THE MATURATION OF NAPOLEON'S ARTILLERY ARM

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Napoleon Bonaparte came of age as an artillery officer in the French *ancien régime* during a time of transition for the artillery arm. The French Vallière system of ordnance reigned supreme as Europe's premier system of artillery in the first half of the eighteenth-century but became antiquated as a system that was primarily designed for siege warfare. A shift in the character of warfare to maneuver and emerging theory that prioritized mobile artillery drove the development of the French Gribeauval system following the Seven Years' War, but the artillery arm continued to be viewed as an ancillary support branch, and its guns were distributed amongst the ranks. Napoleon's education and experiences as an artillery officer, coupled with the influence of emerging theorists and improved materiel, enabled him to develop the Ordnance System of the Year XI that emphasized the massed effects of artillery at the decisive time and place, in contrast to the artillery systems of the *ancien régime*. Under Napoleon's leadership, the artillery arm matured from an ancillary support branch into a decisive force to be employed on the battlefield.

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ABSTRACT

THE MATURATION OF NAPOLEON'S ARTILLERY ARM, by Major Justin G. McBride, 115 pages.

Napoleon Bonaparte came of age as an artillery officer in the French *ancien régime* during a time of transition for the artillery arm. The French Vallière system of ordnance reigned supreme as Europe's premier system of artillery in the first half of the eighteenth-century but became antiquated as a system that was primarily designed for siege warfare. A shift in the character of warfare to maneuver and emerging theory that prioritized mobile artillery drove the development of the French Gribeauval system following the Seven Years' War, but the artillery arm continued to be viewed as an ancillary support branch, and its guns were distributed amongst the ranks. Napoleon's education and experiences as an artillery officer, coupled with the influence of emerging theorists and improved materiel, enabled him to develop the Ordnance System of the Year XI that emphasized the massed effects of artillery at the decisive time and place, in contrast to the artillery systems of the *ancien régime*. Under Napoleon's leadership, the artillery arm matured from an ancillary support branch into a decisive force to be employed on the battlefield.

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CHAPTER 1

INTRODUCTION

Napoleon Bonaparte fundamentally challenged the paradigm of seventeenth- and eighteenth-century artillery employment. As an artillerist, his education and battlefield experiences prepared him to make organizational and employment changes that would transform the artillery arm from an ancillary support branch of *ancien régime* armies to a co-equal arm capable of serving as a decisive force on the battlefield. Building upon the emerging theories and technological advancements of the eighteenth-century, Napoleon applied his vision of operational art to the artillery, transforming the arm to serve in an offensive role by concentrating the artillery and massing its effects at the decisive time and place to create opportunities which the infantry and cavalry could exploit.[1]

This thesis argues the French artillery matured into a decisive force because of Napoleon's employment of massed artillery at the decisive time and place on the battlefield. It will achieve this by examining the French artillery and ordnance systems of the eighteenth-century that influenced Bonaparte's education and employment of artillery. This foundation provides the basis for understanding the French artillery arm in the eighteenth-century. An operational account of the Battle of Austerlitz illustrates Napoleon's use of massed artillery at a decisive time and place by maximizing the mobile use of massed fires in a battle of maneuver. An operational account of the Battle of Borodino illustrates Napoleon's use of massed artillery in a static battle of attrition where

[1] Bruce McConachy, "The Roots of Artillery Doctrine: Napoleonic Artillery Tactics Reconsidered," *The Journal of Military History* 65, no. 3 (July 2001): 614-640, https://www.jstor.org/stable/2677528.

he concentrated a large volume of fires at the decisive time and place to overwhelm the enemy's defenses. Finally, the thesis concludes with analysis of Napoleon's employment of the artillery arm in the two case-studies and examines Napoleon's innovative tactical application of massed artillery, as compared to artillery employment in the *ancien régime* that emphasized dispersed artillery firepower among its formations.

Historiographical debates about the nature of early modern European warfare continue, as embodied by the works of Gunther Rothenberg and Russell Weigley. Rothenberg describes the formal nature of warfare in the seventeenth- and eighteenth-centuries as having employed limited means that sought limited objectives. Monarchs employed small armies in conflicts that rarely sought the total destruction of an enemy, as it was not in the interest of the crowned heads to lose the relatively small trained and equipped formations of their armies. The operational approaches of maneuver and siege were most prevalent in the campaigns of the seventeenth- and eighteenth-centuries. The most accomplished strategy calculated military operations with mathematical precision to continue war without the requirement to engage the enemy and the ultimate aim of placing the enemy in such an untenable position that he was forced to capitulate on terms. The surrender of a fortress or army in the field was not considered dishonorable at the time, as generals rarely defend a position to the last man.[2]

In contrast, Weigley describes the conflicts of the seventeenth- and eighteenth-centuries as occurring during the "Age of Battles." During this time, the economic, social, and technological conditions allowed for tens of thousands of soldiers to occupy

[2] Gunther Erich Rothenberg, *The Art of Warfare in the Age of Napoleon* (Bloomington, IN: Indiana University Press, 1978), 11-12.

the field at a single time in the ultimate test of strength. Military planners sought to secure decisive victories in these battles while only expending resources comparable to the purpose the conflict was intended to attain. These grand-scale battles provided the opportunity to completely destroy the enemy army, resolving a conflict in a single engagement. This idea further offered the hope that wars could be short and incur a relatively low cost as compared to an extended campaign.[3] The truth lies between Rothenberg's and Weigley's arguments, especially when adjusted for contemporary conditions; however, warfare in early modern Europe was limited compared to the period that followed.

The French Revolutionary and Napoleonic Wars brought about a transition from the seventeenth- and eighteenth-century style of limited war with small armies to one of total war, wielding large national conscript armies. Within this transition, the artillery also saw significant advancements. The *ancien régime*'s artillery arm during the "Age of Battles" served two primary roles. Siege artillery employed large-caliber guns to destroy an enemy's fortifications and largely remained stationary once emplaced. Field artillery was lighter and more mobile, but it was viewed as a supplementary arm of the infantry, and its guns were generally equally distributed among the infantry formations. As an artillery officer, Napoleon would foster the field artillery's transition from this ancillary status of the *ancien régime* to a position of prominence. This was accomplished by combining the advances in artillery materiel from the mid-eighteenth century that offered lighter and more mobile firepower with his own emerging theory, which was influenced

[3] Russell F. Weigley, *The Age of Battles: The Quest for Decisive Warfare from Breitenfeld to Waterloo* (Bloomington, IN: Indiana University Press, 2004), xii.

by other great theorists, in consolidating the pieces of the field artillery into larger batteries under specialized artillery commanders for the purpose of providing massed fires at the decisive time and place.[4]

Tactically, artillery of the *ancien régime* primary served in defensive roles and in support of siege operations. Guns were crude, limited in range, difficult to transport, and prone to malfunctioning.[5] Pieces and their ammunition were dragged to the battlefield by contractors and put into action by artillerymen who were viewed to be members of a guild rather than a military arm.[6] Some contemporaries even believed artillery to be more useful as a means to frighten the enemy's soldiers than as a weapon to inflict casualties on his formation.[7]

Artillery remained largely unchanged until a number of innovative improvements during an eighteenth-century arms race between the powers of Europe. These improvements offered more mobile carriages, increasingly standardized calibers, elevation screws, and several new projectiles, which resulted in greater mobility, increased accuracy, and improved rates of fire. As a result, the artillery transformed from

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[4] Anthony L. Dawson, Paul L. Dawson, and Stephen Summerfield, *Napoleonic Artillery* (Wiltshire: The Crowood Press Ltd, 2007), 6; Brent Nosworthy, *With Musket, Cannon and Sword: Battle Tactics of Napoleon and His Enemies* (New York: Sarpedon, 1996), 380.

[5] Kevin F. Kiley, *Artillery of the Napoleonic Wars* (S. Yorkshire: Greenhill Books, 2015), 46.

[6] McConachy, "The Roots of Artillery Doctrine," 614-640; Rothenberg, *The Art of Warfare in the Age of Napoleon*, 15.

[7] Brent Nosworthy, *The Anatomy of Victory: Battle Tactics, 1690-1763* (New York, NY: Hippocrene Books, 1990), 13.

the slow and immobile artillery pieces used primarily for siege operations in the seventeenth century into a mobile striking capable of keeping up with the infantry and cavalry in the eighteenth century.[8]

The French Royal Artillery, which had gone through several periods of change and innovation leading up to the French Revolution, built upon the progress of innovative theorists such as Sébastien Le Prestre, siegneur de Vauban; Jean-Baptiste Vaquette de Gribeauval; and Jean du Teil, who led innovative efforts to standardize, professionalize, and increase the arm's effectiveness in the eighteenth-century. Napoleon Bonaparte, having studied under or been influenced by these innovative theorists, would continue to develop concepts of artillery organization and employment during his ascension to the Imperial throne, which would bring about such change that the French artillery would become the most mobile and effective artillery in the world.[9]

The success of Napoleon's artillery arm lay in its organization for and use in mass, in contrast to *ancien régime*'s use of artillery dispersed among its formations and siege roles. Napoleon mastered the principle of mass by concentrating his artillery pieces into large batteries that delivered heavy volumes of artillery fire during the preparatory bombardment. The artillery would then mass on a designated section of the enemy line.

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[8] John R. Elting, *Swords Around a Throne: Napoleons Grande Armée*. (New York, NY: The Free Press, 1988), 17-18; Kiley, *Artillery of the Napoleonic Wars*, 117; Nosworthy, *The Anatomy of Victory*, 13; Robert S. Quimby, *The Background of Napoleonic Warfare* (New York, NY: AMS Press, 1979), 88-89.

[9] Jonathan Abel, "The Prophet Guibert," in *Napoleon and the Operational Art of War Essays in Honor of Donald D. Horward*, (Leiden: Brill, 2016), 8-39; Elting, *Swords Around a Throne*, 17-18; Peter Paret, *Makers of Modern Strategy: from Machiavelli to the Nuclear Age* (Princeton, NJ: Princeton University Press, 1986), 65.

Once the enemy's line was broken and his reinforcements committed, the artillery would rush forward and deliver canister shot at close range while the infantry and cavalry exploited the artillery's success.[10] The Emperor also organized an artillery reserve under his direct command for use at the decisive time and place, maximizing arm's destructive power and ability to decide the outcome of a battle.[11]

The French Revolution and the Napoleonic Wars elevated the French artillery from a previously existing proud tradition to one rising above the perceived supremacy of Austrian artillery in the eighteenth-century.[12] Under Napoleon's tutelage, offensive artillery tactics employing the principle of mass came of age and the arm became the

[10] In the mid-eighteenth century, canister shot was an anti-personnel artillery ammunition that consisted of several musket balls in a container that was held together by wire, resulting in what was termed "grapeshot," as it resembled a bunch of grapes. The French artillery experienced little success with this ammunition during the Seven Years War. New canisters of wrought iron were developed following artillery experiments after the conclusion of the Seven Years War; these prevented the individual balls from colliding and breaking apart. By the time of the Napoleonic Wars, experienced artillerymen recommended the maximum range for the use of canister ammunition as four hundred to five hundred meters. See Nosworthy, *With Musket, Cannon and Sword*, 363-366.

[11] Dawson, Dawson, and Summerfield, *Napoleonic Artillery*, 6.

[12] Elting, *Swords Around a Throne*, 250; The supremacy of France's Vallière System in Europe at the beginning eighteenth century was surpassed by the Austrian Lichtenstein System, which was developed following the War of Austrian Succession, that took place from 1740 to 1748. Prince Lichtenstein was appointed as the Director General of the artillery in 1744 and directed the establishment of an artillery school at Budweis and new designs for light and maneuverable guns that would be supplemented with howitzers. At the outset of the Seven Years War the Austrian artillery system stood as the premier artillery arm in Europe. See Rothenberg, *The Art of Warfare in the Age of Napoleon*, 25.

great decider of battles. No longer would the arm be restricted to roles during the siege or enemy advance.[13]

During this transformative time, artillery became a decisive arm that utilized the offensive traits of speed and maneuverability and the principle of mass to obtain a decisive decision. Napoleon believed a revolution in artillery tactics had occurred that centered around the use of mobile artillery formations capable of providing a large volume of fires at the decisive point on the battlefield. The technological improvements of lighter and more mobile pieces employed in mass through the constructs of Napoleon's tactical prowess resulted in the maturation of the arm to the position as the most respected in artillery arm in Europe. The concentration of cannon into batteries of greater size became more common under Napoleon, and greater numbers of artillery pieces became common on the field. Armies became measured by the number of guns they possessed, as opposed to the numbers of battalions alone. The artillery arm matured to serve on the leading edge of battle, engaging lead enemy formations offensive actions. Napoleon's synthesis of ideas from military theorists in conjunction with his own artillery experience transformed the art of war from the *ancien régime*'s ineffective employment of dispersed artillery used in defensive roles into one which emphasized the use of mobile artillery massing at the decisive point.[14]

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[13] Dawson, Dawson, and Summerfield, *Napoleonic Artillery*, 6.

[14] Dawson, Dawson, and Summerfield, *Napoleonic Artillery*, 6; Kiley, *Artillery of the Napoleonic Wars*, 92; McConachy, "The Roots of Artillery Doctrine," 614-640.

CHAPTER 2

THE EVOLUTION OF FRENCH ARTILLERY

This purpose of this chapter is to analyze the influential theorists and systems of ordinance of the eighteenth century that provided the foundation for Napoleon's innovative employment of the artillery arm. As a young artillery officer, Napoleon came of age during a period of transition and debate regarding the role of the artillery arm. The Vallière System served as the system of ordnance for artillery employment in the French army during the Seven Years' War, but its inadequacies as a system designed for seventeenth century warfare were uncovered in the face of other states' lighter and more mobile systems. It will detail how artillerist Jean-Baptiste Vaquette de Gribeauval, who had observed the modernized Austrian system of artillery, would set about making changes in the French artillery aimed at rivaling the Austrians, which resulted in the development of the Gribeauval System.[15]

It will also examine how the du Teil brothers would prove to have great influence over young Bonaparte. Jean-Pierre du Teil would instruct Napoleon on the Gribeauval System and share influential ideas of artillery employment at the artillery school in Auxonne. Jean du Teil served alongside Napoleon at the Siege of Toulon, and his theory of massing artillery would provide additional influence. Jacques-Antoine-Hippolyte, comte de Guibert, who believed the artillery arm to be an ancillary support arm of the infantry, emphasized the importance of the artillery's mobility in order to support the

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[15] Scott Bowden, *Napoleon and Austerlitz: an Unprecedentedly Detailed Combat Study of Napoleon's Epic Ulm-Austerlitz Campaigns of 1805* (Chicago: The Emperor's Press, 1997), 59-60; Elting, *Swords Around a Throne*, 7-8.

infantry in his writings. Finally, this chapter will conclude by analyzing Napoleon's synthesis of artillery employment ideas by Auguste-Frédéric-Louis Viesse de Marmont, duc de Raguse, for use in his own tactical application of the artillery through the development of the ordnance System of the Year XI, which would serve the French army from 1809 until after Napoleon's eventual downfall at the Battle of Waterloo.[16]

The French field artillery was long considered to be an extension of the infantry arm and did not attain its status as an independent arm until at least 1774. Even then, the arm was not widely identified as its own independent arm until 1793. Artillery regiments were still required to mark their equipment with their infantry regiment's identification as late as 1789. The artillery regiments therefore adopted the names of the artillery schools from which they were trained to cultivate a sense of pride and to identify themselves.[17]

Artillery officers began their careers as enlisted men until they were able to master their craft and could pass practical and written examinations, a requirement that separated the arm from the others. The artillery attracted officers from the bourgeoisie who possessed a technical education, especially in mathematics, or from the lowest levels of the nobility; it was uncommon for officers from most noble houses to seek a commission in the artillery. Napoleon Bonaparte, from the nobility of recently-pacified Corsica, and Auguste Marmont, from a family of lower French nobility, were examples of this precedent.[18]

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[16] Abel, "The Prophet Guibert," 8-39; Kiley, *Artillery of the Napoleonic Wars*, 138-150; Quimby, *The Background of Napoleonic Warfare*, 145-155.

[17] Elting, *Swords Around a Throne*, 17-18.

[18] Ibid.

While the French wielded state-of-the-art guns in the 1730s and 1740s, they found themselves with an artillery arm best suited for siege warfare following the Seven Years' War, falling behind the changes in the character of warfare as countries like Austria sought to combine fires with maneuver. This was a result of the Vallière System, which was introduced in 1732 and gave the French the hardest-hitting and longest-ranging artillery in the world at the time. However, it was heavily influenced by the views of the French military engineer Vauban, who saw the primary purpose of the artillery as being to raze enemy fortifications during siege operations. The resulting heavy pieces were impractical to move on the battlefield, as it took significant time, horsepower, and civilian contractors to accomplish.[19]

As noted, Vauban and Vallière's paradigm artillery system was designed primarily to support siege operations and thus offered limited use against the enemy during a field battle. Moreover, in the event a battle was lost, the guns were usually lost as well. The changing nature of warfare from a siege focus to one that added emphasis to the increased mobility of armies in field battles challenged the effectiveness of the Vallière System. As a result, Gribeauval and Guibert argued in favor of a system of artillery that employed mobile guns that could keep up with the army on campaign and provide responsive fire support. However, guns designed to support a more mobile

[19] Bowden, *Napoleon and Austerlitz*, 59-60; Elting, *Swords Around a Throne*, 17-18.

system of warfare were lighter, but prone to malfunction.[20] A dispute between the two systems appeared mid-century and continued through the Revolution.

The Vallière System attached two battalion guns to each infantry battalion, which failed to promote the concentration of artillery fires and the massing of effects on the battlefield by dispersing cannon into lower-level infantry formations. The battalion guns were intended to harden the lines of the infantry, but they often failed to provide any additional strength. Outside of France, as the nature of warfare evolved, artillery employment methods evolved with it. Commanders began to emphasize the importance of mobility and consolidating their larger-caliber field guns in batteries to influence the battle and relied less on the distributed firepower of battalion guns. French artillerymen who observed the swift employment of Austrian and Prussian guns during the Seven Years' War took note of their innovative practices and began rethinking their own concepts of artillery employment.[21]

The artillery arm rapidly progressed throughout the eighteenth century with the development of lighter and more mobile pieces due to armies fighting more battles and conducting less sieges. Reformers also drew on ideas from the Scientific Revolution and the Enlightenment, particularly as proto-industrialization spread from England to the rest of Europe. The Austrian and Prussian armies led change during this time by introducing carriages with interchangeable parts, iron axles, limber boxes, and aiming devices. An Austrian field piece employed during the Seven Years' War weighed less than half of a

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[20] Bowden, *Napoleon and Austerlitz*, 59-60; Elting, *Swords Around a Throne*, 17-18.

[21] Elting, *Swords Around a Throne*, 17-18.

French piece of the Vallière System. The innovative lighter and standardized Austrian pieces placed the Austrian Feurstein-model guns as the premiere artillery piece of the day. The Prussian army soon followed the Austrians and developed a new series of guns that imitated the Austrian pieces and led the development of horse artillery.[22]

The defeats of the Seven Years' War led France to realize a new ordnance system and method of employment was needed. Joseph-Florent de Vallière, dean of the French school of artillery and son of Florent-Jean de Vallière, designer of the 1732 Vallière System, refused to entertain any criticism of his father's demonstrably antiquated system. He insisted that it retained its utility by weight of shot, range, and in counter-battery fire. Artillery officers who believed in the relevance of the artillery in siege warfare and counter-battery fire became known as "Reds." Artillerymen who sought a lighter, standardized, and more mobile ordnance system used to target the enemy's troops became known as "Blues." The argument lasted for twenty years until it was settled in the 1770s by the unavoidable evidence of the changing character of warfare. A new ordnance system was needed and it received approval in 1774, although implementation did not begin until Vallière's death in 1776.[23]

The new system of ordnance became known by its designer, Jean-Baptiste Vaquette de Gribeauval, who would become one of the most influential artillery officers in history. Gribeauval joined the French army in 1732, the same year the Vallière System

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[22] Bowden, *Napoleon and Austerlitz*, 59-62; Rothenberg, *The Art of Warfare in the Age of Napoleon*, 22-28.

[23] Bowden, *Napoleon and Austerlitz*, 59-60; Quimby, *The Background of Napoleonic Warfare*, 145-155.

was implemented. He went on to serve in the Seven Years' War, where he was attached to the Austrian army and served as General of the Artillery. During this assignment, Gribeauval witnessed the Austrian's Feurstein ordnance system in action and developed initial ideas for redesigning France's Vallière System.[24]

Gribeauval began designing the *artillerie modèle 1765, système Gribeauval* in the 1760s and improved Vallière System's pattern of twelve-, eight-, and four-pound cannon by decreasing weight, standardizing carriages and limbers, and implementing new casting methods. The Vallière System cast hollow barrels around a solid core. The core was difficult to keep still during the manufacturing process, which caused inaccuracies in the bore. Gribeauval introduced an alternative method of casting barrels that originated in Holland bored barrels from a solid mold and produced a better-aligned bore with tighter tolerances and reduced windage. The more-accurate casting method paired with the production of more-precisely machined round shot resulted in greater accuracy without a loss of velocity because the expanding gasses were more effectively contained to propel the projectile. Smaller charges could therefore be used in lighter cannon that were more suited to support an army on campaign.[25]

Each cannon in contemporary artillery was designed to serve a specific role and was complemented with a standard six-inch field howitzer. The light four-pounders were designed for use as close infantry support and saw service in the foot artillery. This battalion artillery was discontinued following the Seven Years' War, but it reappeared

[24] Bowden, *Napoleon and Austerlitz*, 59-60.

[25] Rothenberg, *The Art of Warfare in the Age of Napoleon*, 24.

during the Wars of the Revolution. Eight-pounders were versatile and hard-hitting and could quickly move around the battlefield, with highly-trained crews and strong horse teams, to deliver devastating fire on enemy troops within five-hundred yards. This combination was best suited for use as foot or horse artillery. Twelve-pounders were designed for counter-battery use or long-range bombardment of enemy formations.[26]

The guns of the Gribeauval system were made more maneuverable by using horses that were harnessed in pairs instead of in tandem, a method that offered more manageable power when hauling heavy loads. Gribeauval's field pieces also had ammunition readily available in the trail chest between the gun trails, and gunners were able to set the piece into action as soon as the gun unlimbered. All ordnance was also equipped with an elevating screw, which greatly increased the accuracy of the guns. Accuracy was even further improved by the inclusion of tangent scales that consisted of a graduated rear sight marked in degrees. This was used in conjunction with a foresight for the purpose of aiming the piece by elevating or depressing the barrel. Gribeauval also believed that only soldiers should be responsible for the artillery trains, not often-unreliable civilian contractors. However, this change would not be implemented until Napoleon organized the drivers into artillery train battalions in 1800.[27] These reforms

[26]Quimby, *The Background of Napoleonic Warfare*, 146; Gribeauval's siege cannon were developed about ten years after the field cannon and included twenty-four, sixteen, twelve, and eight pounders and the eight pouce field howitzer. These were also known as *artillerie modèle 1765, système Gribeauval*, although the siege pieces are often referred to as *artillerie modèle 1775, système Gribeauval*. See Bowden, *Napoleon and Austerlitz*, 60.

[27] Bowden, *Napoleon and Austerlitz*, 61.

constituted the Gribeauval System, which immediately began to compete with the established Vallière system in the words and writings of artillerists throughout France.

Along with Gribeauval, the du Teil brothers, Jean and Jean-Pierre, were two of the foremost French artillery experts from 1763 to 1789, and both had a lasting impact on Napoleon. Jean-Pierre du Teil entered service in 1731 as a volunteer in the artillery. Jean-Pierre du Teil was promoted to *sous-lieutenant* in 1735 and captain by 1748 and served in the Seven Years' War from 1757 to 1758; he was medically retired in 1760. He returned to service in 1761, designated *chef de brigade* of the Artillery Regiment of Toul in 1766, was promoted to lieutenant-colonel in 1768, and was the colonel of the La Fére Regiment by 1777.[28] Later, Jean-Pierre was appointed commander of the artillery school at Auxonne, where he first met Napoleon. Recognizing Napoleon's talent, Jean-Pierre du Teil mentored Napoleon in his studies to become an expert in the Gribeauval artillery system. Jean-Pierre du Teil went on to become the inspector-general of the artillery in 1791 and was nominated chief of the artillery of the *Armée du Rhin* in 1792. Named inspector general of the artillery of the *Armée des Alpes* in 1793, Jean-Pierre du Teil was too sick to accept the appointment. Opposing the Jacobins and refusing to implement their harsh policies, Jean-Pierre du Teil was later accused of treason and executed at Lyons in 1794.[29]

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[28] Kiley, *Artillery of the Napoleonic Wars*, 138-150; "Brigadier" was not an actual rank in the Old Regieme, but the designation of someone who commanded a brigade. Any officer could be a Brigadier and there were several instances of junior officers having the status. See Jonathan Abel, "In Search of the Combined-Arms Division in Old-Regime France," (Consortium on the Revolutionary Era 2019, Atlanta, GA). Text provided by author.

[29] Kiley, *Artillery of the Napoleonic Wars*, 138-150.

Unlike his brother, Jean du Teil had a successful career in the Old Regime and Revolutionary periods. As a colonel and supporter of the revolution, Jean du Teil successively served as an artillery commander in the *Armées du Rhin*, *Alpes*, and *Italie*. He went on to serve as a General of Division in 1793 and commanded the artillery at the Siege of Toulon, with Captain Bonaparte by his side. He also wrote works on artillery, in which he emphasized mobility, firepower, and cooperation between the different arms on the battlefield.[30]

The work of the du Teil brothers had a profound influence on Napoleon as an officer and artillerist. Jean du Teil's writing provided the basis of instruction for artillery employment in the highly regarded French artillery schools and offered Napoleon a detailed way forward regarding the concentration of fires and mobility in artillery employment. Jean believed that maneuverability, firepower, cooperation, and coordination between the artillery and infantry arms would provide success on the battlefield. He asserted that:

> it is necessary to multiply the artillery on the points of attack which ought to decide the victory, relieving the batteries which have suffered, replacing them by others without the enemy's being able to notice it, so to prevail from an advantage which redoubles his ardour, and discourages your troops. The artillery thus multiplied with intelligence, procures decisive results… does it not follow further, that it is necessary to concentrate on the principal points and upon the weak points which are most threatened, the greatest quality of fire . . . while one threatens attacks upon others.[31]

The influence provided by the du Teil brothers proved critical in the development of the future emperor's belief that artillery could serve as a decisive arm. Napoleon, like Jean du

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[30] Kiley, *Artillery of the Napoleonic Wars*, 138-150.

[31] McConachy, "The Roots of Artillery Doctrine," 626.

Teil, came to believe the artillery should concentrate its fire at a single point to create gaps in the enemy's line. Once the enemy's line was broken, the equilibrium of the battle was broken, and the remainder of the fight was easy.[32]

Another theorist who proved vital to the development of Napoleonic artillery was Jacques-Antoine-Hippolyte, comte de Guibert. He was one of the most important military writers of eighteenth-century France. Born in 1743 to a French family of lesser nobility, he entered service in 1756 alongside his father, Charles-Benoît Guibert, a long-serving French officer.[33] The younger Guibert's ideas formed the foundation of tactics under the Old-Regime system in the form of the Regulations of 1791, which provided the basis of French tactics for over forty years. Guibert's writing was innovative in the way it was the first great non-specialist military work to specifically address artillery, a fact that illustrates previous writers' beliefs that field artillery's influence on the battlefield was not great enough to be discussed. Guibert's works, first published in 1771, emphasized the importance of a quality artillery system over quantity of men and guns. He also described an effective artillery arm as one that exercised mobility, capable supporting the infantry in all its efforts.[34]

According to Robert Quimby, Guibert tried to find balance between opposing arguments in the application of artillery. One argument suggested that the artillery was

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[32] Kiley, *Artillery of the Napoleonic Wars*, 138-150; McConachy, "The Roots of Artillery Doctrine," 614-640.

[33] Abel, "The Prophet Guibert," 8-39.

[34] Abel, "The Prophet Guibert," 8-39; Quimby, *The Background of Napoleonic Warfare*, 145-155.

more of an encumbrance than of any use and scared the enemy more than provided value in its application of firepower. This argument was predicated on the traditional use of the arm under the Vallière System. Another argument, chiefly held by the upcoming generation of artillerists, suggested that artillery should be used against the enemy's formations, and its superiority determined the victor in battle. Guibert sought to find a sound middle position between the two arguments and determined the purpose of the field artillery was:

> To support and sustain troops, to take reverses and prolongations of lines which they occupied, to buttress the parts of the line that were weak because of the number or quality of the troops which held them or because the nature of the ground. It should keep the enemy off; hold him in check; hinder him from debouching. Artillery was a useful accessory for the man of genius. Its tactics should be analogous to those of the troops, since the commander needed to know what to expect from its various dispositions in order to combine artillery in his general disposition.[35]

Thus Guibert viewed the artillery as an accessory of the army that possessed an excessive amount of guns, a practice he declared originated with the Turks and Russians that reached back to the days of Ivan the Great and Basil III. The Austrians went on to copy the practice from the Russians, which resulted in a less-maneuverable army. The Prussians also followed this example, but Frederick the Great refused to allow artillery to slow the maneuvers of his army and maintained the bulk of his ordnance in reserve to fill his losses. Guibert felt the practice of overburdening numbers of artillery pieces fell upon the French army in 1762 and minimized its ability to maneuver.[36]

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[35] Quimby, *The Background of Napoleonic Warfare*, 148.

[36] Ibid.

Guibert believed that the artillery was only an accessory because it could not fight alone, unlike the infantry, cavalry, and light arms.[37] He thought an army of one-hundred battalions required no more than one-hundred and fifty guns, while maintaining an adequate number of guns in reserve. The small number of guns would result in more experienced gunners and artillery officers, which would be able to move rapidly to make up for the inferiority in numbers. Mobility was therefore the dominant theme in Guibert's writings. He described an artillery arm that was that was well-trained in the employment of its pieces, was mobile and maneuverable, and capable of following and supporting the infantry and cavalry.[38]

Napoleon later embraced the innovative ideas of du Teil and Guibert and believed the artillery arm would prove pivotal in his art of war. Through his foundational artillery education and the influence of teachers, writers, and mentors, Napoleon developed a theory of artillery application that intended to inflict casualties and create gaps in the enemy's ranks through massed fires, which would then be exploited by shock forces. The use of massed artillery would prove to be a critical element of Napoleon's tactical considerations, but before the Emperor could implement widespread changes regarding the employment of the artillery arm, he first had to direct a significant degree of institutional reform.[39]

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[37] Abel, "The Prophet Guibert," 8-39.

[38] Abel, "The Prophet Guibert," 8-39; Quimby, *The Background of Napoleonic Warfare*, 145-155.

[39] McConachy, "The Roots of Artillery Doctrine," 614-640.

The field artillery arm suffered from a level of immaturity displayed in its lack of a formal organization for command and control and employment. Created in 1671, the Royal Corps of Artillery was still a relatively young arm and continued to be enrolled in the lists as an infantry regiment. Although it had been granted full status as an autonomous service in 1774, the separation of the artillery from the infantry arm was not complete until 1793. Even then, the artillery arm did not receive recognition as a senior service arm until 1797. This longstanding connection with the infantry arm created a narrow view of employing artillery, descending from the biases of the armies of the *ancien régime*.[40]

At the outset of the French Revolution, the guns of the Gribeauval System were the best in the world. Following the Gribeauval System's first appearance at the Battle of Valmy in 1792, where the French army won its first major victory of the French Revolutionary Wars, military leaders of Europe took note of this new system of ordnance. The new system was significant because of its capabilities offered by increased mobility of the horse artillery. The Gribeauval System's ability to provide firepower in support of the cavalry was highly valued, particularly when the cavalry forced the infantry into square formations. The guns were capable of very quickly limbering and advancing to just beyond the range of the enemy's musket where they would then decimate the enemy with canister shot. Maximilien Sébastien Foy, French military leader, statesman, and writer, noted the purpose of the horse artillery was to "get up close and

[40] Bowden, *Napoleon and Austerlitz*, 59-60.

shoot fast."[41] The horse artillery was used in close support of the infantry at the Battle of Wattignies in October 1792, the Battle of Altenkirchen in June 1796, the Battle of Rastadt in July 1796, and the Battle of Biberach in October 1796. Proponents of the Gribeauval System argued the horse artillery was equivalent to two cavalry regiments of combat power.[42]

The Gribeauval System provided Napoleon the mobile pieces he needed for the maturation of the artillery into a decisive arm, but it remained for him to change the arm's tactical focus. The dominant theory at the time remained focused on the artillery's primary role of negating the enemy's artillery via counter-battery fire. Under Napoleon's maturing system, the field artillery maximized the Gribeauval System's mobility while changing the arm's focus to target the enemy's formations. The guns would follow the supported infantry and cavalry formations and provide fires in support of their maneuvers and focus its fires against the enemy's troop maneuvers instead of his guns.[43]

To achieve this, Napoleon incorporated theories that called for the massing of fires capabilities. He drew on the theories of Guibert, which emphasized the concentration of artillery into powerful batteries, as opposed to the traditional method that dispersed the artillery evenly along the army's front. In the dispersed manner, the artillery simply served as an irritant to the enemy and was incapable of serving in a decisive role. Napoleon's evolving system of artillery also incorporated Du Tiel's

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[41] McConachy, "The Roots of Artillery Doctrine," 623.

[42] Ibid., 623-624.

[43] Ibid.

teachings that emphasized a large number of concentrated guns provided greater effect than the same number of guns operating in individual companies. Du Teil's theory of concentrating the artillery's effects on "the principle points and upon the weak points which are most threatened" of the enemy's line also became key to Napoleon's maturing artillery system.[44]

While the Gribeauval System was seen as the standard for artillery pieces in Europe, other states began to adapt its technology, closing the gap on France's technological advantage. Napoleon wanted to improve Gribeauval System's design and tactical employment considerations, which would coincide to his specific art of war. Napoleon personally selected Marmont to lead the mighty endeavor of rebuilding the French artillery system.[45]

Marmont was born the son of a retired French officer who owned and operated an iron works. According to his own account, Marmont grew up studying mathematics and metallurgy, in both of which he showed incredible skill. He went on to enroll in the Châlons artillery school and received a commission in 1792. At the Battle of Toulon in 1793, Marmot first met fellow artillerist Napoleon, who would later appoint Marmot as his aide-de-camp in 1796. Marmont would go on to distinguish himself while serving with Napoleon in 1796 at the Battle of Lodi and personally laid the guns that helped win the Battle of Castiglione in the same year. He also displayed his ability as a skilled gunner and soldier at Rovereto, Bassano, San Giorgio, Malta, and Alexandria. As one of

[44] McConachy, "The Roots of Artillery Doctrine," 626.

[45] Bowden, *Napoleon and Austerlitz*, 59-60.

Napoleon's trusted advisors, Marmont also participated in the Coup of 18 Brumaire. In 1802 Napoleon named Marmont inspector-general of the artillery and followed the honor by naming him the commander of all artillery in the various encampments of Boulogne. Appointment as the chief artillery advisor serves as a testament to Marmont's knowledge and skill as an artillerist as well as his devotion to Napoleon.[46]

In 1801 First Consul Bonaparte formed a commission to research and determine the best material for artillery use. The *Premier Inspecteur General de l'Artillerie* François Marie d'Aboville led a commission comprised of Generals Antoine-François Andréossy, Jean Baptiste Eblé, Nicolas-Marie Songis des Courbons, Simon de Faultrier, Jean-Jacques Basilien de Gassendi, and Marmont, who were charged with the task of developing a new system of artillery and refining the arms tactical employment. Marmont in particular solicited observations from the officer corps on the tactical employment roles for foot and horse artillery attached to infantry divisions.[47]

In response, Marmont received large quantities of feedback in reference to the guns themselves. Infantry and foot artillery officers were unhappy with the four-pounders and desired more firepower for the foot artillery. Infantry officers also wanted the hard-hitting eight-pounder of the horse artillery close to them or directly assigned to the foot artillery. General Jean-Ambroise Lariboisére, commander of the artillery school at Strasbourg, argued that the improved firepower of the guns that supported the infantry was the most important issue at hand and could be achieved by taking the eight-pounders

[46] Bowden, *Napoleon and Austerlitz*, 63-64.

[47] Ibid.

from the horse artillery and replacing them with the new six-pounder. On the other hand, cavalry and horse artillery officers argued that taking away their prized eight-pounders would reduce their effectiveness on the battlefield.[48]

While the cavalry and horse artillery officers sought to avoid any new system that lessened their lethality on the battlefield, both sides agreed on two points. First, the twelve-pounders assigned to foot artillery companies utilized in a reserve role should remain untouched. While improvements that reduced the weight of the piece and increased its range were desired, the twelve-pounder would remain the heavy field gun of the army. Second, the six-inch howitzer was too heavy a piece for the horse artillery. Marmont believed that design and manufacturing improvements could produce a lighter howitzer better suited for use in the horse artillery. With these two points, Marmont set off to resolve the issue of increasing firepower of cannon in foot artillery companies while maintaining the striking power of the cannon in the horse artillery. All parties eventually agreed the employment of the four-pounders had to be reconsidered. The cannon lacked the firepower necessary in the foot artillery and were inadequate against enemy six-pounders.[49]

Replacing the four-pounders with eight-pounders proved impractical. The eight-pounder was the most numerous gun in the army at the time. It consumed the most resources in terms of powder and caissons for ammunition, which also required more horses and more non-technical personnel. These facts pointed to increased cost for the

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[48] Bowden, *Napoleon and Austerlitz*, 64-65.

[49] Ibid., 65-66.

French treasury and more demands in an already-limited supply of horses. Additionally, quality saltpeter, a vital ingredient in the manufacture of gunpowder, was already difficult for the French to obtain. Replacing the four-pounders with eight-pounders would create more demand for the limited resource. The eight-pounder's heavier composition also limited its capabilities in restricted terrain.[50]

The effectiveness of the Gribeauval System's six-inch howitzer as a horse artillery piece was also a point of contention. Originally designed as a foot artillery weapon, it had been employed by the horse artillery out of necessity. Identifying the requirement for a howitzer lighter than the six-inch for the horse artillery, a larger howitzer could be developed for use in conjunction with the with the heavier twelve-pounders, while a lighter, smaller-caliber howitzer could be used with horse and foot artillery operating anything other than the twelve-pounder. The supporting equipment such as limbers and trail chests also required updating.[51]

Balancing the consideration of firepower, cost, number of horses and men, and Napoleon's personal belief in having only one piece to support the foot and horse artillery, Marmont determined that replacing the four-pounders with Gribeauval eight-pounders was not a practical solution. Due to the need to lessen logistical requirements for the branch of service, one new gun could replace both of the Gribeauval System's four- and eight-pounders. Also, a new ordnance system that used two different-caliber howitzers rather than one did not reduce the total number of field pieces. The Gribeauval

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[50] Bowden, *Napoleon and Austerlitz*, 65-66.

[51] Ibid., 65-70.

System employed four field pieces, three guns and one howitzer, while the new ordnance System of the Year XI would comprise the same number of field pieces: two cannon and two howitzers. Identifying the replacement of the eight-pounders would be an unpopular decision, so Marmont moved forward developing the new ordnance system in a manner that would minimize criticism as much as possible.[52]

The research commission split in opinion over the future new system of the artillery arm, much like the twenty-year disagreement to replace the Gribeauval System. This time the commission split on whether the Gribeauval System's four- and eight-pounders should be replaced with a single new six-pounder. Jean-Jacques-Basilien Gassendi, author of manuals used for the Gribeauval System, led the group that wanted to retain the existing system.[53] Marmont led the faction that desired reform to adopt the single six-pounder. Dissatisfaction among officers with the four- and eight-pounders were motivating factors to begin experimenting with the manufacture of a six-pounder in 1800. Marmont's faction would go on to convince Napoleon of the new system's improvements, and about sixty new six-pound cannon and forty new howitzers were cast, marking the unofficial start of the *système an XI* ordnance. In May 1803, the new system of artillery was approved to replace the Gribeauval System.[54]

Marmont sought a compromise between the infantry and horse artillery's need for a harder-hitting piece than the four-pounder. Marmont's solution became one for which

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[52] Bowden, *Napoleon and Austerlitz*, 65-70.

[53] Ibid.

[54] Bowden, *Napoleon and Austerlitz*, 65-70; McConachy, "The Roots of Artillery Doctrine," 614-640.

he had argued since before being named inspector general of the artillery. The new ordnance system would be comprised of two improved and larger-caliber twelve-pounders and a new, very large-caliber six-pounder. With the knowledge that almost every other country employed a six-pounder, this afforded the French the capability of cannibalizing captured ammunition. The new system would also be lighter than pieces of comparable size. Marmont applied his knowledge of improved metallurgy, casting techniques, and force dynamics to thin out the cross-sections of the barrels when possible to improve their design. The pieces of the Year XI System would also implement improved carriage designs which further lightened the pieces. The addition of an ammunition box that was manufactured as part of the limber provided more ready ammunition than was available in the trail chest of the Gribeauval System. The ammunition box, located above the axle in the middle of the limber, provided better weight distribution and allowed crews to bring the piece into action more quickly.[55]

Testing of the Year XI System pieces were completed, and new pieces were being manufactured, when the campaign of 1805 began. The new six-pounders were thought to be ideal for the mountains of Northern Italy, and Napoleon eagerly directed the artillery companies in Northern Italy to exchange their Gribeauval System pieces for the New Year XI System in June 1803, while debate over the new system was still ongoing. However, it would take approximately five years before pieces from the Year XI System arrived in Napoleon's main army. In addition, pieces of the Gribeauval System continued to be the primary ordnance employed by the French armies throughout the Peninsular

[55] Bowden, *Napoleon and Austerlitz*, 65-70.

War due to the secondary nature of the campaign. Napoleon employed the pieces of the Gribeauval System during the War of the Third Coalition and the Battle of Austerlitz to great effect. However, Napoleon's matured ordnance System of the Year XI, which reflected his tactical employment of field artillery, was fully implemented by the Russian Campaign of 1812 and the Battle of Borodino and would remain in use until after Napoleon's abdication.[56]

Napoleon implemented several additional changes to the artillery arm that would add flexibility and increase its role as a decisive force as part of the Ordnance System of the Year XI. One foot and one horse artillery company was assigned to each infantry division. Light cavalry divisions received one horse artillery company, and heavy divisions received two. Each corps received a reserve artillery force of two foot artillery companies, with at least one being comprised of twelve pounders, and a horse company. Importantly, a central reserve artillery was established, under the Emperor's personal control.[57]

The practice of an army artillery reserve was relatively new. Previously, artillery reserves were maintained in the artillery park and used to fortify weak sections of the line. Otherwise, guns from the artillery park rarely moved. Napoleon bolstered the artillery reserve's role by filling its ranks with seasoned veterans, and its commitment was held for use at the decisive time and place on the battlefield. Referring to the army artillery reserve, Napoleon is quoted to have stated, "in most battles, the guard artillery is

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[56] Bowden, *Napoleon and Austerlitz*, 65-70.

[57] Bowden, *Napoleon and Austerlitz*, 65-70; McConachy, "The Roots of Artillery Doctrine," 614-640.

the deciding factor since, having it always at hand, I can take it wherever it is needed."[58] However, Napoleon proved hesitant on several occasions to commit the reserve, as he understood the weight of its impact on the field, and the tremendous loss in capability he would suffer if wielded unwisely.[59]

Therefore, the implementation of the Year XI System reflects Napoleon's synthesis of ideas regarding artillery employment he developed as a trained artillerist. Napoleon drew from the innovative perspectives of military theorists and combined them with his own tactical innovations to create a system that leveraged improving technology and employment concepts. This approach facilitated the maturation of his artillery arm, which would place the artillery at the leading edge of battle, mobile and capable of massing on the enemy's decisive point by synthesizing emerging theory in the organization and application of the arm. As Emperor, Napoleon implemented Jean du Teil's philosophy regarding the application of artillery:

> We must unite the greatest number of troops and the greatest masses of artillery on the points where we wish to force the enemy's position, while creating the illusion of attack on others . . . the moment when our troops should assault is determined by the ravages that the artillery has made on the troops and defenses of the foe.[60]

During the Napoleonic Era, the French artillery established its supremacy as the premier artillery arm of the European armies. The origins of the French artillery's superiority began before the French Revolution and Napoleon's rise to power, but the

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[58] McConachy, "The Roots of Artillery Doctrine," 630.

[59] Bowden, *Napoleon and Austerlitz*, 65-70; McConachy, "The Roots of Artillery Doctrine," 614-640.

[60] McConachy, "The Roots of Artillery Doctrine," 630.

Emperor's passion for the guns, organizational efficiency, and France's innovative officer corps raised the artillery arm to a position of prominence. The resulting strength of the artillery allowed it to survive Napoleon's numerous high-casualty-producing campaigns and serve as a force which no army could equal from 1805 to 1815.[61]

[61] Kiley, *Artillery of the Napoleonic Wars*, 138-150, 71-72; Nosworthy, *With Musket, Cannon and Sword*, 375-376.

CHAPTER 3

THE BATTLE OF AUSTERLITZ

The purpose of this chapter is to analyze Napoleon's employment of the French artillery at the Battle of Austerlitz, which is considered Napoleon's greatest victory. The Battle of Austerlitz provides an account of Napoleon's methods of artillery employment during a battle of maneuver and using Gribeauval System guns. This will contrast with the artillery employment of modernized guns in the attrition-based Battle of Borodino. This is achieved through a historical review of the military and political background leading up to the battle and an operational account of the battle, with specific attention offered to the accounts of artillery employment. The chapter concludes by analyzing the employment and performance of the belligerents' artillery arms.[62]

France, Great Britain, and the other great powers of Europe had been at war for almost a decade when the 1802 Treaty of Amiens temporarily brought an end to hostilities for the first time since 1792 and marked the end of the Second Coalition. The terms of the treaty secured international acceptance of France's expansion to the Rhine, its strong position in Northern Italy, and it's recouping of colonial territories, while Great Britain was forced to relinquish several territorial gains. However, George III of Great Britain never personally accepted the terms of the Treaty of Amiens, providing a route for his state to resume war within two years.[63]

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[62] Mark T. Gerges, "1805: Ulm and Austerlitz," in *Napoleon and the Operational Art of War Essays in Honor of Donald D. Horward*, (Leiden: Brill, 2016), 145-172.

[63] Bowden, *Napoleon and Austerlitz*, 143-155; Gerges, "1805: Ulm and Austerlitz," 145-172; Robert Goetz, *1805 Austerlitz: Napoleon and the Destruction of the*

The temporary relief from war experienced by the peoples of Europe allowed French merchants to resume overseas trade, and British merchants expected to take advantage of new markets on the continent under French dominion. However, the British would become frustrated by Napoleon's refusal to open French-controlled ports to British trade, France's increasing control over Italy with the annexation of several provinces, and French intentions to expand influence into the eastern Mediterranean. Napoleon furthermore refused to withdraw troops from the Batavian Republic until the British withdrew from Malta, in accordance with the terms of the Treaty of Amiens. With Great Britain's increased discomfort with Napoleon's intent to expand his empire and internal uncertainty about having ceded too much in the peace, the British government indefinitely delayed its withdrawal from Malta and demanded that France remove its troops from the Low Countries and Switzerland.[64]

Napoleon's displeasure with the British refusal to relinquish Malta in accordance with the Treaty of Amiens led to his decision to demonstrate a show of force in 1803. Napoleon mobilized an army commanded by General Adolphe-Édouard-Casimir Joseph Mortier, duc de Trévise, at Nijmegen to threaten invasion of Hanover, the hereditary home of the British king. The intent of this action was to intimidate Britain into following its agreed terms in the Treaty of Amiens. The British capitalized upon the opportunity Napoleon presented to impose an embargo on French shipping and ports, which resulted

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Third Coalition (London: Greenhill Books, 2005), 21-27; Rothenberg, *The Art of Warfare in the Age of Napoleon*, 45-47.

[64] Bowden, *Napoleon and Austerlitz*, 143-155; Gerges, "1805: Ulm and Austerlitz," 145-172; Goetz, *1805 Austerlitz*, 21-27.

in the exchange of fire and seizure of a French ship under the terms of blockade. These actions became the first acts of hostility in a new war. Napoleon ordered the arrest of all British citizens in France and General Mortier to commence his march into Hanover with 12,000 soldiers.[65]

Great Britain had little support on the continent with the reemergence of Anglo-French hostilities. Tension from the League of Armed Neutrality, an attempt by North-Sea states to isolate Britain in response to the policy of unrestricted search of neutral shipping for French contraband, was still prevalent. With this in mind, Napoleon prepared for an invasion of Britain by assembling seven army corps and supporting ships arrayed from Hanover to Brest.[66] These forces stationed along the Channel began conducting disembarkation training from small boats, which posed a significant threat to Britain.[67]

Concurrently, Austria was rebuilding its military and economy following its two previous wars with France. Prussia displayed more concern over the economic hardships it suffered from the closure of Hanoverian ports to British trade, which caused serious economic repercussions across northern Germany, than the actual French occupation of Hanover. Russian Tsar Alexander viewed himself as a mediator between the French and British governments, as ringleader of Armed Neutrality, and sought to settle the belligerents' disagreements through negotiation. Anglo-Russian diplomatic ties sought to

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[65] Gerges, "1805: Ulm and Austerlitz," 145-172; Goetz, *1805 Austerlitz*, 21-27.

[66] Goetz, *1805 Austerlitz*, 21-27; Rothenberg, *The Art of Warfare in the Age of Napoleon*, 45-47.

[67] Goetz, *1805 Austerlitz*, 21-27.

contain French expansion into the Mediterranean and Great Britain required large quantities of Russian timber following the loss of its source in North America.[68]

In May 1804 the French Senate approved a new constitution that proclaimed the government would be led by a hereditary emperor. This action alienated the authority of Franz II of Austria, the Holy Roman Emperor, particularly regarding France's diplomatic influence over numerous German states. In turn, Austria joined into a defensive alliance with Russia, and Sweden joined a defensive pact with Britain the following month. By the time Napoleon crowned himself emperor in Paris in late 1804, the major powers of Europe had entered defensive agreements against potential French expansion.[69]

Napoleon continued to unify his enemies by annexing Italian lands and crowning himself King of Italy, actions in direct violation of the Treaty of Lunéville, which guaranteed the separation of the Ligurian Republic from France. Napoleon's invasion of Hanover and continued occupation of the Batavian States may have been allowed to pass by the powers of Europe, but further expansion into Italy and assuming an imperial crown could not go unnoticed. Franz II could no longer abide Napoleon's continued expansion of power and began negotiations with Britain and Russia to establish a new Coalition against France. Napoleon's further brazen actions in response to an alleged assassination plot which resulted in the trial and execution of Louis-Antoine de Bourbon, duc d'Enghien, based on weak accusations and charges of serving in an army against

[68] Goetz, *1805 Austerlitz*, 21-27.

[69] Ibid.

France, also outraged the monarchs of Europe.[70] What began as an advantageous political situation for France, was compromised by Napoleon through hubris and uniting his enemies rather than exploiting their divisions.

The Third Coalition thus consisted of Great Britain, Austria, Russia, and the militarily smaller but strategically-important Sweden and Naples. Britain also planned to convince Prussia into joining the Coalition, which could provide a large army located in the center of Europe. In 1805 Coalition leaders agreed to adopt the Austrian strategy of deploying the majority of the Austrian army in northern Italy and a smaller force in Germany, which would be bolstered by the arrival of additional forces coming from across the Hapsburg Empire.[71]

The Russian army would join the Austrian Army of German, British, and Neapolitan troops in northern Italy with intent of driving the French out of central Italy. Troops from the several German states along the Rhine River were planned to slow the French advance and allow time for the Russian army to arrive in Germany. Russian and Swedish forces operating in Swedish Pomerania would move against the lower Rhine, and a British force would land near Bremen. British goods were traditionally offloaded at the port of Bremen for transport via the Weser and Elbe Rivers into Germany. France's occupation of Bremen deprived central Germany and Prussia of economic commerce with Britain, and landings would reopen the trade routes before turning to march on the Low Countries. Russian forces would also deploy to the Prussian eastern frontier,

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[70] Duffy, *Austerlitz: 1805*, 4; Gerges, "1805: Ulm and Austerlitz," 145-172; Goetz, *1805 Austerlitz*, 21-27.

[71] Duffy, *Austerlitz: 1805*, 1-7; Goetz, *1805 Austerlitz*, 27-30.

prepared to march across Prussian territory once Prussia was convinced to join the war. However, Prussia ultimately decided to remain neutral and honor its 1795 peace treaty with France. Coalition planners estimated that, even without Prussian support, the Coalition armies would consist of over 350,000 men.[72]

While the Coalition strategy was sensible, it failed to consider the situations of the individual armies that made up the Coalition as compared to Napoleon's fully-mobilized army on the Channel coast. Foremost, the Austrian army of 1805 was not the army of 1799, which had achieved several victories against France. Reorganization of the army, a change in senior leadership prior to the commencement of hostilities, and deep political division amongst the officer corps between the peace and war parties laid the foundation for an undermanned, disorganized, and poorly supplied Hapsburg army.[73]

The Hapsburg States were large in size but paled in comparison to French military resources. Conscription only applied to the hereditary lands of Austria proper, Bohemia, and Moravia, with a population totaling about 13,000,000. The Austrian army was based on the eighteenth-century regimental system, which had no permanent unit structure above the regimental level, offering no unit structure or management at the operational level, between the army as a whole and individual regiments.[74]

As noted, the Austrian Liechtenstein Artillery System reigned as the finest in Europe when it was introduced in 1753. The Austrian artillery arm was organized into

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[72] Duffy, *Austerlitz: 1805*, 1-7; Goetz, *1805 Austerlitz*, 27-30.

[73] Duffy, *Austerlitz: 1805*, 24-29; Goetz, *1805 Austerlitz*, 29-37.

[74] Duffy, *Austerlitz: 1805*, 24-29; Goetz, *1805 Austerlitz*, 29-37.

four regiments of sixteen companies each, and the concepts of its employment were vestiges of the *ancien régime*. Gunners were required to borrow labor from the unwilling infantry to fill gaps in the ranks. There were no standing permanent artillery horse teams, leading to a system where horse teams had to be created each time the artillery was to be deployed in battle. In line with eighteenth-century practice, light guns were distributed among infantry battalions, and the artillery reserve only resembled a battery in appearance, thus never allowing for conditions to mass fires on the enemy. By 1805 every artillery piece was outmatched by its French adversary.[75]

The Austrian army was nominally led by the king's younger brother, Archduke Karl, Duke of Teschen. Following years of almost constant war since 1792, the Austrian army of the inter-war period existed in a poor state.[76] Most soldiers were sent home on leave as a way of minimizing expense, and the transport trains for supply and artillery were totally disbanded. Archduke Karl, befitting his cautious nature, assessed Austrian military readiness to be in a low state and discouraged any conflict with France. Opposing him was Austrian Foreign Minister Johann Ludwig Joseph, Graf von Cobenzl, who sought war with France and rescued General Karl Freiherr Mack von Lieberich from obscurity as the man capable of leading the army to victory over France. Mack conducted a review of Austrian forces and reported the opposite of Archduke Karl's assessment. Mack's findings were then used as a means for Cobenzl to further promote his agenda for

[75] Bowden, *Napoleon and Austerlitz*, 131-135; Duffy, *Austerlitz: 1805*, 27-28; Goetz, *1805 Austerlitz*, 37-40.

[76] Duffy, *Austerlitz:* 1805, 26; Goetz, *1805 Austerlitz*, 29-37.

war with France.[77] Franz appointed Mack Chief of Staff of the Austrian army in April 1805, which severely limited Archduke Karl's powers as Minister of War.[78]

Mack quickly implemented organizational change in the Austrian army, beginning by increasing the number of infantry field battalions, reserve companies, and cavalry squadrons. These changes required an increase in the number of officers needed to lead the formations, and the army had to accomplish the reorganization in about twelve weeks before the start of the campaign. Mack's reforms came as a result of careful reflection following the recent wars against France but were implemented in a time that displayed great optimism regarding the current geo-political situation and the Austrian army's ability to quickly reorganize.[79]

Austria was prepared to fight another war similar to the wars of the eighteenth-century against *ancien-régime* France. The army was slow to move. Coordinating regimental movements was difficult, and brigade-size movements under enemy fire were almost unthinkable. The baggage trains were considerably larger than those of the French army and significantly contributed to its sluggish movement. These detriments resulted in an Austrian army only capable of moving five to seven miles a day. The French were routinely capable of traveling three times as fast.[80] Thus, the Austrian army entered the War of the Third Coalition having hastily implemented change that did little to improve

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[77] Duffy, *Austerlitz: 1805*, 24-25.

[78] Gerges, "1805: Ulm and Austerlitz," 145-172; Goetz, *1805 Austerlitz*, 29-37.

[79] Bowden, *Napoleon and Austerlitz*, 123-124; Gerges, "1805: Ulm and Austerlitz," 145-172; Goetz, *1805 Austerlitz*, 29-37.

[80] Duffy, *Austerlitz: 1805*, 24-29; Goetz, *1805 Austerlitz*, 29-37.

it. The result was a slow, under-strength, disorganized, and ill-supplied Hapsburg army marching to meet the flexible and fast-moving *Grande Armée*.[81]

At the turn of the nineteenth-century, Russia continued to operate on a quasi-feudal system. Serfs owed their labor to the noble ruling class. The Romanov dynasty had been in power for over a century, and the serfs lost more rights with every passing decade of the eighteenth century under their rule. Landowners feared that serfs would desert the landed estates for military service, if given the opportunity. To appease the landowning class and maintain a standing military force, the Romanov government conscripted four standing armies, which primarily consisted of infantry formations.[82]

The Russian army experienced its own period of transition and turmoil under the Tsar Paul I's reign from 1796 to 1801. Tsar Paul I was infatuated with the image of Frederick the Great and made several changes to remake the Russian Army in the image of the Prussian Army of half a century earlier. Some changes were sensible in nature, aimed at minimizing corruption amongst regimental commanders. Others changes were more arbitrary, like changing the design of uniforms for sake of appearance at the detriment of the individual soldier's comfort.[83] Following the assassination of Tsar Paul I in March 1801, the army began reversing a number of his changes but retained the much-needed improvements aimed at minimizing corruption. Paul I's son, Alexander I,

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[81] Duffy, *Austerlitz: 1805*, 36-37; Goetz, *1805 Austerlitz*, 24-29.

[82] Bowden, *Napoleon and Austerlitz*, 95; Duffy, *Austerlitz: 1805*, 30-36; Goetz, *1805 Austerlitz*, 37-40.

[83] Bowden, *Napoleon and Austerlitz*, 95-98; Duffy, *Austerlitz: 1805*, 30-36; Goetz, *1805 Austerlitz*, 37-40.

ascended to the throne following his father's assassination and inherited a vast geographical empire with almost 44,000,000 subjects.[84]

Following the traditions of the *ancien régime*, the Russian Army held no permeant command structure above the regiment. Some regiments were assigned to ad hoc brigades, which would change composition at each engagement. Multiple brigades could combine to form "columns," which were also ad hoc formations. The purpose of the ad hoc organization of formations above the regimental level was to allow flexibility to commanders based on the daily changes of the campaign. The weaknesses of the ad hoc system became apparent once Russian forces engaged with the enemy. Response to the changing situation on the battlefield and the exploitation of gains were restricted to the regiment. Compounding this, Russian officers were also unwilling to establish relationships with officers of other units who were of lesser social stature and did little to coordinate with units of different regiments. A brigade comprised of multiple arms of service might place cavalry units under the command of infantry officers, who were unable to properly employ those forces, which resulted in a loss of battlefield effectiveness.[85]

The Russian artillery suffered from a lack of sufficient oversight and stewardship throughout the eighteenth-century. Reform of the branch began with Alexander's ascension to the Russian throne and General Alexey Arakcheyev's appointment as

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[84] Bowden, *Napoleon and Austerlitz*, 95-98; Duffy, *Austerlitz: 1805*, 30-36; Goetz, *1805 Austerlitz*, 37-40.

[85] Bowden, *Napoleon and Austerlitz*, 110-116; Duffy, *Austerlitz: 1805*, 30-36; Goetz, *1805 Austerlitz*, 37-40.

inspector general of the artillery. Arakcheyev redesigned the old Russian guns with lighter carriages and caissons inspired by the French Gribeauval system and redesigned six- and twelve-pounder cannon tubes with light and medium variants. General Arakcheyev worked to reform the Russian artillery over a period of three years prior to the Battle of Austerlitz, a quick execution in comparison to the French transition from the Gribeauval System to the System of the Year XI. With the new artillery system of 1805, the Russian Army went to war in Europe.[86]

The artillery was designated as "light" or "heavy" companies with twelve pieces each. Four to twelve companies formed mixed artillery regiments of over 2,000 officers and men. The new artillery pieces were well-designed and built; however, they were heavier than French cannon of the same shot size. The men selected to man the guns were from the most physically robust of the year's recruits. Despite the many improvements the system of 1805, the Russian artillery was unevenly matched against French artillery. French guns were able to outrange Russian pieces, and Russian pieces were distributed piecemeal amongst the regiments in a similar manner as the artillery arm of France's Old Regime. Additionally, an inferior quality of powder troubled the Russian artillery, which stemmed from Russia's poor-quality saltpeter. This resulted from a combination of the locations from which the saltpeter originated, the methods used to conduct the extraction, and the method of production.[87]

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[86] Duffy, *Austerlitz: 1805*, 30-35.

[87] Bowden, *Napoleon and Austerlitz*, 112-115; Duffy, *Austerlitz: 1805*, 30-36.

The Russian officer corps had no staff-officer training in the modern sense, which made it extremely difficult to issue new orders once an army was on the march. This forced the Tsar's armies into an offensive operational mindset except for specific defensive actions when absolutely necessitated. Many observers viewed the Russian officer corps as the worst in Europe, being unprofessional, comfort-loving, and cowardly, although their ability to supply an army in central Europe from distant Russia suggests at least some level of professionalism and efficiency.[88]

The Russian Army of 1805 experienced four years of rebuilding and reorganizing following the assassination of Tsar Paul I, which afforded it time to prepare for the next war. However, the large distances that encompass Russia made it difficult to coordinate and execute maneuvers with armies spread across the empire, and deficient funding made live-fire musket training difficult, if not impossible. On the other hand, Russian soldiers had a Europe-wide reputation for toughness, particularly when dug into a fixed position, and Russian armies had long experience of marching great distances to participate in wars far from the Russian homeland. Regardless of its shortfalls, the Russian army of 1805 was a confident and competent force with much experience and spirit, if not professionalism or modernization.[89]

In 1805 Napoleon's army was in a position of relative advantage following four years of peace after the end of the Second Coalition. The French army had an inconsistent

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[88] Bowden, *Napoleon and Austerlitz*, 110-111; Duffy, *Austerlitz: 1805*, 29-36; Christopher Duffy, *The Military Experience in the Age of Reason* (Hertfordshire: Wordsworth Editions, 1998) 26-27.

[89] Bowden, *Napoleon and Austerlitz*, 110-111; Duffy, *Austerlitz: 1805*, 29-36; Duffy, *The Military Experience in the Age of Reason*, 26-27.

record in the previous wars and lost several battles. The Directory in France had been unpopular, corrupt, and inefficient, which complicated to army's ability to wage an effective war. General André Masséna's victory at the Second Battle of Zurich in 1799 helped salvage the army's reputation and prevent a Coalition invasion at the time. Following the 1799 *coup d'état* that placed Napoleon in power, the French army began to improve, in large part due to Napoleon's improved administrative practices.[90]

The soldiers of Napoleon's forces were a result of years of experimentation in the Revolution's early years. Revolutionary armies consisted of old Royalist army line units and those of new battalions of Revolutionary national volunteers. Vast differences existed between the two types of formations regarding social order, pay, discipline, promotion, training, and professionalism.[91] In order to unify the army, soldiers and units were incorporated, amalgamated, or brigaded. Incorporation dissolved volunteer battalions into battalions and companies of the old army, which was not the preferred option. The *amalgamé* merged the two armies by creating new units in which the volunteers would outnumber the veteran soldiers but would gain from their experience and professionalism. *Amalgamé* was the preferred method, but it required time that could not be afforded. The process of brigading created demi-brigades by assigning one line battalion with two volunteer battalions into a demi-brigade. The process of brigading was accepted as the most favorable and time efficient manner of unifying the army and began in 1793.[92] This

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[90] Goetz, *1805 Austerlitz*, 43-44.

[91] Bowden, *Napoleon and Austerlitz*, 15-17.

[92] Jean Paul Bertaud and R. R. Palmer, *The Army of the French Revolution: from Citizen-Soldiers to Instrument of Power* (Princeton, NJ: Princeton University Press, 2019)."Demi-brigade" was a term chosen by the Revolutionary government to replace

army won the Revolution's great victories between 1794 and 1799, and Napoleon inherited it when he took power late in that year.

Following two years of war and increasing tensions with Britain, Napoleon set out to mobilize and train the Army of the Ocean Coasts on the English Channel to prepare for an invasion of England. Forces were spread from Holland to Brest, with the main contingent focused on the invasion of England and based in Boulogne. Napoleon appointed some of the most well-known generals as his marshals and placed them in command of his forces in Boulogne. The eighteen months the army had to train at Boulogne provided an unprecedented opportunity to prepare for war and became instrumental to the establishment of the disciplined *Grande Armée* that would face the Coalition.[93]

During the summer at Boulogne, the army executed realistic training in simulated conditions of the battlefield environment.[94] Unit drill began at the company level and gradually grew in size until division commanders exercised their formations across the open countryside. Battalions drilled daily, practicing various offensive and defensive formations. Every other day consisted of firing exercises in the mornings and regimental and brigade drills in the afternoon. Divisional maneuvers were conducted every third day, with increasing levels of complexity, simulating battlefield conditions with blank musket fire. The training the French army underwent while at Boulogne provided invaluable

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"regiment," which carried noble connotations and was therefore anathema to the Revolution's egalitarian ethos.

[93] Gerges, "1805: Ulm and Austerlitz," 145-172; Goetz, *1805 Austerlitz*, 47-50.

[94] Duffy, *Austerlitz: 1805*, 11-13.

lessons that were latter implemented on the battlefield and enabled Napoleon to remake the army in his own image.[95]

The officers and men lived and worked together at Boulogne, encouraging *esprit de corps* to grow amongst the units even more quickly than those of the revolutionary forces.[96] The Army was able to gain remarkable experience while training in Boulogne, which resulted in a high level of military proficiency and would pay tremendous dividends under fire. The common hardships the men faced while training did much to overshadow a troublesome past, and soldiers became attached to their regiments, establishing a deep sense of pride and belonging. The French benefitted from the presence of veteran non-commissioned officers and junior officers that helped forge the army into a highly trained and cohesive organization leading up to the Battle of Austerlitz, especially for the forces that were afforded the opportunity to train and prepare in Boulogne.[97]

On the operational level, the soldiers stationed at each of the channel camps were formed into *corps d'armée*. This organizational concept, created by Napoleon, was a small, self-contained army consisting of two or more infantry divisions, a brigade of light cavalry, and supporting corps artillery, engineers, commissariat, medical, train personnel, and headquarters staff. The corps provided the foundation for Napoleon's operations and strategy, capable of simultaneous independent movement while marching toward a

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[95] Bowden, *Napoleon and Austerlitz*, 17-21.

[96] Ibid.

[97] Duffy, *Austerlitz: 1805*, 8-16.

common objective. Napoleon was also responsible for the creation of the cavalry reserve and the army's artillery reserve. The cavalry, which consisted of heavy cavalry and horse artillery, was placed under the command of Marshal Joachim Murat and played a prominent role in Napoleon's campaigns. The army artillery reserve placed a large pool of artillery with soldiers who were hand-selected by Napoleon to be wielded at the decisive time and place.[98]

Napoleon's artillery consisted of four-, eight-, and twelve-pounder cannon and six- and eight-inch howitzers, with the new six-pound cannon still being relatively rare for 1805. Marmont's reorganization of the artillery arm militarized the drivers and brought the corps total to about 38,000 soldiers. A company of gunners was assigned to a battery of eight to twelve pieces. There were twenty-two companies in each of the eight regiments of foot artillery and six in each of the six regiments of horse artillery. Batteries were distributed along the line in such a manner as to achieve a concentration of artillery fires while maintaining adequate distance to impede the efficacy of counter-battery fire. Most light guns were formed into the divisional reserves, while some numbers of horse artillery and twelve-pounders were maintained for the corps and army reserves.[99]

Napoleon's army further consisted of forces from the satellite states of the Batavian Republic and the Kingdom of Italy, and following the outbreak of hostilities, from his new allies in Bavaria and Württemberg. The large number of troops at the Emperor's disposal was required to extend French influence and control over such a large

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[98] Bowden, *Napoleon and Austerlitz*, 17-21; Duffy, *Austerlitz: 1805*, 13-25.

[99] Duffy, *Austerlitz: 1805*, 17-18.

geographic area. France's colonies, coasts, islands, and the Rhine frontier required defensive garrisons in addition to the forces needed for the internal security of France. Napoleon generally used second-line and foreign forces for these duties. Forces that were not allocated into these garrisons comprised its four separate armies, of which the Army of the Ocean Coasts was the largest.[100]

Napoleon's operational art and approach reflected that of a battle on a larger scale. He would begin an action on a wide front to confuse the enemy to his actions, fix the enemy, and attack in mass along a selected axis of advance. He favored the principle of maneuver in his approach, moving the corps separately to speed their movement before they ultimately massed on a decisive point. Napoleon is often considered to be a daring commander, but may be more accurately described as a hard-working and cautious commander. He worked to improve his position at every opportunity by seeking fortified routes of retreat, alternative lines of communication, created large tactical reserves, and largely believed in fighting when his chances of victory were favorable. His seemingly-more-daring attitude may be attributed to his ability arrange the uncertainties of battle in his favor via his penchant for long working hours, personal genius, and a large and competent general staff.[101]

Napoleon's preparation for the invasion of England continued, and advanced to the stage that the artillery and other heavy equipment was loaded onto transports. By June 1805 the only preparations left to complete were the loading of provisions, small arms,

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[100] Goetz, *1805 Austerlitz*, 46-47.

[101] Duffy, *Austerlitz: 1805*, 21-23.

and ammunition. Napoleon intended to create a diversion by dispatching a squadron of French ships from Toulon to the West Indies to draw English warships from the English Channel.[102] Reports of the diversion's failure reached Napoleon on 13 August 1805 and motivated the Emperor to instruct Charles-Maurice de Talleyrand-Périgord, French Foreign Minister, on 16 August to inform the Elector of Bavaria that, if Austria did not cease its mobilization against France, Napoleon would march on Austria with a 200,000-man army. Ten days later, Napoleon issued orders directing the formation of the new *Grande Armée*, the core of which was comprised of the Army of the Ocean Coasts, for war against the Coalition.[103]

The Austrians and Russians planned to join their forces and advance across the Rhine into France. Napoleon, aware of the Coalition's intentions, quickly marched the *Grande Armée* towards the Rhine to strike the Austrian army. The Austrian army, commanded by General Mack, made a premature advance into Bavaria and isolated itself from the other armies of the Coalition. Mack planned to slow Napoleon's advancing army and delay invasion of Austria until the large Russian army could arrive. To this end, he established a defensive line near Ulm. Upon encountering this position, French cavalry, led by Marshal Marat, executed feint attacks through the Black Forest, while the rest of Napoleon's army enveloped the Austrian army from the north. After a series of battles, General Mack and the Austrian army suffered a devastating defeat at Ulm and

[102] Duffy, *Austerlitz: 1805*, 9-10.

[103] Duffy, *Austerlitz: 1805*, 10-13; Gerges, "1805: Ulm and Austerlitz," 145-172; Goetz, *1805 Austerlitz*, 47.

surrendered the Austrian Army on 19 October, leaving Napoleon and the *Grande Armée* free to march into the heart of Europe.[104]

The Russian army, commanded by General Mikhail Kutuzov, was about one-hundred sixty miles away when General Mack surrendered the Austrian Army at Ulm. Kutuzov knew he could not face the French army alone and ordered his army to retrograde, allowing the French to occupy Vienna on 12 November 1805. Kutuzov regrouped in Olmütz, where he was joined by reinforcements, Tsar Alexander, and Emperor Franz. Napoleon was angry that Kutuzov was able to escape, but knew his army was tired. Soldiers needed rest, and logistics trains and purchase agents were unable to keep pace with the advancing French army. The pressure of the impending winter and the lack of proper winter quarters were also beginning to take a toll on Napoleon's forces. Thus Napoleon needed to force the Coalition into a decisive battle before the heart of winter.[105]

The presence of the Austrian and Russian Emperors bore great weight on the Coalition's decision to engage Napoleon. General Kutuzov believed dwindling French supplies and the advent of winter would put Napoleon in a disadvantageous position. The Tsar overruled General Kutuzov's plan to attack the following spring, seeking the more immediate glory of a decisive victory over Napoleon. The two armies sought contact north of Vienna throughout the late autumn before meeting at the town of Austerlitz.[106]

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[104] David Chandler, *The Campaigns of Napoleon* (New York, NY: Scribner, 1966), 1455; Goetz, *1805 Austerlitz*, 50-56.

[105] Chandler, *The Campaigns of Napoleon*, 1071-1075.

[106] Duffy, *Austerlitz: 1805*, 74-75.

The battlefield at Austerlitz was marked to the north by the mound of the Santon, which overlooked the main highway from Brünn to Olmütz and runs north to south. The road traverses the Goldbach stream and its tributary, the Bosenitzer, flowing south and joining at the village of Puntowitz, forming a triangle with Lapanz and Jirschikowitz. A long ridge lies to the west of the Goldbach, and the ground steadily increases in elevation towards Pratzen Village and the plateau beyond. The villages of Blasowitz and Krzenowitz lie to the north and east of the Pratzen Heights. The town of Austerlitz is located three miles to the east of the Pratzen Heights on the Littawa River.[107]

Seeing this, Napoleon conducted a thorough terrain analysis and ceded the dominating high ground of the Pratzen heights to the armies of the Coalition. Napoleon's intent was to entice the Coalition to attack what he presented as a thin right flank at Kobelnitz, Zokolnitz, and Tellnitz, while Marshal Louis-Nicolas Davout's III Corps was marching to reinforce the position. The preponderance of Napoleon's army was to be concealed in the dead space behind Zurlan. Once the Coalition's center was weakened, the French army would counterattack the Coalition's center at the Pratzen Heights. The northern flank was to be held by the garrison at the Santon and reinforced with Murat's cavalry.[108]

On 29 November 1805 French forces occupied their initial positions. Field fortifications and a battery of eight guns were emplaced around the mound of the Santon.

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[107] Chandler, *The Campaigns of Napoleon*, 1119-1121; Duffy, *Austerlitz: 1805*, 86-87.

[108] Chandler, *The Campaigns of Napoleon*, 1121-1123; Duffy, *Austerlitz: 1805*, 89-92.

Marshal Murat's reserve cavalry and twenty-four light field guns were positioned to the right of Santon. Ten battalions of the Imperial Guard and General Nicholas Oudinot's grenadiers were positioned in the dead space to the south of the main road with forty additional guns. To the rear was General Jean-Baptiste Bernadotte's I Corps, which was still making its way to the battlefield. Marshal Jean-de-Dieu Soult's IV Corps was deliberately extended on the right flank, massed near Puntowitz and garrisoned in the villages of Kobelnitz, Zokolnitz, and Tellnitz. Marshal Davout's III Corps would reinforce the right flank upon its arrival on the battlefield from Vienna.[109]

Throughout the evening of 1 December, the first columns of the Coalition army occupied the Goldbach Height to the north, and elements of the center and left wing deployed along the Pratzen Heights. 85,400 Coalition soldiers and two hundred seventy-eight guns occupied the field, and the Russian and Austrian Emperors established their headquarters in Krzenowitz. 5,000 additional Russian soldiers were also on their way from Olmütz. Napoleon's army consisted of 66,800 soldiers and one hundred thirty-nine guns. General of Division Nicolas-Marie Songis des Courbons commanded the French artillery. Bernadotte's corps had arrived on the battlefield, but Davout's corps would continue to worry Napoleon until its arrival later that evening after a forced-march of almost seventy miles in forty-eight hours.[110]

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[109] Chandler, *The Campaigns of Napoleon*, 1112-1121; Duffy, *Austerlitz: 1805*, 89-92.

[110] Chandler, *The Campaigns of Napoleon*, 1123-1125; Duffy, *Austerlitz: 1805*, 80-83.

Discussions in the Coalition headquarters centered on the opening moves of the battle. Emperor Franz and General Kutuzov advised moving forward with caution, but the Tsar favored a plan developed by the Austrian Chief of Staff, General Franz Weyrother, for immediate action. Weyrother's plan was to execute a turning movement against the French right by crossing the Goldbach in force between Tellnitz and Zokolnitz. This would be followed by an envelopment to the north intended to force the French to flee for the safety of Brünn. A cavalry force would advance west to block the French reinforcements from the Brünn-Vienna road near Gross Raigern. A shaping operation on the French left flank would fix French forces to set conditions for the decisive operation on the French right. This would bring the promise of a flanking movement but open the Coalition center to a possible counter-attack. Indeed, General Louis Alexandre Andrault de Langeron, commander of the second column of the Austro-Russian forces, identified the potential risk that existed in the Coalition center but the issue was dismissed, as the Coalition leaders generally believed that Napoleon was already on the verge of defeat.[111]

The Coalition army was to advance in five large columns from the Pratzen Heights overlooking the French army. Three columns would advance from the heights in oblique order and engage the weakened French right. One column would attack the French center, and Prince Pyotr Bagration would fix the French left. The Russian Imperial Guard would be maintained in reserve on the heights. The Coalition intended to

[111] Chandler, *The Campaigns of Napoleon*, 1127-1129; Duffy, *Austerlitz: 1805*, 93-99.

overwhelm the weak French right with almost 40,000 and turn Napoleon's flank, cutting him off from Vienna.[112]

The advance guard of Column I would advance along the Salschan Pond, covering the left flank of I Column, to the lower Goldbach. I Column would attack towards Tellnitz, sweep across the Goldbach Brook, turn the French far right, then advance north. II Column would advance on the Coalition right across the Goldbach, driving the French between Tellnitz and Zokolnitz and assist I Column defeat the French right. III Column would advance on the right of II Column, cross the Goldbach, and take Zokolnitz Castle, and join I and II Columns in their advance north against the French flank. IV Column would advance on the right of III Column, cross the Goldbach, then swing north. V Column would move north of Blasowitz and turn west to link IV Column and the advance guard. The advance guard of the army would stand fast until released the reserve would prepare to support either IV or V Column or the army advance guard.[113]

The battle began at approximately 7:00 a.m.as soldiers of the Austrian advance guard engaged soldiers in the French right at the village of Tellnitz. The French were forced to relinquish the village, with Davout's chasseurs and hussars covering the retrograde. The Coalition army failed to take advantage of the success at Tellnitz due to the late arrival of orders and confusion impressed upon them by the morning mist. Approximately one hour later, Coalition forces began to move and fierce fighting erupted around Zokolnitz and the medieval castle in the town. Davout organized a counterattack

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[112] Frederick C. Schneid, *Napoleon's Conquest of Europe: the War of the Third Coalition* (Westport, CT: Praeger, 2005), 137.

[113] Bowden, *Napoleon and Austerlitz*, 314-315.

that would lead to the reoccupation of Tellnitz by French forces, but proved to be short-lived. By 9:00 am, Coalition forces were in control of Zokolnitz and Tellnitz.[114]

As the morning mist began to clear, Napoleon was able to observe the Coalition army moving down from the Pratzen Heights and weakening in the center. 40,000 soldiers were massed against the French right at this point, and more were on the way. Napoleon needed to execute his counterattack at the right moment, as two divisions of Marshal Soult's IV Corps were still hidden by fog and smoke. Napoleon continued to watch the steady advance of two more Coalition columns south from the Pratzen Heights. At 9:00 am, as Coalition forces pressed Davout on the right and once Napoleon had determined the two enemy columns had moved a sufficient distance, he gave the order for Marshal Soult's two divisions to advance.[115]

General Louis-Vincent-Joseph le Blond, comte de Saint-Hilaire, quickly advanced towards his objective, the village of Pratzen. To his left, General Dominique-Joseph René Vandamme encountered resistance at the village of Girzikowitz, which delayed him for some time. General Kutozov, who had taken personal command of General Mikhail Miloradovitch's southbound IV column, attempted to organize a hasty defense of the heights. However, poor command and control measures had allowed the Russian columns to become entangled in their flanking maneuver, and only two battalions were able to reach Pratzen. They were unable to impede the French advance.[116]

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[114] Chandler, *The Campaigns of Napoleon*, 1144.

[115] Chandler, *The Campaigns of* Napoleon, 1147-1148; Gerges, "1805: Ulm and Austerlitz," 145-172.

[116] Chandler, *The Campaigns of Napoleon*, 1149-1150.

Shortly after 10:00 a.m., General Charles-Antoine-Louis Alexis Morand, commanding First Brigade, First Division, IV Corps, led his force of two battalions and three guns over the Pratzen. As Morand advanced, two Russian regiments wheeled northward and advanced up the slope of the Pratzen to meet him. Morand ordered his two battalions into line formation and prepared to engage the Russian force, which consisted of three times the number of French infantry battalions and four times their number of guns. Forced to relinquish ground in the face of a numerically superior enemy, the French infantry and artillery provided effective covering fire for each other as they withdrew. The action provided enough time for General Saint-Hilaire and a battalion of infantry to arrive. Saint-Hilaire subsequently led a bayonet charge in the face of overwhelming enemy numbers, which offered another short respite. While the Russians reorganized in preparation for another attack and Saint-Hilaire considered his next action, the entire IV Corps artillery reserve of six twelve-pound guns arrived.[117]

The IV Corps artillery reserve had been ordered forward at the direction of the Emperor to stabilize the Pratzen Heights. The guns were positioned on the French flanks and masked by squads of infantry in preparation for the impending attack that would advance from two directions. The guns were ordered to double-load with canister shot and round shot and sighted-in to fire at thirty to forty yards.[118] In his memoirs, General of

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[117] Bowden, *Napoleon and Austerlitz*, 349-350; Chandler, *The Campaigns of Napoleon*, 1549-1550; Duffy, Austerlitz: 1805, 116-117.

[118] Artillery was able to fire round shot and canister shot simultaneously in extreme circumstances. A commander typically only used this combination when the destruction of the guns was less important than retaining a position. The combined wear from the round shot and the debris from canister shot could quickly ruin the barrel of an artillery piece. See Nosworthy, *With Musket, Cannon and Sword*, 392.

Division Paul-Charles-François Adrien Henri Dieudonné Thiébault wrote the enemy advanced to the designated distance when the artillery

> abruptly unmasked, and my whole line poured in one of the most destructive fires ever seen . . . My satisfaction may be imagined when I saw every round tear square holes through these regiments until they fled in mobs of fugitives before my three battalions. I had not lost a man, and if I had had a brigade of cavalry at my disposal, not one of my assailants would have escaped.[119]

The Emperor's timely employment of the IV Corps artillery reserve proved decisive in the French retention of the Pratzen Heights.

Thus, Coalition attacks on the Pratzen Heights stalled as a result, and the Russians began to withdraw. Saint-Hilaire, identifying the confusion in the enemy ranks, ordered his division commanders to prepare for an attack in order to exploit the success offered by the artillery. Saint-Hilaire marched south and cleared the Pratzen Heights of any remaining enemy formations, capturing the artillery of two Russian battalions along the way. By 11:00 a.m., the French had taken the Pratzen Heights and driven a wedge into the Coalition position.[120]

In the north, a large cavalry battle developed when General Bernadotte was ordered to move on Blasowitz in support of Marshal Soult's attack. A Russian advance guard moved to capture the village of Bosenitz but was halted by cannon fire from the Santon Hill. Conscripts of Marshal Jean Lannes' V Corps came under intense Russian artillery fire, which caused as many as four-hundred casualties in a matter of minutes. Lannes quickly ordered his corps artillery into action and had the advantage of range over

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[119] Bowden, *Napoleon and Austerlitz*, 350.

[120] Bowden, *Napoleon and Austerlitz*, 350-351; Chandler, *The Campaigns of Napoleon*, 1156-1160; Duffy, *Austerlitz: 1805*, 113-115; Goetz, *1805 Austerlitz*, 198-205.

the Russian guns. Lannes was also able to quickly maneuver his guns on the field, as he maintained the artillery horse teams well forward, allowing them to move much quicker than the Russians, who dragged their pieces by hand. After intense fighting in which the village of Bosenitz exchanged hands several times, a charge by French cavalry forced the Coalition army in the north into retrograde. This action enabled V Corps to seize Blasowitz and Krug, securing the French left.[121]

On the French right, the Napoleon became concerned after the fall of Tellnitz and Zokolnitz and ordered General Oudinot's grenadiers of the reserve force to strengthen the southern flank; however, the situation in the south began to improve with Soult's attack on the Pratzen Heights in the center. General Kutuzov attempted to reinforce the Coalition center with formations from the Coalition left, which the French cavalry delayed. This action allowed the three beaten French regiments the opportunity to form a new line to the west of the villages they had lost. With the addition of valuable reinforcements, the French fought to regain possession of Zokolnitz. An intense battle in which 8,000 French infantry and 2,800 French cavalry fought against overwhelming odds of 35,000 Coalition soldiers ensued, but the French were able to hold Zokolnitz.[122]

By midday, the battle was in the French favor. The French right had successfully held with against the Coalition's advance with the timely assistance from Marshal Davout's hard-marching reinforcements. Marshal Soult controlled the Pratzen Heights,

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[121] Chandler, *The Campaigns of Napoleon*, 1151-1152; Duffy, *Austerlitz: 1805*, 121-123.

[122] Chandler, *The Campaigns of Napoleon*, 1160-1162; Duffy, *Austerlitz: 1805*, 105-117.

and the left had been successfully contained. A French victory was almost assuredly at hand. The only major Coalition forces that stood between Napoleon and victory were horse and foot soldiers of the Russian Imperial Guard, which were advancing from their reserve position to fill the void in the Coalition center. These units prematurely committed to a charge following a morning of inaction but were able to break through the forward French line, causing consternation for Napoleon.[123]

General Vandamme's flank became engaged by fifteen squadrons of the Russian Guard cavalry, supported by a frontal assault of Russian grenadiers. Napoleon responded by counterattacking with cavalry of the Imperial Guard. The first two squadrons were repelled by the Russians, but the second counterattack of three squadrons of horse grenadiers supported by horse artillery made progress. A French division commanded by General Jean-Baptiste Drouet, comte d'Erlon, reinforced the center, which helped stabilize the French position. Napoleon then sent his senior aide-de-camp, General Jean Rapp, and two squadrons of Chasseurs of the Guard and one of Mamelukes to finish the Russian force. Soon thereafter, the Coalition's center no longer existed.[124]

Napoleon then issued orders for the Imperial Guard, Oudinot's grenadiers, and Marshal Soult to swing south and envelop the remaining Coalition forces, severing any lines of retreat, while Marshal Davout attacked from the west. General Vandamme soon occupied Augezd, and Marshal Davout marched towards the villages of Zokolnitz and Tellnitz. By 3:00 p.m. the Russians were forced to retreat south where many were driven

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[123] Chandler, *The Campaigns of Napoleon*, 1163-1164; Duffy, *Austerlitz: 1805*, 113-123.

[124] Chandler, *The Campaigns of Napoleon*, 1163-1165.

into the marshes and frozen lakes. As the Russians fled over the frozen lakes, Napoleon ordered twenty-five cannon to begin firing on the surface of the lakes to shatter the ice, to which an estimated 2,000 soldiers and thirty-eight guns were lost. The account of the French guns firing on retreating the Russians is in present time highly debated, as excavations have revealed few Russian casualties or guns in the ponds, and is largely dismissed as French propaganda.[125]

The Coalition defeat turned into a rout by 4:30 p.m. Shortly thereafter, a general ceasefire was issued. Approximately 11,000 Russian and 4,000 Austrians lay dead on the battlefield. An additional 12,000 Coalition soldiers were taken prisoner, along with one-hundred eighty guns and fifty colors and standards. The Austro-Russian army suffered 27,000 casualties, about one-third of its combat power. The French suffered 1,305 soldiers killed, 6,940 injured, and five-hundred seventy-three captured.[126]

Napoleon won a decisive victory at Austerlitz, which brought an end to the campaign and left the Third Coalition on the verge of collapse. While Napoleon may have acted in an overconfident manner following the victory at Ulm, the French army displayed exceptional flexibility by keeping the corps dispersed until the time to bring them together and engage the enemy. The Battle of Austerlitz was Napoleon's masterpiece, demonstrating his evolved art of war which emphasized the principles of

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[125] Chandler, *The Campaigns of Napoleon*, 1168-1171; Gerges, "1805: Ulm and Austerlitz," 145-172. Legend has it that Napoleon ordered the victory column in the Place Vendôme built from the cannon in the ponds, which supporters of the theory argue accounts for the lack of archaeological remains.

[126] Chandler, *The Campaigns of Napoleon*, 1171-1172; Duffy, *Austerlitz: 1805*, 140-149.

offensive and mass, as compared to the Austrian and Russian armies that held to the practices of the *ancien régime*.[127]

The Coalition had fought well, but it lacked operational- and tactical-level leadership, which degraded its ability to move quickly or operate outside its traditional methods. Austrian military reforms had begun too late to be of major impact, and their attempt to mobilize and deploy against Napoleon's army, which had been training for the invasion of Britain for the past two years, proved futile. Austrian Emperor Franz was forced to agree to a humiliating Treaty of Pressburg, which required the payment of a large indemnity and the relinquishment of territory in exchange for peace. The following year, he would suffer the ultimate humiliation of disbanding the thousand-year-old Holy Roman Empire.[128]

For their part, the Russians had withdrawn after the Battle of Ulm in good order from Braunau am Inn to Olmütz, fighting off their French pursuers prior to the Battle of Austerlitz. Ultimately, however, the Russian army was not capable of exercising the same operational flexibility or speed as Napoleon's corps system. Following the Battle of Austerlitz, the Russians retrograded towards Hungry and Poland on their return to Russia.[129]

The belligerents' employment and performance of their artillery arms displayed many similarities between the French and Coalition artillery arms that faced each other at

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[127] Chandler, *The Campaigns of Napoleon*, 1177-1195; Gerges, "1805: Ulm and Austerlitz," 145-172.

[128] Chandler, *The Campaigns of Napoleon*, 1193-1195.

[129] Ibid., 1173-1175.

the Battle of Austerlitz. As demonstrated, impactful periods of refitting and reorganizing in the last half of the eighteenth-century saw a rapid advance in the employment of each army's artillery, as each was placed in the care of well-trained professionals dedicated to the advancement of the arm. However, technical reforms proved only half of the process of reform, and new artillery systems would need to be used effectively in battle as well. Napoleon's employment of the French artillery at the Battle of Austerlitz proved the second half and illustrates the Emperor's evolved art of war that employed massed artillery at the decisive time and place.[130]

The Russian artillery outnumbered French artillery at the Battle of Austerlitz and was able to achieve positive results in situations where the unit integrity of artillery companies was maintained, such as the horse artillery companies on the Coalition right. However, this was not the primary method of employment. The Russian army held on to the idea that the guns should be distributed throughout the army as battalion guns in support of the infantry. About two-thirds of the total guns were employed as battalion guns, which left few remaining for deployment in company-size elements and prevented the concentration of guns or massed fires. Only eighty-six guns were emplaced in seven and a half companies along a seven-mile front. Such a large dispersion pattern left the artillery companies that did maintain unit integrity vulnerable to coordinated French attacks, which resulted in the loss of many Russian pieces.[131]

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[130] Kiley, *Artillery of the Napoleonic Wars*, 276; Quimby, *The Background of Napoleonic Warfare*, 145-155.

[131] Bowden, *Napoleon and Austerlitz*, 426.

Additionally, the French fought in a true combined-arms system, while the Russians did not. French skirmishers were often able to deliver uncontested musket fire against Russian artillery positions, as the Russians failed to employ their own skirmishers or other forces to protect the guns. Russian infantry and cavalry often traversed terrain immediately in front of the guns just as they were about to fire and, in turn, the infantry and cavalry failed to support the Russian artillery at critical times during the battle. In some instances, parent infantry battalions moved across terrain which the artillery was unable to traverse, such as the lower Goldbach. These guns were ultimately left behind, preventing them from providing fire support to their infantry battalions.[132] Distributed Russian artillery served an almost completely defensive role during the battle, as compared to the French use of offensive massed artillery on the Pratzen Heights. Thus, the performance of the Tsar's artillery at Austerlitz was indicative of the Russian army in 1805, as it maintained the fighting philosophies of the *ancien régime*.[133]

The Austrian artillery arm displayed competence during the battle and performed well within the restrictions of their limited deployment, but the concept of dispersing artillery to the battalions also prevented it from massing fires in any manner. The timely appearance of two horse artillery batteries near the Olmütz road possibly saved Bagration and the advance guard of the I Column on the Coalition right, but occurrences such as

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[132] Bowden, *Napoleon and Austerlitz*, 426; Kiley, *Artillery of the Napoleonic Wars*, 276; Quimby, *The Background of Napoleonic Warfare*, 145-155.

[133] Bowden, *Napoleon and Austerlitz*, 426; Kiley, *Artillery of the Napoleonic Wars*, 47; Nosworthy, *With Musket, Cannon and Sword*, 358-359.

this were few. Finally, the shortage of draft horses and transport personnel severely limited the overall deployment of Austrian ordnance during the battle.[134]

The French employment of artillery during the Battle of Austerlitz was successful in large due to the employment of artillery in mass, in contrast to the Coalition's dispersed form that adhered to the paradigm of eighteenth-century artillery employment. In particular, the Battle of Austerlitz illustrates Napoleon's early concept of massing artillery and its effects against armies that adhered to practices of the *ancien régime*. Napoleon prevented the collapse of his line on the Pratzen Heights through the quick employment of the IV Corps artillery reserve to mass against the advancing Russians, which ultimately broke the Coalition line in two. Cannon fire from the Santon Hill also halted the Russian advance in Bosenitz, and the rapid employment of horse artillery supporting cavalry of the Imperial Guard stabilized Vandamme's flank.[135]

While these instances of aggressive employment of cannon to mass at the decisive time and place made an immediate impact, Napoleon's artillery employment practices would be further honed in a manner that reflected his maturing art of war, which would be reflected in the Year XI System after Austerlitz. The new twelve- and six-pound guns and five-inch howitzers in production were issued to the army as soon as they were available. Napoleon's intent was to issue every infantry division with two artillery companies. The companies would have six-pounders and five-inch howitzers with one company of horse artillery. An army artillery reserve was formed, which consisted of the

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[134] Bowden, *Napoleon and Austerlitz*, 420.

[135] McConachy, "The Roots of Artillery Doctrine," 614-640.

heavy twelve-pound guns and would remain under the direct control of the Emperor to mass at the decisive time and place. Corps artillery reserve companies would be maintained by the corps commanders to provide the flexibility to shape the battlefield with massed fires at a more local level. The old Gribeauval pieces would be placed in arsenals for storage or assigned to armies in the secondary Italian or Spanish theaters.[136]

The changes Napoleon implemented as part of the System of the Year XI reflect Napoleon's heightened understanding of the importance of employing artillery fires in mass at the decisive time and place on the battlefield, particularly as filtered through the experience of Austerlitz. As an artillerist who received his military education in the *ancien régime* and one who witnessed the diminished effects of the dispersed artillery employment, Napoleon knew the artillery was capable of serving a more decisive role on the battlefield with the proper organization and employment philosophy. As France's new System of the Year XI was developed, Napoleon synthesized his battlefield experiences, such as the artillery's success on the Pratzen Heights at the Battle of Austerlitz, to mature his artillery employment philosophy.[137]

Napoleon's method of artillery employment continued to evolve into the use of grand batteries following the Battle of Austerlitz. The grand battery concentrated artillery formations under central direction and massed artillery fires against common targets for the accomplishment of tactical objectives. The grand battery provided the Emperor the ability to deliver devastating barrages on specific sectors of an enemy's line or strong

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[136] Kiley*, Artillery of the Napoleonic Wars*, 276.

[137] Kiley, *Artillery of the Napoleonic Wars*, 276; McConachy, "The Roots of Artillery Doctrine," 614-640.

point in preparation for an impending infantry attack that would exploit the artillery's success, as was the example in the defense of the Pratzen Heights.[138] Summarizing his theory of massed artillery, Napoleon concluded that "nothing will resist, whereas the same number of cannon spread out along the line would not give the same results."[139]

Napoleon continued to lead innovative employment of the artillery arm in the face of the preconceived employment practices of the *ancien régime*, resulting in an arm capable of decisive employment. In the years between the Battle of Austerlitz and the Battle of Borodino, the value of massed effects from the artillery was solidified and the lethality of the artillery was increasingly identified as a decisive force. At Napoleon's direction, the artillery's transition from one of an exclusively supporting arm to one capable of serving as a decisive force was underway.[140]

[138] Kiley, *Artillery of the Napoleonic Wars*, 276; McConachy, "The Roots of Artillery Doctrine," 614-640.

[139] McConachy, "The Roots of Artillery Doctrine," 631-632.

[140] Ibid., 614-640.

CHAPTER 4

THE BATTLE OF BORODINO

This purpose of this chapter is to discuss the significant events that influenced Napoleon's use of the artillery arm following the Battle of Austerlitz and analyze Napoleon's artillery employment as a decisive force at the Battle of Borodino. This is achieved through a historical review of the military and political background leading up to the Battle of Borodino and an operational account of the battle itself, with specific attention offered to the accounts of artillery employment. The chapter concludes by analyzing the employment and performance of the belligerents' artillery arms.

Eighteenth-century-style Coalitions built around little coordination and British funding proved no match for the aggressive nature of Napoleon's art of war. The Austrians were put out of action for four years following their defeat at Austerlitz. The Prussians suffered a crushing defeat at the hands of Napoleon at Jena-Auerstedt in 1806, and the Russians fought the French to a draw at the Battle of Eylau in 1807 but suffered a terrible defeat at the Battle of Friedland later that year.[141]

Following the Battle of Eylau, Napoleon solidified his views on the employment of artillery on the battlefield after witnessing the devastation of massed Russian guns. The Russians possessed a 1:167 ratio of guns to soldiers, compared to the French 1:500 ratio. During the battle, the Russians employed massed fires in support of the infantry along their entire front while simultaneously maintaining an adequate artillery reserve.

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[141] Christopher Duffy, *Borodino and the War of 1812* (New York, NY: Scribners, 1973), 16-17.

An entire French corps was decimated within thirty minutes at the battle by a combination of massed Russian artillery followed by an exploitation force of Russian cavalry, albeit in a blinding snowstorm.[142]

Antoine-Henri, baron Jomini, later argued that Russian employment of massed artillery at the Battle of Eylau compelled Napoleon to increase his own numbers of artillery.[143] Following the battle, Napoleon increasingly used massed artillery for preparatory fires before an assault, a reflection of the battle's impact on Napoleon and his maturing theory of artillery employment. At Borodino, Napoleon concentrated approximately two-hundred guns to fend off a counterattack from Field Marshal Kutuzov, while about one-hundred guns of the horse artillery would support a cavalry charge led by Marshal Murat.[144]

As an artillerist, Napoleon involved himself with such detail of the artillery arm as to change the fire regimes of artillery batteries. Frederick the Great and du Teil had previously advocated for the conservation of artillery ammunition and measured application of artillery fire in relation to the importance of the objective. This was intended to save the preponderance of artillery fire for the decisive moment. Napoleon opposed these views, as he believed the artillery did not fire enough.[145]

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[142] Bertaud and Palmer, *The Army of the French Revolution*, 232; Dominic Lieven, *Russia Against Napoleon* (London: Penguin Books, 2009), 145; McConachy, "The Roots of Artillery Doctrine," 614-640.

[143] Antonie-Henri de Jomini, *The Art of War* (Ontario: Legacy Books Press Classics, 2008), 232-237.

[144] McConachy, "The Roots of Artillery Doctrine," 614-640.

[145] Ibid.

The use of Napoleon's grand battery was as preparatory fires prior to the assault. Once the enemy committed its reserves and its forces were beginning to waver, the grand battery would deploy forward of the front line and pour canister shot into the enemy's ranks. This tactic of artillery employment also reflects Napoleons innovative employment of artillery, as previous methods limited the use of cannon in support of advancing formations. Napoleon's artillery arm would serve as an integral element of the assault, rather than merely a supporting force. The artillery would mass its fires on the enemy to prepare for the infantry's advance aimed at securing decisive points on the battlefield. This is identified as a decisive shift from *ancien régime*'s use of dispersed artillery that was used as local support of to the infantry to that of serving as the decisive force that set the conditions for infantry and cavalry exploitation.[146]

Evidence of Napoleon's continued maturation in his use of the grand battery is noted with the implementation of the Year XI System and in the Battle of Wagram. Following the French victories during the 1805 to 1807 wars of the Third and Fourth Coalitions, France held significant influence over the European continent and no power was able to resist French hegemony. However, Britain made no peace with Napoleon and maintained control of the seas. Napoleon turned to economic sanctions in the form of the Continental System to stop British commercial trade on the continent. This led to the Peninsula War, among other conflicts. Napoleon attempted to force Britain's traditional trade partner Portugal to adhere to the terms of the Continental System through diplomatic means, but when these efforts failed, he occupied the country and the ruling

[146] McConachy, "The Roots of Artillery Doctrine," 614-640.

family left in exile to the Portuguese colony of Brazil. While he was in the area, Napoleon also decided to place his brother, Joseph Bonaparte, King of Naples, on the Spanish throne, provoking an uprising supported by the British. [147]

The French position on the peninsula became unsustainable following a shocking French capitulation at the Battle of Bailen, and Napoleon subsequently allocated a significant number of forces to stabilize the peninsula. Austria, motivated by the weakening French grip on Europe and British promises to provide subsidies and military intervention, seized upon the opportunity to regain lost territory. In April 1809 the Austrian army crossed the Inn River into Bavaria, a staunch French ally. Having accomplished significant military reform since 1805, Archduke Karl led an army of 200,000 to face Napoleon. [148]

Following a poor French deployment at the beginning of the campaign by General Louis-Alexandre Berthier, prince de Neufchatel, acting on orders issued from Napoleon in Paris, Napoleon pushed the Austrian army back and occupied Vienna. Following a series of defeats, Archduke Karl saved the army by withdrawing north of the Danube River. Napoleon resumed his offensive against the Austrians in May 1809 and suffered his first defeat in over a decade at the Battle of Aspern-Essling. Napoleon took six weeks

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[147] Chandler, *The Campaigns of Napoleon*, 1347-1348; Rothenberg, *The Art of Warfare in the Age of Napoleon*, 48-53.

[148] Chandler, "The New Challenge," in *The Campaigns of Napoleon*, 1728-1758; Rothenberg, *The Art of Warfare in the Age of Napoleon*, 48-53.

to prepare his forces for his next attack, and during the night of 4 July, Napoleon crossed the Danube River to engage the Austrian army at the Battle of Wagram.[149]

At Wagram, Napoleon supplemented the Imperial Guard's sixty guns with about forty additional pieces from the Army of Italy and twelve Bavarian pieces to form a grand battery of over one-hundred guns. This proved significant, as the concentration of fires delivered by the grand battery allowed the French army to successfully cross the Danube by providing fires across the river. Once across the river, the artillery provided an enormous storm of cannon fire during the battle which proved both accurate and deathly. The artillery covered a dangerous corps change of front during the height of the battle, inflicted high casualties in the Austrian formations, and disabled many of their guns before Étienne-Jacques-Joseph Alexandre MacDonald's attack that finished the shattered Austrian line.[150] Napoleon expressed the importance of role of the artillery during the battle by telling the artillery commander, Jean Ambroise Baston de Lariboisière, "at Eylau, you provided me with powerful support, but today you have won the battle."[151] For the first time, an artillery formation had fought on its own, a landmark in artillery usage. The dominance the French artillery exerted over the Austrians with the grand battery at the Battle of Wagram would further solidify the arm's decisive role and stand

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[149] Chandler, "Aspern-Essling," in *The Campaigns of Napoleon*, 1806-1839; Chandler, "The Second Attempt: Wagram," in *The Campaigns of Napoleon*, 1841-1891.

[150] John H. Gill, *1809 Thunder on the Danube: Napoleon's Defeat of the Habsburgs,*vol. 3, *Wagram and Znaim* (London: Frontline Books, 2010), 380-381; Kiley, *Artillery of the Napoleonic Wars*, 290.

[151] Gill, *1809 Thunder on the Danube*, 406-407.

as another step in the evolution of the increased use of massed artillery by the French army.[152]

These events were only a part of the larger strategic picture. From 1805 to 1810 Napoleon embarked on numerous campaigns, bringing most of Europe under the control of his "Grand Empire," annexing numerous territories and placing many of his relatives on the thrones of old and new states. Possessing control over northern Italy, Napoleon continued his conquest into the Kingdom of Naples. Italy then became a French satellite under Napoleon's brother Joseph, followed shortly by his brother-in-law Murat.[153]

In Germany, Napoleon increased pressure on Prussia to become allies with France, but Prussia's resentment grew due to France's increased influence in Europe and over Germanic territories. In February 1806 Napoleon forced Prussian King William Frederick III to sign a peace treaty that required concessions of territory, imposed trade limitations, and recognition of the new order for Germanic states.[154]

Napoleon granted territory and sovereignty to his allies of Bavaria, Württemberg, Baden, and Westphalia in northwest Germany. The formation of the Confederation of the Rhine in July 1806 proved significant for Germanic hegemony under Napoleon, as it recognized Napoleon as its protector and provided soldiers for French service. This was

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[152] Gill, *1809 Thunder on the Danube*, 406-407.

[153] Alexander I. Grab, *Napoleon and the Transformation of Europe* (Basingstoke: Palgrave Macmillan Limited, 2003), 2.

[154] Ibid., 12-13.

followed by Franz II's abdication as Holy Roman Emperor in August 1806, bringing about the end of the thousand-year German *Reich*.[155]

Confident in the Prussian military tradition, Frederick William III mobilized the Prussian army in the summer of 1806 and signed an alliance with Russian Tsar Alexander I to fight Napoleon. The Prussian army was subsequently defeated at the Battles of Jena and Auerstedt in October 1806. Napoleon then met the combined Prussian and Russian armies at the Battle of Eylau in February 1807, then defeated the Russians at Friedland in June 1807, after which Tsar Alexander I sued for peace.[156]

French victories against the Russians and the Prussians allowed Napoleon to dictate terms the defeated. The French and Russian Emperors met on decorated raft moored in the River Niemen at Tilsit, Russia, in June 1807 to discuss terms. The two Emperors got along well, sharing mutual respect and a spirit of cooperation. Napoleon made it known to the Tsar that he would have no issue with Russia's pursuing territorial expansion at the expense of Sweden and the Ottoman Empire in exchange for the Tsar's support of the Continental System. In light of the recent military defeats, the Tsar was able to agree to terms with Napoleon that left Russia relatively unscathed.[157]

Several crowned heads of Europe were willing to sign away sovereign rights, but many of their subjects began to feel their national identities and religions were at risk

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[155] Grab, *Napoleon and the Transformation of Europe,* 12-13.

[156] Ibid.

[157] Duffy, *Borodino and the War of 1812*, 16-18.

from Napoleon.[158] Napoleon implemented organizational changes in his conquered and annexed territories, with a heavy focus towards the more efficient providing of soldiers and taxes to fund the armies. Napoleon also believed the conquered peoples of Europe would be grateful for French organizational reforms once they realized their benefits. In practice, the impact of the reforms varied by territory, with some territories embracing French ideas and others viewing French as exploiting their people and society.[159] The best example of the former took place on the Iberian Peninsula. The Spanish began to resist French occupation in early 1808. Spanish regulars were defeated by the French army, but the *partidos* drew the conflict out until British and Portuguese became involved. Napoleon was forced to direct combat power to the deal with the less-than-desirable conflict on the Peninsula, occupying hundreds of thousands of men who could have been used in his other conflicts.[160]

During this same period, Napoleon's Continental System began to cause economic strain throughout Europe, especially Russia.[161] War between Austria and France in 1809 symbolized the beginning of the end of the Russo-French alliance, but Napoleon's request for the hand of the Tsar's sister Grand Duchess Anna Pavlovna added complexity and tension to the situation. The Tsar did not want to give his sister's hand to Napoleon, but neither did he want to insult the French emperor. Having already lost two

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[158] Duffy, *Borodino and the War of 1812*, 16-18.

[159] Grab, *Napoleon and the Transformation of Europe*, 19-20.

[160] Lieven, *Russia Against Napoleon*, 222-224.

[161] Duffy, *Borodino and the War of 1812*, 17-18; Lieven, *Russia Against Napoleon*, 213-217.

daughters who married at an early age during childbirth, Grand Duchess Catherine compromised, stating that Grand Duchess Anna would not be allowed to marry until her eighteenth birthday. Once this news had reached Napoleon in February 1810, he shifted his focus to Austria, contracting to marry Archduchess Marie-Louise, daughter of the Austrian emperor.[162]

The marriage issue combined with the effects of Napoleon's establishment of a nominally-independent Duchy of Warsaw and the economic hardship brought upon noble Russian families due to the Continental System to lead to Russian discontent with Napoleon and eventual disregard for the Tsar's agreements. By 1811 Napoleon was convinced that he needed to use military force to bring Russia back into the terms of its agreements.[163]

In June 1812, Napoleon embarked on an invasion of Russia. He took seven corps into Russia, many of which were augmented to the size of armies. The size of the theatre was immense, and previous campaigns had taken a physical and psychological toll on the Emperor and the French army. The French army was comprised of about 250,000 French soldiers, many of whom had little seasoning, as the percentage of veterans was much lower than previous campaigns. Since 1798, the army's ranks had been filled each year by a levy of conscripts from males aged eighteen to thirty, with acknowledgement that younger populations would have to called up in the future to maintain the size of the army. Many valued, seasoned soldiers were assigned to the Imperial Guard, which was

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[162] Lieven, *Russia Against Napoleon*, 222-224.

[163] Duffy, *Borodino and the War of 1812*, 17-18.

always close to Napoleon on the battlefield and had grown in size from its initial, small formation. This formation became so valued to Napoleon that he would hesitate to employ it throughout the campaign, including at critical moments during the Battle of Borodino. Other veterans, particularly officers and non-commissioned officers, were tied down on occupation duty in Spain.[164]

To supplement the French, large numbers of soldiers came from other European armies. Napoleon's Russian campaign included soldiers from Poland, Saxony, Württemberg, Westphalia, Italy, Bavaria, Dalmatia, Spain, Portugal, and Egypt. Only about two-thirds of men in French units were from France proper, with the remainder hailing from the Low Countries, the west bank of the Rhine, parts of Hanover, Geneva, Savoy, Avignon, Nice, Piedmont, Genoa, Parma and Tuscany. The mix of nationalities and ethnicities would cause problems with regards to the commonality of language, equipment, and tactics throughout the campaign.[165]

For its part, the Russian army was able to draw from a population of 44,000,000 servile subjects, which included serfs, peasants, and townspeople. Most young men were tough and physically fit from their toil in the Russian fields. Irregular levies were conducted to fill the ranks of the army, although in some years, there were none

[164] Duffy, *Borodino and the War of 1812*, 17-18; Lieven, *Russia Against Napoleon*, 213-217.

[165] Duffy, *Borodino and the War of 1812*, 34-35.

conducted. In 1812 three levies were necessary to provide 400,000 soldiers for the impending confrontation with Napoleon.[166]

The army was led by Michael Andreas Barclay de Tolly, a long-serving non-commissioned officer whose talents were identified by, and he was offered a commission to serve as adjutant to, Prince Nikolai Vasilyevich Repnin. This launched his career as a general officer.[167] From 1810 to 1812 Barclay served as the Russian Minister of War, and he would command the First Army of the West in 1812. During his tenure as Minister of War, the officer corps represented an accurate microcosm of Russian society. Many generals began as rank-and-file soldiers, earning their way through the ranks. Well-connected sons of the upper class found a somewhat easier time by enrolling in one of several cadet houses while pursuing a military education. Foreign-born officers represented a smaller but important percentage of the total of Russian officers. Many French and Prussian officers, such as Carl Philipp Gottfried von Clausewitz and Jomini, found their ways into the Russian army in the wake of Napoleon.[168]

Russian commanders were accustomed to employing large amounts of artillery on the battlefield, potentially as a way to make up for the infantry's lack of maneuverability. Tsar Alexander continued directing reform of the Russian artillery arm that began with his father. Following the Russian defeat at Austerlitz in 1805, General Alexei Arakcheyev led the reform of the Russian artillery arm with the System of 1805, which

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[166]Alexander Mikaberidze, *The Battle of Borodino: Napoleon Against Kutuzov* (Barnsley: Pen & Sword, 2010), 57.

[167] Duffy, *Borodino and the War of 1812*, 38.

[168] Ibid.

introduced standardized equipment, ammunition, and guns. Among these were the twenty-, ten-, and three-pound "unicorns." The new unicorns fired explosive shell with more velocity compared to the French six-inch howitzer. The elevating wedges operated by screws, sights provided greater accuracy to the cannon, and the pieces were pulled by strong draft horses. As a result, the state of the Russian artillery arm had drastically improved since the Battle of Austerlitz.[169]

General Alexander Ivanovich Kutaisov, Russian First Army artillery commander, believed the number of one's guns should be concealed from the enemy at the beginning of a battle. More guns should then be brought into action as the battle develops. Like Napoleon, Kutaisov also understood the benefit of massed fires. Kutaisov thought artillery should be used to break through the enemy line at a decisive point or to prevent a breakthrough at a certain point along the line. Unfortunately for his theories, General Kutaisov was killed at the Battle of Borodino before he could employ the Russian army's artillery reserves, with many pieces never seeing action during the battle.[170]

Napoleon claimed he did not seek territorial expansion through a war of conquest, but to destroy the Russian army as to compel the Tsar to capitulate under French terms.[171] Napoleon planned the invasion of Russia using the same operational approach that had been successful in previous campaigns. Keeping his true aim secret from his

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[169] Duffy, *Borodino and the War of 1812*, 46-47; Mikaberidze, *The Battle of Borodino*, 64.

[170] Duffy, *Borodino and the War of 1812*, 47; Mikaberidze, *The Battle of Borodino*, 133-136.

[171] Duffy, *Borodino and the War of 1812*, 17-18.

enemy, he intended to overwhelm the Russian army with numerical superiority at the point of his choosing, destroy the Russian army in the field, and then dictate his terms to the Russian Tsar. Knowing the vastness of the Russian frontier, the Emperor sought to engage the Russians as soon as possible. Although he understood the challenges of an invasion of Russia, he still believed he could achieve a decisive victory within a few weeks. Previous experience campaigning in Poland had provided the Emperor with experience conducting warfare in sparsely-populated areas of unforgiving terrain with formidable weather. The French army had prepared for the momentous challenge by stockpiling huge amounts of food, ammunition, and other supplies in Poland and Germany to follow the army through a large logistical supply network.[172]

The Russian army developed numerous potential plans for the defense of Russia, but Tsar Alexander I ultimately favored a plan developed by Ludwig Wolzogen, a Prussian officer who joined the Russian army in 1807, to pursue a defensive strategy with one army in the north and one in the south along Russia's western border. The First Western Army was positioned to the north near Polesye, with the Second Western Army positioned to its south. The army that encountered Napoleon first would execute a retrograde to a predetermined defensive position, and the other would come to its aid. First Western Army would retrograde to the Drissa Camp on the Western Dvina River, and the Second Western Army would retrograde to Zhitomyr and Kiev. General Karl

[172] Mikaberidze, *The Battle of Borodino*, 5.

Ludwig August von Pfuel, a former Prussian officer and advisor to the Tsar, championed the plan and received the Tsar's approval for its implementation.[173]

On 24 June 1812 Napoleon's force of French and satellite armies crossed the River Niemen from the Duchy of Warsaw into Russia. Napoleon's main force consisted of the Imperial Guard, Davout's I Corps and Ney's III Corps, and two reserve cavalry corps. The Army of Italy was arrayed to the southwest under Napoleon's step-son, Prince Eugène de Beauharnais. The Second Support Army of Germans and Saxons under the Emperor's brother, Jérôme-Napoléon Bonaparte, assumed a position on the French right flank. Detached forces on the flanks of the Army consisted of Marshal Oudinot's II Corps that advanced against the Russian center and MacDonald's X Corps that advanced towards the fortress port city of Riga. Napoleon's unwilling Austrian allies made up the army's extreme right, south of the Pripet Marshes.[174]

Upon Napoleon's invasion, the Russian armies retreated accordingly and arrived at the Drissa Camp by 8 July. The Tsar, realizing the weakness of the plan, discarded it and left the army without appointing a supreme commander. Barclay, commander of the First Western Army, subsequently assumed authority over both armies. On 14 July Barclay abandoned the Drissa Camp and detached 20,000 men under General Peter Wittgenstein to guard the route to Saint Petersburg while Barclay retrograded to Smolensk.[175]

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[173] Mikaberidze, *The Battle of Borodino*, 8-9.

[174] Duffy, *Borodino and the War of 1812*, 51.

[175] Mikaberidze, *The Battle of Borodino*, 10-11.

General Prince Pytor Bagration and the Second Western Army withdrew to Minsk, Nesvizh, then Bobruisk, evading French attempts at envelopment and achieving minor victories. Marshal Davout intercepted the Second Western Army at Moghilev, and Bagration conducted a diversion at Saltanovka on 23 July while his soldiers crossed the Dnieper River and marched towards Smolensk. The two Russian armies met at Smolensk on 2 August, bringing the total Russian strength to 120,000, compared to 180,000 in the main French force.[176]

In the north, Marshal Oudinot attacked Wittgenstein and took Polotsk on 26 July, but the French suffered a defeat near Klyastitsy on 1 August that forced Napoleon to divert forces to reinforce Oudinot. MacDonald's X Corps in the north was ordered to occupy Riga, which resulted in a siege from July to September 1812. The French later withdrew from Riga without attempting to seize the city. In the south, the French were defeated at Kobrin. Napoleon's plan to destroy the Russian army in a decisive battle thus failed to materialize by August, and the two Russian armies escaped defeat in detail and united at Smolensk. In addition, the French army had already consumed much materiel and suffered high casualties.[177]

However, Russian hesitation on the decision to continue the retrograde or to take advantage of the combined strength of the two armies to launch a counteroffensive gave Napoleon time to evaluate his situation and prepare his next move. Barclay's indecisiveness convinced Napoleon there was no real threat of a Russian offensive and

[176] Mikaberidze, *The Battle of Borodino*, 10-11.

[177] Ibid.

that the opportunity to achieve the decisive victory he sought lay before him. However, Napoleon's advance on Smolensk was impeded by General Dmitry Petrovich Neverovsky's peremptory identification of Napoleon's intentions and subsequent successful withdrawal. Napoleon halted his advance on Smolensk for one day after the engagement with Neverovsky to regroup, missing the opportunity to exercise the principle of surprise when attacking Smolensk. In addition, the presence of overwhelming numbers of screening Cossacks compounded Napoleon's uncertainty about the size of the enemy force that he faced. Meanwhile, Russian forces quickly returned to Smolensk to repel the impending French attack.[178]

Captain Jean-Roch Coignet, a French officer who served in the French army from 1799 to 1815, wrote that the Russians riddled Smolensk with artillery fire from the surrounding heights as the French entered the city, setting fire to many storehouses. The fighting of 15-16 August was incredibly bloody and cost the French dearly, but the Russians ultimately paid a higher price, as they were forced to abandon Smolensk and retrograde towards Moscow.[179] The French and Russian armies are each estimated to have suffered approximately 10,000 casualties during the fighting.[180] Coignet reports having spent several days in Smolensk, presumably waiting while Napoleon contemplated his next move.[181]

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[178] Mikaberidze, *The Battle of Borodino*, 16-17.

[179] Jean-Roch Coignet, *Narrative of Captain Coignet (Soldier of the Empire) 1776-1850* (New York: T.Y. Crowell & Co., 1890), 221.

[180] Mikaberidze, *The Battle of Borodino*, 16-17.

[181] Coignet, *Narrative of Captain Coignet*, 221.

Following the Battle of Smolensk, Napoleon was faced a decision: press on towards Moscow, or spend the winter in Smolensk and resume the campaign once spring arrived. Until that time, Napoleon had sought a decisive battle to bring a quick end to the campaign in Russia, which continued to elude him. The Emperor had to evaluate military and political considerations, each of which had their fair share of advantages and disadvantages, to arrive at a decision.[182]

Moscow lay almost three-hundred miles away, and it would take until late autumn to cover the distance. Spending the winter in Smolensk would allow the French army time to train the new year's conscripts, who would be brought to the front over the winter, and increase the force's training readiness to a heightened state before continuing the campaign. Overstretched supply lines would also be offered respite, which logisticians could use to refit and reorganize for a spring offensive. The Russians were in an almost constant state of retrograde since the beginning of the campaign, which reinforced Napoleon's belief that when the Russians did stand and fight, he would defeat them as he had in the past. Additionally, having agreed to the re-formation of the Kingdom of Poland, Napoleon may have been able to add formations of Polish soldiers to his army.[183]

On the other hand, continuing the campaign offered numerous problems. The Russian countryside was poorly mapped, which would cause difficulty on the march. As over the summer, there was no certainty the Russian army would stand and fight.

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[182] Chandler, *The Campaigns of Napoleon*, 2126.

[183] Chandler, *The Campaigns of Napoleon*, 2126; Duffy, *Borodino and the War of 1812*, 62.

Extended lines of communication limited supplies and the added effects of the previous year's poor harvest. Additionally, the implementation of a scorched-earth policy by the Russians prevented Napoleon from extracting any sustainment from the land, which further limited Napoleon's ability to supply his army.[184]

Military considerations indicating Napoleon should winter in Smolensk were only a portion of the issue, as political factors also weighed on the Emperor's decision.[185] The political objective of returning Russia to the terms of the Continental System as quickly as possible demanded a quick and decisive victory. Waiting until spring to continue the campaign also offered the Tsar the same ability to refit his army, and he would also further benefit from British aid, ultimately making a French victory more difficult to achieve. Additionally, signs of conspiracies began to develop with Napoleon's prolonged absence from Paris, and continued bad news from Spain led the Emperor to contemplate how long he could remain in Russia.[186]

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[184] Chandler, *The Campaigns of Napoleon*, 2127; Duffy, *Borodino and the War of 1812*, 62.

[185] Duffy, *Borodino and the War of 1812*, 62.

[186] Chandler, *The Campaigns of Napoleon*, 2129–2130; Napoleon left the *Grande Armée* for Paris in December 1812 with the intent of standing up a new army and in response to the The Malet Coup of 1812. The attempted *coup d'état* in Paris that intended to remove Napoleon from power was led by General Claude François de Malet, a veteran of the Revolutionary Wars who became disenchanted with Napoleon's rise to power. Malet was imprisoned due to his opposition to Napoleon but still managed to mastermind a coup and escaped from prison in an attempt to seize control of France. The coup failed, and the leading conspirators were executed. See Elting, *Swords Around a Throne*, 418; French forces in Spain were severely overstretched in 1812 as Napoleon prepared for his invasion of Russia. The July 1812 Battle of Salamanca was a damaging defeat for the French in Spain. King Joseph Bonaparte was forced to abandon Madrid, and Soult abandoned the siege of Cádiz, which lasted for over two years, in August 1812. The French reoccupied Madrid in November 1812, but the campaigns of Arthur Wellesley,

As a result, Napoleon ultimately decided to press on with the advance in search of a decisive battle. The Russian army appeared to be in retrograde since the opening of the campaign, which further persuaded Napoleon to seek the victory he desired. The Emperor believed the defeat of the Russian army and occupation of the traditional Russian capital of Moscow would encourage the Tsar to sue for peace. Napoleon determined a march on Moscow would prove logistically difficult but provide a quick conclusion for the campaign.[187]

On 25 August, the *Grand Armée* continued its march east towards Moscow. Little opposition was met during the advance, except small cavalry skirmishes and the ever-present harassment by Cossacks. Severe rainstorms caused more delay than did any Russian opposition, and on 30 August, Napoleon announced that if conditions did not improve within the next twenty-four hours, he would order a return to Smolensk. The following day, the rains dissipated, and the march continued. By 5 September, the French army halted within sight of the village of Borodino, where the Russian army was observed preparing defensive positions.[188]

The terrain surrounding Borodino consisted of rolling countryside with several streams, ravines, small areas of woods, and open fields. The Kalatsha River ran parallel to the main mail road. While the river was fordable in most areas, Napoleon would bridge

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future Duke of Wellington, significantly weakened France's hold on Spain. See Chandler, *The Campaigns of Napoleon*, 2149.

[187] Chandler, *The Campaigns of Napoleon*, 2130–2131; Duffy, *Borodino and the War of 1812*, 62.

[188] Chandler, *The Campaigns of Napoleon*, 2135–2136.

it to facilitate speed of crossing. Borodino itself lay on the high road on the northern bank of the river. The village of Utitsa lay on the old mail road, approximately two miles south of the high road and the Kalatsha River. Several small streams ran south from the Kalatsha in the direction of Utitsa, with a series of hamlets on the banks, with Fomkina, Schivardino, and Semionovskaya among the most important.[189]

The Russian army, now commanded by Field Marshal Kutuzov, established its defense on these two main roads leading from Smolensk to Moscow. A forward position was constructed beyond the hamlet of Schivardino, with the primary Russian positions about a mile to the east. Between Borodino and Semionovskaya, a large entrenchment known as the Great Redoubt was erected. Captain Coignet noted Napoleon knew it was necessary to seize the defensive work and it would require an unprecedented effort to accomplish.[190] Three small hills located a mile to the south had fleches, arrow-shaped redans, constructed with opening on their eastern sides. Additional earthworks had been emplaced on the main post road near the village of Gorki, with many more overlooking the Kalatsha River as it traversed northeast of Borodino.[191]

General Barclay's First Army formed the right wing of the Russian army with the Kalatsha River to its front. Prince Bagration's Second Army formed the left wing, which lay in more open terrain but was reinforced by the forward redoubt at Schivardino and the

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[189] Chandler, *The Campaigns of Napoleon*, 2136-2137.

[190] Chandler, *The Campaigns of Napoleon*, 2136-2137; Coignet, *Narrative of Captain Coignet*, 223.

[191] Chandler, *The Campaigns of Napoleon*, 2138; Coignet, *Narrative of Captain Coignet*, 223.

earthworks of the Great Redoubt and the fleches. The Russians believed the primary advantage offered by the terrain was that it required an advance from the west to be dispersed into broken formations, which would be vulnerable to artillery fires. It is notable to mention that much as Napoleon emphasized the importance of massed artillery fires in his campaigns, at Borodino, the Russians predicated their positions in part on massed fires by to striking the enemy with concentrated fires from prepared defensive positions. The disadvantages of the terrain included ground that was more open, which provided an opportunity for the enemy to execute an enveloping or flanking maneuver in the south. In this position, the Russians deployed a combined army consisting of approximately 120,800 men with six-hundred forty pieces of artillery on the eve of the Battle of Borodino.[192]

The French army, consisting of approximately 133,000 men with five-hundred eighty-seven guns, conducted reconnaissance of the Russian positions on 6 September.[193] Napoleon decided the terrain in front of the Russian right wing and north of Borodino was unfavorable to an attack. The seizure of the Great Redoubt in the Russian center was deemed necessary, even though he knew it would come at a great cost. The weakness of the Russian right was also identified as open to a flanking maneuver.[194]

Marshal Davout insisted Napoleon direct 40,000 men to threaten the weak Russian right, but Napoleon discounted this option. Napoleon believed that his men were

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[192] Chandler, *The Campaigns of Napoleon*, 2138-2139; Duffy, *Borodino and the War of 1812*, 72-73; Mikaberidze, *The Battle of Borodino*, 51.

[193] Duffy, *Borodino and the War of 1812*, 87-88.

[194] Chandler, *The Campaigns of Napoleon*, 2145-2148.

tired of campaigning and were focused on survival. The horses of the artillery and the cavalry were in poor condition, and if the Russians became aware of a strategic envelopment maneuver, they would withdraw from their positions. Napoleon settled in favor of a less elaborate maneuver that sought a fast frontal attack, intended to pierce the Russian line at one or multiple points, with diversions on each of the wings. The stage was thus set for the Battle of Borodino to be a one of brute force and attrition.[195]

On the French left, Prince Eugène de Beauharnais' IV Corps and the cavalry of General Emmanuel, marquis de Grouchy, were to capture Borodino, then cross the Kalatsha River and attack the Great Redoubt, leaving a covering force on the north bank of the river. Simultaneously, the divisions of Jean Dominique Compans and Joseph Marie Dessaix from I Corps would assault the fleches. Marshal Michel Ney would then advance on Davout's left with III Corps to seize Semionovskaya and break the Russian line in two. Prince Józef Antoni Poniatowski would advance on Utitsa with V Corps and threaten the Russian flank. General Jean-Andoche Junot's VIII Corps, the Imperial Guard, General Louis Friant's division of I Corps, and the majority of the cavalry would be held in central reserve. Napoleon issued orders to build bridges over the river west of Borodino and three large redoubts. The redoubts would hold one-hundred twenty guns to deliver preparatory fires prior to the attack.[196]

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[195] Chandler, *The Campaigns of Napoleon*, 2145-2148.

[196] Ibid.

The Emperor spent the day of 6 September reconnoitering the Russian positions and issued orders for the following day's battle.[197] During the night of 6-7, the French completed work on the three large redoubts. Once daylight arrived, The French were able to see that they had made an incredible miscalculation and constructed the batteries outside the maximum effective range of their cannon. The French then advanced their cannon to be within range of their intended targets, in full view of the Russians. However, the Russians did nothing to interfere with the French and allowed them to complete their task unabated.[198]

At 6:00 a.m. on 7 September the French guns of the Guard artillery, posted on the French right, began firing, and the Russian artillery quickly responded. The French bombardment of the Great Redoubt continued for hours, pulverizing the position and surrounding area.[199] On the left, IV Corps stormed into Borodino and quickly took possession of the village. The Russians in Borodino were taken by surprise, and the Russian Lifeguard Jäger in the village took high casualties.[200] In the center, the lead divisions of I and III Corps advanced, delivering powerful strikes against the Russian

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[197] Armand-Augustin-Louis de Caulaincourt, George Libaire, and Jean Hanoteau. *With Napoleon in Russia,* (New York: Morrow, 1935), 94; Coignet, *Narrative of Captain Coignet*, 223.

[198] Chandler, *The Campaigns of Napoleon*, 2145-2148; Duffy, *Borodino and the War of 1812*, 95.

[199] Coignet, *Narrative of Captain Coignet*, 223; Duffy, *Borodino and the War of 1812*, 95.

[200] Duffy, *Borodino and the War of 1812*, 96.

positions. On the French Right, V Corps advanced towards Utitsa and began to make progress in the village. The French attack initially appeared to be successful.[201]

However, IV Corps found itself suffering severe losses after advancing too far from Borodino towards the Gorki Heights and was forced to take up a defensive position around the village.[202] The Russian jägers quickly made up the ground they lost but were ordered to return to their primary position on the Russian line. Before retreating, they made sure to burn Borodino's bridge over the Kalatsha River to disrupt a future French advance.[203]

Kutuzov observed that the soldiers left in Borodino were serving no purpose other than occupying the village and moved units to bolster the Russian left.[204] Eugène then moved forward and emplaced twenty-eight pieces of artillery near Borodino, which brought the Russian batteries at Gorki and the northern flank of the Great Redoubt into range. Meanwhile, the fight for the fleches intensified.[205] French soldiers "made every possible effort to take the redoubts which were thundering upon our infantry on the right; they were always repulsed, and the victory depended upon this position," according to Coignet.[206]

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[201] Chandler, *The Campaigns of Napoleon*, 2151.

[202] Ibid.

[203] Duffy, *Borodino and the War of 1812*, 96-97.

[204] Chandler, *The Campaigns of Napoleon*, 2151.

[205] Chandler, *The Campaigns of Napoleon*, 2151; Duffy, *Borodino and the War of 1812*, 97.

[206] Coignet, *Narrative of Captain Coignet*, 223.

Napoleon, able to hear the fighting in Borodino, determined that Poniatowski must have launched flanking movement along the Old Smolensk Road and ordered I Corps to attack the southernmost fleche. The attack was supported by one-hundred two pieces of artillery that provided fire from the French left at Borodino and the French right from Poniatowski's position. French infantry marched forward into a hail of canister fire from Russian artillery positioned in front of the fleche that proved devastating. French infantry occupied the southernmost fleche for only a short time before the Russians, who exerted every effort to retain the earthworks, expelled them from the position.[207]

On the French Right, V Corps dispelled the Russians from and seized Utitsa after a short battle. The Russians set fire to the village during their retreat. Poniatowski's advance out of Utitsa was stopped by heavy Russian artillery and infantry fire. For the next two hours, the battle on the French right became an indecisive skirmishing action, which led to the postponement of V Corps' executing its turning movement.[208]

Napoleon moved General Louis-Pierre Montbrun's cavalry to reinforce III Corps and General Étienne-Marie-Antoine Champion de Nansouty and General Victor de Fay de La Tour-Maubourg to reinforce Davout. These reinforcements proved to not be enough, and Junot's VIII Corps was soon dispatched to support I Corps. At approximately 8:30 a.m., the French reserve had been depleted, leaving only the Imperial Guard, and there were few gains to show in exchange for the commitment of forces.

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[207] Coignet, *Narrative of Captain Coignet*, 223; Duffy, *Borodino and the War of 1812*, 98-99.

[208] Chandler, *The Campaigns of Napoleon*, 2157; Duffy, *Borodino and the War of 1812*, 98-99

Eugène's assault on the Great Redoubt had been repulsed, and Poniatowski experienced heavy losses. The battle of brute force and attrition was well underway.[209]

Shortly after 10:00 a.m. I, III, and VIII Corps, along with two cavalry corps, launched an attack against the fleches, with two-hundred fifty French artillery pieces in support. Bagration responded with three-hundred guns, inflicting a significant number of casualties on the French formations. The close proximity of the French to the Russian artillery made for easy targets.[210]

However, while defending the fleches, Bagration was struck by a splinter from a French shell. He continued issuing order to his troops despite his injury, desiring to see the result of a Russian Cuirassier attack. Once he was gratified by its success, Bagration left the battlefield. News of Bagration's injury reached Russian soldiers in the Russian center and so weakened their morale they abandoned positions along the line, resulting in the French capture of the fleches.[211]

Victory once again seemed to be in sight for the French, but the Russians stiffened their resistance and defended a position near the Psarevo Plateau from which they could not be dislodged. Murat, Davout, and Ney all requested that Napoleon commit the Old Guard to break the stalemate, but he refused. Kutuzov took advantage of the

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[209] Chandler, *The Campaigns of Napoleon*, 2153-2154; Duffy, *Borodino and the War of 1812*, 100-101.

[210] Chandler, *The Campaigns of Napoleon*, 2155.

[211] Alexander Mikaberidze, "Peter Bagration: The Best Georgian General of the Napoleonic Wars," The Napoleon Series, accessed April 25, 2020, https://www.napoleon-series.org/research/biographies/bagration/c_bagration12.html.

respite offered by Napoleon's hesitation by reinforcing the most threatened sections of the Russian line.[212]

The Russians launched a diversionary cavalry attack against the forces in Borodino and the cavalry screen to its rear. However, General Alexis Joseph Delzons' French cavalry was routed, and Delzons immediately requested assistance from the Emperor. Napoleon was planning an attack against the Russian lines when the news of General Delzons' failure arrived. In response, Napoleon dispatched reinforcements to stabilize the situation but decided to withhold the remainder of his reserve force in the event of a similar reverse requiring the reserve to stabilize another situation.[213]

Armand-Augustin-Louis de Caulaincourt, French general and aid to the Emperor, stated that "a formidable array of guns spat forth death in every direction…the Great Redoubt belched out a veritable hell on our center."[214] For more than two hours following the French seizure of Borodino, French artillery massed on the Great Redoubt.[215] Four-hundred pieces of artillery would mass fires against this one decisive point.[216] Napoleon ordered his army to halt in their current positions to allow the artillery time to demolish the position in preparation of the infantry attack.[217]

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[212] Chandler, *The Campaigns of Napoleon*, 2155-2169.

[213] Ibid.

[214] Caulaincourt, Libaire, and Hanoteau, *With Napoleon in Russia*, 97-98.

[215] Lieven, *Russia Against Napoleon*, 471.

[216] Chandler, *The Campaigns of Napoleon*, 2158-2169.

[217] Caulaincourt, Libaire, and Hanoteau, *With Napoleon in Russia*, 98.

Following the two hours of bombardment, orders arrived for Prince Eugène to launch a frontal assault on the Great Redoubt with three divisions supported by the Second Cavalry Corps. The attack began at about 2:00 p.m. with the French cavalry penetrating the Russian line and entering the earthworks from the rear. French infantry breached the fortifications and eliminated the four Russian regiments defending it. The Great Redoubt was now in French hands, creating a large gap in the Russian center, and almost all of Kutuzov's reserves had been committed.[218]

Eugène attempted to exploit the French success by advancing with cavalry in the Russian center, but was quickly met by a Russian counterattack. The superior condition of the Russian cavalry defeated the tired mounts of the French cavalry five-hundred yards east of the Great Redoubt. Eugène pleaded for Napoleon to commit the Guard, but Napoleon again refused, and the Russian infantry took up positions behind a screen of cavalry.[219]

Kutuzov sensed the French tempo was flagging and ordered a counterattack towards Semionovskaya. Davout identified Russian preparations taking place to execute the counterattack and again pleaded with Napoleon to release the Imperial Guard. Napoleon still refused but directed eighty guns from the artillery reserve to provide aid. The fires provided by these guns were able to halt the Russian counterattack and allow the French to maintain their hard-fought gains.[220]

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[218] Chandler, *The Campaigns of Napoleon*, 2160-2161.

[219] Ibid., 2162-2163.

[220] Ibid., 2163-2164.

On the French right, Poniatowski began to advance forward to penetrate the Russian left. As evening began to settle, the French V Corps claimed the terrain to the east of Utitsa. The Russian left wing began to withdraw in order to reorganize their forces along the new front. The Russian withdrawal was complete by approximately 6:00 p.m., but the spirit of Kutuzov's army remained high. As night fell, both sides began to cease firing without official orders to do so.[221] The French army had gained only about one mile during the twelve hours of fighting. The French prepared themselves to continue the offensive the following day, but Kutuzov ordered a withdrawal to begin before dawn on the following day. The French, not willing to continue the battle of attrition that had occurred the previous day, allowed Kutuzov to leave the field, making no attempt to impede the Russian withdrawal towards Moscow.[222] Thus ended the Battle of Borodino.

Napoleon seems to have become overwhelmed by the physical and psychological tolls of war at the Battle of Borodino. Napoleon sought a decision through a frontal attack as opposed to the flanking maneuver suggested by his marshals, perhaps believing it too complicated for his large numbers of conscripts or resulting in another Russian withdrawal. The result was a bloody battle of attrition in which both sides displayed incredible forbearance, but left the battlefield in the hands of Napoleon, who therefore claimed victory.[223]

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[221] Caulaincourt, Libaire, and Hanoteau, *With Napoleon in Russia*, 102.

[222] Duffy, *Borodino and the War of 1812*, 144; Alexander Mikaberidze, "The Limits of the Operational Art: Russia 1812," in *Napoleon and the Operational Art of War Essays in Honor of Donald D. Horward* (Leiden: Brill, 2016), 265-316.

[223] Duffy, *Borodino and the War of 1812*, 170.

However, it was not the decisive victory he sought. The road to Moscow was now open to Napoleon, but at a high cost, as total French casualties are estimated to have ranged from 30,000 to 50,000. Napoleon's decisions not to accept Davout's plan to envelop the Russian position the night before the battle started and not to commit the Imperial Guard when the Russian center appeared to have been broken were his most impactful decisions and are now judged to have had largely negative impacts on the outcome of the battle.[224]

For his part, Kutuzov's remote headquarters behind Gorki did little to provide command and control over the Russian forces and rarely did more than send sporadic orders for unit movements through the dispatch of staff officers. Kutuzov spent most of the battle lethargically slumped over in his headquarters and left decision-making to his subordinate commanders, providing little to no direction to the army. The day concluded with approximately 44,000 Russian casualties. Kutuzov relinquishing control of the battlefield, and the Russian army retrograded towards Moscow with the army in good order.[225]

The belligerents' artillery arms at the Battle of Borodino served a critical role during the battle for both sides, although their individual performances differed

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[224] Chandler, *The Campaigns of Napoleon*, 2165; Duffy, *Borodino and the War of 1812*, 141-142; Mikaberidze, *The Battle of Borodino*, 70; Mikaberidze, "The Limits of the Operational Art: Russia 1812," 265-316; Philippe-Paul Ségur, *Napoleon's Russian Campaign* (Westport, CT: Greenwood Press, 1976), 23.

[225] Chandler, *The Campaigns of Napoleon*, 2166; Duffy, *Borodino and the War of 1812*, 141-142; Mikaberidze, *The Battle of Borodino*, 70; Mikaberidze, "The Limits of the Operational Art: Russia 1812," 265-316.

greatly.[226] The Russians showed great tenacity, constructed effective fieldworks, held their ground, and when forced to withdraw, did so in an orderly manner. Their ranks, pounded by French artillery, continued to stand firm in the face of concentrated French fires.[227] In spite of their steadfastness; however, Russian artillery was only able to succeed in its task of defending its positions for as long as possible. Russian artillery delivered effective fires during Poniatowski's advance out of Utitsa and against several French assaults in defense of the fleches, but otherwise performed in largely unsatisfactory manner.[228] The artillery pieces located inside the Great Redoubt were unable to adequately cover the approaches to the position and began to run out of ammunition. Guns along the Russian line were also positioned in the open, leaving them subject to devastatingly intense French counter-battery fire. These factors combined with the massed fires directed against the decisive point of the Great Redoubt and the fleches allowed the positions to be taken by French forces.[229]

Tactical Russian successes were offset by a lack of coordination at higher levels. First Army artillery commander Kutaisov proved to be more interested in involving himself in the hand-to-hand action instead of managing the employment of Russian artillery fires, which impeded the employment of all available pieces and deprived the Russians of their advantage in numerical superiority. Russian artillery was therefore

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[226] Mikaberidze, *The Battle of Borodino*, 70.

[227] de Caulaincourt, Libaire and Hanoteau, *With Napoleon in Russia*, 103.

[228] Duffy, *Borodino and the War of 1812*, 139-140.

[229] Lieven, *Russia Against Napoleon*, 458-459.

overmatched in each sector of the battlefield, although existed in superior numbers. When this was combined with problems resupplying the artillery, the Russians were only able to fire about 60,000 rounds, the same approximate number as the French. These circumstances resulted in Russian artillery's repeated defeat by the heavier volume of fire per gun provided by French gunners at Borodino.[230]

Individual Russian batteries fought bravely at Borodino but failed to concentrate their fires in order to achieve the effects of mass. Their batteries were heavily outnumbered in key sectors of the battlefield and were continually smothered by French cannon fire. Once batteries along the line were destroyed or forced to withdraw, new batteries would be ordered to take their place and suffer the same fate. The Russian guard artillery batteries were pushed forward to support the line regiments and ultimately suffered the same end. According to Dominic Lieven, Russian General Ivan Petrovich Liprandi noted that the Russian army's inability to mass its fires at Borodino was not a direct result of Kutaisov's death, as the Russians were never able to achieve the feat of massing fires throughout the campaign of 1812. It was only by 1813 that the Russian artillery arm had improved enough to mass its fires, and even then, it was only able to achieve it at times.[231]

Kutuzov echoed this sentiment, saying that the shortcomings of the Russian artillery accounted for the limited success of the Russian army at the Battle of Borodino. Regardless if Kutaisov's death during the assault on the Great Redoubt served as the

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[230] Duffy, *Borodino and the War of 1812*, 139-140; Lieven, *Russia Against Napoleon*, 473.

[231] Lieven, *Russia Against Napoleon*, 473-474.

ultimate blow to the Russian artillery or its failure was a manifestation of the Russian artillery arm's inadequate command and control and methods of employment, it was used to explain away many of the Russian shortfalls at Borodino.[232]

Unlike the Russian's, Napoleon's artillery arm served him well at the Battle of Borodino, delivering a bombardment of 90,000 rounds with a devastating concentration of fire on Russian positions.[233] Following the Emperor's inspection of the French and Russian positions, he knew Bagration's fleches and the Great Redoubt were be strongpoints along the Russian line that had to be taken if his frontal assault was to succeed, and he knew it would come at a heavy price. The Emperor had become increasingly dependent on massed formations of artillery, as evidenced by the Battle of Wagram, and he would prove it again Borodino. Having gained ever more experience employing the artillery arms in mass and perfecting his artillery organizations and methods of employment, Napoleon knew his artillery arm would be key to the success of the battle.[234] The night before the battle, Napoleon set his pieces for the impending battle. Sixteen artillery pieces from III and VIII Corps were emplaced, and the forty-gun grand battery was designated to strike the fleches. Napoleon issued orders to the Guard's artillery to be prepared to advance and provide artillery fires against the fleches.[235]

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[232] Duffy, *Borodino and the War of 1812*, 140-141; Lieven, *Russia Against Napoleon*, 473-474.

[233] Lieven, *Russia Against Napoleon*, 2165.

[234] Lieven, *Russia Against Napoleon*, 464-473; Mikaberidze, *The Battle of Borodino,* 61-70.

[235] de Caulaincourt, Libaire and Hanoteau, *With Napoleon in Russia*, 94; Coignet, *Narrative of Captain Coignet*, 223.

Napoleon's use of the artillery during the opening bombardment of the battle as preparatory fires provided a brutal cover for the advance of the frontal attack on the Russian lines. The French quickly identified that one-hundred six artillery pieces had been initially emplaced at too great a range to deliver accurate fires, so the guns quickly limbered and were in their next positions, providing concentrations of fire. The cannon moved with such speed to their new positions that it seemed as though there was never a break in the firing. The Russians quickly retaliated in such a dense reply of cannon fire that the whole battlefield became saturated with powder smoke.[236]

The artillery barrage signaled the infantry attack. Fifth Division of Davout's I Corps advanced towards the fleches, and Eugène advanced towards Borodino. Eugène stabilized his position after suffering many casualties by bringing up twenty pieces of artillery, which brought the Russian batteries at Gorki and the northern flank of the Great Redoubt into range. The number of French cannon targeting the fleches continued to increase as Napoleon added cannon to the number of massed guns to finally total approximately three-hundred fifty guns. The cannon proved critical in this moment and devastated the Russian defenders, which allowed the French to finally take the position and exploit the Russian center. Napoleon massed four-hundred pieces of artillery, which bombarded the Great Redoubt for over two hours and served a critical role in preparing the position for capture by Saxon cavalry.[237]

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[236] Chandler, *The Campaigns of Napoleon*, 2151; Coignet, *Narrative of Captain Coignet*, 223; Duffy, *Borodino and the War of 1812*, 95.

[237] Chandler, *The Campaigns of Napoleon*, 2158-2169; Lieven, *Russia Against Napoleon*, 471.

The use of artillery at the Battle of Borodino was awe-inspiring for the time, as it was the largest-scale artillery use in the 1812 campaign and was at the forefront of each phase of the battle. Russian and French gunners inflicted tremendous casualties on each other throughout the course of the day. The Russians made use of their defensive works to deliver deadly fires into the advancing French formations but suffered from a lack of organization and command and control, having attached their guns to the infantry regiments combined with the death of Kutaisov. [238]

The monumental artillery match at the Battle of Borodino illustrates Napoleon's use of the principle of mass in a bloody battle of attrition. The French artillery capitalized on the principle of mass against the fleches and the Great Redoubt during Napoleon's frontal assault to pulverize the enemy strongpoints. These were then exploited by the infantry and cavalry and ultimately tipped the balance of the battle in favor of the French army. [239]

[238] Duffy, *Borodino and the War of 1812*, 95; McConachy, "The Roots of Artillery Doctrine," 614-640; Lieven, *Russia Against Napoleon*, 473-474, 479.

[239] Duffy, *Borodino and the War of 1812*, 95; McConachy, "The Roots of Artillery Doctrine," 614-640; Lieven, *Russia Against Napoleon*, 473-474, 479.

CHAPTER 5

CONCLUSION

This thesis examined the influential military theorists and systems of ordinance of the eighteenth century that provided the foundation for Bonaparte's military education and thoughts on artillery employment. As a young artillerist, Napoleon came of age when the paradigm of artillery employment was increasingly challenged by influential thinkers. They believed the artillery to be one capable of more influence on the battlefield than only serving in siege and defensive roles, or distributed to the battalions and regiments in a manner that equally spread its fires out along the lines. These innovators wanted to elevate it to co-equal status as a full arm alongside the infantry, cavalry, and light forces.

The evolving concepts of artillery employment and the technological improvements of the eighteenth century serve as the backdrop against which Napoleon rose to power. Pieces became more mobile, and the ideas of their most effective employment were considered, but it took the novel operational and tactical approach of Napoleon Bonaparte to turn theory into practice. By applying the principles of mass, the artillery became not just a co-equal arm, but a decisive one, rising from its role as an ancillary support branch in the armies of the *ancien régime*.[240]

Furthermore, Napoleon realized the effects of massed artillery formations went beyond just the number of guns that were employed. He would augment divisional artillery units with companies from the artillery reserve to form grand batteries capable of

[240] Abel, "The Prophet Guibert," 8-39; Kiley, *Artillery of the Napoleonic Wars,* 138-150; *Bowden, Napoleon and Austerlitz*, 59-60; Elting, *Swords Around a Throne*, 7-8; Quimby, *The Background of Napoleonic Warfare*, 145-155.

delivering large quantities of fire and then quickly repositioning to capitalize on gains made by the infantry and cavalry. At the command of the Emperor, these capabilities continually matured through experience. General Bonaparte massed thirty guns at Battle of Lodi in 1796 and continued to utilize similar artillery formations. Bonaparte employed nineteen guns at the Battle of Castiglione in 1796 and eighteen at Marengo in 1800. During the Battle of Austerlitz, the Emperor formed two grand batteries of twenty-four and eighteen guns that delivered devastating fires against the Pratzen Heights prior to the main attack and prevented the French center from falling. The batteries following the Battle of Austerlitz were considerably larger. One-hundred and twelve guns filled a gap in the French line at the Battle of Wagram in 1809 and were subsequently employed to support the decisive assault. At Borodino, two-hundred guns bombarded the Russian earthworks in advance of the assaults and defeated Kutuzov's counterattack on the French center.[241]

Napoleon's tactics at the Battle of Austerlitz were based in offense and maneuver, which directly correlated to the employment of his forces. This approach would be used to great success at Austerlitz and was replicated throughout the Emperor's reign. This approach usually consisted of a large tactical flanking maneuver or envelopment while continually presenting the enemy with multiple dilemmas via the arrival of more units to the battlefield from different locations. As the infantry and cavalry became engaged along the front, the arrival of French reinforcements of the enemy's flanks would cause

[241] McConachy, "The Roots of Artillery Doctrine," 614-640.

him to commit his reserve. Napoleon was adept at seeing the battlefield through time and space, an ability that his opponents generally lacked.[242]

The offensive use of artillery required mass and mobility to break the continuity of the enemy's line in this approach. Napoleon would employ his artillery to mass on the threatened sector of the enemy line and commit a flanking force to threaten the enemy's rear. Once the enemy commander further extended his line to face the flanking force, the horse artillery of the reserve would be released and rush forward to deliver devastating volleys of canister, creating the gap in the enemy's line through which the infantry and cavalry could exploit and deliver the final blow. In Napoleon's art of war, the artillery's decisive role was also in its offensive application of the principles of mass, as Napoleon would leverage the arm's devastating effects at the decisive time and place during the battle.[243]

Napoleon's tactical approach at the Battle of Borodino came at a later stage of his reign when he was forced to take precautions and assume risk in determining the method to confront the enemy. The decision not to accept Davout's plan for an envelopment force to position behind the Russian lines is in part a reflection of Napoleon's consideration of the large number of inexperienced soldiers in his formation and a poor overall tactical decision. Although not Napoleon's preferred method of attack, he decided the French army would execute a frontal attack to mitigate the risk of inexperienced

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[242] Chandler, *The Campaigns of Napoleon*, 602-620; David G. Chandler, "Napoleon and His Art of War," in *Napoleon* (Barnsley: Pen & Sword, 2002), 152-198.

[243] Chandler, *The Campaigns of Napoleon*, 602-620; Chandler, "Napoleon and His Art of War," 152-198.

soldiers executing complex maneuvers and in an effort to prevent the Russians from retrograding in the event the maneuver was identified.[244]

The use of a frontal attack at Borodino proved to be a brute-force battle of attrition. This approach would closer resemble the approach of the armies of the *ancien régime* and minimized Napoleon's ability to take advantage of his flexible corps that proved so successful in the face of the slow-moving mentality of the Austrian and Russian armies. To achieve victory, Napoleon relied on massed artillery to overwhelm the defenders and create a gap that could be exploited.[245]

In this approach, the Emperor would conduct reconnaissance of the enemy's line to determine its strengths and weaknesses. At Borodino, Napoleon determined the strongpoints of the fleches and the Great Redoubt as decisive terrain. The artillery was organized into a grand battery and provided an intense volume of fires intended to pulverize the positions and weaken their dispositions until the infantry and cavalry could advance far enough to seize the positions in close combat. Once the strongpoints in the emery's line fell, the infantry and cavalry would speed through the gap and the reserve would be committed in the breach, to which the horse artillery could then rush forward to deliver devastating fire at close range. The artillery that had moved forward would prove instrumental in repelling any counterattacks, as was the case at Borodino. In the tactical

[244] Chandler, *The Campaigns of Napoleon*, 602-620; Chandler, "Napoleon and His Art of War," 152-198.

[245] Chandler, *The Campaigns of Napoleon*, 602-620; Chandler, "Napoleon and His Art of War," 152-198.

approach of attrition, the artillery's decisive role lay in overwhelming and breaking the enemy's defensive positions.[246]

According to Bruce McConachy, Napoleon believed that a revolution in warfare centered on the artillery arm had been achieved. Artillery commanders were able to take the lead in the assault over those of the infantry and cavalry, and an army's strength would be measured in guns rather than battalions alone. Napoleon's grand tactics for the employment of the artillery arm aimed to compel the enemy to break the continuity of his line, exposing himself to exploitation. The artillery arm employed in mass would now serve as the primary mechanism of breaking the continuity of the enemy's line.[247]

Napoleon's employment of massed artillery allowed it to mature to a position of prominence and serve as a decisive force, rather than only in the role of a supporting force in the attack or for defensive purposes, as was common in the *ancien régime*. This was achieved through the application of Napoleon's specific art of war to the evolving technology and thought of artillery employment in the eighteenth century. Following Napoleon's reign and dominance over Europe, military doctrine would increasingly transition to focus on the offensive employment the artillery arm's strength in the massing of fires on the enemy to achieve decisive results, following in the footsteps of Napoleon's innovative art of war and his artillery arm.[248] "At heart, Napoleon was a

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[246] Chandler, *The Campaigns of Napoleon*, 602-620; Chandler, "Napoleon and His Art of War," 152-198.

[247] McConachy, "The Roots of Artillery Doctrine," 614-640.

[248] Ibid.

gunner. There had been kings who had made artillery their hobby; Napoleon was an artilleryman who made a hobby of breaking and making kings."[249]

[249] Elting, *Swords Around a Throne*, 220.

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