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To Starve an Army: How Great Power Armies Respond to Austerity

John W. Hall

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How have military institutions in great powers adjusted to severe budget constraints in the past? What can we learn for today?

As the United States slowly crawls its way out of a global recession, extracts itself from the longest war in American history, and attempts to resolve a colossal (and partly derivative) deficit, few responsible observers question the prudence of cuts to the American defense budget. On the magnitude of such cuts or where they should fall, however, there is less agreement. Since 2013, America's armed services have contended with the fiscal bogeyman "sequestration" and jockeyed against one another for their respective slices of a diminishing pie. Grown fat by supplemental funding and a favorable base budget over more than a decade of war, the US Army has found that the navy and air force have closed ranks against it, offering operational concepts that promise to secure America's future interests with high-tech capabilities that are at once economical and alluring. The army, meanwhile, is relegated to its traditional role of waging conventional or counterinsurgent wars and occupying terrain—competencies for which Americans presently have no enthusiasm, whether because of their high cost and meager dividends or (in the case of conventional warfare) their perceived irrelevance to the future operating environment. Compounding the army's problem is its own rhetoric regarding civilian soldiers over the past forty years. Having extolled the virtues of the National Guard and the Army Reserve in order to grow these components, the army must now justify the preservation of a large regular force to do things that part-time soldiers seem capable of doing for a fraction of the price. Thus, it appears inevitable that while all of the services will have to surrender their pound of flesh, the army will have to give several.

The army's protestations to the contrary, this is not necessarily a bad thing. To a far greater extent than the other services, the army relies on the most expensive element of American force structure: manpower. Historically, Americans have been loath to pay for big armies in times of relative peace because, despite their positive impact on local economies, they represent torrential drains on public revenues without offering any appreciable return on the nation's investment, save in the exceptional event of war. When it erupts, the republic pours funds into the army for the duration of hostilities—and cuts them off once they have concluded.

Having endured it for nearly two and a half centuries, the US Army is very familiar with this cycle but protests that it hardly provides a model for sustainable national security. In the mid-1980s, the army commissioned an edited volume titled *America's First Battles*, in which respected military historians examined the army's performance in the first engagement in each of America's major wars. With only a handful of exceptions, the army performed very poorly, and the principal inference by the volume's editors was that, by their misguided frugality, the American people and Congress had routinely set their army up for failure. The book found a receptive audience among army officers, making its way onto the Chief of Staff of the Army's reading list and burrowing itself into the curricula at nearly every level of professional military education.¹ Perhaps the most assigned chapter from the volume is Roy Flint's survey of the US Army's abysmal performance at the beginning of the Korean War. The United States threw an understrength, poorly trained battalion in the path of a North Korean juggernaut that brushed aside "Task Force Smith" and the rest of the 24th Division and nearly completed its conquest of the Korean Peninsula.² Particularly after the Cold War, army leaders used the expression "no more Task Force Smiths" to warn about the dangers of cutting army spending too drastically or assuming that ground combat power would not be needed again in the future.

But the other "lessons" we might draw from *America's First Battles* are more ambiguous. After all, the United States categorically lost only one of the wars addressed in the volume. Ironically, the American army that deployed *en masse* to Vietnam in 1965 was one of "the best-equipped armies in history."³ Conversely, the United States' most sweeping and complete

victory—that over Mexico in the mid-nineteenth century—was won by a perpetually underfunded and widely maligned army that surprised everyone with its magnificent performance.⁴ So whatever lesson army leaders and their lobby would *like* for us to draw from history, one point seems clear: robust peacetime spending is no guarantee of future performance or, for that matter, salutary to national interests. Far more important than the gross flow of dollars to the army or other elements of the defense establishment are the ways that those dollars are put to use.

Rather than revisit each of these chapters of American history to evaluate the prudence of interwar defense allocations, this chapter will examine two broad case studies that bear certain similarities to the current fiscal and strategic environment. Broadly speaking, retrenchment in defense spending occurs for one of two reasons, sometimes in combination: economic considerations create an imperative for cost savings, or a nation's assessment of the strategic situation warrants a reduction in military capabilities or capacities and, by extension, expenditure. Arguably, the United States presently finds itself in both situations; the relevant question now is not *whether* the nation should cut defense spending but rather how deeply and at the expense of what capabilities.⁵

To shed some light on these questions, this chapter will examine how effectively the armies of several great powers responded to the austerity of the 1920s and the Great Depression and how the US Army in particular dealt with the Eisenhower administration's discretionary cutbacks under the "New Look" of the 1950s.⁶ Collectively, these case studies suggest that responsibility for the prudent commitment of scarce resources is shared by civilian policymakers (and the domestic constituencies to which they answer) and military leaders who develop doctrine and capabilities. Perhaps not surprisingly, nations fare best when they enjoy a reasonably accurate estimate of the strategic situation; a consistent, feasible strategy for safeguarding national interests; and the military capabilities to implement it.

No less surprisingly, nations rarely draw such a winning hand. Indeed, its essential components—strategic clarity and doctrinal flexibility—are largely countervailing forces, one

achieving its fullest realization only at the expense of the other. Nations facing a single strategic threat are prone to construct military capabilities optimized for that threat alone, while those confronted with an ambiguous strategic environment are likely to hedge their bets, building a range of general (and sometimes competing) capabilities optimal for no single contingency. Each course is fraught with danger. In the former case, any misreading of the strategic situation or misjudgment of the military capabilities required to meet it can result in catastrophic failure (such as France endured in 1940). On the other hand, jacks of all trades are usually masters of none—unless they possess the time, perspicuity, and resources to reorient on threats as they become salient. Complicating matters further, the militaries of democratic nations are rarely able to devise their capabilities in a theoretical vacuum, for they are beholden to public sentiments born of recent conflicts and borne by emotion as much as reason. Similarly, military services are prone to subordinating genuine requirements to parochial interests when they perceive political-fiscal threats to their wellbeing.

It is therefore not surprising that history is replete with examples of nations and armies that fail to prepare adequately for the future, however astute their reading of the strategic environment. Of the five cases examined here, not one may be judged an unqualified success story, and in no instance were shortcomings attributable solely or even primarily to inadequate peacetime spending. Raw levels of funding proved less important than the projects to which armies applied their limited resources. Ultimately, the nations that fared best possessed armies with learning cultures and enough political security to tolerate—indeed, harness—ambiguity, dissent, and innovation. They also enjoyed enough freedom from operational demands to undertake serious reflection and experimentation. Unfortunately, the United States Army today is overextended in the role of a global constabulary even as many Americans question the need for substantial ground forces. Although it tries to look to the future, the army is preoccupied with threats to its immediate front—and bottom line. Compounding matters, American partisan politics no longer stop at the water's edge, making it increasingly difficult to craft a consensus strategy and identify the requisite military capabilities. To achieve sustainable security, the

United States will have to contend with each of these problems, the most pressing of which is the need to define strategic requirements that realistically serve American interests and ideals.

GERMANY IN THE INTERWAR PERIOD

While sustainable security demands strategic clarity and doctrinal flexibility, these attributes are by themselves insufficient guarantors of national ambition, which may itself be irrational and self-defeating. Such was the case with Germany, which enjoyed exceptional strategic clarity (shared broadly by the national leadership, the military, and society at large) and an almost mythological military culture of innovation. Yet Germany suffered complete defeat by the summer of 1945 because Hitler miscalculated the military and industrial means required to achieve his otherwise-clear strategic vision of overturning the Versailles Treaty and establishing Germany as a global hegemon.⁷

From a strictly military point of view, however, the German Army was more successful than any other great power military establishment at anticipating the requirements of the next war and—despite crippling austerity measures imposed at Versailles and exacerbated by the Great Depression—building the requisite military capabilities. The army certainly benefitted (at least in the short run) from the ascension of Adolf Hitler to Reich Chancellor in 1933 and his aggressive rearmament program, but the money Hitler lavished on the *Wehrmacht* was akin to water spread over seeds planted years earlier. Hitler neither planted these seeds nor, in the case of the army, had any substantive role in their development.⁸ The foundations of that force had been laid a decade earlier by a generation of officers determined to both learn from and rewrite the history of the Great War.

Stereotypes notwithstanding, most German were not technophiles hoping to manufacture a “revolution in military affairs” that would render obsolete the lessons of the past. To the contrary, the German doctrinal renaissance of the interwar period was a product of intense historical study, opportunity afforded by the Versailles Treaty (which wiped clean the German army’s slate), and an abiding desire on the part of the military to overturn that treaty.

Ironically, the austerity imposed by the Treaty of Versailles in some ways, at least, fostered doctrinal innovation in the German Army. Firstly, it deprived that force of the matériel of modern warfare, which allowed the staff to envision ideal technological solutions to future operational problems rather than binding them to stockpiles of legacy equipment. To bend Donald Rumsfeld's infamous phrase, Germany would not have to go to war with the army *it had* because it had no army to speak of. Instead, it could design the army it *wished* it had—and build it once Hitler provided the funding for rearmament. Similarly, the absence of a large body of men under arms relieved the officers of the *Reichswehr* of responsibility for training those men and allowed them more time for theoretical-doctrinal reflection.⁹

The Germans established a deserved reputation for tactical ingenuity and imagination during the Great War.¹⁰ By 1918, the German Army had essentially arrived at its doctrinal solution for restoring mobility and operational maneuver to the battlefield. Yet despite unprecedented success (as measured in depth of penetration) in their 1918 spring offensive, the Germans could not maintain offensive momentum or translate tactical gains into operational success. How to solve this problem became the overriding concern of the German Army's General Staff after the war.¹¹ Its chief, General Hans von Seeckt, commissioned no less than fifty-seven committees to study the “lessons” of the last war.¹² Out of this ferment arose a commitment to restoring mobility to the battlefield.¹³ While their own experience in motorization and mechanization was limited, the Germans were profoundly impressed by the potential of the tank as demonstrated by the British in 1918.¹⁴ Versailles Treaty restrictions reduced the Germans to conducting armored warfare experiments with cars fitted with prosthetics that made them look like tanks, but it did not prevent them from paying close attention to the experiments of other nations, especially the United Kingdom. The Germans devoured the writings of British armor pioneers J.F.C. Fuller and Basil Liddell Hart and keenly observed the British Army's realistic experiments in the late 1920s. In 1935, the commander of Germany's first *Panzer* unit was entirely sincere when he told Sir John Dill “with some pride that the German tank corps had been modelled on the British.”¹⁵ Soon afterward, the British lost

their enthusiasm for the tank while the Germans assumed the global lead in developing armored formations and doctrine.¹⁶

This is not to say, however, that all German commanders were sold on the revolutionary potential of the tank. Whereas General Heinz Guderian and his disciples forwarded an “armored idea” of rapid, strategic penetrations by panzer units, the senior leadership of the Germany Army remained committed to a more traditional strategy of annihilation carried out by a mass army. Guderian railed especially against the apparent conservatism of Chief of the General Staff Ludwig Beck (1935-1938), whom he accused of retarding the development of Germany’s armored potential and rejecting a supposedly superior form of war. So blinded was Guderian by his enthusiasm for the armored idea that he failed to appreciate its risks, limits, and (for Germany in particular) unbearable costs. With a better appreciation of the German Army’s logistical limitations and strategic vulnerability, Beck rejected Guderian’s radical vision but underwrote continued experimentation and development of mechanized forces, generating the army that enjoyed so much operational success in 1939 and 1940. If he was not a revolutionary himself, he was hardly a reactionary. Nor did he (or for that matter von Seeckt) insist upon a single doctrinal template without room for dissent or innovation. “What separated the German army from the other European armies,” writes Williamson Murray, “was the fact that most German army leaders, while remaining skeptical about the armor school’s extravagant claims, acquiesced in the development of the new arm.” Once this arm demonstrated its potential in combat, former opponents (among them Erwin Rommel and Gerd von Rundstedt) were quick to change their positions and become champions of the new capability, which they continued to refine through rigorous after-action reviews.¹⁷ This open-mindedness and commitment to professional learning extended to all other domains of the German army, and largely explains its astonishing success throughout the first two years of the war.

But tactical acumen obscured fundamental problems that ultimately spelled defeat for the Third Reich. In 1938, Hitler purged the senior leadership of the army (prompting Beck to resign in protest) and began replacing military professionals with fanatics and stooges. Yet this is not to

suggest that German Army officers were blameless in the tragedy that befell their nation. According to Manfred Messerschmidt, the Weimar-era army “laid the foundation for political military order that aimed at ignoring the aims and values of republic in order to organize a thoroughly militarized society and a modern army ready to wage an industrialized war.”¹⁸ Thus, the officers of this army were more than receptive to Hitler’s aggressive rearmament programs—but thoroughly disappointed to learn that they had no strategic voice in the Third Reich.¹⁹ From 1936 through the commencement of the Second World War, moreover, rearmament occurred in a void of strategic planning and guidance. There was perfect clarity when it came to the strategic ends desired, but none whatsoever when it came to the ways and means required to achieve them. Predictably, the various services of the *Wehrmacht* gobbled up whatever funds Hitler fed them, building forces that served their professional ambitions more than any unified strategy (which Hitler kept to himself). When Hitler at last committed these forces, none of them were deemed operationally ready by their commanders, who had been left to speculate (or fantasize) about their ultimate role.²⁰ Perhaps the least prepared was the German Navy, prompting its commander, Erich Raeder, to exclaim in 1939, “the navy is not ready for the great fight with England. The only thing the fleet can do is to prove that it can sink honorably.”²¹

Nevertheless, the army and *Luftwaffe*’s exemplary performance in the first years of the war is a testament to a professional military culture that *had* distinguished Germany from its adversaries. More ably than most, they reexamined the apparent lessons of the Great War and synthesized a new (if not revolutionary) vision of modern warfare. Strapped for resources, they read widely and carefully observed the experiments of other nations. Whether or not the German military actually benefitted from the forced austerity of the Weimar era, the paucity of resources certainly did not hinder its ability to innovate. Unfortunately for the rest of Europe, Germany drew not only tactical and operational lessons from the Great War but also the ill-begotten moral lesson that it had endured an historic injustice. With currency across most of German society, this “lesson” engendered a strategy that was as clear as it was morally bankrupt.

FRANCE IN THE INTERWAR PERIOD

Of course all nations derived their own moral lessons from the Great War; that which predominated amongst the western Allies was “never again.” Victory had come at such an immense human and material cost that it seemed war was no longer a constructive tool of statecraft, let alone the gymnasium of fit nations extolled by fin-de-siècle intellectuals. None of these nations had sacrificed or suffered more than France, yet France alone among the western allies could not simply withdraw from the Continent and make “never again” a functioning component of national strategy.

France provides perhaps the most interesting case study, as it maintained the highest level of defense spending throughout the interwar period and yet had the least to show for it once the smoke cleared. The failure was clearly *not* one of failing to anticipate strategic requirements. Despite the trauma of the Great War, all French political and military leaders recognized the imperative of preparing for another war with Germany. Nor did they underestimate the potential power of a rearmed Germany. Indeed, they assumed that, in the next war, Germany would again mobilize the entirety of its society to launch an offensive against France, which prepared itself accordingly.

With only a single contingency to plan for, we might well wonder how the French got it so wrong. We may discount out of hand the popular explanation that France was so traumatized by the experience of the Great War (and, in particular, the bloodletting at Verdun) that it adopted a passive, defensive strategy that was bound to fail when tested by the “revolutionary” Blitzkrieg methods of the Germans. After all, the Germans also fought at Verdun and, in fact, suffered more dreadfully. If the psychological scars on France were for some reason more severe, we would expect to see this reflected in their post-war military doctrine—but we do not. Indeed, according to Eugenia Kiesling, “Few armies have emerged from a major war with greater confidence in the future than the French Army felt in 1918.”²² For the next ten years, moreover, French military leaders generally embraced (albeit not without some dissent) an offensive doctrine, and their war plans envisioned the strategic penetration and division of Germany.²³

Yet where was this confidence and offensive spirit in 1940? Some scholars blame the French Left, which assumed control of the government in 1924 and, they contend, committed a pair of cardinal errors. The first, according to Elizabeth Kier, was to reduce the term of conscription for the French Army to twelve months out of an abiding mistrust for professional (and presumably fascist) forces. Deprived the ability to properly train and indoctrinate their troops, officers of the French High Command scotched their plans for an offensive war against Germany in favor of a static defense—with doleful consequences in May and June 1940.²⁴ According to Williamson Murray, the Leftist government compounded this error by allocating insufficient resources to rearmament after 1935, setting back the development of French armored and air forces. “Unfortunately, French military leaders *never* confronted political leaders about the serious imbalance between requirements and funding levels.”²⁵

But these explanations are insufficient by themselves, and they shift too much blame to the usual patsies for military disasters: Leftist politicians. It is quite true that the French High Command preferred that professional soldiers make up a larger component of the French army and that they felt that two years were necessary to transform reservists into effective soldiers. But no one in France (save the iconoclast Charles de Gaulle) envisioned any defense policy that did not rest almost entirely on a massive conscript army.²⁶ Moreover, the Popular Front government actually gave the French military *more* resources than they requested.²⁷ According to Robert Doughty, “the dominant characteristics of relations between civil and military leaders between 1919 in 1939 were of accord and accommodation, rather than discord and defiance.”²⁸ Indeed, if there were problems in civil-military relations in the interwar period they were that the French government deferred *too much* to military judgments and that the French army suspended disbelief regarding manpower policy rather than intrude on the civil domain.²⁹ Finally, the shift to a predominantly defensive strategy had as much to do with the withdrawal of French forces from the Rhineland and the construction of the Maginot Line as it did changes to the conscription law. Throughout the interwar period, a consistent imperative was to fight the next war somewhere other than France. With the Maginot Line protecting France’s Rhine frontier,

the French army no longer had to rush into Germany to save the French people the horror of another war fought on French soil. Instead, it merely had to win a race into Belgium, where it would occupy defensive positions and wait for the inevitable German attack. After letting the Germans wade against torrents of overwhelming firepower for two or three years, the French and their allies would launch a counteroffensive and complete the destruction of a battered and demoralized German force.³⁰

Despite Barry Posen's postulation that defensive doctrines are less expensive than offensive ones, this concept required the commitment of substantial resources, and one French general advocated an offensive alternative on the grounds that it was more economical.³¹ Channeling the Germans into Belgium and defending the French heartland demanded the construction of the exorbitantly expensive Maginot Line, which (popular memory notwithstanding) performed exactly as intended. Winning the race to the Belgian frontier, moreover, required the development of expensive mobile forces. Accordingly, the French fielded the world's first truck-borne infantry units and armored division.³² Although the French strategy generally depended on quantity over quality, the French Army sometimes achieved both. When Germany invaded in 1940, the French had more tanks than the Germans, and their SOMUA-35 was the best on the battlefield.³³ Such capabilities did not come cheaply. Indeed, from the conclusion of the Great War until 1935, no World War II combatant spent as much of its GNP on defense as France. The Depression momentarily set French defense spending back to 1927 levels, but by 1938 the French were spending (in real francs) 2.6 times as much on defense as they had on the eve of the Great War.³⁴ Despite his criticism of laggard French rearmament in the 1930s, even Williamson Murray acknowledges that "The problem...was not so much a lack of funding, but rather how the French prepared."³⁵

In their preparation for the next war, the French were no less attentive to the past than were the Germans, but they derived what we might call "negative" lessons from the Great War. Whereas the Germans focused their attention on possibilities that were not quite within their grasp during that conflict, the French instead fixated on the apparent constraints of

industrialized warfare. At the level of policy, the French military and government concurred that any future war with Germany would be total in nature, requiring the complete mobilization of French society. In their experience, there was no longer room for partial mobilizations or limited war waged by small professional forces. Thus, when Germany remilitarized the Rhineland in 1936, France had two options: mobilize the entire nation for war or acquiesce. It chose the latter. In the strictly military domain, the French learned one overriding lesson from the Great War: firepower kills. Unlike the Germans, French officers were content to plumb to the past for truisms such as this and did not undertake genuine historical studies of the Great War. Consequently they failed to perceive that technology, which had created the stalemate on the Western Front, also had the potential to restore maneuver to the battlefield.³⁶ Instead, French officers predicted that advances in technology would only compound the horror of the Western Front many times over.

These lessons—although drawn from a past shared with Germany—took the French Army in a completely different direction. Whereas the Germans assumed that armored and air formations would make operational penetrations and exploitations feasible once more, the French concluded that attackers would wreck themselves on walls of concentrated firepower. In the German conception, the key to success was decentralizing command and control so that subordinate commanders could develop the situation and seize opportunities as they developed. Conversely, the French assumed that they could position their conscript units and mass their fires only by centralized command and control. The result was a doctrine of “methodical battle,” which—as the name implies—was very nearly the polar opposite of what the Allies would term “Blitzkrieg.”³⁷ Judged by the blinding light of May 1940, historians have been quick to assert the superiority of the German method. Yet as Douglas Porch reminds us, the German “Blitzkrieg” faltered after two years and some version of the much-maligned “methodical battle” eventually carried the Allies to victory.³⁸ Nor have historians convincingly suggested that some alternative strategy or doctrine was more appropriate for France in 1940; had the French Army actually been trained in its doctrine, the outcome might have been much different.³⁹

Ultimately France fell not because of inappropriate strategy or inadequate funding but because fragile civil-military relations inhibited professional discourse and learning. Whereas the German Army enjoyed a revered station in its society and could subordinate purely parochial concerns to professional inquiry, the French military was much less secure. Although the historical tension between the rightist officer corps and the Left relaxed somewhat during the interwar period, military leaders proved unwilling to challenge French military policy for fear of upsetting the *détente* they had achieved. Hence, while officers knew that the government's manpower policies (which were, in fact, predicated on a mistrust of the military) precluded the army from adequately training either individual conscripts or the units in which they would serve, they dared not protest. Similarly, a staff college established in 1936 to provide the nation with civil and military experts to superintend the nation's mobilization for total war deliberately avoided the sorts of exercises and wargames that might have laid bare the weaknesses of French military policy.⁴⁰ Nor would the army tolerate critical reappraisal of the French doctrine of methodical battle or the place of tanks within it. Out of fear of repeating the bloody mistakes of the last war and subjecting itself to renewed attacks from the Left, the high command squashed dissent, requiring officers on active duty to submit virtually any writings on modern warfare to the Ministry of War for approval.⁴¹ Politically insecure, the French Army was unwilling to ask uncomfortable questions and thereby deluded itself (and most foreign observers) that it was ready for the impending showdown with the Wehrmacht.⁴²

GREAT BRITAIN AND THE UNITED STATES IN THE INTERWAR PERIOD

Whereas France's shared boundary with Germany provided the war-weary French with an imperative to prepare for the next war, Great Britain and the United States could withdraw beyond the English Channel and the Atlantic and vow "never again" with sincerity. In both nations, isolationist and pacifistic sentiments rose while defense budgets fell. With far-flung and largely insular empires to maintain, the navies of each nation retained a clear sense of purpose and at least a modicum of funding. The US and British armies, however, enjoyed neither. A

shared Whig political tradition rooted in seventeenth-century England contributed to a historical mistrust of the army in each nation, and neither the disappointments of the Great War nor the Great Depression did anything to improve the soldiers' standing in either society. Not that the soldiers knew exactly where they stood or were supposed to stand in the event of another war. The strategies of the two nations were remarkably similar, each affording priority to the defense of the homeland and the preservation of their overseas empires but generally forswearing another Continental, great-power war.⁴³ As a consequence, both nations maintained capable (albeit insufficient) naval forces during the interwar period but left their ground forces starved for resources and otherwise to their own devices. In the latter regard the two armies provide a study in contrasts, as the Americans navigated austerity more successfully than their British cousins thanks to a marginally better organizational culture and the blessings of geography.

The British Army

After the Great War, Britons resolved to never again relive its horrors and substituted the sentiment “never again” for a viable strategy. Such a strategy asked very little from the British military, which in turn could expect very little from Parliament. All of the services were neglected, but none more so than the army. The “Mistress of Seas” enjoyed both a robust lobby and a special place in Britain’s conception of itself as an empire, and the Royal Air Force captured the imagination—and with it the solicitude—of the British people.⁴⁴ But while the Royal Navy and Air Force represented the ghosts of British military greatness past and future, the British Army remained nothing more than a necessary evil. Exactly *why* it was necessary remained open to question—even within the army. According to one defense planner, “the salient difference between us and Germany... [is that] they know what army they will use and, broadly, how they will use it and can thus prepare... in peace for such an event. In contrast, we here do not know what size of army we are to contemplate for purposes of supply preparations between now and April 1939.”⁴⁵

When Britain began rearming in 1935, it hoped to deter Japan and Germany with seapower and airpower, respectively. Having withered on the vine for nearly twenty years, the

British Army was unfit for actual deployment by design. It therefore was unconvincing as a deterrent and received minimal funding even as Europe rearmed.⁴⁶ Neville Chamberlain did nothing to improve the situation upon becoming prime minister in the spring of 1937. Instead, he decisively committed Britain to a strategy of “limited liability,” reaffirming the following priorities: (1) defending the British Isles, (2) protecting trade routes, (3) maintaining the Empire, and (4) upholding obligations to allies. In no case could Chamberlain envision a situation that required the commitment of a large British ground force to the Continent, so he slashed £70 million from the army’s budget even as Germany was building a juggernaut in plain view.⁴⁷ Although British Army officers themselves had extolled the virtues of a strategy of limited liability, *de-armament* was, under the circumstances, too much to bear quietly. After all, Chamberlain’s top priority—protecting the home isles—demanded the capability to keep Channel ports in the Low Countries out of German hands. Their French allies shared this objective but depended on the contributions of Belgium, which declared neutrality in 1936, and Great Britain, which foreswore Continental intervention in 1937. In short, Chamberlain had opened cavernous capability gap and left the army without the means of closing it. Its leaders duly protested, albeit meekly considering the gravity of the situation. The fact of the matter was that most British officers shared their countrymen’s aversion to preparing for another Continental war. “In fact,” conclude leading scholars of the interwar British Army, “the whole sorry story of the interwar period suggests that British military institutions, like British society in general, made every effort to escape the realities of the last war and to forget the hard lessons of that conflict.”⁴⁸

Thus, while the British government (particularly under the leadership of Neville Chamberlain) may be faulted for providing the British Army with inadequate funding, the army itself was culpable for a complacent, unprofessional service culture that retarded strategic thought and doctrinal innovation. The British Army did not undertake serious study of the Great War until 1932. When the new Chief of the Imperial General Staff, Field Marshal Archibald Montgomery-Massingberd, found the results unflattering to the British profession of arms, he

suppressed the report.⁴⁹ This is not to say that the British Army was devoid of intellectual talent during the interwar period, but it lacked both the means and motivation to harness it. As already addressed, the Germans built their armored formations and doctrine largely by reading the seminal works of Britons J.F.C. Fuller and Basil Liddell Hart. Their ideas were too radical for the conservative hierarchy of the British Army, however, and few senior commanders paid them much heed in matters of tactics.⁵⁰ One exception was Field Marshall Sir George Milne who, during his 1926-1933 tenure as CIGC, underwrote some of the most demanding and realistic armored experiments ever conducted. Unfortunately, the armored warfare pioneers were displeased by Milne's measured approach and the (far more numerous) skeptics were unimpressed by the demonstrated potential of the tank. Once Milne left office, the British Army largely abandoned the development of armored doctrine and forces.⁵¹ In 1938, the British Army allocated less than £8 million for the acquisition of tracked vehicles – and over half as much for horse fodder! The following year, British Army cashiered one of its most innovative armored commanders, General Percy Hobart, who had been in Egypt training the 7th Armoured Division. Although Heinz Guderian recognized Hobart's genius and had his writings translated to German, the British cavalry establishment (and their allies in Parliament) considered Hobart a heretical nuisance. "The Army must stand together and show a solid front to the politicians," admonished one CIGS.⁵² Hobart did not relent, and by 1940 he found himself a corporal in the Home Guard. The force he had trained went on to win glory and distinction as the "Desert Rats."⁵³

For the most part, however, British feats of arms during the Second World War resulted from (in Lord Tedder's words) "an excess of bravery and a shortage of brains."⁵⁴ The venerable British military historian Michael Howard has acknowledged that the interwar British Army "contained a high proportion of men of deep and far-ranging intelligence," but he questions how much influence these men wielded in an establishment that was "as firmly geared to the pace and perspective of regimental soldiering as it had been before 1914." "Too many of its members," Howard concludes, "looked on soldiering as an agreeable and honourable occupation rather than

a serious profession demanding no less intellectual dedication than that of the doctor, the lawyer, or the engineer.”⁵⁵ Part of the problem was the British regimental system, which promoted esprit but did little or nothing to advance modern notions of professionalism.⁵⁶ “They are such nice chaps, socially,” Hobart wrote of his subordinate officers before his relief. But they were “so conservative of their spurs and swords and regimental tradition” that it was hard to get any real work out of them. For this leisurely lifestyle, the soldiers of the British Army paid a steep price during the Second World War.

Yet it is perhaps too easy to caricaturize the “gentleman-officers” of the British Army and to hold them exclusively accountable for its lackluster performance in 1940 and afterward.⁵⁷ Fundamentally, Britain’s disappointments during the Second World War were a product of leaders—political and military—willfully misreading the nation’s strategic requirements and failing to generate even a modicum of the military capabilities needed to fulfill them. Whether a more professional officer corps might have more carefully studied the past and developed appropriate, skeletal capabilities during the lean years is largely beside the point. The entire nation was in the thrall of a powerful moral lesson that precluded a rational assessment of the nation’s strategic situation until the last moment. Then, the British adopted the most rational strategy available: they turned to the United States for deliverance.

The US Army

Like their allies, most Americans were thoroughly disillusioned with the dividends of the Great War. While their sacrifices paled in comparison to the other combatant nations, none of the domestic constituencies Woodrow Wilson cobbled together to support the war got what they wanted out of it.⁵⁸ Disillusionment with the outcome collided with fiscal retrenchment to create a climate of austerity that, according to Army Chief of Staff Peyton March, punished the US Army more severely than the Versailles Treaty had the Germans.⁵⁹ After their 1924 convention, Republican Party leaders crowed that “our standing army is now below 125,000 men, the smallest regular military force maintained by any great power.”⁶⁰ The consequences for the readiness of that force were perhaps predictable. According to Russell Weigley, “the Army

during the 1920s and early 1930s may have been less ready to function as a fighting force than at any time in its history.”⁶¹ The situation had not materially improved by the beginning of World War II. According to the relevant chapter of *America’s First Battles*, “the US Army was still seriously undermanned and underequipped, practiced obsolete procedures with outmoded weapons, and from 1933 ranked seventeenth in size among the armies of the world.”⁶²

Yet within three years, this army would prove itself capable of conducting large-scale combat operations against veteran German forces and demonstrate a capacity for operational learning that eluded most other forces. How did this come to pass? Did the Americans, like the Germans, commit themselves to the rigorous study of the Great War and devise concepts that required only the addition of dollars to blossom into an effective warfighting doctrine? Not quite. Instead, the US Army squandered much of the interwar period by maintaining the hulks of understrength divisions and clinging to doctrine that would have little place in the Second World War. The American army provided an intellectual climate that was somewhat (and sometimes) more receptive to new ideas than that of the British Army, but it performed better in the Second World War largely due to factors beyond its institutional control. Alone among the interwar cases examined here, the US Army did not *need* to be ready for a European war in 1939. Ultimately, it performed better than the British Army because it had more time and space to prepare.

Like the Germans, the Americans studied the “last war,” but they did so without the introspective curiosity born of defeat. Studies abounded, but different officers embraced whichever lessons resonated with them most. Officers who had endured frontline combat frequently emphasized the importance of firepower to modern warfare while traditionalists and many senior commanders asserted that the war had validated the Americans’ prewar doctrine of infantry-centered “open warfare.”⁶³ These divergent interpretations were reflected in two of the army’s most important doctrinal publications of the interwar era, the 1923 edition of *Field Service Regulations* and the 1930 *The Manual for Commanders of Large Units*.⁶⁴ Citing “the glaring inconsistencies in doctrine” reflected in those two publications, one chief of infantry complained

that they were “based on two distinct military philosophies as opposite as night and day.”⁶⁵ The army’s belated effort to resolve these discrepancies, *FM 100-5, Tentative Field Service Regulations, Operations* (1939), amounted to little more than an expanded version of the 1923 manual. It failed to account for any significant military advancements since World War I and had no bearing on the army’s materiel acquisition strategy.⁶⁶ As a consequence, the US Army would deploy to North Africa with outdated, contradictory doctrine and equipment reflecting the traditional American preference for highly mobile operations. The consequences for American tankers and tank destroyer crews were dreadful.⁶⁷

They were not, however, strategically significant. Indeed, General Dwight D. Eisenhower was unaware his tanks were inferior until late 1944.⁶⁸ Ultimately, the Americans improvised a combined arms doctrine that mitigated the army’s failure to develop it (and better armored vehicles) before the war. Yet why, with so much time to observe developments in other countries and to prepare for an explicit strategic threat did the US Army fail to do so? According to one historian, the blame falls largely on the US Congress, which assigned the army immense responsibilities in the 1920 National Defense Act yet subsequently cut defense spending to the bone.⁶⁹ Nevertheless, army leaders own responsibility for the decision to prioritize force structure and end strength over all other concerns. A principal reason for this decision was the US Army’s traditional fixation on manpower policy. Since the 1790s, army leaders had lobbied for more control of militia regulation and training, but they made little headway against the popular view that un-indoctrinated citizen soldiers were paragons of republican virtue. These popular prejudices slowly eroded over the course of the nineteenth century and were, by 1920, at last subordinated to reason. The National Defense Act of that year provided for a three-tiered mobilization scheme comprising the active duty US Army, the National Guard, and a skeletal Organized Reserve. The army was to maintain nine full-strength divisions and was responsible for the training of the Guard and Reserve units assigned to its nine corps commands. Unfortunately, Congress began whittling away the end strength of the army as early as 1921. By 1927, less than 120,000 men filled formations designed for 280,000. Rather than reduce the

number of formations, the army clung to its nine divisions, compromising not only their deployability but also their ability to conduct realistic training.⁷⁰ Indeed, “[b]y 1939, the Army had virtually forgotten how to conduct training on a broad scale.”⁷¹

As Army Chief of Staff from 1930 to 1935, Gen. Douglas MacArthur had tried to address this problem by focusing resources on select units that would form an “Instant Readiness Force.” He also instituted a research, development, and re-equipment program designed to improve the army’s material readiness, but MacArthur could stretch sparse funds—and his imagination—only so far.⁷² He foresaw the potential of motorized warfare but opposed spending army money on research and development or “expensive toys” (such as tanks) because, in the event of war, America’s automotive industry would provide the requisite hardware. When, according to Brian Linn, “congressional reformers tried to cut personnel and obsolescent organizations in order to fund tanks and airplanes, MacArthur fought them with a crusader’s zeal.”⁷³ MacArthur retarded the development of armored doctrine by disbanding an experimental mechanized force in 1931 and relegating its future development to the Cavalry and Infantry Schools. In 1928, the General Staff had entrusted the direction of this force to its brilliant operations officer, Major Adna R. Chaffee, Jr. His command consisted of little more than the decrepit relics of the last war, yet he was able to recognize the potential to create a wholly new combat arm characterized by speed and shock power. By letting the Infantry and Cavalry schools generate their own concepts, MacArthur essentially placed Chaffee’s vision at the mercy of branch parochialism. Nevertheless, Chaffee was retained first as the executive officer and later as the commander of the Cavalry School’s test outfit, the 7th Cavalry Brigade (Mechanized). In this capacity, he was able to further his own ideas against organizational conservatism. When General George Marshall reversed MacArthur’s decision and constituted a new Armored Force in 1940, Chaffee commanded it.⁷⁴

To the credit of the US Army, it empowered Chaffee to develop an American vision for independent mechanized warfare even when the chiefs of staff, cavalry, cavalry and infantry viewed tanks merely as tools for the traditional branches. To Chaffee’s credit, he continued to

toil within the system and make a difference rather than making himself a pariah (as in the cases of de Gaulle and Fuller).⁷⁵ It is worth considering the extent to which the United State's relatively "free security" provided the space for competing ideas to coexist and compete. Outside those forces assigned to the Pacific theater, the army did not design their capabilities against a single most-likely threat.⁷⁶ Undeniably, American forces paid a heavy price for mismatched doctrine and equipment, but the consequences might have been much worse had army leaders (like the French) actually achieved a unitary vision of future warfare. Whether by design or accident, ambiguity allowed the development of competing models that, once tested in combat, could be modified to suit the actual conditions.

Of course, it is questionable whether France had the luxury of pursuing such an option. The United States' relative geographic isolation and awesome industrial capacity allowed it to overcome the "lost years" of the 1920s and 1930s, during which the army officer corps at least envisioned the force it would eventually command. This was in many respects an intellectual exercise that demanded little in the way of resources, which had always been sparse in peacetime. The "board system" by which branch chiefs established requirements and the army chief of staff set priorities worked reasonably well and provided the mold into which Congress eventually poured dollars to cast a warfighting army. The officers who would command it, meanwhile, received a rigorous education at the army's service schools, where the army sent its top officers both as students and faculty. As in the French case, students learned a "school solution"—but without the political imperative of conformity as war approached.⁷⁷ At the Command and General Staff School at Fort Leavenworth, Kansas, the future commanders of regiments and divisions learned the rudiments of combined-arms operations that, while incomplete and conflicted, would eventually defeat Nazi Germany.⁷⁸

In the twenty-seven months between the German invasion of Poland and the US-British invasion of North Africa, the Americans dramatically expanded their armed forces, fielded equipment that existed only in prototype just a few years before, and conducted realistic

combined arms training on an unprecedented scale. Culminating in the Louisiana and Carolina maneuvers of 1941, these exercises not only trained legions of newly-inducted soldiers but provided an opportunity to test and revise theoretical doctrine against the then-manifest capabilities of the German Army.⁷⁹ The army that landed in North Africa in 1942 was undertrained and inadequately equipped to employ a doctrine that remained fraught with problems, but it proved equal to the task at hand. In this regard, it was fairly typical of all American armies up to that time.

THE PENTOMIC ARMY

Soon after World War II, the proliferation of long-range strategic bombers and nuclear weapons deprived the United States of the luxury of preparing for the next war *after* it had begun. Disillusioned with the United States' lackluster performance in the Korean War yet demanding a curtailment in defense spending, the American people in 1952 elected Dwight David Eisenhower to the presidency with a mandate to at once enhance the nation's security and reign in run-away defense spending. Despite the paradoxical nature of such sentiments, they were entirely in line with Eisenhower's thinking on the subject. In accordance with traditional Republican fiscal conservatism, he regarded a strong economy as the foremost guarantor of national security.⁸⁰ In accordance with American political thought dating back to the eighteenth century, any drain on the national treasury that did not at least pay for itself in the long run was prejudicial to the public weal. And nothing fit this description more squarely than a standing, professional defense establishment, which was considered both fiscally *and* ideologically odious to the republic. Now and again, navalists and shipbuilders would make a compelling case that overseas trade depended on a strong navy—but the army could muster no such arguments. For most of its existence, the US Army had coped with acute fiscal austerity during peacetime, but its leaders were nevertheless surprised when one of their own threatened to reduce the force to something approaching irrelevancy.

But here also Eisenhower's views accorded with those of the population at large. The Korean War suggested to most Americans the limited utility of ground combat in the nuclear age. Years of desperate fighting had produced only stalemate and—in Truman's relief of MacArthur—a national scandal. When contrasted with the dazzling, high-tech capabilities of the newly independent US Air Force, the army appeared at once unglamorous and incompetent. The overriding moral lesson from Korea was not “never again” but rather “not *that way* again.” As Eisenhower saw it, his principal duty as commander in chief was to prepare the nation and the military for a single contingency: an unrestrained nuclear war against the Soviet Union. Eisenhower hoped very much to avoid this, so he and his secretary of state threatened the Soviet Union with “massive retaliation” as a means of deterring such an event. Naturally, this strategy relied on a strong US Air Force to make the deterrent threat credible, and it relied on the army only as a theoretical afterthought. Eisenhower could envision calling on the army to establish military rule over a land devastated by a nuclear attack (whether the homeland or a foreign country), but the prospects of participating in another maneuver-based land war were exceedingly slim.⁸¹

Thus under Eisenhower's watch, the army entered what one chief of staff termed its “Babylonian Captivity.”⁸² Along with funding, the morale and prestige of the force plummeted. Quality recruits flocked to the air force and navy but left the army well enough alone, and junior officers resigned their commissions in droves.⁸³ One major who stayed in the service and went on to become a general officer lamented, “I do not know what the army's mission is or how it plans to fulfill its mission. And this, I find, is true of my fellow soldiers. At a time when new weapons and new machines herald a revolution in warfare, we soldiers do not know where the army is going and how it is going to get there.”⁸⁴

Led by Chief of Staff Matthew B. Ridgeway, the army confronted this existential crisis by attacking the concept of massive retaliation on the grounds of morality and practicality, in the latter regard asserting that it would be nearly impossible to forward any genuine national interests in a post-apocalyptic world. Indeed, the army recommended forswearing the use of

atomic weapons or, at the very least, restricting their use to tactical targets. To Eisenhower these protestations were as ridiculous as they were insubordinate. He shared Ridgway's doubts about the dividends of a post-nuclear "victory" but considered it fantasy to assume that any war with the Soviet Union would not involve nuclear weapons.⁸⁵ In any event, the concept of massive retaliation was intended primarily to serve a strategy of deterrence. Eisenhower could envision no war with the Soviets but a nuclear one—and his goal was to avoid it altogether.

Frustrated by their commander in chief, army leaders next argued that, once the Soviets achieved parity in nuclear forces, deterrence would fall apart. Stalemated at the highest end of the spectrum of conflict, the initiative would fall to the antagonist with asymmetric capabilities elsewhere. With a manifest superiority in conventional forces, the Soviets would be able to pursue a campaign of subversion and revolution with relative impunity.⁸⁶ The most logical course available, argued army leaders, was for the United States to grow "balanced" forces capable of countering the Soviets and seizing opportunities across the spectrum of potential conflict. Eisenhower disagreed, but on 3 December 1954 he allowed Ridgway to make his final case to the National Security Council. He impressed the president as sincere but unrealistic. To the economically minded Kansan, "the United States could not afford to prepare to fight all kinds of wars and still preserve its free economy and its basic institutions."⁸⁷ Treasury Secretary George Humphrey emphatically agreed: maintaining "all kinds of forces designed to fight all kinds of war at all times . . . was absolutely impossible."⁸⁸

Ridgway saw it differently and continued to be a thorn in Eisenhower's side beyond his June 1955 retirement as chief of staff of the army.⁸⁹ His successor, Maxwell Taylor, shared most of Ridgway's misgivings about the "New Look" but proved receptive to candid advice offered by the President and his secretary of defense. If the army wanted money, it was going to have to sell itself as something other than the force that had recently bogged down in Korea. Eisenhower was not entirely unsympathetic to the plight of his old service, and he urged Taylor to "sex up" the army's public image as a means of winning congressional support.⁹⁰ Defense Secretary Wilson issued similar guidance after reviewing an army budget request that appeared too

conventional. According to Taylor, the secretary directed him “to substitute requests for ‘newfangled’ items with public appeal instead of the prosaic accoutrements of the foot soldier.”⁹¹

Unable to convince the administration that the United States needed the capabilities the army offered, the army changed its tack under the leadership of Taylor. For the duration of the Eisenhower administration, at least, the army would develop the capabilities Congress appeared willing to buy and worry afterward about how they would fulfill strategic requirements. The result was the “Pentomic” division, a neologism coined by Taylor as a means of staking the army’s claim to the nuclear pie. Armed with “Honest John” nuclear rockets and the ludicrous “Davey Crockett” nuclear recoilless rifle, soldiers of the Pentomic division were to fight from dispersed positions on an atomic battlefield out of the recognition that most of them would die in the initial attack. Those who survived would form islands of resistance against attacking Soviet forces; relief would come in the form a tactical nuclear counterattack that would likely expose the defenders to as much radiation as the enemy. Were the Pentomic soldiers to live long enough to assume the offensive, they would wait for nuclear missiles to blast holes in the Soviet defenses before plunging forward in a frontal attack reminiscent of World War I.⁹²

The absurdity of such a concept was not lost on most army leaders, who railed against it in later years. When the army undertook earnest studies of tactical nuclear warfare, it concluded that tactical nuclear weapons would not be able to offset the Soviet manpower advantage and that forces built around such capabilities would have to be larger rather than smaller.⁹³ This did not accord with the political imperative of reducing end strength, however, so the army shrank most of its divisions. Most officers doubted the prudence of these reductions, but Maxwell Taylor’s principal concern in 1956 was not generating a combat-ready force but rather to combat the growing popular opinion that “sizable Army forces may no longer be required.”⁹⁴ According to Ingo Trauschweizer, the Pentomic division was a political ploy designed “to enhance the army’s position with respect to the other armed services, to help redefine the role of the institution in the Cold War, and to contribute to a change in national military strategy.”⁹⁵ Indeed, even while committing exorbitant resources to the development of a force that he and his

colleagues knew to be deeply flawed, Taylor began to articulate the alternative strategy of “flexible response,” which was essentially the same strategy for which Ridgway had argued in 1954. With the election of John F. Kennedy, Taylor got his way—but only after squandering millions of dollars rather than letting them go to another service or some other purpose.

OBSERVATIONS

Collectively, these case studies do little to inspire confidence in professional militaries’ ability to prepare for the next war—an endeavor that nearly always occurs under conditions of peace and, by extension, austerity. In reflections on a study of military effectiveness during the Second World War, retired Lt. Gen. John H. Cushman noted that the evaluated officer corps demonstrated “for the most part less than general professional military competence and sometime abysmal incompetence.”⁹⁶ It is doubtful that the US Army’s ministrations during the Eisenhower years would rate any more favorably. Indeed, it is apparent from these case studies that there are no exemplars worthy of emulation. For this we may be thankful, however, as the formulas derived from these unique cases would undoubtedly be found wanting once applied to contemporary problems. Nevertheless, we may venture some observations.

The principal of these is that robust peacetime defense spending is not necessarily an indicator of performance in a future war. The real issue, unsurprisingly, is how the dollars allocated are actually spent. Two considerations prevail: the accuracy of a nation’s perception of strategic requirements and the adequacy of the military capabilities generated to fulfill them. During times of peace (and thus relative austerity) these capabilities are never fully developed; some remain theoretical abstractions, and the rest lack the capacity (i.e. numbers of platforms, men, etc.) demanded of a major war. Typically, the allocation of funds to realize or expand these capabilities is belated and insufficient—but this is true for all nations and rarely spells the difference between victory and defeat. Far more important is the organizational culture of the forces that design and employ military capabilities, specifically their tolerance for innovation.

Of the nations analyzed, only the British drew a losing hand on both the counts of recognizing strategic requirements and generating the relevant military capabilities. Arguably, only the British were guilty of the fundamental error of miscalculating the strategic situation.⁹⁷ This shortsightedness, when combined with a hidebound army culture, resulted in “the scandalously bad performance” of the British Army in World War II.⁹⁸ Fortunately, the British were delivered by something old, something new, something borrowed, and something blue: respectively, the Royal Navy, the Royal Air Force, American largess in the form of Lend-Lease assistance, and the English Channel.

As the other cases make clear, however, strategic clarity is, by itself, insufficient to guarantee the creation of appropriate military capabilities. Indeed, the distinction between strategic clarity and myopia is very fine. If a nation and its military have a clear, common conception of their interests and the military means of safeguarding them, the production of relevant military capabilities may be reduced to an engineering problem. One error in calculation or implementation (to say nothing of the emergence of new strategic problems), however, and the solution will not work. The error in this case is not of recognizing strategic requirements but in designing and building the appropriate military capabilities to fulfill them. There are perhaps no clearer examples than the French army of 1940 and the Pentomic army of the late 1950s. Closing their eyes to all contingencies but (respectively) a German invasion of France and total nuclear war with the Soviet Union, these armies developed forces that were presumed optimal for these purposes and adequate for all “lesser included” missions. In hindsight, we can appreciate that they were instead (to borrow Washington’s phrase) *incompetent* to every exigency.⁹⁹

Indeed, these cases suggest that *too much* strategic clarity removes the impetus for innovation as well as toleration for competing ideas. None of the nations addressed here tolerated dissent that threatened to subvert civil control of the military, as the American aviator Billy Mitchell and the French armor pioneer Charles de Gaulle could well attest.¹⁰⁰ But strategic myopia had a tendency to squelch productive debate *within* the services as well. This was especially so when the affected services felt cornered or neglected by their civilian masters. The

imperative of “closing ranks” against presumably hostile administrations produced in the French and Prussian armies almost fatalistic resignation to defense policies that were not of their own design. The result was, in each case, a carefully engineered yet inflexible doctrine and a force ill-prepared for the challenges of modern warfare.

Conversely, the most effective armies were those afforded sufficient leeway to grow their own, competing conceptions of future warfare. As the contrasting cases of the interwar Germany and American armies suggest, it did not really matter whether this professional space was a product of social deference or neglect; nor did it require robust funding. (Indeed, Samuel Huntington has argued that the isolation and austerity of the late-nineteenth-century Western frontier provided the US Army with an ideal crucible for professionalization).¹⁰¹ Nor did competing ideas demand resolution before the next war. Far more important were professional minds conditioned to tolerate ambiguity and dissent and to capitalize on the ideas of others once their merit became apparent. It is worth remembering that as late as 1939, the *infantryman* Erwin Rommel was highly skeptical about the potential of tanks. Within every service, proponents for new capabilities developed their own consensus about how to optimally employ those capabilities—and they never got it entirely right. Naval commanders considered aircraft carriers and submarines as auxiliaries to battleships, most armies thought of tanks primarily as reconnaissance and infantry support vehicles, and aviators were steadfast in their commitment to strategic bombing at the expense of all other missions. In war, each of these communities proved stubborn in their convictions, but visionaries among them were allowed to assert themselves—provided they had been able to develop their alternative visions in the years before the war.

Significantly, the most accurate of these visions were historically based yet *aspirational*. Their authors studied the last war carefully—not with an eye to refighting its battles but to identify needs and opportunities for innovation. Fixated on the disastrous Nivelle Offensive of 1917, the French “learned” the putative limits of maneuver in an age of overwhelming firepower. The Germans likewise studied their failed offensives but drew completely different conclusions. Instead of looking for “lessons,” they identified tactical and operational problems as a means of

designing their solutions. Popular misconceptions notwithstanding, the resulting “blitzkrieg” formations and doctrine were anything but revolutionary. They were historically derived and evolutionary.

Problems arose for armed forces, however, when they assumed that new technology would render old methods (and their historical study) obsolete. This is a perennial vice of aviators who, from the earliest days of military aviation, have espoused millenarian views about the promise of airpower.¹⁰² Especially in Britain and United States, they captured the imagination of the broader public and assured themselves at least a modicum of funding in an era of austerity. Popular enthusiasm also granted them, to one degree or another, independence from the armies that spawned them.¹⁰³ Untethered, the acolytes of Hugh Trenchard and Billy Mitchell advocated strategic bombing as the one true use of air power, and they generally ignored the development of doctrine or aircraft for close air support or air defense. Moreover, they dogmatically clung to the theory of strategic bombing well after experiments and experience demonstrated its shortcomings.¹⁰⁴ If most of the cases examined here suggest that overly conservative organizations have a tendency to suppress or marginalize their visionaries, the cases of the Royal Air Force and US Army Air Forces reveal the danger of giving the visionaries too much leash. By the time the Second World War erupted, their once original and provocative ideas had hardened into dogma. Indeed, the most innovative officers in each of these air services represented Thermidorian reactions to organizational revolutions gone too far. In their respective development of Britain’s air defense system and America’s pursuit tactics, Hugh Dowding and Claire Chennault labored against the grain of the airpower community and in so doing attempted to compensate for its failings.¹⁰⁵

Perhaps the most alarming observation from these studies is the extent to which perceived *moral* lessons from past wars can influence military policy – rarely for the better. Indeed, these cases suggest that we should perhaps revisit and revise the old saw about generals preparing to fight the last war. As already suggested, the more careful the generals’ attention to the last war, the better their performance in the next tended to be. Societies, on the other hand,

are not configured like general staffs and have a harder time extracting meaningful lessons from the past. To the contrary, they are prone to draw sweeping moral lessons from the last war that tend to distort the past and complicate the formulation of strategies that actually serve the national interest.

CONCLUSION / RECOMMENDATIONS

As the United States enters another era of uneasy peace and uncertainty, it should strive for as much strategic clarity as possible without ever looking for certitude. Certain Cold Warriors wax nostalgically about the days when the United States had a clear-cut enemy and a well-defined strategy for confronting it. They neglect to consider the enormous cost, fiscal and social, incurred in that contest or how America's myopic attention to a single strategic problem helped created the multitude of challenges the United States confronts today.¹⁰⁶ We should be thankful that the strategic environment is less clear than it once seemed, if only so we can avoid building forces such as the French Army of 1940 or the US Army of 1955.

Yet as the world's lone superpower in an age in which two oceans no longer provide a strategic buffer, the United States is unlikely to revert to the pre-World War II practice of building combat-ready forces and developing a strategy for their employment only in the event of a national emergency. Prudently, the United States seeks not merely to monitor but to shape the strategic environment, and it quadrennially reviews the priorities and programs of the Defense Department as a means of ensuring that its limited (if considerable) resources are being well-spent on capabilities that fulfill strategic requirements. Unfortunately, such measures are prone to producing modern equivalents of the Pentomic army. By subjecting the services to what is essentially a competition for slices of a fixed pie, the government incentivizes them to promote concepts and weapons that appear most relevant to the existing strategy or congruent with popular sentiment. Neither is necessarily constructive, particularly when strategy reflects an aversion to ground combat, counterinsurgency, or any other mission that the American people ostensibly will not tolerate—until they must. In those instances in which the services win

funding for future-looking programs of questionable relevance to the contemporary environment, they prove tenacious in their defense regardless of cost or merit.¹⁰⁷

As with military forces that feel politically insecure, it is beyond the ken of organizations engaged in such budgetary contests to be genuine learning organizations. Wargames and experiments intended to generate new ideas and challenge existing paradigms are likely to become charades designed instead to “validate” favored concepts. Moreover, the necessity of fielding combat-ready forces places a premium on training that, while entirely warranted, acts as a brake on meaningful innovation and intellectual reflection. Rather than staffing their schoolhouses with the “best and brightest,” the services expect their “best” to stay in command of troops. When they do go to school, they are encouraged to “recharge their batteries” (recuperate) and reconnect with the families they have neglected—perfectly understandable priorities, but not those associated with a learning organization.

The greatest challenge currently confronting the armed forces of the United States is neither uncertainty nor austerity. Rather, it is the preoccupation with what amount to global constabulary obligations and the constraint of being perpetually ready for a major war against every identifiable threat. As the service chiefs brace for further “sequestration,” they have made clear their priority of providing the president with the broadest range of strategic options *now*. Doing so requires the recapitalization of aging equipment vice modernization and prioritizes the training of warfighting units over the education of their leaders. In other words, they are mortgaging the future viability of the force in the name of operational readiness for the moment. Far from happy about this state of affairs, the chiefs have been very vocal about the strategic risks it imposes.¹⁰⁸ They are chary of admitting, however, that the cuts imposed by sequestration have thus far been less severe than the drawdowns following each of America’s twentieth-century wars.¹⁰⁹ In fact of matter, the US military is not entering an era of austerity at all. Rather, it is resuming its nineteenth-century role as a constabulary force (albeit on a much larger scale) with the late-twentieth-century conviction that it must be prepared for conventional warfare at all

times. Not surprisingly, it is discovering that even the defense budgets of a decade ago cannot accommodate both traditions.

Reconciling them and achieving sustainable security will demand a strategic consensus that the United States presently appears incapable of achieving. Partisan politics have, for the past generation, exerted an increasingly powerful and dysfunctional force on the formulation of national foreign and military policy. Since the 1980s, the Republican Party has all but abandoned its traditional fiscal conservatism regarding defense spending (which contributed to each of the eras of austerity addressed in this chapter). It has replaced it with a narrative that American military might has made the world safe for democracy and that only American “leadership” can keep it so. A competing narrative—more popular on the left—maintains that American military misadventures since 1945 have engendered instability and that the American people will not tolerate another Korea...or Vietnam...or Beirut...or Somalia...or Iraq. Betwixt these problematic moral lessons there is little common ground upon which to achieve a rational appreciation of the United States’ strategic requirements.

Yet beneath disagreements about ways and means, there exists greater consensus about the United States’ strategic aims than is readily apparent. Ultimately, the United States seeks to maintain the global order it has constructed over the past seventy years, mitigate threats to it, and maintain a position of preeminence. The problem, therefore, is not fundamentally the absence of strategic clarity; it is the lack of strategic realism. These interests are—practically speaking, if not morally—undefensible in the long term. If, as many argue, the threats to American interests are greater today than at any time since World War II, it is principally because the United States has defined its interest more broadly than ever before. While most Americans deny that the United States exercises imperial power, they are loath to surrender the privileges it conveys. Hence, the United States today implicitly defines its interest as the preservation of a favorable status quo that will be—inevitably and perpetually—challenged by “revisionist” powers. Countering them at every turn and in every domain is infeasible, so the Defense Department has proposed that it instead devise “offset” strategies that play American strengths off of competitor weaknesses.¹¹⁰

But such strategies are most effective when wielded by the revisionists—not the guardians of the status quo—and they are unlikely to close the gap between America’s strategic aims and the means it is willing or able to commit. Solving this dilemma will require nothing less than a reassessment of the United States’ truly vital interests and place in the world. Until then, the US Army will dutifully perform the constabulary mission it has been assigned while preparing for its next major contest: the next quadrennial defense review.

¹ In fairness to the volume’s editors and contributors, it is solid, scholarly contribution that deserves wide readership. Charles E. Heller and William A. Stofft, eds., *America’s First Battles, 1776–1965* (Lawrence, Kan.: University Press of Kansas, 1986).

² Flint is careful to point out, however, that despite its numerous deficiencies, the 24th Division succeeded in delaying the advance of the North Korean forces long enough to allow the US 8th Army to establish a lodgment at Pusan. Roy K. Flint, "Task Force Smith and the 24th Division: Delay and Withdrawal, 5-19 July 1950," in *America’s First Battles, 1776–1965*, ed. Charles E. Heller and William A. Stofft (Lawrence: University Press of Kansas, 1986), 266–299.

³ George C. Herring, "The 1st Cavalry and the Ia Drang Valley, 18 October–24 November 1965," *ibid.*, 303. Unable to blame its eventual defeat on pre-war civilian parsimony, the army eventually developed a “stabbed-in-the-back” narrative that ascribed responsibility to political leaders and the decisions they made during the war.

⁴ Although volunteers outnumbered regulars by a margin of two-to-one in this war, their performance was uneven, and the officers of a professional US Army credited their soldiers and (above all) themselves for the victory. Their claims to the lion’s share of credit were not without merit, and an American public that had previously viewed the regular army with distrust nominated each of its senior commanders in this war for the presidency. William B. Skelton, *An American Profession of Arms: The Army Officer Corps, 1784–1861* (Lawrence: University Press of Kansas, 1992), 340–345.

⁵ There is little disagreement on the first point. The second is more contentious but reflected in the most recent (2014) Quadrennial Defense Review. Even dissenters such as Andrew Krepinevich, who argues that the United States is “entering an era of heightened security challenges,” concede the inevitability of decreased or static defense spending. Andrew F. Krepinevich, "Statement before the Senate Armed Services Committee on Defense Strategy, October 28, 2015," Center for Strategic and Budgetary Assessments, 30 October 2015, accessed 31 October 2015 <http://csbaonline.org/publications/2015/10/alternative-approaches-to-defense-strategy/>.

⁶ Primarily as means of containing the scope of this chapter, it focuses exclusively on the interwar cases of Germany, France, Great Britain, and the United States. It omits consideration of the Soviet Union because—although clearly a “great power”—its largely pre-industrial, agrarian economy partially insulated the Red Army from the effects of the Great Depression, but more important was the priority afforded to military spending and military-oriented

industrialization under the five-year plans. According to Earl F. Ziemke, “the Soviet Armed Forces had something no other military establishment of the time had, namely... an economy entirely devoted to military support.” Earl F. Ziemke, "The Soviet Armed Forces in the Interwar Period," in *Military Effectiveness: Volume 2, The Interwar Period*, ed. Allan Reed Millett and Williamson Murray (Cambridge: Cambridge University Press, 2010), 6-7, quotation from pp. 15-16.

⁷ The historiography of Germany’s economic mobilization for World War II is vast and, while relevant to this paper, beyond its scope. Among the more recent and influential works on this point is Adam Tooze, *The Wages of Destruction: The Making and Breaking of the Nazi Economy* (New York: Viking, 2007).

⁸ Williamson Murray, *The Change in the European Balance of Power, 1938-1939: The Path to Ruin* (Princeton, N.J.: Princeton University Press, 1984), 32; Williamson Murray, "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy'," in *German Nationalism and the European Response, 1890-1945*, ed. Carole Fink, Isabel V. Hull, and MacGregor Knox (Norman: University of Oklahoma Press, 1985), 79; Elizabeth Kier, *Imagining War: French and British Military Doctrine between the Wars* (Princeton, N.J.: Princeton University Press, 1997), 14.

⁹ Citing a persistent culture of doctrinal innovation in the German Army, Williamson Murray argues that historians tend to overemphasize the extent to which Versailles limitations actually facilitated innovation. Nevertheless, he elsewhere obliquely supports this argument. Murray, "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy'," 75-77; Murray, *The Change in the European Balance of Power, 1938-1939*, 31. See also Robert O. Paxton, *Parades and Politics at Vichy: The French Officer Corps under Marshal Pétain* (Princeton, N.J.: Princeton University Press, 1966).

¹⁰ Murray, "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy'," 72. For a detailed analysis of Germany tactical innovations during the Great War, see Timothy T. Lupfer, *The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War* (Fort Leavenworth, KS: Combat Studies Institute, 1981).

¹¹ Technically, the Versailles Treaty outlawed the General Staff, but it nevertheless persevered during the Weimar era under the cover name *Truppenamt* (“troop office”).

¹² MacGregor Knox and Williamson Murray, *The Dynamics of Military Revolution, 1300-2050* (Cambridge: Cambridge University Press, 2001), 157-158.

¹³ This commitment was originally predicated on the belief that Germany’s severe military weakness demanded a mobile defensive doctrine. With Germany’s seizure of the Rhineland in 1936 and Hitler’s underwriting of a dramatic expansion of the army, the General Staff seized the opportunity to embrace an offensive doctrine not because it facilitated any articulated strategy but for the simple reason that it was good for the army. Murray, *The Change in the European Balance of Power, 1938-1939*, 31-32; Murray, "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy'," 76; Manfred Messerschmidt, "German Military Effectiveness Between 1919 and 1939," in *Military Effectiveness: Volume 2, The Interwar Period*, ed. Allan Reed Millett and Williamson Murray (Cambridge: Cambridge University Press, 2010), 225, 230; Wilhelm Deist, *The Wehrmacht and German Rearmament* (Toronto: University of Toronto Press, 1981), 42.

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- ¹⁴ Murray, "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy'," 75, 88.
- ¹⁵ Murray, *The Change in the European Balance of Power, 1938-1939*, 35.
- ¹⁶ Matthew Cooper, *The German Army, 1933-1945: Its Political and Military Failure* (New York: Scarborough House, 1990), 144-145; Azar Gat, *British Armour Theory and the Rise of the Panzer Arm: Revising the Revisionists* (New York: St. Martin's Press, 2000), 43-48. The principal "revisionist" alluded to in the title is John Mearsheimer, who argued in 1988 that the then-consensus interpretation exaggerated the originality and influence of Basil Liddell Hart, one of Britain's leading prophets of armored warfare. Gatz's counter-revision has restored the consensus interpretation. John J Mearsheimer, *Liddell Hart and the Weight of History* (Ithaca: Cornell University Press, 1988).
- ¹⁷ Cooper, *The German Army, 1933-1945*, 142-158; Murray, "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy'," 77, 80, 85-86 (quotation from p. 85).
- ¹⁸ Messerschmidt, "German Military Effectiveness Between 1919 and 1939," 220-221.
- ¹⁹ *Ibid.*, 218-227.
- ²⁰ *Ibid.*, 229-237; Deist, *The Wehrmacht and German Rearmament*, 36-85.
- ²¹ Quoted in Messerschmidt, "German Military Effectiveness Between 1919 and 1939," 235. Germany had perhaps the most mature conception of the diverse, complementary roles of airpower of any of the World War II combatants. Nevertheless, Hitler commenced hostilities before German industry could build the balanced air force envisioned by *Luftwaffe* commander General Walther Wever (whose death in 1936 did nothing to improve that force's prospects). *Ibid.*, 231-32.
- ²² Eugenia Kiesling, "France Prepares for War, 1918-1939," in *History of the Military Art since 1914*, ed. Steve Waddell (Boston: Pearson Custom Publishing, 2005), 115.
- ²³ Kier, *Imagining War*, 41-45.
- ²⁴ *Ibid.*
- ²⁵ From 1935-1938, the Italians spent more real dollars on defense than did the French. Williamson Murray, "Armored Warfare: The British, French, and German Experiences," in *Military Innovation in the Interwar Period*, ed. Williamson Murray and Allan R. Millett (New York: Cambridge University Press, 1996), 15.
- ²⁶ Charles de Gaulle, *Vers l'Armée de Métier [Toward a Professional Army]* (Paris: Presses Pocket, 1934).
- ²⁷ Eugenia C. Kiesling, *Arming against Hitler: France and the Limits of Military Planning* (Lawrence: University Press of Kansas, 1996), 82.
- ²⁸ Robert A. Doughty, "The French Armed Forces, 1918-40," in *Military Effectiveness: Volume 2, The Interwar Period*, ed. Allan Reed Millett and Williamson Murray (Cambridge: Cambridge University Press, 2010), 40-41.
- ²⁹ Respectively, *ibid.*, 41; Kiesling, *Arming against Hitler*, passim.
- ³⁰ Doughty, "The French Armed Forces, 1918-40."
- ³¹ Barry Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca: Cornell University Press, 1984), 18-20; Kier, *Imagining War*, 42.
- ³² Kiesling, *Arming against Hitler*, 147.
- ³³ Doughty, "The French Armed Forces, 1918-40," 45.

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- ³⁴ Robert A. Doughty, *The Seeds of Disaster: The Development of French Army Doctrine, 1919-1939* (Hamden, Conn.: Archon Books, 1985), 183; Doughty, "The French Armed Forces, 1918-40," 43; Kier, *Imagining War*, 48.
- ³⁵ Murray, "Armored Warfare: The British, French, and German Experiences," 13. This was particularly true of in the case of the French Air Force, which falls beyond the scope of this essay but demands some attention. It remained doctrinally tied to the support of traditional ground forces until it gained its independence from the army in 1933 and an air minister who favored strategic bombing in 1936. By then, however, Germany was already surpassing French capabilities in this regard, so the next air minister re-prioritized the defense of French air space. As a consequence of shifting priorities and inadequate industrial capacity, French planes were neither numerous nor good on the eve of war. Doughty, "The French Armed Forces, 1918-40," 50-51.
- ³⁶ Superficial comparisons of the French and Germany armies during the interwar period suggest just the opposite—that the French remained captives of history while the Germans slipped its suffocating yoke. For an incisive revision of this interpretation, see Kiesling, *Arming against Hitler*, 119-125.
- ³⁷ Robert A. Doughty, "The Myth of Blitzkrieg," in *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?*, ed. Lloyd J. Matthews (Carlisle Barracks, PA: US Army War College, 1998), 57-79.
- ³⁸ Douglas Porch, "Military 'Culture' and the Fall of France in 1940: A Review Essay," *International Security* 24, no. 4 (2000): 164-165.
- ³⁹ Kiesling, *Arming against Hitler*, 174-175.
- ⁴⁰ *Ibid.*, 43-60.
- ⁴¹ *Ibid.*, 125-135; Kier, *Imagining War*, 80-83; Murray, *The Change in the European Balance of Power, 1938-1939*, 103-104.
- ⁴² Doughty, "The French Armed Forces, 1918-40," 39; Kiesling, *Arming against Hitler*.
- ⁴³ Brian Bond and Williamson Murray, "The British Armed Forces, 1918-39," in *Military Effectiveness: Volume 2, The Interwar Period*, ed. Allan Reed Millett and Williamson Murray (Cambridge: Cambridge University Press, 2010), 99; Ronald H. Spector, "The Military Effectiveness of the US Armed Forces, 1919-39," *ibid.*, 78.
- ⁴⁴ Brian Bond and Williamson Murray, "The British Armed Forces, 1918-39," *ibid.*, 101-104.
- ⁴⁵ Quoted in Murray, "Armored Warfare: The British, French, and German Experiences," 12.
- ⁴⁶ Bond and Murray, "The British Armed Forces, 1918-39," 100.
- ⁴⁷ Murray, "Armored Warfare: The British, French, and German Experiences," 10.
- ⁴⁸ Bond and Murray, "The British Armed Forces, 1918-39," 117.
- ⁴⁹ Murray, "Armored Warfare: The British, French, and German Experiences," 20; Knox and Murray, *The Dynamics of Military Revolution, 1300-2050*, 157-158.
- ⁵⁰ Michael Howard, "The Liddell Hart Memoirs," *Journal of the Royal United Services Institution* 111(1966): 59.
- ⁵¹ Murray, "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy'," 81.
- ⁵² Quoted in Howard, "The Liddell Hart Memoirs," 61.
- ⁵³ Murray, "Armored Warfare: The British, French, and German Experiences," 25-27; Bond and Murray, "The British Armed Forces, 1918-39," 115-116, 22-23.

⁵⁴ Quoted in Williamson Murray, "British Military Effectiveness in the Second World War," in *Military Effectiveness: Volume 3, The Second World War*, ed. Allan Reed Millett and Williamson Murray (Cambridge: Cambridge University Press, 2010), 111.

⁵⁵ Howard, "The Liddell Hart Memoirs," 61.

⁵⁶ Bond and Murray, "The British Armed Forces, 1918-39."

⁵⁷ Porch, "Military 'Culture' and the Fall of France in 1940: A Review Essay," 163-164, 174-178.

⁵⁸ David M. Kennedy, *Over Here: The First World War and American Society* (Oxford: Oxford University Press, 1980); Edward M. Coffman, "The Meuse-Argonne Offensive: The Final Battle of World War I," in *Between War and Peace: How America Ends its Wars*, ed. Matthew Moten (New York: Free Press, 2011), 179-196.

⁵⁹ Russell F. Weigley, *History of the United States Army* (New York: Macmillan, 1967), 403.

⁶⁰ Quoted in Spector, "The Military Effectiveness of the US Armed Forces, 1919-39," 71.

⁶¹ He continued, "It lacked even the combat capacity that the Indian campaigns had forced on it during the nineteenth century and the pacification of the Philippines had required early in the twentieth century. Weigley, *History of the United States Army*, 402-403.

⁶² Martin Blumenson, "Kasserine Pass, 30 January-22 February 1943," in *America's First Battles, 1776-1965*, ed. Charles E. Heller and William A. Stofft (Lawrence: University Press of Kansas, 1986), 227. By comparison, the US Navy fared relatively well. The Washington and London Naval Conferences of 1922 and 1930, respectively, amounted to voluntary submissions to Versailles-style restrictions on force structure. This allowed the US Navy (like the German Army) to concentrate its efforts on modernizing and training the best force allowable under the restrictions. Naval officers chafed under these restrictions, especially the Five Power Washington Treaty, which demilitarized much of the Pacific and thus compromised the United States' ability to wage a successful war against Japan. (The US Marine Corps eagerly stepped into the resulting capability gap, however, by developing and marketing the capability to seize the advance bases denied by this treaty. This was a relatively rare instance in which strategic necessity and service parochialism converged.) The navy received a boon with the 1932 election of Franklin D. Roosevelt to the presidency. A former assistant secretary of the Navy who had always looked fondly on America's sea service, he provided the navy an advocate in the highest of places. Naval expansion became part of FDR's New Deal program of public works, and naval expenditures increased yearly after 1933. Allan R. Millett and Peter Maslowski, *For the Common Defense: A Military History of the United States of America*, Revised and expanded ed. (New York: Free Press, 1994), 383-384; *ibid.*, 383; Spector, "The Military Effectiveness of the US Armed Forces, 1919-39," 72-74; Jeter Allen Isely and Philip A. Crowl, *The US Marines and Amphibious War: Its Theory, and Its Practice in the Pacific* (Princeton: Princeton University Press, 1951).

⁶³ In 1919, the army's plenary "Superior Board" attempted to reconcile these positions, genuflecting to American military tradition while arguing (as the French would) that advances in firepower were likely to exacerbate the stalemated conditions of the Western Front and recommending that the army enhance its capabilities for trench warfare. Having commanded the American Expeditionary Force in France but having seen little actual combat, General John J. Pershing represented the traditionalist point of view and dissented. Nothing in *his* experience challenged his faith in fighting élan of the individual infantryman or the superiority of open warfare over European

methods, and he considered it unlikely that the army would again operate on a large scale overseas. Brian M. Linn, *The Echo of Battle: The Army's Way of War* (Cambridge, Mass.: Harvard University Press, 2007), 120; Russell F. Weigley, "The Interwar Army, 1919-1941," in *Against all Enemies: Interpretations of American Military History from Colonial Times to the Present*, ed. Kenneth J. Hagan and William R. Roberts (Westport, Conn.: Greenwood Press, 1986), 257.

⁶⁴ William O. Odom, *After the Trenches: The Transformation of US Army Doctrine, 1918-1939* (College Station: Texas A & M University Press, 1999), 118-123; Mark E. Grotelueschen, *The AEF Way of War: The American Army and Combat in World War I* (New York: Cambridge University Press, 2007), 362-364.

⁶⁵ Quoted in Spector, "The Military Effectiveness of the US Armed Forces, 1919-39," 90. That chief of infantry was Major General George A. Lynch, who had been primary author of the 1923 *Field Service Regulations*. Odom, *After the Trenches*, 121.

⁶⁶ Blumenson, "Kasserine Pass, 30 January-22 February 1943," 229; Odom, *After the Trenches*; Linn, *The Echo of Battle*, 130-131.

⁶⁷ Russell F. Weigley, *Eisenhower's Lieutenants: The Campaign of France and Germany, 1944-1945* (Bloomington: Indiana University Press, 1981), 5-12; David E. Johnson, *Fast Tanks and Heavy Bombers: Innovation In The US Army, 1917-1945* (Ithaca: Cornell University Press, 1998), 189-201; Blumenson, "Kasserine Pass, 30 January-22 February 1943," 226-265.

⁶⁸ Johnson, *Fast Tanks and Heavy Bombers*, 197-201.

⁶⁹ Odom, *After the Trenches*, 199-220.

⁷⁰ Russell F. Weigley, *History of the United States Army*, Enl. ed. (Bloomington: Indiana University Press, 1984), 402; Millett and Maslowski, *For the Common Defense*, 385-386, 396-397; Spector, "The Military Effectiveness of the US Armed Forces, 1919-39," 72.

⁷¹ Blumenson, "Kasserine Pass, 30 January-22 February 1943," 229.

⁷² Weigley, *History of the United States Army*, 406-407. From 1925 to 1940, War Department expenditures totaled \$6.2 billion. Only \$344 million of this was allocated to procurement for ground forces. According to Ronald Spector, "The entire research and development program [of the US armed forces during the interwar period] amounted to about one-twentieth of the cost of a contemporary battleship and less than one four-hundredth of what it cost to develop the atomic bomb." Millett and Maslowski, *For the Common Defense*, 399; Spector, "The Military Effectiveness of the US Armed Forces, 1919-39," 74.

⁷³ Linn, *The Echo of Battle*, 134.

⁷⁴ Weigley, *History of the United States Army*, 410-411; Johnson, *Fast Tanks and Heavy Bombers*, 116-117, 127-128, 139-148. One of the most egregious examples of this conservatism was the army's insistence that medium tanks weigh no more than fifteen tons so as to not exceed the load capacity of the bridging equipment then in the army's inventory. This led to disproportionate attention to the development of light tanks that would prove nearly useless in World War II and to the rejection of the superior designs of American tank designer J. Walter Christie. He sold them to the Soviets, who used them to produce the T-34, widely regarded as the best heavy tank of the war. Weigley, *History of the United States Army*, 411; Johnson, *Fast Tanks and Heavy Bombers*, 74.

⁷⁵ David E. Johnson depicts Chaffee as an essentially conservative force who innovated only within the cavalry paradigm familiar to him. Yet Chaffee compares quite favorably to genuinely reactionary influences such as cavalry chief Major General John K. Herr and infantry chief Major General Stephen O. Fuqua. If he did not grasp the apparent potential of “blitzkrieg,” it is worth remembering that neither did most Germans. Johnson, *Fast Tanks and Heavy Bombers*, 127-128, 139-145. For more sympathetic portrayals of Chaffee, see Mildred Hanson Gillie, *Forging the Thunderbolt: A History of the Development of the Armored Force* (Harrisburg, Pa.: Military Service Pub. Co., 1947); George F. Hofmann, *Through Mobility We Conquer: The Mechanization of US Cavalry* (Lexington: The University Press of Kentucky, 2006).

⁷⁶ Brian Linn describes the US Army in the Pacific as almost a separate service with unique strategic requirements and even culture. Brian McAllister Linn, *Guardians of Empire: The US Army and the Pacific, 1902-1940* (Chapel Hill: University of North Carolina Press, 1997).

⁷⁷ The situation was different under the fiscally conservative Republican administrations of Warren Harding and Calvin Coolidge, which censured officers for public comments regarding defense spending, chilling professional discourse within the army. Johnson, *Fast Tanks and Heavy Bombers*, 66-71.

⁷⁸ US Army Heritage and Education Center, "Maintaining and Modernizing the Force in Periods of Reduced Resources," (Carlisle, PA: United States Army War College and Carlisle Barracks, 2012), 2; Peter J Schifferle, *America's School for War: Fort Leavenworth, Officer Education, and Victory in World War II* (Lawrence: University Press of Kansas, 2010). For a more critical appraisal of the Leavenworth curriculum, see Jörg Muth, *Command Culture: Officer Education in the US Army and the German Armed Forces, 1901-1940, and the Consequences for World War II* (Denton: University of North Texas Press, 2011).

⁷⁹ Blumenson, "Kasserine Pass, 30 January-22 February 1943," 233-238.

⁸⁰ NSC 162/2, approved in October 1953, outlined the Eisenhower administration's thinking on defense policy. The paper was issued by the National Security Council Planning Board, which Eisenhower created “to regularize and make more reliable the activities of the NSC.” Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (repr., Bloomington: Indiana University Press, 1977), 401; John Lewis Gaddis, *Strategies of Containment* (New York; Oxford: Oxford University Press, 2004), 131-133.

⁸¹ Andrew J. Bacevich, *The Pentomic Era: The US Army Between Korea and Vietnam* (Washington, DC: National Defense University Press, 1986), 16.

⁸² *Ibid.*, 9; Maxwell D. Taylor, *The Uncertain Trumpet* (New York: Harper, 1960), 108.

⁸³ Bacevich, *The Pentomic Era: The US Army Between Korea and Vietnam*, 20.

⁸⁴ Quoted in *ibid.*, 21.

⁸⁵ Gaddis, *Strategies of Containment*, 133.

⁸⁶ Bacevich, *The Pentomic Era: The US Army Between Korea and Vietnam*, 25-33.

⁸⁷ Memorandum of Discussion at the 227th Meeting of the National Security Council, Friday, December 3, 1954, John P. Glennon, ed. *Foreign Relations of the United States, 1952-1954*, vol. 2 (Washington, D.C.: G.P.O., 1986), 804.

⁸⁸ Memorandum of Discussion at the 227th Meeting of the National Security Council, Friday, December 3, 1954, *ibid.*, 805.

⁸⁹ For the rest of Eisenhower's administration, Ridgway and his compatriots worked to undermine the President's defense policy by whatever means available: published doctrine, congressional testimony, leaked correspondence, and critical memoirs. Collectively, these efforts did not shake Eisenhower's commitment to massive retaliation, but they swayed public opinion to the point that a Democratic presidential candidate would, in 1960, make Taylor's vision for a balanced defense policy his own.

⁹⁰ Quoted in Ingo Trauschweizer, *The Cold War US Army: Building Deterrence for Limited War* (Lawrence: University Press of Kansas, 2008), 270n26.

⁹¹ Quoted in *ibid.*, 56.

⁹² Bacevich, *The Pentomic Era: The US Army Between Korea and Vietnam*, 103-127.

⁹³ Weigley, *The American Way of War: A History of United States Military Strategy and Policy*, 419, 422. Collecting usable data, however, was not always the topic priority of these experiments. The after action report of Operation DESERT ROCK VI matter-of-factly acknowledged that "planning proceeded from the basic decision the first priority be given to demonstrating the Army at its best." Quoted in Bacevich, *The Pentomic Era: The US Army Between Korea and Vietnam*, 113.

⁹⁴ Quoted in Trauschweizer, *The Cold War US Army: Building Deterrence for Limited War*, 56.

⁹⁵ *Ibid.*, 58.

⁹⁶ Cushman was also that major who worried about the purpose and direction of the army under the Eisenhower administration. John H. Cushman, "Challenge and Response at the Operational and Tactical Level," in *Military Effectiveness: Volume 3, The Second World War*, ed. Allan Reed Millett and Williamson Murray (Cambridge: Cambridge University Press, 2010), 322.

⁹⁷ The others, to one degree or another, designed the wrong capabilities to fulfill those requirements (France, the Pentomic Army) or developed insufficient capacity (Germany, the US—especially in the Pacific).

⁹⁸ Murray, "Armored Warfare: The British, French, and German Experiences," 29n85.

⁹⁹ Washington to John Hancock, 16 December 1776, *The Papers of George Washington*, ed. Philander D. Chase, vol. 7, Revolutionary War Series (Charlottesville: University Press of Virginia, 1997), 352.

¹⁰⁰ Furthermore, Eisenhower essentially relieved Ridgway by not renewing him for a second term as chief of staff.

¹⁰¹ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge: Belknap Press of Harvard University Press, 1957), 229. John M. Gates has since dismantled the notion that the army officer corps of this era was truly isolated from the sources of political influence and society at large, but the austerity under which labored is beyond dispute. John M. Gates, "The Alleged Isolation of US Army Officers in the Late-19th Century," *Parameters* 10, no. 3 (1980).

¹⁰² Michael S. Sherry, *The Rise of American Air Power: The Creation of Armageddon* (New Haven: Yale University Press, 1987).

¹⁰³ The Royal Air Force became an independent service in 1918. American aviators had to wait longer, but an "American love affair with military aviation flowered in 1925-26." The latter year Congress authorized a new US

Army Air Corps, which was still technically part of the army but answered directly to the chief of staff. Henceforth, the visionaries did not need to fight the establishment to forward their views; they were the establishment. Millett and Maslowski, *For the Common Defense*, 390.

¹⁰⁴ Richard Overy, *Why the Allies Won* (New York: W.W. Norton & Company, 1995), 105-113; Johnson, *Fast Tanks and Heavy Bombers*, 153-175, 202-211. "That there was a disastrous first raid on Schweinfurt by the Eighth Air Force in August 1943 is neither surprising nor necessarily avoidable," write Allen Millett and Williamson Murray. "But what should have been avoidable was the follow-on raid in October 1943, which proved even more costly and repeated the errors of the first raid in nearly every way." Allan Reed Millett and Williamson Murray, *Military Effectiveness: Volume 2, The Interwar Period*, New ed. (Cambridge: Cambridge University Press, 2010), xv.

¹⁰⁵ Spector, "The Military Effectiveness of the US Armed Forces, 1919-39," 84.

¹⁰⁶ Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (New York: Cambridge University Press, 2005).

¹⁰⁷ The US Army's most recent example of this was the ill-fated (and by some accounts misbegotten) Future Combat System.

¹⁰⁸ John T. Bennett, "Service Chiefs Warn of Sequester's 'Insidious' Effects," *DefenseNews*, September 18, 2013, accessed October 12, 2013 <http://www.defensenews.com/article/20130918/DEFREG02/309180018/Service-Chiefs-Warn-Sequester-s-Insidious-Effects>; Cheryl Pellerin, "Service Chiefs Detail 2014 Sequestration Effects," *American Forces Press Service*, September 19, 2013, accessed October 12, 2013 <http://www.defense.gov/news/newsarticle.aspx?id=120825>.

¹⁰⁹ Todd Harrison, "Defense Cuts Conundrum: Weighing the Hard Choices Ahead," *Foreign Affairs*, September 29, 2013, accessed October 12, 2013 <http://www.foreignaffairs.com/articles/139965/todd-harrison/defense-cuts-conundrum>.

¹¹⁰ US Department of Defense, "The Third US Offset Strategy and its Implications for Partners and Allies: As Delivered by Deputy Secretary of Defense Bob Work, Willard Hotel, Washington, D.C., January 28, 2015," accessed 31 October 2015, <http://www.defense.gov/News/Speeches/Speech-View/Article/606641/the-third-us-offset-strategy-and-its-implications-for-partners-and-allies>.