

FROM GLORY TO MENIAL: THE MULTIFACETED USE OF HORSES IN WAR

1701-1918

by

ANDREA VARGA, B.A.

THESIS

Presented to the Graduate Faculty of
The University of Texas at San Antonio
in Partial Fulfillment
of the Requirements
for the Degree of

MASTER OF ARTS IN HISTORY

COMMITTEE MEMBERS:
Abraham Gibson, Ph.D., Chair
Brian Davies, Ph.D.
Catherine Clinton, Ph.D.

THE UNIVERSITY OF TEXAS AT SAN ANTONIO
Liberal and Fine Arts
Department of History
December 2023

DEDICATION

To my amazing parents. Thank you for your constant love and support.

ACKNOWLEDGEMENTS

I am extremely grateful to my thesis advisors, Dr. Abraham Gibson and Dr. Brian Davies, who provided the expertise, feedback, and invaluable patience that allowed me to complete this work. Additionally, words cannot express my gratitude to Dr. Catherine Clinton, an inspiring role model who never ceased challenging and pushing me to grow as a historian as well as an individual. I am also grateful to each professor and colleague at UTSA for guiding me and inspiring me to continuously explore the vast expanse of this topic. Lastly, I could not have undertaken this journey without my family, especially my parents. I would not be in this position had it not been for their sacrifices and belief in me.

December 2023

FROM GLORY TO MENIAL: THE MULTIFACETED USE OF HORSES IN WAR 1701-1918

Andrea Varga, M.A.
The University of Texas at San Antonio, 2023

Supervising Professor: Abraham Gibson, Ph.D.

The history of mankind has been carried on the back of horses. On March 3, 2023, a study published in the journal *Science Advances* shed new light on the relationship between man and horse. The study explains that “five Yamnaya individuals well-dated to 3021 to 2501 calibrated BCE from kurgans in Romania, Bulgaria, and Hungary”¹ showcased patterns of wear on their bones, suggesting regular horse riding. These five individuals have set the marker for the oldest examples of horsemen. These people who inhabit this land have deep-rooted ties with equines, often being called “the first nomads of the world.”² These nomads would not only use their horses for daily transport but relied on them as warhorses. The horses and their riders became feared on the battlefield using rudimentary forms of cavalry. Particularly, the country of Hungary has been extensively studied. In 896 A.D., the kingdom of the Magyars was formed by seven tribes galloping onto the plain of the Danube.³

In 924 A.D., Madena, an anonymous poet, wrote a song (*O tu qui servas armis ista moenia*) as the walls of Madena were being augmented in preparation for the attack of the

¹ Martin Trautmann et al., “First Bioanthropological Evidence for Yamnaya Horsemanship,” *Science Advances* 9, no. 9 (March 3, 2023), <https://doi.org/10.1126/sciadv.ade2451>.

² Ibid.

³ Anne Marshall Zwack, “Seeing Hungary at a Gallop,” *The New York Times*, March 18, 1990, accessed November 7, 2023, <https://www.nytimes.com/1990/03/18/travel/seeing-hungary-at-a-gallop.html>.

Magyars. The poet writes, “Nunc te rogamus, licet servi pessimi, / Ab Ungerorum nos defendas jaculis” (Now we ask you, even though we are the worst of servants, / to protect us from the arrows of the Hungarians).⁴ The culture of horsemen continued to grow each century, being mentioned continuously by the European cultures. The men continued their ancient practice of proper horsemanship, caring for their horses at home and on the battlefield. In return, the horses continually carried the country through the evolutions of warfare. In the fifteenth century, the famed Hungarian *huszár* cavalry was well established. The *huszár* technique of cavalry rose from antiquity and spread throughout the entirety of Europe, crossing the world and becoming implemented in the United States of America. To this day, the Hungarian people maintain their cultural ties to the horses to which they owe their country. There are many people who continue the ancient practice of the Hungarian equivalent of cowboys, called “csikós.”⁵

This thesis will focus on the eighteenth century through World War I, tracing the ways in which the warhorse, once thought to be a glorious instrument of warfare, became an outmoded menial weapon of war with each passing century. Each chapter will focus on a specific element that significantly impacted the evolution of equine warfare. A deeper examination of the cultural aspect in Chapter One, the multifaceted use of the animals explored in Chapter Two, and the progressive mechanization seen in Chapter Three reveals that, eventually, these contributing factors led to a drastic change in the ways horses could serve on the battlefield.

⁴ Giulio Bertoni, *Relatio Translationis Corporis Sancti Geminiani (M.XC.IX-M. C. VI)*, vol. 6, pt.1 (Tipi della casa editrice S. Lapi, 1907), 12.

⁵ Great Big Story, “These Hungarian Horsemen Predated the American Cowboy,” August 22, 2017, <https://www.youtube.com/watch?v=CiYsphB1XWA>.

TABLE OF CONTENTS

Acknowledgments.....	iii
Abstract.....	iv
Chapter One: Horse Culture in the 18 th Century.....	1
Battle of Blenheim	1
Battle of Rossbach	9
Chapter Two: The Roles of Horses in 19 th -Century Battles	17
Battle of Waterloo.....	17
American Civil War.....	27
Chapter Three: Edged out by Mechanization in the 20 th Century	36
Battle of Haelen	36
Battle of Moreuil Wood	43
Conclusion	49
Bibliography	50
Vita	

CHAPTER ONE: HORSE CULTURE IN THE 18TH CENTURY

Battle of Blenheim

A quick search of “major events in the 18th century” will first lead readers to explore the War of the Spanish Succession (1701-1714). It is easy to become lost in where to begin understanding the war due to its numerous battles. However, four years into this war, “the decisive blow struck at Blenheim, resounded through every part of Europe; it at once destroyed the vast fabric of power which it had taken Louis XIV, aided by the talents of Turenne, and the genius of Vauban, so long to construct.”⁶ Prolific historian and writer Joseph Hilaire Pierre René Belloc, remarks that “a battle is no more than an incident in a campaign.”⁷ However, the value of the battle can be great when the results have an immediate effect on the campaign. Just as The Battle of Blenheim (August 13, 1704) had a memorable impact on the War of the Spanish Succession, so did the horse culture of the involved countries on utilizing their horses as weapons of war.

There is a distinguishable difference between the horsemanship practiced by the English and French. These differences give insight into one of the key contributors to France’s first significant defeat in 40 years and its commander-in-chief being captured. Historian Eric Niderost brings to attention that this war depended on “primitive transportation,” requiring a massive number of warhorses.⁸ It is important to note that the British section of Marlborough’s wing only made up a quarter of the cavalry squadrons. The rest were a mixture of Dutch, Hessian, Danish, and Hanoverian troops. Joining Marlborough to form the Grand Alliance was an Imperial Army

⁶ William Blackwood And Sons, “MARLBOROUGH, NO. I.,” *Blackwood’s Edinburgh Magazine* 58, no. 357 (July 1845): 1–28, https://www.gutenberg.org/cache/epub/28336/pg28336-images.html#Page_28.

⁷ Hilaire Belloc, *The Battle of Blenheim*, by Hilaire Belloc, 1911.

⁸ Eric Niderost, “War of the Spanish Succession: Battle of Blenheim,” *HistoryNet*, November 18, 2020, <https://www.historynet.com/war-of-the-spanish-succession-battle-of-blenheim/>.

commanded by Prince Eugene of Savoy. Eugene drew upon the horsemen of Austria, Denmark, Prussia, and Imperial Germany to comprise the cavalry of his wing.⁹ Despite the blend of countries, it can be said that each of these locations had ancient ties with equines that continued to course through the men's veins. Most of the troops were "country-bred lad[s]" who found practicing good horsemanship natural.¹⁰ They placed their horses' comforts before their own, ensuring proper stables, grooming, and feed for the horses. The care and love the "country-bred lads" had for the horses was demonstrated during the march to Blenheim. Interestingly, they arrived with the horses not over-tired. The horses' good health was due to the men opting to walk for lengthy periods to rest their horses rather than being comfortable in the saddles. The results of natural horsemanship were clear. The cavalymen arrived at Gross Heppach in June 1704. Meeting Marlborough's cavalry and dragoons, Eugene commented: "I never saw such better horses, better clothes, finer belts and accoutrements, but money, which you don't want in England, will buy clothes and fine horses, but it cannot buy that lively air I see in every one of these troopers faces."¹¹ This lively air was the natural feeling of *esprit de corps*. The degree at which the men had taken care of their horses "was a simple matter of pride to a good horseman and brought with it an enthusiasm."¹² The contrast of the French cavalymen's view of and approach to their horses would also have clear results.

On August 2, 1704, the French "confidently peered down from the ridge of their hill" at Blenheim.¹³ The cavalry was proud of their "long list of past battle honours [and was] sure of

⁹ "Blenheim: The Battle That Created The Marlborough Legend," Forces Network, August 11, 2017, accessed November 7, 2023, <https://www.forces.net/services/army/blenheim-battle-created-marlborough-legend>.

¹⁰ James Falkner, *Marlborough's War Machine 1702-1211* (Pen and Sword, 2014), 184.

¹¹ David Chandler, *The Art Of Warfare In The Age Of The Marlborough* (Da Capo Press, Incorporated, 1995), 56.

¹² Falkner, *Marlborough's War Machine 1702-1211*, 183.

¹³ Charles Spencer, *Battle for Europe: How the Duke of Marlborough Masterminded the Defeat of the French at Blenheim* (John Wiley & Sons, Inc., 2005), 334.

eventual victory as their forebears had been for sixty years.”¹⁴ However, this pride was in vain. The men took pride in being victorious, unlike the horsemen under Marlborough, who took pride in the upkeep of the horses. The French cavalry’s horses were noticeably in worse condition than those of the British, with saddle sores being a prominent problem. The horse was simply a weapon of war to the French. Marlborough’s troops had arrived on the banks of the Danube fit and ready to go straight into action even after the long march through poor weather. Marshal Tallard’s cavalry troops had to endure a similar march. However, the feed was insufficient, and an outbreak of the equine disease glanders (*Burkholderia mallei*) spread among the horses. Already weakened by the Frenchmen’s paltry horsemanship, the disease decimated Tallard’s cavalry as it swept through like a forest fire. Quick replacements were sought out among the farms of Bavaria; however, they were not by any means military standard. These causal sequences culminated in a critical weakness for the French. As it turned out, the cavalry was the key element in the outcome of the battle.

Alongside their horse care, the strategic tactics in which the warhorse was used gave the Grand Alliance the victory. The early eighteenth century was a transition period for cavalry tactics. Remnants of the seventeenth century could occasionally still be seen while other countries began adopting new cavalry charge methods. The French are notable for reverting to the outdated method of “troops riding towards the enemy, halting and firing with pistols or short muskets.”¹⁵ Throughout the day on August 13, Tallard’s troops repeatedly halted to discharge their weapons, and their forward impetus was lost. The cavalymen were unable to move swiftly

¹⁴ Ibid.

¹⁵ Rod MacArthur, “The Evolution of Tactics in the 18th Century,” Rod’s Wargaming, May 29, 2019, <https://rodwargaming.wordpress.com/military-historical-research/military-historical-research/the-evolution-of-tactics-in-the-18th-century/>; John A. Lynn, “Tactical Evolution in the French Army, 1560-1660,” *French Historical Studies* 14, no. 2 (January 1, 1985): 176, <https://doi.org/10.2307/286581>.

around the battlefield, instead overlapping each other. The choice to abandon the practice of an all-out charge was ill-timed.

In stark contrast to French thinking, Marlborough took on the bold tactic of relying on the sword as the only weapon for his cavalymen. Viewing the firearms of the early eighteenth century as cumbersome and ineffective, Marlborough wanted his squadron's fighting effectiveness to be free of the firearm's operational distraction. Brigadier-General Kane, one of Marlborough's officers, noted the commander's belief in the importance of the cavalry being able to "handle their swords well, which is the only weapon our British Horse makes use of when they charge the enemy; more than this is superfluous."¹⁶ As a reinforcement of this belief, the horsemen received three pistol rounds per trooper per campaign. The pistol did not make it into the battle drill; it was only to be used in situations such as a cavalryman being ambushed while foraging.

Marlborough also adopted a cavalry formation designed to efficiently use the striking power and mass effect that warhorses are suited to achieve. The formation called for squadrons to assemble in two or three lines, each comprised of a troop. The senior troop commander would lead the unit, with his trumpeter accompanying him at the front. This technique was further improved by instructing the troops to ride *en muraille*.¹⁷ The first line would be closed up, with the second line tightly following behind the first. The jackbooted innermost knee of each rider would be "locked firmly behind the knee of the rider to his front."¹⁸ To enhance the effectiveness of the "flying wedge," the men would need to turn down the top of their long leather boots by a

¹⁶ Spencer, *Battle for Europe: How the Duke of Marlborough Masterminded the Defeat of the French at Blenheim*, 334.

¹⁷ For more information on the *en muraille* formation, see the explanation provided by military historian Graham J. Morris: <https://battlefieldanomalies.com/napoleonic-wars/eylau/image024-6/>.

¹⁸ Falkner, *Marlborough's War Machine 1702-1211*, 189.

few inches to prevent the legs and knees from being crushed in the tight charges. The double thickness also provided protection from musket and pistol shots. Ironically, Jean-Philippe Eugène, Comte de Merode et marquis de Westerloo, a Flemish cavalry commander serving for the French, gave testimony to why the English method of folding the jackboot was a clear advantage. He recalls that “a bullet had been fired at me at point-blank range, it had failed to penetrate thanks to my strong thigh boots with thick flaps . . . the bullet had got as far as my stockings but had penetrated no further.”¹⁹ He gained a swollen knee but avoided any long-term damage.

The firsthand account of Captain Peter Drake gives a clear illustration that although the French method of using firearms was occasionally successful in wounding the enemy, overall, the French tactic was ineffective. Drake’s opponent, a French cavalryman, had to press the muzzle of his firearm firmly against Drake before shooting to cause damage. Even so, the description explains that “his ball only grazed my shoulder and tore the flesh a little.”²⁰ Had the soldier been a small distance further, “it seems that little harm would have been done at all,” perhaps something similar to The Comte de Merode-Westerloo’s swollen knee.²¹ Throughout the Battle of Blenheim, this back-and-forth of methods would be seen. When the French cavalry slowed down their charge to shoot their pistols, two fractions of Marlborough’s cavalry force took advantage and split their troops to ride around the back of the French. However, The English were then fired upon as they slammed into the French centre, leading to the death of squadron leader, Major Richard Creed. Despite the tug of war between culture and methods, the

¹⁹ Robert Parker and David Chandler, *Robert Parker and Comte de Mérode-Westerloo: The Marlborough Wars*, 1968, 276.

²⁰ Peter Drake, *Amiable Renegade The Memoirs of Captain Peter Drake 1671-1753*, ed. Sidney Burrell (Stanford University Press, 1960), 167.

²¹ Falkner, *Marlborough’s War Machine 1702-1211*, 193.

final charge of Marlborough would decide the fate of the once “most unstoppable force in Europe.”²²

As the day approached 5 p.m., Marlborough prepared to deliver the “decisive blow” of Blenheim. He gathered “no less than 28 infantry battalions, about 14,000 troops, and 71 squadrons of cavalry, about 5,000 horsemen” to advance against the 60 squadrons of cavalry and nine battalions of infantry.²³ As 5 p.m. passed, the trumpets began blowing, the drums beating, and as the Allied infantry approached, the French cavalry squadrons were launched, but the wall of bayonets were impenetrable by the exhausted horses. The Allied army’s steady volleys also swept away the French infantry. At this point, Marlborough ordered the “flying wedge” to be formed. The two parallel lines of horses stood nearly three miles across, with Marlborough in front, ready to lead his men into the final charge. He raised his sword, and the trumpeter blew his horn, and the cavalry began “at full trot, knee-to-knee, swords at the ready. This wall of horse and horsemen moved with ever-increasing speed and aggression and with an irresistible momentum.”²⁴ The ground pulsated as thousands of horses thundered towards the weakening French center, and “the hearts of the French horsemen failed them.”²⁵

The formidable Maison du Roy, or King’s Household cavalrymen, awaited them. Well known for their pride and confidence, the sensations created by the perfectly executed cavalry charge must have been overwhelming as they discharged their firearms and fled. The nine infantry battalions were left without protection. The Allied cavalry wheeled left, joining the

²² “Blenheim: The Battle That Created The Marlborough Legend,” Forces Network, n.d., <https://www.forces.net/services/army/blenheim-battle-created-marlborough-legend>.

²³ Niderost, “War of the Spanish Succession: Battle of Blenheim.”

²⁴ Ibid.

²⁵ Ibid.

infantry, and forced the French horsemen, clinging to their horses, to plunge into the Danube, causing “3,000 of them to drown.”²⁶

The Battle of Blenheim came to a close at 9 p.m., and Tallard had surrendered to Marlborough near Hochstadt road. Both men acknowledged the immediate turning point of European history that occurred in the previous hours. As the men approached each other, Marlborough said, “I am very sorry that such a cruel misfortune should have fallen upon a soldier for whom I have the highest regard.” Tallard responded with, “And I congratulate you on defeating the best soldiers in the world.”²⁷ Tallard was taken off of the battlefield in Marlborough’s personal coach and remained a prisoner in Nottingham for the next eight years. Marlborough’s story is vastly different. His skills at this battle established his reputation as a “great captain,” earning many honors and the royal manor of Woodstock.²⁸

The post-war life of the leaders of each army provides an easy-to-understand example of what each side suffered or gained from the Battle of Blenheim. However, the detailed numbers and statistics of the war reveal the massive role the eighteenth-century warhorse played in these outcomes. Marlborough marched to the Danube with “not less than 12,000 horses.”²⁹ Breaking this number down into the different types of warhorses allows the reader to gain a sense of how central the warhorse was in eighteenth-century warfare. The cavalry portion of the Allied army is not completely known. It was recorded that 2,000 English cavalry were present; however, the number of remounts is unstated. The army also had 1,700 supply carts and an artillery train, with

²⁶ National Army Museum Staff, “Battle of Blenheim,” National Army Museum, accessed November 7, 2023, <https://www.nam.ac.uk/explore/battle-blenheim>.

²⁷ “Blenheim: The Battle That Created The Marlborough Legend.”

²⁸ Niderost, “War of the Spanish Succession: Battle of Blenheim.”

²⁹ Ivan P. Phelan, “MARLBOROUGH AS LOGISTICIAN (Continued),” *Journal of the Society for Army Historical Research* 68, no. 273 (1990): 40, <https://www.jstor.org/stable/44224692>.

both requiring 5,000 horses to pull them.³⁰ These numbers pale in comparison to the force under Tallard. The French brought with them “8,000 wagons and over 15,000 horses.”³¹ The number of lives lost on both sides gives a sobering image of the difference proper warhorse usage can make. It was at the cost of 12,000 men for the Allies to win the “glorious victory.” The French casualties are estimated to be “18,000 men killed, wounded, and drowned, and a further 13,000 taken prisoner, for a total of 31,000 out of 60,000 engaged.”³² The army was also stripped of monetary items as the Allies took a booty of “100 cannons, 3,600 tents, 34 coaches and eight casks of silver.”³³ Such drastic losses and gains dictated the fate of the warhorse all throughout Europe.

The Allies would go on to occupy Munich, Ingolstadt, Augsburg, and Ulm in the following months. The excellence of the British soldiers was celebrated with a parade from the Tower of London to Westminster. The parade consisted of “thirty-four regimental standards...carried by the cavalry,” marking the welcomed and encouraged use of the warhorse in England.³⁴ However, the French suffered the dramatic loss of Tallard’s cavalry and became “victims of one of the most comprehensive defeats in French military history.”³⁵ This loss reverberated throughout the many theories and manuals of horsemanship in France. Henry Herbert, 10th Earl of Pembroke addressed that the system of horsemanship lacked proper instruction throughout four editions of influential treaties.³⁶ Pembroke’s work simplified the art

³⁰Ibid.

³¹ Ibid.

³² Ibid.

³³ Ibid.

³⁴ Spencer, *Battle for Europe: How the Duke of Marlborough Masterminded the Defeat of the French at Blenheim*, 396.

³⁵ Ibid, 369.

³⁶ The editions are as follows: *A Method of Breaking Horses, and Teaching Soldiers to Ride* (1761 and 1762), revised and retitled, *Military Equitation; or, A Method of Breaking Horses, and Teaching Soldiers to Ride* (1778 and 1793).

of military horsemanship for the French. However, when looking at the percentages of cavalry in the armies of France and Britain throughout the eighteenth century, it is evident that the blow of Blenheim surpassed any attempts to refine the warhorse in France. In the years 1648-1715, the cavalry made up thirty percent of France's army. The British cavalry was twenty-seven percent. In the latter half of the eighteenth century, England maintained the same percentage, however, France began to fade their reliance on cavalry charge victories, dropping down to twenty-one percent.³⁷

Although the Battle of Blenheim did not end the War of the Spanish Succession, it has been regarded by many historians as the strategic turning point of the war. The Battle of Gettysburg would be similar in this fashion. Napoleon Bonaparte, the leader of yet another great cavalry battle (Waterloo), commissioned a biography of Marlborough, and it is worth pondering if the Emperor took inspiration from the horsemanship perspectives of Marlborough.³⁸ “‘Such,’ says Voltaire, ‘was the celebrated battle which the French called the battle of Hoeschtaedt, the Germans Blindheim, and the English Blenheim.’”³⁹

Battle of Rossbach

Over 226 years ago, the Battle of Rossbach (November 5, 1757) was fought in the west of Saxony. Part of the Seven Years War, the battle has been regarded as “Frederick the Great's single most impressive victory.”⁴⁰ The battle only lasted ninety minutes. However, a greatly outnumbered Prussian army successfully defeated the French under the leadership of King Frederick II of Prussia, creating a lasting legacy. The leadership and detail Frederick placed into

³⁷ Chandler, *The Art Of Warfare In The Age Of The Marlborough*, 30.

³⁸ Stephen Saunders Webb, *Marlborough's America* (Yale University Press, 2013), xvi.

³⁹ Edward Shepherd Creasy, *The Fifteen Decisive Battles of the World from Marathon to Waterloo*, 1885, 281.

⁴⁰ Christopher Clark, *Iron Kingdom: The Rise and Downfall of Prussia, 1600-1947* (Belknap Press, 2008), 201–2.

his cavalry also contributed to the decline in the French Monarchy's prestige. François-Joachim de Pierre de Bernis, the French foreign minister, observed that after the Battle of Rossbach, "more than ever before, our nation is outraged against the war. Our enemy, the King of Prussia, is loved to the point of distraction... but the court of Vienna is hated..."⁴¹ The power of warhorses, in one battle, influenced the politics of Europe.

The extreme difference a country's equine culture can make in the way the warhorse was employed during battles was clearly demonstrated by Frederick. The Prussian cavalry which entered the Seven Years War was a labor of love. Frederick inherited a cavalry that was very neglected by the previous reign. Learning from the lessons of battles from the past, Frederick took to Marlborough's cavalry style of relying on "cold steel" instead of firearms. However, he took these lessons a step further and redefined what roles he wanted his cavalry to play. The Prussian hussars had taken lessons from their opponents and, under Frederick, became modernized. The Austrians recruited their horsemen from the "classic hussar country of Hungary."⁴² Although the men fought on warhorses since the beginning of their country's origin, a lack of adapting to the change of warfare left them inferior to Frederick's well-trained cavalrymen. The Prussian hussars would drill alongside the dragoons and were capable of adapting to the form they were required to fight in. The men could quickly maneuver between squadrons, companies, and troops. The cavalrymen also worked hand in hand with their infantry counterparts, often working in a combined advance, making it possible to overtake larger armies.

Frederick produced a cavalry that had "a level of effectiveness unrivalled by any other European Army of any period" by instilling a great pride and a high standard of horsemanship in

⁴¹ House of History, "The Battle of Rossbach, 1757 AD 🦄 (Part 8)," July 8, 2022, <https://www.youtube.com/watch?v=D74FxXhJiNA>.

⁴² Christopher Duffy, *Prussia's Glory: Rossbach and Leuthen 1757*, 2003, 15.

each cavalryman.⁴³ This was achieved through requirements that the men and their horses bond through riding each day together in peacetime and war. In his own words, Frederick explains, “The cavalry must be instructed man by man and horse by horse...The officer must see that the men ride continually so that each man can turn and twist his horse and be completely its master...the day was wasted on which the rider had not exercised his horse.”⁴⁴ Alongside daily bonding, the horsemen were required to attend yearly training sessions, with Frederick personally attending these trainings. He also gathered the cavalry leaders from all over Prussia to meet and have them observe his demonstrations of the methods he expected them to implement. He would show clear examples by leading a squadron himself at these meetings.

The great Prussian cavalryman’s training intensified as the King became pleased with the cavalry’s efficiency. It was stressed to leaders that there was to be a balance between training individual men and training cohesively as large masses of cavalry. In camps, he would gather “as many as 60 to 70 squadrons” for leaders to handle.⁴⁵ In the peace before the Seven Years War, Frederick guaranteed that his horsemen would be prepared to fight. Six years before entering the war, “he lays down that in approaching an enemy 1,200 yards away, the first 600 are to be covered at the trot, the last 600 at a good gallop. Four years later he demands 4,000 yards at the trot, 1,800 at the gallop, and the last 300 to 400 at full speed.” Such speeds required extreme skill

⁴³ John Mackenzie, “Battle of Rossbach,” britishbattles.com, accessed November 7, 2023, [https://www.britishbattles.com/frederick-the-great-wars/seven-years-war/battle-of-rossbach/#:~:text=The%20Battle%20of%20Rossbach%20is%20a%20striking%20example%20of%20this%20facility.&text=Heavy%20cavalry%20of%20the%20period,wore%20a%20light%20blue%20coat.](https://www.britishbattles.com/frederick-the-great-wars/seven-years-war/battle-of-rossbach/#:~:text=The%20Battle%20of%20Rossbach%20is%20a%20striking%20example%20of%20this%20facility.&text=Heavy%20cavalry%20of%20the%20period,wore%20a%20light%20blue%20coat.;); Louis Edward Nolan, *Cavalry: Its History and Tactics*. United Kingdom: n.p, 1860.

⁴⁴ W. H. Greenly, “The Cavalry of Frederick the Great: Its Training, Leading and Employment in War,” *Journal of the Royal United Service Institution* 53, no. 380 (October 1, 1909): 1306, <https://doi.org/10.1080/03071840909423014>.

⁴⁵ Greenly, “The Cavalry of Frederick the Great: Its Training, Leading and Employment in War,” 1307.

and precision. With each passing year, he prepared his men for such moments as that of the Battle of Rossbach.

On the other hand, the French continued the same pattern seen at Blenheim, treating their horses as simply a weapon of war, lacking proper horsemanship that would benefit the horse both in peacetime and war. The French equine culture stressed that the most important aspect of the French cavalry was to create a grand appearance. This was successfully attained, making “a universally favorable impression.”⁴⁶ The cavalry’s presentation even greatly surpassed that of the infantry arm of the French cavalry. It was noted that The Penthièvre Cuirassiers were “well set-up men on large-powerful horses [that] formed a regiment which lived up to the reputation of the French for having a fine-looking cavalry.”⁴⁷ However, it can be argued that the pride of parading on “fine-looking” horses once again came with a large cost to the French. To maintain this look of a striking cavalry, the captains strived to do the exact opposite of Frederick. Instead of keeping the horses in constant preparation, the expensive and fine-looking horses were restrained from participating in any demanding activities during peacetime. Treated as inanimate weapons of war, not only hindered the stamina and endurance of the horses, but the captains were also unwilling to “provide the necessary supplements in fodder” when they were not being useful as warhorses.

The French army’s complacency in the performance and well-being of their horses not only affected the horses, but the riders continued to contribute to the death of their weapons of war on the battlefield. One year before the Seven Years War began, a 1755 regulation attempted to reform this strategy, placing importance on the strategy of shock and impetus. However, it was

⁴⁶ Duffy, *Prussia’s Glory: Rossbach and Leuthen 1757*, 22.

⁴⁷ Johann Elieser Theodor Wiltsch, *Die Schlacht von Nicht Bei Rossbach Oder Die Schlacht Auf Den Feldern von Und Bei Reichardtswerben Den 5. November 1757* (Halle, 1858), 280.

too late to undo the damage that cultural pride had caused. The war came with such speed that neither the horsemen nor the warhorses had a chance to prepare. They were years behind the level of efficiency to which Frederick had polished his cavalry. If the French were able to be persuaded into a charge, “it was seldom at any faster gait than the trot,” creating easy targets for their enemy.⁴⁸ It took foreign regiments to somewhat counterbalance the drastically unprofessional French horsemen. However, the Battle of Rossbach made the consequences of such radically different views in equine culture very clear.

The Prussian cavalry arrived at Rossbach with 5,400 mounts. The French Imperial Army arrived with an overwhelming number of 7,340 mounts. In total, the Prussian Army of 22,000 men faced an army almost double theirs, with the French totaling 41,110 men. There were small odds of surviving, but Frederick would showcase that horses that were looked at as greater than a weapon of war could live up to the romanticized glory of majestic beasts ridden onto the battlefield to save the day. Prematurely, the musicians at the French camp presented a musical celebration with “all their complements of musicians, trumpeters, drummers, and fifers...gave sound as if they had won some great victory.”⁴⁹ However, the French lost, and the victory of Rossbach belonged to the Prussian horses. The brilliance of the proper use of the warhorse was revealed as the battle unfolded.

The French began the day by moving their cavalry south of Branderoda in hopes of outflanking Frederick’s army on the left. The king realized that the French began to turn east. If he did not act soon, the Prussians would be in a grave situation. Frederick dispatched his cavalry under General Friedrich Wilhelm von Seydlitz to the southwest, repositioning them in front of

⁴⁸ Duffy, *Prussia’s Glory: Rossbach and Leuthen 1757*, 22.

⁴⁹ Gregory Ricks, “Frederick the Great & The Battle of Rossbach,” Warfare History Network, March 9, 2016, <https://warfarehistorynetwork.com/frederick-the-great-the-battle-of-rossbach/>.

Reichardtswerben and Tagewerben. The army worked in a cohesive unit, with the artillery horses being positioned on the Janusberg hill. As the Imperial cavalry reached their eastern destinations, Seydlitz's cavalry confronted them with a charge. The Prussians failed to gain enough momentum, and the French cavalry came to aid their Imperial comrades.

In return, Seydlitz sent forth eighteen Prussian squadrons, supported by the five squadrons of Szekely Hussars, successfully completing a double-flank attack against both enemy forces. The men charged following the Prussian cavalry regulations, "full speed to within about twelve paces of the enemy, at which distance they are to raise themselves off of their saddles, make a stroke, and then stand fast."⁵⁰ This strategy gave the Prussians the needed advantage, gaining "both the weight and the impetus," necessary to force the enemy to break and flee back to their infantry. The very thing that was recommended in the French 1755 cavalry regulations had been perfectly executed by the Prussian army, which spent years refining their skills in this technique. At this point, Seydlitz made the decision not to follow through in the classic role of pursuing the fleeing enemy. Instead, he pulled his men to the side until the allied battalions came under heavy Prussian fire and once again led his men into a mass charge against the right flank of the Allies. The power of the Prussian warhorses and their riders sliced through the remaining French cavalry screen "and charged on into the mass of allied infantry beyond. The charge of the Prussian cavalry was too much and the allied columns simply dissolved into a frightened, fleeing mass before Seydlitz's troopers."⁵¹ The cavalymen hacked and sliced any Allied member in sight.

⁵⁰ William Fawcett and PRUSSIA. Army. Infantry, *Regulations for the Prussian Infantry Translated from the German Original* (Paul Vaillant, 1757), 127.

⁵¹ Ricks, "Frederick the Great & the Battle of Rossbach.

At five in the afternoon, the battle came to a close, the victors clearly shown in the substantial difference of casualties. The price of pride was, in fact, a large sum. The Allies suffered the loss of “10,152 men killed, wounded, or captured.”⁵² In contrast, the greatly outnumbered Prussians lost “only 30 officers and 518 men.”⁵³ The death of the horses matched that of their riders. Like most cavalry-heavy battles, the field was littered with horses dying or already dead. The result of the French tactic in ordering their expensive fine horses not to be strained before entering this battle was to lose their weapons of war in large masses.

Prussia’s massive cavalry victory impacted the horse culture in many countries. During peacetime, Frederick wrote his *Secret Instructions for his Generals*. The second part of the King’s book was entitled *Instructions for the Use of Light Troops*. The duties of the Hussars in the field were thoroughly described. Frederick ensured that “the conduct of the C.O., Squadron leader, subaltern, N.C.O. and Hussar, in the attack, is given in detail.”⁵⁴ Such details made the book sought after. In 1753, it was translated into German, and fifteen copies were distributed to the army officers the King deemed outstanding. Lt.-Colonel T. Foster retitled the work as *Military Instructions by the King of Prussia* in his 1762 English translation. By this time, the French had also created a translation, making the work understandable to most of Europe as it reached the hands of many cavalry leaders, who in turn implemented the successful techniques.⁵⁵

The well-known warhorse lover Napoleon stated that the Battle of Rossbach “was a

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Oskar Teichman, “Frederick The Great’s Cavalry,” *The Cavalry Journal* 16 (1926): 14.

⁵⁵ Hohenzollern, *Frederick’s Orders: Frederick the Great’s Orders to His Generals and His Way of War* (Winged Hussar Publishing, 2013).

masterpiece.”⁵⁶ Prussia’s cavalry continued on to follow the path of every European country’s cavalry. It rose and fell in greatness until it became an obsolete form of warfare.

⁵⁶ H.W. Koch, *A History of Prussia* (Routledge, 2014), 126.

CHAPTER TWO: THE ROLES OF HORSES IN 19TH CENTURY BATTLES

Battle of Waterloo

The 19th century saw the end of the traditional distinction between heavy and light cavalry.⁵⁷ By the end of the Peninsular War (1808-1814), heavy cavalry had taken over the scouting and outpost duties previously assigned to light cavalry. Horses were still an excellent weapon of war when used as a cavalry charge. When carefully managed for speed, they could reach maximums of 20km/h (12mph), as the Armee du Nord highlighted. Conditions were unfavorable at Waterloo (June 18, 1815) for the horses, limiting their full potential. A rain the night before left the ground soft and muddy. This cold, wet, and hard-to-walk-through situation had sapped the horses of their strength. Their fatigue had made them less effective. Even so, the roles they played that day forever changed history.

Both the Allied forces and France had charges during those fateful nine hours. However, this war showcased how adapting the use of the warhorses could make a drastic difference. Pure cavalry was no longer a dependable weapon of war. The fading of traditional warhorse roles made it clear why, one hundred years later, attempts to continue the use of this weapon of war would cause mass slaughter.

The Duke of Wellington was weary of his cavalymen. Through careful breeding, the army developed exceptional horses and trained brave men. However, the excitement of a cavalry charge often left Wellington's men prone to counterattacks. Charging at high speed, the men would lose formation and tire the horses as they approached the enemy. They rode down the enemy much longer than was efficient on the battlefield.⁵⁸ He remarks, "[There is] a trick our

⁵⁷ Philip J. Haythornthwaite, *The Colonial Wars Source Book*, 1996, 25, <http://ci.nii.ac.jp/ncid/BA40258767>.

⁵⁸ Waterloo Association, "British Cavalry," *The Waterloo Association*, January 21, 2019, <https://www.waterlooassociation.org.uk/2018/05/27/british-cavalry/>.

officers of cavalry have acquired of galloping at everything, and then galloping back as fast as they gallop on the enemy. They never keep... a reserve. All cavalry should charge in two lines, of which one should be in reserve.”⁵⁹ Sir David Dundas wrote *the Instructions and Regulations for the Formations and Movements of Cavalry* in 1796. In 1808, the War Office published *His Majesty’s Regulations for the Formation and Movement of Cavalry*. Having access to both, one would assume that they would avoid this mistake. However, there was no time to learn the instructions of these manuals during the workday. Officers and troopers entered the army untrained and remained as such.

The lack of trained cavalry left Wellington admitting that “misfortunes of this kind [self-destructive charges] have happened more than once... and I have frequently been present on occasions when the same conduct in the cavalry was likely to be attended by the same unfortunate results.”⁶⁰ For this reason, he would hold the cavalry back from charging at Waterloo. When backed into a corner, Wellington gave the allowance for The Union Brigade, the 1st Royals, Scots Greys, and 6th Inniskillings to charge. They proceeded with the all-to-familiar pattern. They were “reckless, out of control, initially successful and, in the end, self-consuming.”⁶¹ Although disorderly, their charge caused 4,000 casualties and routed another 15,000 French soldiers. Filled with adrenaline from the charge, the men went too far and advanced through the French Guard Battery. The counterattack from Jacquinet’s Lancers and

⁵⁹ MilitaryHistoryNow.com Staff, “Cavalry at Waterloo – How Mounted Troops Made History in the Napoleonic Wars’ Final Battle,” *MilitaryHistoryNow.Com*, September 4, 2018, <https://militaryhistorynow.com/2018/09/02/cavalry-at-waterloo-how-mounted-troops-made-history-in-the-napoleonic-wars-final-battle/#:~:text=At%20the%20Battle%20of%20Waterloo,but%20an%20important%20one%20nonetheless.>

⁶⁰ Wellington, *The Dispatches of Field Marshal the Duke of Wellington, During His Various Campaigns in India, Denmark, Portugal, Spain, the Low Countries, and France*.

⁶¹ Waterloo Association, “British Cavalry.”

Farine's Cuirassiers resulted in the British horsemen being sliced apart. The frivolous charge ended in The Union and Household Brigades losing 40% of their men.⁶²

Leading the French cavalry, Commander Marshal Ney was a stark contrast to Wellington's feelings on cavalry. Ney, a cavalryman himself, had high confidence in the training and equipment of the French cavalry. He was eager to lead the cavalry charges when the opportunity arose. Five hours had passed at Waterloo, and the infantry struggled to progress against the Allied lines. The call for cavalry support came in, and at 4 p.m., Ney launched over 8,000 French mounted cavalrymen as an assault. However, the evolved tactics of the British would present the traditional cavalry with significant problems.

The warhorses who played a more prominent part that day would earn their recognition as a separate regiment during the battle. The Royal Horse Artillery did not consist of men charging into battle on the backs of their noble steed. Instead, the noble steed was pulling its own demise as the prime weapon of war. During the Seven Years War (1754-1763), the lighter and agile cavalry units surpassed the heavy guns drawn by oxen teams. Charles Lennox, Duke of Richmond and Master-General of the King's Ordnance, would create the bases of the Royal Horse Artillery in 1793. They started with four troops armed with light artillery (6-pounder cannons) drawn by teams of light horses that kept up with the light dragoons. Ten years before Waterloo, the industry introduced the 9-pounder cannon as a response to the heavier French caliber guns. The successes of the horse artillery also led to the number expanding to twelve troops. Both the British and French would use their artillery; however, the British strategy would

⁶² Ibid.

prove superior, leading to a 13-pounder “Nery” cannon being introduced in 1904 and continuing its service throughout World War I.⁶³

The French tactic was to start the battle with artillery bombardment. The Allied army faced the 34 French batteries containing 246 pieces. During Ney’s cavalry attacks, the 27th Inniskilling Fusiliers suffered significant casualties. The battalion lost 478 of its original 750 men. An attack by d’Erlons’ Corps left a casualty of 3,000 men. The guns rendered 309 horses dead or wounded, drastically impacting the cavalry.⁶⁴

While the French began with bombardment, Captain Alexander Cavalié Mercer’s choice to disobey Wellington’s order would lead to the cry of “La Garde recule!”⁶⁵ The men would use the horse artillery as “a rapid response force, successfully repulsing attacks from the French and assisting the infantry.”⁶⁶ Wellington’s army consisted of 157 pieces. The twelve batteries had sixty pieces of nine-pounder guns. The remaining thirteen had six-pounders and howitzers. Fighting alongside the British at Waterloo, the Dutch-Belgian Brunswick Artillery used French cannons. Mercer was in command of G Troop. The troop consisted of 220 horses with six subdivisions. Five subdivisions were armed with a nine-pounder gun, and the sixth had a 5.5-inch howitzer. Each gun required eight horses, while six horses drew each of the nine ammunition wagons. Six horses also pulled a spare wheel carriage. In addition, the forge, curricule cart, and baggage wagons each needed four horses. There were eighty-four drivers and eighty gunners. The gunners took their positions either mounted individually or on the limbers.⁶⁷

⁶³ Stephen Luscombe, “Royal Horse Artillery,” n.d., <https://www.britishempire.co.uk/forces/rha.htm>.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ “Horse Artillery,” *Oxford Reference*, n.d., <https://doi.org/10.1093/acref/9780198606963.013.0579>.

⁶⁷ Luscombe, “Royal Horse Artillery.”

Wellington gave strict orders “to the artillery to leave their guns and take shelter inside the infantry squares when the enemy broke through.” Mercer’s troop placed themselves on the extreme right, allowing them clean views and shots at the enemy cavalry charging in the center. The French were one hundred yards away at this stage, advancing to a trot. Mercer’s first gunshot opened the door to a clear British victory. The first gun victoriously reduced the French to walk. Mercer recalls, “The discharge of every gun was followed by a fall of men and horses like that of grass before the mower’s scythe.”⁶⁸ The following rounds “reduced them to mounds of dead horses and men.”⁶⁹ Seeing the success of his horse artillery and the heavy casualties, Mercer could not fathom Wellington’s order. In Mercer’s opinion, the thought of his men leaving their guns and retreating into the square was unsafe and might make the Brunswickers not keep their nerve seeing their counterparts seek safety. Therefore, the guns continued, seeing “wave after wave of French dragoons and cuirassiers [fall] to the fire which Mercer’s Horse Gunners continued to produce in a rhythmic drill.”⁷⁰ The enemy could pair the incessant sounds of guns firing with the visual of a pile of dead men and horses slowly growing in front of the gun muzzles. Mercer’s firsthand account gives the reader a semblance of the environment in which the shooting took place. He writes, “The air was suffocatingly hot, resembling that issuing from an oven. We were enveloped in thick smoke, and ...the incessant roar of cannon and musketry, could distinctly hear round us a mysterious humming noise, ...and so thick were the trails of balls and bullets that it seemed dangerous to extend the arm lest it should be torn off.”⁷¹ The

⁶⁸ Luscombe, “Royal Horse Artillery.”

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ “Journal of the Waterloo Campaign, Kept throughout the Campaign of 1815 by the Late General Cavalié Mercer. With an Introd. by the Hon. Sir John Fortescue ...,” HathiTrust, 1927, <https://hdl.handle.net/2027/wu.89095867891?urlappend=%3Bseq=7>.

thick trail would continue to be fired until the French scrambled to the rear, and the last charge of the Imperial Guard broke. The call of “La Garde réculé!” marked the end of the continuous attacks against the line of Allied resistance.⁷²

Wellington’s horse artillery thrived, but the French cavalry demonstrated the limitations of traditional horse tactics. Around four p.m., more than 8,000 mounts were ordered to ride to the British lines. As the French cavalry made their way through the valley, the allied artillery sought to fire as many rounds as they could rapidly. As the horses got struck, they dropped and forcefully threw their riders to the ground. However, the surviving cavalry pressed on, and as they crested the ridge, they faced yet another of the cavalry’s greatest challenges. It was here where the Allied battalions skillfully formed squares, which was impossible for any cavalry to break through. The battalion had “front ranks kneeling, bayonets fixed, with the men in the second rank ready to fire.”⁷³ The battalion could feel the earth’s tremor as the heavy cavalry hordes approached. As the French crested, they launched themselves towards the squares. Under orders, the squares held their fire. The cavalry charged closer and closer, and only when the infantrymen could imagine the horse’s breath on their faces did the order of “Fire!” ring out. Recollections of the event described it “like a tidal wave of cavalry crashing upon the immovable rocks of the squares, seemingly engulfing them, but forcing the wave to break up and dissipate its energy as it swirled harmlessly around them.”⁷⁴ Both horse and man suffered immense carnage. Ordered to reserve their fire, the infantry shot wisely and took out the biggest asset of

⁷² Luscombe, “Royal Horse Artillery.”

⁷³ MilitaryHistoryNow.com Staff, “Cavalry at Waterloo – How Mounted Troops Made History in the Napoleonic Wars’ Final Battle.”; For more on infantry squares see: Hans Delbrück, *History of the Art of War: The Dawn of Modern Warfare*, 1990.

⁷⁴ Jonny Hough, “French Cavalry Assault,” *The Waterloo Association*, September 2, 2018, <https://www.waterlooassociation.org.uk/2018/06/05/french-cavalry-assault/>.

the cavalry. Even though, by that point, it was known that the cuirass could not take a musket bullet at close range, the men aimed for the horses. Shooting at horses gave the men an advantage as their target was a larger mass, and as the horse collapsed, the men riding on them fell. The cavalymen were most likely to break their necks as they hit the ground. If they survived the fall, the heavy armor worn made it almost impossible to stand up. There was a slight chance to escape if falling farther from infantry squares by releasing the straps of the armor. However, cavalymen without their horses were rendered useless.

The French cavalymen repeatedly attempted to charge over the crest over the next two hours. There was no time to count the attempts, but it is estimated that it is anywhere from six to fifteen charges. Although they were occasionally successful, their efforts were ultimately futile. Bombarded with artillery and continuous British and Prussian infantry squares forming at moments of weakness, the French grew exhausted and resorted to retreating to the French ridge and reforming behind their infantry. At the time, the French cavalry was considered the finest in Europe. The finest cavalry was decimated and retired for the last time. The British and French cavalry tactics shaped the future of horses' roles on the battlefield.

Although many horses were "...devoted to Waterloo, little attention has been paid to them [by military historians]." Firsthand accounts give a glimpse into the carnage that occurred. Mercer's words detail the death of the average noble warhorse. Among his horse artillery, he describes how "a cannon-shot had completely carried away the lower part of the animal's head, immediately below the eyes."⁷⁵ Mercer ordered the fatally wounded but still-alive animal to be put out of its misery. While this horse passed swiftly, the majority suffered until they died. Mercer continues to describe how horse after horse lay on the ground with their entrails hanging

⁷⁵ Cavalie Mercer, *Journal of the Waterloo Campaign* (Casemate Publishers, 2012), 167–70.

out. The horses would “occasionally attempt to rise... quickly falling back again, would lift their poor heads, and, turning a wistful gaze at their side, lie quietly down again, to repeat the same until strength no longer remained, and then, their eyes gently closing, one short convulsive struggle closed their sufferings.”⁷⁶ There are no detailed records of these horses. They were left to rot or thrown into mass graves.

However, people have celebrated two notable horses from Waterloo as military heroes. Their lives give insight into the different lives of being a nineteenth-century warhorse. The names and legacies of Wellington and Napoleon’s horses (Copenhagen and Marengo) have transcended the boundaries of their century and countries. Marengo’s past remains unknown, just like the average warhorse. Although legend has it that the small white horse was captured during the Egyptian campaign, no “horse with the name Marengo appears in the registers of Napoleon’s stables or in any primary source.”⁷⁷ The little white horse made the name Marengo famous for his bravery and reliability as he served in many military campaigns. He had been injured eight times as a warhorse and was taken away to be sold in the United Kingdom upon defeat at Waterloo. Put on public display at the Waterloo Rooms after his capture, “all classes were impressed by the five visible wounds on his body, talk of a bullet in his tail, and the imperial crown and letter ‘N’ branded on his hind quarters.”⁷⁸ Although most warhorses will never be recognized for their service, Marengo would represent the dying practice. After the excitement of a warhorse on display wore off, they sold the stallion to Lieutenant-Colonel Angerstein of the Grenadier Guards. Marengo died at thirty-eight. Known as Napoleon’s favorite horse, the family

⁷⁶ Ibid, 182.

⁷⁷ The Waterloo Association Staff, “Napoleon Series Reviews: Marengo: The Myth of Napoleon’s Horse,” accessed November 7, 2023, https://www.napoleon-series.org/reviews/biographies/c_hamilton.html.

⁷⁸ “Horse’s Hoof Snuff Mill - Age of Revolution,” Age of Revolution, February 27, 2017, <https://ageofrevolution.org/200-object/horses-hoof-snuff-mill/>.

of Angerstein decided to preserve his skeleton. The public can view it on display at the National Army Museum in Chelsea, London. At the time of his death, they did not include two of his hoofs in the preservation of his skeleton. The family wanted a keepsake from the horse, so his two front hooves were removed and mounted in silver. As his legacy had become legendary, Angerstein gifted one hoof as a snuff box to the officers' mess at St. James's Palace, where it still resides today. Those interested can see another hoof at the Household Cavalry Museum in the form of a silver inkwell. In 2017, the family discovered Marengo's lost fourth hoof, 202 years after his last ride with Napoleon.⁷⁹ Engraved in gold, his hoof reads "Hoof of Marengo Barb[ary] charger of Napoleon ridden by him at Marengo, Austerlitz, Jena, Wagram, in the campaign of Russia, and lastly at WATERLOO."⁸⁰ Marengo's legacy lives on even centuries later.

Copenhagen's life was not that of the average warhorse. His genetic makeup was designed to be a perfect mixture. He was the epitome of a racehorse. It is explained that "he was got by Meteor (a chestnut, son of Eclipse, bred by Lord Grosvenor in 1783), out of Lady Catherine (bred by General Grosvenor in 1796), by John Bull, out of a mare by the Duke of Rutland's Arabian, out of a hunting mare, three parts thoroughbred."⁸¹ Bred for perfection, Copenhagen would live up to his thoroughbred bloodline. Alongside many military expeditions, the horse continuously carried Wellington for sixteen hours at the Battle of Waterloo. He showcased that despite the severe exertion, he was "[n]either sick or sorry" as when Wellington

⁷⁹ Simon De Bruxelles, "Napoleon's Steed Finds His Feet at Last," *The Times*, May 1, 2017, <https://www.thetimes.co.uk/article/napoleons-steed-finds-his-feet-at-last-g53nxsrss>.

⁸⁰ "Marengo's Hoof Snuffbox - Age of Revolution," Age of Revolution, February 22, 2017, <https://ageofrevolution.org/200-object/marengos-hoof-snuffbox/>.

⁸¹ Thomas Henry. Taunton, *Portraits of Celebrated Racehorses of the Past and Present Centuries : In Strictly Chronological Order, Commencing in 1702 and Ending in 1870 Together with Their Respective Pedigrees and Performance Recorded in Full / by Thomas Henry Taunton.*, 1887, 74, <https://doi.org/10.5962/bhl.title.35033>.

dismounted, “it is on record that when the Duke had dismounted, Copenhagen lashed out with a vehemence so sudden that his master narrowly escaped injury from his heels.”⁸² For feats such as this, Copenhagen’s name was already widely known when Wellington and he returned home to England in 1818. Admirers came to greet him, and women made jewelry from his hair. At twenty-eight years old, Copenhagen passed away. Unlike Marengo and most of his counterparts, they buried Copenhagen with full military honors.⁸³ Wellington’s son created an epitaph for the horse. The words ring true for every horse that served on June 18, 1815. The inscription reads, “God’s humbler instrument though meaner clay/Should share the glory of that glorious day.”⁸⁴

The word “Waterloo” carries various meanings to numerous people. However, all of these slight variations center around the famed battle. The term has become an idiom— “meet your Waterloo.” Cambridge Dictionary defines this phrase as “to be defeated by someone who is too strong for you or by a problem that is too difficult for you.”⁸⁵ The battle’s legacy surpasses changes in vocabulary, leaving an effect culturally. Pop group Abba entered their song “Waterloo” in the 1974 Eurovision Song Contest. Not only did the entry come first, but it also launched their international career. Multiple generations have etched the lyrics based on the phrase “meet your Waterloo” into their hearts.. The lyrics speak of a woman who “surrenders to a man and promises to love him while referencing Napoleon’s surrender at the Battle of Waterloo...Essentially, he’s her own personal ‘Waterloo.’”⁸⁶ Looking at the lyrics, one wonders

⁸² Douglas Straight, *The Pall Mall Magazine*, ed. Fredric Hamilton, vol. III, 1894, 631, <https://babel.hathitrust.org/cgi/pt?id=njp.32101064476896&seq=7>.

⁸³ Christopher Hibbert, *Wellington: A Personal History* (Da Capo Press, 1999), 65.

⁸⁴ Arthur Wellesley, *Wellington Anecdotes : A Collection of Sayings and Doings of the Great Duke.*, 2nd ed. (Addey and Co., 1852), <https://books.google.com/books?id=thRcAAAAQAAJ>.

⁸⁵ “Meet Your Waterloo,” October 11, 2023, <https://dictionary.cambridge.org/us/dictionary/english/meet-waterloo>.

⁸⁶ Tom Eames, “The Story of... ‘Waterloo’ by ABBA,” *Smooth*, May 17, 2021, <https://www.smoothradio.com/features/the-story-of/abba-waterloo-lyrics-meaning-eurovision-video/>.

how Napoleon must have felt after the crushing loss and being exiled to St Helena. ABBA sings the lyrics:

Waterloo, I was defeated, you won the war
Waterloo, promise to love you forevermore
Waterloo, couldn't escape if I wanted to
Waterloo, knowing my fate is to be with you
Wa-Wa-Wa-Wa-Waterloo, finally facing my Waterloo⁸⁷

Napoleon reflected on this battle in his exile; in 1816, his conclusions reflected that of the song. It was fate for him to lose the battle. He expressed his thoughts to Count de Las Cases, saying, “It is very certain that during the events of 1815, I relinquished the anticipation of ultimate success: I lost my first confidence. Perhaps I found, that I was wearing [*sic*] beyond the time of life at which fortune usually proves favourable; or, perhaps, in my own eyes...the spell that had hung over my miraculous career was broken.”⁸⁸ Perhaps it was fate that ended a war that had carried on for a long twenty-three years. However, studying that day's cavalry charges reveals much of what went wrong. Wellington brought 13,000 English, Dutch, and Prussian horsemen to the battlefield. Napoleon commanded nearly 16,000 cavalry troops. Approximately 45,000 horses took part in the Battle of Waterloo. Out of that 45,000, it has been estimated that 20,000 horses laid down their lives to end Napoleon's imperial power forever.⁸⁹

American Civil War

Forty-six years after the Battle of Waterloo, The United States of America would have its deadliest war. The Civil War raged on from 1861 until 1865. The death toll of over 700,000 is

⁸⁷ National Army Museum Staff, “Battle of Waterloo,” National Army Museum, accessed November 7, 2023, <https://www.nam.ac.uk/explore/battle-waterloo>.

⁸⁸ Emmanuel Auguste Dieudonné De La Cases, *Mémorial de Sainte Hélène, Vol. 4: Journal of the Private Life and Conversations of the Emperor Napoleon at Saint Helena; Part the Seventh (Classic Reprint)* (Forgotten Books, 2017), 143–45.

⁸⁹ Gareth Glover, *Waterloo in 100 Objects*, 2015, 14.

greater than American deaths in World War I and World War II combined.⁹⁰ This staggering number becomes even more somber after considering that the casualties of the warhorses that served are almost double—an estimated 1.2 million.⁹¹ Many Americans will recognize the names Ulysses S. Grant and Robert E. Lee. However, the steeds that carried them through battle (Cincinnati and Traveller) will most likely not be known or even connected to the American Civil War. These mighty horses represent the three million equines that served the country as a contribution to the mechanization of American wars. Although often perceived as a battle that witnessed a technological revolution, the Civil War remained “a war of animal power.”⁹²

Grant had more than ten horses throughout the span of the Civil War, however, Cincinnati has often been noted to be his favorite. The steed and General’s relationship began in a rare coincidence. On a rare leave of absence to St. Louis, Grant received a letter from a bedridden Cincinnati man who told Grant that he owned a horse that he deemed “the finest animal in America.”⁹³ Knowing that he would never ride again, the man gifted the horse to Grant under strict conditions. It was requested that Cincinnati (later called Cincinnati) should never be ill-treated or sold to someone who would do so.⁹⁴ Such treatment was called for as Cincinnati’s lineage was that of esteemed racehorses bred to perfection. Cincinnati was sired by Lexington, who for twenty years, was considered to be “the fastest horse in the world.”⁹⁵

⁹⁰ S. Mintz and S. McNeil, “Digital History,” accessed November 7, 2023, https://www.digitalhistory.uh.edu/disp_textbook.cfm?smtID=2&psid=3062. D tr

⁹¹ Livia Gershon, “A Horse’s-Eye View of the Civil War,” *JSTOR Daily*, April 12, 2019, <https://daily.jstor.org/a-horses-eye-view-of-the-civil-war/>.

⁹² Ann Norton Greene, *Horses at Work: Harnessing Power in Industrial America*, 2008, 119–63, <http://ci.nii.ac.jp/ncid/BA87891956>.

⁹³ Denise M. Dowdall, *From Cincinnati to the Colorado Ranger - The Horsemanship of Ulysses S. Grant* (Lulu.com, 2012), 146.

⁹⁴ Frazier Hunt, *Horses and Heroes - The Story of the Horse in America for 450 Years*, 2010, 120.

⁹⁵ Samantha Baskind, “The Lost Story of Lexington, the Record-Breaking Thoroughbred, Races Back to Life,” *Smithsonian Magazine*, June 8, 2022, <https://www.smithsonianmag.com/smithsonian-institution/lexington-one-of-the-greatest-race-horses-of-all-time-comes-roaring-back-to-life-180980132/>.

Lexington, in turn, was sired by another famed racehorse—Boston. These genetics created a horse perfect for the battlefield.

Photographs of the magnificent mount showcase the traits passed down through careful breeding. Viewers can see Cincinnati's "large, intelligent head, generous ears, and a slightly Roman profile. What stands out are his big bulging shoulders [and]...the enormous depth of his chest, which would have given him great stamina."⁹⁶ These characteristics, paired with the horse's even temper, quickly turned Cincinnati into the apple of his eye. Grant would keep his promise, only allowing two other people to mount his prize horse. Daniel Ammen, Grant's childhood friend, was trusted with this privilege and described Cincinnati as the "finest horse that he, Grant, had ever mounted."⁹⁷ The other man given the privilege of mounting the majestic steed was the only man who outranked Grant—Abraham Lincoln. Lincoln rode Cincinnati on his visit to see the men of Meade's and Butler's commands, accompanied by Grant riding "Jeff Davis" in June of 1864. He took much liking to the horse, and Grant notes that "Lincoln spent the latter days of his life with me. He came to City Point in the last month of the war and was with me all the time. He was a fine horseman and rode my horse 'Cincinnati' every day."⁹⁸ The warhorse would honorably serve Grant throughout the Overland Campaign (May 4-June 24, 1864).

On the opposing army, Traveller was the steady mount for the Confederate leader, General Lee. Unlike Cincinnati's thoroughbred genes, Traveller was a Saddlebred Gelding. Although capable of racing as well, the main purpose of Traveller's breed was to be used by

⁹⁶ Dowdall, *From Cincinnati to the Colorado Ranger - The Horsemanship of Ulysses S. Grant*, 149.

⁹⁷ Hunt, *Horses and Heroes - The Story of the Horse in America for 450 Years*, 210.

⁹⁸ The Ulysses S. Grant Homepage Staff. "Ulysses S. Grant Homepage - Grant the Equestrian," n.d., <https://www.granthomepage.com/grantequestrian.htm>.

“wealthy plantation owners to tour their enormous estates in comfort.”⁹⁹ Although the two horses were bred for different purposes, they both had advantages that made them ideal for the battlefield. Slightly shorter than Cincinnati, Traveller stood 16 hands tall and was said to be “sharp, nervous, [and] spirited.”¹⁰⁰ Lee bought the horse for \$200 from Captain Joseph M. Broun in 1862 after taking a fancy to him, often calling him “my colt.”¹⁰¹ After the purchase, the horse and his master became inseparable. Perhaps the best illustration of the love that Traveller and Lee shared is the words he dictated to his daughter Agnes after the war. He responded to an artist who requested a description of the horse, saying:

If I were an artist like you I would draw a true picture of Traveller—representing his fine proportions, muscular figure, deep chest and short back, strong haunches, flat legs, small head, broad forehead, delicate ears, quick eye, small feet, and black mane and tail. Such a picture would inspire a poet, whose genius could then depict his worth and describe his endurance of toil, hunger, thirst, heat, cold, and the dangers and sufferings through which he passed. He could dilate upon his sagacity and affection, and his invariable response to every wish of his rider. He might even imagine his thoughts, through the long night marches and days of battle through which he has passed. But I am no artist; I can only say he is a Confederate gray.¹⁰²

This love between man and horse was seen at the Battle of Gettysburg (July 1 – July 3, 1863), where Traveller gallantly served alongside the 80,000 warhorses present. On the bloodiest day of the battle (July 2, 1863), an estimated 840 Confederate warhorses were present, hauling seventy artillery pieces. Each cannon and its limber needed six horses. Another six horses were required for each caisson. Both armies also used their horses to pull numerous supply wagons. The need for horses continued to grow as many significant battles— including Antietam, 2nd Bull Run, and

⁹⁹ Dowdall, *From Cincinnati to the Colorado Ranger - The Horsemanship of Ulysses S. Grant*, 154.

¹⁰⁰ *Ibid.*, 151.

¹⁰¹ *Ibid.*

¹⁰² Robert Edward Lee, *The Recollections and Letters of General Robert E. Lee* (Konecky & Konecky, 1904), 95.

Fredericksburg—already claimed the lives of thousands of soldiers.¹⁰³ The versatility of the horse allowed them to provide a form of ambulances with “two and four team ambulances [carrying] men from the battlefield to aid stations and field hospitals further to the rear.”¹⁰⁴ On the last day of the battle, the most prominent use of the warhorse (cavalry) was given a chance to prove its worth.

The engagement was coordinated with Pickett’s Charge and is known as Custer’s Stand at East Cavalry Field. Often out shadowed and even forgotten, this cavalry charge has largely been overlooked by many Gettysburg historians. Custer’s own personal report of that day’s events was never published in the “128 volumes of *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*...printed by the U.S. government from 1880 to 1901... for reasons that are unknown to this day.” However, this minor event deserves to have its story passed down and ensure that the horses that gave their lives that day are not forgotten.

Four miles east of Gettysburg, the East Cavalry Field was strategically significant. The roads on the field’s northern and southern ends were the York Pike and the Hanover Road. The Hannon Road was occupied by Union cavalry under Brigadier General David McMurtrie Gregg in order to ward off approaches to the Army of the Potomac’s rear. However, Gregg came to the realization that if the Hannon Road and intersecting Low Dutch Road were left unoccupied, it was vulnerable to the Confederate army threatening the Union supply line. Gregg’s men were

¹⁰³ There are many other studies of these three battles, but Gettysburg has become emblematic of Civil War history. For this reason, I will be focusing on this battle. For further information, reference: Luther W. Hopkins, *From Bull Run to Appomattox: The Recollections of a Confederate Army Trooper of Company 'a,' Sixth Virginia Cavalry During the American Civil War*, 2011; Stephen Z. Starr, *The Union Cavalry in the Civil War: From Fort Sumter to Gettysburg, 1861–1863* (LSU Press, 2007).

¹⁰⁴ Chris Bagley, *The Horse at Gettysburg: Prepared for the Day of Battle*, 2021, 54.

spread across the field, and as luck would have it, Brigadier General George Armstrong Custer's 1,900 cavalymen, in addition to ten pieces of artillery, were available to assist Gregg in establishing the defensive line along the field's southern end.

Confederate Major General James Ewell Brown "J.E.B." Stuart arrived at the northern end of the field with around 5,000 cavalymen, and "one of the liveliest cavalry fights of the war" was set to take place.¹⁰⁵ Like many of the cavalry interactions throughout the Civil War, the men initially fought dismounted, exchanging artillery fire on both sides. The Confederates then returned to their Southern roots and launched the first mounted assault. A countercharge from the 7th Michigan led by Custer was ordered by Gregg. Like many cavalry commanders, Custer took his place in front of his men and shouted his famed battle cry: "Come on you Wolverines!"¹⁰⁶

Although he lacked sufficient experience as a commander of a full cavalry brigade, the tactics Custer employed that day combined Napoleon's cavalry tactics with more modern ones, therefore slowing down the rate at which the glorious cavalry charge became obsolete. The warfare tactic of shock power was an argued subject in the schools of horsemanship throughout the Civil War due to the less favorable terrain in America than the open plains of Europe. However, Custer's style proved that "the mounted charge...combined with the mobility, flexibility, and firepower of dismounted troopers armed with fast-firing repeating rifles could reap an important victory."¹⁰⁷ His charge successfully halted the Confederate attack.

At 3 p.m., 2,000 more Confederate cavalymen arrived under Brigadier General Wade Hampton. Once again, under the order of Gregg, Custer rode to the head of his regiment, the 1st

¹⁰⁵ "Custer's Stand at East Cavalry Field," American Battlefield Trust, October 4, 2022, accessed November 7, 2023, <https://www.battlefields.org/learn/articles/custers-stand-east-cavalry-field>.

¹⁰⁶ Ibid.

¹⁰⁷ Phillip Thomas Tucker, *Custer at Gettysburg*, 2019, 24.

Michigan. The Union attempted to first utilize horse artillery batteries to block the advance, but the skilled Southern horsemen were too quick. The cry of Custer was heard once again, and the two armies clashed. A soldier from Gregg's Pennsylvania regiment describes the jarring sound that comes with cavalry charges. He recalled, "As the two columns approached each other, the pace of each increased, when suddenly a crash, like the falling of timber, betokened the crisis."¹⁰⁸ The fighting lasted under an hour, with Stuart withdrawing after suffering heavy losses.

The number of casualties is not as great as other encounters at Gettysburg. The Union reported 254 casualties between McIntosh's brigade and Custer's Wolverines. Custer's Michigan Brigade suffered 219 of these casualties; the bulk of the casualties were in the 1st and 7th Michigan regiments. The Union inflicted "450 casualties on Stuart's vaunted cavalry."¹⁰⁹ While these numbers do not have the same shock value as the grand total of Gettysburg, the horses that gave up their lives at one of the least visited sites of Gettysburg National Military Park did not serve in vain. This battle protected the Union's main position and was "one of the most crucial situations during the final day of the most important battle that ultimately decided America's destiny and defined the nation anew."¹¹⁰

The Battle of Gettysburg saw a drastic difference in horse usage and deaths from the Battle of Waterloo. The Union and Confederates relied on 25,000 more horses than in the war of 1815. However, the loss was approximately 15,000 fewer equines than experienced at Waterloo. Perhaps this difference can be attributed to the difference in cavalry style. The Napoleonic tactic

¹⁰⁸ Stephen W. Sears, *Gettysburg* (Houghton Mifflin, 2003), 462.

¹⁰⁹ Eric J. Wittenberg, *Protecting the Flank at Gettysburg: The Battles for Brinkerhoff's Ridge and East Cavalry Field, July 2 -3, 1863* (Casemate Publishers, 2013), 199.

¹¹⁰

of letting mass cavalry charges decide the results of a battle became too risky as the decades passed. In the face of improved artillery, rifled muskets, and repeating rifles, “the boot-to-boot saber charge was not seriously planned for by veteran general staffs—Northern or Southern.” At Pickett’s Charge, historians record that only thirteen men were willing to ride their horses into battle. Out of these thirteen men, seven became casualties, four were killed, and three were wounded. Each of the thirteen horses was struck by artillery fire, and some died that day. The roles that the warhorse carried out continued to diminish in importance despite occasional outliers.

As the glory and role of mounted cavalry faded, so did the prominence of the assigned duties. The horse continued to be a beast of burden, but its use as a weapon continued to diminish. The Civil War, an emblem of American conflict, is a prime example of the shift in warhorse roles. The 1997 “Bridled Veterans” Horse and Mules Memorial sculpted by Tessa Pullan gives a visual of not just the equines of the Civil War but the 19th century as a whole. The riderless horse stands with its head drooped. Common consensus on the backstory implies that “the horse's rider is dead, and the weary horse may itself not have long to live.”¹¹¹ The statue does not depict a strong, glorious stallion but a broken and beaten-down animal, no longer a legend but a utilitarian creature. The Civil War showcases that this transition was not limited to Europe.

Both Traveller and Cincinnati were present on the day that began the end of the Civil War. On April 9th, 1865, Grant and Lee rode up to the McLean House on their mighty steeds as

¹¹¹ “Civil War Horse Sculpture, Middleburg, Virginia,” RoadsideAmerica.com, n.d., <https://www.roadsideamerica.com/story/54798>.

the two leaders agreed to the Confederate's surrender.¹¹² The leaders' two brave horses would go on to live the rest of their lives in peace. Grant kept his promise, turning down multiple offers for the purchase of Cincinnati, one notable offer amounting to the sum of \$10,000. When Grant became president, Cincinnati lived at the White House with him, eventually dying of old age. Traveller was also inseparable from his master, dying just a year after Lee's passing. The affection between man and beast transcended death as the warhorse was granted the honor of being buried just a few yards away from his longtime rider at Lee Chapel.

This peaceful life after the war was not the case for most of the horses that served in this decisive war. Eyewitnesses at Gettysburg estimated that they burned 3,000 deceased horses as the method of disposal. The equines that did not perish were inspected for their chance of survival and were either shot in the head to end their misery or were transported to temporary veterinary pens. Horses were just weapons of war and were considered to be the property of The United States government. Citizens were arrested if they tried to take the horses off the battlefields for themselves. The horses were instead sold.¹¹³ The countless unknown beasts would only be memorialized in the form of equine statues carrying the great war leaders such as that of Cincinnati and Grant. Although not given glorious honors, the menial jobs that the warhorse could fulfill would still be needed in the next century.

¹¹² "The Surrender Meeting - Appomattox Court House National Historical Park (U.S. National Park Service)," n.d., <https://www.nps.gov/apco/learn/historyculture/the-surrender-meeting.htm>.

¹¹³ Sarah Kay Bierle, "Equestrian Casualties at Gettysburg," *Emerging Civil War*, July 11, 2018, <https://emergingcivilwar.com/2018/07/11/equestrian-casualties-at-gettysburg/>.

CHAPTER THREE: EDGED OUT BY MECHANIZATION IN THE 20TH CENTURY

Battle of Haelen

A 1916 Fortunino Matania artwork titled *Goodbye Old Man: An Incident on the Road to Battery Position in Southern Flanders*, commissioned by the Blue Cross to raise money for the suffering horses in Europe, is the best illustration of this chapter's argument. Dr. Jane Flynn describes that while the image might seem simply like a dying horse, "the horse, when viewed closely, is clearly beyond any sort of aid. It is very nearly dead; its eyes roll upwards and blood bubbles at its mouth."¹¹⁴ At first thought, it might seem that horses continued to be used after World War I (WWI); however, on further examination, it becomes clear that this war was the defining transition point when the use of the warhorse had officially folded due to wartime mechanization.¹¹⁵

The times of advanced forces and pursuit were over. The cavalry was now backstage due to modern technology. On August 12, 1914, the first cavalry battle of WWI took place. The Battle of Haelen at Belgium revealed the growing decline of cavalry-reliant combat in The Great War. The warhorse was placed in a permanent support role for many countries following Haelen. The occurrences of men being killed due to the horse's inability to maneuver the evolved battlefield of WWI needed to be avoided. The failure of the German's saber charge contributed to the images of "horses wearing gas masks, horses pulling guns larger than themselves, and

¹¹⁴ Calvert, Chris and Jessica Gröling. 2012. *Proceedings of the Conference: Critical Perspectives on Animals in Society*, University of Exeter, UK, March 10, 2012. CPAS.pdf.

¹¹⁵ Peter Van Den Hove, "Halen, 12th of August, 1914. A Forgotten Battle in a Forgotten Landscape?," *ResearchGate*, January 1, 2014, 2, https://www.researchgate.net/publication/317090646_Halen_12th_of_August_1914_A_forgotten_battle_in_a_forgotten_landscape.

horses lying dead next to heaps of mortar shells.”¹¹⁶ The mixture of culture, roles, and modern weapons began to implement its full effect in the decline of the warhorse.

The Battle of Haelen gained its nickname ‘The Battle of the Silver Helmets’ after a priest who lived nearby wrote a poem about the destruction seen. He found ‘The Battle of the Silver Helmets’ most fitting for the title. He claimed that the many shiny silver helmets of the German cavalry covered the combat zone after the battle.¹¹⁷ These helmets were the representation of one of the last great cavalry charges. The success of Frederick the Great directly links to the history and heritage of the German cavalry, highlighting the topic of cultural ties to horses once again. However, the progress of mechanization would render that connection meaningless. Despite the impressive training and attention to equipment, “24 German officers, 468 men, and 843 horses were lost to the seemingly insignificant battle, while only a little more than 150 Belgian soldiers and 100 of their horses perished... Four complete German regiments failed in their task that day.”¹¹⁸ General von der Marwitz led the German cavalry corps as they faced the only cavalry division of the Belgian army, led by General De Witte. The day consisted of eight separate charges and became a watershed moment. Not only does the Battle of Haelen mirror past battles, but it is also a significant link in the chain of mechanized warfare.

Looking back to previous chapters to thoroughly understand the Germans’ disastrous day is essential. In under half a century, Waterloo’s large musket balls transformed into the rifle-muskets seen in the American Civil War. Entering World War One, the machine gun replaced

¹¹⁶ “Retreat of the Cavalry | AMNH,” American Museum of Natural History, n.d., <https://www.amnh.org/exhibitions/horse/how-we-shaped-horses-how-horses-shaped-us/warfare/retreat-of-the-cavalry>.

¹¹⁷ Van Den Hove, “Halen, 12th of August, 1914. A Forgotten Battle in a Forgotten Landscape?,” 12.

¹¹⁸ Joe Robinson, Francis Hendriks, and Janet Robinson, *The Last Great Cavalry Charge: The Battle of the Silver Helmets, Halen 12 August 1914*, 2015.

the rifle-musket. Alongside machine guns, the variety of artillery used in the Battle of Haelen would make people consider the German cavalry charge as the last charge on a fixed position using cavalry. The modernized weapons included artillery in the form of bolt action rifles, machine guns, mobile mortars, breach-loading, and rifled cannons. Each heavy artillery piece, the ammunition, and the baggage were horse-drawn. However, the military would learn lessons mirroring those of the American Civil War. On August 12, 1914, the German cavalry drew their sabers and “rode into a barrage of shrapnel and shell fire.”¹¹⁹ A nail was placed in the coffin—a cavalry charge with melee weapons was no match to the efficiency of the rapid mechanization of war.

There had been warning signs from the time of Napoleon; however, as the field manuals of the American Civil War, the machine gun’s magnitude was not considered. Since ancient times, the humans held cavalry superior to the infantry. As each country struggled with cavalry doctrines, Germany was no different. Traditionalists wanted to hold onto the antiqued notion of saber charges; the reformists saw the next steps and advocated for a dismounted cavalry to be the methodology. The American Civil War showcased the occasional circumstances in which cavalry raids still were advantageous and the new necessity of demounted action. Each side could see their perspectives playing out in the war and bring the manuals as examples to back their thinking.

In order to appease both sides, the German doctrine was a union of the two methods. Following this merged ideology, the “German cavalry charged into glory, history and disaster.”

¹¹⁹ Robert Koenig, “‘War Horse’ and the Great War’s Equine Holocaust,” *St. Louis Public Radio*, July 18, 2019, accessed November 7, 2023, <https://www.stlpr.org/arts/2012-06-07/war-horse-and-the-great-wars-equine-holocaust>.

¹²⁰ At the Battle of Haelen, the Belgian cavalry's dismounted action would surpass the German cavalry's mounted methods. The manuals used to argue that each side was no longer valid as this "insignificant war" made it unquestionable that the mounted soldier was now inferior on the Western Front.

Haelen was the first time the German cavalry attempted a charge against machine guns. Historians have described the decisions of the cavalry that day as "an enterprise that did more credit to the courage than to the judgment of the German soldier."¹²¹ The Belgians faced multiple charges from the Germans, each one ending in heaps of dead German horses and men. At the outset of the day, the horse-dependent parts of the German army faced a disadvantage. A lack of oats and intense heat had created extreme fatigue in the animals.

The Belgian forces spotted the first German Uhlans, and their fire forced the German cavalry to retreat. However, a reinforcement of artillery pressed the cyclists to withdraw to a farmhouse (Ijzerwinning) in the midst of the Belgian defensive line. After crossing the bridge across the Gete into the center of Haelen, the German army brought field artillery and 1,000 mounted troops to the center of Haelen.¹²² At the same time, the first attacks on Haelen station and the railway dam took place. Two companies of carabineer-cyclists repulsed the attack with rifle and machine-gun fire; however, they were forced to join the main force at noon as the German attacks made their position indefensible. The Belgian officers had taken the time to explore the landscape and found the hill known as the Mettenberg to be the most suitable place to take up their positions and guns. This location allowed the Belgian artillery to come into

¹²⁰ Robinson, Hendriks, and Robinson, *The Last Great Cavalry Charge: The Battle of the Silver Helmets, Haelen 12 August 1914*.

¹²¹ J. John McFarland Kennedy, *The Campaign Round Liege*, 2018, 85.

¹²² "The War of 1914. Military Operations of Belgium in Defence of the Country, and to Uphold Her Neutrality : Belgium. Armée ," Internet Archive, January 1, 1915, 19, <https://archive.org/details/warof1914militar01belg>.

action as their counterparts sought safety. With the advantage of Mettenberg's positioning, the shells exploded in the center of Haelen. The city's center was filled with numerous troops, and eliminating the enemy's guns became the top priority.

In Zelk, the 17th Dragoon Regiment encountered the road lined with hedges and fenced off with barbed wire. No action could be taken to the left or right. Their only option was to make a full frontal on the barricade. Barbed wire rendered horses ineffective, and many fell, their riders becoming prisoners of war (POW).

Almost immediately following the encounter with the 17th Dragoon Regiment, the Belgians were now faced with a new dragoon charge across the railway dam. They were heading towards the Mettenberg with sabers drawn. Lieutenant Van Overstraeten noticed that the carabineer-cyclists were still retreating and feared that they were retreating too fast. He ordered that they return to the Betsersbaan, "a deep hollow road crossing the landscape from north to south."¹²³ Before they could cross the field and reach the road, the German cavalry stormed it.

In the next two hours, the German cavalymen "launched a frontal charge at full gallop with drawn sabers. The rush, however, turned out to be dramatic and the German cavalry died an inglorious death."¹²⁴ In the same order as they had crossed the Gete River, regiments of dragoons, cuirassiers, and uhlans appeared on the battlefield. Caught in the open between the hollow road and IJzerwinning farm, the carabineer-cyclists made a valiant effort to repel the attacks. An essential help was the landscape, which proved to be a weakness for the cavalry. The sunken road before them was a natural barrier for the charging horses. The carabineer-cyclists

¹²³ Van Den Hove, "Halen, 12th of August, 1914. A Forgotten Battle in a Forgotten Landscape?," 6.; Wilfred Burie, "Brabançon Folklore: Brabançon Folklore-161 to 165," June 1, 2012, <https://www.echarp.be/folklore-braban%C3%A7on-161-165.php>.

¹²⁴ Vidar, "The Last Great Cavalry Charge with Drawn Sabre in Western Europe," *Medium*, February 21, 2023, <https://vidar-writing.medium.com/the-last-great-cavalry-charge-with-drawn-sabre-in-western-europe-22fad834b6c6>.

also had the help of their army's artillery, which, with great accuracy, dispersed the German cavalry. Ultimately, the sheer volume of the enemy charges overpowered the carabineer-cyclists. Once they lost their position, they were caught in the crossfire of the Belgian lancers opening fire on the charging cavalry from the IJzerwinning farm.

The Belgian troops had dismounted, and they "...poured vicious fire into repeated charges by the cavalry, cutting the advance units to pieces."¹²⁵ At the same time, one of the immense struggles horses would face throughout WWI foreshadowed began to play its part. The horses were becoming tangled in barbed wire and surrounding fence farms. The sunken road caused the massive beasts to slow in their charge. Each of those elements allowed for the horses to become large, vulnerable targets for the sharpshooters to pick them off and the machine guns to create mass damage. Volleys of fire from Hotchkiss machine guns and rifles put an end to the numerous charges.¹²⁶ The mass of artillery used by the dismounted cavalymen and the barricades made it impossible for the Germans to reach the Belgian guns on the Mettenberg. The Belgians repelled a force that was more than twice their numbers. Dewitt's orders for his men to dismount and greet the attack with mass rifle fire "influenced contemporary views on modern warfare."¹²⁷

The Commander-in-Chief of the Belgian army's report clearly shows how greatly outnumbered the Belgian army was. It is written that "six regiments belonging to the 2nd and 4th Cavalry Divisions, supported by the 7th and 9th Rifle Battalions and by three batteries, took part in this operation. Against these 4,000 sabres, 2,000 rifles and 18 guns, the Belgian cavalry

¹²⁵ Patrick Murfin, "Battle of the Silver Helmets—Cavalry Clash at Beginning of Industrial Scale War," n.d., <https://patrickmurfin.blogspot.com/2015/08/battle-of-silver-helmetscavalry-clash.html>.

¹²⁶ Guest Author, "Last Charge of the German Cavalry – The Battle of Halen," *Warhistoryonline*, April 13, 2018, <https://www.warhistoryonline.com/guest-bloggers/the-battle-at-halen-cavalry.html>.

¹²⁷ Staff, "Last Charge of the German Cavalry – The Battle of Halen."

division could only oppose 2,400 sabres, 410 cyclists and 12 guns.”¹²⁸ After three o’clock, the Germans were able to add “some 3,000 rifles, the 12 cannons, and the 12 machine guns of the 4th mixed brigade.”¹²⁹ This edge should have allowed the Germans an easy victory if the doctrine they followed was as effective as they considered it to be. However, the casualties were heavy on both sides. The Belgian army endured 1,122 casualties, including 160 dead and 320 wounded. The Belgian Cavalry Division lost 101 horses.¹³⁰ The German Cavalry Divisions’ casualties gave them a preview of the bleak war ahead. During the battle, the 4th Cavalry Division alone suffered casualties of 501 men and about 900 horses. Three years after the battle, Léon Van Der Essen, Professor of History at the University of Louvain, observed that the victorious combat of Haelen “... which, since the transformations of modern warfare, to-day appears to us as a vague reminiscence of ancient times. The charges of cavalry on horses with quivering nostrils, their riders bent over their necks, the lance or sword seeking to penetrate the flesh of the enemy, the uproar like a storm, the cries and shouts of terror or triumph, now appear no longer in the order of things. The humble village of Haelen was perhaps the last witness of them.”¹³¹

The Battle of Haelen was a small skirmish in the grand timeline of history, but upon closer look, one can see that the rapid mechanization of war was finally making the warhorse obsolete. The well-known World War Two tank commander Heinz Guderian included the small battle in his 1937 book, *Achtung – Panzer!*, which has since become a military classic. He explains how even the bravest cavalry charge is doomed against modern weapons.¹³² POW

¹²⁸ Belgium. Armée, *The War of 1914: Military Operations of Belgium in Defence of the Country, and to Uphold Her Neutrality*, 1915, 29.

¹²⁹ Léon Van Der Essen, *The Invasion & the War in Belgium from Liège to the Yser: With a Sketch of the Diplomatic Negotiations Preceding the Conflict* (London : T.F. Unwin, 1917), 113.

¹³⁰ Ibid.

¹³¹ Van Der Essen, *The Invasion & the War in Belgium from Liège to the Yser: With a Sketch of the Diplomatic Negotiations Preceding the Conflict*, 13.

¹³² Staff, “Last Charge of the German Cavalry – The Battle of Halen.”

Arther Brüche of Kürassier Regiment Nr 2 returned to the battle of Haelen forty-four years later. His memoirs allow for a unique firsthand account of a participant of Haelen. He explains that due to the heavy losses, “no longer would other cavalry attacks against machine gun supported infantry positions be conducted on other parts of the German Western Front.” The results of the battle had spread worldwide, making it onto the front page of *The Evening World* in New York on August 13, 1914.¹³³

The imagery of the battle’s aftermath was shocking to the cavalry charge lovers. Instead of victorious men, they saw numerous horse corpses buried in large, long pits covered with unslaked lime to decompose. The Belgian Corporal Jean Pecher took pictures of the battlefield the day after the battle. The horrors he witnessed were expressed in a letter to his parents. He describes how he “photographed the results of a cavalry charge where the Germans were literally crushed.... It was full of dead horses, not to mention the bodies of the cavalerymen, terrifying, one does not have a clue of this kind of spectacle.”¹³⁴ The new era of mechanized warfare had declared its entrance into European military history. The warhorse’s role had once again diminished, only to continue down that path throughout the next four years.

Battle of Moreuil Wood

Private Albert Dale set the scene for a critical event of WWI: “Everything seemed unreal. The shouting of the men, the moans of the wounded, the pitiful crying of the...dying horses...When I woke up, I was pinned under my horse, which was mercifully dead.”¹³⁵ On March 30, 1918, the Battle of Moreuil Wood, nearly four years after the Battle of Haelen,

¹³³ “The Evening World (New York, N.Y.), August 13, 1914, (Baseball and Racing Results-War Extra),” The Library of Congress, August 13, 1914, <https://www.loc.gov/item/sn83030193/1914-08-13/ed-1/>.

¹³⁴ Pecher, Jean., Vanacker, Daniël. *Un mitrailleur à l'Yser: la correspondance de guerre de Jean Pecher, 1914-1918*. Belgium: Commission Royale d'Histoire, 2012,58.

¹³⁵ Roman Jarymowycz, *Cavalry from Hoof to Track* (Stackpole Books, 2009), 150.

showed the significant cost that came with the final cavalry charges of World War I. Entering this battle, the Germans had considered the aftereffects of The Battle of Haelen. On the other hand, the Canadian cavalry held onto the hope of one day living out the classic role of their training. Forced into infantry positions, the men of the Canadian cavalry did not have as many opportunities to utilize their original training. The Canadian Cavalry Brigade (CCB) had gone through the transformation from glory to menial during The Great War. From the Battle of Haelen, the face of warfare changed dramatically in the early years of the war. The role of warhorses had already shifted due to the heavy use of “machine guns, barbed wire, trenched, minefields and artillery barrages.”¹³⁶ These innovations resulted in severe numbers of casualties.

Trench warfare had replaced wars that functioned on mobility. The twentieth-century military saw horses as a method of transport for military items. The once noble cavalry horse was now just a method of transportation for the men who rode them, too. The CCB men joined their horses in becoming outmoded. The CCB now dismounted and fought on foot as infantry.

However, the age-old longing and spirit of being a “true” cavalryman had not died out. The men dreamed of breaking free from the reserves, “waiting for the holy grail of a gap to appear in enemy lines, through which they could charge to rear areas.”¹³⁷ In the final year of the Great War, the rare opportunity to live out the dream of every cavalryman arose. The cost that came with the dream makes it questionable whether it was worth it. The pace was different for each country as they learned the harsh lesson that the method of warfare they had relied on for so long was now antiquated. While the Germans learned early on at Haelen that changes needed to

¹³⁶ John Boileau, “Charge of the Cavalry,” *Legion Magazine*, March 27, 2018, <https://legionmagazine.com/charge-of-the-cavalry/>.

¹³⁷ *Ibid.*

be made, the Canadian cavalymen had to wait until the end of the conflict to test old doctrine and tactics.

As the war progressed, the very technology that began as horse-drawn took up the horse's traditional duties. The tank and armored car took on the concepts of reconnaissance, shock action, and pursuit. There was no worry about them dying from machine gun fire or tripping in barbed wire; however, the military did not yet perfect the use of this technology. The frequent use of radio communications was yet to come, and coordination between all mechanized branches was not effective. This problem gave a space for the warhorse to retain some purpose on the battlefield, no matter how reduced it had become. The CCB had three regiments. Each regiment had 526 officers and men. The CCB had the Royal Canadian Horse Artillery (RCHA) as part of their mechanization. More advanced than the examples of horse artillery previously seen in this paper, the RCHA was comprised of two batteries. Both batteries contained "four 13-pdr. guns," which was "2,200 pounds for gun and carriage."¹³⁸ By the time of Moreuil Wood, the "No. 1 Canadian Gun Squadron with...six Vickers .303 machine guns. No.7 (Cavalry) Field Ambulance... [and] the 1st Canadian Cavalry Brigade Supply column" were all added to the Cavalry Brigade. Despite the massive number of horses and their varying roles, Lieutenant Gordan Muriel Flowerdew's charge would stand out as the most memorable event of the day..

The army tasked Flowerdew with taking his squadron to the northeast corner of the wood and attacking the enemy. Joined by British Brigadier-General Jack Seely as he rode off to inform his squadron commander, Flowerdew remarked how "it is a splendid moment. I will try not to fail you."¹³⁹ The British-born Flowerdew was a 33-year-old pre-war Canadian Militia

¹³⁸ John R. Grodzinski, *Fighting for Canada: Seven Battles, 1758-1945* (R. Brass Studio, 2000), 245.

¹³⁹ *Ibid.*

cavalryman. The opportunity of leading a cavalry charge was what every cavalryman dreamed of. For Flowerdew, the long-awaited chance of his heroic charge had come.

Perhaps the most memorable moment from this battle was the battle cry of Flowerdew. Leading the Strathconas C squadron around the edge of the wood, he realized that an encounter with the enemy could come very soon. He began to form his squadron. As he was doing so, he noticed that about 300 yards to his front, two lines of German infantry accompanied by artillery were approaching. Flowerdew's three troops had come face to face with the two lines. It would be certain death to charge at them. The three troops totaled around seventy-five men. They were now face to face with "perhaps 300 German infantrymen...supported by an artillery battery and a machine-gun company."¹⁴⁰ The Canadians would also learn the effect that "six 150 mm guns and...Maximum 08 7.92 mm machine guns" would have on horses.¹⁴¹ In hopes to "exploit whatever element [his] squadron's appearance had created," he ordered a charge.¹⁴²

The words "It's a charge, boys, it's a charge!" would be Flowerdew's lasting legacy, as leading this charge was the last thing he did. Reg Longley, the squadron's boy trumpeter, rode directly behind Flowerdew. Longley heard the command and raised his horn to sound the charge. However, there was no sound. "Horse and rider had been shot down."¹⁴³ Despite the boy trumpeter's death, despite seeing what lay in front of them, the Strathconas bravely charged forward. The past and the future clashed as sabers were pitted against rifles and machine guns.¹⁴⁴ This great cavalry charge was, in fact, certain death. Sergeant Tom Mackay's legs became riddled with bullet holes. Fifty-nine in one, the other uncountable as the holes ran into each other.

¹⁴⁰ Boileau, "Charge of the Cavalry."

¹⁴¹ Grodzinski, *Fighting for Canada: Seven Battles, 1758-1945*, 263.

¹⁴² Boileau, "Charge of the Cavalry."

¹⁴³ Ibid.

¹⁴⁴ Jarymowycz, *Cavalry from Hoof to Track*, 150.

Flowerdew, in front, approached the first line of the menacing enemy. Within thirty seconds, he and the Strathconas covered the 300-yard distance. A minute into the battle, Flowerdew went down. Shot through the chest and both thighs, he died of his injuries the following day.¹⁴⁵

Flowerdew's death was a sacrifice in the greater Battle of Moreuil Wood. His squadron flooded past his injured body, sabers drawn, "cutting down more than 70 Germans."¹⁴⁶

The charge gathered momentum, and the soldiers saw a glimpse at the dying method of warfare. Riders were only a few inches from each other, galloping at full speed; the horses' hooves were throwing up clods of mud. As they "advanced in the face of German machine gun and small arms fire—with artillery rounds exploding around them—each rider drew his sword."¹⁴⁷ At a range of 400 meters, they opened fire at the attacking squadrons. A war diary of Germany's 238th (Württemberg) Field Artillery Regiment details the aftermath. A first-hand account recalls, "In a few minutes, one could only see a few riderless horses still heading toward our gun lines. The greatest part of the riders lay dead or wounded on the ground. A few lucky ones were able to escape this fate through quick retreat."¹⁴⁸

One hundred twenty men entered the C squadron charge, and fewer than half returned. This sobering thought continues as, at the end of the battle, "The CCB tabulated a total of 305 casualties and lost 800 horses."¹⁴⁹ Germans reconquered Moreuil Wood and Rifle Wood the following day. Though the CCB recaptured the latter afterward, Moreuil Wood remained under German control until August 1918. The use of mounted warfare continued to diminish

¹⁴⁵ Aaron Curtis, "The Battle of Moreuil Wood | VALOUR CANADA," *VALOUR CANADA | Educating Canadians About Our Shared Military Heritage*, September 23, 2022, <https://valourcanada.ca/military-history-library/battle-moreuil-wood/>.

¹⁴⁶ Boileau, "Charge of the Cavalry."

¹⁴⁷ Jarymowycz, *Cavalry from Hoof to Track*, 264..

¹⁴⁸ Boileau, "Charge of the Cavalry."

¹⁴⁹ Curtis, "The Battle of Moreuil Wood | VALOUR CANADA."

throughout WWI and World War II, until it became clear that the ancient weapon of war had succumbed to the modern world. The once glorious charge was now reduced to the image of the broken bodies and spirits of the once majestic animals.

CONCLUSION

As showcased, change is inevitable, and adaptability is key to a less tumultuous transition. Horses were, are, and will always remain an inseparable cultural facet of humanity. However, their military use, without a doubt, has faded into the past. The romanticized vision of heroic cavalymen charging into battle only served to delay what was inevitable and increased the number of equines lost to war. The mechanical horsepower proved to be no match for the vulnerable flesh of these often overlooked “weapons of war,” the noble warhorse. The evolution of war stamped out the glory of breed, bravery, or nobility and left merely the stump of pure strength.

Exploring this topic brings to light the complexity of the relationship between man and horse. There is a vast distance between almost mythical and disposable, yet war was able to achieve an emulsion of the two when it came to the warhorse. Such an intriguing subject deserves further investigation and offers invaluable historical contributions. The glory days of the warhorse are over, yet the lessons taught will continue to shape humanity’s worldview.

Wars changed, military tactics changed, and insights on the usefulness of the horse in battle changed. But the horse itself remained unchanged by all of these. As reflected in the wisdom of the flowing Yiddish proverb: “The wagon rests in winter, the sleigh in summer, the horse never.”

BIBLIOGRAPHY

Primary Sources

BOOKS:

- Armée, Belgium. *The War of 1914: Military Operations of Belgium in Defence of the Country, and to Uphold Her Neutrality*, 1915.
- Bertoni, Giulio. *Relatio Translationis Corporis Sancti Geminiani (M.XC.IX-M. C. VI)*. Vol. 6, pt.1. Tipi della casa editrice S. Lapi, 1907.
- De La Cases, Emmanuel Auguste Dieudonné. *Mémorial de Sainte Hélène, Vol. 4: Journal of the Private Life and Conversations of the Emperor Napoleon at Saint Helena; Part the Seventh (Classic Reprint)*. Forgotten Books, 2017.
- Drake, Peter. *Amiable Renegade The Memoirs of Captain Peter Drake 1671-1753*. Edited by Sidney Burrell. Stanford University Press, 1960.
- Fawcett, William, and PRUSSIA. Army. Infantry. *Regulations for the Prussian Infantry Translated from the German Original*. Paul Vaillant, 1757.
- Hohenzollern. *Frederick's Orders: Frederick the Great's Orders to His Generals and His Way of War*. Winged Hussar Publishing, 2013.
- Lee, Robert Edward. *The Recollections and Letters of General Robert E. Lee*. Konecky & Konecky, 1904.
- Parker, Robert, and David Chandler. *Robert Parker and Comte de Mérode-Westerloo: The Marlborough Wars*, 1968.
- Pecher, Jean. *Un Mitrailleur à l'Yser: La Correspondance de Guerre de Jean Pecher, 1914-1918*, 2012.
- Straight, Douglas. *The Pall Mall Magazine*. Edited by Fredric Hamilton. Vol. III, 1894.
<https://babel.hathitrust.org/cgi/pt?id=njp.32101064476896&seq=7>.
- Taunton, Thomas Henry. *Portraits of Celebrated Racehorses of the Past and Present Centuries : In Strictly Chronological Order, Commencing in 1702 and Ending in 1870 Together with*

Their Respective Pedigrees and Performance Recorded in Full / by Thomas Henry Taunton., 1887. <https://doi.org/10.5962/bhl.title.35033>.

Van Der Essen, Léon. *The Invasion & the War in Belgium from Liège to the Yser: With a Sketch of the Diplomatic Negotiations Preceding the Conflict*. London: T.F. Unwin, 1917.

Wellesley, Arthur. *Wellington Anecdotes : A Collection of Sayings and Doings of the Great Duke*. 2nd ed. Addey and Co., 1852.
<https://books.google.com/books?id=thRcAAAAQAAJ>.

Wiltsch, Johann Elieser Theodor. *Die Schlacht von Nicht Bei Rossbach Oder Die Schlacht Auf Den Feldern von Und Bei Reichardtswerben Den 5. November 1757*. Halle, 1858.

JOURNAL ARTICLES:

Greenly, W. H. "The Cavalry of Frederick the Great: Its Training, Leading and Employment in War." *Journal of the Royal United Service Institution* 53, no. 380 (October 1, 1909): 1300–1326. <https://doi.org/10.1080/03071840909423014>.

The Evening World. (New York, NY), Aug. 13, 1914.
<https://www.loc.gov/item/sn83030193/1914-08-13/ed-1/>.

William Blackwood And Sons. "MARLBOROUGH, NO. I.," *Blackwood's Edinburgh Magazine* 58, no. 357 (July 1845): 1–28.
https://www.gutenberg.org/cache/epub/28336/pg28336-images.html#Page_28.

Secondary

BOOKS:

Bagley, Chris. *The Horse at Gettysburg: Prepared for the Day of Battle*, 2021.

Belloc, Hilaire. *The Battle of Blenheim*. STEPHEN SWIFT & CO., LTD., 1911.
<https://www.gutenberg.org/files/32195/32195-h/32195-h.htm>.

Brose, Eric Dorn. *The Kaiser's Army: The Politics of Military Technology in Germany During the Machine Age, 1870-1918*. Oxford University Press on Demand, 2004.

Chandler, David. *The Art Of Warfare In The Age Of The Marlborough*. Da Capo Press, Incorporated, 1995.

Clark, Christopher. *Iron Kingdom: The Rise and Downfall of Prussia, 1600-1947*. Belknap Press, 2008.

Creasy, Edward Shepherd. *The Fifteen Decisive Battles of the World from Marathon to Waterloo*, 1885.

- Delbrück, Hans. *History of the Art of War: The Dawn of Modern Warfare*, 1990.
- Dowdall, Denise M. *From Cincinnati to the Colorado Ranger - The Horsemanship of Ulysses S. Grant*. Lulu.com, 2012.
- Duffy, Christopher. *Prussia's Glory: Rossbach and Leuthen 1757*. Emperor's Press, 2003.
- Falkner, James. *Marlborough's War Machine 1702-1211*. Pen and Sword, 2014.
- Falls, Cyril. *Great Military Battles*, 1969.
- Glover, Gareth. *Waterloo in 100 Objects*, 2015.
- Greene, Ann Norton. *Horses at Work: Harnessing Power in Industrial America*, 2008.
<http://ci.nii.ac.jp/ncid/BA87891956>.
- Grodzinski, John R. *Fighting for Canada: Seven Battles, 1758-1945*. R. Brass Studio, 2000.
- Gudmens, Jeffrey J. *Staff Ride Handbook for the Battle of Shiloh, 6-7 April 1862*, 2012.
<https://apps.dtic.mil/dtic/tr/fulltext/u2/a445681.pdf>.
- Haythornthwaite, Philip J. *The Colonial Wars Source Book*, 1996.
<http://ci.nii.ac.jp/ncid/BA40258767>.
- Hibbert, Christopher. *Wellington: A Personal History*. Da Capo Press, 1999.
- Hunt, Frazier. *Horses and Heroes - The Story of the Horse in America for 450 Years*, 2010.
- Jarymowycz, Roman. *Cavalry from Hoof to Track*. Stackpole Books, 2009.
- Kennedy, J. John McFarland. *The Campaign Round Liege*, 2018.
- Koch, H.W. *A History of Prussia*. Routledge, 2014.
- Mercer, Cavalie. *Journal of the Waterloo Campaign*. Casemate Publishers, 2012.
- Nolan, Louis Edward. *Cavalry: Its History and Tactics*. United Kingdom: n.p., 1860.
- Robinson, Joe, Francis Hendriks, and Janet Robinson. *The Last Great Cavalry Charge: The Battle of the Silver Helmets, Halen 12 August 1914*, 2015.
- Sears, Stephen W. *Gettysburg*. Houghton Mifflin, 2003.
- Spencer, Charles. *Battle for Europe: How the Duke of Marlborough Masterminded the Defeat of the French at Blenheim*. John Wiley & Sons, Inc., 2005.

Starr, Stephen Z. *The Union Cavalry in the Civil War: The War in the West, 1861–1865*. LSU Press, 1985.

Tucker, Phillip Thomas. *Custer at Gettysburg: A New Look at George Armstrong Custer Versus Jeb Stuart in the Battle's Climactic Cavalry Charges*. Stackpole Books, 2019.

Webb, Stephen Saunders. *Marlborough's America*. Yale University Press, 2013.

Wittenberg, Eric J. *Protecting the Flank at Gettysburg: The Battles for Brinkerhoff's Ridge and East Cavalry Field, July 2 -3, 1863*. Casemate Publishers, 2013.

WEBSITES:

American Battlefield Trust Staff. "Custer's Stand at East Cavalry Field," October 4, 2022. Accessed November 7, 2023. <https://www.battlefields.org/learn/articles/custers-stand-east-cavalry-field>.

American Battlefield Trust Staff. "War Horses: The Four-Legged Fighters That Carried Giants Into Battle," September 7, 2023. <https://www.battlefields.org/learn/articles/head-tilting-history/war-horses-four-legged-fighters-carried-giants-battle>.

American Museum of Natural History. "Retreat of the Cavalry | AMNH," n.d. <https://www.amnh.org/exhibitions/horse/how-we-shaped-horses-how-horses-shaped-us/warfare/retreat-of-the-cavalry>.

Bierle, Sarah Kay. "Equestrian Casualties at Gettysburg." *Emerging Civil War*, July 11, 2018. <https://emergingcivilwar.com/2018/07/11/equestrian-casualties-at-gettysburg/>.

Forces Network Staff. "Blenheim: The Battle That Created The Marlborough Legend." *Forces Network*, August 11, 2017. Accessed November 7, 2023. <https://www.forces.net/services/army/blenheim-battle-created-marlborough-legend>.

Age of Revolution Staff. "Horse's Hoof Snuff Mill - Age of Revolution," February 27, 2017. <https://ageofrevolution.org/200-object/horses-hoof-snuff-mill/>.

Luscombe, Stephen. "Royal Horse Artillery," n.d. <https://www.britishempire.co.uk/forces/rha.htm>.

MacArthur, Rod. "The Evolution of Tactics in the 18th Century." *Rod's Wargaming*, May 29, 2019. <https://rodwargaming.wordpress.com/military-historical-research/military-historical-research/the-evolution-of-tactics-in-the-18th-century/>.

Mackenzie, John. "Battle of Rossbach." *britishbattles.com*. Accessed November 7, 2023. <https://www.britishbattles.com/frederick-the-great-wars/seven-years-war/battle-of-rossbach/#:~:text=The%20Battle%20of%20Rossbach%20is%20a%20striking%20exampl>

e%20of%20this%20facility.&text=Heavy%20cavalry%20of%20the%20period,wore%20a%20light%20blue%20coat.

Age of Revolution Staff. "Marengo's Hoof Snuffbox - Age of Revolution," February 22, 2017. <https://ageofrevolution.org/200-object/marengo-hoof-snuffbox/>.

Mintz, S., and S. McNeil. "Digital History." Accessed November 7, 2023. https://www.digitalhistory.uh.edu/disp_textbook.cfm?smtID=2&psid=3062.

Morris, Graham J. "Image024 | Battlefield Anomalies," April 24, 2018. Accessed October 26, 2023. <https://battlefieldanomalies.com/napoleonic-wars/eylau/image024-6/>.

National Army Museum Staff. "Battle of Blenheim." National Army Museum. Accessed November 7, 2023. <https://www.nam.ac.uk/explore/battle-blenheim>.

National Army Museum Staff. "Battle of Waterloo." National Army Museum. Accessed November 7, 2023. <https://www.nam.ac.uk/explore/battle-waterloo>.

Ricks, Gregory. "Frederick the Great & the Battle of Rossbach." Warfare History Network, March 9, 2016. <https://warfarehistorynetwork.com/frederick-the-great-the-battle-of-rossbach/>.

RoadsideAmerica.com. "Civil War Horse Sculpture, Middleburg, Virginia," n.d. <https://www.roadsideamerica.com/story/54798>.

The Waterloo Association Staff. "Napoleon Series Reviews: Marengo: The Myth of Napoleon's Horse." Accessed November 7, 2023. https://www.napoleon-series.org/reviews/biographies/c_hamilton.html.

The Ulysses S. Grant Homepage Staff. "ULYSSES S. GRANT HOMEPAGE - Grant the Equestrian," n.d. <https://www.granthomepage.com/grantequestrian.htm>.

U.S. National Park Service Staff. "The Surrender Meeting - Appomattox Court House National Historical Park (U.S. National Park Service)," n.d. <https://www.nps.gov/apco/learn/historyculture/the-surrender-meeting.htm>.

Wilfred, Burie. "Brabançon Folklore: Brabançon Folklore-161 to 165," June 1, 2012. <https://www.echarp.be/folklore-braban%C3%A7on-161-165.php>.

JOURNAL ARTICLES:

Baskind, Samantha. "The Lost Story of Lexington, the Record-Breaking Thoroughbred, Races Back to Life." *Smithsonian Magazine*, June 8, 2022. <https://www.smithsonianmag.com/smithsonian-institution/lexington-one-of-the-greatest-race-horses-of-all-time-comes-roaring-back-to-life-180980132/>.

- Boileau, John. "Charge of the Cavalry." *Legion Magazine*, March 27, 2018. <https://legionmagazine.com/charge-of-the-cavalry/>.
- Curtis, Aaron. "The Battle of Moreuil Wood | VALOUR CANADA." *VALOUR CANADA | Educating Canadians About Our Shared Military Heritage*, September 23, 2022. <https://valourcanada.ca/military-history-library/battle-moreuil-wood/>.
- De Bruxelles, Simon. "Napoleon's Steed Finds His Feet at Last." *The Times*, May 1, 2017. <https://www.thetimes.co.uk/article/napoleons-steed-finds-his-feet-at-last-g53nxsrss>.
- Eames, Tom. "The Story of... 'Waterloo' by ABBA." *Smooth*, May 17, 2021. <https://www.smoothradio.com/features/the-story-of/abba-waterloo-lyrics-meaning-eurovision-video/>.
- Faust, Drew Gilpin. "Equine Relics of the Civil War." *Southern Cultures* 6, no. 1 (2000): 23–49. <https://www.jstor.org/stable/26236827>.
- Gershon, Livia. "A Horse's-Eye View of the Civil War." *JSTOR Daily*, April 12, 2019. <https://daily.jstor.org/a-horses-eye-view-of-the-civil-war/>.
- "Horse Artillery." *Oxford Reference*, n.d. <https://doi.org/10.1093/acref/9780198606963.013.0579>.
- Houben, Robby. "Last Charge of the German Cavalry – The Battle of Halen." *Warhistoryonline*, April 13, 2018. <https://www.warhistoryonline.com/guest-bloggers/the-battle-at-halen-cavalry.html>.
- Hough, Jonny. "French Calvary Assault." *The Waterloo Association*, September 2, 2018. <https://www.waterlooassociation.org.uk/2018/06/05/french-calvary-assault/>.
- Koenig, Robert. "'War Horse' and the Great War's Equine Holocaust." *St. Louis Public Radio*, July 18, 2019. Accessed November 7, 2023. <https://www.stlpr.org/arts/2012-06-07/war-horse-and-the-great-wars-equine-holocaust>.
- Lynn, John A. "Tactical Evolution in the French Army, 1560-1660." *French Historical Studies* 14, no. 2 (January 1, 1985): 176. <https://doi.org/10.2307/286581>.
- MilitaryHistoryNow.com Staff. "Cavalry at Waterloo – How Mounted Troops Made History in the Napoleonic Wars' Final Battle." *MilitaryHistoryNow.Com*, September 4, 2018. <https://militaryhistorynow.com/2018/09/02/cavalry-at-waterloo-how-mounted-troops-made-history-in-the-napoleonic-wars-final-battle/#:~:text=At%20the%20Battle%20of%20Waterloo,but%20an%20important%20one%20nonetheless>.
- Niderost, Eric. "War of the Spanish Succession: Battle of Blenheim." *HistoryNet*, November 18, 2020. <https://www.historynet.com/war-of-the-spanish-succession-battle-of-blenheim/>.

Phelan, Ivan P. "Marlborough as Logician (Continued)." *Journal of the Society for Army Historical Research* 68, no. 273 (1990): 36–48. <https://www.jstor.org/stable/44224692>.

Teichman, Oskar. "Frederick The Great's Cavalry." *The Cavalry Journal* 16 (1926): 14.

Trautmann, Martin, Alin Frînculeasa, Bianca Preda-Bălănică, Marta Petruneac, Marin Focșăneanu, Stefan Alexandrov, Nadezhda Atanassova, et al. "First Bioanthropological Evidence for Yamnaya Horsemanship." *Science Advances* 9, no. 9 (March 3, 2023). <https://doi.org/10.1126/sciadv.ade2451>.

Van Den Hove, Peter. "Halen, 12th of August, 1914. A Forgotten Battle in a Forgotten Landscape?" *ResearchGate*, January 1, 2014.

https://www.researchgate.net/publication/317090646_Halen_12th_of_August_1914_A_forgotten_battle_in_a_forgotten_landscape.

Vidar. "The Last Great Cavalry Charge With Drawn Sabre in Western Europe." *Medium*, February 21, 2023. <https://vidar-writing.medium.com/the-last-great-cavalry-charge-with-drawn-sabre-in-western-europe-22fad834b6c6>.

Waterloo Association Staff. "British Cavalry." *The Waterloo Association*, January 21, 2019. <https://www.waterlooassociation.org.uk/2018/05/27/british-cavalry/>.

Zwack, Anne Marshall. "Seeing Hungary at a Gallop." *The New York Times*, March 18, 1990. Accessed November 7, 2023. <https://www.nytimes.com/1990/03/18/travel/seeing-hungary-at-a-gallop.html>.

VIDEO:

Great Big Story. "These Hungarian Horsemen Predated the American Cowboy," August 22, 2017. <https://www.youtube.com/watch?v=CiYsphB1XWA>.

House of History. "The Battle of Rossbach, 1757 AD 🏰 (Part 8)," July 8, 2022. <https://www.youtube.com/watch?v=D74FxXhJiNA>.

ONLINE DICTIONARY ENTRY:

"Meet Your Waterloo," October 11, 2023. <https://dictionary.cambridge.org/us/dictionary/english/meet-waterloo>.

VITA

Andrea Varga is currently pursuing a Master's Degree in History at the University of Texas at San Antonio. Her areas of interest are World History and Environmental History. As a first generation American, Andrea found her passion for European history from listening to the stories of her immigrant parents and grandparents. Her love for historical practices was cemented when researching her ancestry and stumbling upon USSR documents revealing the timeline and POW camp of her Hungarian great-grandfather. Studying at UTSA allowed Andrea to learn new historical methods and expand her focus to World History with a special interest in Environmental History. It also provided an excellent opportunity to collaborate on numerous projects, such as the *Women's Voices of Military City, U.S.A.* The NAU scholarship opened a platform for Andrea to present her original and ongoing research on WWII propaganda. Andrea's goal is to become a professor and possibly earn a PhD.