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US Air Force Academy Harmon Memorial Lecture #28
Napoleon and Maneuver Warfare
Steven T. Ross, 1985

It is a great honor to be invited to deliver the Twenty-eighth Harmon Memorial lecture. Gen. Hubert Harmon had a lifelong interest in military history. His belief in the enduring importance of the historical study of war is confirmed by the call of many Great Captains to study the history of warfare both for its own sake and to gain greater depth and understanding of current and future problems.

Carl von Clausewitz was fully aware of the dangers of oversimplification and mistaken analogies, but, nevertheless, noted that "historical examples clarify everything and also provide the best kind of proof in the empirical sciences. This is particularly true of the art of war."¹ While still a cadet at West Point, George Patton wrote,

I believe that in order for a man to become a great soldier . . . it is necessary for him to be so thoroughly conversant with all sorts of military possibilities that whenever an occasion arises he has at his hand without effort on his part a parallel. To attain this end I think that it is necessary for a man to begin to read military history in its earliest and crudest form and to follow it down in natural sequence permitting his mind to grow with his subject until he can grasp without effort the most abstruse question of the science of war because he is already permeated with all its elements ²

It was, of course, Napoleon who said, "Knowledge of grand tactics is gained only by experience and by the study of the campaigns of all the great captains."³ He also urged officers "to read and reread the campaigns of Alexander, Hannibal, Caesar, Gustavus, Eugene and Frederick. This is the only way to become a great captain."⁴ Thus, Napoleon, like many others, regarded the combination of experience plus reflection upon the immediate and distant past as essential guideposts for military professionals.

Recently, there has been a rediscovery of the importance of military doctrine which Gen. Curtis LeMay aptly described in the following terms: 'At the very heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory. . . . It is the building material for strategy. It is fundamental for sound judgement."⁵ The study of doctrine has both a contemporary and a historical dimension.

Current interest focuses on maneuver warfare, a concept that involves combined arms operations, bold deep attacks and flexible operational methods. New U.S. Army and Air Force manuals emphasize rapid, deep, violent assaults designed to dislocate and disorient the enemy. A strategy based on swift unexpected strikes coupled with a relentless exploitation of initial success is not, of course, totally new. Many if not most great commanders were masters of mobile warfare, and Napoleon was one of the most able executors of maneuver doctrine and strategy. His reflections on the art of war have in fact a very modern ring, and it is instructive to compare them with current American manuals.

Napoleon always understood the necessity for combined arms operations and noted that "infantry, cavalry and artillery cannot do without one another."⁶ The 1982 edition of the U.S. Army's Field Manual 100-5 (FM 100-5) states, "the term combined arms refers to two or more arms in mutual support to produce complementary and reinforcing effects that neither can obtain separately."⁷

In his campaigns Napoleon always relied upon surprise and speed. "It is," he wrote, "a well established maxim of war never to do what the enemy wishes you to do."⁸ He also believed that "the strength of an army like power in mechanics is the product of the mass by the velocity."⁹ Similarly,

the 1984 edition of Air Force Manual 1-1 (AFM 1-1) calls upon commanders to "influence the timing and tempo of military actions by seizing the initiative and operating beyond the enemy's ability to react effectively."¹⁰ The 1984 edition of FM 100-5 calls for operations that are, "rapid, unpredictable, violent and disorienting to the enemy."¹¹

Boldness and flexibility in battle were characteristic of Napoleon's style of combat. "In audacity and obstinacy will be found safety and conservation of the men,"¹² and war, he noted, was "composed of nothing but surprises. While a general should adhere to general principles, he should never lose the opportunity to profit by these surprises. It is the essence of genius. In war there is only one favorable moment. Genius seizes it."¹³ AFM 1-1 for its part bluntly tells commanders to "seize the initiative,"¹⁴ while FM 100-5 enjoins commanders to "develop opportunities that the force as a whole can exploit."¹⁵

To Napoleon fire was an essential component of maneuver, or as he put it, "in battle skill consists in converging a mass of fire upon a single point",¹⁶ FM 100-5 notes that "fire power provides the enabling violent destructive force essential to successful maneuver,"¹⁷ while AFM 1-1 states, "Concentrated firepower can overwhelm enemy defenses and secure an objective at the right time and place."¹⁸

Pursuit in the wake of victory was another essential element of Napoleonic warfare. "Once the offensive has been assumed," he wrote, "it must be maintained to the extremity,"¹⁹ and he also noted that a good general would "never let the victors or the vanquished rest."²⁰ FM 100-5 points out the importance of taking "advantage of opportunities by momentum"²¹ and of sustaining the initiative by "exploiting success."²² AFM 1-1 also recognizes the need to "attack the enemy relentlessly."²³

The American military has the opportunity to create and reflect upon its doctrine before having to test it in a major clash of arms. Napoleon on the other hand had to devise his operational techniques in the crucible of war. Fortunately, he had an instrument to match his genius- the army created by revolutionary France.²⁴

The pre-1789 French Royal Army was both socially and tactically inflexible. The nobility dominated the officer corps. In 1789 the army contained 9,578 officers of whom 6,633 were aristocrats. Enlisted personnel numbered about 140,000 and consisted primarily of volunteers from the lower classes who joined the army to escape poverty, unemployment and occasionally the police.

Once in uniform soldiers felt little loyalty to the ruling monarch. Desertion was a constant problem. During the Seven Years' War about 70,000 French soldiers fled the army. Harsh discipline was necessary to maintain the army's cohesion, and brutal punishments were common.

The nature of weapons reinforced the need for rigid discipline. The standard infantry weapon was the inaccurate, short range, slow firing smoothbore flintlock musket. Under optimum conditions a trained soldier could fire his weapon two or three times a minute and expect to hit something only if it were less than 150 yards distant.

To obtain the most effective use of the musket, armies employed linear formations three ranks deep and up to several miles long. The linear battle order brought the most weapons to bear and produced the greatest volume of fire. Troop training, therefore, emphasized rapid deployments from marching columns to battle lines and rapid volley firing. Soldiers were forbidden to show individual initiative even to the extent of aiming their weapons, and officers and NCOs in battle typically devoted their efforts to keeping their formations properly aligned and ready to deliver volleys upon command.

Light infantry performed special tasks: scouting, rounding up prisoners and deserters, and harassing a retreating enemy. Light troops, however, remained functionally separate from the line battalions and rarely participated directly in major battles.

Cavalry composed about a fifth of the army's strength. In battle cavalry regiments usually served on the army's flanks and were employed as a shock force. Socially prestigious, the horsemen were occasionally effective in battle. Light cavalry units performed special functions and often operated with the light infantry.

Field artillery usually provided a preliminary bombardment, but once the army was fully engaged, the guns that were too heavy to move quickly, usually fell silent. Lighter regimental guns did move with the infantry but were too few to be of significant support to the foot soldiers. Recognizing the artillery's limited combat role, the Royal Army maintained a field artillery force of only 12,000 officers and men.

Old Regime battles were marked by rigid tactics. Troops in linear order traded close range volleys with their enemies until one side broke. Army commanders could move reserves to bolster the firing line or order cavalry charges, but linear formations made more extensive maneuvering impossible, and volley fire remained the deciding factor in most engagements.

Delivered by serried ranks at close range, volley fire produced heavy losses among victors and vanquished alike. Casualties could, in fact, reach as high as forty percent of the forces engaged. Consequently, battles were rarely decisive since the victors were usually too depleted to mount an effective pursuit, and the defeated army could usually escape annihilation.

The high casualty rate coupled with indecisive results also made generals reluctant to risk battle. The Royal Army had no effective reserve system, and commanders did not want to hazard their small forces in constant tactically expensive but strategically futile combats. Battles were, therefore, relatively rare, and most wars were indecisive. Statesmen in old regime France, as in other states, frequently devised ambitious diplomatic stratagems, but achievements usually fell far short of aspirations in large measure because the nature of warfare was not suited to the goals of state policy.

For France the Seven Years' War was an unmitigated disaster. The army entered the war without enthusiasm, fought without distinction, and emerged without victory. After 1763 the French made a sustained effort to improve their armed forces.

Infantry tactics were hotly debated. Some wanted to imitate Prussian expertise in linear deployments; others called for the use of shock power by introducing massive assault columns; and still others advocated a flexible combination of lines and small columns. The government increased the number of light infantrymen, and a few farsighted thinkers advocated that line troops receive light infantry training, thus creating a soldier who could fight in either close or open order.

The artillery corps made great strides. The number of gun calibers was reduced to four, and new guns, lighter than their predecessors, had standardized parts and packaged rounds. One officer, the Chevalier Jean du Teil, argued that light mobile field guns used in large concentrations against infantry rather than in counterbattery work would be decisive in combat. Du Teil's elder brother commanded an artillery regiment and trained his cadets, including a young Corsican named Bonaparte, according to the Chevalier's doctrine.

To improve interarm coordination the War Ministry in 1776 divided France into sixteen military districts. The number was later raised to eighteen. Each district had a permanent garrison from all three service branches, inspector generals were empowered to hold combined arms maneuvers, and for campaigns they could create task forces composed of elements of two or more branches.

Thus by 1789 the Royal Army had made some progress in improving its tactics and in developing combined arms doctrine. It, nevertheless, remained a small, long service volunteer force run by aristocrats and staffed by society's lower orders. Moreover, the reforms were tentative, and it was to take the impact of domestic revolution coupled with foreign war to alter fundamentally the army's organization and doctrine.

The first years of the Revolution witnessed a continuation of the reform efforts of the Old Regime. Infantry drill regulations, issued on August 1, 1791, described a variety of line and column formations and encouraged commanders to employ formations and maneuvers best suited to their particular geographic and tactical circumstances. The artillery corps introduced horse batteries, where mounted gunners accompanied their cannons into battle, and the aristocracy lost their virtual monopoly over the officer corps.

It was, however, the war which began on April 20, 1792, that forced French leaders to undertake drastic reforms to save the nation and its revolution. By 1793 France was at war with most of Europe, under invasion from the Channel coast to the Alps and from the Mediterranean to the Pyrenees. The nation also faced counterrevolutionary insurrections in the western departments, in the Loire and Rhone Valleys and in the major Mediterranean seaports.

The Republic's first priority was to expand the army. When calls for volunteers proved inefficient, the government resorted to conscription. On February 21, 1793, the National Convention called 300,000 men to the colors, and on August 23, 1793, the government passed the *levee en masse* decree, placing all French men and women in a state of permanent requisition for the duration of hostilities.

Conscription was quite effective. Most of the French people supported the revolution, had a personal stake in the Republic's survival and were willing to participate in the national defense effort. By January 1794, France had 670,000 men under arms, and by the end of the year the Republic had 1,108,000 troops, of whom 850,000 served in the field armies while the remainder garrisoned fortresses, guarded the coasts or underwent training in depots.

The government organized its soldiers into demi-brigades consisting of one battalion from the old regular army and two conscript battalions. By early 1794, the army contained 198 demi-brigades and fourteen smaller light demi-brigades. Army commanders began to place two or more demi-brigades with supporting artillery under a single officer. Division strengths varied widely as did the number of field guns, but by 1794 the use of the multiarm division was standard in all field armies.

Since about two thirds of the officers of the old army left their posts because of opposition to the Revolution, the Republic had to create a new officer corps. Talent, experience and loyalty replaced birth and status as promotion criteria. The new officer corps was by social origin overwhelmingly middle class. Nobles who supported the revolution continued to serve the Republic; however, a few high ranking officers came from artisan and peasant backgrounds. Many generals of the Republic had previous service as enlisted men in the Royal Army, while others had served in the National Guard, an organization created during the Revolution's early years to provide local security.

The new officers were young and energetic. Not all were great commanders, but Republican officers on the whole were able leaders and succeeded in molding regulars, volunteers and conscripts into a fighting force able to face Europe's professional armies on better than even terms.

Officers used the 1791 regulations as the basic drill manual and also gave troops light infantry training. Their goal was to create all purpose infantrymen able to fight in open order, as part of an assault column or as a member of a firing line.

A typical nine company infantry battalion about 1,000 strong usually entered battle in a closed column, two companies wide and four deep. Thus, the column resembled a rectangle eighty men across and twelve deep. The ninth company remained in reserve. Depending upon battlefield conditions, the commander had a number of options. He could detach companies as skirmishers and reinforce them using, if necessary, the entire battalion. Alternatively, he could order the companies in column to launch a bayonet assault, or he could deploy his troops for fire action.

The demi-brigade enjoyed similar flexibility. The commander could place all three of his battalions in line or establish three parallel columns screened by light infantry. He also could put some battalions in line and others in column and shift formations from one mode to another during combat to respond to changing tactical circumstances.

Divisions could march and fight independently or as part of a larger force. Commanders could, therefore, wage encounter battles, feeding troops into action as they arrived on the field instead of waiting until their entire force deployed. Army commanders often used ad hoc, multi-division formations for specific missions. These corps could operate also on their own or as part of a field army.

Divisional and army commanders adopted du Teil's views concerning the employment of field guns. Serving in large batteries, guns provided close fire support for the infantry and operated as an integral part of Republican battle formations.

Only the cavalry arm did not witness a marked improvement, plagued as it was by insufficient training and a serious shortage of horses. Nevertheless, the cavalry performed useful services including scouting and screening the main body's advance. The Republican cavalry earned the unique distinction of capturing a fleet. In January 1795, French horsemen charged over ice-covered water and seized a Dutch fleet.

Republican logistics were at best sketchy. Troops lived by requisitioning, and when there was nothing to requisition they did without. There were constant shortages of food, pay, shoes and uniforms in Republican armies, but troops put up with privations that would have destroyed an Old Regime army because they had a personal stake in the war.

The Republican army in which soldiers were motivated by patriotism and hope of reward as well as by fear of punishment allowed generals to operate with a boldness and flexibility that was simply not possible under the Old Regime. Commanders could and did attack constantly, seeking to wear down and destroy their enemies in pitched battles. The French were not always successful and did not win every engagement. Nor did the Republican forces have the ability to wage campaigns and battles of annihilation. With rare exceptions Republican forces employed a strategy of exhaustion. Fighting aggressively and attacking constantly, the French typically wore down their enemies in a series of engagements. Still, the creation of a citizen army, all purpose infantrymen and combined arms formations able to operate in any kind of terrain enabled the Republic to wage a multi-front war, defeat two great power coalitions, and expand substantially French territory and power.

Napoleon, after seizing power in November 1799, did not introduce fundamental changes in the French Army's organization and tactics because he was satisfied with the Republican system. His infantry continued to train according to the 1791 regulations and to serve in three battalion demi-brigades that he renamed regiments in 1803. Napoleon continued to employ the division, which, as under the Republic, varied in size from three to five regiments. He also regularized the use of the corps. Napoleonic army corps ranged from 17,000 to 30,000 men in order to baffle enemy intelligence, fit a particular mission and suit the capabilities of the commander. A corps contained from two to four divisions, a brigade or division of cavalry and thirty to forty field guns. A corps could march independently and fight on its own. It could begin and sustain major engagements until the rest of the army arrived.²⁵

Napoleon sought to expand the artillery corps, and by 1805 he had 8,300 howitzers, 1,700 mortars, 4,500 heavy guns and 7,300 light cannons. He also reorganized the cavalry and created a large reserve directly under his control. Cavalry capabilities improved, but as in the days of the Republic it remained the weakest service arm.

Napoleon noted that "I give myself only half the credit for the battles I have won . . . the fact is that a battle is won by the army,"²⁶ and he devoted much effort to training his forces in order that officers and men would fully understand his tactical and operational techniques.

Between 1801 and 1803 special inspectors visited regiments checking on maneuvers and testing sergeants on their knowledge of the drill regulations. Battalion officers and NCOs met twice a week with their regimental adjutants to study tactics. At the Boulogne camp in 1804 and 1805, Napoleon ordered officers to devote two days a week to battalion drill, three days to division drill and one day to corps maneuvers. Every fifteenth day the Emperor conducted a grand evolution involving several corps. Napoleon did not insist on rigid adherence to every detail of the 1791 drill book, but he did want his entire army to be able to operate in the flexible spirit embodied in the regulations.

At the start of the Austerlitz Campaign of 1805 Napoleon's Grand Army, 210,000 men strong, was a highly effective fighting machine. Almost all the senior officers were combat tested. About a quarter of the rank and file were veterans of Republican campaigns, another quarter entered the army

between 1800 and 1804, and the remainder were new conscripts. Against them the Austrians sent 95,000 men into Italy, 23,000 into the Tyrol and 70,000 into Bavaria. About 95,000 Russian troops were to follow the Austrians into Germany.

Faced by threats to northern Italy and eastern France, Napoleon, whose forces were concentrated on the Channel coast, decided to seize the initiative by striking the Austrian forces in south Germany before the Russians could reach them.

He moved the Grand Army to the Rhine, sent 50,000 men to Italy to hold the Austrians in check and placed 30,000 troops at Boulogne to guard against an English descent. On August 26 he issued orders for the Grand Army to wheel south from the Rhine toward the Danube. Light forces were to demonstrate in the Black Forest to draw the Austrians further west while the Grand Army then crossed the Danube and enveloped the enemy forces.

The Duke of Marlborough had executed a similar maneuver in 1704, but he led a force of 40,000. Napoleon's plan called for moving more than five times that number. He assigned each corps an independent line of march, thus ensuring that only a single formation would have to live off the countryside in any given area. He reduced supply trains to a minimum and ordered engineer officers to scout the German roads. On the night of September 24-25, the Emperor ordered his forces to cross the Rhine and begin the enveloping maneuver.

While feints drew the Austrians west, the Grand Army advanced at a rate of about thirty kilometers a day, and on the evening of October 6-7 leading elements reached the Danube and seized a crossing. Napoleon next sent two corps toward Munich to hold off the Russians if they should arrive and seek to join the Austrian army camped around Ulm. He ordered his remaining corps to move south and west in order to surround the Austrians.

The ring tightened quickly. There were several sharp actions in which the demoralized Austrians lost about 20,000 men. On October 21 the Austrian forces at Ulm, 27,000 strong, laid down their arms while remnants of the Hapsburg army fled east. In twenty-six days Napoleon had marched from the Rhine to the Danube, scored a major victory and completely dislocated the plans of the Third Coalition.

Despite his triumph Napoleon realized he could not rest. Large Austrian armies were still in the field, the Russians were moving forward, and Prussia was contemplating joining the Coalition. Napoleon, therefore, decided to strike rapidly deep into Austrian territory in order to bring the Austro-Russian forces to battle. By October 25 the Grand Army was again on the march, and by November 12 the French were in Vienna.

The Austro-Russian forces retreated into Bohemia where they gathered 85,000 men near the small town of Austerlitz. Napoleon's forces were tired, deep in enemy territory and short of supplies. In addition to casualties French troop strength was further reduced by the need to garrison captured positions and guard lines of communication. By late November Napoleon had 53,000 men near Austerlitz with another 22,000 around Vienna. To make matters worse, the Prussians were becoming more belligerent, and Austrian battalions from Italy were moving steadily north.

The logical thing for the Emperor to do was retreat in order to rest and replenish his forces, but Napoleon's response to his dilemma was to seek a decisive battle. He began by deliberately giving the impression that his army was weak and exhausted. He accepted an Allied offer to discuss an armistice, deliberately pulled his troops back from Austerlitz and the Pratzen Heights, the supposed geographic key to the area, and gave the impression that his right flank was especially vulnerable. The enemy took the bait and planned to strike the French right and sever the Grand Army's line of communications with Vienna.

The Battle of Austerlitz, fought on December 2, 1805, was the decisive victory that Napoleon sought. The allied forces fell on the French right, but to achieve this concentration the allies weakened their center. One of Napoleon's reserve corps had arrived to strengthen the Grand Army's left and

center the night before the battle. The other corps moved up from Vienna, covering eighty miles in fifty hours, and the divisions entered the battle on Napoleon's right directly off the march.

When he felt that the allies were fully committed against his right, Napoleon unleashed his strategic reserve against the Austro-Russian center. After bitter fighting, the French broke the allied center and pivoted south against the allied left wing. When the allies finally retreated, they left behind 27,000 casualties—a third of their original strength. The Austrians soon sought an armistice while the Russians marched back to Poland.

Napoleon had struck at his enemies with deep, rapid, slashing maneuvers that threatened their communications and threw them off balance strategically and psychologically. Napoleon constantly retained the initiative, striking boldly and ruthlessly, and never gave his foes the opportunity to gather their forces or their senses. The capabilities of the Grand Army were, of course, vital to Napoleon's success. Their ability to move rapidly with a minimum of logistic support and their tactical proficiency on the battlefield enabled the Emperor to transfer his plans into action and provides an excellent historical object lesson.

The Prussian campaign of 1806 marked the apogee of Napoleonic maneuver warfare. The Grand Army, numbering about 180,000 troops, consisted almost entirely of seasoned troops. The Prussians had about 254,000 men under arms, of whom 171,000 were available for field operations. The Prussian king was irresolute, and the leading generals comprised a junta of septuagenarians. The troops, heirs of the traditions of Frederick the Great, were well drilled and well disciplined. Prussian battalions lacked the flexibility of French units but were still Europe's masters of linear tactics.

French troops were quartered in south Germany with army headquarters at Munich. In September the Prussians occupied Saxony and concentrated their forces at Leipzig, Dresden and Göttingen. Three possible courses of action presented themselves to the Prussian high command. The army could stand on the defensive, retreating slowly eastward in a series of holding actions until the Russians mobilized and moved west. A slightly bolder scheme called for the army to concentrate in the vicinity of Erfurt north of the Thuringian Forest. If Napoleon moved east, the army could threaten the French left. A more daring strategy called for a concentrated drive from Erfurt towards Stuttgart to threaten the line of the Rhine, catching the French in their scattered garrisons and defeating them in detail.

The Prussian high command finally decided to pursue an offensive strategy, and in early October the Duke of Brunswick ordered the Prussian army to concentrate around Erfurt in preparation for a blow against Napoleon's left flank.

Never willing to await passively an enemy blow, Napoleon was determined to seize the initiative. He, therefore, decided to seek out and crush the Prussian army before the Russians could come to their assistance. A drive on Berlin would, he felt, force his enemies to offer battle.

In seeking a decisive engagement Napoleon examined several avenues of strategic approach. He could concentrate his forces on the Rhine near the Dutch border and march directly on Berlin. Such a move would, however, force him to redeploy the Grand Army, a time-consuming process that would grant additional weeks for the Russians to mobilize. Moreover, a Prussian army, if defeated on the north German plain, could simply retreat toward Berlin, its depots and the Russians.

A concentration at Mainz and an advance on Berlin via Frankfurt and Erfurt made the initial concentration of forces easier. Such a movement, however, faced daunting geographical obstacles, including the vast Thuringian Forest with its scanty road net. Once again the Prussians, if defeated, could retreat towards their magazines and reinforcements.

A rapid concentration of forces around Bamberg and Bayreuth in northeastern Bavaria followed by an advance north toward Leipzig or Dresden and then to Berlin promised the most spectacular results. The terrain posed problems since the Grand Army would have to pass through the Thuringian Forest, but given the current disposition of the army, the concentration area was most convenient. Moreover, a rapid advance through Saxony toward Berlin would at one stroke threaten the

Prussian lines of communication, outflank their field forces, place the French in a commanding position between Frederick William and the Russians and imperil the Prussian bases and capital. If the Prussians held their ground, Napoleon might repeat the maneuver of Ulm. If they retreated hastily, the Grand Army would have several opportunities to defeat them piecemeal.

On September 5 Napoleon ordered engineer officers to reconnoiter the roads leading north from Bamberg. On September 18 and 19, the Emperor dictated 102 separate orders including the famous "General Dispositions for the Assembly of the Grand Army" wherein he directed six army corps, the Guard, the Cavalry Reserve and a Bavarian contingent to begin moving toward northeastern Bavaria. He then ordered his brother Louis, King of Holland, to mobilize 30,000 men and directed a 22,000 man corps to Mainz. These forces were to attract Prussian attention to the north, and in case of disaster they were to hold the line of the Rhine while the Grand Army retreated. If the Prussians lunged west, the troops in Mainz and Holland would form the anvil against which Napoleon could hammer the enemy from the rear.

Napoleon left Paris on September 24 and on October 2 took personal command of his forces. Three days later he issued orders for the advance through the Thuringian Forest and on into Saxony. The Emperor formed the Grand Army into what he called a *bataillon carre* able to meet an attack from any direction. The army was to march in three columns each two corps strong. The Bavarians joined the right flank column; the Guard and Cavalry Reserve followed the center column. All of the columns were within supporting distance of each other. If the Prussians struck one of the columns, the commander was to fight a defensive battle while Napoleon maneuvered the unengaged forces to attack the enemy rear.

At first light on October 8, 1806, the three columns preceded by a light cavalry screen began to advance. By nightfall on the 9th the Grand Army had largely passed through the forest meeting only sporadic opposition.

In the days following the French continued to march toward Leipzig, crushing an isolated detachment and taking 1,800 prisoners and thirty-three guns in the process. Caught off balance, the anxious Prussians gave up all thought of attacking the Grand Army. On October 13 the Prussians decided upon a hasty retreat to Leipzig to protect their communications. The main body, some 63,000 strong, was to march to Leipzig by way of Auerstadt. Two large detachments with a combined total of 53,000 troops were to take up positions between Jena and Weimar until the main body was clear of Auerstadt and then join the retreat to the north.

Receiving sporadic reports of the Prussian movements, Napoleon reacted quickly, issuing orders to his corps to swing westward in preparation for a major battle. The Emperor presumed that he would face the bulk of the Prussian army around Jena. What he did not realize was that the main enemy forces were already in full retreat and that the fighting on October 14 would in fact evolve into two separate engagements.

The dual battles of Jena-Auerstadt demonstrated that French tactical ability was again equal to the Emperor's strategic genius. At Jena one corps began the engagement, and Napoleon fed additional units into the battle as they arrived on the field. Ultimately, four corps with 96,000 troops crushed the Prussians, inflicting 25,000 casualties for a loss of 5,000. At Auerstadt a single corps of 27,000 men met the Prussian main force. So tactically superior were the French that at the end of the fight the Prussians were in full retreat having lost 10,000 men and 115 guns, while French casualties amounted to 7,000 killed and wounded.

Virtually without pause Napoleon ordered a relentless pursuit of the scattered demoralized Prussian forces. One force moved west taking Erfurt and 9,000 prisoners on the 16th, while other units pushed to the Elbe, covering seventy-five miles to reach the river on October 20. Four days and ninety miles later the French advanced guard was in the outskirts of Berlin. On October 25 the French marched through the city while other corps moved toward the Baltic and still others advanced on the Oder. By the 29th the French were at Stettin; Lubeck fell on November 5, and other corps were

approaching the Oder. Throughout the advance the various corps took thousands of prisoners and huge amounts of equipment.

In the space of thirty-three days the Grand Army killed or wounded 25,000 Prussians and took 140,000 prisoners and 2,000 cannons. The king with remnants of his once mighty army fled across the Oder to join the Russians, leaving most of his state to the mercies of the Emperor.

As in 1805 Napoleon again struck his enemy from a completely unexpected direction. Surprise coupled with mobility completely disoriented the Prussian high command from the outset of the war. Moreover, Napoleon never gave the Prussians an opportunity to regroup.

Napoleon was, of course, ultimately defeated. There are numerous factors, including British sea power, his own policy of continual expansion and military reforms by enemy armies, that contributed to his downfall. Additionally and critically, the capabilities of the French army declined after 1807. Casualties plus ever-expanding military commitments diluted the quality of the Grand Army. New recruits were not as masterful on the battlefield as were the victors of Austerlitz, Jena and Auerstadt. Napoleon, therefore, had little choice but to substitute mass for tactical flexibility in his battles.

After 1808 his battles became battles of attrition. He won decisively at Austerlitz with 73,000 men, and 96,000 troops triumphed at Jena. A vastly outnumbered force emerged victorious at Auerstadt. At Wagram Napoleon deployed 170,000 men, at Borodino 133,000, at Dresden 120,000 and at Leipzig 195,000. Yet in each engagement, despite very heavy losses, he never destroyed an enemy field army. He remained a master of the bold strategic maneuver, but his army's tactical execution no longer matched his strategic genius.

The Revolutionary and Napoleonic era imposed dramatic changes on warfare. War became national, and entire peoples participated in the great affairs of state. Armies ceased to be composed of automatons adhering to a rigid tactical doctrine. Citizen armies employing flexible tactics and emphasizing individual initiative down to the small unit level dominated the battlefield. After 1815 military leaders had to reflect upon and absorb the lessons of the Napoleonic wars, and even in the far off United States military men responded to this imperative.

In 1815 Sylvanus Thayer went to Europe to buy texts for the West Point library. Most of the books purchased were French, and French was the only modern foreign language taught at the academy. D. H. Mahan, father of the U.S. Navy's A. T. Mahan, studied at the Metz artillery school. He then joined the faculty at West Point, and for the rest of his career he proclaimed to his cadets that the study of Napoleonic tactics was essential for the modern officer. His textbook on tactics emphasized the flexible employment of lines and columns covered by skirmishers. Instructors and cadets formed a Napoleon Club where they discussed at length the Emperor's tactics and strategy.

Newly commissioned West Point graduates entered an army that despite its small size and unique frontier experience, nevertheless resembled on a minute scale the Imperial forces. During the Revolutionary War, Congress adopted a drill manual written by Baron von Steuben. It was a simplified version of Prussian drill. These 1779 regulations proved inadequate during the War of 1812, and Gen. Winfield Scott proceeded to drill the troops under his command according to the French regulations of 1791. In 1815 the government appointed Scott to head a board charged with revising the army's drill. The board ultimately adopted the 1791 manual for all infantry regiments. Scott translated the manual, and the army used it until 1854. In the following year the army adopted a more recent French drill book, and it was not until 1867 that the United States Army ceased using translations of French manuals and wrote its own.

It is now 180 years since Napoleon launched his Ulm-Austerlitz campaign, but despite vast changes in the technology of war, the Emperor's operational methods may still hold valid lessons. His use of bold slashing strokes pursued resolutely until victory, his ability to combine all of the service arms effectively, his insistence upon developing and perfecting a tactical system able to execute his strategic thrusts and his desire that everyone in his army understand his methods and use their initiative at every level to accomplish the mission seem to apply to contemporary military organizations.

Napoleon once noted, "Speeches preceding a battle do not make soldiers brave. Old soldiers scarcely listen and recruits forget them at the first cannon shot."²⁷ The Emperor believed that intellectual preparation for war was essential but it had to take place long before combat. Genius cannot be taught, but the study of a particular genius and his methods may indeed be useful to mere mortals.

1. Michael Howard and Peter Paret, eds., Carl von Clausewitz, *On War* (Princeton, NJ: Princeton University Press, 1976), p. 170.
2. Martin Blumenson, *The Many Faces of George Patton* (Colorado Springs: USAFA, 1972), p. 25.
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