the importance of logistics is the relationship between logistics and strategy. General Barrow's observation in the introduction to this chapter regarding the focus of professionals as opposed to the focus of amateurs seems to suggest that logistics is more important in warfare than strategy. While everyone agrees that logistics is important in warfare, modern analysts and historians do not agree on whether it is as important as strategy and tactics.

The debate over the importance of logistics in relation to strategy and tactics must begin, as do so many discussions, with Jomini and Clausewitz. Both men were active military officers who served during the Napoleonic wars, on opposing sides. Each had many opportunities to participate in and observe how wars were fought. While both, especially Clausewitz, considered earlier conflicts too, their experiences contributed directly to the synthetic works they produced on the conduct of war—Jomini's *Précis de l'art de la guerre* (*Summary of the Art of War*) and Clausewitz's *Vom Kriege* (*On War*). Both works are explicitly intended to instruct readers in the complexities of warfare, but they follow, to a degree, a historical path older than Thucydides's

---

[9] This is based largely on Henry E. Eccles, *Logistics in the National Defense* (Harrisburg, PA: Stackpole, 1959), 9–10; and Kress, *Operational Logistics*, 2, 7. For the historiography of this definition, see Vladimir Prebilič, "Theoretical Aspects of Military Logistics," *Defense & Security Analysis* 22, no. 2 (June 2006): 159–77, https://doi.org/10.1080/14751790600764037. Some definitions focus on land warfare to the exclusion of naval activity; see John A. Lynn, "The History of Logistics and Supplying War," in Lynn, *Feeding Mars*, 10, 13. See also C. P. Adams, "Feeding the Wolf: Logistics and the Roman Army," *Journal of Roman Archaeology* 14 (2001): 465.

Peloponnesian War in which veterans set out, orally and in writing, aspects of their experiences in an effort to synthesize their experience of war or educate current and future leaders or both. The importance of Jomini and Clausewitz can be seen clearly in Vladimir Prebilič's recent argument that modern institutional theories of military logistics spring from Jomini in America and Clausewitz in Europe.[10]

Jomini, the late-eighteenth- to nineteenth-century Swiss author who served as an officer in the Swiss, French, and Russian armies, wrote *Summary of the Art of War* in an effort to present so-called "principles of war" based largely—but not exclusively—on the wars of the eighteenth and early nineteenth centuries. This is not the venue to dive into the historiography of his work, but his impact on modern logistical theory is a significant legacy.[11] Jomini invented the term *logistics* (*la logistique*) and was first to define it: "Logistics comprises the means and arrangements which work out the plans of strategy and tactics."[12] He presented logistics as equivalent in importance to strategy and tactics, one of the major components of warfare.[13] In the words of Jomini, "Strategy decides where to act; logistics brings the troops to this point; grand tactics decides the manner of execution and the employment of the troops."[14] His assertion, like many in his work, has a dogmatic resonance.

Clausewitz, the other towering figure in nineteenth-century military theory, devoted a chapter of his fifth book within *On War* to supply.[15] He characterized the need for supply in graphic terms: "It follows that war, with its numerous tentacles, prefers to suck nour-

---

[10] Prebilič, "Theoretical Aspects of Military Logistics," 160–64.
[11] Prebilič, "Theoretical Aspects of Military Logistics," 161–63. A good recent treatment of Jomini, his career, and his impact can be found in Antulio J. Echevarria II, "Jomini, Modern War, and Strategy: The Triumph of the Essential," in *The New Makers of Modern Strategy*, ed. Hal Brands (Princeton, NJ: Princeton University Press, 2023).
[12] Antoine-Henri de Jomini, *The Art of War: Restored Edition* (Kingston, ON: Legacy Books, 2008).
[13] Jomini, *The Art of War*, 32–47.
[14] Jomini, *The Art of War*, 47.
[15] Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 330–40.

ishment from main roads, populous towns, fertile valleys traversed by broad rivers and busy coastal areas."[16] Clausewitz acknowledged the importance of logistics, but he also acknowledged that Prussian and other militaries had played down the need to supply soldiers consistently and were terrible in managing food rations. He even quotes Napoleon as having said, "*qu'on ne me parle pas des vivres*!" (don't talk to me about food!), suggesting that he was frustrated by logistical demands.[17] But in his analysis of supply, Clausewitz did not value logistics as highly as did Jomini, making it subordinate to strategy and tactics.[18] We may recognize that herein lay the beginnings of the modern debate.

Perhaps it is not surprising that disagreement remains present among more recent analysts. Henry E. Eccles, one of the foremost logistical theorists of the twentieth century, argued that logistics and strategy are inextricably interconnected.[19] More recently, there is some confusion about the connection between strategy and logistics. In the most dominant recent study of logistics, Martin van Creveld suggested on the first page of his 1977 work that logistics is important, but by the end of his book he concluded that flexibility and imagination, not logistics, were critical to strategy.[20] His view has had a significant impact on later works and policies despite steady criticism of his conclusion.[21] There still seems to be a division between analysts and historians who agree with Eccles and those

---

[16] Clausewitz, *On War*, 338. Thanks to Paul Johstono for bringing this passage to my attention.

[17] Clausewitz, *On War*, 339.

[18] Clausewitz, *On War*, 338–39.

[19] Henry E. Eccles, "Logistics and Strategy," *Naval War College Review* 11, no 1 (1958).

[20] Martin van Creveld, *Supplying War: Logistics from Wallenstein to Patton* (Cambridge, UK: Cambridge University Press, 1977), 1, 235–36.

[21] Lynn, "The History of Logistics and Supplying War"; Thomas M. Kane, *Military Logistics and Strategic Performance* (New York: Routledge, 2001) 6–8, 32, 177–78; and Patrick Bury, "Conceptualising the Quiet Revolution: The Post-Fordist Revolution in Western Military Logistics," *European Security* 30, no. 1 (2021): 113–16, https://doi.org/10.1080/09662839.2020.1796650.

who prefer van Creveld.[22] Current discussions have devolved into debates over formulation of a better theoretical framework, attempts to avoid the mistakes of the past while improving for the future, and a desire to influence and establish policy.[23]

Regardless of modern debates, the reality of military strategy, ancient and modern, is that basic action, much less success, is highly unlikely without the soldiers and sailors on site with provisions to execute it. As leaders formulate strategy and tactics, they must ensure that their forces arrive and do so with sufficient supplies of all kinds to meet objectives. Similarly, all the planning, moving, and provisions that time permits will come to naught if there is not a strategy behind their deployment. Logistics and strategy are tightly interconnected. It is clear, then, that logistics is as important to military success as strategy and tactics.

This acknowledgment brings us back around to our earlier question of the place of logistics in ancient warfare. Logistical planning was not limited to modern militaries. Ancient states and empires may not have been as bureaucratized as modern armed forces, and their officers may not have been steeped in doctrine and theory, but that does not mean that ancient leaders did not plan for supply and grapple with securing the "means of war." Commanders from military cultures as diverse as Cyrus, Pericles, Alexander III, Antiochus III, Marius, Caesar, Trajan, Constantine, and Stilicho were able to

---

[22] Kane, *Military Logistics and Strategic Performance*, 2–3; and Mark Erbel and Christopher Kinsey, "Think Again—Supplying War: Reappraising Military Logistics and Its Centrality to Strategy and War," *Journal of Strategic Studies* 41, no. 4 (2018): 519–44, https://doi.org/10.10 80/01402390.2015.1104669.

[23] For the first, see Kane, *Military Logistics and Strategic Performance*; Prebilič, "Theoretical Aspects of Military Logistics"; and Bury, "Conceptualising the Quiet Revolution." For the second, see van Creveld, *Supplying War*; Erbel and Kinsey, "Think Again—Supplying War"; and Uttley and Kinsey, "The Role of Logistics in War." For the third, see Jomini, *The Art of War*; van Creveld, *Supplying War*; and Martin, *The UK as a Medium Maritime Power in the 21st Century*.

deploy soldiers in accordance with their strategic aims because they paid attention to the logistics necessary to support their campaigns.[24]

Why Are There Not More Studies of Ancient Logistics?

A Pattern of Neglect?

The last few decades would seem to be a growth period for work on military logistics—there are journals, conferences, and numerous publications devoted to various aspects of logistics, both theoretical and practical. And yet, a constant refrain in studies of military logistics of all periods is that it has not received sufficient attention.[25] While such perceived inattention may take various forms, this observation has been especially true of historical research and publication on logistics. Much of what has been published focuses on security studies, planning, operational studies, and theory rather than study by historians of the application and result. More work by historians has been appearing recently.[26]

Before the middle of the twentieth century, little was written about the logistics of ancient conflicts. The number of works increased gradually during the 1960s, but even with the emergence of the "New Military History" in the late 1960s and early 1970s, there was little more than what one might call a trickle of publications.[27] Jacques Harmand's treatment of logistics within his broader study of the Roman military stood out for devoting significant space to

---

[24] See John F. Donahue and Lee L. Brice, eds., *Brill's Companion to Diet and Logistics in Greek and Roman Warfare* (Leiden, Netherlands: Brill, 2023), chaps. 8–12, https://doi.org/10.1163/9789004687189_017.

[25] Bury, "Conceptualising the Quiet Revolution"; and Lynn, "The History of Logistics and Supplying War."

[26] See, for example, Earl J. Hess, *Civil War Logistics: A Study of Military Transportation* (Baton Rouge: Louisiana State University Press, 2017).

[27] A bibliography of works on ancient logistics published before 1989 can be found in Lynn, *Feeding Mars*, 291–93. The *Oxford Bibliography of Military History* does not include an entry on "logistics." On the New Military History, see Lee L. Brice, "Ancient Warfare and Moving Beyond 'New Military History'," in *New Approaches to Greek and Roman Warfare*, ed. Lee L. Brice (Hoboken, NJ: Wiley, 2020), 1–11.

the topic.[28] J. K. Anderson and W. Kendrick Pritchett each devoted useful chapters to logistics in their studies of Greek warfare.[29] There have been a number of dissertations on logistics, though most of these remain unpublished.[30] Even after John Keegan emphasized the experience of everyday soldiers in his book *The Face of Battle*, there was not an increase in treatments of logistics, even though this topic was of great importance to soldiers' experience of warfare.[31] Donald W. Engels's study of the logistics of Alexander the Great made an enormous impression on many readers but did not result in a flood of new work.[32] Then, at the end of the twentieth century, there was a burst of activity on logistics, mostly focused on the Roman empire.[33] During the early twenty-first century, the trickle of new works has continued and more historians have included logistics in general studies, often trying to build on previous works by

---

[28] Jacques Harmand, *L'armée et le soldat à Rome, de 107 à 50 avant notre ère* [*The Army and the Soldier in Rome, 107 to 50 BCE*] (Paris: Picard, 1967).

[29] J. K. Anderson, *Military Theory and Practice in the Age of Xenophon* (Berkeley: University of California Press, 1970), 43–67; and W. Kendrick Pritchett, *The Greek State at War*, vol. 1 (Berkeley: University of California Press, 1971), 30–53.

[30] See Lynn, *Feeding Mars*, 291–93.

[31] John Keegan, *The Face of Battle: A Study of Agincourt, Waterloo, and the Somme* (New York: Viking, 1976), gave logistics no attention. On ancient historians' responses to Keegan's approach, see Everett L. Wheeler, "Greece: Mad Hatters and March Hares," in *Recent Directions in the Military History of the Ancient World*, ed. Lee L. Brice and Jennifer T. Roberts (Claremont, CA: Regina, 2011); and Brice, "Ancient Warfare and Moving Beyond 'New Military History'," 2–3.

[32] Donald W. Engels, *Alexander the Great and the Logistics of the Macedonian Army* (Berkeley: University of California Press, 1978). On Engels, see Lee L. Brice, "Assessing Military Logistics and Diet in Ancient Greece and Rome," in Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, 417–20, https://doi.org/10.1163/9789004687189_017.

[33] Paul Erdkamp, *Hunger and the Sword: Warfare and Food Supply in the Roman Republican Wars (264–30 BC)* (Amsterdam: J. C. Gieben, 1998); and Roth, *The Logistics of the Roman Army at War*.

Anderson, Pritchett, Engels, Paul Erdkamp, and Jonathan P. Roth.[34] Volumes and studies devoted to diet and manufacture, even that of the military, have emerged in increasing numbers, but various biases continue to limit research and publication of logistical studies of the ancient world and even of modern militaries.

Professional Biases

There are several reasons for such limited historical scholarship, including professional biases, literary genre norms, military history historiography, and ancient historiography. Basic biases against works on logistics can be found in the society of most militaries through time, evident in the hierarchical bias of the elites who led wars and, until the modern era, exclusively wrote about them. Both officers and authors were elites, as was, until the nineteenth century, generally their audience whom they sought to impress. Logistics in all its forms was beneath them.[35] Christopher Martin suggests that other biases include "the . . . unwarranted assumption that 'strategy' . . . is performed by real soldiers and is an intellectually superior undertaking to operational logistics . . ." and that "the issue of logistics is generally reduced to the misused analogy of 'tooth' and 'tail.' This assumption ignores the holistic nature of military organization and assumes that a 'good' military organization has a high ratio of 'tooth'

---

[34] See, for example, William J. Hamblin, *Warfare in the Ancient Near East to 1600 BC: Holy Warriors at the Dawn of History* (London: Routledge, 2006); Philip Sabin, Michael Whitby, and Hans van Wees, eds., *The Cambridge History of Greek and Roman Warfare*, vol. 1, *Greece, the Hellenistic World, and the Rise of Rome* (Cambridge, UK: Cambridge University Press, 2007), 150–55, 380–88, 488–91, https://doi.org/10.1017/CHOL9780521782739; Philip Sabin, Hans van Wees, and Michael Whitby, eds., *The Cambridge History of Greek and Roman Warfare*, vol. 2, *Rome from the Late Republic to the Late Empire* (Cambridge, UK: Cambridge University Press, 2007), 165–75, 226–29, 324–28, 408–11, https://doi.org/10.1017/CHOL9780521782746; John W. I. Lee, "Daily Life in Classical Greek Armies, c. 500–330 BCE," in Brice, *New Approaches to Greek and Roman Warfare*, 39–52, https://doi.org/10.1002/9781119248514.ch4; Conor Whately, *An Introduction to the Roman Military, from Marius (100 BCE) to Theodosius II (450 CE)* (Hoboken, NJ: Wiley Blackwell, 2021); and Jeremy Armstrong, Arthur J. Pomeroy, and David Rosenbloom, eds., *Money, Warfare, and Power in the Ancient World* (London: Bloomsbury, 2024).
[35] Luttwak, "Logistics and the Aristocratic Idea of War," 5–6.

to 'tail'." The soldier "who faces the enemy directly . . . is scornful of those who remain in the 'soft' rear," away from the front lines.[36] The assumptions and biases that Martin identifies seem to reiterate from a different perspective Luttwak's point about a lack of glory. Martin's points about the interests and biases of military professionals remain only part of the explanation for a lack of historical interest in logistics.[37]

Military Historiography and Logistics

Another contributor to the lack of historical interest in logistics has to do with the historiography of military history. Traditionally, the field of military history has served multiple "needs" simultaneously. The literary (entertainment or enrichment) function of military history is obvious. We must accept within this context that the most obvious "problem" with reporting or narrating logistics is its lack of "flash" as a topic. There is neither drama nor trendiness in most of it. As Luttwak observed,

> Military historiography is no different from any other historiography in its origin as a branch of literature and as such is subject to literary norms and priorities. Of these, the first is the writer's need to entertain readers or at least attract their attention . . . the literary conventions of military historiography have varied much. . . . But it may safely be said that within them . . . whatever is dramatic easily displaces what is merely important.[38]

---

[36] Martin, *The UK as a Medium Maritime Power in the 21st Century*, 77–78.
[37] See, for comparison, the observation made by Gen Barrow, quoted in the beginning of the chapter.
[38] Luttwak, "Logistics and the Aristocratic Idea of War," 4.

Luttwak's assertion is persuasive—logistics in general has been relegated by authors and audiences to the, at best, "merely important" topics.

Other aspects of military history, such as its function as a tool for educating would-be officers and leaders or as an expression of nationalism and propaganda, have also tended to militate against treatments of logistics. Manuals for officers and would-be leaders have long been a part of military history as education. Some of these have focused on logistics, but they are few in number and only appeared when warfare and military institutions had become so complex that it was thought necessary.[39] The educational mission was not limited to military manuals. Biographies of famous leaders and narratives of battles and wars also contributed lessons to be gleaned from past successes and failures. The "political" or jingoistic biases and aims present in some traditional works of military history has also tended to find expression through biographies and accounts of conflicts.[40] It should not be surprising that in all these traditional aspects of military history, logistics has not been a topic of interest. It is not the part of warfare that serves the ends of these works. It lacks drama. Given the biases, the lack of drama, and the minimal interest by practitioners, it is little wonder that the historiography of warfare has largely overlooked logistics.

Ancient Historiography

Studies of ancient logistics are limited by several further forces arising out of traditional sources and the literary conventions in which they originated. It is commonplace for ancient historians to complain about the lack of sources, but that is a given for those who limit themselves to literary sources. We work with what we have. Ancient

---

[39] Prebilič; "Theoretical Aspects of Military Logistics"; and Martin, *The UK as a Medium Maritime Power in the 21st Century*, 78.
[40] Wheeler, "Greece," 53–58; and Brice, "Ancient Warfare and Moving Beyond 'New Military History'," 1–3.

authors, all of whom were elites, often had access to primary sources that no longer exist, so the literary sources are not without value, but they must be used with caution.

Limitations with the extant ancient sources result from the genre conventions of ancient historiography. One of these issues is the lack of interest on the part of ancient authors and audiences. Luttwak's point that logistics is not flashy applies to ancient authors' topical choices too. These authors wrote for various audiences, mostly but not exclusively elite. All authors negotiated the expectations of their peers and audiences as well as genre conventions. Logistics seems generally to have been something that audiences were not interested in, or the authors assumed that they were not. Besides, most elites would have had military experience and were familiar with the banalities of provisioning their soldiers and support personnel; therefore, they did not need to be reminded or have it explained to them. It is a quotidian topic that, even in the ancient world, was "merely important."

Another set of troublesome ancient historiographical genre conventions relate to the crafting of historical narratives. Authors were expected to add details to make the history "richer." These juicy details were to be added where appropriate to increase the drama and thrill for the reader. It is not difficult to see how these additions could make a mess of literary narratives and the studies based exclusively on them. However, there was a related aspect to these additions. According to Lucian in his work on history, *Verae historiae*, the flashy bits or details to be added to historical narratives by ancient authors (Greeks and Romans) were supposed to be plausible.[41] As a result of practices like these and the strength of literary conventions, authors seem to have often drawn on standardized traditional forms

---

[41] Lucian, *Ver. hist.* 1.12–18. Abbreviations for all ancient sources in this chapter can be found in Simon Hornblower, Antony Spawforth, and Esther Eidinow, eds., *The Oxford Classical Dictionary*, 4th ed. (Oxford, UK: Oxford University Press, 2012), xxvii–liii, https://doi.org/10.1093/acref/9780199545568.001.0001.

or scripts of historical episodes (e.g., prebattle speeches, rallying soldiers, etc.) and then would add their own flourishes, especially in the speeches, displaying for peers their knowledge and skill. Historians must be cautious in analyzing and using these ancient literary sources.[42] But, with care and thorough analysis, we can glean some evidence about logistics from literary and epigraphic sources.

Where Are We Now with Logistics?

Strategic and tactical planning are of limited use without attention to planning to meet provisioning needs. Similarly, just as logistics are important to warfare, food and drink (diet) are an important component of logistics. We have learned much in the last several decades about diet and logistics in the ancient world. A treatment of everything we have uncovered about logistics is beyond the scope of this chapter, and there are now resources to which readers may turn. But some key features of the state of our knowledge are worth pointing out.

Study of the material culture of militaries has much to inform us when it moves beyond antiquarian labeling and cladistics to apprise us about harvesting, manufacture, distribution, and provisioning. Since the early modern period, there has been a continuing antiquarian (or nearly so) fascination with the material culture of militaries—arms, armor, gear, uniforms, insignia, and so on. This obsession

---

[42] On these issues, see T. P. Wiseman, *Clio's Cosmetics: Three Studies in Greco-Roman Literature* (Leicester, UK: Leicester University Press, 1979); T. P. Wiseman, "Lying Historians: Seven Types of Mendacity," in *Lies and Fiction in the Ancient World*, ed. Christopher Gill and T. P. Wiseman (Exeter, UK: Exeter University Press, 1993), 122–46; and A. J. Woodman, *Rhetoric in Classical Historiography: Four Studies* (Oxford, UK: Oxford University Press, 1988). For a contrast, see J. E. Lendon, "Historians without History: Against Roman Historiography," in *The Cambridge Companion to the Roman Historians*, ed. Andrew Feldherr (Cambridge, UK: Cambridge University Press, 2009), 41–62, https://doi.org/10.1017/CCOL9780521854535. For an example of how genre conventions could affect types of military narratives, see J. E. Lendon, "Battle Description in the Ancient Historians, Part I: Structure, Array, and Fighting," *Greece and Rome* 64, no. 1 (April 2017): 39–64, https://doi.org/10.1017/S0017383516000231; and J. E. Lendon, "Battle Description in the Ancient Historians, Part II: Speeches, Results, and Sea Battles," *Greece and Rome* 64, no. 2 (October 2017): 145–67, https://doi.org/10.1017 /S0017383517000067.

with labeling and describing these military minutiae has not become less antiquarian with time.[43] More recently, analyses by archaeologists and archaeological science specialists (e.g., zooarchaeologists, archaeobotanists, etc.) of the material culture of ancient military sites has begun to increase greatly our knowledge of logistics for the ancient and medieval worlds. This work provides many details about supply networks as well as about diet that we would not know otherwise. For example, studies of remains on Roman military sites on Hadrian's Wall in Britain and various forts in Northern Europe and in Egypt reveal the types of animals, grains, beverages, and supplemental items that soldiers ate and drank, as well as how far away some of it traveled to reach armies on far-flung frontiers. Much was locally sourced, but well-traveled goods included olive oil and dried or salted Mediterranean fish that were transported to Britain and Northern Europe as well as condiments and black pepper recovered at military sites in diverse parts of the empire.[44]

Most ancient warfare occurred on the local level—intercity or intergroup competition for resources and occasionally status and power. Even when leagues of regional allies fought each other over dispersed parts of Greece or Italy, they thought of their conflict as local, which it was when compared to campaigns after the mid-fourth century. Finding supplies in home territory was not usually

---

[43] Roger J. Spiller, "Military History and Its Fictions," *Journal of Military History* 70, no. 4 (October 2006): 1081–97, https://doi.org/10.1353/jmh.2006.0280; and Brice, "Ancient Warfare and Moving Beyond 'New Military History'," 2–3.

[44] See, for example, Laura Kooistra, "Food for Soldiers: Farm Deliveries from *Germania Inferior* in the Second and Third Centuries AD," in *Embracing the Provinces: Society and Material Culture of the Roman Frontier Regions*, ed. Tatiana Ivleva, Mark Driessen, and Jasper de Bruin (Oxford, UK: Oxbow, 2018), 111–20; Mark Driessen, "Nice Meating: The *Canabae Legionis* Livestock Market at Nijmegen Revisited," in Ivleva, Driessen, and de Bruin, *Embracing the Provinces*, 121–32; Harry van Enckevort, "Cauldrons and Feasting in *Oppidum Batavorum* on the Eve of the Batvian Revolt," in Ivleva, Driessen, and de Bruin, *Embracing the Provinces*, 133–40; and Paul Bidwell, "The External Supply of Pottery and Cereals to Antonine Scotland," in *The Antonine Wall: Papers in Honour of Professor Lawrence Keppie*, ed. David J. Breeze and William S. Hanson (Oxford, UK: Archaeopress, 2020), 263–85. See also Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 3–9, with references for additional resources.

difficult. The ancient "state" (e.g., the city-state or territorial state) or allied league could and would marshal the resources to supply their military efforts within their own home territory. Soldiers often carried several days of rations at the beginning of a campaign and cities set aside stores against siege. If the campaign continued in home or nearby friendly territory, authorities could send supplies by wagon, pack animal, or porters, as occurred at the Greek campaigns at Plataea in 479 and Sphacteria in 427 or the Roman siege of Veii in ca. 410–396 BCE.[45] Local arrangements may seem limited in scale and a natural outgrowth of local economies and networks, which they were, but that does not mean that they did not require preparation or make them any less burdensome on the ancient city or less important to success in war.

When ancient military forces departed their home region, logistics became more complicated but could still be managed with planning. Provisioning outside friendly territory increased complications and vulnerabilities. No military could carry all its supplies on a long campaign, such as those of Alexander the Great or the Roman wars outside Italy in the middle-late Republic. Armies and navies could often arrange for resupply in friendly or neutral territory through local markets and traveling merchants for supplies. Markets outside city walls provided a means for commanders or even individual soldiers on campaign to purchase food, drink, and other supplies at prearranged, often below-market prices from friendly or neutral communities without entering the city and causing trouble. Even neutral cities could be asked to provide markets outside city walls,

---

[45] On Plataea, see Hdt. 9.39.2; on Sphacteria, see Thuc. 4.16.1, 26.5. On these campaigns and similar episodes, see Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 3–5, 8, 10–11, 13.

as Rhegium did when Athens was sailing to Sicily in 415.[46] Commanders or individual soldiers could take booty (human, animal, or material) to traveling merchants to exchange for cash with which to buy provisions, or they could turn the spoils directly into provisions, such as with grain. Some merchants specialized in trading plunder for supplies. Various armies employed this means of provisioning, sometimes even in enemy territories.[47] When these mechanisms were unavailable, armies gathered supplies through forage and plunder, though these options also required planning, were time-consuming, and were potentially dangerous.[48] If they could neither buy supplies nor forage or plunder, then military forces on campaign had to return home.[49]

That logistics mattered in ancient warfare and was something that commanders accounted for is demonstrated in the long campaigns undertaken far from home territory by Greek and Roman militaries. Indeed, it is surprising when one considers the limitations of low productivity and slow communications how far from their local territories ancient militaries sometimes went on campaign. Grain and other supplies that were purchased, requisitioned, or pillaged

---

[46] Thuc. 6.44.3. On markets, see Stephen O'Connor, "Sailors, Soldiers, and Market Exchanges in the Classical Greek World: The Constraints on Opportunism," *Classical Philology* 116, no. 4 (October 2021): 515–36, https://doi.org/10.1086/715871; and Stephen O'Connor, "Why Markets?: The Provisioning of Classical Greek Military Forces on the Move through Friendly, Allied, and Neutral Territory," *Klio* 104, no. 2 (2022): 487–516, https://doi.org/10.1515/klio-2021-0058. The pragmatism of logistical markets is seen in its longevity into medieval and early modern Europe.

[47] Matthew Trundle, "Wealth and the Logistics of Greek Warfare: Food, Pay, and Plunder," in Brice, *New Approaches to Greek and Roman Warfare*, 13–27, https://doi.org/10.1002/9781119248514.ch2; and Stephen O'Connor, "Private Traders and the Food Supply of Classical Greek Armies," *Journal of Ancient History* 3, no. 2 (November 2015): 173–219, https://doi.org/10.1515/jah-2015-0011.

[48] Erdkamp, *Hunger and the Sword*, 122–40; Roth, *The Logistics of the Roman Army at War*, 117–55; and Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 3–5, 8.

[49] For example, when Sparta invaded Attica during the Peloponnesian War, they had to withdraw when their own food ran out and none could be foraged. See Thuc. 2.23.3, 57.2. See also Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 3, 5, 8.

along the way had to be transported to a distribution point or transported until the next supply was arranged. Transport by soldiers, pack animals, carts or wagons, or even boat were employed as necessary, each of which brought with it different complications. No commander wanted to be reliant on wagon trains or boat convoys, which created extended "tails" for marching columns.[50]

Militaries could reduce their reliance on wagons and pack animals, but it required planning. Proactive thinking about provisioning appears in ancient biographies of commanders and histories of their campaigns (e.g., Caesar, Plutarch, Arrian) and occasionally in military manuals (e.g., Frontinus, Vegetius) as something successful commanders do. Alexander the Great, for example, took his large army into Persia and continued through central Asia, down the Indus River and back to Babylon, and received reinforcements from Macedon and Persia during the campaign. During most of the war, he was able to secure supplies by various means, especially via the Persian logistical institutions from the regions through which he traveled. This level of success was possible because Alexander and his officers took provisioning seriously. At no point was he able to do without wagons and pack animals, but he did not need to carry all of his supplies at all times.[51] Hellenistic militaries such as that of Antiochus III in his campaigns into central Asia and Roman armies such as Caesar's in Gaul in the 50s BCE or Trajan's in the Dacian wars of the second

---

[50] Donald Engels asserted that neither Philip nor Alexander used wagons during most of their campaigns, a point which he repeated without adjustment in his later work despite evidence to the contrary. See Engels, *Alexander the Great and the Logistics of the Macedonian Army*, 12, 14–16; and Donald Engels, "Logistics: Sinews of War," in *The Oxford Handbook of Warfare in the Classical World*, ed. Brian Campbell and Lawrence A. Tritle (Oxford, UK: Oxford University Press, 2013), 356, https://doi.org/10.1093/oxfordhb/9780195304657.013.0018. For a contrast, see Arther Ferrill, *The Origins of War: From the Stone Age to Alexander the Great* (Boulder, CO: Westview, 1997), 183–85; Brice, "Assessing Military Logistics and Diet in Ancient Greece and Rome," 419–22; and James Lacey, "Food and Conquest: Getting beyond Engels," in *Brill's Companion to the Campaigns of Philip II and Alexander the Great*, ed. Edward M. Anson (Leiden, Netherlands: Brill, forthcoming).

[51] Ferrill, *The Origins of War*, 183–85; Brice, "Assessing Military Logistics and Diet in Ancient Greece and Rome," 417–20; and Lacey, "Food and Conquest."

century CE succeeded in similar ways during their far-flung wars.[52] Each regional power started with limited capacity for provisioning; some grew more effectively than others as their logistical planning and preparation evolved, but many remained dependent on the skills of individual commanders and officers.

During the imperial period, Rome developed the most bureaucratized-looking logistical institutions to keep its armies in the field supplied and provision garrisons wherever they were stationed.[53] As had been the case previously for all militaries, Roman field armies and garrisons secured supplies locally when they could and adapted to meet local conditions (e.g., beer in Britain and Egypt, wine and posca elsewhere).[54] However, during the republic and into the empire, Rome employed centrally arranged private contractors to transport supplies and maintain storage near campaign hubs and forts.[55] During the empire, military logistics became more formalized in terms of having specific imperial appointees organizing it.[56] What is surprising about this network is that regardless of where Roman soldiers were stationed, the military continued to supply them with

---

[52] On these mechanisms and for further discussion, see Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 3–5 and 8–12, with citations of previous work.

[53] Despite appearances, this was in all periods a bit ad hoc and understaffed for the territory and supply needs. Although logistical institutions went through changes, some of which were significant, in the later empire, it remained generally effective. See Paul Erdkamp, "War, Food, Climate Change, and the Decline of the Roman Empire," *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 422–65, https://doi.org/10.1353/jla.2019.0021; Douglas Lee, "Food Supply and Military Mutiny in the Late Roman Empire," *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 277–97, https://doi.org/10.1353/jla.2019.0017; Philip Rance, "The Farmer and the Soldier Should Be Friends: Justinian's Legislation on the Provisioning of Soldiers (*Novel* 130)," *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 380–421, https://doi.org/10.1353/jla.2019.0020; Alexander Sarantis, "Military Provisioning in the Sixth-Century Balkans," *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 329–79, https://doi.org/10.1353/jla.2019.0019; and Jeroen W. P. Wijnendaele, "Late Roman Civil War and the African Grain Supply," *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 298–328, https://doi.org/10.1353/jla.2019.0018.

[54] See Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 6–7.

[55] On eighteenth-century U.S. Army contractors, see chap. 2 of this volume.

[56] See Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 5, 12, 14.

supplies from Italy and the Mediterranean basin such as olive oil, wines, fish, and condiments. As a result, soldiers in the second century who were stationed in Scotland, on the Rhine, or in southern Egypt could receive some Mediterranean foods and beverages (e.g., Spanish wine, Italian condiments, dried Aegean fish) along with their locally procured supplies despite their distance from the points of supply. The success of Rome in expanding and maintaining its empire was not due primarily to the logistical abilities of its leaders, commanders, and officers, but logistics was undoubtedly a contributing factor.

Opportunities for Further Work

Despite advances in our understanding of ancient logistics and an impressive production of publications devoted to it, opportunities to shed further light on ancient warfare remain. Some of these topics are more appropriate to Greece, others to Rome, but generally they apply to all ancient armies. As with logistics overall, these quotidian topics were "merely important" to ancient armies and outside the interests of ancient authors who usually skipped over them. It is not possible in a short chapter such as this to cover all topics or research advances. What follows is a sample of topics in need of further attention from scholars in many fields.

Among the human aspects of logistics, it would be beneficial if we had a better understanding of the maintenance of the "support staff" (e.g., drovers, porters, muleteers, etc.) and noncombatant followers (e.g., family members, captives, merchants, etc.) on campaigns. These groups could be enormous in terms of size and needs; they merit increased attention. Herodotus explicitly excludes them from his calculations of grain requirements for Xerxes' invasion of Greece in 480 BCE, while also making clear that these groups were a significant part of the army column.[57] Regrettably, like Herodotus and Thu-

---

[57] Hdt. 7.187. See also Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps, 3 and 8.

cydides, many modern scholars who have worked on provisioning and logistics have overlooked these groups, while those who have given some attention to them have presumed that "support staff," free and enslaved, as well as noncombatant camp followers, ate and drank and prepared food in the same ways as the soldiers. In truth, there is little explicit evidence to support such an assumption. When it came to foraging for food or firewood, the soldiers would certainly have received the first shares, but that does not mean others went entirely without. They may have received less quality, such as barley instead of wheat, or less quantity, but they would still have needed to have food and drink to sustain their energy.[58] The same may be suggested for the noncombatant followers. Officers and soldiers would have ensured that family members and favorites received food. Thucydides' report that the terms of the Athenian-Spartan armistice at Sphacteria in 425 BCE included half-rations of "one quart of barley meal, half a pint of wine, and half a piece of meat" for each Spartan servant daily is one of our only detailed references to quantity and type of rations. We would like to know more, such as whether this size and type of ration was typical in Sparta or in other Greek militaries.[59] We may take some of these assertions as given, but it would be useful to know how food and drink were shared with and distributed to servants and noncombatants or whether they always had to fend for themselves. Taking care of the noncombatants and servants, if any, was a burden, but it also contributed directly to positive morale and success of the military's efforts on campaign.

On a deeper operational level, we would also like to know, for example, what the mechanisms were by which rations were distributed to soldiers. We know that the Roman military deducted rations from

---

[58] On servants' energy needs, see Lee, "Daily Life in Classical Greek Armies," 42–45; and Stephen O'Connor, "The Daily Grain Consumption of Classical Greek Sailors and Soldiers," *Chiron* 43 (2013): 349–50, https://doi.org/10.34780/2b4g-21gb.

[59] Thuc. 4.16.1. On baggage handlers, drovers, and camp followers, see Roth, *The Logistics of the Roman Army at War*, 91–116; and Brice, "Assessing Military Logistics and Diet in Ancient Greece and Rome," 414fn21.

soldiers' pay and that some men received double rations. It would be useful to know how precisely that process was managed and maintained in various forces. More specifically, when soldiers received one *choenix* of grain or its equivalent per day, was it distributed from a central store, or were wagons, carts, or storage vessels designated for each mess group or unit? It would be helpful to learn too whether the soldiers themselves were responsible for obtaining their rations or if servants distributed them to each soldier or group on behalf of the army. The number of servants, free or enslaved, appropriate or required for all these operations is unknown. A labor-heavy system could have consumed much time daily to distribute and manage rations and would have required more rations for the workers. These considerations would have mattered less in a garrison or fort, but on campaign it mattered greatly since food had to be carried for these workers. Furthermore, how did the army keep track of rations to ensure that everyone received their proper allotment? These and similar avenues of enquiry will help us understand the organization, administration, and economies of militaries as well as important aspects of their societies.

When we consider garrisons and fortifications, we should research the relationship between diet and provisioning and the layout of military structures.[60] Such relationships include considering provisioning and the associated domestic remains such as of billeting in towns, as well as in the communities (e.g., *vici* and *canabae*) that

---

[60] On examinations of ancient military spaces, see Harald von Petrikovits, *Die Innenbauten römischer Legionslager während der Prinzipatszeit* [*The Interior Buildings of Roman Legionary Camps during the Principate Period*] (Opladen, Germany: Westdeutscher Verlag, 1975); and Penelope Allison, "Beyond von Petrikovits—Artefact Distribution and Socio-spatial Practices in the Roman Military," in *Roman Frontier Studies 2009: Proceedings of the XXI International Congress of Roman Frontier Studies (Limes Congress) Held at Newcastle upon Tyne in August 2009*, ed. Nick Hodgson, Paul Bidwell, and Judith Schachtmann, (Oxford, UK: Archaeopress, 2017), 9–15, https://doi.org/10.2307/j.ctv177tk1m.9.

emerged next to long-term forts.[61] We would expect the food supply and dietary material culture of these settlements to reflect that of the units in the fort, although any differences between these venues would be equally informative.[62] The archaeology of fortifications has yielded much new data on layout, organization, and construction, yet we have not fully tapped these excavation reports for what they can reveal about all material aspects of cooking, dining, and cleaning up afterward.

Topics not typically included in military history until recently include the environmental history of ancient military logistics. Understanding geography and climate are important aspects of studying various aspects of logistics including ancient diet, but the same is true of military logistics. The natural environment was critical to any military success but could just as easily be the cause of failure. Climatic changes also contribute to agricultural change and military provisioning of all kinds (e.g., drought, hail, extreme temperature fluctuations). The environments in which ancient militaries operated were diverse, complex, and subject to change. It is not difficult to

---

[61] On some Roman billeting practices and new perspectives, see Sarah Bond, " 'Feasts and Harlots, Baths and Idleness': The Geography of Billeted Troops in Late Antiquity," in *War and Community in Late Antiquity*, ed. Kristina Sessa and Susanna Elm (Cambridge, UK: Cambridge University Press, forthcoming).

[62] Mark Driessen, "Nice Meating," demonstrates how much we may be able to learn about diet and supply institutions from analysis of such *canabae* excavations. See also van Enckevort, "Cauldrons and Feasting in *Oppidum Batavorum* on the Eve of the Batvian Revolt"; Kooistra, "Food for Soldiers"; and Donahue and Brice, *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, chaps. 8, 10–11.

see how this field can be useful for understanding military logistics, and yet little attention has been paid to it by military historians.[63]

This chapter has not even scratched the surface of the military logistics of things such as arms or armor and the material culture of the military, but these also are areas for future work. Provision of these "means of war" and life in the military to armies of all regions and periods has much to inform us about ancient logistics, in terms of not only manufacture but also repair, disposal, and distribution networks in much the same way as food studies. We might expect armies and individual soldiers to have replenished stocks of many kinds through plunder, traveling merchants, markets, and towns during campaigns, much as they did with food and drink. Some armies had sufficient institutional organization to distribute such items of need to soldiers, but much was probably obtained on an individual basis. Even after the Roman imperial military had reached its height, private purchases by individuals as recorded in letters seem to have remained an important part of provisioning.[64] Future work on these and related military topics will fill gaps in our understanding of ancient military supply networks.

A last topic in need of attention is more comparative analysis of how different ancient militaries coped with logistical demands in war. All preindustrial states and groups were subject to low pro-

---

[63] Early studies focusing on the relationship between Greek agriculture and warfare are examples of environmental history of ancient warfare. See, for example, Victor Davis Hanson, *Warfare and Agriculture in Classical Greece* (Berkeley: University of California Press, 1998); P. B. Harvey, "New Harvest Reappear: The Impact of War on Agriculture," *Athenaeum* 64, no. 1/2 (1986): 205–18; and Lin Foxhall, "Farming and Fighting in Ancient Greece," in *War and Society in the Greek World*, ed. John Rich and Graham Shipley (London: Routledge, 1995), 134–45. For more recent considerations of environmental history of the Classical world, see Erika Weiberg and Mark Finné, "Human-Environment Dynamics in the Ancient Mediterranean: Keywords of a Research Field," *Opuscula* 15 (2022): 221–52, https://doi.org/10.30549/opathrom-15-07. For a recent promising approach to the environmental history of military logistics and war, see Micah S. Muscolino, *The Ecology of War in China: Henan Province, the Yellow River, and Beyond, 1938–1950* (New York: Cambridge University Press, 2015), 4–9, https://doi.org/10.1017/CBO9781107785274.
[64] M. C. Bishop and J. C. N. Coulston, *Roman Military Equipment: From the Punic Wars to the Fall of Rome*, 2d ed. (Oxford, UK: Oxbow, 2006).

ductivity and slow communication. Yet, some of them—Assyria, Persia, Rome, and Han China—grew strong enough to expand into empires and maintain their territorial control for centuries.[65] Careful comparative analysis of these different states can reveal features that we had not noticed previously or help fill gaps in our evidence and understanding. Results may also reveal commonalities that exist despite cultural differences and help explain how human societies organize for war. Regardless, there is much we can learn from such interregional study.

Conclusion

Ancient warfare, when examined from the distance of more than 1,500 years, seems uncomplicated, particularly when compared to modern warfare. It was less complicated in many respects. Much of the killing in ancient combat was hand-to-hand and face-to-face. Militaries were not bureaucratized and often not institutions in the sense we think of in modern states. The armies and navies of Athens and Republican Rome (and many ancient "states") were temporary organizations, called up for the purpose as needed and then demobilized as soon as requirements passed. That is not to suggest all aspects of ancient warfare were small-scale or lacking in complexity. The militaries of major ancient empires, including the Assyrian, Persian, Roman, Qin and Han, were all complex for their periods. It is

---

[65] For background on these militaries, see, for Assyria: Tamás Deszö, *The Assyrian Army*, 2 vols. (Budapest: Eötvös University Press, 2012–16); for Persia: Christopher Hassan, "Structure of the Army and Logistics," in *A Companion to Achaemenid Persian Empire*, vol. 2, ed. Bruno Jacobs and Robert Rollinger (Hoboken, NJ: Wiley, 2021) 1151–59, https://doi.org/10.1002/9781119071860.ch80; and John Hyland and Khodadad Rezakhani, eds., *Brill's Companion to War in the Ancient Iranian Empires* (Leiden, Netherlands: Brill, 2024); for Rome: Paul Erdkamp, ed., *A Companion to the Roman Army* (Malden, MA: Blackwell, 2007); Sabin, Whitby, and van Wees, *Greece, the Hellenistic World, and the Rise of Rome*, 303–515; and Sabin, Whitby, and van Wees, *Rome from the Late Republic to the Late Empire*; and for China: Denis Twitchett and Michael Loewe, eds., *The Cambridge History of China*, vol. 1, *The Ch'in and Han Empires, 221 B.C.–A.D. 220* (Cambridge, UK: Cambridge University Press, 2008), https://doi.org/10.1017/CHOL9780521243278; and Nicola Di Cosmo, ed., *Military Culture in Imperial China* (Cambridge, MA: Harvard University Press, 2009), chaps. 2–4.

not surprising that their armies reflected the growth of these states and the requirements of conquest and control.

Regardless of complexity, there are some features of warfare present in all periods and about which modern authors have spent much effort and ink. Strategy, tactics, battles, leaders, maneuvers, combat, commands, arms, victory and defeat, and destruction are all, to different degrees, popular and important topics with military scholars and general readers. But what of the merely important topics, those features that have been a necessary part of all warfare, such as logistics? It may not usually be as dramatic or flashy as many other aspects of warfare, but it is no less important.[66] Indeed, it may actually be just as important as strategy and tactics to the outcome of war in any period.

This chapter has addressed some issues surrounding scholarship on logistics, particularly as they relate to the logistics of diet in the ancient Greek and Roman worlds. Historians need to contribute more vigorously to the debate regarding the place of logistics in military history and peace and security studies. We may not have a surfeit of sources about ancient military logistics, but archaeological sciences and other fields contribute to expanding our knowledge and opportunities. We can use what we have more effectively and thoroughly. The importance of ancient logistics for understanding ancient warfare and ancient states is obvious.

It is certainly possible to perceive the success of Assyria, Rome, Persia, and Qin and Han China without exploring the role that logistics played in their success and eventual failure. Authors with their attention to the dramatic and the audience as well as traditional military history, with its focus on battles, wars, leaders, and the material culture of the military (or all four), have certainly proven this obser-

---

[66] Cornelius Ryan's account of the 1944 Operation Market Garden in the Netherlands demonstrated that logistical failure could be dramatic in a literary format. Military history abounds with such examples. See Cornelius Ryan, *A Bridge too Far* (New York: Simon and Schuster, 1974).

vation. But current military history is more than strategy, tactics, and outcomes. It has so much to contribute to our historical knowledge and to other fields.

Warfare placed great burdens for planning and provisioning on all ancient militaries, but the logistical arrangements fashioned and adapted by those militaries in diverse regions and eras succeeded more often than not in sustaining forces in the field and averting defeat. Ancient logistics reflects local and global concerns and connections. Studying and publishing about the strengths and weaknesses of leaders' and states' provisioning and planning as well as the institutions, entities, and people that contributed to logistical undertakings has much to inform us about specific aspects of these and other states, including their general history, economy, politics, and society. Study of military logistics is a good example of how military history done thoroughly and presented effectively expands our historical knowledge well beyond the military.[67]

Chapter 10

International Actors Intervening in a Local War

The Long World War I of the Eastern Mediterranean, 1911–23

James N. Tallon, PhD

This chapter examines the "Long War" (1911–23) in the Eastern Mediterranean as a protracted conflict that ultimately reshaped the political geography of the Middle East, North Africa, and Southeastern Europe. This periodization repositions the Italo-Ottoman War of 1911–12 as the opening battle in a long conflict in the Ottoman world and its environs. The war played out on diverse regions from the Balkans and Anatolia to the Arabian Peninsula and Iran for more than a decade as a struggle for national and political belonging. This long war was occasionally marked by clashes on a static positional front, such as the western front of World War I, but it also witnessed insurgent and irregular forces coordinating with the vast human resources that the Ottoman, Greek, Bulgarian, Serbian, German, Austro-Hungarian, and Italian armies mustered. For the Ottomans, anti-Western and anticolonial ideologies merged with Muslim political activism and provided a common political framework to bolster their war effort and to perpetuate the fight to preserve the empire even after its agreed-on dismemberment at the 1920 Treaty of Sèvres. For the Balkan states, these local allies were used to pursue irredentist claims to their perceived historical patrimonies, which also lingered well into the 1920s. Austria-Hungary and Italy used locals to pursue imperial claims and bolster flagging manpower. This

chapter challenges both the typical periodization and the prevailing conception of a moribund Islamic empire swiftly wiped from the map by emergent nationalisms as well as the lingering perception that the Eastern Mediterranean, the Middle East, and the Balkans were a mere "sideshow" to the "real war" on the western front during World War I.

This chapter advances three ideas. First, the Eastern Mediterranean domains (the Middle East, North Africa, and Southeastern Europe), either governed or influenced during the period in question or formerly governed by the Ottomans, were a connected space that was undergoing a military, political, and economic transformation.[1] Many of these were former territories under some form of European influence or control, such as Tunisia, Algeria, and Egypt. Others were former territories under a new "national" government, such as Albania, Bulgaria, Greece, Montenegro, and Serbia, or domains under Ottoman governance, such as Syria and Anatolia. Despite some different political realities, there remained geographical, historical, economic, and religious connectivity that would play an important role in the first quarter of the twentieth century. Second, conflict in the Eastern Mediterranean was well underway in 1911, or perhaps earlier, and was essentially unrelated to the concerns of Western Europe, with Italy and Austria-Hungary being notable exceptions. When peace arrived in Western Europe in 1918, conflict continued with little pause in the Eastern Mediterranean. Therefore, a Long War from 1911 to 1923 engulfed this region. This was particularly true for the Ottoman Empire, Greece, Bulgaria, Albania, and Ser-

---

[1] Malte Fuhrmann, *Port Cities of the Eastern Mediterranean: Urban Culture in the Late Ottoman Empire* (Cambridge, UK: Cambridge University Press, 2022), https://doi.org/10.1017/9781108769716; and Ilham Khuri-Makdisi, *The Eastern Mediterranean and the Making of Global Radicalism 1860–1914* (Berkeley: University of California Press, 2010).

bia.[2] The interests of the great powers complicated and temporarily absorbed this long conflict and spurred it on. While these powers shaped the development of the conflict, many of the reasons for the Long War continued unabated and remained after 1918. Finally, this work argues for a historical framework that views the crisis of the summer of 1914 and the world war that followed as an interruption of an ongoing conflict in the Eastern Mediterranean that has been described by one author as "the War of Ottoman Succession."[3] Others have characterized it as the Third Balkan War.[4] Ultimately, the aims and points of contention of the Italo-Turkish War and the Balkan Wars of 1912–13 were essentially unchanged in 1914–18 and really only came to a conclusion in 1923 with the Treaty of Lausanne. The contest over this Ottoman/post-Ottoman space was the principal driver for war in the region during this period rather than alliances or nationalism. The Long War in the Eastern Mediterranean, like the wider First World War, was a war of imperialism simply fought on a smaller scale.

---

[2] Other authors have also conceptualized a "Long War" or "Greater War." Some have speculated on different starting points and ending points of the Long War. See Jay Winter, *The Day the Great War Ended, 24 July 1923: The Civilianization of War* (Oxford, UK: Oxford University Press 2022), 1–4; Antonis Liakos and Nicholas Doumanis, *The Edinburgh History of the Greeks, 20th and Early 21st Centuries* (Edinburgh: Edinburgh University Press, 2023), 27–62; Andrekos Varnava, *British Cyprus and the Long Great War 1914–1925: Empire, Loyalties and Democratic Deficit* (London: Routledge, 2021), 5–6; Vanda Wilcox, *The Italian Empire and the Great War* (Oxford, UK: Oxford University Press, 2021), 13–15; and Veronika Hager, "The Long End of the Ottoman Empire: Historiographical Discourses on the First World War in the Consolidating Republic of Turkey," in *The Long End of the First World War: Ruptures Continuities and Memories*, ed. Katrin Bromber et al. (Frankfurt: Campus Verlag, 2018), 235–66.
[3] Sean McMeekin, "The War of the Ottoman Succession," *Historically Speaking* 13, no. 1 (January 2012): 2–4, https://doi.org/10.1353/hsp.2012.0000. These concepts later appeared in Sean McMeekin, *The Ottoman Endgame: War, Revolution, and the Making of the Modern Middle East, 1908–1923* (New York: Penguin, 2016).
[4] Joachim Remak, "1914—The Third Balkan War: Origins Reconsidered," *Journal of Modern History* 43, no. 3 (September 1971): 354–66. This was later echoed in Christopher Clark, *The Sleepwalkers: How Europe Went to War in 1914* (New York: Harper Collins, 2013), 242.

The Eastern Mediterranean Front

The Mediterranean as connected space is hardly a new concept. Ever since the publication of French historian Fernand Braudel's path-breaking book *Mediterranean* in 1949, this idea has been influential in European and later in other scholarly circles through conferences, journals, and more.[5] Even the Eastern Mediterranean has been given some scholarly attention as an extension of Braudel's argument, generally in the ancient or medieval periods.

How does this concept relate to the study of military history and the First World War? The Mediterranean or the Eastern Mediterranean as an analytical framework is rarely used for the period in question except in reference to naval operations.[6]

The Eastern Mediterranean is a useful geographical concept for the period in question. These lands, bound by the Mediterranean Sea, connected Italy, the Ottoman Empire, the Balkans, and North Africa.[7] It was also distinguished as the stage for a series of regionally focused lesser wars that complicated World War I. Conceptually partitioning the Eastern Mediterranean from the larger theater shows that war, like politics, is local. Additionally, the interconnection between the Long War and smaller conflicts in the Eastern Mediterranean reveals that previous narrative treatments of the First World War simply exclude events happening before 1914 and after 1918 to preserve the Western 1914–18 timeframe and perhaps out of lack of

---

[5] Fernand Braudel, *La Méditerranée et le Monde Méditerranéen à l'époque de Philippe II* [*The Mediterranean and the Mediterranean World at the Time of Philip II*] (Paris: Librairie Armand Collin, 1949). Many editions and translations appeared later.

[6] Paul G. Halpern, *A Naval History of World War I* (Annapolis, MD: Naval Institute Press, 1994).

[7] All geographical regions have a degree of imaginary connectedness. See Olaf Farschid, Manfred Kropp, and Stephan Dähne, eds., *The First World War as Remembered in the Countries of the Eastern Mediterranean* (Beirut: Orient-Institut, 2006).

awareness of the wider literature. Some recent work has substituted the "Middle Eastern Front" for the "Eastern Mediterranean Front."[8]

Geography as represented in historical studies is often problematic. Historians are bound by their own perspectives and linguistics. Their geographic concepts are further reinforced by historical disciplines and their expectations as well as the scholarly and popular market for historical works.[9] One of the more common heuristic choices is to divide the First World War between a western and an eastern front. While understandable, this is rather simplistic. While there were connections between Poland, Ukraine, the Baltic states, Macedonia, Bulgaria, Romania, Serbia, Greece, Albania, and Anatolia, these were limited. Categorizing this region as a connected space seems to be done simply to distinguish these areas from the western front.

In the study of World War I, a consistent focus on the western front continues to permeate the field. There have been significant attempts to revise this in the last decade or so, with some notable achievements, some of which share similar ideas to this work.[10] The most consistent topic in this region remains the Dardanelles.[11] Other studies have drawn together imperialism and the Macedonian/

---

[8] Michelle Tusan, *The Last Treaty: Lausanne and the End of the First World War in the Middle East* (Cambridge, UK: Cambridge University Press, 2023), 9–12, https://doi.org/10.1017/9781009371063. There are many ways to imagine this conflict and space. A multiplicity of perspectives is welcome and necessary to gain greater clarity of this issue.

[9] Martin W. Lewis and Kären Wigen, *The Myth of Continents: A Critique of Metageography* (Berkeley: University of California Press, 1997); Janne Holmén and Norbert Götz, eds., *Mental Maps: Geographical and Historical Perspectives* (London: Routledge, 2022); Maria Todorova, *Imagining the Balkans* (Oxford, UK: Oxford University Press, 2009); and John Lewis Gaddis, *The Landscape of History: How Historians Map the Past* (Oxford, UK: Oxford University Press, 2004).

[10] Gerhard P. Gross, ed., *The Forgotten Front: The Eastern Theater of World War I, 1914–1915* (Lexington: University Press of Kentucky, 2018); and Joachim Bürgschwentner, Matthias Egger, and Gunda Barth-Scalmani, eds., *Other Fronts, Other Wars?: First World War Studies on the Eve of the Centennial* (Leiden, Netherlands: Brill, 2014).

[11] Nicholas A. Lambert, *The War Lords and the Gallipoli Disaster: How Globalized Trade Led Britain to Its Worst Defeat of the First World War* (Oxford, UK: Oxford University Press, 2021); Mesut Uyar, *The Ottoman Army and the First World War* (London: Routledge, 2021); and Jenny Macleod, *Gallipoli* (Oxford, UK: Oxford University Press, 2015).

Salonika front. These provide nuance and new narratives.[12] So too have publications focused on Austro-Hungarian, Greek, Italian, and Serbian interests during the Long War.[13]

There are alternatives to the phrase Eastern Mediterranean front. But these neglect physical geographical realities, historical connectedness, and the fact that all of the principal belligerents in the Long War were engaged in a contest to claim a portion of former or current Ottoman domains. The concept of an Eastern Mediterranean front connects these works and allows for a more fruitful understanding of how this conflict played in the region.

The Long War/Greater War

Conceptualizing war and historiography are important and go beyond simply reading and interpreting sources. How societies and academic communities think about conflict has serious ramifications. Some wars have a fairly clear beginning and end, but others are a bit hazy. Even when a beginning and an end are clear, the motivations of governments or even armies can be uncertain or represent an ever-changing set of principles or ideas. Conceptualizing war becomes a more difficult task when war was carried out over vast distances with the advent of sail and later steam and other transportation technologies. Moreover, certain groups or individuals may be drawn to the expressed goals of the government or army but may also

---

[12] Basil Gounaris, Michael Llewellyn-Smith, and Ioannis Stefanidis eds., *The Macedonian Front, 1915–1918: Politics, Society, and Culture in Time of War* (London: Routledge, 2022); and Justin Fantauzzo, *The Other Wars: The Experience and Memory of the First World War in the Middle East and Macedonia* (Cambridge, UK: Cambridge University Press, 2020), https://doi .org/10.1017/9781108782067.

[13] Marvin Benjamin Fried, *Austro-Hungarian War Aims in the Balkans during World War I* (New York: Palgrave Macmillan, 2014); James Lyon, *Serbia and the Balkan Front, 1914: The Outbreak of the Great War* (New York: Bloomsbury Academic, 2015); Christopher Kinley, "The Balkan War in Epirus: Religious Identity and the Continuity of Conflict," *Journal of Balkan and Near Eastern Studies* 23, no. 5 (2021): 667–83, https://doi.org/10.1080/19448953.2021.1935 077; and James N. Tallon, "Albania's Long World War I, 1912–1925," *Studia Historyczne* 57, no. 4 (2014): 437–55.

have other motivations of their own, or they may be forced into war against their will.

The First World War, or the Great War, is most often described as lasting from 1914 to 1918. This was the period in which the world's great powers fought until a peace treaty ended their mutual conflict. For the purpose of bookending this aspect of the conflict, it is a valid periodization, but outside of the western front the Great War continued, sometimes until the mid-1920s. Furthermore, the Serbian radicals who assassinated the Archduke Franz Ferdinand of Austria and his wife Sophie, Duchess of Hohenberg, on 28 June 1914 were fighting in a conflict that was already underway. Numerous powers in the Eastern Mediterranean were trying to lay claim to territory recently acquired from the Ottomans. These claims often had historical or national rationalizations, but in essence they reflected imperialist desires. Most of the historical evidence for these asserted national rights were centuries old, and most of the territories were full of heterogenous agriculturalists who were ambivalent at best about outside leaders. Nonetheless, from the Italian invasion of present-day Libya in 1911 until the Greek withdrawal from Anatolia and the signing of the Treaty of Lausanne in 1923, this region was at war. The reasons for this war had little to do with French revanchism or Anglo-German naval rivalry. While the belligerents in the Eastern Mediterranean were fixated on their own concerns, the outside war intervened into their local war. Likewise, when "peace" was declared in 1918, these locals continued pursuing their objectives as they had done before 1914. To be fair, some recent works are aware of the more local concerns of Eastern Mediterranean states and actors, or at least they entertain the idea of other versions to the western front-centric perspective of World War I or imagine a long World War I

from different angles.[14] Some have examined the nature of landscape on the conflict. Drawing together two principal points of this work are a revision of timeline and a rethinking of geography.[15] Additionally, nonofficial sources or accounts of the "lived experience" often have a longer perspective than the standard narrative. This is usually the case among Ottoman/Turkish memoirs, but there most certainly are Greek, Bulgarian, and Serbian memoirs that reflect a similar local reality.[16]

Given the multiplicity of timelines, how can these discordant realities be historiographically synthesized? In contrast to the conventional telling of the First World War, in which the western front is the focus and all else is simply a "sideshow," many of the wars in seventeenth- and eighteenth-century Europe—such as the Thirty Years' War (1618–48), the Seven Years' War (1756–63), and the War of the Spanish Succession (1700–14)—offer more nuanced models.

---

[14] Jonathan Wyrtzen, *Worldmaking in the Long Great War: How Local and Colonial Struggles Shaped the Modern Middle East* (New York: Columbia University Press, 2022); and Adam Tooze, *The Deluge: The Great War, America and the Remaking of the Global Order, 1916–1931* (London: Allen Lane, 2014).

[15] Selena Daly, Martina Salvante, and Vanda Wilcox, eds., *Landscapes of the First World War* (Cham, Switzerland: Palgrave Macmillan, 2018) 1–11.

[16] Selim Deringil, *The Ottoman Twilight in the Arab Lands: Turkish Memoirs and Testimonies of the Great War* (Brighton, MA: Academic Studies Press, 2019); Salim Tamari, *Year of the Locust: A Soldier's Diary and the Erasure of Palestine's Ottoman Past* (Berkeley: University of California Press, 2015); İsmet Görgülü, *On* yıllık *harbin kadrosu, 1912–1922*: *Balkan-Birinci Dünya ve İstiklâl Harbi* [*The Cadre of the Ten Years' War: The Balkan, First World, and Independence Wars*] (Ankara: Türk Tarih Kurumu, 2014); Altay Fahrettin, *10 yıl savaş, 1912–1922, ve sonrası* (*The Ten Years' War and Afterward: 1912–1922*) (Istanbul: İnsel Yayınları, 1970). This is the case with non-Muslim soldiers as well. See, for example, Charalampos Minasidis, "Greek Orthodox Citizen Soldiers under the Ottoman Banner: Experiencing and Surviving the Great War," *Archiv orientální* [*Oriental Archive*] 88, no. 3 (2020): 341–73, https://doi.org/10.47979/aror.j.88.3.341-373. Military memoirs are useful but must be used with caution. This is particularly true of many Turkish memoirs, which before being published as books were serialized in multiple periodicals over several years. See, for example, Mehmet Beşikçi, "One War, Multiple Memories: Ottoman Reserve Officers in the First World War," *Archiv orientální* [*Oriental Archive*] 88, no. 3 (2020): 309–40; Philipp Wirtz, *Depicting the Late Ottoman Empire in Turkish Autobiographies: Images of a Past World* (London: Routledge, 2017); and Yuval Noah Harari, "Military Memoirs: A Historical Overview of the Genre from the Middle Ages to the Late Modern Era," *War in History* 14, no. 3 (July 2007): 289–309, https://doi.org/10.1177/0968344507078375.

The Thirty Years' War is often described as having two phases and two interventions as well as at least one parallel conflict.[17] It can be imagined as a string of separate conflicts. However, scholars of the period pull the separate stories together because the motivations of each are similar: who will control the Holy Roman Empire? Nevertheless, perhaps this model will not work as well for the long history of World War I because that later conflict is not driven by a simple central motivation.

The Seven Years' War is conceived of in an opposite manner. There were two rival coalitions that fought for preeminence in Europe, but there were also related conflicts occurring concurrently.[18] This war, then, was not one long conflict with phases and interventions. Instead, it is imagined as a series of different but somewhat related conflicts.

The War of the Spanish Succession offers yet another approach. Here in the contest for the Spanish throne, two coalitions fought a series of campaigns in Western Europe, but there were other allies drawn into the conflict further afield. These smaller conflicts were unrelated to a degree but tangentially connected. This seems most useful as a historiographical approach to more effectively describing

---

[17] Sometimes three interventions are described. Phase I (1618–35) includes a Danish intervention (1625–29) and a Swedish intervention (1630–34), and Phase II (1635–48) includes a French intervention. There is also the concurrent Portuguese Restoration War (1640–68) as well as other conflicts.

[18] Depending on the context, the Seven Years' War can be conceived as the War of Austrian Succession (1740–47), from a British/American perspective as the War of Jenkins' Ear (1739–48), from a British/Indian perspective as the First Carnatic War (1744–48), and from a Prussian/German/Austrian perspective as the First Silesian War (1740–42) and the Second Silesian War (1744–1745). Similarly, the Seven Years' War includes the French and Indian War (1754–63) and the War of Conquest (1758–63) in North America, the Third Carnatic War (1757–63) in India, the Third Silesian War (1756–63) in Central Europe, and the Pomeranian War (1757–62) in Scandinavia.

the First World War.[19] These various historiographical models show that World War I could be conceived of differently because similar events in European and world history have also been thought of differently.

With this in mind, a rereading of the Italian invasion of Tripolitania and Cyrenaica (present-day Libya) as the beginning of a larger conflict has historiographical merit. Indeed, similar sentiment was articulated by the Serbian diplomat Miroslav Spalajković in the 1920s as he reflected back on the war.[20] The Italian invasion of Libya weakened the Ottoman position in the Balkans as well as in the Middle East. This in turn encouraged the activities of the Balkan League, which was supported by the Russian Empire.[21] The Balkan League's victory forced the Ottomans out of most of Southeastern Europe, and the Balkan League divided up the spoils (save for Albania, which attained independence with the assistance of Austria-Hungary, Italy, and the United Kingdom). Italy also gained Libya and the Dodecanese as a result of its war. The other members of the Balkan League then turned against Bulgaria, forcing it out of some of its previous gains.

While Bulgaria was distracted, the Ottoman Empire was able to claw back some modest amounts of territory that it had lost, but the Ottomans still harbored plans for revenge to take back the rest

---

[19] Put differently, neither the Wabanaki Confederacy nor the Kuruc army of Francis II Rákóczi had a vested interest in Bourbon victory in Spain. They fought for their own reasons and concerns—respectively, maintaining their autonomy in present-day Maine and the Maritime provinces against British and French interests and seeking an independent Hungarian state. Consequently, they were essentially independent of the larger contours of the War of the Spanish Succession, yet their interests aligned due to a common enemy.

[20] Zoran Bajin, "Miroslav Spalajković, the Serbian Minister in Russia in the July Crisis of 1914," *Balcania* 47 (2016): 217–48, https://doi.org/10.2298/BALC1647217B. He stated this in an interview in *La Revue Diplomatique* on 31 July 1924.

[21] Additionally, the Ottoman government was engaged in suppressing several insurrections in the Balkans and Arabia in 1910–12 as a result of negative reactions to reform measures. These certainly undermined confidence in the Ottoman government and fanned local displeasure, which was used by both Italy and the Balkan states in the buildup to war. See James N. Tallon, "Ottoman Anti-Insurrectionary Operations in Yemen and Albania, 1910–1912: The End of Ottomanism and the Beginning of an Age of Violence," in *Empire, Ideology, Mass Violence: The Long 20th Century in Comparative Perspective*, ed. Tobias Hof (Munich: Herbert Utz Verlag, 2016), 45–71.

of their lost territory. Bulgarians also felt betrayed and looked to regain what was lost. The Balkan League victory made the Austria-Hungarian leadership defensive and strengthened Pan-Slavic sentiment within the Tsarist government in Russia. Elements within the Serbian government, strengthened by victory and Russian enthusiasm, moved to undermine the Habsburg position in Bosnia-Herzegovina and strengthen their position in northern Albania.

These local maneuvers ultimately led, in part, to the events of 28 June 1914. This Long War was then interrupted by the intervention of several great powers—particularly Austria-Hungary, Italy, Germany, and France—whose goals were to secure their own strategic objectives and desires. As a result, the objectives of the other combatants in the Long War were temporarily superseded by these larger powers' interests. That being said, there were several occasions when local desires were also pursued.[22] Consequently, not unlike the aphorism "all politics is local," warfare too can be viewed as a local affair.[23] This is not surprising if one invokes another oft-quoted aphorism, as originated by the Prussian military theorist Carl von Clausewitz, that "war is the continuation of policy with other means."[24] These well-worn axioms aside, the motivations of the principal combatants in the Long War were firmly rooted in local matters. These interventions would also violate neutrality and widen the conflict. Though Greece declared its neutrality at the outbreak of World War I, the Allied Powers occupied portions of its territory and prodded into war throughout 1915 and 1916. The neutrality of recently formed Albania was also frequently violated, beginning ironically with Greece's occupation of Northern Epirus in October 1914. Throughout the Long

---

[22] Germany and Austria-Hungary promised to honor Bulgaria's claim to Macedonia. Austria-Hungary, Italy, and France all recognized the independence of Albania.

[23] This phrase has many purported sources but is most associated with speaker of the U.S. House of Representatives Thomas P. "Tip" O'Neill Jr.

[24] Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (London: David Campbell, 1993), 77.

International Actors Intervening in a Local War

War, Albania's neutrality would be violated seven times and Greece's neutrality at least three times.[25]

As the general declarations of war initiated the Great War in August 1914, Ottoman officials mulled entering the war and finally did so out of fear of Russian intervention and in a desire to regain territory lost in 1911–13. The United Kingdom, France, and Italy intervened in the Balkans and the Arab provinces to support Serbia and counteract the Bulgarian declaration of war as well as to secure the Suez Canal and gain control of Ottoman provinces that they felt they deserved. Germany and Austria-Hungry also intervened in these regions to support the Ottoman Empire and Bulgaria as well as gain influence.

Grinding campaigns and a brutal blockade in Macedonia, the Dardanelles, and Greater Syria stretched Ottoman logistics, and its society began to fray at the seams. British and French armies also had to increasing rely upon soldiers and resources from their empires. Both sides sought to stir rebellion in their enemies' territories. The Russian Empire collapsed in November 1917. Then, the Allies defeated Bulgaria in September 1918, the Ottoman Empire in October 1918, and Austria-Hungary in November 1918.

These conclusions brought a respite in the fighting, but the spoils of the defeated empires were fought over by their would-be successors. Serbia, and later Yugoslavia, battled for influence in Macedonia and Albania well into the 1920s. Italy too sought influence in Albania and tried to occupy Corfu in the 1920s. Despite serious resistance, the United Kingdom and France carved protectorates in Greater Syria under the guise of League of Nations mandates. Finally, the United Kingdom and France supported claims to create Greek and

---

[25] Limnos was occupied by the Allies in February 1915; Thessaloniki (Salonika), in October 1915; and Corfu, in January 1916. To be fair, some factions of the Greek government did support intervention. This resulted in what was known as *Ethnikos Dikhasmos* (national schism), in which there were two rival governments in Greece. Albania's neutrality was violated on at least seven occasions by Montenegro, Serbia, Greece, Italy, Austria-Hungary, Bulgaria, and France.

Armenian national states in Anatolia, which eventually created a Turkish Nationalist movement that defeated both of these efforts. All of these moves resulted in further and very serious bloodshed. Several agreements, principal of which were the Treaty of Neuilly in November 1919 and the Treaty of Lausanne in July 1923, ended many of the major issues that had plagued this region since 1911. Consequently, between 1923 and 1925, depending on one's perspective, the Long War ended.[26]

The Long War of 1911–23 in the Eastern Mediterranean was incredibly destructive. Two centuries-old empires were shattered and their territories fought over. Hundreds of thousands of soldiers and civilians were killed, and many more were wounded and disfigured. Ethnic cleansing and genocide would follow in the wake of the conflict. The settlements of the 1920s would prove ephemeral, and violence would return again in 1939–45 as well as in 1991–99. In the Arab world today, the foundations of some ongoing conflicts arguably have their roots in the Long War of 1911–23. Far from being a sideshow, this conflict had a profound impact on the fate of this region, and it still has resonance today. Understanding it better by placing it in a more nuanced historiographical context is an important task for military historians to undertake.

---

[26] Resistance to the French mandate in Greater Syria was stiff until late in 1925, when organized resistance began to wane.

Chapter 11

War and Conflict in the Middle Ages

A Global Perspective

Stephen Morillo, DPhil[1]

Introduction

When the editors of this volume asked me to address the conference they had organized on global and local perspectives on military history, I was happy to accept their kind invitation in order to, among other things, address the challenge of studying global military history, a topic I had been exploring for years. In fact, I had just published *War and Conflict in the Middle Ages: A Global Perspective* with Polity Press, where I explored some of the issues arising from attempting to write a global military history.[2]

I also wished to explore further some new approaches to the analysis of warfare with a group of military historians who extended beyond the usual medieval bounds of my scholarly connections. Indeed, when the full lineup of the conference became available to me, a further purpose appeared necessary: to perhaps claim some space for medievalists between the classicists and the modernists who jointly predominated on the program.

I hope to address some of these issues here. Many of my conclusions about them appear in the form of the final chapter of my recent book, *War and Conflict in the Middle Ages,* reproduced here with

---

[1] This chapter is formatted in the first-person perspective to best represent the information presented at the 2023 military history conference at Western Illinois University.
[2] Stephen Morillo, *War and Conflict in the Middle Ages: A Global Perspective* (Cambridge, UK: Polity, 2022).

slight adjustment with the kind permission of Polity Press. But first we may consider a few issues that frame these conclusions in larger historiographical terms.

Global military history may seem a relatively straightforward goal in our globally connected contemporary world. Although Euro- or "Western"-centric analyses are certainly still possible, the reach of information available to both historians and military practitioners, as well as the actual interactions that take place across the range of global politics, tends to push in the direction of a globally based, relatively inclusive analysis (inclusive of different sorts of warfare and political organization, among other factors). But what does a global perspective mean in eras of world history that were not so intrinsically connected? This is not to deny that there were connections across the medieval world, but simply that they were neither so obvious nor pervasive as they have become in the industrial-electronic world we live in today. What theoretical bases are there for both analysis and periodization (periodization often being the front line for theoretical assumptions about the past, explicitly or not)?

The fundamental approach to periodization and the definition of a "medieval" period that I take in *War and Conflict in the Middle Ages* and that appears in summary form here is materialist: climate change is primary, combined with modes of human subsistence and their resulting demographic impacts. It has the advantage of being truly global, avoiding the centrisms that usually limit the applicability of periodization schemes beyond the cultural context in which they arose; it does not only fit but also explains the end of the classical world; and it raises interesting questions about when the medieval period ended. A materialist context for military history also has the advantage of fitting with the usual outlook of much military history, which is basically materialist.

But global materialist explanations can only be pushed so far before they risk devolving into facile determinisms. Especially at the level of climate and demography, they provide contexts and limits,

but they do not offer detailed explanations of regional differences within the larger common boundaries. Inevitably, culture must enter the picture, as human societies perceive and react to their material circumstances within cultural frames that give the material world meaning.

Unfortunately, culture often enters military history in the form of unexamined assumptions about the "rationality" of military decision making, when what is rational to one culture may seem bizarre and irrational to another with a different cultural frame. This can extend to the almost universal tendency for military decision making to be placed in the context of states, diplomacy, and a sort of "political science" analytic frame. While certainly useful in many circumstances, this is limited, and its limits are particularly clear in the medieval world, when states were neither as pervasive, powerful, nor monopolistic of organized violence as they are today and as they were—or at least appeared to be—in the classical world of large dominant empires.

The cultural analysis of warfare that my recent book undertakes, and which is outlined here, therefore attempts a new direction: the analysis of warfare as a form of discourse; a violent and unsubtle negotiation, not necessarily over political aims and goals but one that is more centrally about group identity and the meaning of the world; a discourse in which each side is making statements not just about its goals and the other side's goals but also about itself (identity) and its place in the world (meaning). It was the sum of these discourses around the globe in the wake of the collapse of the classical world that created and connected the medieval world, discourses whose ongoing echoes continue to shape the development of today's world.

Finally, then, in terms of claiming some space for medievalists between the classicists and modernists who filled the conference and this volume, my work makes the following two claims. First, medieval societies were better—more economically developed, more politically resilient, and more culturally rooted than their classical

forebears (admitting that *better* is a silly, value-laden judgment, but accepting the terms that are sometimes used of the "glory that was Greece and the grandeur that was Rome" against the "darkness" of the Middle Ages, at least in European history). Second, and especially from a materialist perspective, the medieval world did not really end until the Industrial Revolution, with two consequences: that, historiographically, there is no room for that conceptual monstrosity, the "early modern" world of 1500–1800; and that in cultural terms the "modern" (industrial) world actually owes much more to the armed discourses of the medieval world than to the remembered (but transformed through medievalization) "glory and grandeur" of the classical world. Some details of the arguments that led to those conclusions follow.

Making the Medieval World

When the Late Antique Little Ice Age (LALIA) descended from the ash of massive volcanic eruptions to cool the Earth from roughly the year 540 for more than a hundred years, not just bringing disruptions to agriculture but also triggering—or at least coinciding with—the pandemic spread of deadly diseases, the structures of "classical civilizations" came apart.[3] Even if the major state centers of classical societies represented only the anomalous high points of social and cultural complexity at that point in world history, they nevertheless were already home to a majority of the world's population. And the networks of economic, cultural, and political exchange that connected them to each other as well as the widespread nonstate regions

---

[3] See Ulf Büntgen et al., "Cooling and Societal Change during the Late Antique Little Ice Age from 536 to around 660 AD," *Nature Geoscience* 9, no. 3 (February 2016): 231–36, https://doi.org/10.1038/ngeo2652. For a more general overview, see Benjamin Lieberman and Elizabeth Gordon, *Climate Change in Human History: Prehistory to the Present* (London: Bloomsbury, 2018), which includes a section on the Late Antique Little Ice Age. My argument is laid out in full in Morillo, *War and Conflict in the Middle Ages*, chap. 2.

of the world carried the effects of the LALIA-based nexus of crises across the globe.

The great classical states and empires did not, of course, simply disappear from the face of the Earth. Some survived, adapting and transforming as they could. Even those that fragmented into smaller local pieces left memories of their existence and models of social, political, and administrative organization to the peoples who inhabited a world newly full of opportunities and options, a reminder that "collapse" casts the processes that began with the LALIA far too much in terms set by the rulers of the classical world. Disaster for them was freedom for many. Consequently, the successors of the classical world set about to rebuild and reshape their world.

It is the argument of this chapter that war and conflict were central to the process of rebuilding the world and redefining what the world meant that ensued after 540, a process that created the medieval world. To understand the dynamics and contributions of war to this process, we first must consider what I call the "common rules" of armed conflict. These include the physical and structural limits on warfare: where it could take place, and how that limit was inextricably tied to where the political structures (states) that could generate large-scale elements of warfare, including armies and major military infrastructure such as fortifications, could exist. They also include the physics of armed conflict in an age when all "work" had to be performed with the limited power sources available in a preindustrial world, such as wind power, water power, and muscle power, the latter being the power source for almost all armed conflict. This had major implications for the range and effectiveness of medieval weaponry. These are called common rules because they apply to all armed conflicts across the world during this period, regardless of scale—that is, no matter how many or few people were involved. The common rules, therefore, also serve as a reminder that war and conflict were not activities monopolized by states and formal state armies. Substate and nonstate fighting happened so frequently in so

many places that, although the scale of major wars could have significant historical impacts, the sheer volume of substate and nonstate armed conflict shaped the course of history constantly. The common rules therefore also help identify the parameters of this constant tide of war and conflict.

The construction of the medieval world, however, took place in culturally and chronologically specific circumstances within the confines of the common rules, and so the second part of my book examines the changing settings of medieval warfare, or the specific chronological periods and their cultural character that the Middle Ages can be divided into. In the first period, from 540 to 850, warfare appeared as central to the processes, largely internal to different societies, that "medievalized" those societies. This involved conflicts that spread militarized forms of social-political organization more deeply into societies, which in turn stimulated economic development directly "from the ground up" in many places. Military activity was also closely associated with the spread of what world historians call the "salvation religions."[4] Religiously motivated forms of social and cultural organization, as well as religious interpretations of the meaning of the world, acted hand in hand with military structures and military cultural discourses to lay medieval foundations that would shape the world in lasting ways.

In the second period, from 850 to 1300, the expansive, culturally self-confident worlds that emerged from the early period of medieval development increasingly encountered each other, often violently even as they also traded and exchanged ideas. Indeed, as in the first period, I view this military activity as acting as a form of discourse through which ideas, ideologies, and forms of social and political organization were "discussed"—argued over, promoted, and resisted—with the result that a larger, ever-spreading "conversation"

---

[4] See Stephen Morillo, *Frameworks of World History*, vol. 1 (New York: Oxford University Press, 2014), chap. 7.

is what created a coherent medieval world from a set of emergent disparate medieval worlds.

Finally, the period that began in 1300 saw the richer, more complex medieval world face a new period of challenges similar to those that ended the classical world: a cooling climate and a vast, deadly pandemic, piled on top of the shock provided by the conquests of the Mongols, whose wars typified the conflicts of the preceding period. But instead of breaking apart as the classical world had done, the medievalized societies of the 1300s and beyond showed their resiliency. They did not collapse but met these challenges, reaffirmed their cultural identities, and carried on with the expansive, interactive trajectories they had established already, ultimately bringing the entire world into their violent discourses.

It is this "carrying on" in the last period of medieval wars examined here that raised the question of when the Middle Ages ended, because 1500 does not make a good breaking point across most of the world.[5] So, then, when did the Middle Ages end?

The End of the Middle Ages?
Transformations and Globalizations

Having taken a global perspective throughout, we can ignore the phenomena usually cited as marking the end of the Middle Ages—especially, for example, the Renaissance—as too Eurocentric to justify a global periodization change. From a global perspective, there are two developments that can justify a period change around 1500. First, the increasing importance of gunpowder weaponry, which in the view of some historians is an aspect of the so-called "Military Revolution" of the period 1500–1800. Since the very existence of a Military Revolution is disputed, let us focus on gunpowder weaponry in its own right.

---

[5] See especially Morillo, *War and Conflict in the Middle Ages,* chap. 7.

There is no denying that gunpowder brought change to warfare. It was the first sort of weaponry that transcended the limits of wind, water, and muscle power for getting the destructive work of warfare done.[6] In its earliest forms, however, it was not much more powerful than the best of the traditional weapons—counterweight trebuchets were more powerful siege weapons than any early guns, for example. And even after centuries of development, gunpowder weaponry remained comparable to, rather than worlds apart from, traditional weapons in terms of physics. Even eighteenth-century artillery was largely a line-of-sight weapon with a range of a few hundred yards. Admittedly, the gradual development of cannon had created a new, or at least newly effective, combat arm: field artillery. But "gradual development" raises a question that has dogged debates about the Military Revolution: was there a decisive "revolutionary" moment in the long evolutionary history of gunpowder when one can say, "There! That is when things changed!"? It is hard to find such a moment, and so gunpowder becomes an example of a medieval technology whose development extended from Song China in the 1000s into the 1800s and beyond. The one exception, arguably, is that when medieval trends in shipbuilding intersected with medieval trends in gunpowder weapons development, the result—the full-rigged broadside ship of war—was not medieval.

The second development that can justify a periodization moment in the global perspective is the true globalization of the world's network of exchanges after 1492. The Columbian exchange of foodstuffs and other primary agricultural products was undeniably significant, as was the associated movement of populations, especially the emergence of the Atlantic slave trade in the wake of the epidemic-induced depopulation of two continents. It is hard to say that with the addition of the New Worlds of the Americas, there was not a New World globally.

---

[6] See Morillo, *War and Conflict in the Middle Ages*, chap. 4.

War and Conflict in the Middle Ages

The question then becomes, however, what kind of New World was created by the incorporation of the Americas into the Eurasian-centered world that existed before 1500? The answer to this question brings continuity to the fore again.

An Extended Medieval World to 1800?
Continuities

Let us take this back to the fundamentals.[7] Demographically, the period 1500 to 1800 fits on the second relatively flat part of the graph of total human population that is presented here (figure 11.1).
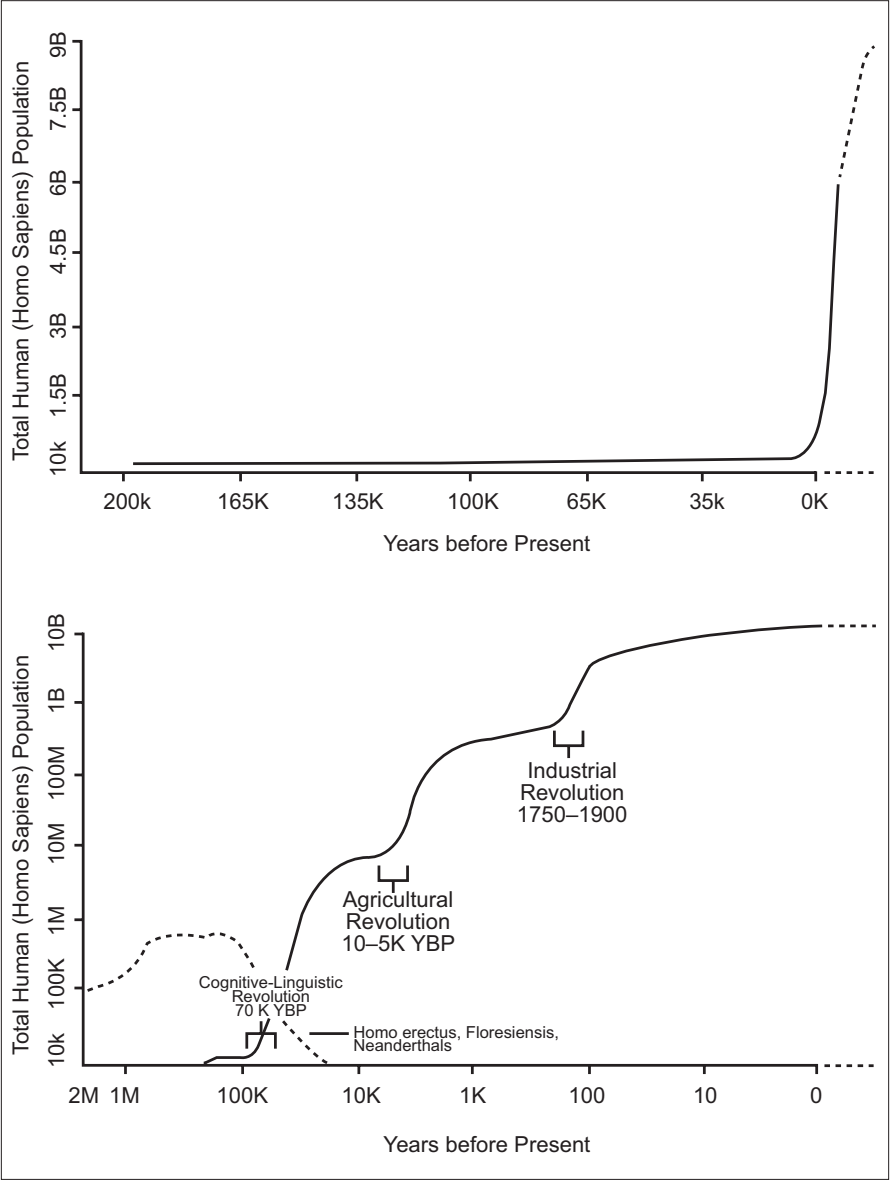
This graph illustrates that there was no population explosion after 1500, despite the benefits of the Columbian exchange in some areas—not surprisingly, given that the period began with the depopulating of the Americas and continued with the deaths and dislocations of the slave trade. Moreover, the essential contexts of economic activity underwent no change in 1500. Technologically, low productivity and slow communications were still the basic constraints on wealth creation and distribution, as well as on military activity. And the Little Ice Age (LIA) that began around 1300 continued unabated into the 1800s. Therefore, despite the extension of maritime trade routes and connections, global economic and military activity can easily be seen as a continued slow expansion of medieval economics and armed conflicts.

Since nothing transformed the economic and demographic bases of social organization, it is even more obvious that the political structures of the world after 1500 were similar to—indeed, usually the same as, in direct survival or succession from—medieval polities. Therefore, monarchies dominated global politics, to the extent that they were everywhere still taken as the "natural" form of governance.

Finally, in terms of the military patterns of activity, the common rules constraining and shaping combat and campaigns—constraints

---

[7] See Morillo, *War and Conflict in the Middle Ages*, chap. 3.

Figure 11.1. Graph of total human population. Arithmetic scale (top) and logarithmic scale (bottom) for time and population

Source: courtesy of the author.

War and Conflict in the Middle Ages

of geography, political structure, and technology—remained the same, with the above discussion about gunpowder remaining in mind.

The Industrial Transformation

All these points about continuity are highlighted and emphasized when they are viewed in terms of the true change in global history: the Industrial Revolution. The demographic chart (see figure 11.1) shows the drastic effect that the coming of industrial economics had on world population, initiating a period of explosive growth that is only today beginning to abate worldwide. The onset of industrialization also roughly coincided with, and even preceded, the ending of the LIA, and although early industrialization was limited enough that it probably did not bring the cool period to an end itself, by now the drastic and potentially catastrophic warming of the world from industrial-era fossil-fuel energy use has guaranteed that the cold will not return. Industrialization put an end to the constraints of low productivity and slow communications, revolutionizing economic activity globally. Mass production—and mass consumption, and mass culture (mass is the keyword, obviously)—inevitably transformed politics. The revolutionary political changes in parts of the Atlantic world in the second half of the eighteenth century gained permanence and were amplified by these changes. Democracy was not the inevitable result, but mass politics of various sorts was increasingly organized around mass political-cultural ideologies such as nationalism and capitalism, as well as the more explicitly political schools of liberalism, fascism, and so forth. And international relations were certainly revolutionized, recasting old "isms" such as colonialism and imperialism in new forms.

The revolutionizing of international relations depended crucially on the real "revolution"—the one that flowed from industrialization. Steam power, mass production, and political transformation changed the common rules of warfare radically and continually, as

rapid technological change became one of the constants of military activity and everyday life.

The result, summing over all these categories, was the creation of the "modern" world, where *modern* is basically a sloppy synonym for *industrial.* Compared to truly revolutionary transformations such as these, the differences between the world of 540–1500 and the world of 1500–1800 appear gradual, incremental, and, consequently, characterizable as a species of continuity.

Extended Middle Ages versus Late Agrarian Era

The conclusion that flows from this discussion, it seems, is that there is no light cast, and indeed much confusion sown, by calling the period 1500–1800 "early modern." If we accept the synonym just proposed, it was clearly not an "early industrial" era. That name might best describe the nineteenth century as a whole. Nor are the markers of "early modernism" that are common in historiography especially modern-looking. The increasing sophistication and bureaucratization of states, to take just one example, in the context of continued monarchical government can be seen simply as part of the maturing of medieval systems of governance. Basically, the further we move from the onset of industrialization, the less modern the world of 1500–1800 looks. To call on a military example, the Blenheim campaign of John Churchill, 1st Duke of Marlborough, in 1704 bears far more resemblance to the campaigns of King Henry V of England in Normandy in 1415, in terms of modes of transport (horse and foot), focus on localized strongpoints, and even army size, as a few examples among many, than to the campaigns of U.S. Army general H. Norman Schwarzkopf Jr. in Iraq in 1990–91. The French painter Jacques Louis David could see this continuity in 1803 (figure 11.2).

So, what do we call this period? Historiography abhors a vacuum as much as nature supposedly does, so we cannot just tear down early modern; we must replace it with something that emphasizes the essential continuity of the period. I see two choices. In the context of

Figure 11.2. *Napoleon Crossing the Alps*, by Jacques-Louis David, ca. 1803. A (very) late medieval warrior. Note that David groups Bonaparte's name at the bottom of the painting with those of Hannibal (Annibal) and Charlemagne (Karolus Magnus), showing that the continuities of the agrarian era made such comparisons plausible

Source: Musée National du Château de Malmaison, Rueil-Malmaison.

my book, referring to 1500–1800 as "the extended Middle Ages" certainly makes sense. But as a military historian, I recognize that this label may give more weight to military history than it can bear in the wider historical profession. The second option is the one I deployed in another of my books, *Frameworks of World History*: that 1500–1800 is "the late agrarian era," the age when the agrarian world reached maturity in every way, not just militarily.[8] This has the additional advantage of emphasizing continuity while recognizing the shifts in globalization and network connectedness that suggest a periodization marker in 1500.

Militarily, however, one of the conclusions shown in my book is that the fundamentals of "medieval" warfare continued well into the eighteenth century. This strikes me as a conclusion worth emphasizing, even if not through the imposition of the label "extended Middle Ages" on the late agrarian world.

Lessons to Be Drawn

Finally, with respect to conclusions, we may ask what lessons our current world might draw from the history of medieval war and conflict in global perspective. We will tread carefully in this question, as the usefulness of history sits in a fine and tense balance between its relevance to today—that is, the day of the historian, a constantly moving target—and what can be learned from experiencing the past on its own terms, as an explicitly different place from the present. Our distance from the Duke of Marlborough and his victory at Blenheim should remind us forcefully of the latter.

That distance indicates that explicitly military lessons from the history of medieval warfare are probably few and far between. The contexts of war and conflict are so different that details—such as, "Gosh, what's the best battlefield plan when facing a horde of Mon-

---

[8] Stephen Morillo, *Frameworks of World History*, vol. 2 (New York: Oxford University Press, 2014).

gol invaders?"—almost certainly will not apply. Lessons are more likely to come at a higher, somewhat more abstract level of analysis.

That lessons might be available looks possible from one unfortunate set of contexts. We have defined the Middle Ages, in a global perspective, as the period defined by its emergence and eclipse in eras of climate change and pandemics (letting the end point retain some ambiguity in these terms). The world today, in the 2020s, faces potentially catastrophic climate change and has lived through a major pandemic. Do the dynamics of the emergence of the medieval world from similar circumstances tell us anything about our potential paths forward?

The medieval world was constructed, as we have seen, in large part from wars and armed conflicts at every social level that we have analyzed as forms of discourse: ways that human communities, and those communities' subsections, staked out positions, claimed power, and performed identities. This process proved successful in establishing both communal identities and power structures and in negotiating what the world meant to its inhabitants. In short, war and conflict in the Middle Ages built societies with cultural traditions that have shown tremendous resilience and lasting power ever since; the outlines of the medieval world's cultures are still clearly visible even after the industrial transformation.

But the history of war and conflict in the Middle Ages is also full of death, destruction, and the building of power structures that—perhaps inevitably in conditions of low productivity and slow communications—were oppressive and unfair to the vast majority of the humans who occupied them. And that was when war and conflict were played by common rules that were very constraining geographically and in terms of basic physics. Carrying on global discourses about the shape of the future through armed conflicts powered by nuclear weaponry does not sound, to me, like a good idea, perhaps seriously limiting what we can learn from that past. Or perhaps the lesson is negative: if our main forms of discourse rely on armed

force, the likely result will be inequality, oppression, and more damage than construction. War and conflict in the Middle Ages, from this perspective, can stand as an example of what my son Robin said when he was about five years old: "That's how you *don't* do it."

On the other hand, the larger shape of the conflicts of the medieval world may hold a few useful lessons. For one, we have arrived at a world that, in its multipolarity, resembles the medieval world more than it does recent histories of nineteenth-century British dominance and twentieth-century U.S. dominance (or at least Cold War bipolarity). Adapting to our changing and challenging world, a world once again beset by climate change and pandemics, might well benefit from medieval lessons in the dangers of a world-dominating power like the Mongols and in tolerance for multiplicity, contradiction, and answers that need not be final.

Conclusion

Walter E. Kretchik, PhD

In 1991, the American Historical Association (AHA) published Australian historian and American Studies professor Ian Tyrrell's "American Exceptionalism in an Age of International History." The article placed transnational history in the academic limelight, for it relegated the nation-state, the driver of Western historical analysis since the nineteenth century, and took the concept of American exceptionalism head-on. Many historians within the migration, diplomatic, labor, and other subfields viewed the transnational method not only as fresh but also groundbreaking and soon incorporated the so-called "outside-in" approach in their research and publications.[1]

More than three decades later, transnational history has attained sufficient traction to become a turn in the historiography, prompting Western Illinois University's military history conference attendees to contemplate what their subfield should make of it. Participants were asked if there are local, regional, and national ways of war, or if all wars are subject to global influence. That important query raises a broader and significant one: What does transnational history mean for the military history subfield? Such questions are difficult to answer, for the adage that history is easier to write than it is to explain holds true when it concerns a particular scholarly approach and its historiographical implications.

In 2006, an AHA panel investigated conundrums anticipating those raised at the 2023 military history gathering in Moline, Illinois. Panelists directed their attention toward transnational history and its meaning for the field in general, as well as their personal

---

[1] Ian Tyrrell, "American Exceptionalism in an Age of International History," *American Historical Review* 96, no. 4 (October 1991): 1031–55, https://doi.org/10.2307/2164993.

academic interests. Their observations spoke of endless possibilities across the subfields, although they expressed some concern that the terms *world*, *global*, and *transnational* lacked precise definitions and were often used interchangeably. Still, the panel historians understood the transnational method to imply "a comparison between the contemporary movement of groups, goods, technology, or people across national borders and the transit of similar or related objects or people in an earlier time."[2]

In 2012, Asian historian and professor Mae M. Ngai expanded on the panel's thoughts when writing:

> Broadly conceived, transnational history follows the movement or reach of peoples, ideas, and/or things across national (or other defined) borders. In addition, it involves empirical research in more than one nation's archives. Although "transnational" would seem, by definition, to refer to modern history (transnational) the term has been also used to describe regional worlds of the pre-and early-modern periods (Atlantic world, Indian Ocean, medieval "Europe," and so on). I would not argue for any particular orthodoxy on this point, but the questions and stakes are different. For earlier periods, the concept perhaps simply renames already existing fields. For the modern period, however, fundamental categories are reframed and problematized. The nation is not effaced but is examined afresh—from different angles, from within and from without, in larger context, and in dynamic relation with myriad social forces, many of which cannot be contained by national boundaries.[3]

---

[2] C. A. Bayly et al., "AHR Conversation: On Transnational History," *American Historical Review* 111, no. 5 (December 2006): 1441–64, https://doi.org/10.1086/ahr.111.5.1441.
[3] Mae M. Ngai, "Promises and Perils of Transnational History," *Perspectives on History* (1 December 2012): 52–54.

With the above descriptions of the transnational method and its characteristics in mind, it should be no surprise that military historiography already includes the cross-border movement of ideas such as the Prussian military officer Friedrich von Steuben's transformation of the American Continental Army using Frederick the Great's drill methods in 1778. William H. Mott IV's *Military Assistance: An Operational Perspective* details the movement of goods in the form of military equipage through his recounting of American commissioner Silas Deane arranging the transport of French war material across borders to the American colonies in 1776. Philip Shaw Paludan's *A People's Contest: The Union & Civil War, 1861–1865* describes how a Confederate agent contracted with British shipyards in Liverpool, England, which produced the Confederate raiders CSS *Florida* (1862) and CSS *Alabama* (1862). Technology transfer can be found within Bruce Vandervort's *Wars of Imperial Conquest in Africa, 1830–1914*, when local rebel forces armed themselves against the French using foreign-acquired weapons, as well as in Edward J. Drea's *Japan's Imperial Army: Its Rise and Fall, 1853–1945*, when the Imperial Japanese Army adopted French equipment in the 1870s.[4]

Examples taken from published histories are not intended to serve as evidence that the conversation about what the transnational approach means for the future of military history is done and dusted. They do demonstrate that some earlier work—and perhaps a substantial amount of it—contains transnational history aspects. If military historians were to examine previously plowed ground with the transnational method in mind, certain murky details may become clearer so as to allow for a fuller appreciation of past martial activity and perhaps a rethinking of conclusions.

---

[4] William H. Mott IV, *Military Assistance: An Operational Perspective*, Contributions in Military Studies no. 170 (Westport, CT: Greenwood Press, 1999), 33; Phillip Shaw Paludan, *A People's Contest: The Union & Civil War, 1861–1865*, 2d ed. (Lawrence: University Press of Kansas, 1996), 44–45; Bruce Vandervort, *Wars of Imperial Conquest in Africa: 1830–1914* (Bloomington: Indiana University Press, 1998), 132; and Edward J. Drea, *Japan's Imperial Army: Its Rise and Fall, 1853–1945* (Lawrence: University Press of Kansas, 2009), 25–26.

Historiographical turns arise periodically; anticipation and anxiety over what they bring is a matter of course. Some military historians may perceive the transnational method as another tool in the toolbox to consider when conducting research and interpreting results. Others may view the latest twist as a threat, for competitive publishing realities may invite a fixation on it at the expense of any other methods. Nevertheless, scholarly military history work remains dependent on evidence, and the transnational approach is no different in that regard. It is neither panacea nor the subfield standard.

As prevalent as transnational history may be among the history profession at large, military historians must unravel what it means for their interests and the human condition. Future research must distinguish between what is considered transnational military activity and what is not, as well as uncover its manifestations and subsequent influence on military matters in general and the preparation and conduct of war more specifically.

As military historians grapple with what the transnational turn means for the future of the subfield, it might be helpful to consider the observations of Ernst Breisach, as published in *Historiography: Ancient, Medieval, and Modern* in 1983. There he addressed the historiographical trend of the moment: world history. Breisach wrote:

> [W]orld history is becoming an empirical fact, and because of that new and crucial circumstance the relationship between local, regional, national, and world histories will need redefining. On the one hand, it will not do to act as if all histories of cities, of nations, or of Western civilization itself had suddenly been outdated and now must yield to claims of world history. After all, these histories are no mere theoretical constructs but living traditions of utmost importance which structure the collective consciousness of large groups and provide them with a sense of identity, order, and purpose. On the other hand, world histo-

ry can no longer be ignored, because it is becoming increasingly intertwined with the process of life in Western civilization. In this situation the reconciliation between past, present, and future will require arduous labor.[5]

Human beings have engaged in the preparation and conduct of war for thousands of years. Military historians provide an account of the martial past that affects how people today perceive themselves and the environs in which they exist. The transnational turn is a practical certainty that influences how historical events are portrayed, and its prominence within the military history subfield and historiography will require Breisach's "arduous labor" to square. But it must be done. The 2023 Western Illinois University military history conference, with its local, global, and logistical insights, is an encouraging step in that direction.

---

[5] Ernst Breisach, *Historiography: Ancient, Medieval, and Modern* (Chicago: University of Chicago Press, 1983), 411.

Bibliography

Archival Sources

John Hampden Chamberlayne Papers, 1858–1877. Virginia Museum of History and Culture, Richmond, VA.

Korean War Survey Collection. Military History Institute, U.S. Army Heritage Center and Museum, Carlisle, PA.

Samuel Derrick Webster Collection. Huntington Library, San Marino, CA.

Samuel R. Beardsley Papers, U.S. Army Heritage and Education Center, Carlisle, PA.

Special Planning Division, Postwar Division, 145.86-78, Air Force Historical Research Center, Maxwell Air Force Base, AL.

Strategic Plans Division Record Group, Navy Operational Archives, Naval History and Heritage Command, Washington, DC.

Strategic Plans Division Records, Record Group 38, Modern Military Records Branch, National Archives II, College Park, MD.

White, Wyman Silas. "The Civil War Diary of Wyman S. White, First Sergeant of Company 'F' of the 2nd U.S. Sharpshooter Regiment (New Hampshire Men) in the Army of the Potomac, 1861–1865." Edited by Russel C. White. Manuscript copy, Manassas National Battlefield Park Library, Manassas, VA.

Books and Monographs

Adamec, Ludwig W. *Historical Dictionary of Islam*. Lanham, MD: Scarecrow Press, 2009.

Adams, Stephen. *The Best and Worst Country in the World: Perspectives on the Early Virginia Landscape*. Charlottesville: University of Virginia Press, 2001.

American State Papers, 1789–1838: Indian Affairs. Vol. 1, *1789–1814*. Washington, DC: Gales and Seaton, 1832.

Anderson, J. K. *Military Theory and Practice in the Age of Xenophon*. Berkeley: University of California Press, 1970.

Andrade, Tonio. *The Gunpowder Age: China, Military Innovation, and the Rise of the West*. Princeton, NJ: Princeton University Press, 2016.

Arch, Jakobina K. *Bringing Whales Ashore: Oceans and the Environment of Early Modern Japan*. Weyerhaeuser Environmental Series. Seattle: University of Washington Press, 2018.

Armitage, David. *Civil Wars: A History in Ideas*. New York: Palgrave, 2018.

Armstrong, Jeremy, Arthur J. Pomeroy, and David Rosenbloom, eds. *Money, Warfare, and Power in the Ancient World*. London: Bloomsbury, 2024.

Arnold, James R. *Jeff Davis's Own: Cavalry, Comanches, and the Battle for the Texas Frontier*. New York: Wiley, 2000.

Arvine, Kazlitt. *Cyclopedia of Moral and Religious Anecdotes: A Collection of Nearly Three Thousand Facts, Incidents Etc., Narratives, Examples, and Testimonies, Embracing the Best of the Kind in Most Former Collections and Some Hundreds in Addition, Original and Selected, the Whole Arranged and Classified on a New Plan with Copious Topical and Scriptural Indexes*. New York: Leavitt and Allen, 1857.

Asprey, Robert B. *War in the Shadows: The Guerrilla in History*. Vol. 1. Garden City, NJ: Doubleday, 1975.

Baker, Gabriel. *Spare No One: Mass Violence in Roman Warfare*. New York: Rowman & Littlefield, 2021.

Barlow, Jeffrey G. *Revolt of the Admirals: The Fight for Naval Aviation, 1945–1950*. Washington, DC: Naval Historical Center, 1994.

Barowski, Harry R. *A Hollow Threat: Strategic Air Power and Containment before Korea*. Westport, CT: Greenwood Press, 1982.

Bauer, K. Jack. *The Mexican War, 1846–1848*. Lincoln: University of Nebraska Press, 1992.

Bell, Andrew McIlwaine. *Mosquito Soldiers: Malaria, Yellow Fever, and the Course of the American Civil War*. Baton Rouge: Louisiana State University Press, 2010.

Bennett, Judith. *Natives and Exotics: World War II and Environment in the Southern Pacific*. Honolulu: University of Hawaii Press, 2009.

Berkovich, Ilya. *Motivation in War: The Experience of Common Soldiers in Old-Regime Europe*. Cambridge, UK: Cambridge University Press, 2017. https://doi.org/10.1017/9781316711835.

Birtle, Andrew J. *U.S. Army Counterinsurgency and Contingency Operations Doctrine, 1860–1941*. Washington, DC: U.S. Army Center of Military History, 2004.

Bishop, M. C., and J. C. N. Coulston. *Roman Military Equipment: From the Punic Wars to the Fall of Rome*. 2d ed. Oxford, UK: Oxbow, 2006.

Black, Jeremy. *A Military Revolution?: Military Change and European Society, 1550–1800*. New York: Bloomsbury, 1990.

———. *Beyond the Military Revolution: War in the Seventeenth-Century World*. New York: Palgrave, 2011.

———. *Insurgency and Counterinsurgency: A Global History*. Lanham, MD: Rowman & Littlefield, 2016.

———. *Insurgency Warfare: A Global History to the Present*. Lanham, MD: Rowman & Littlefield, 2023.

———. *Rethinking Military History*. London: Routledge, 2004.

———. *War and the World: Military Power and the Fate of Continents, 1450–2000*. New Haven, CT: Yale University Press, 2000.

———. *War: A Short History*. London: Continuum, 2009.

Blackford, Susan Leigh, and Charles Minor Blackford. *Letters from Lee's Army; Or Memoirs of Life in and out of the Army in Virginia during the War between the States.* New York: Scribner, 1947; reprint, New York: A. S. Barnes, 1962.

Bloch, Marc. *Pour une histoire comparée des sociétés européennes* [*For a Comparative History of European Societies*]. Paris: Renaissance du Livre, 1928.

Bonura, Michael A. *Under the Shadow of Napoleon: French Influence on the American Way of Warfare from the War of 1812 to the Outbreak of World War II.* New York: New York University Press, 2012.

Bowman, Samuel M., and Richard B. Irwin. *Sherman and His Campaigns: A Military Biography.* New York: Charles B. Richardson, 1865.

Brady, Lisa M. *War upon the Land: Military Strategy and the Transformation of Southern Landscapes during the American Civil War.* Athens: University of Georgia Press, 2012.

Braudel, Fernand. *La Méditerranée et le Monde Méditerranéen à l'époque de Philippe II* [*The Mediterranean and the Mediterranean World at the Time of Philip II*]. Paris: Librairie Armand Collin, 1949.

Breisach, Ernst. *Historiography: Ancient, Medieval, and Modern.* Chicago: University of Chicago Press, 1983.

Brennan, Dechlan. "Pacific Responses to AUKUS a Mix of Unease and Understanding." *Diplomat*, 18 April 2023.

Broadwater, Robert P. *General George H. Thomas: A Biography of the Union's "Rock of Chickamauga."* Jefferson, NC: McFarland, 2009.

Brock, William H. *Justus Von Liebig: The Chemical Gatekeeper.* Cambridge, UK: Cambridge University Press, 2002.

Brower, Benjamin Claude. *A Desert Named Peace: The Violence of France's Empire in the Algerian Sahara, 1844–1902.* New York: Columbia University Press, 2011.

Browning, Judkin, and Timothy Silver. *An Environmental History of the Civil War.* Chapel Hill: University of North Carolina Press, 2020.

Brubaker, Rogers. *Citizenship and Nationhood in France and Germany.* Cambridge, MA: Harvard University Press, 2009.

Bugeaud, Thomas. *Instructions pratiques du maréchal Bugeaud* [*Practical Instructions from Marshal Bugeaud*]. Paris: Leveneu, 1854.

———. *The Practice of War: Being a Translation of a French Military Work Entitled "Maxims, Counsels and Instructions on the Art of War."* Richmond, VA: West and Johnson, 1863.

Bugh, Glenn R. *The Horsemen of Athens.* Princeton, NJ: Princeton University Press, 1988.

Bürgschwentner, Joachim, Matthias Egger, and Gunda Barth-Scalmani, eds. *Other Fronts, Other Wars?: First World War Studies on the Eve of the Centennial.* Leiden, Netherlands: Brill, 2014.

Cady, R. C. *Ground-water Resources of Northern Virginia; Prepared in Cooperation with the United States Geological Survey*. Virginia Geological Survey Bulletin 50. Richmond: University of Virginia, 1938.

Callwell, Charles E. *Small Wars: Their Principles and Practice*. London: His Majesty's Stationary Office, 1906.

Campbell, Brian. *Rivers and the Power of Ancient Rome*. Chapel Hill: University of North Carolina Press, 2012.

Campbell, J. B. *The Emperor and the Roman Army, 31 BC–AD 235*. Oxford, UK: Clarendon Press, 1984.

Carlyle, Thomas. *History of Friedrich II of Prussia, Called Frederick the Great*. Vol. 1. New York: Harper & Brothers, 1858.

Charney, Michael W. *Southeast Asian Warfare, 1300–1900*. Leiden, Netherlands: Brill, 2004.

Citino, Robert M. *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare*. Lawrence: University Press of Kansas, 2004.

———. *The German Way of War: From the Thirty Years' War to the Third Reich*. Lawrence: University Press of Kansas, 2005.

Clark, Christopher. *The Sleepwalkers: How Europe Went to War in 1914*. New York: Harper Collins, 2013.

Clausewitz, Carl von. *On War*. Translated and edited by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976.

———. *On War*. Translated and edited by Michael Howard and Peter Paret. London: David Campbell, 1993.

Clinton, David. *Tocqueville, Lieber, and Bagehot: Liberalism Confronts the World*. New York: Palgrave Macmillan, 2003.

Cointat, Alain. *Les Souliers de la Gloire: Alexis Godillot (1816–1893)*. Toulon: Presses du Midi, 2006.

Coletta, Paolo E. *The United States Navy and Defense Unification, 1947–1953*. Newark: University of Delaware Press, 1981.

Colman, Henry. *European Agriculture and Rural Economy: From Personal Observation*. Vol. 2. Boston, MA: Charles C. Little and James Brown, 1849.

Cronon, William. *Nature's Metropolis: Chicago and the Great West*. New York: W. W. Norton, 1991.

Crosby, Alfred W. *Ecological Imperialism: The Biological Expansion of Europe, 900–1900*. New York: Cambridge University Press, 1986.

Daly, Selena, Martina Salvante, and Vanda Wilcox, eds. *Landscapes of the First World War*. Cham, Switzerland: Palgrave Macmillan, 2018.

Daumas, Eugène. *Le Grand désert itinéraire d'une caravane du Sahara au pays des Nègres, royaume de Haoussa* [*The Great Desert: Itinerary of a Caravan from the Sahara to the Land of the Negroes, Kingdom of Hausa*]. Paris, Michel Lévy Frères, 1856.

Davis, Jefferson F. *The Papers of Jefferson Davis*, vol. 6, *1856–1860*. Edited by Lynda Lasswell Crist and Mary Seaton Dix. Baton Rouge: Louisiana State University Press, 1989.

Davis, Vincent. *Postwar Defense Policy and the U.S. Navy, 1943–46*. Chapel Hill: University of North Carolina Press, 1966.

Dawson, Anthony. *Letters from the Light Brigade: The British Cavalry in the Crimean War*. Barnsley, UK: Pen and Sword, 2014.

Denny, Ebeneezer. *Military Journal of Major Ebeneezer Denny, an Officer in the Revolutionary and Indian Wars*. Philadelphia: Historical Society of Pennsylvania, 1859.

Deringil, Selim. *The Ottoman Twilight in the Arab Lands: Turkish Memoirs and Testimonies of the Great War*. Brighton, MA: Academic Studies Press, 2019.

Deszö, Tamás. *The Assyrian Army*. 2 vols. Budapest: Eötvös University Press, 2012–16.

Di Cosmo, Nicola, ed. *Military Culture in Imperial China*. Cambridge, MA: Harvard University Press, 2009.

"Die Verarbeitung de Abfälle in der Industrie" [The Processing of Waste in Industry], *Aus der Natur: Die neuesten entdeckungen auf dem Gebiete der Naturwissenschaften* [*From Nature: The Latest Discoveries in the Field of Natural Sciences*]. Leipzig: A. Abel, 1863.

Dodman, Thomas. *What Nostalgia Was: War, Empire, and the Time of a Deadly Emotion*. Chicago: University of Chicago Press, 2017.

Donahue, John F., and Lee L. Brice, eds. *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*. Leiden, Netherlands: Brill, 2023. https://doi.org/10.1163/9789004687189_017.

Dowling, Melissa Barden. *Clemency & Cruelty in the Roman World*. Ann Arbor: University of Michigan Press, 2009. https://doi.org/10.3998/mpub.145291.

Doyle, Don H. *The Cause of All Nations: An International History of the American Civil War*. New York: Basic Books, 2013.

Drake, Brian A., ed. *The Blue, the Gray, and the Green: Toward an Environmental History of the Civil War*. Athens: University of Georgia Press, 2015.

Drea, Edward J. *Japan's Imperial Army: Its Rise and Fall, 1853–1945*. Lawrence: University Press of Kansas, 2009.

Drozdzewski, Danielle, Sarah De Nardi, and Emma Waterton, eds. *Memory, Place and Identity: Commemoration and Remembrance of War and Conflict*. New York: Routledge, 2016.

Eccles, Henry E. *Logistics in the National Defense*. Harrisburg, PA: Stackpole, 1959.

Engels, Donald W. *Alexander the Great and the Logistics of the Macedonian Army*. Berkeley: University of California Press, 1978.

Engle, Stephen D. *Struggle for the Heartland: The Campaigns from Fort Henry to Corinth*. Lincoln: University of Nebraska Press, 2001.

Erdkamp, Paul. *Hunger and the Sword: Warfare and Food Supply in the Roman Republican Wars (264–30 BC)*. Amsterdam: J. C. Gieben, 1998.

Erdkamp, Paul, ed. *A Companion to the Roman Army*. Malden, MA: Blackwell, 2007.

Fahrettin, Altay. *10 yıl savaş, 1912–1922, ve sonrası* [*The Ten Years' War and Afterward: 1912–1922*]. Istanbul: İnsel Yayınları, 1970.

Fantauzzo, Justin. *The Other Wars: The Experience and Memory of the First World War in the Middle East and Macedonia*. Cambridge, UK: Cambridge University Press, 2020. https://doi.org/10.1017/9781108782067.

Farschid, Olaf, Manfred Kropp, and Stephan Dähne, eds. *The First World War as Remembered in the Countries of the Eastern Mediterranean*. Beirut: Orient-Institut, 2006.

Ferrill, Arther. *The Origins of War: From the Stone Age to Alexander the Great*. Boulder, CO: Westview, 1997.

Fissel, Mark Charles, ed. *The Military Revolution and Revolutions in Military Affairs*. Berlin: DeGruyter, 2022.

Fogarty, Richard. *Race and War in France: Colonial Subjects in the French Army, 1914–1918*. Baltimore, MD: Johns Hopkins University Press, 2008.

Foster, John Bellamy. *The Ecological Revolution: Making Peace with the Planet*. New York: Monthly Review Press, 2009.

Fouquet, M. *Traité des engrais et amendements* [*Fertilizers and Amendments Treaty*]. Paris: Libraire Agricole de Dusacq, 1855.

Fried, Marvin Benjamin. *Austro-Hungarian War Aims in the Balkans during World War I*. New York: Palgrave Macmillan, 2014.

Friedman, Hal. *Arguing over the American Lake: Bureaucracy and Rivalry in the U.S. Pacific, 1945–1947*. College Station: Texas A&M University Press, 2009.

Frontinus, *Stratagems. Aqueducts of Rome*. Translated by Charles E. Bennett. Cambridge, MA: Harvard University Press, 1925.

Fuhrmann, Malte. *Port Cities of the Eastern Mediterranean: Urban Culture in the Late Ottoman Empire*. Cambridge, UK: Cambridge University Press, 2022. https://doi.org/10.1017/9781108769716.

Gaddis, John Lewis. *The Landscape of History: How Historians Map the Past*. Oxford, UK: Oxford University Press, 2004.

Gaff, Alan D. *Brave Men's Tears: The Iron Brigade at Brawner Farm*. Dayton, OH: Morningside Press, 1985.

Gallois, William. *A History of Violence in the Early Algerian Colony*. London: Palgrave Macmillan, 2013.

Gasparin, Adrien Étienne Pierre. *Cours d'agriculture* [*Agriculture Course*]. 2d ed. Vol. 1. Paris: Librairie Agricole de la Maison Rustique, 1846.

Ginio, Ruth. *The French Army and Its African Soldiers: The Years of Decolonization*. Lincoln: University of Nebraska Press, 2017.

Glatthaar, Joseph T. *Forged in Battle: The Civil War Alliance of Black Soldiers and White Officers*. Baton Rouge: Louisiana State University Press, 1990.

Gleeson, David T., and Simon Lewis, eds. *The Civil War as Global Conflict: Transnational Meanings of the American Civil War*. Columbia: University of South Carolina Press, 2014.

Görgülü, İsmet. *On yıllık harbin kadrosu, 1912–1922*: *Balkan-Birinci Dünya ve İstiklâl Harbi* [*The Cadre of the Ten Years' War: The Balkan, First World, and Independence Wars*]. Ankara: Türk Tarih Kurumu, 2014.

Gounaris, Basil, Michael Llewellyn-Smith, and Ioannis Stefanidis eds. *The Macedonian Front, 1915–1918: Politics, Society, and Culture in Time of War*. London and New York: Routledge, 2022.

Grenier, John. *The First Way of War: American War Making on the Frontier, 1607–1814*. Cambridge, UK: Cambridge University Press, 2005. https://doi.org/10.1017/CBO9780511817847.

Griffith, Thomas. *MacArthur's Airman: General George C. Kenney and the War in the Southwestern Pacific*. Lawrence: University Press of Kansas, 1998.

Gross, Gerhard P., ed. *The Forgotten Front: The Eastern Theater of World War I, 1914–1915*. Lexington: University Press of Kentucky, 2018.

Grover, N. C., and R. H. Bolster. *Hydrography of Virginia*. Virginia Geological Survey Bulletin 3. Richmond, VA: Board of Agriculture and Immigration, 1906.

Hagerman, Edward. *The American Civil War and the Origins of Modern Warfare: Ideas, Organization, and Field Command*. Bloomington: Indiana University Press, 1992.

Halleck, Henry W. *Elements of Military Art and Science*. New York: D. Appleton, 1863.

Halpern, Paul G. *A Naval History of World War I*. Annapolis, MD: Naval Institute Press, 1994.

Hamblin, Jacob Darwin. *Oceanographers and the Cold War: Disciples of Marine Science*. Seattle: University of Washington Press, 2005.

———. *Poison in the Well: Radioactive Waste in the Oceans at the Dawn of the Nuclear Age*. New Brunswick, NJ: Rutgers University Press, 2008.

Hamblin, William J. *Warfare in the Ancient Near East to 1600 BC: Holy Warriors at the Dawn of History*. London: Routledge, 2006.

Hanson, Victor Davis. *Carnage and Culture: Landmark Battles in the Rise to Western Power*. New York: Anchor Books, 2002.

———. *The Western Way of War: Infantry Battle in Classical Greece*. Berkeley: University of California Press, 1989.

———. *Warfare and Agriculture in Classical Greece*. Berkeley: University of California Press, 1998.

Harmand, Jacques. *L'armée et le soldat à Rome, de 107 à 50 avant notre ère* [*The Army and the Soldier in Rome, 107 to 50 BCE*]. Paris: Picard, 1967.

Hennessy, John J. *Return to Bull Run: The Campaign and Battle of Second Manassas*. New York: Simon and Schuster, 1993.

Hess, Earl J. *Civil War Logistics: A Study of Military Transportation*. Baton Rouge: Louisiana State University Press, 2017.

Hinton, Harwood, and Jerry Thompson. *Courage above All Things: General John Ellis Wool and the U.S. Military, 1812–1863*. Norman: University of Oklahoma Press, 2020.

Hixson, Walter L. *American Settler Colonialism: A History*. New York: Palgrave Macmillan, 2013.

Hogan, Michael J. *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945–1954*. Cambridge, UK: Cambridge University Press, 1998. https://doi.org/10.1017/CBO9780511664984.

Holmén, Janne, and Norbert Götz, eds. *Mental Maps: Geographical and Historical Perspectives*. London: Routledge, 2022.

Hornblower, Simon, Antony Spawforth, and Esther Eidinow, eds. *The Oxford Classical Dictionary*. 4th ed. Oxford, UK: Oxford University Press, 2012. https://doi.org/10.1093/acref/9780199545568.001.0001.

Howe, Timothy, and Lee L. Brice, eds. *Brill's Companion to Insurgency and Terrorism in the Ancient Mediterranean*. Leiden, Netherlands: Brill, 2016.

Hsieh, Wayne Wei-siang. *West Pointers and the Civil War: The Old Army in War and Peace*. Chapel Hill: University of North Carolina Press, 2009.

Humphreys, Margaret. *Marrow of Tragedy: The Health Crisis of the American Civil War*. Baltimore, MD: Johns Hopkins University Press, 2013.

Hyland, John, and Khodadad Rezakhani, eds. *Brill's Companion to War in the Ancient Iranian Empires*. Leiden, Netherlands: Brill, 2024.

Jefferson, Thomas. *Notes on the State of Virginia*. Edited by Frank Shuffelton. New York: Penguin Books, 1999.

Johnson, Steven. *The Ghost Map: The Story of London's Most Terrifying Epidemic—and How It Changed Science, Cities, and the Modern World*. New York: Riverhead Books, 2006.

Johnston, Joseph E. *Narrative of Military Operations, Directed, during the Late War between the States*. New York: D. Appleton, 1874; reprint, Bloomington: Indiana University Press, 1959.

Jomini, Antoine-Henri. *Summary of the Art of War*. Translated by O. F. Winship and E. E. McLean. New York: Putnam, 1854.

———. *The Art of War: Restored Edition*. Kingston, ON: Legacy Books, 2008.

Jones, Robert F. *King of the Alley: William Duer, Politician, Entrepreneur, and Speculator, 1768–1799*. Philadelphia, PA: American Philosophical Society, 1992.

Kane, Thomas M. *Military Logistics and Strategic Performance*. New York: Routledge, 2001.

Kearny, Philip. *Service with the French Troops in Africa*. New York, 1844.

Keaveney, Arthur. *The Army in the Roman Revolution*. London: Routledge, 2007.

Keegan, John. *The Face of Battle: A Study of Agincourt, Waterloo, and the Somme*. New York: Viking Press, 1976.

Keiser, Gordon W. *The U.S. Marine Corps and Defense Unification, 1944–47: The Politics of Survival*. Washington, DC: National Defense University Press, 1982.

Khuri-Makdisi, Ilham. *The Eastern Mediterranean and the Making of Global Radicalism 1860–1914*. Berkeley: University of California Press, 2010.

Killingray, David. *Fighting for Britain: African Soldiers in the Second World War*. Rochester, NY: James Currey, 2010.

Konijnendijk, Roel. *Classical Greek Tactics: A Cultural History*. Leiden, Netherlands: Brill, 2018.

Kress, Moshe. *Operational Logistics: The Art and Science of Sustaining Military Operations*. 2d ed. New York: Springer, 2015.

Ku, Julian, and John Yoo. *Taming Globalization: International Law, the U.S. Constitution, and the New World Order*. New York: Oxford University Press, 2012.

Lacroix, Eugène, ed. *Dictionnaire industriel à l'usage de tout le monde* [*Industrial Dictionary for Everyone*]. Saint-Denis: Eugène Lacroix, 1892.

Lambert, Nicholas A. *The War Lords and the Gallipoli Disaster: How Globalized Trade Led Britain to Its Worst Defeat of the First World War*. Oxford, UK: Oxford University Press, 2021.

Langlands, Rebecca. *Exemplary Ethics in Ancient Rome*. Cambridge, UK: Cambridge University Press, 2018. https://doi.org/10.1017/9781139629164.

Laqueur, Walter. *Guerrilla Warfare: A Historical and Critical Study*. New York: Routledge, 2017.

Lassarat, Raymond. *Alexis Godillot, 1816–1893*. Vincennes, France: Raymond Lassarat, 1984.

Le Bohec, Yann, Giovanni Brizzi, Eckhard Deschler-Erb, Geoffrey Greatrex, Boris N. Rankov, and Michel Reddé, eds. *The Encyclopedia of the Roman Army*. Malden, MA: Wiley-Blackwell, 2015.

Lee, Wayne E. *Waging War: Conflict, Culture, and Innovation in World History*. Oxford, UK: Oxford University Press, 2016.

Lee, Wayne E., ed. *Warfare and Culture in World History*. New York: New York University Press, 2020.

Leigh, Matthew. *Comedy and the Rise of Rome*. Oxford, UK: Oxford University Press, 2004.

Leuchs, Johann Carl. *Zehn tausend Erfindungen und Ansichten aus einem Leben von 1797 bis Jezt: 1820 bis 1832* [*Ten Thousand Inventions and Views from a Life from 1797 to Now: 1820 to 1832*]. Vol. 2. Nuremburg: Verlag Leuchs, 1870.

Levithan, Josh. *Roman Siege Warfare*. Ann Arbor, MI: University of Michigan Press, 2013. https://doi.org/10.3998/mpub.4464415.

Lewis, Bernard. *The Muslim Discovery of Europe*. New York: W. W. Norton, 2001.

Lewis, Martin W., and Kären Wigen. *The Myth of Continents: A Critique of Metageography*. Berkeley: University of California Press, 1997.

Liakos, Antonis, and Nicholas Doumanis. *The Edinburgh History of the Greeks, 20th and Early 21st Centuries*. Edinburgh: Edinburgh University Press, 2023.

Liddell Hart, B. H. *A Greater than Napoleon: Scipio Africanus*. London: Blackwood and Sons, 1927.

Lieber, Francis. *Instructions for the Government of Armies of the United States in the Field*. Washington, DC: Government Printing Office, 1898.

Lieberman, Benjamin, and Elizabeth Gordon. *Climate Change in Human History: Prehistory to the Present*. London: Bloomsbury, 2018.

Liebig, Justus. *Die Chemie in ihrer Anwendung auf Agricultur und Physiologie* [*Chemistry in Its Application to Agriculture and Physiology*]. Braunschweig, Germany: Friedrich Vieweg, 1862.

———. *Letters on Modern Agriculture*. New York: John Wiley & Sons, 1859.

Lincoln, Abraham. *The Collected Works of Abraham Lincoln*. Vol. 7, *1863–1864*. New Brunswick, NJ: Rutgers University Press, 1953.

Linn, Brian MacAllister. *Guardians of Empire: The U.S. Army and the Pacific, 1902–1940*. Chapel Hill: University of North Carolina Press, 1999.

———. *The Echo of Battle: The Army's War of War*. Cambridge, MA: Harvard University Press, 2007.

Livy, *History of Rome*. Vol. 8. Edited and translated by J. C. Yardley. Cambridge, MA: Harvard University Press, 2021.

Longstreet, James. *From Manassas to Appomattox: Memoirs of the Civil War in America*. Philadelphia, PA: J. P. Lippincott, 1896; reprint, New York: Barnes & Noble, 2004.

Low, Polly, Graham Oliver, and P. J. Rhodes, eds. *Cultures of Commemoration: War Memorials, Ancient and Modern*. Oxford, UK: Oxford University Press, 2012.

Lynn, John A. *Battle: A History of Combat and Culture*. Boulder, CO: Westview Press, 2003.

———. *The Bayonets of the Republic: Motivation and Tactics in the Army of Revolutionary France, 1791–94*. Champaign: University of Illinois Press, 1984.

Lyon, James. *Serbia and the Balkan Front, 1914: The Outbreak of the Great War*. New York: Bloomsbury Academic, 2015.

Macleod, Jenny. *Gallipoli*. Oxford, UK: Oxford University Press, 2015.

Malkasian, Carter. *The American War in Afghanistan: A History*. New York: Oxford University Press, 2021.

Marcy, Randolph B. *The Prairie Traveler: A Hand-book for Overland Expeditions, with Maps, Illustrations, and Itineraries of the Principal Routes between the Mississippi and the Pacific*. New York: Harper & Brothers, 1859.

Marszalek, John F. *Sherman: A Soldier's Passion for Order*. Carbondale: Southern Illinois University Press, 2007.

Martel, William C. *Victory in War: Foundations of Modern Strategy*. New York: Cambridge University Press, 2011. https://doi.org/10.1017/CBO9780511842443.

Martin, Christopher. *The UK as a Medium Maritime Power in the 21st Century: Logistics for Influence*. London: Palgrave, 2016.

Matheny, Michael R. *Carrying the War to the Enemy: American Operational Art to 1945*. Norman: University of Oklahoma Press, 2011.

Maxfield, Valerie A. *The Military Decorations of the Roman Army*. London: Batsford, 1981.

McMeekin, Sean. *The Ottoman Endgame: War, Revolution, and the Making of the Modern Middle East, 1908–1923*. New York: Penguin, 2016.

McNeill, William H. *Plagues and Peoples*. New York: Anchor Books, 1977.

McPherson, James M. *For Cause and Comrades: Why Men Fought in the Civil War*. New York: Oxford University Press, 1997.

McWhiney, Grady, and Perry D. Jamieson. *Attack and Die: Civil War Military Tactics and the Southern Heritage*. Tuscaloosa: University of Alabama Press, 1984.

Meier, Kathryn Shively. *Nature's Civil War: Common Soldiers and the Environment in 1862 Virginia*. Chapel Hill: University of North Carolina Press, 2013.

Miller, Edward S. *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897–1945*. Annapolis, MD: Naval Institute Press, 1991.

Morillo, Stephen. *Frameworks of World History*. Vol. 2. New York: Oxford University Press, 2014.

———. *War and Conflict in the Middle Ages: A Global Perspective*. Cambridge, UK: Polity, 2022.

Morillo, Stephen, and Michael Pavkovic. *What Is Military History?* Cambridge, UK: Polity Press, 2018.

Morton, John C. "Bone Manure." In *A Cyclopedia of Agriculture: Practical and Scientific*. Vol. 1. London: Blackie and Son, 1855.

Moten, Matthew. *The Delafield Commission and the American Military Profession*. College Station: Texas A&M University Press, 2000.

Mott, William H., IV. *Military Assistance: An Operational Perspective*. Contributions in Military Studies no. 170. Westport, CT: Greenwood Press, 1999.

Muscolino, Micah S. *The Ecology of War in China: Henan Province, the Yellow River, and Beyond, 1938–1950*. New York: Cambridge University Press, 2015. https://doi.org/10.1017/CBO9781107785274.

Neely, Mark E., Jr. *The Civil War and the Limits of Destruction*. Cambridge, MA: Harvard University Press, 2009.

Nelson, Megan Kate. *Ruin Nation: Destruction and the American Civil War*. Athens: University of Georgia Press, 2012.

Nestler, Johann C., and Franz Diebl. *Mittheilungen über zweckmäßigste Wahl, Bereitung und Verwendung des Düngers: zwei von der k.k. mährisch-schlesischen Gesellschaft zur Beförderung des Ackerbaues, der Natur- und Landeskunde gekrönte Preisschriften* [*Information on the Most Appropriate Choice, Preparation and Use of Fertilizer*]. Brünn, Germany: Rudolph, 1835.

Noakes, Tim. *Waterlogged: The Serious Problem of Overhydration in Endurance Sports*. Champaign, IL: Human Kinetics, 2012.

Noe, Kenneth W. *The Howling Storm: Weather, Climate, and the American Civil War*. Baton Rouge: Louisiana State University Press, 2020.

O'Shaughnessy, Andrew Jackson. *The Men Who Lost America: British Leadership, the American Revolution, and the Fate of the Empire*. New Haven, CT: Yale University Press, 2014.

Ollman, Bertell, and Kevin B. Anderson, eds. *Karl Marx*. New York: Routledge, 2017.

Palmer, Michael A. *Origins of the Maritime Strategy: The Development of American Naval Strategy, 1945–1955*. Annapolis, MD: Naval Institute Press, 1988.

Paludan, Phillip Shaw. *A People's Contest: The Union & Civil War, 1861–1865*. 2d ed. Lawrence: University Press of Kansas, 1996.

Parker, Geoffrey. *The Military Revolution: Military Innovation and the Rise of the West, 1500–1800*. New York: Cambridge University Press, 1996.

Parker, Geoffrey, ed. *The Cambridge History of Warfare*, 2d ed. Cambridge, UK: Cambridge University Press, 2020. https://doi.org/10.1017/9781316855089.

Patchan, Scott C. *Second Manassas: Longstreet's Attack and the Struggle for Chinn Ridge*. Dulles, VA: Potomac Books, 2011.

Phang, Sara Elise. *Roman Military Service: Ideologies of Discipline in the Late Republic and Early Principate*. Cambridge, UK: Cambridge University Press, 2008. https://doi.org/10.1017/CBO9780511497872.

Piccard, J. *L'Avenir de l'agriculture d'après M. de Liebig* [*The Future of Agriculture According to Mr. de Liebig*]. Lausanne, Switzerland: Imprimerie L. Vincent, 1863.

Polybius, *The Histories*. Vol. 3. Translated by W. R. Paton. Revised by F. W. Walbank and Christian Habicht. Cambridge, MA: Harvard University Press, 2011.

Porch, Douglas. *Counterinsurgency: Exposing the Myths of the New Way of War*. New York: Cambridge University Press, 2014. https://doi.org/10.1017/CBO9781139226301.

———. *The French Foreign Legion: A Complete History of the Legendary Fighting Force*. New York: Skyhorse Publishing, 2010.

Pritchard, David M. *Athenian Democracy at War*. Cambridge, UK: Cambridge University Press, 2019. https://doi.org/10.1017/9781108525572.

Pritchett, W. Kendrick. *The Greek State at War*. Vol. 1. Berkeley: University of California Press, 1971.

Quaife, Milo M., ed. *From the Cannon's Mouth: The Civil War Letters of General Alpheus S. Williams*. Detroit, MI: Wayne State University Press, 1959.

Reardon, Carol. *With a Sword in One Hand and Jomini in the Other: The Problem of Military Thought in the Civil War North*. Chapel Hill: University of North Carolina Press, 2012.

Reguera, Leopoldo José Maria Martinez. *Fauna de Sierra-Morena: catálogo descriptivo de los mamiferos del término de montoro* [*Fauna of Sierra-Morena: Descriptive Catalog of the Mammals of the Montoro Term*]. Madrid: M. Romero, 1881.

Renier, Léon, ed. *Encyclopédie moderne: dictionnaire abrégé des sciences, lettres, arts, de l'industrie, de l'agriculture et du commerce* [*Modern Encyclopedia: Abridged Dictionary of Sciences, Letters, Arts, Industry, Agriculture, and Commerce*]. Vol. 14. Paris: Firmin Didot Frères, 1857.

Report of the Commission to Examine into the Organization, System of Discipline, and Course of Instruction of the United States Military Academy at West Point. Washington, DC: Government Printing Office, 1860.

Risch, Erna. *Quartermaster Support of the Army: A History of the Corps, 1775–1939*. Washington DC: U.S. Army Center of Military History, 1962.

———. *Supplying Washington's Army*. Washington, DC: U.S. Army Center of Military History, 1981.

Roberts, Michael. *The Military Revolution, 1560–1660: An Inaugural Lecture Delivered before the Queen's University of Belfast*. Belfast: M. Boyd, 1956.

Rogers, Clifford J., ed. *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*. Boulder, CO: Westview Press, 1995.

Roller, Matthew B. *Models from the Past in Roman Culture: A World of Exempla*. Cambridge, UK: Cambridge University Press, 2018. https://doi.org/10.1017/9781316677353.

Rosenberg, Charles E. *The Cholera Years: The United States in 1832, 1849, and 1866*. Chicago: University of Chicago Press, 1962.

Rosenstein, Nathan S. *Imperatores Victi: Military Defeat and Aristocratic Competition in the Middle and Late Republic*. Berkeley: University of California Press, 1990.

Roth, Jonathan P. *The Logistics of the Roman Army at War (264 BC–AD 235)*. Leiden, Netherlands: Brill, 1999.

Rozwadowski, Helen M. *Vast Expanses: A History of the Oceans*. London: Reaktion Press, 2018.

Rugeley, Terry. *The River People in Flood Time: The Civil Wars in Tabasco, Spoiler of Empire*. Stanford, CA: Stanford University Press, 2014.

Ryan, Cornelius. *A Bridge too Far*, New York: Simon and Schuster, 1974.

Sabin, Philip, Hans van Wees, and Michael Whitby, eds. *The Cambridge History of Greek and Roman Warfare*. Vol. 2, *Rome from the Late Republic to the Late*

Empire. Cambridge, UK: Cambridge University Press, 2007. https://doi.org/10.1017/CHOL9780521782746.

Sabin, Philip, Michael Whitby, and Hans van Wees, eds. *The Cambridge History of Greek and Roman Warfare*. Vol. 1, *Greece, the Hellenistic World, and the Rise of Rome*. Cambridge, UK: Cambridge University Press, 2007. https://doi.org/10.1017/CHOL9780521782739.

Scullard, H. H. *Scipio Africanus: Soldier and Politician*. Ithaca, NY: Cornell University Press, 1970.

Sears, Stephen W. *To the Gates of Richmond: The Peninsula Campaign*. New York: Ticknor and Fields, 1992.

Sheehan-Dean, Aaron. *Reckoning with Rebellion: War and Sovereignty in the Nineteenth Century*. Gainesville: University Press of Florida, 2020.

———. *The Calculus of Violence: How Americans Fought the Civil War*. Baton Rouge: Louisiana State University Press, 2018.

Sherman, William T. *Memoirs of General William T. Sherman*. 2 vols. New York: D. Appleton, 1875, 1886.

Sherry, Michael S. *Preparing for the Next War: American Plans for Postwar Defense, 1941–45*. New Haven, CT: Yale University Press, 1977.

Shrader, Charles R., ed., *United States Army Logistics, 1775–1992: An Anthology*. Vol. 1. Washington, DC: U.S. Army Center of Military History, 1997.

Simpson, Brooks D., and Jean V. Berlin, eds. *Sherman's Civil War: Selected Correspondence of William T. Sherman, 1860–1865*. Chapel Hill: University of North Carolina Press, 2014.

Smith, Jason W. *To Master the Boundless Sea: The U.S. Navy, the Marine Environment, and the Cartography of Empire*. Chapel Hill: University of North Carolina Press, 2018.

St. Clair, Arthur. *A Narrative of the Manner in which the Campaign against the Indians, in the Year One Thousand Seven Hundred and Ninety-One, Was Conducted, under the Command of Major General St. Clair, Together with His Observations on the Statements of the Secretary of War and the Quarter Master General, Relative Thereto, and the Reports of the Committees Appointed to Inquire into the Causes of the Failure Thereof*. Philadelphia, PA: Jane Aitken, 1812.

Stith, Matthew M. *Extreme Civil War: Guerrilla Warfare, Environment, and Race on the Trans-Mississippi Frontier*. Baton Rouge: Louisiana State University Press, 2016.

Strootman, Rolf, Floris van den Eijnde, and Roy van Wijk, eds. *Empires of the Sea: Maritime Power Networks in World History*. Cultural Interactions in the Mediterranean. Vol. 4. Leiden, Netherlands: Brill, 2019.

Sutherland, Daniel E. *American Civil War Guerrillas: Changing the Rules of Warfare*. Santa Barbara: ABC-Clio, 2013.

Sword, Wiley. *President Washington's Indian War*. Norman: University of Oklahoma Press, 1985.

Tamari, Salim. *Year of the Locust: A Soldier's Diary and the Erasure of Palestine's Ottoman Past*. Berkeley: University of California Press, 2015.

Taylor, Paul. *He Hath Loosed the Fateful Lightning: The Battle of Ox Hill (Chantilly) September 1, 1862*. Shippensburg, PA: White Mane Publishing, 2003.

The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies. 70 vols. Washington, DC: War Department, 1880–1901.

Todorova, Maria. *Imagining the Balkans*. Oxford, UK: Oxford University Press, 2009.

Tone, John Lawrence. *War and Genocide in Cuba, 1895–1898*. Chapel Hill: University of North Carolina Press, 2006.

Tooze, Adam. *The Deluge: The Great War, America and the Remaking of the Global Order, 1916–1931*. London: Allen Lane, 2014.

Troiani, Don. *Regiments and Uniforms of the Civil War*. Mechanicsburg, PA: Stackpole Books, 2002.

Tucker, Spencer C. *Almanac of American Military History*. Vol. 1. Santa Barbara, CA: ABC-Clio, 2013.

Tusan, Michelle. *The Last Treaty: Lausanne and the End of the First World War in the Middle East*. Cambridge, UK: Cambridge University Press, 2023. https://doi.org/10.1017/9781009371063.

Twitchett, Denis, and Michael Loewe, eds. *The Cambridge History of China*. Vol. 1, *The Ch'in and Han Empires, 221 B.C.–A.D. 220*. Cambridge, UK: Cambridge University Press, 2008. https://doi.org/10.1017/CHOL 9780521243278.

Tyrrell, Ian. *Transnational Nation: United States History in Global Perspective since 1789*. New York: Palgrave Macmillan, 2007.

Uyar, Mesut. *The Ottoman Army and the First World War*. London: Routledge, 2021.

Valerius Maximus. *Memorable Doings and Sayings*. 2 vols. Edited and translated by D. R. Shackleton Bailey. Cambridge, MA: Harvard University Press, 2000.

Van Creveld, Martin. *Supplying War: Logistics from Wallenstein to Patton*. Cambridge, UK: Cambridge University Press, 1977.

Van Wees, Hans. *Greek Warfare: Myths and Realities*. New York: Bloomsbury Academic, 2004.

Vandervort, Bruce. *Wars of Imperial Conquest in Africa: 1830–1914*. Bloomington: Indiana University Press, 1998.

———. *Indian Wars of Mexico, Canada and the United States, 1812–1900*. New York: Routledge, 2006.

Varnava, Andrekos. *British Cyprus and the Long Great War 1914–1925: Empire, Loyalties and Democratic Deficit*. London: Routledge, 2021.

Von Petrikovits, Harald. *Die Innenbauten römischer Legionslager während der Prinzipatszeit* [*The Interior Buildings of Roman Legionary Camps during the Principate Period*]. Opladen, Germany: Westdeutscher Verlag, 1975.

Vorepierre, Jean-François-Marie Bertet-Dupiney. *Dictionnaire français illustré et encyclopédie universelle* [*Illustrated French Dictionary and Universal Encyclopedia*]. Vol. 1. Paris: Imprimerie de I. Martinet, 1857.

Ward, Harry M. *The Department of War, 1781–1795*. Pittsburgh, PA: University of Pittsburgh Press, 1962.

Washington, George. *The Writings of George Washington*. Vol. 12, *1790–1974*. Edited by Worthington Chauncey Ford. New York: G. P. Putnam's Sons, 1891.

Washington, John M. "Memories of the Past." In David W. Blight, *A Slave No More: Two Men Who Escaped to Freedom, Including Their Own Narratives of Emancipation*. New York: Houghton Mifflin, 2007.

Watson, Samuel J. *Jackson's Sword: The Army Officer Corps on the American Frontier, 1810–1821*. Lawrence: University Press of Kansas, 2012.

———. *Peacekeepers and Conquerors: The Army Officer Corps on the American Frontier, 1821–1846*. Lawrence: University Press of Kansas, 2013.

Weigley, Russell F. *The American Way of War: A History of United States Military Strategy and Policy*. New York: Macmillan, 1973.

———. *The American Way of War: A History of United States Military Strategy and Policy*. Bloomington: Indiana University Press, 1977.

Welker, David A. *Tempest at Ox Hill: The Battle of Chantilly*. Cambridge, MA: Da Capo Press, 2002.

Whately, Conor. *An Introduction to the Roman Military, From Marius (100 BCE) to Theodosius II (450 CE)*. Hoboken, NJ: Wiley Blackwell, 2021.

White, Richard. *Organic Machine: The Remaking of the Columbia River*. New York: Hill and Wang, 1995.

White, Robert P. *Mason Patrick and the Fight for Air Service Independence*. Washington, DC: Smithsonian Institution Press, 2001.

Whittingham, Daniel. *Charles E. Callwell and the British Way in Warfare*. Cambridge, UK: Cambridge University Press, 2020. https://doi.org/10.1017/9781108628846.

Wilcox, Vanda. *The Italian Empire and the Great War*. Oxford, UK: Oxford University Press, 2021.

Wiley, Bell Irvin. *The Life of Billy Yank: The Common Soldier of the Union*. Baton Rouge: Louisiana State University Press, 1952.

———. *The Life of Johnny Reb: The Common Soldier of the Confederacy*. Baton Rouge: Louisiana State University Press, 1943.

Willekes, Carolyn. *The Horse in the Ancient World: From Bucephalus to the Hippodrome*. New York: Bloomsbury Academic, 2016.

Winstanley-Chesters, Robert. *Fish, Fishing, and Community in North Korea and Neighbors: Vibrant Matter(s)*. Berlin: Springer, 2020.

Winter, Jay. *The Day the Great War Ended, 24 July 1923: The Civilianization of War.* Oxford, UK: Oxford University Press 2022.

Wirtz, Philipp. *Depicting the Late Ottoman Empire in Turkish Autobiographies: Images of a Past World*. London: Routledge, 2017.

Wiseman, T. P. *Clio's Cosmetics: Three Studies in Greco-Roman Literature*. Leicester, UK: Leicester University Press, 1979.

Woodman, A. J. *Rhetoric in Classical Historiography: Four Studies*. Oxford, UK: Oxford University Press, 1988.

Worley, Leslie J. *Hippeis: The Cavalry of Ancient Greece*. New York: Routledge, 1994.

Worster, Donald. *Rivers of Empire: Water, Aridity, and the Growth of the American West*. New York: Pantheon Books, 1985.

Wrightson, Graham. *Combined Arms Warfare in Ancient Greece: From Homer to Alexander the Great and His Successors*. New York: Routledge, 2020.

Wyrtzen, Jonathan. *Worldmaking in the Long Great War: How Local and Colonial Struggles Shaped the Modern Middle East*. New York: Columbia University Press, 2022.

Zen, E-an, and Alta Walker. *Rocks and War: Geology and the Civil War Campaign of Second Manassas*. Shippensburg, PA: White Mane Books, 2000.

Book Chapters

Allison, Penelope. "Beyond von Petrikovits—Artefact Distribution and Socio-spatial Practices in the Roman Military." In *Roman Frontier Studies 2009: Proceedings of the XXI International Congress of Roman Frontier Studies (Limes Congress) Held at Newcastle upon Tyne in August 2009*, edited by Nick Hodgson, Paul Bidwell, and Judith Schachtmann, 9–15. Oxford, UK: Archaeopress, 2017. https://doi.org/10.2307/j.ctv177tk1m.9.

Antonaccio, Carla. "Religion, *Basileis* and Heros." In *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*, edited by Sigrid Deger-Jalkotzy and Irene S. Lemos, 381–96. Edinburgh: University of Edinburgh Press, 2006.

Aubert, Jean-Jacques. "A Double Standard in Roman Criminal Law?: The Death Penalty and Social Structure in Late Republican and Early Imperial Rome." In *Speculum Iuris: Roman Law as a Reflection of Social and Economic Life in Antiquity*, edited by Jean-Jacques Aubert and Boudewijn Sirks, 94–133. Ann Arbor: University of Michigan Press, 2002. https://doi.org/10.3998/mpub.17128.

Bidwell, Paul. "The External Supply of Pottery and Cereals to Antonine Scotland." In *The Antonine Wall: Papers in Honour of Professor Lawrence Keppie*, edited by David J. Breeze and William S. Hanson, 263–85. Oxford, UK: Archaeopress, 2020.

Bond, Sarah. " 'Feasts and Harlots, Baths and Idleness': The Geography of Billeted Troops in Late Antiquity." In *War and Community in Late Antiquity*, edited by Kristina Sessa and Susanna Elm. Cambridge, UK: Cambridge University Press, forthcoming.

Brennan, T. Corey. "Power and Process under the Roman 'Constitution'." In *The Cambridge Companion to the Roman Republic*, edited by Harriett I. Flower, 31–65. Cambridge, UK: Cambridge University Press, 2004. https://doi .org/10.1017/CCOL0521807948.003.

Brice, Lee L. "Ancient Warfare and Moving Beyond 'New Military History'." In *New Approaches to Greek and Roman Warfare*, edited by Lee L. Brice, 1–11. Hoboken, NJ: Wiley-Blackwell, 2020.

———. "Assessing Military Logistics and Diet in Ancient Greece and Rome." In *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, edited by John F. Donahue and Lee L. Brice, 403–31. Leiden, Netherlands: Brill, 2023. https://doi.org/10.1163/9789004687189_017.

———. "Commanders' Responses to Mutinies in the Roman Army." In *People and Institutions in the Roman Empire*, edited by Andrea F. Gatzke, Lee L. Brice, and Matthew Trundle, 44–67. Leiden, Netherlands: Brill, 2020. https://doi .org/10.1163/9789004441378_006.

———. "Insurgency and Terrorism in the Ancient World, Grounding the Debate." In *Brill's Companion to Insurgency and Terrorism in the Ancient Mediterranean*, edited by Timothy Howe and Lee L. Brice, 1–27. Leiden, Netherlands: Brill, 2016. https://doi.org/10.1163/9789004284739_002.

———. "SPQR SNAFU: Indiscipline and Internal Conflict in the Late Republic." In *Romans at War: Soldiers, Citizens, and Society in the Roman Republic*, edited by Jeremy Armstrong and Michael P. Fronda, 247–66. London: Routledge, 2020.

Carstens, Anne Marie. "To Bury a Ruler: The Meaning of the Horse in Aristocratic Burials." In *Tracing the Indo-Europeans: New Evidence from Archaeology and Historical Linguistics*, edited by Brigit Anette Olander, Thomas Olander, and Kristian Kristiansen, 165–84. Oxford, UK: Oxbow Books, 2005. https://doi.org/10.2307/j.ctvmx3k2h.14.

Charbonnier, D. "Os (Technologie)" [The Technology]. In *Nouveau dictionnaire de la conversation, ou, Répertoire universel* [*New Conversation Dictionary, or Universal Directory*], 6. Brussels: Librairie Historique-Artistique, 1843.

Chrysoulaki, Stella, and Ioannis Pappas. "About the Horses at the Phaleron Delta." In *Hippos: The Horse in Ancient Athens*, edited by Jenifer Neils and Shannon M. Dunn, 33–39. Athens: American School of Classical Studies at Athens, 2022.

Degler, Carl. "American Civil War and German Wars of Unification: The Problem of Comparison." In *On the Road to Total War: The American Civil War and*

the German Wars of Unification, 1861–1871, edited by Stig Förster and Jörg Nagler, 53–72. New York: Cambridge University Press, 2002. https://doi.org/10.1017/CBO9781139052474.003.

Donahue, John F., and Lee L. Brice. "Diet and Logistics in Ancient Greek and Roman Warfare, a Consideration." In *Brill's Companion to Diet and Logistics in Greek and Roman Warfare*, edited by John F. Donahue and Lee L. Brice, 3–27. Leiden, Netherlands: Brill, 2023. https://doi.org/10.1163/9789004687189_002.

Driessen, Mark. "Nice Meating: The *Canabae Legionis* Livestock Market at Nijmegen Revisited." In *Embracing the Provinces: Society and Material Culture of the Roman Frontier Regions*, edited by Tatiana Ivleva, Mark Driessen, and Jasper de Bruin, 121–32. Oxford, UK: Oxbow, 2018.

Echevarria, Antulio J., II. "Jomini, Modern War, and Strategy: The Triumph of the Essential." In *The New Makers of Modern Strategy*, edited by Hal Brands, 145–68. Princeton, NJ: Princeton University Press, 2023.

Engels, Donald. "Logistics: Sinews of War." In *The Oxford Handbook of Warfare in the Classical World*, edited by Brian Campbell and Lawrence A. Tritle, 351–68. Oxford, UK: Oxford University Press, 2013. https://doi.org/10.1093/oxfordhb/9780195304657.013.0018.

Foxhall, Lin. "Farming and Fighting in Ancient Greece." In *War and Society in the Greek World*, edited by John Rich and Graham Shipley, 134–45. London: Routledge, 1995.

Gattinoni, Franca Landucci. "Diodorus Siculus." In *Oxford Bibliographies-Classics*. Oxford, UK: Oxford University Press, 2018. https://doi.org/10.1093/OBO/9780195389661-0320.

Gough, Paul. "Commemoration of War." In *The Routledge Research Companion to Heritage and Identity*, edited by Brian Graham and Peter Howard, 215–30. New York: Routledge, 2008.

Hager, Veronika. "The Long End of the Ottoman Empire: Historiographical Discourses on the First World War in the Consolidating Republic of Turkey." In *The Long End of the First World War: Ruptures Continuities and Memories*, edited by Katrin Bromber, Katharina Lange, Heike Liebau, and Anorthe Wetzel, 235–66. Frankfurt: Campus Verlag, 2018.

Hall, Joshua R. "The Western Greeks and the 'Greek Warfare' Narrative." In *Brill's Companion to Greek Land Warfare beyond the Phalanx*, edited by Roel Konijnendijk, Cezary Kucewicz, and Matthew Lloyd, 266–92. Leiden, Netherlands: Brill, 2021. https://doi.org/10.1163/9789004501751_011.

Hassan, Christopher. "Structure of the Army and Logistics." In *A Companion to Achaemenid Persian Empire*, edited by Bruno Jacobs and Robert Rollinger, 1151–59. Vol. 2. Hoboken, NJ: Wiley, 2021. https://doi.org/10.1002/9781119071860.ch80.

Hoyos, Dexter. "The Age of Overseas Expansion (246–146 BC)." In *A Companion to the Roman Army*, edited by Paul Erdkamp, 63–79. Oxford, UK: Blackwell, 2007. https://doi.org/10.1002/9780470996577.ch5.

Hughes, J. Donald. "Warfare and Environment in the Ancient World." In *The Oxford Handbook of Warfare in the Classical World*, edited by Brian Campbell and Lawrence A. Tritle. Oxford, UK: Oxford University Press, 2013, 128–39. https://doi.org/10.1093/oxfordhb/9780195304657.013.0006.

Hyland, Ann. "The Development and Training of Cavalry in Greece and Rome." In *The Oxford Handbook of Warfare in the Classical World*, edited by Brian Campbell and Lawrence A. Tritle, 493–526. Oxford, UK: Oxford University Press, 2013. https://doi.org/10.1093/oxfordhb/9780195304657.013.0026.

Konijnendijk, Roel. "Cavalry and the Character of Classical Warfare." In *Brill's Companion to Greek Land Warfare beyond the Phalanx*, edited by Roel Konijnendijk, Cezary Kucewicz, and Matthew Lloyd, 169–204. Leiden, Netherlands: Brill, 2021. https://doi.org/10.1163/9789004501751_008.

Kooistra, Laura. "Food for Soldiers: Farm Deliveries from *Germania Inferior* in the Second and Third Centuries AD." In *Embracing the Provinces: Society and Material Culture of the Roman Frontier Regions*, edited by Tatiana Ivleva, Mark Driessen, and Jasper de Bruin, 111–20. Oxford, UK: Oxbow, 2018.

Lacey, James. "Food and Conquest: Getting beyond Engels." In *Brill's Companion to the Campaigns of Philip II and Alexander the Great*, edited by Edward M. Anson. Leiden, Netherlands: Brill, forthcoming.

Lee, John W. I. "Daily Life in Classical Greek Armies, c. 500–330 BCE." In *New Approaches to Greek and Roman Warfare*, edited by Lee L. Brice, 39–52. Hoboken, NJ: Wiley-Blackwell, 2020. https://doi.org/10.1002/9781119248514.ch4.

———. "Warfare in the Classical Age." In *A Companion to the Classical Greek World*, edited by Konrad H. Kinzl, 480–508. Malden, MA: Blackwell, 2006. https://doi.org/10.1002/9780470996799.ch23.

Lendon, J. E. "Historians without History: Against Roman Historiography." In *The Cambridge Companion to the Roman Historians*, edited by Andrew Feldherr, 41–62. Cambridge, UK: Cambridge University Press, 2009. https://doi.org/10.1017/CCOL9780521854535.

Luttwak, Edward N. "Logistics and the Aristocratic Idea of War." In *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present*, edited by John A. Lynn, 3–7. Boulder, CO: Westview Press, 1993.

Lynn, John A. "The History of Logistics and Supplying War." In *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present*, edited by John A. Lynn, 9–27. Boulder, CO: Westview Press, 1993.

Moore, Rosemary. "Generalship: Leadership and Command." In *The Oxford Handbook of Warfare in the Classical World*, edited by Brian Campbell and

Lawrence A. Tritle, 457–73. Oxford, UK: Oxford University Press, 2013. https://doi.org/10.1093/oxfordhb/9780195304657.013.0023.

Mrva-Montoya, Agata. "Learning from Dead Animals: Horse Sacrifice in Ancient Salamis and the Hellenisation of Cyrus." In *Animal Death*, edited by Jay Johnston and Fiona Probyn-Rapsey, 114–22. Sydney, Australia: Sydney University Press 2013.

Munson, Rosario Vignolo. "An Alternative World: Herodotus and Italy." In *The Cambridge Companion to Herodotus*, edited by Carolyn Dewald and John Marincola, 257–73. Cambridge, UK: Cambridge University Press, 2006. https://doi.org/10.1017/CCOL052183001X.018.

North, John A. "The Constitution of the Roman Republic." In *A Companion to the Roman Republic*, edited by Nathan Rosenstein and Robert Morstein-Marx, 256–77. Newark, NJ: John Wiley & Sons, 2006.

Porch, Douglas. "Bugeaud, Galliéni, Lyautey: The Development of French Colonial Warfare." In *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, edited by Peter Paret, Gordon Craig, and Felix Gilbert, 376–407. Princeton, NJ: Princeton University Press, 1986. https://doi.org/10.2307/j.ctv8xnhvw.18.

Raaflaub, Kurt A. "Archaic and Classical Greece." In *War and Society in the Ancient and Medieval Worlds: Asia, the Mediterranean, Europe, and Mesoamerica*, edited by Kurt A. Raaflaub and Nathan Rosenstein, 129–61. Cambridge, MA: Harvard University Press, 1999.

———. "Early Greek Infantry Fighting in a Mediterranean Context." In *Men of Bronze: Hoplite Warfare in Ancient Greece*, edited by Donald Kagan and Gregory F. Viggiano, 95–112. Princeton, NJ: Princeton University Press, 2013.

Rawlings, Louis. "Army and Battle during the Conquest of Italy (350–264 BC)." In *A Companion to the Roman Army*, edited by Paul Erdkamp, 43–62. Oxford, UK: Blackwell, 2007. https://doi.org/10.1002/9780470996577.ch4.

Roller, Matthew B. "The Exemplary Past in Roman Historiography and Culture." In *The Cambridge Companion to the Roman Historians*, edited by Andrew Feldherr, 214–30. Cambridge, UK: Cambridge University Press, 2009. https://doi.org/10.1017/CCOL9780521854535.014.

Rosenstein, Nathan. "Military Command, Political Power, and the Republican Elite." In *A Companion to the Roman Army*, edited by Paul Erdkamp, 132–47. Oxford, UK: Blackwell, 2007. https://doi.org/10.1002/9780470996577.ch9.

Seibert, Jakob. "Die Logistik der Feldzüge Alexanders des Großen" [The Logistics of Alexander the Great's Campaigns]. In *Die Bedeutung der Logistik für die militärische Führung von der Antike bis in die neueste Zeit* [*The Importance of*

Logistics for Military Leadership from Ancient Times to Modern Times], edited by Horst Boog, 11–33. Herford, Germany: Mittler, 1986.

Spence, Iain. "Cavalry, Democracy and Military Thinking in Classical Athens." In *War, Democracy and Culture in Classical Athens*, edited by David M. Pritchard, 111–38. Cambridge, UK: Cambridge University Press, 2010.

Tallon, James N. "Ottoman Anti-Insurrectionary Operations in Yemen and Albania, 1910–1912: The End of Ottomanism and the Beginning of an Age of Violence." In *Empire, Ideology, Mass Violence: The Long 20th Century in Comparative Perspective*, edited by Tobias Hof, 45–71. Munich: Herbert Utz Verlag, 2016.

Tanasi, Davide, Rosa Lanteri, and Stephan Hassam. "New Data on the Funerary Religion of the Greeks of Sicily." In *Philosopher Kings and Tragic Heroes: Essays on Images and Ideas from Western Greece*, edited by Heather L. Reid and Davide Tanasi, 329–50. Sioux City, IA: Parnassos Press-Fonte Aretusa, 2016. https://doi.org/10.2307/j.ctvbj7gjn.

Taylor, Tristan S. "Social Status, Legal Status and Legal Privilege." In *The Oxford Handbook of Roman Law and Society*, edited by Paul J. du Plessis, Clifford Ando, and Kaius Tuori, 349–61. Oxford, UK: Oxford University Press, 2016. https://doi.org/10.1093/oxfordhb/9780198728689.013.27.

Trundle, Matthew. "Wealth and the Logistics of Greek Warfare: Food, Pay, and Plunder." In *New Approaches to Greek and Roman Warfare*, edited by Lee L. Brice, 1–11. Hoboken, NJ: Wiley-Blackwell, 2020. https://doi.org/10.1002/9781119248514.ch2.

Tuplin, Christopher. "All the King's Horse: In Search of Achaemenid Persian Cavalry." In *New Perspectives on Ancient Warfare*, edited by Garrett Fagan and Matthew Trundle, 101–82. Leiden, Netherlands: Brill, 2010. https://doi.org/10.1163/ej.9789004185982.i-391.26.

Uttley, Matthew, and Christopher Kinsey. "The Role of Logistics in War." In *The Oxford Handbook of War*, edited by Yves Boyer and Julian Lindley-French, 401–16. Oxford, UK: Oxford University Press, 2012.

Van Enckevort, Harry. "Cauldrons and Feasting in *Oppidum Batavorum* on the Eve of the Batvian Revolt." In *Embracing the Provinces: Society and Material Culture of the Roman Frontier Regions*, edited by Tatiana Ivleva, Mark Driessen, and Jasper de Bruin, 133–39. Oxford, UK: Oxbow, 2018.

Van Wees, Hans. "The Myth of the Middle-Class Army: Military and Social Status in Ancient Athens." In *War as a Cultural and Social Force: Essays on Warfare in Antiquity*, edited by Tønnes Bekker-Nielsen and Lise Hannestad, 45–71. Copenhagen: C. A. Reitzels Forlag, 2001.

Wheeler, Everett L. "Greece: Mad Hatters and March Hares." In *Recent Directions in the Military History of the Ancient World*, edited by Lee L. Brice and Jennifer T. Roberts, 53–104. Claremont, CA: Regina Books, 2011.

Wiseman, T. P. "Lying Historians: Seven Types of Mendacity." In *Lies and Fiction in the Ancient World*, edited by Christopher Gill and T. P. Wiseman, 122–46. Exeter, UK: Exeter University Press, 1993.

Ziolkowski, Adam. "*Urbs direpta* or How the Romans Sacked Cities." In *War and Society in the Roman World*, edited by John Rich and Graham Shipley, 62–92. London: Routledge, 1995. https://doi.org/10.4324/9781003071341.

Journal Articles

Adams, C. P. "Feeding the Wolf: Logistics and the Roman Army." *Journal of Roman Archaeology* 14 (2001): 465–73.

Bajin, Zoran. "Miroslav Spalajković, the Serbian Minister in Russia in the July Crisis of 1914." *Balcania* 47 (2016): 217–48. https://doi.org/10.2298/BAL-C1647217B.

Banks, Iain. "Editorial." *Journal of Conflict Archaeology* 16, no. 3 (September 2021): 65–68. https://doi.org/10.1080/15740773.2021.2052010.

Bayly, C. A., Sven Beckert, Matthew Connelly, Isabel Hofmeyr, Wendy Kozol and Patricia Seed. "AHR Conversation: On Transnational History." *American Historical Review* 111, no. 5 (December 2006): 1441–64. https://doi.org/10.1086/ahr.111.5.1441.

Bertolino, Francesco, Flavia Alaimo, and Stefano Vassallo. "Battles of Himera (480 and 409 BC): Analysis of Biological Finds and Historical Interpretation. Experiences of Restoration in the Ruins of Himera, 2008–2010." *Conservation Science in Cultural Heritage* 15, no. 2 (2015): 27–40. https://doi.org/10.6092/issn.1973-9494/7115.

Beşikçi, Mehmet. "One War, Multiple Memories: Ottoman Reserve Officers in the First World War." *Archiv orientální* [*Oriental Archive*] 88, no. 3 (2020): 309–40.

Blackwood, William, ed. "Notes of a Recent Tour in Germany," *Journal of Agriculture* 5 (1853): 1–10.

———. "The Farmers' Note-Book.—No. XXXII—Johnston's Notes on North America," *Journal of Agriculture* 5 (1853): 46–79.

Bozzo, Giancarlo. "Da ippeis ad equites: osservazioni sull'iconografia di alcuni rilievi funerari siracusani del III secolo a.C" [From Ippeis to Equites: Observations on the Iconography of Some Syracuse Funerary Reliefs from the 3rd Century BC]. *Vexillum* 3 (2008).

Brady, Lisa M. "Sowing War, Reaping Peace: United Nations Resource Development Programs in the Republic of Korea, 1950–1953." *Journal of Asian Studies* 77, no. 2 (May 2018): 351–63. https://doi.org/10.1017/S0021911817001334.

Brown, Alan S. "The Role of the Army in Western Settlement: Josiah Harmar's Command, 1785–1790." *Pennsylvania Magazine of History and Biography* 93, no. 2 (April 1969): 161–78.

Büntgen, Ulf, Vladimir S. Myglan, Fredrik Charpentier Ljungqvist, Michael Mc-Cormick, Nicola Di Cosmo, Michael Sigl, Johann Jungclaus, Sebastian Wagner, Paul J. Krusic, Jan Esper, Jed O. Kaplan, Michiel A. C. de Vaan, Jürg Luterbacher, Lukas Wacker, Willy Tegel, and Alexander V. Kirdyanov. "Cooling and Societal Change during the Late Antique Little Ice Age from 536 to around 660 AD." *Nature Geoscience* 9, no. 3 (February 2016): 231–36. https://doi.org/10.1038/ngeo2652.

Bury, Patrick. "Conceptualising the Quiet Revolution: The Post-Fordist Revolution in Western Military Logistics." *European Security* 30, no. 1 (2021): 112–36. https://doi.org/10.1080/09662839.2020.1796650.

Charney, Michael W. "Shallow-draft Boats Guns, and the Aye-ra-wa-ti: Continuity and Change in Ship Structure and River Warfare in Precolonial Myanma." *Oriens Extremus* 40, no. 1 (1997): 16–63.

Citino, Robert M. "Military Histories Old and New: A Reintroduction." *American Historical Review* 112, no. 4 (October 2007): 1070–90. https://doi.org/10.1086/ahr.112.4.1070.

Connelly, Thomas L. "The American Camel Experiment: A Reappraisal." *Southwestern Historical Quarterly* 69, no. 4 (April 1966): 442–62.

Cook, John Granger. "Roman Crucifixions: From the Second Punic War to Constantine." *Zeitschrift für die Neutestamentliche Wissenschaft und die kunde der älteren Kirche* [*Journal for New Testament Science and the Knowledge of the Older Church*] 104, no. 1 (January 2013): 1–32. https://doi.org/10.1515/znw-2013-0001.

"Die Frühlings-Meetings in den Vereinigten Staaten" [The Spring Meetings in the United States]. *Karlsruher Beobachter* [*Karlsruhe Observer*], 4 July 1847.

Du Jonchay, J. "Des os et de leur emploi en agriculture (Annales Agricoles de l'Allier)" [Bones and Their Use in Agriculture (Agricultural Annals of Allier)]. *Journal de la ville de Saint-Quentin et de l'arrondissement* [*Journal of the City of Saint-Quentin and the District*], 17 December 1848.

Dvoichenko-Markov, Eufrosina. "Americans in the Crimean War." *Russian Review* 13, no. 2 (April 1954): 137–45. https://doi.org/10.2307/125706.

Eccles, Henry E. "Logistics and Strategy." *Naval War College Review* 11, no 1 (1958).

Edwards, Thomas J., and Rick Eden. "Velocity Management and the Revolution in Military Logistics." *Army Logistician* 31, no. 1 (1999): 52–57.

Egeland, Kjølv. "Climate Security Reversed: The Implications of Alternative Security Policies for Global Warming." *Environmental Politics* 32, no. 5 (2023): 883–902. https://doi.org/10.1080/09644016.2022.2146934.

Erbel, Mark, and Christopher Kinsey. "Think Again—Supplying War: Reappraising Military Logistics and Its Centrality to Strategy and War." *Journal of Strategic Studies* 41, no. 4 (2018): 519–44. https://doi.org/10.1080/01402390.2015.1104669.

Erdkamp, Paul. "War, Food, Climate Change, and the Decline of the Roman Empire." *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 422–65. https://doi.org/10.1353/jla.2019.0021.

Firestone, Jeremy, and Christina Jarvis. "Response and Responsibility: Regulating Noise Pollution in the Marine Environment." *Journal of International Wildlife Law and Policy* 10, no. 2 (April 2007): 109–52. https://doi.org/10.1080/13880290701347408.

Geyer, Michael, and Charles Bright. "Global Violence and Nationalizing Wars in Eurasia and America: The Geopolitics of War in the Mid-Nineteenth Century." *Comparative Studies in Society and History* 38, no. 4 (October 1996): 619–57. https://doi.org/10.1017/S001041750002048X.

Goldman, Emily O. "Cultural Foundations of Military Diffusion." *Review of International Studies* 32, no. 1 (January 2006): 69–91. https://doi.org/10.1017/S0260210506006930.

Harari, Yuval Noah. "Military Memoirs: A Historical Overview of the Genre from the Middle Ages to the Late Modern Era." *War in History* 14, no. 3 (July 2007): 289–309. https://doi.org/10.1177/0968344507078375.

Harley, Felicity. "Crucifixion in Roman Antiquity: The State of the Field." *Journal of Early Christian Studies* 27, no. 2 (Summer 2019): 303–23. https://doi.org/10.1353/earl.2019.0022.

Harvey, P. B. "New Harvest Reappear: The Impact of War on Agriculture." *Athenaeum* 64, no. 1/2 (1986): 205–18.

Heuzé, Gustave. "Cours d'agriculture: Professé a L'Institut Agricole de Grand-Jouan" [Agriculture Course: Taught at the Agricultural Institute of Grand-Jouan]. *L'agriculteur praticien revue de l'agriculture francaise et etrangere* [*The Practical Farmer Review of French and Foreign Agriculture*] (1850): 333–43.

Homann, Arne, Robin Schäfer, and Bernard Wilkin. "Die Toten von Waterloo" [The Dead of Waterloo]. *Archäologie in Deutschland* [Archeology in Germany] 3 (July 2023): 44–45.

Iriye, Akira. "The Internationalization of History." *American Historical Review* 94, no. 1 (February 1989): 1–10. https://doi.org/10.1086/ahr/94.1.1.

Janda, Lance. "Shutting the Gates of Mercy: The American Origins of Total War, 1860–1880." *Journal of Military History* 59, no. 1 (January 1995): 7–26. https://doi.org/10.2307/2944362.

Jones, Robert F. "William Duer and the Business of Government in the Era of the American Revolution." *William and Mary Quarterly* 32, no. 3 (July 1975): 393–416. https://doi.org/10.2307/1922131.

Kadercan, Burak. "Strong Armies, Slow Adaptation: Civil-Military Relations and the Diffusion of Military Power." *International Security* 38, no. 3 (Winter 2013–14): 117–52. https://doi.org/10.1162/ISEC_a_00146.

Kemmerly, Phillip R. "Environment and the Course of Battle: Flooding at Shiloh (6–7 April 1862)." *Journal of Military History* 79, no. 4 (October 2015): 1079–1108.

———. "Rivers, Rails, and Rebels: Logistics and Struggle to Supply U.S. Army Depot at Nashville, 1862–1865." *Journal of Military History* 84, no. 3 (July 2020): 713–46.

Kinley, Christopher. "The Balkan War in Epirus: Religious Identity and the Continuity of Conflict." *Journal of Balkan and Near Eastern Studies* 23, no. 5 (2021): 667–83. https://doi.org/10.1080/19448953.2021.1935077.

Kinsella, Helen M. "Settler Empire and the United States: Francis Lieber on the Laws of War." *American Political Science Review* 117, no. 2 (May 2023): 629–42. https://doi.org/10.1017/S0003055422000569.

Kyle, Britney, Laurie J. Reitsema, Janelle Tyler, Pier Francesco Fabbri, and Stefano Vassallo. "Examining the Osteological Paradox: Skeletal Stress in Mass Graves versus Civilians at the Greek Colony of Himera (Sicily)." *American Journal of Physical Anthropology* 167, no. 1 (2018): 161–72. https://doi.org/10.1002/ajpa.23624.

Langlands, Rebecca. " 'Reading for the Moral' in Valerius Maximus: The Case of 'Severitas'." *Cambridge Classical Journal* 54 (2008): 160–87. https://doi.org/10.1017/S1750270500000610.

Lee, Douglas. "Food Supply and Military Mutiny in the Late Roman Empire." *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 277–97. https://doi.org/10.1353/jla.2019.0017.

Lee, Wayne E. "Mind and Matter-Cultural Analysis in American Military History: A Look at the State of the Field." *Journal of American History* 93, no. 4 (March 2007): 1116–42. https://doi.org/10.2307/25094598.

Lendon, J. E. "Battle Description in the Ancient Historians, Part I: Structure, Array, and Fighting." *Greece and Rome* 64, no. 1 (April 2017): 39–64. https://doi.org/10.1017/S0017383516000231.

——— "Battle Description in the Ancient Historians, Part II: Speeches, Results, and Sea Battles." *Greece and Rome* 64, no. 2 (October 2017): 145–67. https://doi.org/10.1017/S0017383517000067.

Lesley, Lewis B. "The Purchase and Importation of Camels by the United States Government, 1855–1857." *Southwestern Historical Quarterly* 33, no. 1 (July 1929): 18–33.

Li, Mingjiang. "ASEAN's Responses to AUKUS: Implications for Strategic Realignments in the Indo-Pacific." *China International Strategy Review* 4, no. 2 (2022): 268–87. https://doi.org/10.1007/s42533-022-00121-2.

Linn, Brian McAllister. "The American Way of War Debate: An Overview." *Historically Speaking* 11, no. 5 (November 2010): 22–23. https://doi.org/10.1353/hsp.2010.a405440.

Low, Polly. "Cavalry Identity and Democratic Ideology in Early Fourth-Century Athens." *Proceedings of the Cambridge Philological Society* 48 (2002): 102–22. https://doi.org/10.1017/S0068673500000857.

Machado, Dominic. "Deconstructing *Disciplina*: Disentangling Ancient and Modern Ideologies of Military Discipline in the Middle Republic." *American Journal of Philology* 142, no. 3 (Fall 2021): 387–424. https://doi.org/10.1353/ajp.2021.0013.

Martin, Laura J. "Proving Grounds: Ecological Fieldwork in the Pacific and the Materialization of Ecosystems." *Environmental History* 23, no. 3 (July 2018): 567–92, https://doi.org/10.1093/envhis/emy007.

McMeekin, Sean. "The War of the Ottoman Succession." *Historically Speaking* 13, no. 1 (January 2012): 2–4. https://doi.org/10.1353/hsp.2012.0000.

Meek, Basil. "General Harmar's Campaign." *Ohio History Journal* 20, no. 1 (January 1911): 74–108.

Minasidis, Charalampos. "Greek Orthodox Citizen Soldiers under the Ottoman Banner: Experiencing and Surviving the Great War." *Archiv orientální* [*Oriental Archive*] 88, no. 3 (2020): 341–73. https://doi.org/10.47979/aror.j.88.3.341-373.

Mitchell, M. X. "Offshoring American Environmental Law: Land, Culture, and Marshall Islanders' Struggles for Self-Determination during the 1970s." *Environmental History* 22, no. 2 (April 2017): 209–34. https://doi.org/10.1093/envhis/emw101.

Monfils, Rean, Trevor Gilbert, and Sefanaia Nawadra. "Sunken WWII Shipwrecks of the Pacific and East Asia: The Need for Regional Collaboration to Address the Potential Marine Pollution Threat." *Ocean and Coastal Management* 49, nos. 9–10 (2006): 779–88. https://doi.org/10.1016/j.ocecoaman.2006.06.011.

Morgan, Curtis F., Jr. "Nathaniel Greene as Quartermaster General." *Journal of the American Revolution* (November 2013).

Morillo, Stephen. "Guns and Government: A Comparative Study of Europe and Japan." *Journal of World History* 6, no. 1 (Spring 1995): 75–106.

Negrin, Hayley. "Return to Yeokanta/River: Powhatan Women and Environmental Treaty Making in Early America." *Environmental History* 28, no. 3 (July 2023): 522–53. https://doi.org/10.1086/725422.

Ngai, Mae M. "Promises and Perils of Transnational History." *Perspectives on History* (1 December 2012): 52–54.

Nickerson, William C., Mehdi Amiri, and Nagaraja Iyyer. "Building Environmental History for Naval Aircraft." *Corrosion Reviews* 37, no. 5 (July 2019): 367–75. https://doi.org/10.1515/corrrev-2019-0022.

Nisbet, R. G. M. "Aeneas Imperator: Roman Generalship in an Epic Content." *Augustan Age* 3 (1983): 54–72.

"Notes upon Passing Events." *Journal of Gas Lighting, Water Supply and Sanitary Improvement* (2 December 1862).

O'Connor, Stephen. "Private Traders and the Food Supply of Classical Greek Armies." *Journal of Ancient History* 3, no. 2 (November 2015): 173–219. https://doi.org/10.1515/jah-2015-0011.

———. "Sailors, Soldiers, and Market Exchanges in the Classical Greek World: The Constraints on Opportunism." *Classical Philology* 116, no. 4 (October 2021): 515–36. https://doi.org/10.1086/715871.

———. "The Daily Grain Consumption of Classical Greek Sailors and Soldiers." *Chiron* 43 (2013): 327–56. https://doi.org/10.34780/2b4g-21gb.

———. "Why Markets?: The Provisioning of Classical Greek Military Forces on the Move through Friendly, Allied, and Neutral Territory." *Klio* 104, no. 2 (2022): 487–516. https://doi.org/10.1515/klio-2021-0058.

Pollard, Tony. "These Spots of Excavation Tell: Using Early Visitor Accounts to Map the Missing Graves of Waterloo." *Journal of Conflict Archaeology* 16, no. 2 (September 2021): 75–113. https://doi.org/10.1080/15740773.2021.2051895.

Prebilič, Vladimir. "Theoretical Aspects of Military Logistics." *Defense & Security Analysis* 22, no. 2 (June 2006): 159–77. https://doi.org/10.1080/14751790600764037.

Pritchard, Sara B. "The Trouble with Darkness: NASA's Suomi Satellite Images of Earth at Night." *Environmental History* 22 (April 2017): 312–30. https://doi.org/10.1093/envhis/emw102.

Rabkin, Jeremy. "Anglo-American Dissent from the European Law of War: A History with Contemporary Echoes." *San Diego International Law Journal* 16, no. 1 (2014): 1–72.

Rance, Philip. "The Farmer and the Soldier Should Be Friends: Justinian's Legislation on the Provisioning of Soldiers (*Novel* 130)." *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 380–421. https://doi.org/10.1353/jla.2019.0020.

Reinberger, Katherine L., Laurie J. Reitsema, Britney Kyle, and Stefano Vassallo. " 'Immortal, though He Lies under the Ground': Osteobiographies of Three Individuals from the First Battle of Himera (480 BCE)." *American Journal of Physical Anthropology* 171 (2020): 231–32.

Reinberger, Katherine L., Laurie J. Reitsema, Britney Kyle, Stefano Vassallo, George Kamenov, and John Krigbaum. "Isotopic Evidence for Geographic Heterogeneity in Ancient Greek Military Forces." *Plos One* 16, no. 5 (2021): e0248803. https://doi.org/10.1371/journal.pone.0248803.

Remak, Joachim. "1914—The Third Balkan War: Origins Reconsidered." *Journal of Modern History* 43, no. 3 (September 1971): 354–66.

Rid, Thomas. "The Nineteenth Century Origins of Counterinsurgency Doctrine." *Journal of Strategic Studies* 33, no. 5 (2010): 727–58. https://doi.org/10.1080/0 1402390.2010.498259.

Ringmar, Erik. "Francis Lieber, Terrorism, and the American Way of War." *Perspectives on Terrorism* 3, no. 4 (December 2009): 52–60.

Roberts, Timothy Mason. "The Role of French Algeria in American Expansion during the Early Republic." *Journal of the Western Society for French History* 43 (2015): 153–64.

Robisch, Thomas. "General William T. Sherman: Would the Georgia Campaigns of the First Commander of the Modern Era Comply with Current Law of War Standards?." *Emory International Law Review* 9, no. 2 (1995): 459–506.

Rochette, P. "Les os.—utilité de les récolter pour l'industrie (1)" [Bones—Use of Harvesting Them for Industry (1)]. *Moniteur d'hygiène et de salubrité publique* [*Hygiene and Public Health Monitor*] 3, no. 8 (August 1868): 290–94.

Rosenstein, Nathan S. " '*Imperatores Victi*': The Case of C. Hostilius Mancinus." *Classical Antiquity* 5, no. 2 (October 1986): 230–52. https://doi.org /10.2307/25010850.

Roy, Kaushik. "Small Wars, Ecology, and Imperialism in Precolonial South Asia: A Case Study of Mughal-Ahom Conflict, 1615–1682." *Journal of Military History* 87, no. 1 (January 2023): 9–31.

Sanson, André. "La loi d'extension des races" [The Law of Extension of Races]. Edited by Émile Littré and Grigory Wyrouboff. *La Philosophie Positive: Revue* [*Positive Philosophy: Review*] 13 (1874): 321–40.

Sarantis, Alexander. "Military Provisioning in the Sixth-Century Balkans." *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 329–79. https://doi.org/10.1353/jla .2019.0019.

Schneider, James J. "The Loose Marble—and the Origins of Operational Art." *Parameters: The U.S. Army War College Quarterly* 19, no. 1 (1989): 85–99. https:// doi.org/10.55540/0031-1723.1539.

Schüler-Springorum, Stefanie. "Review: Perspectives on War in the Twentieth Century." *Contemporary European History* 17, no. 4 (November 2008): 567–73.

Sears, Matthew A., and Carolyn Willekes. "Alexander's Cavalry Charge at Chaeronea, 338 BCE." *Journal of Military History* 80, no. 4 (2016): 1017–35.

Soares, Marcelo de Oliviera, Sula Salani, Sandra V. Paiva, and Marcus D. A. Braga. "Shipwrecks Help Invasive Coral to Expand Range in the Atlantic Ocean." *Marine Pollution Bulletin* 158 (September 2020): 111394. https://doi .org/10.1016/j.marpolbul.2020.111394.

Spiller, Roger J. "Military History and Its Fictions." *Journal of Military History* 70, no. 4 (October 2006): 1081–97. https://doi.org/10.1353/jmh.2006.0280.

Tallon, James N. "Albania's Long World War I, 1912–1925." *Studia Historyczne* 57, no. 4 (2014): 437–55.

Taylor, Michael J. "*Decimatio*: Myth, Discipline, and Death in the Roman Republic." *Antichthon* 56 (2022): 105–20. https://doi.org/10.1017/ann.2022.9.

"The Farmers' Note-Book No. XXXII." *Journal of Agriculture* 5 (1853): 46–79.

Tse, Wicky W. K. "The Tactical Role of Rivers in Early Chinese Warfare." *Journal of Chinese Military History* 12, no. 1 (April 2023): 7–23. https://doi.org/10.1163/22127453-bja10017.

Tyrrell, Ian. "American Exceptionalism in an Age of International History." *American Historical Review* 96, no. 4 (October 1991): 1031–55. https://doi.org/10.2307/2164993.

Vassallo, Stefano. "Un'offerta di schinieri di un mercenario Iberico nella Battaglia di Himera del 480 AC" [An Offering of Greaves from an Iberian Mercenary at the Battle of Himera in 480 BC]. *Sicilia Antiqua: International Journal of Archaeology* 6 (2014): 533–40. https://doi.org/10.1400/226072.

Viva, Serena, Norma Lonoce, Giorgia Vincenti, Roberto Cameriere, Matteo Valentino, Stefano Vassallo, and Pier Francesco Fabbri. "The Mass Burials from the Western Necropolis of the Greek Colony of Himera (Sicily) Related to the Battles of 480 and 409 BCE." *International Journal of Osteoarchaeology* 30, no. 3 (May/June 2020): 307–17. https://doi.org/10.1002/oa.285.

Waite, Kevin. "Jefferson Davis and Proslavery Visions of Empire in the Far West." *Journal of the Civil War Era* 6, no. 4 (December 2016): 536–65.

Weiberg, Erika, and Mark Finné. "Human-Environment Dynamics in the Ancient Mediterranean: Keywords of a Research Field." *Opuscula* 15 (2022): 221–52. https://doi.org/10.30549/opathrom-15-07.

Wijnendaele, Jeroen W. P. "Late Roman Civil War and the African Grain Supply," *Journal of Late Antiquity* 12, no. 2 (Fall 2019): 298–328. https://doi.org/10.1353/jla.2019.0018.

Newspaper and Web Articles

"AUKUS Joint Leaders' Statement." U.S. Embassy and Consulates in Australia, 14 March 2023.

Barrow, Robert H. "Q&A: Marines' Barrow Backs SALT—and Conventional Rearming." *San Diego (CA) Union*, 11 November 1979.

Corbet, Sylvie. "France Recalls Ambassadors to US, Australia, over Sub Deal." AP News, 17 September 2021.

"Distinguished Book Awards." Society for Military History, accessed 5 December 2023.

Garramone, Jim. "Karlin Says US Can Support AUKUS Submarine Builds." *DOD News*, 25 October 2023.

Gelman, Andrew. "All Politics Is Local? The Debate and the Graphs." *FiveThirty Eight* (blog), *New York Times*, 3 January 2011.

Groppo, Veronica, and Stefano Vassollo. "Le tombe ei morsi ad anello dei cavalli morti nella battaglia di Himera del 480 aC" [The Graves and Ring Bits of the Horses that Died in the Battle of Himera in 480 BC]. *Notiziario Archeologico della Soprintendenza di Palermo* [*Archaeological Newsletter of the Superintendence of Palermo*] 52 (2020).

Grymes, Charles A. "Geology of the Fall Line." Virginia Places, accessed 26 April 2017.

"Joint Leaders Statement on AUKUS." White House Briefing Room, Statements and Releases, 13 March 2023.

Kuo, Lily, "China Accuses New U.S.-Australian Submarine Deal of Stoking Arms Race, Threatening Regional Peace." *Washington Post*, 16 September 2021.

"Kurze Anzeigen—Jahrbuch der neuesten und wichtigsten Entedkkeungen und Erfindungen" [Short Advertisement—Yearbook of the Latest and Most Important Discoveries and Inventions]. *Leipziger Literaturzeitung* [*Leipzig Literary Newspaper*], 28 December 1827.

"Life in a French Kitchen." *Once a Week* 2 (December 1859–June 1860).

McClure, Tess. "AUKUS Submarines Banned as Pact Exposes Divide between New Zealand and Western Allies." *Guardian*, 16 September 2021.

"Nuclear-free New Zealand." Ministry for Culture and Heritage, 2 October 2014.

Palmer, Russell. "New Zealand a Winner in AUKUS Agreement, but Risks Remain—Experts." Radio New Zealand, 16 September 2021.

"PM Statement on AUKUS Partnership: 15 September 2021." Government of the United Kingdom, 15 September 2021.

"Remarks by President Biden, Prime Minister Morrison of Australia, and Prime Minister Johnson of the United Kingdom Announcing the Creation of AUKUS." White House Briefing Room, Speeches and Remarks, 15 September 2021.

Renju, Jose, and Lucy Craymer. "New Zealand to Explore AUKUS Benefits, Boost Security Ties with Australia." Reuters, 19 December 2023.

Schmitt, Lt Frederick P., USN. "The Founding of the Supply Corps—February 1795." *Navy Supply Corps Newsletter*, February 1970.

Shelbourne, Mallory. "AUKUS Agreement Will Help Deter China from Taiwan Invasion, Says Former PACCOM CO." *U.S. Naval Institute News*, 20 March 2023.

Sparrow, Jeff. "The AUKUS Deal Is a Crime against the World's Climate Future. It Didn't Have to Be Like This." *Guardian*, 19 March 2023.

Storey, Ian, and William Choong. "The AUKUS Announcement and Southeast Asia: An Assessment of Regional Responses and Concerns." ISEAS: Yusof Ishak Institute, 29 March 2023.

"The French in Algeria." *New York Times*, 13 March 1855.

"The Industry of Manures." *Gardeners' Chronicle and Agricultural Gazette* 24, 20 August 1864.

"Traffic in Human Bones." *Spectator*, 7 November 1829.

"Ueber Verwertung der Abfälle (Fortiebung)" [About Recycling of Waste (Forecast)], *Gewerbezeitung: Organ für die Interessen des Bayerischen Gewerbstandes* [*Commercial Newspaper: Organ for the Interests of the Bavarian Business Community*] 13, no. 17 (1863): 66.

"Vieux os a vendre" [Old Bones for Sale]. *Le Charivari*, 7 December 1847.

Theses and Dissertations

Goldstein, Donald M. "Ennis C. Whitehead, Aerospace Commander and Pioneer." PhD diss., University of Denver, 1970.

Hamburger, Kenneth E. "Technology, Doctrine, and Politics of U.S. Coast Defenses, 1880–1945: A Case Study in U.S. Defense Planning." PhD diss., Duke University, 1986.

Koolen, Annelies. "Of Horses and Men: Developments in Greek Cavalry Training and Warfare (550–350 BC) with a Focus on Athens and Xenophon." PhD thesis, Radbound Universiteit, 2012.

Perrin, James K., Jr. " 'Knavish Charges, Numerous Contractors, and a Devouring Monster': The Supply of the U.S. Army and Its Impact upon Economic Policy, 1775–1815." PhD diss., Ohio State University, 2016.

About the Authors

Alexander Belovsky is a PhD candidate at Vanderbilt University in Nashville, TN, studying the effects of military discourse on national identity in nineteenth-century Europe. His work focuses on how French, German, and British discussions of past battlefields and contemporary warfare between 1815 and 1914 elucidated stark expressions of national identity. His ongoing dissertation project will show how overlooked debates about military memories and policies provided the context for some of the clearest expressions of national character during this transitional period in European identities.

Lisa M. Brady, PhD, is a professor of history and chair of the Department of History at Boise State University, ID. Her research focuses on war and environment, examining the ways in which military activities, both in times of peace and times of conflict, shape and are shaped by the natural environment. Her publications include *War upon the Land: Military Strategy and the Transformation of Southern Landscapes during the American Civil War* (2012) and articles in the *Environmental History* and *Diplomatic History* journals. She is the series editor of *War, Conflict and the Environment*. https://orcid.org/0000-0003-1818-7865

Lee L. Brice, PhD, is a distinguished university professor of history at Western Illinois University in Macomb, IL. His research focuses on mutiny and indiscipline in ancient militaries and Greek coinage and war. He has published multiple volumes on ancient military history, including *Brill's Companion to Diet and Logistics in Greek and Ro-*

man Warfare (with John Donahue, 2023) and *Women and the Army in the Roman Empire* (with Elizabeth M. Greene, 2024). He is working on a monograph about mutiny in the Roman army. He is the series editor of *Warfare in the Ancient Mediterranean World* and the senior editor of *Research Perspectives: Ancient History.* https://orcid.org/0000-0002-5100-092X

Michael Burns, PhD, is the wing historian with the U.S. Air Force's 366th Fighter Wing. He received his PhD in history from Texas Christian University in Fort Worth, TX, in 2018 and is currently writing an environmental history of Northern Virginia and the Second Bull Run campaign (1862) that explores the human-environment relationship both during and after the conflict. He previously worked as an editor for academic publications and as a seasonal ranger with Manassas National Battlefield Park in Virginia. He has published three scholarly articles on various topics related to the American Civil War.

Hal M. Friedman, PhD, is chair and professor of modern history in the History Program of the Department of Social Sciences at the School of Liberal Arts at Henry Ford College in Dearborn, MI, and both the recording secretary and the Midwest regional coordinator for the Society for Military History. He has published a trilogy on U.S. national security policy in the immediate post-World War II Pacific and another trilogy on the transition of the U.S. Naval War College from World War II in the Pacific to the Cold War in the Pacific.

Ryan Hom is a PhD candidate in the Department of History at the University of South Florida (USF) in Tampa, FL. His dissertation considers the development of a cultural approach to warfare in ancient Greek Sicily, as well as the application of digital technologies in the pursuit of ancient military history. He is also a staff member of the Institute for Digital Exploration at USF and is involved in fieldwork in Malta and Sicily. https://orcid.org/0000-0002-0275-2842

About the Authors

Walter E. Kretchik, PhD, is a professor emeritus of history at Western Illinois University in Macomb, IL. He specializes in U.S. Army doctrine, military interventions, and oral history. He has contributed to many scholarly books and published numerous articles and book reviews within academic journals. Significant books include *U.S. Army Doctrine: From the American Revolution to the War on Terror*, Modern War Series (2011), and *Eyewitness to Chaos: Personal Accounts of the Intervention in Haiti, 1994* (2016).

Rosemary L. Moore, PhD, is a distinguished associate professor of instruction in history and classics at the University of Iowa in Iowa City, IA. A former U.S. Navy officer, her research focuses on Roman military command. She wrote the chapter on "Generalship" in *The Oxford Handbook of Warfare in the Classical World* (2013) and has published articles and case studies on Roman aristocratic women, military command, and ancient military leadership. In addition to her research on military leadership, she is part of a team of classicists, veterans, and mental health professionals who lead reading groups for veterans based on Homer's *Odyssey*, with a book project in progress.

Stephen Morillo, DPhil, is a professor emeritus of history at Wabash College in Crawfordsville, IN. Initially specializing in medieval military history, he expanded his interests into global and comparative premodern military and cultural history. He has coauthored a world military history textbook and authored articles on world history and a world history textbook, *Frameworks of World History* (2014). His latest book is *War and Conflict in the Middle Ages: A Global Perspective* (2022). He is also a painter, cartoonist, chef, and sometime musician who lives in a retirement castle in Kalamazoo, MI. https://orcid.org/0009-0009-1694-8510

Timothy M. Roberts, PhD, is a professor and chair of the Department of History at Western Illinois University in Macomb, IL. He

researches nineteenth-century United States history, focusing on social and international aspects of the era of the American Civil War. He is the author of *Distant Revolutions: 1848 and the Challenge to American Exceptionalism* (2009). His most recent book is *"This Infernal War": The Civil War Letters of William and Jane Standard* (2018). In 2014, he was a U.S. Fulbright lecturer at Zhejiang University, China.

Lieutenant Colonel Michael H. Taint, USAF (Ret), served in the U.S. Air Force for 21 years in a variety of assignments, including missile operations, acquisition management, engineering and space launch operations, and headquarters staff officer. He holds master's degrees in political science from Wichita State University, KS, and computer science from the University of Dayton, OH. An independent scholar of military history, he has presented more than a dozen papers at various history conferences and is a member of the Society for Military History and the Ohio Academy of History.

James N. Tallon, PhD, is an associate professor of history at Lewis University in Romeoville, IL. He holds a PhD in Near Eastern Languages and Civilizations from the University of Chicago, IL. His research interests focus on conflict and state-building in the late Ottoman Empire and Turkey. He also has interest in the same issues in Southeastern Europe and North Africa. He is currently working on books concerning Ottoman Albania, 1910–12; imperialism in the Red Sea; and war and peace in the Eastern Mediterranean, 1905–25. https://orcid.org/0009-0004-0442-9928

The expansion of trade and communication net-
works has been active since the fifteenth century
and has had an undeniable impact on connecting mil-
itary activity around the world. This fact is visible in the
historical record, but has it in the last several decades
transformed the historiography of military history?
The Boundaries of War offers a discussion on whether
the transnational turn in historical scholarship sug-
gests that all warfare is derivative of larger global pat-
terns, or if there are local, regional, or national "ways
of war" that differentiate conflict within that certain
geographical space, which historians should ac-
knowledge. The authors consider how much military
historians should focus on local or idiosyncratic fac-
tors to explain their subject matter and whether they
should consider global phenomena in their research.