

Kaiser Wilhelm II.



Courtesy Special Collections, NDU Library

Over the past two or three decades, scholars on both sides of the Atlantic have lionized both the Prussian military system and its premier theoretician, Carl von Clausewitz. American military academies have made Clausewitz's *On War* required reading. Much research has been done to validate Prussian operational and tactical precepts, and Prussian-German commanders from Erich Ludendorff to Erich von Manstein continue to enjoy their places in the pantheon of great captains.

The reason for this enthusiasm can be readily identified: victories over Napoleon at Leipzig and Waterloo; the *Kriegsschule* and general staff; the writings of Clausewitz; quick and decisive mid-19th century triumphs over Denmark, Austria, and France (fought with total effort for limited goals); the demand for German advisors amid the almost global emulation of the Prussian military education system prior to 1914; a "near victory" against overwhelming odds¹ in World War I; the professionalism and surreptitiousness of the *Reichswehr* in the 1920s; *Blitzkrieg* in 1939–41; and the tragic "lost victories" of 1942–45 (attributed to interference by Adolf Hitler in purely military matters).² From Thomas Carlyle to Martin van Creveld, Prussian-German prowess has attracted more than its share of homage from soldiers and military historians alike.

Army and State

Is it possible to extract lessons for our policy-makers from the Prussian diplomatic-military system of Otto von Bismarck and William II? Are there similarities in contemporary politics? One ingredient remains constant: the German problem. In 1871 Benjamin Disraeli warned the House of Commons that the Iron Chancellor's wars had "totally destroyed" the European balance of power. "You have a new world . . . and unknown

THE PRUSSIAN MODEL and Military Planning Today

By HOLGER H. HERWIG

Holger H. Herwig is professor of history at the University of Calgary and the author of *The First World War: Germany and Austria-Hungary, 1914–1918*.

objects and dangers with which to cope." Could those words not apply to the "accession" by the Federal Republic to the German Democratic Republic in 1989? Although there have not been any wars on the Continent recently, neither the Warsaw Pact nor the North Atlantic Treaty Organization is operative in a traditional Cold War military-political sense. Indeed, new influences, unknown objects, and dangers abound.



To begin with, what is meant by “Prussia?” Honoré Gabriel Riqueti, a perceptive observer of Frederick the Great, is credited with two *bons mots*: that Prussia was not a state with an army, but rather an army with a state; and that the military was the national industry of Prussia.

President Woodrow Wilson took America into World War I in 1917 ostensibly to rid the world of Prussian “militarism.”

the king alone exercised power to command, and his decisions were final

Thirty years later, President Harry Truman and the Allied Control Council excised the word “Prussia” from popular usage. Nonetheless, a professional mystique, an aura of excellence, and the suggestion of a

universally applicable model continue to surround the average person’s view of the Prussian military.

The period after 1870 was marked by reaction to victory, demobilization, and future threat assessment for Germany. To sort fact from fiction, it is useful to start with the obvious: what lessons from the Prussian experience are *not* applicable to present-day military planning? In other words, what are the dissimilarities between the Prussian and American ways of war?

First, the Prussian army was forged to preserve domestic order; power projection across its borders was secondary. In order to achieve its main purpose, the army from March 1890 onward rejected the notion of a “peoples’ army,” as put forth by war minister Julius von Verdy du Vernois, the scion of a Huguenot family that had fled France in the 18th century. As late as 1911 the army took 94 percent of its recruits from the conservative, loyal

countryside and only 6 percent from urban industrial centers. Neither social democrats nor Jews were welcome in the officer corps.³

At the same time, the Prussian army saw itself as a true corps royal. It swore its loyalty to a semi-absolutist king, in whose hands matters such as promotions, appointments, strategy, and even the critical issue of war and peace rested exclusively. At no time did Germany ever develop the equivalent of a Committee for Imperial Defence, *Conseil supérieur de la guerre*, Joint Chiefs of Staff, or National Security Council.⁴ Moreover, officers—especially those in command and high staff positions—continued to come from the landed, aristocratic military caste (*Junkers*). Thus the goal of the war minister Verdy du Vernois to create a “people in arms” (*Volk in Waffen*) was once again rejected. Whenever push came to shove, Prussia’s rulers preferred a small, well-disciplined, and reliable corps royal to a larger citizen’s army (*Volksheer*). As William II cruelly expressed it in 1905: “First gun down the socialists, then behead them and render them harmless—if need be by a bloodbath—and then war outside our borders. But not the other way around and not too soon.”

Legislative control over the military was anathema in Prussia. Although the *Reichstag* had power over appropriations every five or seven years, it could go no further. It did not challenge military policy or national security matters. The king alone exercised *Kommandogewalt*, power to command, and his decisions were final.

The army produced most of its weapons and ammunition in royal arsenals, hence there were no procurement, research and development, or operations research lessons to learn. Even by the end of World War I half of all military hardware came from royal armories.

Operator’s Mind

In the realm of military education, Prussian officers from cadet to corps commander must have felt harassed by the army system. There were numerous hurdles: entrance and term exams, written and oral exams, and field exams. And the emphasis was placed on hard military sciences. In Berlin at the *Kriegsakademie* obligatory subjects included tactics, military history, weaponry, fortifications, staff work, military geography, communications, logistics, military law, and military medicine. In fact, tactics occupied the most hours and had the greatest academic weight; next came staff work and history. Officers could apply to the war academy after five years of field service. Rigorous screening admitted only

German troops in Vienna, 1938.



Naval Historical Center



Courtesy Special Collections, NDU Library

160 of the best and brightest. Once selected the students found their studies demanding and dismissals frequent. Annual fitness reports were harshly direct.

Noncommissioned officers were also subjected to regular education and routine evaluation. They served for twelve years after which they were guaranteed jobs in the civilian sector by means of a special certificate known as the *Zivilversorgungsschein*. Special schools trained and retrained 300,000 noncommissioned officers in fortifications, artillery, supply, communications, and related skills. Distinct medals further built esprit de corps. The effort was highly successful: Germany probably had the best noncommissioned officers on the eve of World War I.

In the realm of intelligence officers were expected to be proficient in languages, regularly appointed to missions abroad, and urged to translate or at least review foreign military literature. From Alfred Thayer Mahan to William (Billy) Mitchell, American authors were routinely analyzed by the general staff in Berlin. Foreign newspapers, military journals, and parliamentary debates were evaluated. Synopses of such material

were circulated to division and district commanders for their information and comment.⁵ In short, officers, especially those on the general staff, were at the cutting edge of international developments at all times.

Tactics reigned supreme in Prussia. The system concentrated on the nuts and bolts of the military profession. Its members were drilled in the theory and practice of the latest weapons, their implications for operations, and their advantages and limitations. Every new invention or modest refinement was thoroughly studied, tested, and adopted if deemed effective. Several general staff departments as well as testing sites were established to scrutinize foreign advances and rule on their applicability. Field Marshal Paul von Hindenburg remembered the motto "Keep it simple" from his early days in the army. Thus the Prussian military, though not big on technological innovation (witness the lack of tanks, trucks, and anti-tank guns in World War I), was nevertheless expert at assessing technological advances and determining their applicability.⁶

Maneuvers and games were rigorous. To the degree permitted in the pre-computer era, the

Prussian army did everything within its power to simulate military conditions. Since the days of the soldier-king, Frederick William I (1713–40), the Prussians annually (and later biannually) went through formal maneuvers. In either spring or autumn, these exercises began with staff work and concluded with a formal review usually by the chief of the general staff. Often involving divisions and armies, the maneuvers were intended to simulate battlefield conditions, test the applicability of existing doctrine and weapons, and assess the suitability of officers and noncommissioned officers for leadership. And tough fitness reports followed each maneuver.

Theoretical exercises served to test the mind of future commanders within the general staff. Under General Alfred von Schlieffen, they were customarily handed out on New Year's Eve to try

perhaps the most important lesson is the relationship between political and military planners

the dedication of a candidate and were immediately evaluated on the highest level.⁷ The best papers were published in service journals.

Spring staff rides enhanced military geography and formed the basis for final class standing—and thus a rung on the critical seniority (*Ancienmität*) ladder.

Combined arms operations were in vogue well before 1914. The Prussian army stressed the interdependence of various combat arms in its regulations. In 1870, for example, the support accorded infantry by the new Krupp breech-loading steel cannons was crucial in storming French positions in Alsace and Lorraine. Moreover the army fully appreciated reconnaissance—be it from horseback, dirigibles, or aircraft. Within personnel constraints, Prussian forces attached staff from one service branch to another to facilitate the exchange of information.

Finally, there was the intangible impact of work ethic and dedication. The vast majority of officers saw their careers as spanning a lifetime. While most knew they would probably not pass the “major’s corner,” they worked as though they would. Early transfer to civilian (and especially military-industrial) corporations was not encouraged or rewarded. Sacrifice was expected and hard work taken for granted. Frederick William I, the father of Frederick the Great, stated it best when he said that the watchword for his (or any other) period was simple: “Nothing more than effort and work.” Certainly the fact that the Elder Moltke began planning for the contingency of a

two-front war against France and Russia late in 1870—at a time when he was about to defeat the former and was on friendly terms with the latter—demonstrates the intellectual dexterity of the general staff.⁸ So did the fact that the moment the Franco-Prussian War concluded the military history section of the staff began a critical study of the campaign.

Choosing the Most Opportune

Next in importance came flexibility of planning. The Elder Moltke, not Schlieffen, should be studied in detail by American military planners. Moltke always maintained that war was at best a shot in the dark and at worst a cynical roll of the dice over the nation’s future. The brightest staff planner could only seek to mobilize as many troops as possible, equip them as well as possible, and marshal them expeditiously at the decisive point. If extremely competent (and lucky), he could deploy his forces against those of an enemy as opportunely as possible by using communications and geography to his advantage.

But once the first shot was fired, Moltke never tired of warning general staff officers, the strategist had to think ad hoc—on his feet. “No plan of operations can look with any certainty beyond the first meeting of the major forces of the enemy.” The intangibles such as interaction, friction, moral factors, and the infamous fog of war then took over: orders were not understood, commanders went separate ways, information was lost or garbled, and the enemy, endowed with an “independent will,” improvised and reacted. After all, warfare was a clash between two highly unpredictable bodies; neither would have entered the conflict without some assurance of victory.⁹

Even later, basking in well-deserved glory, the Elder Moltke remained open to change. He understood the geopolitical chessboard of the 1890s and appreciated that the location of the Reich between France and Russia defied simple operational-tactical resolution. Limited victories were all that could be hoped for. “It must be left to diplomacy,” Moltke concluded, “to see if it can achieve a peace settlement” in a future war among the great powers. Thus his prophetic farewell speech in the *Reichstag* in 1890: “Woe to him that sets Europe on fire.” Under Schlieffen a timetable for the rigid mobilization of the army would rob it of that very flexibility.

Perhaps the most important lesson of the Prussian way of war is the relationship between political and military planners, namely, Bismarck and Moltke. Whatever the discord over storming the Düppel in 1864 or bombarding Paris in 1870—both men understood that in peacetime civilians needed to provide soldiers with clear, unambiguous instructions. Bismarck regretted



Courtesy, Special Collections, ND.U. Library

that *On War* was “the one great book” he never read; but nonetheless he grasped the political nature of war.

Bismarck, like Clausewitz, recognized that the “stream of time” constituted nothing more or less than an unceasing clash of contradictory forces. No such outcome as “complete certainty and definitive results” existed. Politics was not intrinsically an “exact and logical science” but rather “the ability to choose in each transitory situation that which is least harmful or most opportune.” Patience, careful timing, accurate evaluation of potential adversaries, and intuitive recognition of the correct path were critical to success. So was the need at all times to preserve freedom of choice between opposed interests, minimize risk, and reserve options, not as bluffs but rather as practical threats one was prepared to carry out. After the wars of unification, Bismarck offered eloquent testimony to Clausewitz’s principle of interaction:

In chess, one should never base a move on the positive assumption that the other player will in turn make a certain move. For it may be that this will not happen, and then the game is easily lost. One must always reckon with the possibility that the opponent will at the last moment make a move other than the one expected. . . . In other words, one must always have two irons in the fire.¹⁰

The famous “retreat” to Bad Kissingen in June 1877, where an isolated Bismarck sought to adjust to a changed world, provides a convenient case study of *realpolitik*, the “art of the possible.” It is a model in clarity and reason.

The Iron Chancellor first assessed the potential threat: a “nightmare of coalitions” as faced Frederick the Great in 1756. Thereafter he defined the national policy: no expansion, no push for hegemony in Europe. Instead Bismarck accepted what the historian Ludwig Dehio termed “semi-hegemony.” Germany was to be the strongest power in Europe but without being a hegemon. Realistically, Bismarck sought to maintain one percent of the population under arms to buttress that posture. Next he identified a potential enemy: France. From that followed his course of action: to create “a political situation in which all the powers except France need us.” His basic axioms were first, no conflict among major powers in Central Europe and, second, German security without German hegemony. Finally, there was implementation of those conclusions reached: alliances with Austria (1879), Italy (1882), and Russia (1887). There was even a fall-back position: “If Austria-Hungary makes unreasonable demands on us, we can come to an understanding with Russia.” It was devious; and it was diplomacy at its best.

What commander, one may well ask, would not envy Moltke for receiving clear political instructions? The goal of national policy was established, the probable enemy was identified, and the potential of allies was achieved. Little wonder that Moltke was untroubled by the nightmares that plagued his successor, Schlieffen.

Conversely, the Schlieffen plan and the decision for war in 1914 again attest to the validity of these lessons—albeit when they are forgotten. Chancellor Theobald von Bethmann Hollweg proudly recalled after World War I that it had never been his “business to comment upon grand strategy.” He cheerily noted that “there never took place during my entire period in office a sort of war council at which politics were brought into the military for and against.” It would be difficult to find a greater abrogation of political responsibility.

Indeed, Imperial Germany undertook neither joint nor allied planning. The army and navy developed separate strategies without reference to each other. Army and navy appropriations bills were submitted to the Chancellor for approval—without reference to each other. Throughout much of this period the chief of the general staff was not consulted by the war minister in the compilation of the military budget.¹¹

Yet the chief of the general staff, without either legal or constitutional authority and solely as

the “first advisor of the Imperial Supreme Commander,” tied the nation to a desperate strategy in 1905–06 simply by the prestige of his office. The Schlieffen plan was not revealed to the German government, its Austro-Hungarian allies, or even the navy. Thus the war minister could forecast

Prussia worshipped “efficiency” as the natural culmination of 19th century rationalism and positivism

reductions in forces in this period, while the general staff knew that it lacked fully eight army corps for a right “wheel” through Belgium alone.¹²

Most revealingly, on August 1, 1914, the Ger-

man military attaché at Vienna, Colonel Karl Count von Kageneck, would call for the coordination of effort (“with absolute frankness”) between Berlin and Vienna—three days after Austria-Hungary had gone to war with Serbia and on the very day Germany declared war on Russia.¹³

In sum, the business of war is a two-edged sword. As Clausewitz stated, “it is absurd to bring the military into the process of war planning so that they can decide purely militarily what the cabinets must do”; but he warned, “it is even more absurd for theoreticians to demand that available war resources can be turned over to the military commander so that he can make a military war plan accordingly.”¹⁴ Obviously, each segment of the national polity must coordinate its own strategy.

The Goddess Efficiency

One also must consider the Achilles heel of the Prussian system—areas in which it did not serve the nation well. Having gotten much of what the late German historian Gerhard Ritter called *Kriegshandwerk* (the mechanics of war) right, the Prussian system failed on the strategic—and especially grand strategic—levels.

Victory breeds arrogance; defeat drives reform. Mid-19th century Prussian victories turned many regular officers—and especially young general staff officers—into what Bismarck derided as “demigods.” Theirs became the only solution, the only way to success. Why change a victorious system? Preserve it and denounce its critics. This was certainly the case with critics as gentle as Hans Delbrück, whose wise counsel concerning the nature of warfare in the industrial age was blithely ignored.¹⁵ Confidence is one thing, arrogance another.

Moreover there is no substitute for intellectual rigor and honesty. Wargames, especially under William II, turned into grand theater. The garbage in, garbage out phenomenon existed long before the computer age. Maneuvers or games can prove anything their organizers wish—even the superiority of cavalry over machine

guns, howitzers, and trench mortars. The Kaiser “won” many a fall maneuver on the last day with a dashing charge—at times by having well entrenched enemy machine gunners change the color of their armbands so charging friendly cavalry could pass by to victory unharmed. Accordingly, even the model Prussian army maintained the lance as a mobile assault weapon until 1927.

What of the much-revered Alfred von Schlieffen? One of the sternest taskmasters produced by the general staff system, he nevertheless jettisoned intellectual honesty to prove his theory about the centrality of battles of encirclement and annihilation (*Kesselschlacht*). It was after all Schlieffen who read Delbrück’s analysis of the battle of Cannae prior to devising the great plan that bears his name—apparently without being troubled by the obvious lesson that although winning the battle, Hannibal lost the war; and that Carthage, primarily a landpower, succumbed to Roman seapower.

Planners also must avoid the blinkered professionalism (*Fachidiotie*) of the technocrat. In the final analysis, win or lose, men fight wars. There is more to war than understanding the range or rate of fire of certain weapons. Strategy is more than ordnance delivered on target. Limiting the planning horizon to one’s service—or a specialized arm within a service—usually invites disaster. One would do well to remember General Erich Ludendorff’s revealing reprimand to a general staff colonel who dared inquire about the objective of Operation Michael in France during spring 1918 when the nation’s fate hung in the balance: “I object to the word ‘strategy.’ We will punch a hole in their line. For the rest, we shall see.”

In post-1871 Prussia, both soldiers and politicians worshipped the goddess “efficiency” as the natural culmination of 19th century rationalism and positivism. The precision of technological marvels sufficed to guarantee victory. Hence, they asked, why bother with the great philosophical issues that the Elder Moltke had pondered? Was it really necessary to coordinate the diplomatic, economic, political, and psychological elements of national polity? Most thought not. Schlieffen’s successor, Helmuth von Moltke (the Younger) encouraged his son to read the operational history of Cannae by Schlieffen in preparation for the war academy, not Clausewitz’s treatise on the nature of war. Wilhelm Groener, who succeeded Ludendorff in 1918 as the first quartermaster-general, proudly recalled that as a subaltern he had read “books of the practical service” rather than “on high strategy.” Kaiser William II as well as Field Marshals Paul von Hindenburg

and Colmar Baron von der Goltz mined from Clausewitz the nugget that “politics must not interfere with the conduct of war.” In fact, as Werner Hahlweg has indicated, in 1853 the Germans even tampered with the second edition (and subsequent editions) of *On War* by attributing to Clausewitz the statement that a general should attend cabinet meetings so the cabinet could have a voice in military issues. The revision stated that a general needed to attend to participate directly in national decisionmaking.¹⁶

In addition, it is imperative that planners understand the domestic fabric of the society that they are about to lead into war. After 1871 Prussian planners were bedeviled by the dual function of the army as guarantor of domestic stability and executor of national policy. The former calls for a small, reliable conscript force of mainly rural recruits, the latter for a mass formation of industrial workers as well. One reflects an agrarian, semi-absolutist state, the other an industrialized, semi-de-

eventually ended with Ludendorff’s theoretical notion of “total war” as implemented by Adolf Hitler after 1941.

Hand in glove with the last point is the need for economic preparation in warfare. Prussia would never form an economic general staff—despite repeated calls by General August Keim and Field Marshal von der Goltz as well as by the historian Dietrich Schäfer. Army planners simply were confident that the “sinews of war” would somehow fall into place. What Martin van Creveld has termed Schlieffen’s “ostrich-like refusal” to address this issue was probably the single greatest cause for the German collapse on the Marne in September 1914.¹⁷ No George C. Marshall ever emerged from the Prussian military system.

In addition, it is essential to understand economic capabilities and priorities. Despite his managerial skills and talent for propaganda, Admiral Alfred von Tirpitz performed no service by constructing a mammoth fleet that eventually



Courtesy Special Collections, NDU Library

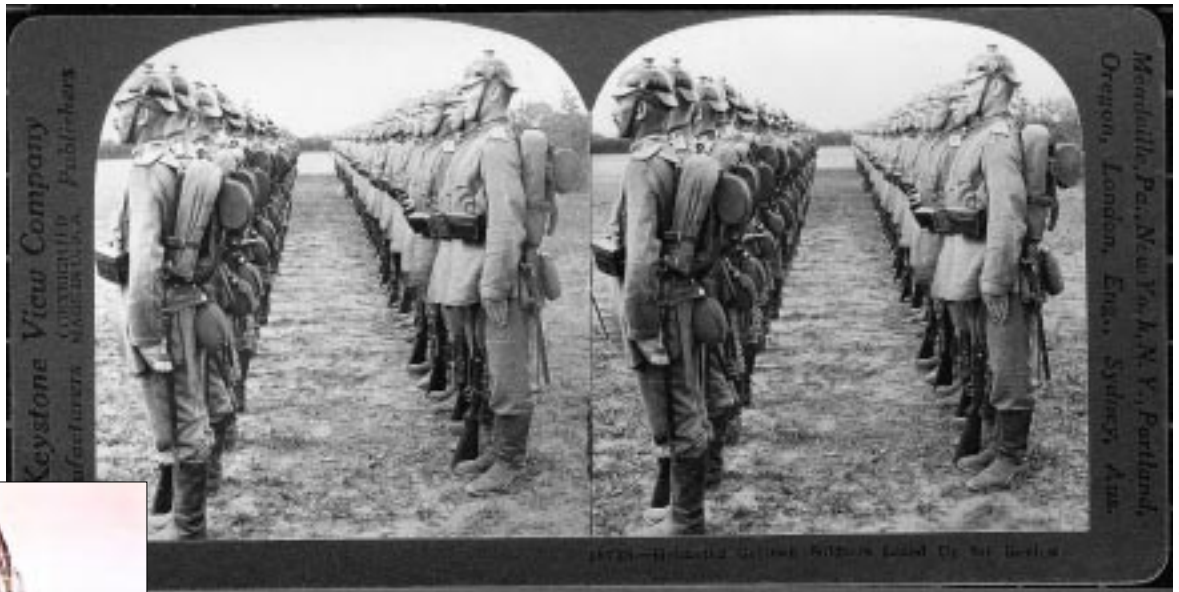
mocratic nation-state. Prussia’s inability to reconcile these functions and to structure and educate its army accordingly was revealed in budget debates prior to and during World War I.

In 1913, when the Younger Moltke and then Colonel Ludendorff discovered that Germany was eight army corps short for Schlieffen’s right “wheel” through Belgium and northern France, they at once demanded a 33 percent increase in strength. General Josias von Heeringen brusquely dismissed the request for 300,000 men, arguing that such an expansion would lead to a detrimental “democratization” of the officer corps. The Prussian war minister reminded the general staff that creating a modern mass army in the industrial era would jeopardize the army’s primary function as guarantor of domestic stability. One of Heeringen’s bureau chiefs, General Franz Wandel, bluntly apprised Ludendorff: “If you continue with these demands, then you will drive the German people to revolution.” The debate

bankrupted the state, drained the army of desperately needed funds, and brought about Germany’s self-imposed diplomatic “encirclement” in Europe.¹⁸

The Big Picture

Another critical point is that there is no substitute for planning on the grand strategic level. No matter how well one may fire a howitzer, plant a mine, maneuver a tank, pilot an aircraft, shape a ship’s course, or even plan a complex field operation, if the equation is wrong at the top it will eventually fail to produce the desired results. When the Prussian army analyzed the campaigns of 1864, 1866, and 1871, it dug into operations and tactics with a vengeance. Unfortunately, it also conveniently overlooked the fact that Bismarck prepared the path to victory



Courtesy Special Collections, NDU Library



Courtesy Special Collections, NDU Library

through alliances and calling in diplomatic markers. Moreover, psycho-babble about Austro-German *Nibelungen* loyalty and Teutonic racial brotherhood which abounded on the eve of World War I obscured the desperate plight of the Central Powers. A hollow alliance with Italy was maintained (no one in either Berlin or Vienna expected Rome to honor its commitment) and no new allies were recruited. As Winston Churchill put it, the only thing worse than fighting with allies is fighting without them.

The German historian Andreas Hillgruber offered a cogent if complex formula for strategic effectiveness. National leaders on all levels must coordinate and integrate domestic and foreign policy, strategic and psychological war planning, and economic and armaments production in order to arrive at a coherent concept of national strategy. As stated earlier, Prussia-Germany's failure to do so was the Achilles' heel of its national strategy and military policy.

Finally, planners must appreciate the implications of war as a political act and the fact that they are political players by definition. The long-standing Prussian myth of the "apolitical" officer valiantly struggling to protect the nation against devious diplomats or scheming politicians remains just that—a myth. Whether one wins or loses a war should no longer be a puzzle: the purpose of war is not to inflict military defeat on an enemy but rather, in the words of Clausewitz, "to compel your enemy to do your [political] will."

Hence, the title of General Erich von Manstein's book, *Lost Victories*, is absurd according to Clausewitz's definition of the purpose of war.¹⁹ Likewise, popular notions of "surgical strikes" and "short cleansing thunderstorms" should be excised from the American military (and political) lexicon.

Conversely, the military planner should not turn Clausewitz on his head by suggesting that the political branch must remain silent in time of war. This reductionism of Clausewitz's famous phrase that war is but politics conducted by other means reached its zenith with Ludendorff's book *Total War* in 1935, wherein he proclaimed that "warfare is the highest expression of the national 'will to live,'" and that "politics must therefore be subservient to the conduct of war." However fervently some planners may wish that to be the case, it certainly is not with regard to what Russell Weigley has aptly termed "the American way of war." As Winston Churchill said:

Let us learn our lessons. Never, never, never believe that any war will be smooth and easy, or that anyone who embarks on that strange voyage can measure the tides and hurricanes he will encounter. The statesman who yields to war fever must realise that once the signal is given, he is no longer the master of policy but the slave of unforeseeable and uncontrollable events. Antiquated war offices, weak, incompetent or arrogant commanders, untrustworthy allies, hostile neutrals, malignant fortune, ugly surprises, awful miscalculations—all take their seats at the council board on

*the morrow of a declaration of war. Always remember, however sure you are that you can easily win, that there would not be a war if the other man did not think he also had a chance.*²⁰

In the last analysis, the “art of the possible” will always rest not on bluff but rather on the ability to defend one’s position, if need be with an appeal to force. Bismarck’s dictum should serve as a reminder to all civilian and military planners: “The influence of a power in peace depends upon the strength that it can develop in war and on the alliances with which it can enter into the conflict.”

JFQ

NOTES

¹ On World War I, see Timothy T. Lupfer, *The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War* (Fort Leavenworth, Kans.: Combat Studies Institute, U.S. Army Command and General Staff College, 1981), and Bruce I. Gudmundsson, *Stormtroop Tactics: Innovation in the German Army, 1914–1918* (Westport, Conn.: Greenwood, 1989); for the 1920s see David N. Spires, *Image and Reality: The Making of the German Officer, 1921–1923* (Westport, Conn.: Greenwood, 1984), and James S. Corum, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform* (Lawrence, Kans.: University Press of Kansas, 1992); on World War II, see especially Martin van Creveld, *Fighting Power: German and U.S. Army Performances, 1939–1945* (Westport, Conn.: Greenwood, 1982).

² For an overview see “The Problem of German Military Effectiveness, 1900–45,” in Williamson Murray, *German Military Effectiveness* (Baltimore: Nautical and Aviation Publishing, 1992), pp. 1–38.

³ Holger H. Herwig, “Strategic Uncertainties of a Nation State: Prussia-Germany, 1871–1918,” in Williamson Murray, Macgregor Knox, and Alvin Bernstein, *The Making of Strategy* (New York: Cambridge University Press, 1994), pp. 242–77.

⁴ See the analysis by Wilhelm Deist, “Kaiser Wilhelm II in the context of his military and naval entourage,” in John C.G. Röhl and Nicolaus Sombart, eds., *Kaiser Wilhelm II: New Interpretations: The Corfu Papers* (New York: Cambridge University Press, 1982), pp. 169–92.

⁵ Holger H. Herwig, “Imperial Germany,” in Ernest R. May, ed., *Knowing One’s Enemies: Intelligence Assessment Before the Two World Wars* (Princeton: Princeton University Press, 1984), pp. 62–97.

⁶ Holger H. Herwig, “The Dynamics of Necessity: German Military Policy During the First World War,” in Allan R. Millett and Williamson Murray, eds., *Military Effectiveness*, vol. 1, *The First World War* (Boston: Allen and Unwin, 1988), pp. 80–115. Also Lupfer, *The Dynamics of Doctrine*; and Gudmundsson, *Stormtroop Tactics*.

⁷ Still valid is the incisive analysis by Gordon A. Craig, *The Politics of the Prussian Army, 1640–1945* (New York: Oxford University Press, 1955), pp. 277 ff.

⁸ See, for example, Dennis E. Showalter, “The Eastern Front and German Military Planning, 1871–1914—Some Observations,” *East European Quarterly*, vol. 15, no. 1 (March 1981), pp. 167 ff; and Holger H. Herwig, “Disjointed Allies: Coalition Warfare in Berlin and Vienna, 1914,” *The Journal of Military History*, vol. 54, no. 3 (July 1990), pp. 265–80.

⁹ See Gunther E. Rothenberg, “Moltke, Schlieffen, and the Doctrine of Strategic Envelopment,” in Peter Paret, ed., *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton: Princeton University Press, 1986), pp. 296–311.

¹⁰ Cited in Otto Pflanze, *Bismarck and the Development of Germany*, vol. 1, *The Period of Unification, 1815–1871* (Princeton: Princeton University Press, 1990), p. 83.

¹¹ See Holger H. Herwig, “From Tirpitz Plan to Schlieffen Plan: Some Observations on German Military Planning,” *The Journal of Strategic Studies*, vol. 9, no. 1 (March 1986), pp. 53–63.

¹² The standard work remains Gerhard Ritter, *The Schlieffen Plan: Critique of a Myth* (New York: Praeger, 1958).

¹³ Found in Gordon A. Craig, “The World War I Alliance of the Central Powers in Retrospect: The Military Cohesion of the Alliance,” *Journal of Modern History*, vol. 37, no. 3 (September 1965), p. 338. See also Holger H. Herwig, *The First World War: Germany and Austria-Hungary 1914–1918* (New York, St. Martin’s, 1997), chapters 1 and 2.

¹⁴ A slightly different translation is rendered by Michael Howard and Peter Paret, eds., in Carl von Clausewitz, *On War* (Princeton: Princeton University Press, 1976), p. 607.

¹⁵ See especially chapters 2 and 3 in Arden Bucholz, *Hans Delbrück and The German Military Establishment: War Images in Conflict* (Iowa City: University of Iowa Press, 1984).

¹⁶ See Jehuda L. Wallach, *The Dogma of the Battle of Annihilation: The Theories of Clausewitz and Schlieffen and Their Impact on the German Conduct of Two World Wars* (Westport, Conn.: Greenwood, 1986), pp. 14, 196–98.

¹⁷ Martin van Creveld, *Supplying War: Logistics from Wallenstein to Patton* (New York: Cambridge University Press, 1977), pp. 113 ff.

¹⁸ For naval developments see Holger H. Herwig, *“Luxury” Fleet: The Imperial German Navy 1888–1918* (Atlantic Highlands, N.J.: Ashfield Press, 1987), pp. 33 ff.

¹⁹ Erich von Manstein, *Lost Victories* (Chicago: Henry Regnery, 1958).

²⁰ Winston S. Churchill, *My Early Life: A Roving Commission* (London: Thornton Butterworth, 1930), p. 246.