CHAPTER 2

The Problems of 1866: Tactics, Weapons, and Money

As visitors to the Military History Museum in Vienna enter Hall 4, they meet a sign with the title "Radetzkysaal: Field Marshal Radetzky and His Time (1848–1866)." The placard might not seem odd to those unfamiliar with the life of the undefeated Habsburg commander Johann Josef Wenzel Graf Radetzky von Radetz. However, the dates appear strange to those who know that the victor of Custozza and Novara died in 1858. Further investigation of the room reveals an emphasis on the feats of the Austrian military, especially Radetzky's Italian campaigns of 1848, whereas the defeats of 1859 and 1866 remain muted. Almost 150 years after the disastrous campaign against the Prussians in Bohemia, Austria (even though no longer under Habsburg rule) still attempts to conceal the low points of its military history and feature the highlights. According to the museum guidebook, "After a number of ill-fated skirmishes, the Austrian Army under *FZM* Ludwig von Benedek suffered a devastating defeat near Königgrätz (Hradec Králové, east of Prague; the battle is also called Battle of Sadová) on 3 July."[1] The key word "ill-fated" shows the intention to lay fault somewhere other than on the Habsburg army.

Despite the claims of contemporary army supporters and some later historians that parliamentary stinginess hindered the Austrian military from procuring the best weaponry, the Habsburg high command deserved the primary blame for the disaster of 1866. The choice of offensive tactics against an enemy possessing superior firepower condemned Austrian infantry and cavalry to horrendous losses while

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granting little hope of success. Poor prewar spending choices and wasteful financial practices eliminated any chance of facing the Prussians in Bohemia with equal weaponry. These causes, inherent within the Austrian military leadership, brought about defeat in 1866.

Casting Aside the Blame

The museum pieces pertaining to the Austro-Prussian War of 1866 consist mainly of rifles, official reports and proclamations from after the climactic battle, and two paintings. The rifle displays reveal the desire to blame the defeat on inferior weaponry. As the museum guidebook states, "With the needle-gun the Prussian army already possessed an efficient breech-loader in the Battle of Königgrätz (Hradec Králové) on 3 July, 1866. This weapon was clearly superior in rate of fire (cadence) to the Austrian muzzle-loaders of the Lorenz system."[2] Although this analysis contains truth, the guidebook does not explain why the Habsburg army relied on an inferior weapon. The museum's collection of official reports and proclamations from the aftermath of Königgrätz admit the gravity of the loss but focus more on the heroism of the Habsburg troops and call upon the people of the Austrian Empire to display their patriotism and courage in the face of disaster.

The two paintings strikingly reveal the devastation of the Austrian catastrophe in Bohemia, far more than the other exhibits. In *The Battery of the Dead*, the Czech artist Vaclav Sochor depicts the panic and confusion of the Habsburg army's attempt to retreat from the battlefield. Amid the carnage of human and equine cadavers of the Austrian 8th Field Artillery Regiment that dominates the center and foreground of the painting, a driverless team of horses leading a cannon and its caisson tries to plow through the bodies and becomes hopelessly entangled in the wreckage. On the left, another team with riders successfully avoids the central mass, while careening frantically down the rut-filled path. In the background, riderless horses rear and run in panic, while the Prussian troops in the distance advance to overrun the abandoned Austrian guns. Sochor not only reveals the horrors of war but also, and more pointedly, the utter confusion of the Habsburg army as it tries to avoid capture and total collapse.[3]

Rudolf Baron Otto von Ottenfeld's oil canvas *A Glorious Chapter of the Austrian Artillery. The Artillery Reserve Unit after the Battle of Königgrätz on 3 July, 1866* sets a stark contrast to *The Battery*

of the Dead. Sochor's title could easily belong to von Ottenfeld's painting as it depicts an abandoned artillery reserve unit in a treeless landscape after the battle. A solitary horse stands as the only living creature in the midst of dead soldiers and animals lying near abandoned and broken artillery pieces. In the distance, under a gray sky, smoke rises from a village, perhaps Chlum. The serenity of the scene creates a very different impression from that of the chaos and panic of Sochor's painting, but the desolation of complete defeat hangs over the battlefield and portrays the hopelessness of the Austrian situation.[4] The title of the painting conveys the artist's view of the glory of the Habsburg military, even in catastrophe. The museum guidebook again attempts to elicit a positive message from the battle: "While suffering heavy losses, the artillery reserve covered the orderly retreat of the Austrian northern army across the river Elbe."[5]

This same attitude pervades the official Austrian general staff history of the Austro-Prussian War published in 1869. Its main editor, General Friedrich Fischer, attempted to portray the outcome of the fighting as almost inevitable because of the difficulties of waging a two-front war against enemies with a combined superiority in manpower and the technological advantages of Prussian weaponry, while having insufficient funding for the Habsburg military and only the weak support and campaign performance of Austria's small German allies. According to the official history, these problems stemmed from diplomacy and funding issues outside the control of the army. Thus, Fischer and his staff tried to shift blame away from the inner problems of the Habsburg military.[6] This view also exonerated *FZM* Ludwig von Benedek, the commander-in-chief of the Northern Army, who after the war attributed his defeat to "bad luck."[7]

One military source, *Sechzig Jahre Wehrmacht 1848–1908*, the anonymous work of several Austrian officers, carries the same spirit in its description of the heroic deeds of the Habsburg military: "The war against Prussia was also unlucky, but the fault lay thus, as indicated, not in the army, not in the leadership alone, not in the deficiency in ability, training, and valor." The officers fault the stinginess of the *Reichsrat* as the primary cause of Austrian defeat in Bohemia in the following passage: "In Austria the means for the development of the army were denied by parliament because of financial considerations, unconcerned about training, unconcerned about consequences, while even the army's status was diminished… Therefore, even if we had been victorious at Königgrätz, (and) possessed an equivalent tactical training and an evenly

matched rifle (to the Prussian weapon), Austria would still finally have been defeated, because it was not capable of fighting through the war without an equivalent number of replacement troops."[8]

Other writers also blamed civilians for the disastrous outcome of 1866. In 1900, the Viennese Liberal Heinrich Friedjung accused reactionaries in the Habsburg government of forming an ultraconservative policy that opposed liberal attempts at reform and led the Austrian state, shackled by Catholicism, into an unwinnable war against the more liberal Prussia. Oskar Regele, an officer in the Austrian federal army, also tried to exonerate the military for the defeat of 1866 and blamed the timidity and parsimony of Habsburg civil officials for the debacle. Similarly, the German historian Emil Franzel, the American historian Gordon Craig, and the Austrian historian Adam Wandruszka, among others, agree with the contention that parliamentary deputies and bureaucrats ruined the Austrian military's chances to gain victory against Prussia in 1866.[9] The inevitability of Habsburg defeat comes out strongly in all of these works and many later historians took up the military cry of blaming others for the disaster rather than analyzing causes within the Austrian army. These attempts to cover up the true reasons for failure present an erroneous picture of reality and thus deserve to be refuted.

Recognizing Reality

The claim that parliamentary monetary restrictions and diplomatic bungling rendered final victory impossible tries to hide the grave shortcomings in the Austrian military. Although some attempted to lay blame on civilian errors, important voices spoke about the real situation in the military. On 21 August 1866, Archduke Albrecht, the oldest son of Archduke Charles (the revered Habsburg commander during the Napoleonic Wars) and cousin of Emperor Franz Joseph, submitted to the emperor a report containing his observations on the problems and causes of defeat in the northern campaign against Prussia. Juxtaposing the Austrian campaign in Bohemia with that in Venetia, where Albrecht had achieved victory over the Italians, Albrecht found numerous reasons for the catastrophe of Königgrätz. Starting with poor army organization and preparation for war by Benedek, Albrecht noted the weakness of the Austrian army at the beginning of the war, a point that "had been repeated several times already by the Military Commission." The Archduke accused the high command of exhibiting poor leadership

in failing to enforce proper control and discipline over subordinates. Albrecht continued with a critique of the general staff and its officers, who did not have adequate knowledge of the Bohemian terrain and the enemy to the north because of a deficiency in training. Despite the presence of the best general staff officers in the Northern Army, the Austrian leadership did not know the theater of war because they had trained in Italy and, therefore, had no familiarity with the northern areas. As for the troops, Albrecht praised their bravery and especially commended the Habsburg artillery for its superior performance in the field. The cavalry, however, he claimed did not fare well in combat because of poor leadership, resulting in horsemen being deployed in unfavorable situations. The infantry did not fight with enough of the discipline that comes from drill, while the insufficient number of officers, both commissioned and non-commissioned, increased the branch's difficulties. Thus, the Austrian troops could not stand against the superior Prussian rifles and discipline. Albrecht made no attempt to exonerate the leadership of the Northern Army. Without naming anyone directly, he accused Benedek and his staff of the mistaken belief that "bravery is everything, but skillfulness in maneuver and knowledge of terrain are not necessary." The archduke criticized the field army's administrative apparatus for being too cumbersome and too removed from contact with the rest of the army, and concluded by blaming the leadership once again for the bleak results of the northern campaign.[10] Coming from the victor of Custozza in Venetia and new commander-in-chief of all Habsburg forces, this report and its criticisms carried great weight.

In 1867, Colonel Friedrich von Beck of the general staff, the special envoy of Franz Joseph to Benedek's headquarters in the Northern Army, wrote several reports about the poor state of the army, especially its morale. Beck pointed out that deficiencies in military administration were the main cause of poor campaign performance by Habsburg forces. Explaining the disadvantage of joining several important positions in one person, as was the case when Benedek both commanded the whole army and controlled the general staff during the previous years, Beck called for the simplification of army administration, better preparation of the general staff for war, and procurement of breech-loading rifles for the infantry.[11]

The general staff colonel elaborated on these issues and others in another document concerning the deflated morale of the army. Instead of blaming outside sources for the disaster in 1866, Beck said, "the fault

for the failed campaign against the Prussians lay in the army and its institutions." Again, he advocated the simplification of army administration in addition to unity throughout the military leadership. Beck indicated the loss of trust in the army's high command on all sides as well as the propensity of the higher military positions, such as the war ministry, field command, and general staff, "to lose sight of important tasks because of too great attention to details."

Beck also discussed other difficulties that had appeared during the recent war. He claimed that the general staff did not play a prominent enough role in relation to the rest of the army, as the Prussian general staff did. Troop training failed to correspond to the requirements of modern warfare. The education of the officers and strength of the troops needed improvement. In addition, he bemoaned the high costs accrued by generals who enjoyed high living, especially during campaigns. To prevent unqualified officers or political appointees from rising to important positions of command, the general staff colonel advised a promotion system that would base advancement on merit and competence rather than on connections and influence.[12] Like Albrecht, Beck pointed to the high command as the primary reason for the catastrophe of Königgrätz. Neither the archduke nor the colonel tried to blame parsimonious parliamentary deputies or financial deficiencies for the defeat, but rather called for reforms within the military to revive the flagging martial spirit and deteriorating status of the Austrian forces.

Another military writer, most likely Major General Gideon Baron von Krismanić, the chief of the operations bureau for the Northern Army, also found fault with the Habsburg army's leadership and Benedek in particular. Krismanić expressed his views shortly after the war in an anonymous article in the *Österreichische Militärische Zeitschrift* (*ÖMZ*), the mouthpiece for many officers who wished to publish their ideas without attaching their names.[13] Krismanić accused the commander of the Northern Army of wasting the opportunity of beating the dispersed Prussian army's individual units as they entered Bohemia instead of fighting a major pitched battle at Königgrätz against superior numbers. For Krismanić, numerical superiority held greater importance than the advantage of the Prussian breech-loader over the muzzle-loading Austrian Lorenz rifle. Like Albrecht and Beck, he did not blame politicians for hindering the Habsburgs from putting an adequate military force in the field. Instead, Krismanić censured Benedek for employing massed shock tactics against the superior firepower of the Prussian needle gun and

the ensuing loss of morale for the Austrian troops, who saw the heavy casualties resulting from their charges. Krismanić denied the invincibility of the Dreyse rifle and claimed that the Austrian army, especially the artillery, fought better than the Prussians and could have gained victory with a more intelligent field commander. The Habsburg forces possessed the means to succeed, but Benedek failed to prepare properly for war by practical training in maneuver and use of terrain.[14]

Once again, an Austrian military source had identified the problems within the army, especially the high command, as the primary causes of failure in 1866. These internal negative assessments of the Habsburg military contrasted sharply with the official history and other writings published by officers and supporters of the army, which diverted blame onto civilian leaders and influenced some later authors. Austrian military leaders realized that the problems stemmed from within the army but wished to maintain a more positive public view of the military. Some later writers also saw the complaints against the politicians as a façade.

The Austrian historian Johann Christoph Allmayer-Beck, writing in 1966, stated that the causes of the 1866 disaster in Bohemia came from within the Habsburg army itself. He refuted claims that a series of unlucky accidents culminated in the fateful battle of Königgrätz, or that inferior numbers or weaponry predetermined the outcome. Instead, Allmayer-Beck blamed the outdated Austrian theory of war, as Archduke Charles had instilled his version of Napoleonic warfare into the Habsburg military: "But the spirit, which should give everything direction and effect—which the victor of Amberg, Würzburg, and Aspern made it his business to kindle and keep alive—this spirit now after half a century had become rigid and lacked elasticity, and one of the proudest armies that Austria had ever put in the field broke to pieces on it."[15]

Twentieth century American historian, Gunther Rothenberg, also rejected the easy explanation of a miserly parliament unwilling to give necessary monetary resources to the Austrian military establishment. However, Rothenberg did not place the blame solely on Benedek. The Northern Army field commander made serious mistakes during the campaign, but prewar choices by the Austrian high command in weaponry and tactics put the Habsburg army at a great disadvantage.[16] According to Rothenberg, the explanation for defeat lies in both the battlefield command and the army administration that decided weapons procurement, tactics, strategy, and training, as Albrecht and Beck maintained in their reports.

Another American historian, Geoffrey Wawro, asserted in 1992 that blame for the catastrophe lay primarily with Benedek because the field commander's strategy and tactics did not suit the capabilities of the Austrian rifle. In addition, Wawro stated that the Habsburg war ministry had used funding carelessly by spending money on bureaucracy and high living rather than on training and weaponry.[17] Clearly, certain historians have seen that, even though the Austrian military preferred publicly to blame outside sources for defeat, the main causes came from within the army itself, as the postwar high command realized.

Breech-Loader Versus Shock Tactics

For those who wished to exonerate the military, such as Fischer, who directed writing of the official Austrian general staff history of the Austro-Prussian War, and the authors of *Sechzig Jahre Wehrmacht 1848–1908*, the claim of having to employ inferior weaponry and rely on poorly trained troops because of financial constraints imposed by a recalcitrant *Reichsrat* (Parliament) conveniently explained the defeat in Bohemia, and at the same time accounted for success against a similarly trained and equipped Italian army in Venetia.[18] Certainly, the Prussian breech-loader, the Dreyse needle gun, surpassed the Austrian Lorenz rifle in rate of fire. Not only did the breech-loading weapon shoot four to seven rounds per minute compared with the one to two rounds per minute of the Austrian muzzle-loader and its Minié bullets, but also soldiers using the needle gun could fire it when standing, kneeling, or prone. Thus, the Dreyse afforded the Prussian troops more flexibility, greater possibility to find cover, and increased firepower over the muzzle-loading weapons of the Habsburg army.[19] An *ÖMZ* author estimated the superiority of the breech-loader over the Lorenz as three to one, and claimed that the needle gun overpowered the courage and perseverance of the enemy.[20] This advantage led to a great discrepancy in casualties between the Prussian and Austrian forces. Habsburg losses amounted to roughly 48,000 men at the battle of Königgrätz, while their adversary lost less than 9000.[21] Not all Austrian casualties resulted from the Prussian breech-loader, but its superior firepower must account for a large proportion. The Dreyse rifle greatly impressed Albrecht. Even though he had not encountered it in Italy, the archduke commented after the Bohemian campaign that the needle gun had proven

the theoretically established advantage of an easily and quickly loaded weapon against troops equipped with slower firing rifles.[22]

The superior rate of fire of the Prussian breech-loader over the Austrian muzzle-loader was not the only cause of the enormous discrepancy in casualties. The reliance of the Habsburg forces on *Stoßtaktik* (shock tactics) eliminated the advantages of the Lorenz rifle's greater range and muzzle velocity.[23] An *ÖMZ* review of an article in the *Revue des Deux Mondes* contended that the *Schnellfeuer* (rapid fire) of the breech-loader, together with the Prussians' greater capability for and use of maneuver, explained the Austrian catastrophe in Bohemia.[24] Another *ÖMZ* writer asserted after the war: "The Prussians knew most how to draw profit from dominating positions, how to use terrain positions for cover, how to bring the enemy into crossfire, etc.; the Austrians on the other hand held themselves more to formal mass tactics and the direct attack with bayonets and sabers, which, hindered by superior enemy fire, could scarcely come to execution and yet brought heavier and heavier losses with it."[25] Clearly, Habsburg military leaders recognized the advantages of the breech-loading rifle over the muzzle-loader as well as the mismatch between Austrian shock tactics and the Lorenz rifle used by Habsburg troops.

The Habsburg army had maintained an offensive spirit in its tactics for decades, like most other nineteenth-century powers. Ever since the great offensive victories of Napoleon I, the European armies had adopted the French emperor's style of emphasizing mobility, rapidity, and the decisive battle with shock tactics and concentration of artillery.[26] In keeping with the ideas of the two great theorists of the Napoleonic Age, Antoine Henri Jomini, who stressed the importance of bringing the greatest mass of troops to bear upon the decisive point of the battlefield, and Carl von Clausewitz, who signified the aim of warfare as the disarming of the enemy and the destruction of his forces, the great victories leading up to 1866 had all contained offensive assaults.[27] Napoleon defeated the Austrians at Ulm and Austerlitz in 1805, the Prussians at Jena and Auerstädt in 1806, and the Russians at Friedland in 1807, all with impressive assaults. Radetzky's famous victories over the Italians at Custozza and Novara as well as Habsburg gains in Hungary came from timely offensives. In the Crimean War, Sevastopol finally fell to a French attack after a long siege. In 1859, the Austrians succumbed to French storm columns at Magenta and Solferino. Even in the Danish War, the Prussian and Austrian frontal assaults appeared to bring decisive victory.

All these achievements were the result of employing the offensive tactics of Napoleon. However, military leaders who chose to continue emulating the Little Corporal's methods ignored the increasing number of casualties resulting from frontal assaults and the battles in which the tactical offensive failed. These battles included Waterloo, Balaclava, and Inkerman, as well as many engagements in the American Civil War, such as Fredericksburg, Gettysburg, and Cold Harbor.

Austrian officers, like the soldiers of most European armies, saw the successes of Napoleon and other generals who won with the tactical offensive. Habsburg leaders especially looked to Archduke Charles' victory at Aspern and Radetzky's feats in 1848 as belonging to a tradition of offensive battle, and hoped to imitate them with similar effect. With this view, most of the Habsburg officer corps did not even consider the tactical defensive as an effective option. Wawro also posits that the Austrian high command could not pit its troops against the superior Prussian forces except in assault formations: "Basically, in 1866, Austria had no choice but to employ storm columns. The poorly educated, poorly trained, largely non-German-speaking Austrian army could not shoot accurately or maneuver in open order. Shock tactics thus met the organizational needs of the unruly Austrian regiments; they massed large numbers of men in formations which could be literally driven into action."[28] With the offensive as the only consideration for the Habsburg high command, shock tactics fit the inferior Austrian soldiers. The defensive, however, would have provided better use of Austrian military resources, especially superior artillery and the Lorenz rifle, but still allowed officers to control their assortment of poorly trained troops. If the Habsburg leaders had understood Clausewitz properly and taken the time to train their units to shoot accurately, they would have realized the superiority of the defense. Instead, Benedek elected to do the opposite by sending his men directly into the *Schnellfeuer* of the Prussian needle gun.

Benedek had emphasized *Stoßtaktik* in his numerous instructions and orders, both before and during the early stages of the 1866 campaign.[29] As the only Austrian general who emerged from the Franco-Austrian War of 1859 with a good reputation, Benedek had received the command not only of the Army of Italy but also of the Austrian General Staff. Thus, he became the most powerful soldier in the Habsburg Empire. Disdainful of military science and intellectual pursuits in general, Benedek, like his emperor and many other Austrian officers, had concluded that shock

tactics achieved the best results in battle. This idea stemmed from his experiences in Italy in 1859 where the French had stormed Habsburg positions and put the Austrian troops to flight, despite the superior rifle and maneuver capabilities of the Habsburg units. Austrian commanders, however, learned the wrong lessons from the war. As Wawro wrote, "Although the secret of French arms was *flexibility*, Austrian critics ignored that and focused instead on the intangible quality of *élan* supposedly conferred by bayonet charges into the breach."[30]

The commander of the North Army clung to these erroneous tactical ideas, even after the experiences of Habsburg forces in the Danish War of 1864 and publication of the writings of Helmuth von Moltke, chief of the Prussian general staff. Prussian units had inflicted devastating losses by rapid fire of the needle gun on the Danish troops, whereas the Austrian massed frontal assaults on entrenched Danish positions had endured heavy casualties.[31] In articles published both in a Prussian army journal and in the *ÖMZ*, which promoted dissemination of the views of foreign military thinkers, Moltke explained the advantages of the Prussian breech-loader and its superior employment in the Danish War.[32] Nevertheless, Benedek, in his devotion to *élan* (vigor) and the supposed merits of the offensive displayed by the French in 1859, insisted on closed formations and shock tactics to achieve decisive results with rapid bayonet charges.[33]

Benedek did not stand alone in his preference for *Stoßtaktik*. Other high-ranking officers in the Habsburg army agreed upon shock as the premier method of attack. Major General Anton von Mollinary praised the French offensive tactics during the 1859 campaign because of their emphasis on closed formations for concentration of the greatest power on decisive points. Even in defensive positions, they tried to maintain their offensive spirit through frequent counterattacks.[34] The 1865 Austrian tactical manual, written by Colonel Johann Waldstätten, stressed the bayonet as the most important weapon and the bayonet attack as the high point of battle.[35] Even Archduke Albrecht advocated bayonet attacks and a perpetual offensive before he realized the decimating effect of the Dreyse rifle.[36] Austrian frontal assaults had found success against the poorly trained Italian troops.[37] In Bohemia, against a highly competent enemy, a far different outcome had resulted.

The combination of shock tactics and the Prussian needle gun contributed heavily to the Austrian defeat in 1866. A defensive form of tactics could have taken advantage of the superior range and muzzle

velocity of the Lorenz rifle without exposing soldiers as much to the devastating effect of the Dreyse's *Schnellfeuer*. The Bavarians, allies of the Habsburgs during the Austro-Prussian War, demonstrated the ability to adapt tactics to the rapidly changing battlefield of the nineteenth century by avoiding massed frontal assaults, and the offensive in general. Ludwig Tann, the Bavarian chief of staff, learned the devastating effect of the breech-loader by observing the Danish War of 1864. During this conflict, at the battle of Düppel, Prussian troops inflicted five times the number of casualties they received from the Danes. Tann interpreted this large differential as the effect of the needle gun and thus included defensive tactics, including lying prone behind cover, in the new Bavarian tactical manual. The Bavarian commander proved the possibility of successfully adapting to technological change on the battlefield during his own encounters with the Prussians in 1866.[38]

Although the Bavarians showed how to limit the advantages of the Dreyse rifle and changed their tactics to accommodate Prussia's style of warfare, Benedek, the chief architect of Austrian tactics, did not see the need to do the same until it was too late. Under the influence of the successful French assaults in 1859 and the Austrian offensive victories against the Danes in 1864, Benedek saw no reason to change tactics. Some members of the Austrian army, however, realized the superior firepower of the Prussian weapon. Beck warned Benedek about the danger of frontal assaults across open spaces in the spring of 1866, before war broke out. The North Army commander, nevertheless, disregarded Beck's advice, claiming that the Austrian attackers would run under the arc of the Prussian bullets, much as the French had done in 1859.[39] Such a plan required poor shooting from the enemy, an unfounded hope against the well-trained Prussians. Only after repeated defeats and heavy losses did Benedek consider changing his tactics. In an order of 28 June, he tried to adjust the offensive methods he had constantly employed up to that time. However, Benedek refused to give up the attack, especially the bayonet charge, commanding his officers to soften up the enemy with artillery fire before any assaults, not wishing to diminish the offensive spirit of his troops.[40]

The Austrian high command clung to the offensive during 1866 until the saner minds of Albrecht and his chief of staff, *Generalmajor* Franz Freiherr von John, ordered no more frontal assaults. In July, before the official end of the war, John began working on a new tactical manual, in which he mandated an emphasis on firepower, the defensive, use of

terrain and cover, coordination with artillery, and open order advances.[41] Although immediate implementation of such a different set of tactics would have proved difficult for the poorly trained Habsburg forces, at least the new Austrian leadership had started to address the problems.

Strategic Failure and Permanent Fortifications

The North Army high command also erred in the realm of strategy. Wavering and tentative, Benedek originally wanted to await the Prussians in the fortified positions surrounding the fortress at Olmütz in Moravia. This plan not only gave the initiative to the enemy during the opening stages of the war, but also withdrew any hope of Austrian assistance for the Habsburg allies in the German Confederation, in particular Hanover, Hesse, and Saxony. Therefore, Franz Joseph sent Beck to prod Benedek into action, though the general complained that his army could not withstand the strain of an advance into Bohemia. Even under pressure from Vienna, Benedek did not act with enterprise and alacrity. Failing to take advantage of his interior lines to attack the three separate Prussian armies invading Bohemia, he wasted his men in isolated assaults against the needle gun. After heavy losses, the Austrian army drew back to Königgrätz, another fortress, where Benedek pleadingly requested Franz Joseph to make peace. Receiving a negative response from the emperor, the leader of the North Army fought the Prussians and lost disastrously.[42]

Strategy certainly played an integral role in Austrian defeat. In an article translated and published in the *ÖMZ*, Jomini, the famous French military writer and strategist, expressed his view that weaponry did not influence the Prussian victory as much as strategy. Although changes in armament affected tactics, they did not alter the immutable principles of war and the goal of great maneuvers. Weapons merely affected the execution of these principles: "As it always is with these secondary questions, one must search much higher for the causes of the extraordinary success of the Prussians in the war in Bohemia; the strategic calculations have certainly more share than the needle gun, if this even contributed to it."[43] Though the octogenarian Jomini denigrated the impact of the Dreyse rifle, he pointed to the superior strategy of concentration on a decisive point and the maneuverability of the Prussian army.

The North Army command received much criticism after the war for its indecisiveness and mishandling of the strategic operations against

Moltke's forces. *FZM* Ladislaus Baron Nagy von Alsó-Szopor, de facto chief of the Habsburg general staff from 1862 to 1864, wrote a report in September 1866 about the Königgrätz campaign and published it anonymously in the *ÖMZ*. Nagy took the view that nations engaging in a two-front war should fight defensively, especially when confronted by enemies who had a combined strength greater than the single nation. In the Austro-Prussian War, Italy and Prussia held an advantage of roughly 200,000 men over Austria and its allies. Lieutenant Colonel Eduard Bartels of the Austrian general staff similarly claimed the two-front war against Prussia and Italy as the primary cause of defeat, especially because of the inability of the Habsburg government and military to provide enough men for the army.[44] Likening the Habsburg Empire to a fencer facing two opponents, Nagy asserted that a strategic defense should have taken precedence over the offense in a war against a military power like Prussia, especially when being fought together with a simultaneous campaign against Italy. Instead of Benedek's idea of hiding behind the fortifications of Olmütz, Nagy favored the occupation of defensive positions in Bohemia not based on fortresses, claiming that defense of the province closer to Berlin would have afforded protection for the rest of the empire as well as the opportunity to take the offensive toward the Prussian capital if the occasion arose.[45] Although not blaming Benedek as much as Nagy, Albrecht, and Beck did, Bartels also criticized the North Army commander for not taking control of Bohemia to ward off any Prussian invasion attempts and to offer the possibility of beating enemy units individually as they crossed into Habsburg territory.[46]

Benedek's desire to stay in Moravia and defend against an enemy advance by holding a position based on permanent fortifications and abandoning most of Bohemia, coincided with the cordon defense strategy that Austrian generals had followed for years. Dating from the previous century, the Habsburg military had attempted to defend imperial lands by establishing a series of fortified outposts throughout the border areas. This strategy had succeeded against Frederick the Great during the Seven Years' War and the War of the Bavarian Succession, when the fortresses at Olmütz and Königgrätz had blocked the Prussian king's routes toward Habsburg possessions. However, the advent of larger armies and more destructive weaponry, especially rifled cannon, rendered these fortresses obsolete. During the Bohemian campaign of 1866, Königgrätz offered no protection for Habsburg forces despite the hopes of Austrian leaders who relied on outdated strategy. Instead, the fortress, which

could hold only one brigade, impeded an orderly retreat from the battlefield across the Elbe and Adler rivers and resulted in a bottleneck that caused even more casualties.[47]

Although the Habsburg high command should have realized the problems that nineteenth-century warfare posed for the cordon system, the disastrous Bohemian campaign at least caused military leaders to start questioning the efficacy of permanent fortifications. Field Marshal Heinrich Hess had advocated permanent fortresses before 1866.[48] After the war, Hess decidedly changed his views: "Already before the application of steam as mobile power, the offensive had a decisive preponderance over the defensive, and since the death of Vauban, when all states began to multiply their great road networks, the cordon fortifications in the borders have almost completely lost their purpose."[49]

Lieutenant Colonel Bartels agreed with Hess that the fortresses in Bohemia no longer served any purpose for the army. Arguing more from a strategic than technical viewpoint, Bartels claimed that any Austrian wars in Germany must take an offensive stance to stop Prussia from swallowing the smaller German states. Such a war would negate the advantages of permanent fortifications. Russia alone presented an opportunity for a defensive war that could use fortresses to protect strategic railroad bridgeheads in Galicia and the Carpathian Mountains.[50]

Hess and other Habsburg leaders had ample precedents for underscoring the tactical obsolescence of relying on fortresses. The permanent fortifications of the Quadrilateral fortresses in Italy (Mantua, Peschiera, Verona, and Legnago) had provided little assistance to the Austrians against the French in 1859. During the Napoleonic wars, the French emperor had merely bypassed Habsburg strongholds, such as Ulm, on the way to finding and decisively defeating the main Austrian force. Archduke Karl, Napoleon's main adversary at the time, did not respond by adopting the new style of warfare. On the contrary, he advocated a return to the eighteenth-century method of fortifying strong positions to create a network of impregnable fortresses that would fend off any enemy who ventured to breach them. Despite losing to Napoleon and his greater strategic and tactical mobility, Karl failed to learn the right lessons. Instead, he adhered to the idea that whoever possessed certain decisive points would win.[51] This strategy resembled more the writings of Jomini and Bülow than those of Clausewitz.[52] According to Karl, "Strategy determines decisive points whose possession is necessary for one's planned purpose. It also marks the lines for their use. These points

must be secured and claimed, and then mutually connected lines must be created. In a defensive war they are called defensive lines, and in an offensive war they are the base of operations."[53] Karl's status as victor at Aspern over Napoleon I and the recent publication of his military ideas greatly influenced Austrian officers to favor permanent fortresses.

However, this strategy did not garner positive results for the Austrian army because the permanent fortresses did not deter the Prussians from invading Habsburg territory. Captain Graf Geldern tried to defend their usefulness in the *ÖMZ*, but he had to admit that they could not withstand modern technology: "…in general the worth and advantages of the fortified points of the northern theater of war were not appreciated as perfectly as they deserved in reality; because the individual fortresses belonged to various time periods, they could not be considered or used as members of a state fortification system corresponding to modern demands; in addition, Josephstadt, Königgrätz, Theresienstadt were built according to the old system to produce no stonework protection and comparatively few bombproof areas, therefore they no longer possessed the resistance that they once had."[54] Even this proponent of fortresses, who continued to defend their merits throughout the rest of his article, had to admit how little the old permanent fortifications helped the Austrians in 1866.

Although a defensive strategy based on the cordon system proved ineffective during the nineteenth century, the strategic defensive in Bohemia could have produced better results than the halting, indecisive offensive waged by Benedek. An anonymous veteran of the Austrian army published an article in the *ÖMZ*, in which he maintained, like Nagy and Bartels, that the possession of Bohemia in a defensive posture with the goal of hindering the unification of the various Prussian armies would have benefitted the Habsburg forces far more than the North Army commander's plans. Although the author noted the impossibility of knowing Benedek's thoughts exactly, he censured the commander for his strategic indecision and for allowing the decisive battle to take place at a poor position near Königgrätz.[55]

Flawed Leadership and Unrealistic Training

Benedek made grave errors in both his strategic and tactical choices in 1866, and thus a large amount of the blame for the disaster fell upon him. His command structure resembled the overly bureaucratic Austrian

government and army, with four different levels: *Kommandantur* (Benedek), *Präsidium* (Henikstein), *Operationskanzlei* (Krismanić), and *Detailkanzlei* (Kriz). As Wawro said, "Benedek erected a four-tier monstrosity of a headquarters that delayed the conception and transmission of orders for critical hours and even whole days."[56] As happens after many heavy defeats on the battlefield, the losing commander-in-chief must bear the brunt of the criticism. In the case of Benedek, he deserved the critical judgments that Albrecht, Beck, Nagy, and others gave him, even if they did not mention him by name in their reports and articles. Before the war, Benedek had earned a reputation as an opponent of intellectual views and anything resembling a scientific approach for the army. Boasting that he had never read a book since his graduation from the Habsburg war college and denigrating those who did study, he claimed that a strong stomach and good digestion were the only talents necessary for a chief of staff.[57] Regardless of Benedek's bravado, his ideas showed in his propensity for adherence to regulations and "iron discipline." He sought to instill obedience and the observance of rules in his troops, with the result that he produced within the army a *Formalismus*, an excessive attention to the details of outward form.[58] According to *FZM* Anton Baron von Mollinary, one of Benedek's subordinates in 1866, "This dashing field soldier held very little to tactical exercises and appeared content if in a parade review the divisions marched by straight and in closed order."[59] As one *ÖMZ* author wrote sarcastically, perhaps the time will come when a wandering traveler will see a faded statue of the goddess "Parade."[60]

Yet, the Austrian army needed more than discipline and obedience to gain victory over the Prussians. Good leadership requires intelligence as well as the so-called military virtues. One Austrian officer recognized this necessity in an *ÖMZ* article: "The mere acquiring of the purely formal part of tactics is more a matter of drill than understanding; it is clearly and distinctly standardized, therefore made very easy, by the exercise regulations, which are the code of the soldier. In the employment of this form for actual war conditions, in which one sees everything from the terrain, mere praxis and routine is not sufficient; a free development of intelligence, bound by neither blind obedience nor regulatory norms, is indispensable, praxis and the gaining of suitable routine should be made possible by utility."[61] The author continued by stating that the higher the officer's rank, the more necessary theoretical training becomes for him rather than formal handbooks and instruction manuals. He must

know military geography and statistics, logistics and supply, and political and foreign relations. The commander-in-chief must use all this knowledge to plan a strategy based on the situation in which he finds himself and his army, rather than on preset rules that may or may not apply. Unfortunately for the Austrian army, Benedek adhered to his *Formalismus* and did not study the terrain or base his decisions on the nature of the battlefield and theater of war.[62]

The problems of Benedek's leadership indicated a deeper issue within the Habsburg military. Officers often received promotions because of family or political connections rather than worthiness and merit proven in battle. Although Benedek had exhibited quick and direct action in squelching a Galician uprising in 1846 and showed his courage on the battlefield at Curtatone in 1848 and Solferino in the Franco-Austrian War, he had never done anything to earn a reputation as a competent strategist or army commander. Popular as the "Lion of San Martino" in 1859 for his stalwart defense at Solferino, loved by his soldiers but suspect among his fellow officers, Benedek had attained the high positions of *FZM*, commander-in-chief of the Army of Italy in Verona, and chief of the general staff in Vienna.[63] In Wawro's words, "His promotion had been a political ploy by Emperor Franz Joseph to win popularity among Austria's newly enfranchised middle class, who revered Benedek for his colorful personality and common origins and tended to overlook the obvious shortcomings of the *FZM* as a staff officer."[64]

Benedek's successor as chief of the general staff in 1863, *Feldmarschalleutnant* (*FML*) Alfred Baron Henikstein, provided another egregious example of the faulty promotion system in the Austrian army. Even though he had less experience and fewer qualifications than Benedek, Henikstein received the position despite admitting his own incompetence.[65] Bartels looked on Henikstein's appointment as a political move by Benedek to obtain a representative in Vienna to counter his rivals.[66] Beck as well as *Generalmajor* Gideon Ritter von Krismanić, the assistant chief of staff for the North Army, considered Henikstein's appointment to be a concession to Benedek and not a beneficial move because of Henikstein's outmoded ideas about war and his amicable relationship with Benedek.[67]

Benedek and Henikstein were not the only officers who received positions for which they had no proper experience. Solm-Braunfels stated the situation accurately: "Besides the customary bestowal of infantry brigades on old cavalry officers, the brigade commanders had been chosen

for the most part in rather unusual ways for the use of the army."[68] A serious problem existed in the promotion system of the Habsburg military, as Beck pointed out in his 1867 report on the poor morale of the army.[69] Bartels, however, exaggerated in claiming that the troops had no confidence in any of the Habsburg corps commanders.[70] Austrian leaders needed to find a solution so that competent and experienced generals, not political appointees, would make the critical decisions in future campaigns.

The Austrian rank and file did not perform well in battle, though this shortcoming stemmed more from poor training than an innate inability to fight. Although Albrecht noted the courage of the Habsburg forces, he lamented their insufficient discipline and cohesion.[71] Beck agreed that troop training required improvement to prepare Austrian soldiers for the practical exigencies of the battlefield.[72] Neither of these leaders cast aspersions on the men themselves or raised the issue of the willingness of the various peoples within the empire to fight for the Habsburg Empire.

Other officers also noted the deficiencies of the Austrian troops. Major General Zaitschek wrote to Albrecht, saying that the army lost the campaign in Bohemia because of the individual and tactical shortcomings of the infantry, who could not fight the Prussians on an equal level without better training.[73] Krismanić lauded the Austrian infantrymen for their indisputable superiority in hand to hand combat because of his supposed contempt for firepower and his strong fists, but castigated the officer corps for not leading the troops with enough intelligence.[74] Contempt for firepower, however, merely led to enormous casualties for both Habsburg officers and soldiers, whose strong fists did not even reach the enemy lines. Too many parades and not enough practical training with an emphasis on shooting had rendered Austrian soldiers inferior to the enemy.

Bartels attributed the poor battle performance and morale of Austrian troops to the failure of the Habsburg government and army to inspire them with love of the Austrian Empire as their country. According to the lieutenant colonel, the lack of discipline that led to the dissolution of certain units during the retreat stemmed from the poor morale of the army. In addition, Bartels claimed that Habsburg forces disintegrated even though casualties remained insignificant.[75] Although the Austrian loss of 48,000 men at Königgrätz hardly comprised an insignificant number, Bartels made the valid point of the difficulty involved in unifying an army composed of soldiers from so many ethnic and linguistic backgrounds.

For the most part, the various peoples of the Austrian Empire (Czechs, Slovaks, Slovenes, Hungarians, Ruthenians, Poles, Croats, Rumanians, and Austrians) remained loyal to the Habsburgs as long as their officers kept them in their units and they had sufficient supplies. Not surprisingly, certain Venetian units refused to fight against Prussia, Italy's ally.[76] In general, Austrian forces, whether German, Slavic, or any other ethnicity, tended to try to escape from danger in difficult situations, especially if no officers remained in the vicinity.[77] This behavior resulted from the Habsburg high command's failure to train the soldiers adequately, with too many parades and not enough realistic exercises in target practice and maneuvers, rather than insufficient love of the Austrian Empire. Confidence in commanders and familiarity with weaponry builds morale, no matter what ethnic background the soldiers represent.

Spending Unwisely

In addition to the wrong choice of tactics for Austrian weapons and poor leadership and training, the internal finances of the army presented a major problem for Habsburg military leaders. Although the official campaign history *Österreichs Kämpfe im Jahre 1866* tried to exonerate the Habsburg high command by finding fault in other areas, especially parliament and its stinginess, the Austrian high command did not critically examine their own handling of money. Instead, they continued to focus on civilian officials as the source of their financial problems, as asserted in *Sechzig Jahre Wehrmacht 1848–1908* as well as by later historians who favored the public military account of events.[78]

The army budget debates in the *Reichsrat*, however, reveal a different explanation. In an 1865 session of the *Abgeordnetenhaus* (House of Representatives), Dr. Čupr, a Liberal delegate from Bohemia, accused the Austrian war ministry of spending seven million florins more than it should have. Taking examples from the army's supply system, he showed how the military "supports the monopoly of profit-seeking, usurious purveyors and speculators, because it pays too much regard to class and party interests at the cost of the common good, because thereby not only the producers in general, but also the soldiers and the taxpayers themselves suffer." Instead of purchasing necessities from industries within the Habsburg Empire, the army did business with suppliers who procured provisions from foreign sources at higher prices. This system

wasted money and, much worse in the eyes of Dr. Čupr, ruined homeland industries. He even went so far as to blame the losses of 1859 at Magenta and Solferino on the system: "Our sons had to starve on the battlefield while unscrupulous speculators sought to enrich themselves by this imperial calamity."[79] Aside from Dr. Čupr's exaggerations concerning the causes of defeat in 1859, he made a valid point in maintaining that the Austrian military could both save money and support Habsburg industry by procuring supplies within the Austrian Empire.

The Liberal party led parliamentary opposition to military overspending and corruption. Although not in the majority before the war, the Liberals became the strongest political group in the *Reichsrat* in 1867. This party, composed mainly of anticlerical Germans, represented the industrial and commercial interests of the empire. The Liberals advocated equality before the law and liberty of the press, religion, and association. As heirs of the Viennese bourgeois revolutionaries of 1848, the Liberals desired limitations on the Habsburg monarch's authority, particularly in finances. This combination of constitutionalism and emphasis on financial matters led Liberals to oppose the army as the primary support of imperial authority and, thus, to oppose military expenditure.[80] The Liberal party did not reject all army expenditures, only those expenses they considered unnecessary, including contracts from foreign producers, such as Čupr bemoaned. In many cases, such as pensions and permanent fortresses, these expenses constituted legitimate concerns.

The Liberal party leader, Dr. Karl Giskra, the mayor of Brno, Moravia, stated during the budget debate of 1863 that from 1850 to 1861 the military had cost over 2 billion florins, and that, as a result, the state debt had risen from 1.3 to 2.5 billion florins with a projected interest payment of 128 million florins, which was more than any other branch of the government.[81] This outlay on interest represented an enormous amount for a state with an overall budget of only 305 million florins in 1862, 138 million of which the army already took, leaving a mere 52 million florins for the rest of the government after the 115 million interest payment servicing the national debt.[82]

Apologists for the army within the *Reichsrat* argued in favor of military expenditure by emphasizing the importance of maintaining Austria's status as a first class power by means of a large military presence. These men stated that the state budget should be looked at as a whole rather than merely inspecting the army's share minutely. They also pointed out that parliament did not allow anyone representing the army to sit on its

benches, thus disallowing true representation.[83] These arguments did not take into account whether the army wasted its funding on useless expenses or not, as Deputy Dreher from Lower Austria declared while underscoring "the contrast of this military luxury with the public emergency, with financial ruin."[84] In 1862, the Habsburg army received a budget of 138 million florins. According to Wawro's calculations, the high command spent only 76.7 million (55%) on regimental troops while the rest went to areas such as pensions, construction costs, army offices, general expenses, and "other expenses."[85]

Giskra continued the debate by accusing the military of shifting numbers within the amount requested for the army by the war ministry. The four million florins of savings the war minister claimed the army had achieved through natural price declines appeared in the 1863 extraordinary request for funding, rather than as a true subtraction from the budget segment designated as ordinary. In addition, the army moved six million florins for other expenses from the ordinary to the extraordinary so that the ten million it purported to save merely showed up in another part of the budget.[86] Aside from the war ministry's number games, Giskra pointed out the army's propensity for wasting money by employing higher ranking officers for positions that lesser officers could easily hold; for example, a colonel was employed as head of a stud farm rather than a major, or a major as riding instructor at a military academy instead of a lieutenant. This practice resulted in an overabundance of officers and administrative officials, who absorbed more funds because of the frequent promotions that the Habsburg high command felt necessary to raise the morale of the army. Thus, the Austrian military had 15,000 officers in 1863, more than in the larger prerevolutionary army of 1848. Earlier, when the army assigned an officer to an administrative position, no new officer replaced him. That policy no longer remained in effect and supernumeraries abounded, with a cost of over half a million florins. Compared with other branches of the Austrian state, such as the justice department, promotions took place far more often and thus raised the expenses of the military accordingly. Giskra said that parliamentary delegates would consider the army's budget requests seriously "as soon as it has happened that in peacetime all superfluous positions are eliminated, superfluous ranks removed, the administration expenses are compressed to a minimum, which is really necessary, all the luxury of the officer ranks and positions is withdrawn, and only what is necessary is introduced."[87]

The superabundant bureaucracy of the Austrian military continued unabated and parliamentary delegates continued to complain about these issues when they debated the army budget again in 1865. Once again, Giskra raised issues of monetary irresponsibility on the part of the military. Even though the number of soldiers and horses in the Austrian army had declined from the previous year, the costs for the military had increased because of the transfer of two lieutenant field marshals from corps commands to administrative boards and the subsequent creation of two new positions to replace them. These positions constituted part of the six new troop commands established within the past 2 years that had no tactical or administrative purpose and did not require men of such high rank to oversee them, as only major generals held similar positions in the rest of the army.[88] Overspending on superfluous officers marked a major source of financial mismanagement for the military. The army spent 8,124,044 florins on 8256 pensioned officers, not counting pensions for invalids and widows, more than half of the 14,954,570 florins it spent on 15,099 active officers. The situation among the generals and staff officers revealed the problem more distinctly because the pensioned outnumbered the active generals and staff officers by 2352 to 1252.[89] The cost of maintaining generals and pensioned officers at the imperial court, where they served as little more than advisors, alone amounted to 141,222 florins.[90] Compared with France and Prussia, Austria spent more on pensions and army administration and less on the rank and file, while consuming more of the state budget.[91]

Asking rhetorically what caused the great overload and ensuing monetary burden of the pensions, Giskra answered, "it is the existing promotion regulations and their management. It is this, and one can say against it what one wishes, because, as it is extremely well known, very frequent pensionings must occur because of the existing promotion regulations."[92] After the Austro-Prussian War, Archduke Albrecht and *Generalmajor* John concurred that the promotions resulting from the large number of supernumerary officers brought about the high rate of pensioning, which only appeared to indicate savings for the active army while in reality burdening the budget with excessive amounts of pension payments.[93] Even *FML* August Count Degenfeld-Schonburg, the war minister, admitted the need for new rules regarding promotions.[94] Thus, the problem of promotions based on political connections and favoritism affected not only battlefield command performance but also the financial situation of the whole empire.

Giskra also attacked the exorbitant sums that the Habsburg army wasted on permanent fortifications. Whereas the Prussians spent a mere 370,000 thaler on their more numerous fortresses in 1865, Austrian expenses amounted to 1,244,000 florins.[95] The Liberal party leader questioned this enormous outlay for structures that would not serve any purpose in modern warfare: "I certainly ought to permit myself the remark, that it has come into question whether in recent time, when the cannon system has changed, the construction of fortification works should not be carried out with greater foresight, as, for example, it is a notorious concern, that fortresses, which were considered impregnable because of their territorial sites according to the old system—impregnable is actually not the right term—but difficult to take, now lie in the range of the new cannon, so that all the works can be bombarded and razed in a very short time."[96] Even though parliamentary delegates pointed out the uselessness of outdated permanent fortifications that held little strategic value, the Austrian high command insisted on spending large sums on upgrading old fortresses or building new ones.

With such imprudent decisions, the deficiency in funding for the procurement of breech-loading rifles, better material for the artillery, and more training and target practice for the rank and file stemmed from the mishandling of funds by the Habsburg high command. In 1865, the Austrian military spent a mere 42,500 florins on rifles, 20,000 on artillery shells, 8500 on new fortress cannon, and 317,000 on troop exercises.[97] Parliamentary stinginess did not hinder the improvement of Austrian military might, as a comparison of the army budgets of the major European powers shows. According to Wawro, "Austrian expenditures on the land army in 1862 were double Prussian expenditures, more than Italy's, nearly equal to France's and only 25% less than Russian appropriations…. In fact, the 1860s did not see a 'catastrophic decline' in Austrian spending, as apologists for the Austrian army have argued, but rather a return to barely sustainable, but still quite high levels of spending."[98] The financial problems for the Habsburg military stemmed not from insufficient funding but from budgetary mishandling on the part of the high command.

Conclusion

The catastrophic defeat in 1866 against the Prussians revealed many grave problems in the Habsburg army. Although the Austrian artillery surpassed their enemies' cannon in range and precision, the infantry

definitely proved inferior in training and rifle firepower. The Habsburg high command failed to implement tactics suitable for the Lorenz. Instead of employing defensive tactics that would have taken advantage of the Austrian weapon's greater range and muzzle velocity, Benedek insisted on shock tactics and reliance on the bayonet for decisive action. This decision played directly into the strength of the Prussians, the *Schnellfeuer* of the Dreyse needle gun, which could fire much faster than the Lorenz but without as much range or impetus.[99] Combined with the indecisive semi-offensive strategy of the North Army commander, the offensive shock tactics resulted in heavy casualties and disaster at Königgrätz. In addition, the expensive permanent fortresses of the defensive cordon system had not stymied the Prussian advance into Bohemia nor afforded the Austrians sufficient protection to take up a favorable position using fortifications.

The abysmal performance of the Austrian army in Bohemia exposed deeper issues within the military than the battlefield actions of certain individuals. The high positions of Benedek and Henikstein revealed the corruption of relying on political and financial bases for promotion rather than a system valuing merit, experience, and ability. Training among the soldiers and officers, including general staff officers, proved deficient, especially in knowledge of the terrain of the northern theater. The troops generally displayed adequate courage but had communication issues with their officers because of language barriers and lack of trust in the high command. Their training proved insufficient in shooting, maneuver, and discipline. All these inadequacies resulted in little cohesion and poor morale.

Although many high ranking officers could see the purely military reasons for Austrian defeat in 1866, they failed to realize the true state of the army's financial situation. Too much bureaucracy, in addition to the waste of resources and corruption within the military, used up a large part of the military budget each year without providing for the procurement of sufficient new weaponry and proper training of troops for battle. Despite the warnings and castigations of the Liberal party, Habsburg military officials continued to excuse their actions and blame the supposed stinginess of parliamentary delegates for the fiscal shortcomings.

The Austrian high command was now confronted with the task of solving the problems that had become clear during the war with Prussia and Italy. Despite the desire to conceal these issues from unfavorable public opinion and to blame parliament, the new leadership recognized

that the problems stemmed from within the military. To maintain its status as a world power, the Habsburg monarchy would have to procure the new weaponry that nineteenth-century technology had to offer, and adapt its tactics and strategy to employ it to full advantage. This endeavor would require a new way of thinking, different from the traditional views of the Austrian military since the time of Archduke Charles. The army would also have to improve its command structure and make sure its officers and soldiers received better training in modern warfare. Finally, the Habsburg army would have to eliminate the financial mismanagement within its ranks to prove itself deserving of further appropriations from the *Reichsrat*. How Austrian leaders would respond to these challenges would shape the status and success or failure of the army in the coming decades.

Notes

1. Manfried Rauchensteiner, *Heeresgeschichtliches Museum Vienna* (Vienna: Styria Verlag, 2000), 49.
2. Rauchensteiner, *Heeresgeschichtliches Museum Vienna*, 54.
3. Vaclav Sochor, *The Battery of the Dead*, 1901/7.
4. Rudolf Ritter Otto von Ottenfeld, *Ein Ruhmesblatt der österreichischen Artillerie. Die Armeegeschützreserve nach der Schlacht bei Königgrätz am 3. Juli 1866*, 1897.
5. Rauchensteiner, *Heeresgeschichtliches Museum Vienna*, 54.
6. K.k. Generalstabs-Bureau für Kriegsgeschichte, *Österreichs Kämpfe im Jahre 1866* (Vienna: R.v. Waldheim, 1867–1869), vol. 1–5; Geoffrey Wawro, "The Austro-Prussian War: Politics, Strategy and War in the Habsburg Monarchy, 1859–1866" (Ph.D. dissertation, Yale University, 1992), 12; Wawro, *The Austro-Prussian War: Austria's War with Prussia and Italy in 1866* (Cambridge: Cambridge University Press, 1996), 2–3.
7. Ludwig August Ritter von Benedek and Heinrich Friedjung, *Benedeks nachgelassene Papiere* (Leipzig: Grübel & Sommerlatte, 1901), 417.
8. *Sechzig Jahre Wehrmacht 1848–1908* (Vienna: k.u.k. Kriegsarchiv, 1908), 132–135.
9. Heinrich Friedjung, *Der Kampf um die Vorherrschaft in Deutschland 1859 bis 1866*, 2 vols. (Stuttgart: J.G. Cotta, 1900), vol. 1, 32; Oskar Regele, *Feldzeugmeister Benedek und der Weg nach Königgrätz* (Vienna: Herold, 1960); Regele, "Staatspolitische Geschichtsschreibung: erläutert an Königgrätz 1866," *Mitteilungen des österreichischen Staatsarchivs (MÖSA)* 3 (1950), 305; Emil Franzel, *1866. Il Mondo Casca. Das Ende des alten Europa* (Vienna: Verlag Herold, 1968); Gordon Craig,

The Battle of Königgrätz (Philadelphia: Lippincott Co., 1964); Adam Wandruszka, *Schicksalsjahr 1866* (Vienna: Styria Verlag, 1966). Wawro provides an in-depth account of the historiography of the Austro-Prussian War in both his book (pp. 2–4) and his dissertation (pp. 11–16). Johann C. Allmayer-Beck also provides an earlier overview of the historiography in "Der Feldzug der österreichischen Nordarmee nach Königgrätz," in *Entscheidung 1866: Der Krieg zwischen Österreich und Preußen*, eds. Wolfgang v. Groote and Ursula v. Gersdorff (Stuttgart: Deutsche Verlags-Anstalt, 1966), 106–110.

10. Feldmarschalleutnant (FML) Erzherzog Albrecht, No. 1017 "Allerunterthänigster Vortrag," 21 August 1866, Kriegsarchiv (KA) Militärkanzlei Seiner Majestät (MKSM) Sonderreihe, Karton Nr. 22, 1866.
11. Oberst Friedrich von Beck, "Promemoria über Armee-Verhältnisse," August 1867, KA MKSM Sonderreihe, Karton Nr. 66, Studien.
12. Beck, "Theilweise Ursachen des gegenwärtigen schlechten Armee-Geistes und Mittel, welche zur Hebung desselben beitragen dürften," 1867, KA MKSM Sonderreihe, Karton Nr. 66, Studien.
13. The *ÖMZ* appeared for the first time in 1808 as the official organ of the war ministry because of Archduke Karl's desire to raise the intellectual level of the Austrian officer corps and bring about unity of thought throughout the army. The journal took this Tacitean saying as its motto: *Omnia quae vetustissima creduntur, nova fuere et quod hodie tuemur exemplis, inter exempla erit.* (All things which are believed to be very old, were new at one time, and what today we preserve in examples, later will be among examples.) The *ÖMZ* lasted until 1849, at which time it ceased to publish its quarterly issues. After a hiatus until 1860, Karl's son Wilhelm, perceiving a declining intellectual level in the officer corps, revived the journal for the same reasons as his father. The journal, as an attempt to stimulate discussion and spread military knowledge from Habsburg as well as foreign sources among the officers, thus continued without interruption until the First World War. Oberleutnant Zitterhofer, *Streffleurs Militärische Zeitschrift 1808–1908: Eine Geschichte dieser Zeitschrift anlässlich ihres 100jährigen Bestehens* (Vienna: L.W. Seidel & Sohn, 1908), 1–25.
14. "Uber die Ursache der Mißerfolge bei der österreichischen Nordarmee im Kriege Preußens gegen Deutschland im Jahre 1866," *Österreichische Militärische Zeitschrift* 2 (1866): 341–361. The author of this article is most likely Generalmajor Gideon Ritter von Krismanić, the assistant chief of staff for the North Army, as it mirrors his report to the commission inquiring into the defeat in Bohemia. Krismanić to Untersuchungs-Commission, 24 August 1866, KA, Nachlässe, Nosinic. However, Zitterhoffer lists the article among the writings of Valentin Streffleur, the editor of the *ÖMZ*. Marginal notes by a reader of the *ÖMZ* express

a difference of opinion about the needle-gun, while claiming that the Dreyse weapon alone rendered the Prussian army numerically superior to the Austrians.

15. Johann Christoph Allmayer-Beck, "Der Feldzug der österreichischen Nord-Armee nach Königgrätz," in *Entscheidung 1866: Der Krieg zwischen Österreich und Preußen*, eds. Wolfgang v. Groote and Ursula v. Gersdorff (Stuttgart: Deutsche Verlags-Anstalt, 1966), 140–141.
16. Gunther E. Rothenberg, *The Army of Francis Joseph* (West Lafayette, IN: Purdue University Press, 1976), 72.
17. Wawro, "The Austro-Prussian War," 807–808, 811–812.
18. *Sechzig Jahre Wehrmacht*, 134–135.
19. Geoffrey Wawro, "An 'Army of Pigs': The Technical, Social, and Political Bases of Austrian Shock Tactics, 1859–1866," *The Journal of Military History* Vol. 59, No. 3 (July 1995), 413; Dennis E. Showalter, *Railroads and Rifles: Soldiers, Technology, and the Unification of Germany* (Hamden, CT: Archon Books, 1975), 112–113.
20. "Der Krieg im Jahre 1866. Im Auszuge nach einem Artikel von Xavier Raymond in der 'Revue des deux mondes'," *ÖMZ* 3 (1866): 101.
21. Wawro, "The Austro-Prussian War," 714.
22. Albrecht, No. 1086 Allerunterthänigster Vortrag, 27 August 1866, Karton Nr. 22, 1866, 1.
23. Walter Wagner, "Die k.(u.)k. Armee - Gliederung und Aufgabenstellung," in *Die Habsburgermonarchie 1848–1918*, vol. 5 *Die Bewaffnete Macht* (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 1987), 349.
24. "Der Krieg im Jahre 1866. Im Auszuge nach einem Artikel von Xavier Raymond in der 'Revue des deux mondes'," *ÖMZ* 3 (1866), 101.
25. "Uber die Ursache der Mißerfolge bei der österreichischen Nordarmee im Kriege Preußens gegen Deutschland im Jahre 1866," *ÖMZ* 2 (1866), 353.
26. Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (New York: Oxford University Press, 2001); Robert Holtman, *The Napoleonic Revolution* (New York: J.B. Lippincott, 1967); Gunther Rothenberg, *The Art of Warfare in the Age of Napoleon* (Bloomington, IN: Indiana University Press, 1980); Geoffrey Wawro, *Warfare and Society in Europe, 1792–1914* (New York: Routledge, 2000).
27. Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976); Antoine Henri Jomini, *The Art of War* (Westport, Connecticut: Greenwood Press, 1862).
28. Wawro, "The Austro-Prussian War," 813–814.

29. *Sammlung der Armeebefehle und speziellen Anordnungen des k.k. Feldzeugmeisters Benedek, Kommandanten der k.k. Nordarmee vom Jahre 1866* (Vienna: k.k. Staatsdruckerei, 1866); "Taktische-und Dienst Instruction für die k.k. Nord Armee," *ÖMZ* 1 (1866); Friedjung, *Der Kampf um die Vorherrschaft in Deutschland 1859 bis 1866,* vol. 1, 424; Rothenberg, *The Army of Francis Joseph*, 69.
30. Wawro, "An 'Army of Pigs'," 415; Wawro, *The Austro-Prussian War*, 26–27.
31. Johann Christoph Allmayer-Beck, "Die Bewaffnete Macht in Staat und Gesellschaft," in *Die Habsburgermonarchie 1848–1918*, Vol. 5 *Die Bewaffnete Macht* (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 1987), 55; Wawro, "An 'Army of Pigs'," 424–431.
32. Helmuth von Moltke, "De l'influence des armes perfectionées sur le combat," *Militär Wochenblatt*, 8 July 1865; "Bemerkungen über den Einfluß der verbesserten Schußwaffen auf das Gefecht," *ÖMZ* 2 (1865).
33. Rothenberg, *The Army of Francis Joseph*, 69; Allmayer-Beck, "Die Bewaffnete Macht in Staat und Gesellschaft," 56.
34. Anton von Mollinary, *Studien über die Operationen und Tactique der Franzosen im Feldzuge 1859 in Italien* (Wien: Wilhelm Braumüller, 1864), 128–129.
35. Friedjung, *Der Kampf um die Vorherrschaft in Deutschland 1859 bis 1866,* vol. 1, 342.
36. Wawro, "An 'Army of Pigs'," 433.
37. Rothenberg, *The Army of Francis Joseph*, 69.
38. Wawro, "The Austro-Prussian War," 812–813; Wawro, "An 'Army of Pigs'," 430; Rolf Förster, "Die Leistungsfähigkeit der bayrischen Armee im Feldzuge 1866: Dargestellt an der militärische Ausbildung vor dem Krieg" (Ph.D. dissertation, Munich, 1987), 155–156.
39. Edmund von Glaise-Horstenau, *Franz Josephs Weggefährte* (Wien: Amalthea Verlag, 1930), 96.
40. Ludwig von Benedek, "Army Order No. 41," Josefstadt, 28 June 1866, KA MKSM Sonderreihe, Karton Nr. 26, Akten (1866); Showalter, *Railroads and Rifles*, 126–127.
41. Wawro, "The Austro-Prussian War," 770.
42. Rothenberg, *The Army of Francis Joseph*, 68–71; Wawro, *The Austro-Prussian War*, 124–273.
43. H., "Jomini über den Feldzug 1866 in Böhmen," *ÖMZ* 1 (1867), 154. The "H" most likely stands for Field Marshal (FML) Heinrich Hess, Chief of the General Staff from 1849 to 1860.
44. Eduard Bartels, *Östreich und sein Heer* (Leipzig: Otto Wigand: 1866), 15.
45. FZM Ladislaus Freiherr Nagy von Alsó-Szopor, "Bemerkungen über den Krieg zwischen Österreich und Preussen 1866, "September 1866, KA

MKSM Sonderreihe, Karton Nr. 22, 1866, 1; "Bemerkungen über den Feldzug der k.k. Nordarmee 1866, mit einem aphoristischen Anhange," *ÖMZ* 2 (1867), 158.

46. Bartels, *Österreich und sein Heer*, 16–17.
47. Wawro, *The Austro-Prussian War*, 264–265.
48. FML Heinrich Freiherr von Hess, "Strategische Grundsätze über die Verteidigung der österreichischen Monarchie," in *Schriften aus dem militärwissenschaftlichen Nachlass*, ed. Manfried Rauchensteiner (Osnaburg: Biblio Verlag, 1975). Sébastien Le Prestre de Vauban (1633–1707) was a French Marshal and the foremost military engineer of his time.
49. H., "Jomini über den Feldzug 1866 in Böhmen," *ÖMZ* 1 (1867), 150.
50. Bartels, *Östreich und sein Heer*, 30–31.
51. Archduke Karl, "Strategie und Taktik. (Geschrieben im Jahre 1845.) Aus dem hinterlassenen Papieren weiland Sr. kaiserlichen Hoheit des Erzherzogs Carl von Österreich," *ÖMZ* 1 (1866), 1.
52. The Prussian officer Dietrich Heinrich von Bülow, who published *Practical Rules of Strategy* in 1805, set the keys of strategy on geometrical formulae with converging lines coming from bases. Thus, possession of both bases and their corresponding lines would assure victory.
53. Milan N. Vego, *Joint Operational Warfare: Theory and Practice* (Newport, Rhode Island: Naval War College, 2009), I-37.
54. Graf Geldern, "Befestigungs-Vorschläge, basirt auf die Vertheidigung von Manövrirplätzen," *ÖMZ* 4 (1867), 299.
55. "Praxis und Routine. - Wissenschaft und Kunst. - Betrachtungen über den Kriegsschauplatz in Böhmen von 1866 und die auf demselben stattgehabten Kriegsereignisse dieses Jahres. (Aus den schriften eines Veteranen des österreichischen Heeres)," *ÖMZ* 4 (1866): 199–207.
56. Wawro, "The Austro-Prussian War," 807.
57. Rothenberg, *The Army of Francis Joseph*, 60; Wawro, *The Austro-Prussian War*, 25–27.
58. Allmayer-Beck, "Die bewaffnete Macht in Staat und Gesellschaft," 34.
59. FZM Anton Freiherr von Mollinary, *Sechsundvierzig Jahre im österreich-ungarischen Heere, 1833–1879*, 2 vols. (Zurich: Art. Institut Orell Füssli, 1905), II 106.
60. B.P.S., "Unsere Aufgabe," *ÖMZ* 4 (1866): 42. Scrawled under the article title is "Prince v. Solms-Braunfels," most likely the author (B[romfels] P[rinz] S[olms]). Friedrich Wilhelm Karl Ludwig Georg Alfred Alexander Prinz zu Solms-Braunfels (1812–1875), a German prince, served in the Austrian army as a major general in charge of a brigade during the Austro-Prussian War and retired as a lieutenant field marshal in 1868.
61. "Praxis und Routine. - Wissenschaft und Kunst. - Betrachtungen über den Kriegsschauplatz in Böhmen von 1866 und die auf demselben

stattgehabten Kriegsereignisse dieses Jahres. (Aus den schriften eines Veteranen des österreichischen Heeres)," *ÖMZ* 4 (1866): 192–193.
62. "Praxis und Routine," 194–195, 198–199.
63. Allmayer-Beck, "Die bewaffnete Macht in Staat und Gesellschaft," 32–33; Rothenberg, *The Army of Francis Joseph*, 57–60.
64. Wawro, *The Austro-Prussian War*, 25.
65. Rothenberg, *The Army of Francis Joseph*, 60; Wawro, *The Austro-Prussian War*, 27.
66. Eduard Bartels, *Kritische Beiträge zur Geschichte des Krieges im Jahre 1866* (Zurich: Cäsar Schmidt, 1901), 24.
67. Glaise-Horstenau, *Franz Josephs Weggefährte*, 96–97.
68. B.P.S., "Unsere Aufgabe," *ÖMZ* 4 (1866), 41.
69. Beck, "Theilweise Ursachen des gegenwärtigen schlechten Armee-Geistes und Mittel, welche zur Hebung desselben beitragen dürften,"1867, KA MKSM Sonderreihe, Karton Nr. 66, Studien.
70. Bartels, *Östreich und sein Heer*, 17.
71. Feldmarschalleutnant (FML) Erzherzog Albrecht, No. 1017 "Allerunterthänigster Vortrag,"21 August 1866, Kriegsarchiv (KA) Militärkanzlei Seiner Majestät (MKSM) Sonderreihe, Karton Nr. 22, 1866, 7–8.
72. Beck, "Theilweise Ursachen des gegenwärtigen schlechten Armee-Geistes und Mittel, welche zur Hebung desselben beitragen dürften,"1867, KA MKSM Sonderreihe, Karton Nr. 66, Studien.
73. Wawro, "The Austro-Prussian War," 813.
74. "Uber die Ursache der Mißerfolge bei der österreichischen Nordarmee im Kriege Preußens gegen Deutschland im Jahre 1866,"*ÖMZ* 2 (1866), 352–353.
75. Bartels, *Östreich und sein Heer*, 7–8, 10–11.
76. Wawro, *The Austro-Prussian War*, 138.
77. Wawro, "The Austro-Prussian War," 815.
78. See pages 3–4.
79. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 55. Sitzung der 3. Session am 4. Mai 1865 (Vienna: k.k. Hof- und Staatsdruckerei, 1865), 1499–1500.
80. C.A. Macartney, *The Habsburg Empire 1790–1918* (London: Weidenfeld and Nicolson, 1968), 519–520; 571.
81. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 61. Sitzung der 2. Session am 11. December 1863 (Vienna: k.k. Hof- und Staatsdruckerei, 1864), 1396.
82. Wawro, "The Austro-Prussian War," 171.
83. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 61. Sitzung der 2. Session am 11. December 1863, 1405–1406.

84. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 61. Sitzung der 2. Session am 11. December 1863, 1414. By public emergency Dreher meant the financial ruin that military expenditures were bringing the rest of the government and in particular lower officials and teachers who did not receive enough pay.
85. Wawro, "The Austro-Prussian War," 178.
86. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 61. Sitzung der 2. Session am 11. December 1863, 1401–1402, 1416.
87. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 61. Sitzung der 2. Session am 11. December 1863, 1417–1419. The Austrian army had 10,000 officers for a peacetime footing of 327,000 soldiers in 1848. By 1865, the peacetime footing had risen to 374,000 men.
88. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 53. Sitzung der 3. Session am 2. Mai 1865, 1446–1447.
89. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 54. Sitzung der 3. Session am 3. Mai 1865, 1481.
90. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 54. Sitzung der 3. Session am 3. Mai 1865, 1469.
91. Antonio Schmidt-Brentano, *Die Armee in Österreich: Militär, Staat und Gesellschaft 1848–1867* (Boppard am Rhein: Harald Boldt, 1975), 146.
92. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 54. Sitzung der 3. Session am 3. Mai 1865, 1482.
93. Albrecht and John, "Die Beförderungs-Vorschrift für die k.k. österreichische Landarmee vom 24. April 1867," *ÖMZ* 2 (1867), 138.
94. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 54. Sitzung der 3. Session am 3. Mai 1865, 1482.
95. According to the Vienna Coinage Treaty of 1857, 1 thaler equaled 1.5 Austrian florin, which would make the Prussian fortress expenditure 555,000 Austrian florins. Steven P. Reti, *Silver and Gold: The Political Economy of International Monetary Conferences, 1867–1892* (Westport, CT: Greenwood Press, 1998), 52.
96. *Stenographische Protokolle des Hauses der Abgeordneten des Reichsrathes*, 54. Sitzung der 3. Session am 3. Mai 1865, 1461.
97. Wawro, "The Austro-Prussian War," 182.
98. Wawro, "The Austro-Prussian War," 174.
99. Showalter, *Railroads and Rifles*, 122. Showalter puts the Dreyse's normal effective range around 600 paces, whereas the Lorenz had a range of 900 paces.

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