

THE EVOLUTION OF CAVALRY DURING THE MILITARY REVOLUTION: THE
ENGLISH EXPERIENCE 1572-1604

by

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A thesis submitted to the Graduate Council of
Texas State University in partial fulfillment
of the requirements for the degree of
Master of Arts
with a Major in History
May 2015

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DEDICATION

To my wife, Emma Lambert

ACKNOWLEDGEMENTS

I would like to thank Ellen Tillman for her inspiration, enthusiasm, insight, and patience as she helped guide me through my research. I would also like to thank Bryan Mann and Gene Bourgeois for reigniting my passion for English history.

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CHAPTER 1

Current scholarship of sixteenth-century warfare claims that cavalry of the period experienced a decline into irrelevance because of the superiority of infantry firepower. According to the interpretation, from the 1540s until the 1630s, the horsemen of European armies slipped inexorably into tactical uselessness because of the insistence on cavalry commanders' use of futile tactical maneuvers. The critique of cavalry claims that until the revival of mounted combat in the 1630s, horsemen on the battlefield were a useless ornament that refused to accept their insignificance in an otherwise dynamic period of military invention.

A reevaluation of primary sources contradicts these criticisms by revealing military leaders' opinions of the importance of mounted soldiers. During the late sixteenth and early seventeenth centuries, European warfare went through a series of changes, collectively called the military revolution.¹ As one of the three combat arms of early-modern armies, cavalry took part in the developments.² The mounted warriors of the period transitioned from aristocratic knights towards professional mounted soldiers as Renaissance commanders adapted cavalry to changing battlefield conditions.

Battlefields of the late sixteenth century differed from those of the preceding centuries because of the dominance of defense-oriented infantry armed with firearms and pikes. Due to advancements in artillery, military architects built sophisticated fortresses to withstand cannon barrages, thus increasing the prevalence and duration of sieges.

¹ Michael Roberts, "The Military Revolution, 1560-1660," in *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, edited by Clifford J. Rogers (Boulder, CO: Westview Press, 1995), 13.

² The other two combat arms being artillery and infantry, both of which favored defensive tactics.

Prominent military historians such as Sir Charles Oman, John Ellis, Geoffrey Parker, and Michael Roberts describe how these two elements made cavalry, whose success relied on offensive tactics, obsolete because masses of infantry, and the effectiveness of fortifications created conditions in which defense was supreme.³

The two main arguments against the effectiveness of cavalry in the latter half of the sixteenth century rest on cavalry's use of the pistol over the lance and the spread of the bastioned artillery fort, the *trace italienne*. According to critics, each contributed to the demise of cavalry by robbing it of its offensive capabilities (in the case of pistols) and rendered horsemen irrelevant because siege warfare precluded cavalry's main function. Combat between cumbersome infantry formations, shielded against the offensive power of horsemen, produced battles that were indecisive because there were no opportunities for cavalry to strike a decisive blow. Field armies were able to retreat unmolested into nearby fortresses following a defeat. Lengthier and more frequent sieges, in turn, decreased the number of large-scale field battles where the shock value of cavalry was important. By the end of the century, warfare in northwest Europe became a sluggish affair waged by small groups of soldiers operating from numerous fortified garrisons.

The prevailing arguments often rely upon a purely technological foundation that does not take into account factors outside of technology. To technological determinists, pikes and firearms gave infantry an unsurpassed advantage over cavalry negating the

³John Ellis, *Cavalry: The History of Mounted Warfare* (Barnsley, UK: Pen & Sword Military Classics, 2004); Charles Oman, *A History of the Art of War in the Sixteenth Century* (London: Methuen, 1937); Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West: 1500-1800* (Cambridge: Cambridge University Press, 1988); Michael Roberts, "The Military Revolution, 1560-1660," in *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, edited by Clifford J. Rogers (Boulder, CO: Westview Press, 1995).

latter's strengths.⁴ The striking power of cavalry withered from a lack of effective means to overcome the combination of the two weapons. Off the battlefield, a proliferation of fortresses altered a campaign's landscape to such an extent that mounted combat ceased to be viable.⁵ The prevalence of fortresses lessened the frequency of pitched battles and led to more siege warfare where cavalry was too useless to justify its enormous expense.

By focusing on technology and its impact on a narrow role performed by mounted soldiers, namely shock combat, the arguments ignore a multitude of other elements critical to understanding the effective use of cavalry. Cultural influences on the role of horsemen and their use of technology factored into the utility of cavalry. A country's cultural assumptions about warfare prescribed the boundaries of how its military conducted itself, including how it used new technology. The adoption of pistols to counter infantry was part of a century-wide process of experimentation in warfare. That this particular experiment was a failure, and there is evidence to suggest it was not, is no reason to dismiss the role of cavalry, or how they fulfilled it, any more than seeing the eclipse of pikemen in favor of musketeers meant that pikes were a tactical dead end. Additionally, horsemen performed a range of tasks beyond simply engaging enemy infantry, many of which were vital to a successful siege. Just as culture influenced tactics, so too did it influence cavalry's non-combat functions. As I will show in subsequent chapters, the cultural environment of cavalrymen played a tremendous role in helping to determine their effectiveness as mounted soldiers.

⁴ Michael Howard, *War in European History* (London: Oxford University Press, 1976), 16, 34.; Oman, *Art of War in the Sixteenth Century*, 35.; Geoffrey Parker, *The Army of Flanders and the Spanish Road, 1567-1659; The Logistics of Spanish Victory and Defeat in the Low Countries' Wars*. (Cambridge: Cambridge University Press, 1972), 5.

⁵ Parker, *The Army of Flanders*, 11.

To be clear, both cavalry's use of pistols and the prevalence of sieges undoubtedly influenced the utilization of cavalry, but neither one of them had a significant enough impact to render cavalry ineffective, much less, in the words of John Ellis, "a debilitated [combat] arm."⁶ Horsemen dominated the roles of scout, raider, shock trooper, and pursuer despite changing battlefield conditions because these roles are near universal in their importance; foot soldiers were ill-suited for these roles. Early modern commanders recognized this and prized mounted soldiers for their value. The fact that contemporaries continued to stress the importance of mounted soldiers showed that cavalymen were an integral part of early-modern armies, be it on the march, during a siege, in pitched battle, or in often overlooked small-scale actions.⁷

As military historian Jeremy Black points out, modern military historians' assumption that technological progress equals military superiority does not conform to the reality that technologically inferior armies frequently defeat their more advanced adversaries.⁸ Given the primacy of the technological approach, it is understandable that military historians have undermined the importance of cavalry, which maintained strong links to medieval warfare. In comparison with technological improvements in artillery and infantry, cavalry does seem anachronistic, but this is not evidence for irrelevance.

The military culture of sixteenth-century aristocrats, who formed the majority of cavalry,

⁶ Ellis, *Cavalry*, 84. Michael Roberts describes them in similar terms although he is less harsh in his assessment of their utility. Roberts, *Gustavus Adolphus: A History*, 2:255.

⁷ Early modern military historians tend to overlook combats that involved less than approximately 5,000 per side. Small-scale actions are important to examine though because the fighting was more intimate and therefore required more personal initiative and motivation. For additional information involving small-scale actions see Charles Carlton, *Going to the Wars: The Experience of the British Civil Wars, 1638-1651* (London, UK: Routledge, 1992), passim; Gervase Phillips, *The Anglo-Scots Wars, 1513-1560: A Military History* (Woodbridge, UK: Boydell Press, 1999), Ch 3-6.

⁸ Jeremy Black, *Rethinking Military History* (New York, NY: Routledge, 2004), 8.

defined the parameters for use of weapons, or as Black states, “what people fought with did not dictate how they fought.”⁹

The weakness of the technological argument is that it oversimplifies the interactions between different elements on the battlefield. The subtleties of warfare, both in specific battles and on campaign, become obscured by broad definitions of cavalry and universal statements based on the particulars of one region. The fact that horse troopers evolved into a variety of mutually supporting types that each fulfilled critical roles in the field and on the march signified a willingness to experiment with new modes of fighting. The expanded scope of war, brought about by the increased development of large standing armies, meant that the duties of horsemen expanded as well.

Contrary to the prevailing scholarly view, the English kept pace with advances in warfare on the Continent. While it is true that among military professionals there was debate about the merits of traditional versus modern weapons, the overall trend was toward innovation and adaptation. One of the pieces of evidence behind the idea that the English military system was antiquated is the charge that the country was late in accepting new methods of training and new weapons, but this is only the case if England’s military is viewed in geographic and temporal isolation. When viewed in the context of the entire century, a picture emerges of a country lurching forward, but still aware of, and accommodating, innovations.

England’s real difficulty in keeping pace with the Continent was imposing uniformity on a diverse and decentralized military establishment. The military system of the late Tudor period was an eclectic mix of medieval obligations, aristocratic retinues, local militias and foreign mercenaries. The militias, in the process of becoming the

⁹ Black, *Rethinking Military History*, 10.

trained bands of the seventeenth century, were reluctant to adhere to court regulations because local loyalties often conflicted with those of the nation. The local military elite's reticence to comply resulted in an ad hoc adaptation of new weapons and techniques. Overall, however, the forces Queen Elizabeth sent over during the wars against Spain performed remarkably well and earned a reputation as courageous soldiers.

The English aristocracy's penchant for honor through combat was not significantly blunted by the infusion of lawyers and academics into its ranks. Aristocrats, newly minted and ancient alike, took to war as either individual gentlemen volunteers or as captains in the pay of their queen or a foreign commander. As part of a titled nobleman's following, gentlemen gained an opportunity to live up to the martial ideal of the mounted aristocratic warrior. Infused with a martial spirit that merged medieval chivalry with humanist notions of duty to the state and given the means to display their prowess, these gentlemen served in horse companies throughout the period. Even when England's presence on the Continent dwindled after James I secured peace in 1604, the military tradition established by the Elizabethan veterans lived on in a handful of professionals who passed this knowledge to the officers of the English Civil War.

The Netherlands was a laboratory of military development in the late sixteenth-century and the school of war for many English veterans.¹⁰ In 1568, the towns of the northern-most Provinces of the Low Countries revolted against the King of Spain for economic and religious reasons. Early on, the two belligerents might have reconciled, but by 1572 hope for a quick peace vanished. The lack of a decisive military victory by either

¹⁰ Fissel, *English Warfare*, 137.; Hale, *Renaissance War Studies*, 230.

side in the opening years of the revolt meant that the war became an insurgency fought on a small-scale, as opposed to a war of large armies fighting set-piece battles.¹¹

The nature of warfare in the Dutch Revolt is important for two principle reasons: it allows military historians to see how cavalry performed outside of the pitched battle, although the few battles that did take place offer an opportunity to see early-modern cavalry in action; it also provides the means, via counterfactuals, to see how the failures of either side might have been mitigated by cavalry, thereby pointing the way towards an understanding of its utility. By approaching the question of mounted warfare from these two analytical perspectives, I will make the case for the place of cavalry in early modern armies and how pre-1630s cavalry succeeded in performing the duties of horsemen.

The sieges of the Dutch Revolt have attracted the attention of early-modern military historians for some time, which is understandably given the prominence of fortifications. However, siege warfare was not static. Around the fortified villages, outposts, and bastioned ramparts, a guerilla war of raids and skirmishes occupied much of a soldier's time.¹² In these actions, cavalry had a distinct advantage because of their mobility. Furthermore, the advantages of firearms in small-scale combat, due to their versatility compared to unwieldy pikes, help explain why the presence of firearms in cavalry companies persisted despite debate over the proper place of gunpowder weapons. As English veteran Sir Roger Williams, pointed out, lighter versions of firearms, termed calivers or arquebuses, were better used in skirmishes and raids over the heavier musket. He claimed that horsemen accompanied by shot were best suited for conducting "great

¹¹ Fissel, *English Warfare*, 141.; Oman, *Art of War in the Sixteenth Century*, 541-542.; Parker, *The Army of Flanders*, 10-13, 17

¹² Parker, *The Army of Flanders*, 10-13.

marches” because of their nimbleness.¹³ Given that earlier Williams describes light cavalry armed with harquebuses as best suited for raids, it is safe to conclude that the role of horseman and footman merged into that of a single versatile mounted infantryman.¹⁴ The reimagining of the mounted infantryman, whose precursor, the mounted archer, had long since become a full-fledged armored knight, demonstrates the influence of siege warfare on cavalry. The ability to fight both mounted and on foot was of utmost importance given the diversity of combat situations in which a soldier might find himself.

Versatility, maneuverability, and willingness to experiment were the virtues of the new way of war. Cavalry commanders displayed those virtues in equal measure compared to their infantry counterparts, but experiments with mounted warfare were minor compared to new infantry tactics. The basic principles of cavalry did not change dramatically, unlike significant changes in formations, weapons handling, and professionalization among foot soldiers. It may well be that the viability of traditional cavalry warfare militated against sweeping reforms. The persistence of the lance as a viable weapon through the 1590s suggests this was the case. The lance and pistol’s coexistence and complimentary natures attest to the unique character of cavalry warfare and account for the insistence that the branch was ignorant, haughty, and anachronistic.

It was during the Dutch Revolt that English volunteers learned about the advances that had taken place since England’s last major Continental undertaking in the 1540s first-hand.¹⁵ The first gentlemen to answer the call of religious solidarity, a group of 300 veterans who served previously in France, Ireland and Scotland, were the kernel of the

¹³ Williams, *Brief Discourse*, 43.

¹⁴ Williams, *Brief Discourse*, 33-34.

¹⁵ English participation in the wars between France and Spain during the reign of Mary I was too brief and too limited to make much of an impact.

English forces that became the main contingent of foreigners in Dutch service.¹⁶ At the battle of Nieuwpoort in 1600, the entire vanguard of the Dutch army was composed of English soldiers serving under the brothers Sirs Francis and Horace Vere.

The significance of this is the proximity to the great military reformer of the age, Maurice of Nassau, Prince of Orange and Stadtholder of the United Provinces of the Netherlands. Maurice is typically credited with developing the infantry drills designed to make maximum use of firepower, but he also applied his knowledge to cavalry. He is responsible for abolishing the lance and standardizing the number of ranks in his horse companies. Just like his reforms for infantry, Maurice drew heavily upon classic Greco-Roman military doctrine as a source for reform. His reorganization of the cavalry reflected classical influence in that the horsemen were armed primarily with pistols. Most ancient cavalry were skirmishers armed with javelins, not unlike early-modern pistols in terms of range of effective use and similarity of tactics. Just like ancient cavalry, horse companies under the Dutch reforms were capable of shock action.

Many of the arguments against the Dutch cavalry reforms are critiques of their ideal form and not their actual performance. The discrepancy between the ideals detailed in training manuals and the reality of combat mean that the maneuvers laid out in military literature must not be mistaken for what actually took place. The battles of Turnhout and Nieuwpoort show how the reforms played out on the battlefield, where a mix of combined arms, confusion of battle, and vagaries of morale altered how commanders utilized cavalry.

England's participation in the heart of military innovation in Western Europe means that it is possible to examine their cavalry as an assessment of early-modern

¹⁶ Williams, *Actions of the Low Countries*, 101.

cavalry as a whole. Regional peculiarities existed, to be sure, but they do not completely obscure the commonalities that existed between England and the Continent. There is a danger in equating the part with the whole, but given the relative uniformity of military culture in Western Europe, at least on the macro scale, it is possible to draw conclusions about horsemen from an examination of English veterans' experiences.

CHAPTER 2

The foundation of the argument against cavalry's relevance on the battlefield rests on the horsemen's use of the pistol to overcome the superior defense of infantry. The replacement of the lance with the pistol and the subsequent development of the *caracole* led critics to see the mounted combat arm as abandoning its traditional role as shock troops.¹⁷ During the period, horsemen kept themselves at a distance and relied on firepower to defeat their foe instead of charging into melee with lance and sword. The *caracole* was a maneuver developed sometime in the mid-sixteenth century for the apparent purposes of maximizing cavalry firepower by countermarch and volley fire not unlike similar infantry techniques.¹⁸ In theory, doing so allowed horsemen to thin the ranks of an infantry formation as a precursor to melee. In brief, the maneuver called for a squadron of cavalry to draw itself up in twelve or more ranks, trot up to within three meters of their enemy, and fire their pistols in successive ranks. Once they had fired their volley, the front rank then filed to the back of the formation, and the next fired their volley. The maneuver was slow, elaborate, and required a high degree of discipline and skill to execute.¹⁹ It could be devastating when used correctly as at the battle of Dreux in 1562, when German horsemen inflicted tremendous casualties on Swiss pikemen. The *caracole* also gave infantry time to shoot at the advancing cavalry and left the horsemen

¹⁷ Oman, *Art of War in the Sixteenth Century*, 83.; Roberts, *Gustavus Adolphus*, 179.

¹⁸ The majority of references to cavalry's use of pistols in sixteenth-century military books regard its merits relative to the lance for fighting other cavalry. Specific references to a maneuver resembling the *caracole* are few and do not appear until the seventeenth-century.

¹⁹ Delbrück, *The Dawn of Modern Warfare*, 123.

vulnerable to countercharge by lancers, drawbacks against which contemporaries warned.²⁰

Sir Charles Oman was particularly critical of the *caracole*, calling it a “most pernicious habit” and an “unhappy system” that robbed heavy cavalry of the impetus of shock and led to disorder in ill-disciplined soldiers.²¹ Published in 1937, his *History of the Art of War in the Sixteenth Century* preceded Michael Roberts’ military revolution thesis, first proposed in 1955. Oman’s criticisms foreshadowed Roberts’ own assessment of cavalry. Oman’s disdain for the *caracole* stemmed from horsemen’s use of the deep column formation as opposed to a single rank and the complexity of the maneuver. Oman derided the deep column and laid the blame for its ascendance on the abandonment of the lance in favor of the pistol. For him, the practicality of the pistol as a weapon for a horsemen and the effectiveness of the *caracole* in combat were dubious and precipitated the absence of shock combat until the 1630s. Oman is unambiguous in his opinion that the only function of cavalry on the battle was to charge into hand-to-hand combat, relying upon weight and shock to overpower their enemies, and that all else is little consequence.²² As such, the presence of lighter forms of cavalry, whose purposes were primarily but not exclusively non-combat roles, did not deserve attention as a feature of early-modern military history. As he explains, “The real military problem... consisted in the trial of the composite regiment of pikes and arquebuses against heavy cavalry, whether of the old type of the French gendarmerie or the new type of the German reiter.”²³

²⁰ La Noue, *The Politicke and Militarie Discourses*, 201-202.; Williams, *Brief Discourse of War*, 39.

²¹ Oman, *Art of War in the Sixteenth Century*, 86, 226.

²² Oman, *Art of War in the Sixteenth Century*, 35, 83.

²³ Oman, *Art of War in the Sixteenth Century*, 228.

The horseman's pistol, invented in eastern Germany sometime in the 1540s, was a wheel-lock firearm that produced the spark necessary to ignite its powder through spinning a steel wheel, wound tightly by a spring, against a piece of pyrite rock. It had many advantages over the matchlock firing mechanism, which used a smoldering cord as the source of ignition, because a horseman could wind a wheel-lock before a battle, holster the pistol, and fire when needed. Oman pointed out the drawbacks of this weapon: the delicate firing mechanism was prone to breaking or weakening from staying wound up too long, and the pyrite might become loose and fall out.²⁴ Additionally, he drew attention to the difficulties inherent in aiming and firing a pistol from a moving horse, claiming that it could be difficult for troopers to fire safely while in formation.²⁵ Furthermore, Oman criticizes the pistol because of the complexity of its use over the lance. The possibilities of a pistol misfiring or a cavalryman shooting too soon rendered the tactic a foolish endeavor. He points out that nervous soldiers might fire well out of effective range or into the air.²⁶ Contemporary military theorists shared the same concerns regarding the care and use of pistols, but ultimately came to the conclusion that the deadliness of the weapon made it worth the drawbacks.²⁷

Oman criticized the deep column, a parallel development in cavalry that eventually converged with pistols in the second half of the century, even more than he did pistols. The deep column, formed of nine to twelve ranks, was another German tactic that originated in the fifteenth century. For Oman, deploying this manner "sins against the doctrine of shock tactics" because men beyond the first rank were unable to fight or

²⁴ Oman, *Art of War in the Sixteenth Century*, 86.

²⁵ Oman, *Art of War in the Sixteenth Century*, 86.

²⁶ Oman, *Art of War in the Sixteenth Century*, 86.

²⁷ Williams, *A Briefe Discourse of Warre*, 39.

lend their impetus to the charge.²⁸ At some point in the 1540s, for reasons Oman does not elaborate on, German cavalry ceased to use the lance and embraced the pistol as their weapon of choice, thus completing the convergence of the two developments.²⁹

Oman's third criticism rests on the assertion that the complexity of the *caracole* rendered the cavalry squadron too vulnerable to counterattack, particularly to the charge of steadfast lancers.³⁰ Given that the front ranks of a horse unit performing the *caracole* constantly filed to the rear of the column, it would be easy for other cavalry to charge the disordered ranks, sowing confusion and ultimately panic among the maneuvering horsemen as the troopers toward the rear fled the chaos.³¹ Even in the absence of enemy cavalry, more cowardly troopers fired their pistols prematurely so they could file to the rear more quickly.³² For Oman, the complexity of the maneuver and the incentive to retire from the enemy as quickly as possible rendered the *caracole* "unsound," "unhappy," and "pernicious."³³ He went on to insist that two opposing horse companies using the *caracole* merely traded a rolling barrage in a choreographed dance of fire and smoke with "no decisive result till the morale of one side or the other gave way."³⁴ For Oman, this is the absolute opposite of the true purpose of cavalry as horsemen were meant to use their superior mass to engage an enemy and ride them down.³⁵

The literature of the day warned of the dangers of using the wheel-lock in the chaos of a cavalry battle and how unskilled troopers may pose more of a danger to

²⁸ Oman, *Art of War in the Sixteenth Century*, 83.

²⁹ Oman, *Art of War in the Sixteenth Century*, 42, 83-86.

³⁰ Oman, *Art of War in the Sixteenth Century*, 226.

³¹ Oman, *Art of War in the Sixteenth Century*, 226.

³² Oman, *Art of War in the Sixteenth Century*, 42.

³³ Oman, *Art of War in the Sixteenth Century*, 41, 83, 226.

³⁴ Oman, *Art of War in the Sixteenth Century*, 226.

³⁵ Oman, *Art of War in the Sixteenth Century*, 226.

themselves and fellow soldiers than the enemy.³⁶ However, this concern did not outweigh the advantages of the offensive firepower of the pistol, and the tendency of horse companies to take up firearms attests to the popularity of the weapon. If it was as ineffective as Oman and others claim then it is difficult to imagine the near-universal acceptance of the pistol as a cavalry weapon. In fact, at the time there was considerable debate of the advantages and disadvantages of the pistol compared to the lance, as I will discuss in detail below.

Accounts of battles contain the most insight into how effective the use of the caracole against other cavalry was. At Turnhout in 1597, Sir Francis Vere led his six companies of cuirassiers, a type of horsemen that combined heavy armor with firepower, against a Spanish marching column. The majority of the Spanish cavalry, primarily lancers, broke at the sight of the English cavalry, and those that stayed were overrun.³⁷ Similarly, at Newport in 1600, English cavalry spent much of the battle contending with their Spanish counterparts who consisted mostly *cuirassiers* and *harquebusiers*. As with Turnhout three years prior, the English *cuirassiers* routed the enemy cavalry and rallied to help break the Spanish infantry.

In both cases, it is clear that exceptions to the rule existed. There is no conclusive evidence that either side used or did not use the *caracole*, but what is clear is that pistol armed cavalry more than held their own against lancers and other *cuirassiers*. Context is the key element. Without specifics to point to, blanket critiques of cavalry's effectiveness undermine legitimate analysis of any drawbacks. Turnhout and Newport

³⁶ Williams, *A Briefe Discourse of Warre*, 39.

³⁷ Vere, *Commentaries*, 78-79.

stand out as encounters where cavalry played a pivotal role in the outcome of the battle.³⁸ Oman's critiques, of the pistol in general and the *caracole* in particular, are too broad to be of much utility. Furthermore, the actual use of both the pistol and the *caracole* shows that they were hardly worth the appellations "unsound", "pernicious", and "unhappy."³⁹ Lumping German *reiters*, Dutch and English cavalymen, and French *cuirassiers* into one category ignores important differences, not the least of which is the role of culture, or national character, in how commanders used cavalry.

In his two-volume history of Sweden under King Gustavus Adolphus, Michael Roberts describes how the increased use of pistols led to the development of the *caracole* as a way to overcome pike and shot infantry with little risk to the horsemen. According to Roberts, commanders were unwilling to use speed and mass to create a breach in infantry formations and relied instead on the combination of mobility and firepower to create gaps for lancers to charge into.⁴⁰ Like Oman, he links the deep column formation with the adoption of the pistol, although Roberts claims that the deep column could be used to penetrate into ranks of footmen. Instead, Roberts argues, commanders desired a concentration of fire onto one target and so developed the *caracole*.⁴¹

In Roberts' estimation, the end product was an elaborate, cumbersome maneuver that failed to overcome the defensive superiority of pike and shot. He describes the *caracole* as "nearly as futile as it was elaborate," and argued claimed it reduced the horsemen to "debilitated popping of pistols."⁴² Reliance on elaborate drills to maximize

³⁸ Turnhout, like Zutphen in 1585, is often dismissed as a minor encounter suggesting that it is not worth study in and of itself as illustrative of cavalry in early modern armies.

³⁹ Oman, *Art of War in the Sixteenth Century*, 41, 86, 226.

⁴⁰ Michael Roberts, *Gustavus Adolphus: A History of Sweden, 1611-1632* (London: Longmans, 1958), 2:178.

⁴¹ Roberts, *Gustavus Adolphus*, 2:179.

⁴² Roberts, *Gustavus Adolphus*, 179-180.

the use of firepower had unintended consequences, that for Roberts, completed the process of making defense the superior force in sixteenth-century warfare.⁴³ During the period, there was a corresponding decline in the use of hand weapons alongside the increased use of pistols, which Roberts attributed to the difficulties in training that the lance required. Cavalry were no longer willing to use speed and mass to propel themselves toward impact with infantry. With the horsemen thus robbed of *élan*, battles became less important, as it was too costly for both sides to rely on attrition to break the other's morale.⁴⁴

Roberts is somewhat more forgiving in his assessment of cavalry in the last decade of the sixteenth-century because he is willing to concede that they were still useful on the battlefield. His admission of the continued importance of cavalry is damning with faint praise, as cavalry remained the "battle-winning arm" only because of the relative decline in the offensive capabilities of cumbersome infantry formations.⁴⁵ Firepower alone was insufficient to secure victory which necessitated the use of "the debilitated cavalry of this caracoling age."⁴⁶ Having begrudgingly established the necessity of cavalry, Roberts then goes on to explain how Gustavus Adolphus' 1630s reforms forbade the *caracole*, relegated the pistol to secondary use and required horsemen to use speed and mass to physically collide with their opponents.⁴⁷

John Ellis, whose assessment of sixteenth-century cavalry is essentially the same as Oman and Roberts', adds an element of class antagonism to his critique of cavalry and the use of the *caracole*. Ellis' description of the interplay between horsemen, infantry,

⁴³ Roberts, *Gustavus Adolphus*, 180.

⁴⁴ Roberts, *Gustavus Adolphus*, 181.

⁴⁵ Roberts, *Gustavus Adolphus*, 180, 255.

⁴⁶ Roberts, *Gustavus Adolphus*, 255.

⁴⁷ Roberts, "The Military Revolution, 1560-1660," in *The Military Revolution Debate*, 14.

and firearms is couched in the idea that cavalrymen as a whole were a hidebound aristocracy, forever resentful and afraid of the innovations of the bourgeois infantry.⁴⁸ The aristocracy was too enmeshed in centuries of tradition, which linked mounted combat with social status, to properly respond to an infantry newly imbued with “self-respect” and “self-confidence.”⁴⁹ Furthermore, the aristocratic reaction to gunpowder, and the threat firearms posed to mounted warfare, was a “fundamental trauma, akin to the terror of a two-year old child in whose face a loud firework explodes.”⁵⁰ For Ellis, the hidebound aristocratic cavalryman had met his match in the stoic, sensible pike-trailing and gun-carrying infantryman, and it was only the inertia of tradition that kept the aristocrat in his saddle.

Ellis accuses aristocratic cavalrymen of stubbornly ignoring the signs around them that they were rapidly decaying into irrelevance. As such, the *caracole* was a desperate attempt to respond to infantry firepower, which was hindered by an unwillingness to accept reality on the part of the aristocracy. For Ellis, cavalry’s response was a fundamental misunderstanding of the interplay between firepower and mobility made more ruinous because of their myopic view of their place in warfare.⁵¹ The adoption of the pistol and consequent abandonment of shock tactics was a disastrous mistake born out of the belief that horsemen could combine firepower with offensive tactics.

⁴⁸ Ellis, *Cavalry*, 66-67, 68, 84, 104.

⁴⁹ Ellis, *Cavalry*, 66, 78.

⁵⁰ Ellis, *Cavalry*, 68.

⁵¹ Ellis, *Cavalry*, 79, 84.

Echoing Oman and Roberts, Ellis asserts that horsemen abandoned shock action completely and essentially became ineffective mounted infantry.⁵² Ellis makes the same assumption that Roberts makes, namely that cavalry was a monolithic entity that made decisions about armaments and tactics as a single group.⁵³ Shock action was the sole determining factor in the utility of cavalry on the battlefield. Ellis makes some mention of light cavalry, similar to Oman, but claims they were of little use on the battlefield.⁵⁴

The second major argument against the importance of cavalry, put forth by Geoffrey Parker, is that the proliferation of the sophisticated bastioned artillery fort, the *trace italienne*, meant less need for cavalry as campaigns became more about siege warfare than field battles. Parker makes the distinction based on the military geography, namely how the natural and man-made landscape of a region influences the course of a campaign, of the Low Countries.⁵⁵ The region was crisscrossed with rivers, canals, fortified villages, defiles, causeways, dykes, and bridges. Due to persistent warfare from 1568 onwards, the region's inhabitants began to heavily fortify their villages and towns in a style of fortification known as *trace italienne*, or angled-bastion fort. Strongholds of this type, developed earlier in the century in northern Italy, featured a system of bastions, redoubts, and firing platforms designed to give garrisons clear, overlapping lines of fire and eliminate the blind-spots that form at the bases of circular towers. Built in conjunction with sconces, smaller satellite forts, and networks of both dry and water-filled moats, an adequately-garrisoned city, well-supplied with food and gunpowder, could potentially hold out for weeks. In extreme cases, heavily fortified cities could hold

⁵² Ellis, *Cavalry*, 84.

⁵³ Ellis, *Cavalry*, 81.; Roberts, *Military Revolution*, 6-7, quoted in Cruickshank, *Elizabeth's Army*, 198-199.

⁵⁴ Ellis, *Cavalry*, 99.

⁵⁵ Parker, *Army of Flanders*, 10-11, 17.

out for a year or more, such as during the Siege of Breda from 1624 to 1625 or the Siege of Ostend from 1601 to 1604.

According to Parker, the presence of so many fortified positions, combined with the natural features of the Low Countries, made battles a rare occurrence. Garrison duty tied down the majority of soldiers in either the Spanish army or the Dutch and their allies, leaving too few soldiers to launch offensive campaigns.⁵⁶ It was too risky to engage the enemy directly in battle with an expensive early-modern army, and, even in large-scale engagements, because if a victorious army allowed a broken enemy to retreat to a nearby fort, then the victory meant little. For Parker, such an environment was not conducive to cavalry tactics, both in the sense that field battles were rare and that the terrain was too broken for effective cavalry action.⁵⁷ When combined with the primacy of pike and shot over horse, the style of warfare practiced in the Low Countries had little room for cavalry.⁵⁸ As evidence, he presents the fact that the Duke of Alba, upon arriving with his army, disbanded his heavy cavalry as unnecessary for pacifying the Dutch rebels.⁵⁹

As with the other critics of cavalry, Parker confines his analysis to solely the combat role of horsemen and how the campaign environment of the Low Countries precluded mounted warfare. In this he is inconsistent, as he claims that cavalry battles like Gembleux in 1572, where 1,200 Spanish cavalry routed a Dutch force of 25,000 men, helped to establish the fearsome reputation of Spanish horse.⁶⁰ In confining horsemen to a limited role, Parker devalues their importance as scouts, raiders, and garrison troops. He does admit that light cavalry played a vital role in patrolling Spanish-

⁵⁶ Parker, *Army of Flanders*, 11-12.

⁵⁷ Parker, *Military Revolution Debate*,

⁵⁸ Parker, *Army of Flanders*, 5, 11.; Parker, *Military Revolution*, 16.

⁵⁹ Parker, *Army of Flanders*, 11.

⁶⁰ Parker, *Military Revolution Debate*, 39.

controlled territory but does not elaborate on that point, even as he describes the nature of warfare in the Low Countries. The Eighty Years' War, particularly its first half, was largely a guerilla war conducted between small groups of soldiers operating from local garrisons, just the sort of combat actions that veterans of the Dutch Revolt claimed best suited light horsemen.⁶¹

Other military historians seem to have largely accepted Roberts' and Parker's critiques of the tactical viability of mounted soldiers and Ellis' class-based explanation for their failure to properly adapt. Michael Howard, anticipating Ellis' class-based argument, called early-modern cavalry indicative of an "elegant anachronism" that stagnated because of the strength of infantry.⁶² He also describes the reaction of cavalry, which he at least divides into light and heavy, as giving up its traditional tactic of shock action in favor of mobile firepower.⁶³ Brian Downing claims that "the challenge to the aristocratic social order posed by the urban bourgeoisie...only slowly became apparent to warrior elites blinded by narcissism and defensive of their military-based privileges."⁶⁴

Other early-modern military historians, particularly those writing before Roberts, temper their views on cavalry but nevertheless devalue its role in period armies. Frank Tallett, who places the blame for cavalry's decline on its cost and not its utility, still describes how new infantry weapons assisted in displacing heavy cavalry from their central place on the battlefield.⁶⁵ Even as he reminds his readers that sixteenth-century commanders experimented to work out the tactical implications of new weapons, Tallett

⁶¹ Barret, *Theory and Practice*, 142-143.; Williams, *Brief Discourse of War*, 36-39. Barret and Williams are the most explicit in their descriptions of light cavalry duty, but nearly every other author who took the time to discuss cavalry listed patrolling and raiding as important functions.

⁶² Howard, *War in European History*, 16, 34.

⁶³ Howard, *War in European History*, 34.

⁶⁴ Downing, *The Military Revolution*, 61.

⁶⁵ Tallett, *War and Society*, 10.

calls the *caracole* a “hopeless failure” seemingly denying horsemen the courtesy of experimentation of their own.⁶⁶ John R. Hale makes the same argument for the influence of military geography on the decreased number of horsemen in the Eighty Years’ War.⁶⁷ He warns, though, that, while numbers of horsemen declined, using statistics to evaluate cavalry’s utility is dangerous because costs, difficulty in replacing losses, and availability of skilled riders better explain the reduced numbers, than military utility.⁶⁸ Hale is also skeptical of arguments about tradition-bound aristocrats clinging to old methods when he remarks that there was no shortage of aristocrats willing to serve as officers for new horse companies.⁶⁹

Criticisms of the *caracole* go hand in hand with denunciations of the gradual adoption of the deep column by cavalry. In order to make effective use of the pistol maneuver, *cuirassiers* had to deploy in multiple ranks to maintain the rolling volley of fire.⁷⁰ Roberts argues the same point, adding that those in the rear must fire their pistols in the air to avoid hitting their comrades.⁷¹

To critics the problem with these developments, a slow advance in a deep column formation and the use of pistols, was that they resulted in cavalry ceding its traditional role of using psychological shock and willingness to enter into melee to defeat an enemy. As a result of abandoning the charge *en haie*, or single rank, cavalry stopped relying upon *arme blanche*, the lance and sword, as their primary weapons, thus completing the transition from shock troops to mobile firepower. Without speed and hitting power,

⁶⁶ Tallett, *War and Society*, 31.

⁶⁷ Hale, *War and Society*, 53.

⁶⁸ Hale, *War and Society*, 53-54.

⁶⁹ Hale, *War and Society*, 96.

⁷⁰ Delbrück, *The Dawn of Modern*, 121, 126.

⁷¹ Roberts, *Gustavus Adolphus*, 179.

something that disciplined infantry negated, cavalry became little more than ineffective mobile infantry. Robbed of any ability to rapidly engage an enemy and pursue them once they were defeated, rival armies slugged it out on the battlefields of early modern Europe without one side achieving a decisive victory over the other.⁷² The old aristocratic warrior found himself in a tactical limbo, where his heavy armor impeded mobility and his traditional weapons were useless against new infantry weapons and tactics. In this environment, mobility and shock gave way to ponderous defense and overwhelming firepower.⁷³ In order to counter this defensive superiority, horsemen armed themselves with pistols in the hopes that increasing their own firepower would enable them to penetrate the ranks of pikemen.⁷⁴

Any discussion of early modern cavalry must begin with a description of the different categories of horse troopers and their evolution during the sixteenth and seventeenth centuries. As I will argue below, the sheer diversity of cavalry types and their uses render universal statements about the mounted arm problematic. In this period, the heavily armored man-at-arms evolved into the comparatively nimbler harquebusier as armor became lighter and cavalry firearms replaced the lance. This process was a gradual one in which debate over the best armament for cavalry took place against the backdrop of wider military developments.

Cavalry is a convenient short-hand term for referring to horsemen, but it obscures the complexities of the mounted combat arm.⁷⁵ Placing the diversity of duties, functions, and equipment under a generic label means that critics of early-modern cavalry make

⁷² Roberts, *Gustavus Adolphus*, 180-181.

⁷³ Roberts, *Gustavus Adolphus*, 169, 180-181.

⁷⁴ Oman, *Art of War in the Sixteenth Century*, 86-87.; Roberts, *Gustavus Adolphus*, 178-179.

⁷⁵ For the purposes of my thesis I will use 'cavalry' as a blanket term for mounted soldiers in general and use the specific names of different types of horsemen where appropriate to avoid confusion.

statements that only apply to a single category of mounted soldier or reduce their myriad roles to a single function. Those who argue that cavalry lost all utility limit the role of horsemen to just shock combat. When looking at the different types of horsemen, it becomes clear that shock combat, the use of fear to break an opposing unit's morale, was one of several types of battlefield roles, the other main functions being fire support and pursuit. Throughout the sixteenth century, the range of horsemen multiplied as different commanders experimented with combinations of equipment and tactics, which were driven by cultural assumptions.

Generally speaking, by the end of the 1570s there were five types of cavalry: men-at-arms, lancers, pistoleers, light horse, and harquebusiers, a type of hybrid mounted infantry. The armament of each of the five types was progressively lighter in correspondence to which role they served on or off the battlefield. They represented the traditional mounted warriors, as inherited from the fifteenth-century, as well as newer horsemen who incorporated firearms as a part of their armament. Their evolution was not a linear progression from medieval to early modern cavalry. Men-at-arms remained on the battlefield long after modern historians proclaimed them obsolete and were still a battle-winning force as late as the 1560s. In comparison, the harquebusier was the successor to the medieval mounted archer, who had by now become indistinguishable from the lancer.⁷⁶ The harquebusier was, in theory, supposed to ride to combat, dismount to fire his harquebus, and then retire before enemy cavalry could attack. However, by 1590, Sir Roger Williams; writing on his thirty years of service under English, French, Dutch, and Spanish armies; recommended that harquebusiers stay mounted in combat to

⁷⁶ Phillips, "'Of Nimble Service': Technology," in *Warfare in Early Modern Europe*, 15.; Oman, *Art of War in the Sixteenth Century*, 40.

better assist lancers.⁷⁷ A generation later, the harquebusier was the dominant form of shock cavalry, although the equipment did not change.

The tendency for light horse to move towards shock combat meant that by the 1640s there were three categories of horse: pistoleers and harquebusiers, with mounted infantry dragoons replacing the harquebusier as mounted infantry.⁷⁸ The primary cavalry drill book of the day, John Cruso's 1632 *Military Instructions for the Cavalry*, includes directions for how to train lancers but mentions that there was a scarcity of them for want of trained men and proper horses.⁷⁹ The disappearance of the lancer due to matters of training and horse breeding, and not technology or tactics, mirrors that of the disappearance of the man-at-arms in the prior century. Cultural conditions, such as the leisure activities of the aristocracy, trends in horse breeding, or the decline of the tournament, meant that there were fewer men available to form lancer companies. The lance was still an effective weapon, and its use persisted in Eastern Europe and in the Scottish Covenanter cavalry of the First English Civil War.

There was considerable overlap in the roles the different types of cavalry fulfilled in war, making it difficult to draw fine distinctions between them. Their equipment can help somewhat in determining whether any given horsemen was heavy or light cavalry, but, given the tendency for reduced weight, even this criteria is problematic. The sixteenth century was just as much of a time of experimentation for cavalry as it was for infantry. Different combinations of armor, firepower, depth of formation, or composition of horse companies all fluctuated throughout the 1500s. Taken as a whole, innovations in

⁷⁷ Williams, *Brief Discourse of War*, 35.

⁷⁸ Throughout the time period one generation's mounted infantry became the next generation's shock horse as troopers dismounted less and less to perform their duties. In a process similar to that of the harquebusiers, dragoons became shock cavalry by the beginning of the eighteenth century.

⁷⁹ Cruso, *Military Instructions*, 30.

cavalry tended towards versatility and reduced weight. Growing awareness of how an army should operate in the field and attempts to find a place for mounted soldiers in the new military order drove these homogenizing tendencies.

It is possible to gain an idea of the evolution of sixteenth-century cavalry by closely examining what few sources are available. There were no cavalry drill books written before Cruso's in 1632. This suggests several possibilities: that there was no need for a drill book because the tactics utilized by horsemen of all sorts were still largely traditional in nature; that, because of the fluid nature of cavalry combat, commanders drew their tactical knowledge from direct experience and not formal instruction; or that the dissemination of innovations proceeded slowly. What information was available consisted largely of descriptions of the types of horse companies and their various campaign duties, in particular those related to light cavalry.

Two of the major sources of cavalry information come from the Huguenot captain Francois de la Noue and his English officer Sir Roger Williams. During the 1560s and 1570s, de la Noue was at the forefront of cavalry combat, having seen the impact of German *reiter* tactics at St. Quintin, Gravelines, and Dreux. His *Politick and Military Discourses*, written in 1587, contains passages on the merits of forming cavalry companies into lines or deep columns, the superiority of pistols over lances, and an analysis of the *caracole*. He was a great admirer of the *reiters* and recommended copying their tactics. However, he condemned them for their improper use of the pistol and the *caracole*, which he said negated the inherent advantages of pistols when used against other cavalry.⁸⁰

⁸⁰ La Noue, *The Politicke and Militarie Discourses*, 201-202.

Sir Roger Williams, whose 1590 work *A Brief Discourse of War* contains some of the strongest calls for reform of the Elizabethan military system, comments on the Spanish and French cavalry with the goal of convincing English captains to fully embrace modern warfare. He discussed the strengths of lancers in relation to men-at-arms, the value of harquebusiers, and weighed in on the debate about pistols versus lances. For Williams, the lance was superior to the pistol, not in terms of its potency, but because the *reiters* used the pistol improperly.⁸¹ It was better to keep the lance because of the signal it sent to other cavalry: namely that lancers showed their resolve to close with the enemy.⁸² This was something that *reiters* were not willing to do, as shown by their tendency to fire and ride off, but he admits that if pistoleers were to imitate French tactics, influenced greatly by their enthusiasm to break into enemy ranks, then the pistol was manifestly superior.⁸³

It is noteworthy that de la Noue and Williams' critiques of cavalry firepower came from poor weapon skills, inadequate training, and lack of resolve. Firepower, whether via pistols or the harquebus, was not the issue for the two veterans, as firearms were of manifest use to cavalry. Pistols' deadliness compared to the lance was unquestionable, but it took a certain kind of training to produce the professional cavalry soldier that slowly replaced the feudal knight. The process itself was not unlike that of instilling discipline in the infantry, except that, due to the constraints on available horses and adequate riders, the transition from amateur warrior to professional soldier was longer.

⁸¹ Williams, *Brief Discourse*, 38.

⁸² Williams, *Brief Discourse*, 38-39.

⁸³ Williams, *Brief Discourse*, 39-40.

The five main functions of cavalry on the battlefield were: to provide cover for maneuvering infantry, limit an opponent's mobility through threat of attack, counter enemy cavalry, attack engaged infantry in the flank or through surprise, and pursue routing enemies. The first two roles were perfectly suited for light cavalry, and, as the types of cavalry increased, there were more cavalymen available to perform these duties. Light cavalry served primarily as auxiliary troops on the battlefield and generally seconded well-armored cavalry in an engagement. The duty of attacking an enemy in melee combat fell to shock cavalry regardless of the weight of their armament. These horsemen used fear as their primary weapon to prevent their opponents from moving or to intimidate them into breaking ranks. Fear of a sudden attack or flanking maneuver were the two best ways to counteract the steadfast defense of infantry. Confusion over when or where a group of horsemen might attack had the potential to weaken the cohesion of disciplined infantry. Given time to prepare for a cavalry charge, a company of footmen could resist the attack indefinitely, but if caught unaware infantry were at the mercy of their mounted opponents.⁸⁴

In any combat encounter, morale is the single biggest factor that contributes to victory, and eroding morale through uncertainty or panic was the main goal of horsemen. Historian Louis A. DiMarco points out that the nearest equivalent to the psychological impact of the imposing sight of a mounted soldier is the use of mounted police in crowd control. According to DiMarco, "the intimidating size, speed, and combined mass of the police horses can disperse a crowd without physically coming into contact with it."⁸⁵ The cavalry of the sixteenth century did not lose this advantage because of technological

⁸⁴ Guthrie, *Battles of the Thirty Years' War*, 3.

⁸⁵ Louis A. DiMarco, *War Horse: A History of the Military Horse and Rider* (Yardley, PA: First Westholme, 2012), 355.

change. Setting up a rigid dichotomy between shock and firepower does not do justice to the array of tasks that commanders expected of their horse troopers. The use of firearms did not significantly diminish the opportunities for shock action, and the spread of guns throughout the mounted arm shows an attempt to combine shock with firepower. The fear provoked by a sudden attack of horsemen was typically enough to cause an infantry formation to lose cohesion, as men on the fringes of the unit backed away or outright fled. A once solid mass of soldiers became a mob of men concerned more about their individual fates than survival as a whole.

If the targets of a cavalry attack stood their ground, or otherwise engaged in close combat the horsemen enjoyed the advantage of using the height and weight of the horse to control the movements of his enemy. The ability to force ill-disciplined or unnerved footmen back created disruptions in neatly ordered ranks and added to the general confusion of combat. The cavalry harquebus and pistol, despite short range, were another means to create gaps in the line. Given that the goal of an attack was to break the enemy's morale, anything that made it easier for horsemen to push their way into an infantry formation increased the odds of victory. Physical and psychological aggression were necessary for success in cavalry combat. Contrasted with the idea that the sole purpose of cavalry was to physically crash into an opponent, and it is easy to see how the proliferation of firearms might seem to signal the demise of cavalry. If "shock" is defined in purely physical terms, then any practices or equipment that reduced the likelihood of contact points to decline.

Off the battlefield, the functions of cavalry varied greatly. While an army was in the field, mounted soldiers were its eyes and ears. Performing reconnaissance patrols,

screening an army's flanks on the march, and raiding convoys or enemy territory were the substance of cavalry duty. Just as the mobility of cavalry gave an army flexibility and maneuverability on the battlefield, it provided an army with flexibility and maneuverability on the march. An increased emphasis on orderly campaigning meant that these non-combat functions were of vital importance. To overlook them is to limit the purposes of cavalry to solely their battlefield roles. Throughout state documents and personal memoirs, the records of numerous small "actions" or "exploits" provide the majority of references to cavalry and attest to the importance of small-scale encounters between rival patrols or during a raid. Military historians who overlook patrol skirmishes, raids, and convoy duty neglect some of early-modern warfare's most prevalent combat encounters.

In the beginning of the sixteenth-century, heavy cavalry men-at-arms, composed of noblemen and their followers, were the elite of European armies. Men-at-arms, armed with a stout lance and riding a powerful warhorse, charged *en haie*, the French term for a single rank, to maximize psychological impact and give each member an opportunity to engage in combat. Once broken, their opponents became easy targets for the horsemen's lances. If any of their foes were left, the men-at-arms scattered among them in a general melee, where their armor, weapons, and training gave them a considerable advantage in hand-to-hand combat.

Shock cavalry, like the men-at-arms, were specialized warriors who required years of dedicated training to fight effectively. A charge required certain conditions to be effective: relatively level ground, room to build speed, fresh horses, and most, importantly, a foe unprepared to receive their charge. By the end of the fifteenth-century,

Swiss, and later German, mercenaries armed with pikes proved that disciplined infantry were capable of stopping the charge of men-at-arms, yet even they could not drive the heavy cavalry from the battlefield. The men-at-arms maintained a place well into the last decades of the sixteenth century until they eventually passed out of use because of cost and slowness.

More versatile types of cavalry gradually supplanted the men-at-arms as the premier horse soldiers. Men-at-arms fell out of favor chiefly because of the costs of purchasing a full head-to-toe suit of bulletproof armor and providing multiple warhorses. Steadily, commanders prized speed and maneuverability over heavy defenses. This is one factor where technology does play an important role: the weight of bulletproof armor for horse and rider made men-at-arms less effective. They were large, slow targets, and, by the time powerful firearms came into common use, armor became too heavy to be practical. Rather than continue increasing the strength of armor, innovators looked to speed to engage exposed infantry formations or outmaneuver opposing cavalry. Lightly armed and armored shock cavalry became more important because they were able to close with infantry without having to survive multiple volleys of shot.

By the 1570s, men-at-arms were considered ill-suited for the duties of contemporary warfare.⁸⁶ Lancers differed little from men-at-arms in terms of their role on the battlefield, but the reduced weight of their armaments and abandonment of horse armor meant that they were able to strike more quickly. The English were long familiar with light armored shock cavalry which they termed demi-lances.⁸⁷ Demi-lances, officially a part of the Gentlemen Pensioners, formed part of the cavalry contingent of

⁸⁶ Barret, *Moderne Warres*, 141-142.; Williams, *A Briefe Discourse of Warre*, 31-32.

⁸⁷ *CSP*, Venice vol. V, no. 703, March 1551; Williams, *Brief Discourse of War*, 37.

Henry VIII's 1513 invasion of France.⁸⁸ By the early-1590s, the lancer had fully supplanted the men-at-arms and became the predominant form of shock/heavy cavalry.

The lancers of the latter half of the sixteenth-century wore pistol-proof plate armor on their torso, arms, and front of the thighs to reduce weight and increase the ability to control their horse. Along with reduced armor, their horses went into battle unarmored, giving the lancers increased stamina and mobility compared to men-at-arms. As their name suggests, lancers' primary weapon was a lighter version of the lance carried by their predecessors, and they carried swords and a pair of pistols as secondary weapons. Tactically, their role was the same as that of men-at-arms, to engage the enemy using intimidation and physical violence, but the lightness of their armament made them more versatile. Versatility meant that an individual lancer found himself in more combat encounters, an important factor considering the importance of bravery among the aristocracy.

Pistoleers were identical to lancers in armament, save that their main weapons were a pair of pistols instead of the lance.⁸⁹ First used by German *reiters* in 1544, the pistol quickly became an attractive alternative to the lance, but there was controversy over its proper use.⁹⁰ The famed Huguenot general Francois de la Noue commented that the pistol was superior over the lance due to its increased deadliness and that instances of lancers overcoming *reiters* were due to a failure of resolve and training on the part of

⁸⁸ Millar, *Tudor Mercenaries and Auxiliaries*, 5-8, 23-24.

⁸⁹ Pistoleer is the generic name used by English military writers for pistol armed cavalry. *Reiter* describes the widely used German mercenary pistoleers. Cuirassier is synonymous with pistoleer and cuirassier became the preferred term by the 1590s. For the purposes of this paper, pistoleer and cuirassier will be used where appropriate based on the source material.

⁹⁰ Hans Delbrück goes into greater detail about the controversy surrounding the lance/pistol debate in volume IV book II chapter I of *History of the Art of War*.

latter and not any deficiencies with the pistol itself.⁹¹ Sir Roger Williams, an English cavalryman who served in France under de la Noue, disagreed somewhat and argued that, despite its diminished stopping power, the lance was preferable to the pistol due to the difficulties in using the firearm correctly and the tendency of *reiters* to flee in the face of charging lancers.⁹² Williams does admit that the courage of the horsemen plays the decisive role in that resolute troopers, in his case Frenchmen, are particularly deadly when armed with pistols and properly led.⁹³

At some point in the mid-1500s, the *reiters* developed a tactic known today as the *caracole*. There are several interpretations of the specifics of the *caracole*, but the most commonly accepted, and criticized, view is that the maneuver consisted of a deep column of pistoleers drawn up in twelve or more ranks that would trot to the enemy, fire their pistols, and then wheel about to the rear of the column so that the next rank could advance and fire. Viewed this way, the maneuver is essentially a cavalry version of the infantry countermarch and was meant to increase the firepower potential of pistoleers.

German *reiters*, pistol-armed mercenary cavalry used extensively in the French Wars of Religion by Huguenot commanders, were the first to make use of the *caracole* at the Battle of Dreux in 1562.⁹⁴ During the battle, the horsemen fired numerous volleys into Swiss pike formations left unprotected by shot or friendly cavalry. A similar result occurred earlier at the battle of Pinkie Cleugh in 1547, when fire from a company of harquebus-armed cavalry in the pay of the English killed many Scottish pikemen. The

⁹¹ La Noue, *The Politicke and Militarie Discourses*, 198-203.

⁹² Williams, *Brief Discourse of War*, 38-39.

⁹³ Williams, *Brief Discourse of War*, 39.

⁹⁴ Delbrück, *The Dawn of Modern Warfare*, 123.

practices *reiters* developed in France eventually made their way to the Low Countries via Huguenot generals who fought alongside the Dutch.

Most modern historians of the military revolution see the *caracole* as the nadir of cavalry's relevance. Characterizing the use of pistols in general, and the *caracole* in particular, this view downplays battles in which *reiters* defeated infantry and heavy cavalry alike, with rolling volleys of pistol fire. Similarly, attributing all pistol use to the ambiguous maneuver does not do justice to the different ways that all types of mounted soldiers utilized firepower. The pistoleers of Henri IV (and his generals de la Noue and Coligny) used pistol-armed cavalry to great effect by having the horsemen hold their fire until the last moment before contact. A single volley fired at close range carried the same psychological shock as that of lancers but came with the additional benefit of the increased deadliness of the pistol. That the *caracole* had mixed results is no reason to denigrate its utility given the period's other innovations.

Pistoleers were just one type of cavalry that used firearms as their primary weapon. Contemporaries recognized that firearms, in particular infantry firearms, were extremely versatile and sought to combine their use with the mobility of horse. In the constant war of raid and counter-raid of the Dutch Revolt, the ability of a horseman to fight mounted and afoot was vital. Cavalry firearms made possible the use of firepower to support shock-action by heavy cavalry.

Harquebusiers, so called because they carried a shortened version of the infantry firearm the harquebus, were ideal scouts and support troops. Initially a form of mounted infantry, harquebusiers guarded the flanks of an army, supported lancers on the battlefield, and conducted raids. They were capable of providing fire support while

mounted and on foot, a clear sign that multifunctionality was a strong influence on the evolution of mounted troops.

Gradually, the lance was discarded in favor of the pistol, and by 1600 there were essentially two different types of cavalry, both of which used firepower as their primary means to attack. In 1597, the Dutch military reforms implemented by Maurice of Nassau, Prince of Orange, called for the abandonment of the lance in favor of the pistol. It is here that writers began to use the term *cuirassier* in place of pistoleer. The contraction of five broad categories into two roughly homogenous ones shows that the pace of cavalry's evolution was slowing. For the next thirty years *cuirassiers* and harquebusiers were the dominant forms of horsemen in Western Europe.

Pistoleers and harquebusiers, collectively termed 'mounted shot' by the English, were an attempt to combine firepower and mobility. In order to respond to developments in warfare, different types of cavalry came into use, and the experimental nature of this process roughly mirrors the evolution of infantry weapons and tactics. The debate over the merits of pistols versus lances was still a controversial topic among military writers as late as 1590.⁹⁵ However, the debate was limited to their relative merits only with regard to fighting other cavalry. There is little evidence of their use against infantry in contemporary military manuals. There is, however, evidence of the use of cavalry firearms against infantry in the reports of battles. In 1547 at Pinkie Cleugh, Spanish mercenary harquebusiers in the pay of Edward Seymour, 1st Duke of Somerset, inflicted massive casualties on the Scottish pike formations. Similarly, German *reiters* decimated the ranks of the Swiss infantry at the battle of Dreux in 1562. What is noteworthy is that in both of these battles the infantry formations lacked firepower of their own to retaliate.

⁹⁵ Williams, *A Briefe Discourse of Warre*, 38-39.

It is possible that by 1590 the use of mounted shot against infantry was an accepted practice and therefore not worth debating.

The critiques of the *caracole* and the deep squadron assume a change in both cavalry and infantry tactics that was universal and immediate. Changes in the way cavalry and infantry engaged with one another did not take place overnight. They were the result of a long process of establishing equilibrium between mobility, defense, firepower, and shock attack. If both were indeed invented to counter disciplined pike-armed infantry as these historians claim, something not entirely supported by sixteenth-century literature, then it certainly didn't take effect across all cavalry forces at once.

Ellis and Oman make mention of the fact that German horsemen were the first to adopt the pistol in 1544, most likely because of its invention somewhere in the eastern German states.⁹⁶ What they do not do is track its diffusion through other armies. At Dreux, *reiters* fought alongside French men-at-arms armed with the heavy lance.⁹⁷ The Spanish used lancers as late as 1600, and Scottish horsemen retained the use of the lance well into the English Civil War in 1642, where it was put to good use against Royalist cavalry.⁹⁸ Even well into the seventeenth-century, proponents of the lance continued to call for its return.⁹⁹

Tactics and equipment were only one part of what went into the making of an effective cavalryman. Various cultural factors, intangible qualities that arose from the aristocracy's social and political landscape, played a more influential role. Culture set the

⁹⁶ Ellis, *Cavalry*, 81.; Oman, *Art of War in the Sixteenth Century*, 85-86. The exact origins of the pistol, and its name, are obscure. See Delbrück, *The Dawn of Modern*, 41-42.; Oman, *Art of War in the Sixteenth Century*, 85-86. for the specifics of the pistol's origins.

⁹⁷ Delbrück, *The Dawn of Modern*, 123.

⁹⁸ Delbrück, *The Dawn of Modern*, 143.; Firth, *Cromwell's Army*, 114.; Roberts, *Gustavus Adolphus*, 180.

⁹⁹ Cruso, *Militarie instructions for the cavallrie.*, 28, 36.

parameters for the martial values of the aristocracy. Black reminds his readers that any discussion of Western military history must account for the role of honor and chivalry and that these elements constitute a “culture of war” that offers an alternative to the technological interpretation.¹⁰⁰ How gentlemen viewed themselves and their place in war influenced cavalymen’s morale, methods of training, and combat performance. Ideas of honor and patronage found expression in acts of conspicuous bravery. Aristocratic pastimes, particularly hunting as primary means of riding instruction, reflected the qualities a gentleman should possess and were the ways to practice the skills of mounted warfare.

Cultural values were the expression of how an aristocratic warrior viewed his place in war in relation to his social standing. There was a reciprocal interplay between war and society, and a gentleman’s place in one mirrored his status in the other. Social prestige demanded battlefield prestige, and cavalry had long been the bastion of the warrior elite. The courage shown in battle, in particular the chaos of cavalry combat, could elevate the social standing of a gentleman.

My use of the term “culture” is a way to describe intangible factors that had a significant impact on the operational and tactical use of cavalry. Scholarly analysis that focuses on culture can too often fall into vaguery and confusion. Therefore, it is necessary to establish as clear a definition as possible. Aristocracy, unless otherwise qualified, refers to the military elite of England, in particular their relation to mounted warfare as an expression of a warrior ethos. Even the term “aristocracy” is problematic, as it describes both the lesser gentlemen and titled nobility of England.

¹⁰⁰ Black, *Rethinking Military History*, 55.

Vagueness can have its advantages, too; it allows historians flexibility in defining the boundaries of analysis. Unlike technological interpretations, which are by necessity inflexible, cultural interpretations drawn by careful source analysis allow the historian to include influential elements that might not be readily apparent. For example, the aristocracy's willingness to experiment in order to maintain relevance in the face of real tactical and technological developments shows how much culture affected the battlefield. If the intellectual currents that drove experimentation with infantry tactics were in part an expression of the importance of classical influences then it follows that similar influences played a role in cavalry developments.

The memoirs, military manuals, and state correspondence of English field commanders contradict assertions that cavalry was ineffective. Beginning in 1572, English volunteers joined their Dutch co-religionists to fight in the Low Countries, one of the most war-torn regions in Western Europe. Consequently, a small section of the English aristocracy and their yeomen followers played their part in shaping early-modern warfare. Their experience reflects contemporary views on the mounted soldier's place in war. In their correspondence, English captains emphasized the need for skilled horsemen in order to wage war effectively.¹⁰¹ Veteran soldiers' memoirs describe battles, large and small, in which the timely intervention of cavalry secured victory. I will examine these documents to evaluate the criticisms raised against cavalry from 1572 to 1645. For the sixteenth-century, I will specifically look at the participation of the English in the Eighty Years' War before England concluded peace with Spain in 1604 following the Treaty of London. The Low Countries were the chief fields of conflict where the English learned

¹⁰¹ The *Calendar of State Papers Foreign* contain the majority of requests for more cavalry, money to pay for equipping horse companies, and descriptions of combat that reference the role of cavalry. Volumes XII to XXI.3 have the most references to cavalry.

the art of early modern warfare.¹⁰² This time period was the final transition from lance to pistol. Therefore, it is only fitting to observe the role of cavalry during the different phases of English intervention in the Dutch Revolt.

In the examination of the seventeenth-century, I will study the influence of Continental developments in the use of cavalry on Jacobean and Caroline warfare. Following the Treaty of London in 1604, English forces largely withdrew from the Continent, and the military heritage of the late Elizabethan soldiery atrophied. Some English captains remained on the mainland and kept alive the lineage of military service via patronage networks dating back to the 1570s, when the first volunteer companies marched alongside the Dutch. Cavalry troopers who served under English captains, such as Sir John Norris and Sir Roger Williams, became captains themselves, continuing a budding tradition of military professionalism. Sir Francis Vere, who served with distinction under Williams, commanded the English forces in the Netherlands from 1589 to 1603. Sir Horace Vere, brother of Sir Francis, led the defense of the Lower Palatinate in 1621. In turn, Sir Horace mentored many of the Royalist and Parliamentarian officers of the English Civil War, among them the Earl of Essex, Sir Thomas Fairfax, Sir Jacob Astley, and George Monck.¹⁰³

Military writers of the late sixteenth-century placed great emphasis on versatility and maneuverability. At the same time, their descriptions of the different types of cavalry overlap and form a continuum based on equipment and duties. Lancers and *cuirassiers* assisted harquebusiers in scouting, raiding, and guard duty. In turn, harquebusiers supported heavier cavalry by acting as skirmishers and flank guards.

¹⁰² Fissel, *English Warfare*, 137, 152.

¹⁰³ Trim, "Vere, Horace, Baron Vere of Tilbury," Oxford Dictionary of National Biography.

Originally arquebusiers served as versatile mounted infantry, but over time that role was transferred to the dragoons. These changes reflected the overall transformation of European warfare during the Early Modern era.

In order to examine the ways in which early-modern commanders saw cavalry, it is necessary to get as close to their experiences as possible. Each of the different types of documentary evidence has a different perspective that, when taken as whole, creates a more well-rounded picture of the time. They allow for the reevaluation of the current ideas regarding cavalry because each set of documents contains what commanders thought was important enough to write down. State correspondence, manuals, and memoirs are the record not only for what commanders found most important, but also how day-to-day operations on campaign played out.

While it is necessary to take these documents as they are in order to get as close as possible to contemporary views, we should not accept them without reservation. An honest evaluation must take into account the writer's intended audience. In almost all cases those who wrote battle reports, training books, and memoirs were writing for their social superiors in the hopes of gaining political favor. English soldiers and authors alike relied upon an extensive patronage network to advance their careers. Military writers dedicated their works to the great lords of England, and this must surely have influenced the treatment of their subject. As such, accounts of battles tend to flatter the nobility, (regardless of actual performance,) mention only those men who stood out for exceptional bravery, and emphasize the moral character of individuals over detailed descriptions of tactics. For instance, apart from some brief, mild criticism in *Brief Discourse* Williams largely wrote about the equipment and role of cavalry and not how

the aristocracy has neglected their duties. Even when he does broach the subject, as is the case with his comparison between men-at-arms and lancers, he quickly points out how English gentlemen are still worthy fighters and only need to modernize the way they ride into battle.

Knowledge of their audience also helps to account for the absence of certain information from the documentary evidence. For example, the lack of detailed information regarding training in drill books is more than likely a result of the fact that the skills necessary to fight come from the aristocracy's way of life. Until 1632, when John Cruso published *Military Instructions for the Cavalry*, there was no dedicated training manual for horsemen. Instead, the few pieces of training material regarding cavalry are found in a select set of manuals where writings on the mounted arm take up only a small portion of the text. In what are typically fewer than a dozen pages, the authors mainly address the types of cavalry and a limited selection of their duties as scouts and foragers.

I have used any relevant training manuals to establish a baseline for evaluating eye-witness accounts and to give context to state documents regarding horse troops. Training manuals undoubtedly have their shortcomings. Very often, the authors who wrote them had little field experience, borrowed heavily from Continental writers, and turned to the ancients for additional advice. This does not invalidate their use in examining the effectiveness and limits of early modern cavalry. Rather, the instructions found in the manuals offer a glimpse at how contemporaries perceived cavalry.

The men who wrote of their experiences in the Low Countries took part in one of the more significant periods of change in military history. While the process was slow,

with many innovations diffused at a halting pace, it represented a period when the relative calm of equilibrium between culture, weapons, and tactics broke before settling into a newer, more stable equilibrium. The English veterans stood on both edges of the transition from medieval to early modern warfare. They witnessed the changes taking place in mounted combat as it moved from the old aristocratic man-at-arms and retinue to the era of the professional mounted soldier. Men such as Sir Roger Williams and Sir Francis Vere fought in a period of blurred lines as heavily armored shock cavalry occupied the same battlefield space as mounted shot. Williams' and Vere's insights, along with those of their contemporaries, show the transition in action and its place in the larger context of sixteenth-century warfare.

CHAPTER 3

Perceptions of cavalry's utility are necessary to help judge how and why soldiers served as horse troopers. Together with descriptions of the military duties of the aristocracy, however neglected those might be, the perception of cavalry contained in drill books reveals a more complete picture of horse companies than historians typically present. When augmented with memoirs and eye-witness accounts, the picture of early modern cavalry becomes even clearer. All three sources of evidence – training guides, descriptions of the aristocracy, and soldier's personal accounts – contain a fragment of the overall picture of the role of cavalry in early modern warfare.

The soldier authors of the Low Country's wars were one of three types: gentlemen volunteers, militia of the Trained Bands, or conscripts. In general, it was gentlemen volunteers who made up the majority of company cavalries, and it wasn't until the 1640s that non-aristocrats began serving in any large numbers. Those non-aristocrats in cavalry companies before the 1640s tended to be tenants or yeoman retainers of landed gentry. The practice of retaining waned as the 16th century progressed but was still a cornerstone of the Elizabethan military system in the 1590s.

The gentlemen volunteers who served on the continent from the 1570s onward were part of something that David Lawrence calls "military circles."¹⁰⁴ The military circle was a group of men, typically of the lower aristocracy, centered upon one of the peerage. The two most prominent nobles in the 16th century were Robert Dudley, the 1st Earl of Leicester and Robert Devereux, the 2nd Earl of Essex. Leicester, beginning in the 1570s, began gathering a group of clients dedicated to a nascent Puritan cause of halting

¹⁰⁴ Lawrence, *The Complete Soldier*, 51.

the Spanish reconquest of the Low Countries. This network of military patronage was driven primarily by a religious zeal, and its members differed markedly from the soldiers serving in English forces in the 1590s. Members of Leicester and Essex's circles were volunteers brought up in a military tradition with connections to an aristocratic warrior ideal inherited from prior centuries. While initially inexperienced in Continental warfare, they made up for it with enthusiasm and bravery. The fact that they were volunteers meant that their morale was more solid than that of those pressed into service, and their social status gave them added confidence when compared to non-aristocratic soldiers, as I will discuss in chapter three.

The first group of volunteers, led by Captain Sir Thomas Morgan, answered the call of its religious compatriots in 1572. Initially a group of 300, within a year the English contingent swelled to over 1000 and earned a reputation for tenacity. Among this group were Sir Roger Williams and, later, Sir John Norris, both of whom are the grandfathers of England's early modern military tradition. From the 1570s through the end of the century, they were the chief military advocates pressing for the modernization of the English militia. Williams was a prominent member of both Leicester and Essex's military circles, but Norris frequently butted heads with his social betters. Williams and Norris were typical of the gentlemen volunteers in that they were lower aristocracy, eventually earned knighthood in combat, and were beneficiaries of court patronage. In their correspondence with Elizabeth's chief ministers, they stress the honor gained through military service in conjunction with their emphasis on the importance of cavalry.

Gentlemen volunteers, the most relevant group in relation to cavalry, were the primary conduit for transferring new methods of warfare and, as such, are worthy of

study, despite England's maligned reputation. Modern military historians generally ignore these gentry-soldiers and instead focus on incompetent militia and ill-disciplined conscripts. It is germane to the discussion of cavalry to focus on the aristocracy for two reasons: aristocrats made up the majority of cavalry companies and absorbed the most of contemporary military practice.

Service abroad in the pay of foreign armies was part of the aristocratic lifestyle. Military education was considered a part of the proper upbringing of the aristocracy. Many were quite poor, which is why they chose to serve abroad. Career opportunities, both foreign and domestic, gave the second sons of the nobility something to do. Commenting upon his reasons for joining the Army of Flanders despite his Protestant leanings, Williams wrote, "having spent all my crowns, and being loathe to return to England without seeing something: I promised to stay."¹⁰⁵ Here, Williams expresses a sentiment common to many military aristocrats: there was no contradiction between honor, religious conviction, profit, and adventure.

Thomas Digges, Muster-Master General for the Earl of Leicester during the 1585-1586 campaign, wrote of the duties of the General and Lieutenants of Horse in his military manual *Stratioticos*. Although he was present at Zutphen for Leicester's cavalry charge, Digges did not have actual combat experience, nevertheless as officer on Leicester's staff he was in a position to know a great deal about the cavalry. As Muster-Master General, it was his responsibility to oversee the troop musters, conduct inspections, and serve as an advisor to the commander. Proximity to Leicester, who was

¹⁰⁵ Williams, *Actions of the Low Countries*, 149.

Digges' patron, gave Digges the opportunity to observe the day-to-day routine of camp life from the top down.¹⁰⁶

The available literature consists of military manuals written by veterans of the Dutch Revolt, memoirs from captains and soldiers, lieutenancy books, and state correspondence. A small group of gentlemen volunteers and soldiers of fortune wrote of their experiences, providing a valuable repository of practical advice for up and coming soldiers and officers.¹⁰⁷ Men such as Robert Barrett, William Garrard, and Sir Roger Williams best exemplify the soldier-authors who wrote from experience. Not surprisingly, they go into great detail about the composition and roles of cavalry in armies of the late sixteenth-century.

When cross-examined against each other, state correspondence and military books reveal the relationship between the theory and practice of using cavalry. Such an approach to analysis also helps to alleviate the drawbacks of using period documents. Many of these soldier-authors also wrote of their experiences on campaign in addition to training manuals. Their reasons varied from writer to writer, but each one detailed the actions of cavalry units on campaign. With this information, it is possible to glean some details about the practical applications of horse.

Of the non-theorists, there are two varieties of soldier-author: those with direct combat experience and those without. Additionally, there is a third contrasting category: those whose experience of war doesn't come from the Dutch Revolt. What they share in common is an experience of campaigning.

¹⁰⁶ Webb, "Thomas Digges", 54.

¹⁰⁷ Cockle, *Bibliography of Military Books*, vii-viii.;

Soldier-authors help anchor the discussion of cavalry in actual practice, as the majority of the available literature is theoretical. Their writings primarily deal with the rational aspects of war, that is to say, the aspects least affected by contingent events. As a group, soldier-authors were officers, although not necessarily gentlemen. Many of them held ranks above captain, with men such as Sir Francis Vere holding the unique rank of Sergeant-Major-General. This experience of command is the source of their authority in matters of Continental military practice.

These works must not be accepted uncritically. The authors sought patronage from the great nobles of England and thus may have altered their writings to present the most favorable arguments. It is important to keep in mind that because these authors were members of military circles, their relationship with their noble patron informed all of their writing. This is why I have used a variety of sources to confirm that what they say is reflective of their shared experiences, and not what they thought their patron wanted to hear. This is important because it shows the tension between a budding military profession and an amateur nobility content to use their station as the sole source of their ability to command.

In contrast with veterans, military theorists wrote from a position of ignorance of the actualities of war, but their writings nevertheless reflect contemporary military thought. They were translators of foreign military manuals and ancient texts. I will discuss their direct contributions later in the chapter.

Training manuals were part of the broader Renaissance literary culture in that they emphasized geometric precision and logical practice. The belief that Continental military practice was becoming more scientific stemmed from the growing importance of artillery

and fortifications. The convergence of military practice, mathematics, and science is best evident in the diagrams contained late sixteenth and early seventeenth century manuals. This cultural desire for precision and control is one possible explanation for the practice of the *caracole*. Hans Delbrück writes about the maneuver at length and argues that the it represents the first step in forming a disciplined training regime for cavalry.

In contrast to infantry, before John Cruso's 1632 manual *Military Instructions for the Cavalry* there was a paucity of literature available regarding cavalry. This is in part due to the rise in importance of infantry in relation to the mounted arm, thus precipitating a need for formal instruction because of the lack of a standardized approach to cavalry warfare. The victories of the Swiss in the latter half of the fifteenth century, coupled with the considerable influence of Greek and Roman military theorists, fueled infantry's rise in prominence. Across Western Europe, infantry fought in near uniformity as pike, arquebus, and musket replaced the diverse array of weapons that soldiers used in the fifteenth century. There were, of course, regional deviations. While the Spanish favored firearms and the French were always short on native pikemen, in general, commanders fought with large bodies of pikemen supported by shot. As Swiss, and later German, tactics spread across Western Europe, the tendency towards homogeneity drove out other practices, and the only significant developments came in the form of an increased ratio of shot to pike and reduction in size of tactical units.

Mounted combat had many variations depending on region, horse stock, and aristocratic tradition. Unlike differences in attitudes towards infantry, cavalry warfare was more pronounced and became more unified only in the last decades of the century. On the Iberian and Italian peninsulas, light cavalry were especially prominent. Albanian

mercenary horsemen, *stradiots*, in the pay of Venetians, were so popular that the French copied their style of combat during the long conflict between the Valois and Habsburgs. France relied upon aristocratic heavy cavalry well into the 1580s despite Henri IV's record of the effectiveness of pistol-armed cavalry over men-at-arms. Heavy cavalry from the Low Countries and Rhineland appear in the army lists of Henry VIII's multiple campaigns on the Continent and against Scotland. The Spanish were perhaps the first to arm their light horsemen with arquebuses, known as *herreruelos*, who hired themselves out as mercenaries. In the British Isles, the lack of war horses suitable as mounts for heavy cavalry meant that lighter armed demi-lancers played a more prominent role and were supplemented by Northern Spears, unruly horsemen from the Scottish border. Add the German *reiter* to this array of mounted soldiers and it becomes apparent that, while there were certain broad similarities, the particulars of cavalry composition served as an impediment to a standardized training regimen. It is no coincidence that the first real cavalry manuals appear after the pistoleer supplanted the lancer as the mainstay of Western European cavalry forces.

Information found in military literature before 1632 concerned itself mainly with the duties of officers and the necessity of horsemen to keep watch in camp, surveil the enemy, and guard an army on the march. Instruction on duties and roles were consistent with the general trend towards logical and scientific approaches to war, but training manuals contain only brief sections concerning information relating to cavalry. This suggests that captains had to rely upon informal training to ensure their horse companies were skilled in riding and combat. Officers' assumptions about their cavalymen's skills

came from the leisure pursuits of the aristocracy – hunting and dueling chief among them.

The second half of the sixteenth century witnessed the growth of the military manual as a distinct form of literature. Military manuals, theoretical treatises, and calls for reform nurtured the martial spirit of a small handful of Englishmen who sought military exploits abroad.¹⁰⁸ Caution must be taken when evaluating the validity of descriptions of drills, maneuvers, and armaments in military manuals. Not all of the authors were veterans, and, even then, imperfect memories or the desire to present themselves in a favorable light may have influenced the soldier-authors.

The new science of war dovetailed neatly with a return to the ancients for advice due to similarities with Greco-Roman warfare, with its emphasis on orderly infantry formations, and pike and shot warfare. The connections between the styles therefore reflect the influence of intellectual and cultural impulses to look back to classical authors for advice on how to conduct contemporary wars.

Part of the reason for the lack of contemporary cavalry manuals is the scarcity of cavalry instructions in ancient military texts. The influence of the ancients on infantry warfare was tremendous to early-modern military practice as befits the infantry-dominated warfare of ancient Greece and Rome. The weight given to the classics, which authors turned to frequently for advice on infantry, meant that the theory of how to best use cavalry was consistent with Renaissance intellectual principles. It is difficult to overstate the influence of the Greco-Roman military literature, but, by the 1570s, writers looked increasingly to their own experiences for guidelines. This shift is evident in the approach they took to the duties and composition of cavalry.

¹⁰⁸ Eltis, *Military Revolution of Sixteenth-Century Europe*, 109, 111.

Classical authors paid little attention to cavalry, as the backbone of ancient armies was the infantry. The military literature of the sixteenth-century reflected their Greco-Roman inheritance as authors looked to the ancients for advice in matters of war due to the great exploits of the Greeks and Romans. While Alexander the Great and his successors made effective use of mounted soldiers, cavalry played an auxiliary role on the battlefield for much of the period before the third century. Many of the manuals include only brief instructions for how to organize cavalry units and what their duties were.¹⁰⁹

With the exception of brief passages in Xenophon's *Hipparchicus* and Aelian's *Tactiks*, sixteenth-century cavalry commanders had few resources to draw from in formulating drill books for horse troopers.¹¹⁰ Both classical and contemporary authors seemed to take for granted that their readers knew the types of cavalry in use. Only six of the 54 chapters in *Tactiks* relate to cavalry. Those six deal exclusively with different battlefield formations and not the specifics of drill. Xenophon's work is slightly more informative but, again, has little in the way of practical advice for how cavalry should perform on the battlefield. The information he does provide relates mainly to the duties of a cavalry commander, how to train horses for military service, and the conduct of cavalry companies on the march.

Captain John Bingham, the translator of *Tactiks* and veteran of the Low Countries, did provide commentary at the end of each chapter, but, again, it consists mainly of elaborating on the different formations used by ancient cavalry. It is difficult to imagine how relevant this information was to sixteenth-century cavalry commanders,

¹⁰⁹ Webb, *Elizabethan Military Science*, 109.

¹¹⁰ Aelian, *Tactiks*, 99, 111, 147.

given the differences in composition and equipment between the two eras. A brief section in the notes of chapter 18 does list the various duties of light cavalry off of the battlefield. The duties are consistent with those described in contemporary works. Thomas Digges, author of *Stratioticos*, lists the duties of horsemen according to the different ranks of officers, and, like the ancient authors, the duties correspond with light cavalry.¹¹¹ In *Stratioticos*, Digges details the duties of cavalry officers, how they should select their junior officers, and the function of cavalry while on the march or in camp.¹¹²

Another element related to cavalry found in works of classical military practice found in contemporary manuals is the enumeration of the duties of different officers. Aelian and Xenophon briefly outline the hierarchy of ranks and the specific duties of each.¹¹³ As in the case of light cavalry, contemporary authors mirror the ancients in their descriptions of officer ranks and function.¹¹⁴ What the inclusion of officers and their roles indicate is a growing sense of discipline among cavalry. Cavalry trailed behind infantry in terms of drill manuals and discipline, not because of the ineffectiveness of cavalry, but because, for much of the century, there was little need for cavalry to radically alter its practices. Men-at-arms, lancers, pistoleers, and harquebusiers intermingled in the same way that infantry armed with a variety of weapons took to the battlefield. Each combat arm developed in relation to each other and their component parts. The gradual shift to uniformity, largely completed by the 1590s, is indicative of the sporadic, uneven transition from medieval to early modern ways of war. Furthermore, given that sixteenth-century authors wrote their manuals for a growing officer class comprised

¹¹¹ Digges, *Stratioticos*, 262-265.

¹¹² Digges, *Stratioticos*, 107-111.

¹¹³ Aelian, *Tactiks*, 107-113.; Xenophon, *Hipparchicus*, ch. 2, passim.

¹¹⁴ Barret, *Theory and Practice of Modern Wars*, 139-141.; Clayton, *Approved Order*, 11, 41-42.; Digges, *Stratioticos*, 262-265.

mostly of aristocrats, it is entirely possible that there was no need to provide descriptions of cavalry functions. Those duties the writers included represent new elements introduced over the course of the century: the importance of light cavalry to siege warfare and the growth of organization and discipline.

Scouting, raiding, launching surprise attacks, intercepting convoys, and protecting their own forces were necessary functions of light cavalry regardless of the time period. The increased importance of light cavalry might account for the inclusion of their functions in the literature of military science, but, even then, the authors leave out many of the practical matters. It is not until Cruso's manual that the specifics of the duties, maneuvers, and practices of heavy and light cavalry receive the same treatment as infantry. It is important to note that the emphasis placed on light cavalry is consistent across all the various military manuals published before 1632 regardless of the experience of each author. Veterans and non-military writers seemed to agree that the versatility of light cavalry on the march, as convoy escorts or in raiding the countryside between garrisoned towns, were worth drawing attention to. This is due to the centrality of sieges, particularly in the Dutch Revolt, to early-modern warfare.

When cross-examined against each other, these documents reveal the relationship between the theory and practice of using cavalry. Such an approach to analysis also helps to alleviate the drawbacks of using period documents. Particularly frustrating to the modern historian is the vagueness of accounts of actual battles. Understandably, accounts of specific battles differ in their descriptions depending on the motives of their authors and the proximity of eye-witnesses to the actual battle. For example, the reports

on the battle between the Dutch and Spanish at Rijmenam differ in chronology of events, vagueness of action, and specifics of outcome depending on their source.

Lieutenancy books and state correspondence contain valuable information on the men who served in horse companies. Records of muster returns, requirements for weapons, and the obligations of the aristocracy all contribute to understanding the place of cavalry in early modern armies. They contain reports of those who shirked their duty to provide equipment and horses as well as those who enthusiastically volunteered themselves or their money. Among the contents of the lieutenancy letterbooks are the records of men who fought as cavalymen. State correspondence is valuable because examination of the letters reveals the thoughts of commanders who otherwise did not write of their own experiences. Of particular note is Sir John Norris, the renowned Elizabethan captain, who from 1576-1585, commanded the English volunteers who served in the Low Countries. Norris was a firm believer in the importance of cavalry, and his letters to members of Elizabeth I's Privy Council consistently stressed the need for more horsemen.

State documents also allow for the opportunity to further verify the authority of the soldier-authors because, despite differences in details, they are all consistent in their portrayal of cavalry action. Williams appears again and again in the correspondence, and, like Norris, draws attention to the value of cavalry. The main difference between the two is not their emphasis on the importance of mounted soldiers but on their opinion of its personal utility. For Norris, who was a practical man when it came to military affairs, cavalry was vital for the conduct of a campaign. Williams agrees with Norris on this point but adds that cavalry service is also important for his personal honor as well.

CHAPTER 4

It is impossible to separate the effective use of cavalry from the social, political, intellectual, and even technological factors that influenced the attitudes and behavior of aristocratic cavalry troopers and officers. In the following section, I will outline how the cultural values of the aristocracy were vital to the effectiveness of cavalry by examining how trends in politics, intellectual life, and education influenced aristocrats as cavalry soldiers. Changing chivalric ideals, the importance of patronage, classical literature, and the role of informal training were the main components of honor, which was the aristocracy's primary motivation to fight.

Sixteenth-century commanders needed skilled mounted soldiers to serve as the mobile combat element of their armies, and aristocratic cavalry adapted to fill the role. Contrary to the critiques of sixteenth-century historians, the aristocracy retained their monopoly on mounted warfare during the age of gunpowder. Allegations that the aristocracy, hidebound by an outmoded social status, refused to acknowledge the supremacy of firearms are common among historians but, upon reexamination, are not consistent with source material. John Ellis, whose critique is perhaps the most condemning, claims "inertia of tradition" caused the aristocracy to fail to appreciate the relationship between firearms and cavalry.¹¹⁵ Contemporary memoirs directly contradict this analysis. Far from being a moribund appendage to early-modern armies, the cavalry evolved alongside infantry in a dynamic relationship that involved more than the role of technology.

¹¹⁵ Ellis, *Cavalry: The History of Mounted Warfare*, 78-79.

The aristocracy's role in warfare remained as vital as it had in prior centuries, even as their equipment and skillset adapted to fit the overall changes in early modern warfare. Alterations in equipment and tactics did not change the fact that the cultural underpinnings of aristocrats as soldiers remained relatively unaltered.¹¹⁶ While all-encompassing heavy armor fell out of use and the pistol replaced the lance, the confidence born out of social superiority was an integral part of combat that was primarily based on psychological shock.

As I stated earlier, cavalry was first and foremost a weapon of fear meant to hem in the opponent's ability to maneuver through threat of a swift attack. Well-timed charges or pursuit of a routing enemy were secondary, though critical, functions. In order to make intimidation credible, a company of horse needed to show resolve as it faced a body of compact infantry or a formation of rival cavalry. Sir Roger Williams, England's foremost proponent of cavalry reform, sums up the importance of intimidation when he says cavalry should "enter resolutely and to keep close together" and that the "charge of the lancers is terrible and resolute."¹¹⁷ Robert Barret, another English veteran turned author, describes the ideal time to charge an infantry formation as when it is "first shaken or disarranged by shot."¹¹⁸ Implicit in his description is the assumption that the courage of mounted soldiers mattered more than their weapons. Williams makes this assumption explicit when he says that an experienced captain cares more for the bravery of his company than whether or not they strike with their lances.¹¹⁹

¹¹⁶ Bush, *The English Aristocracy*, 72-73.

¹¹⁷ Williams, *Brief Discourse of War*, 38-39.

¹¹⁸ Barret, *Theory and Practice of Modern Wars*, 142.

¹¹⁹ Williams, *Brief Discourse of War*, 38.

Like other soldier-authors, Barret and Williams were part of a European-wide military culture that incorporated traditional aristocratic values into the new military professionalism. The military culture of honor, a set of assumptions, attitudes, and values shared by aristocratic officers, provided the motivation necessary to risk their lives in the impersonal battlefields of early-modern warfare. The thunder of cannon and the smoke of arquebus fire added new elements of confusion to the already familiar anxieties of hand-to-hand combat. Death was just as likely to come from an unseen bullet as it was from the “intimate” harm of lance or sword.¹²⁰

The willingness to earn honor on the battlefield through valorous acts in the face of uncertain or intimate violence served as the primary motivation for an emergent officer class seeking to define itself in relation to changes in warfare. On August 1st, 1578, Sir John Norris, colonel of the English volunteers in the Netherlands from 1578 to 1586, led the defense of English soldiers against the advance of Spanish forces so bravely that it led him to become the preeminent commander in the Low Countries.¹²¹ Norris’ conduct during the battle secured him overall command of the English until the arrival of the Earl of Leicester’s expedition in early 1586.

Wider currents of humanist ideas of the relationship between the individual and the state influenced emerging aristocratic concepts of honor. Elizabethan aristocratic society embraced humanistic ideas of civic duty that merged public interests with private gain.¹²² For those inclined to martial pursuits, this meant an abandonment of private

¹²⁰ Barbara Donagan elaborates further on the uncertainty of close combat. Donagan, *War in England: 1642-1649*, 74-78.

¹²¹ *C.S.P. Foreign*, vol. XIII, 1578-1579, # 134-136, 139, 142; Fissel, *English Warfare, 1511-1642*, 141; Nolan, *Sir John Norreys and the Elizabethan World*, 35-36.

¹²² Ferguson, *The Indian Summer of English Chivalry*, 89.; Kelso, *The Doctrine of the English Gentlemen*, 71.

virtue as the prime motivator for action. The state, embodied in the person of the monarch, became the sole object of loyalty and commanded the obedience of all who sought to earn an honorable reputation. Honor as an external quality drove both gentry and peerage to excel in their duties. In theory, honorable service earned through fulfillment of one's obligations brought with it substantial rewards. It was not that public duty completely eclipsed private gain, but that private gain and public duty became fused with service to the state as the prime means to advance internal goals. In essence, the concept of honor combined public and private motivations with internal motivation subordinate to the external.

Honor expressed itself in the reciprocal relationship between social, political, intellectual, and even technical factors. Intellectual currents informed social values that, in turn, served as motivating factors for honorable actions. An honorable reputation enhanced an individual's social standing and consequently his political influence. Standing out from other members of the court allowed aristocrats to attract the attention of patrons who could reward loyal service with considerable rewards. For those gentry and nobility who desired command of their own companies, the patronage of military figures at court, mainly Robert Dudley, 1st Earl of Leicester, or Robert Devereux, 2nd Earl of Essex, were essential. This trend only grew in importance as the century grew to a close. During the reign of the early Stuart monarchs, the importance of local officials such as the lords lieutenant and their deputies grew significantly. It was through these patronage networks that gentlemen sought command of companies, reaped the rewards for dutiful service, and found outlets for their ambitions.¹²³

¹²³ Victor L. Stater, *Noble Government: The Stuart Lord Lieutenancy and the Transformation of English Politics* (Athens, GA: University of Georgia Press, 1994), 18-19.

Patronage was the central means of distributing rewards in a political culture in transformation from interpersonal loyalties to bureaucratic professionalism. The rewards of patronage were predicated on dutiful service and thus required a suitable military skillset. The trends surrounding patronage and its role in government were just beginning their long process of transforming English politics. Martial-minded aristocrats cultivated new professional skills in conjunction with traditional martial values in order to win honor through success on campaign. Studying the classics for insight into warfare went along with training in riding and dueling. Acquisition of martial skills contributed to victory on the battlefield, and the honor won through such acts reinforced the old identity of aristocratic superiority through military service. Honor touched on all these aspects and was central to aristocratic culture. It contributed directly to the aristocracy's role as mounted warriors by instilling moral confidence and encouraging acts of conspicuous courage.

Possession of the technical skills of personal combat was not enough to create a valuable noble warrior. Chivalric values of courage, skill at arms, and honor formed the cultural foundation from which the nobility found their motivation to fight. Influenced by intellectual currents on the Continent during the sixteenth-century, English ideas of chivalry as an inwardly-directed trait gave way to an outwardly-directed code of honor based not on personal loyalty to a particular lord but on duty to the monarch as the head of the state.¹²⁴ Humanism supplemented religion as the chief motivating factor for virtuous action. As a consequence of the influence of humanism, civic obligation became

¹²⁴ Bush, *The English Aristocracy*, 41.; Ferguson, *The Chivalric Tradition*, 108.; Ferguson, *The Indian Summer of English Chivalry*, 83-84.; Howell, *Sir Philip Sidney*, 80-81.; Kelso, *The Doctrine of the English Gentleman*, 27-29, 98.

paramount and eventually merged completely with conceptions of personal honor. Defense of the state or religion was also a defense of a gentleman's reputation.

Even as humanism's influence on honor helped adapt ideas of chivalry to contemporary political thought, it also undermined the martial character of the aristocracy by opening up new avenues for honorable service. The perceived decline of the martial spirit that was the hallmark of the aristocracy in the Middle Ages began as early as the fifteenth century.¹²⁵ Long periods of peace and a new appreciation for scholarly pursuits meant that skill at arms was no longer the sole means of legitimizing the aristocracy. In particular, service to the monarch as an able administrator elevated the legal occupation in the minds of English gentlemen.¹²⁶ As the importance of lawyers, increased so too did the possibility of ennoblement through civil service.¹²⁷ However, martial values had not entirely vanished from the aristocratic culture of England.

During the sixteenth-century, aristocrats' role in English society became defined in part by their use of violence in the service of the state rather than solely for personal gain. Those who still held to martial values had to work harder for recognition before England's participation in the Dutch Revolt in 1585. A scarcity of opportunities to fight increased the pressure to be victorious and pushed those aristocrats who volunteered to acts of conspicuous bravery in an era of impersonal warfare.

Central to aristocratic martial values was the concept of honor and its ties to service to the state. Honor, an expression of an individual's self-worth as expressed through public acts of valor, grew out of the medieval concept of chivalry. Chivalric

¹²⁵ Kelso, *The Doctrine of the English Gentlemen*, 44.

¹²⁶ Ferguson, *The Indian Summer of English Chivalry*, 197.

¹²⁷ Ferguson, *The Indian Summer of English Chivalry*, 102-3.; Kelso, *The Doctrine of the English Gentleman*, 51.

virtue was an inner quality that came from adhering to a certain code of conduct and went hand-in-hand with bonds of loyalty between two individuals.¹²⁸ The feudal conception of chivalry was intensely personal and accounted for the complex web of loyalties characteristic of political life in the Middle Ages.¹²⁹

In contrast, the early-modern concept of honor was as a public virtue, an affirmation of an individual's reputation for dutiful service to the state. Honor was earned through actions that advanced the cause of the state as embodied in the monarch. An aristocrat's honor was external, even if it brought internal rewards. In this way, Elizabethan aristocratic culture was in a transition from its chivalric past to a culture of honor based on duty. What emerged from that adaptation was a military culture that contained a core of traditional chivalric virtue with expanded concepts of duty and reward.¹³⁰

The institution of patronage demanded that lesser nobility prove their worth and use every opportunity to distinguish themselves. Conspicuous acts of bravery or skillful management of a campaign raised the status of an aristocrat and provided the social capital to seek patronage. In a governmental structure that was in transition from interpersonal loyalties to bureaucratic state service, connections with court favorites brought opportunities to serve the monarch.

The need to emphasize one's valor was vital to ensuring the patronage of influential members of court. Perhaps the best example of this attitude comes from Sir Roger Williams, who, in both his memoirs and his correspondence with Elizabeth's

¹²⁸ Kelso, *The Doctrine of the English Gentleman*, 71.

¹²⁹ Stone, *The Crisis of the Aristocracy*, 199.

¹³⁰ DiMarco, *War Horse: A History*, 152.

ministers, stresses the role of mounted combat in displays of courage.¹³¹ In late September 1585, Williams wrote to Sir Philip Sidney, a relative of Leicester's and member of the Earl's military circle, that "all my delight is in the cavalry, wherefore I do humbly desire your honour both to remember me to my Lord of Leicester and to Mr. Secretary if there comes any, that I may have some place amongst them." A week later he wrote to Secretary Walsingham, "All my trust is to have commandment amongst the cavalry. It grieved me the last day to be on foot and to see the enemies braving on horseback." Later in the same letter, he insists that, in order to secure victory in the field, horsemen were essential.¹³²

Maintaining a reputation as a servant who upheld the cause of the state was important to the lesser aristocracy because it was the means by which they advanced their position in life. The Tudors sought to break local loyalties and solidify the court as the sole source of legitimate authority that commanded the loyalty of English subjects. Personal loyalties did not disappear overnight, but because of the efforts of the dynasty the influence of the great provincial lords waned and those seeking sources of patronage began to turn to the court.¹³³ The shift of loyalty to the center and the subsequent shift of patronage opened up new avenues for social advancement.

In this new court culture, service to the crown became central to the life of an aristocrat as honorable service led to appointments to offices, financial benefits, influence, and personal fulfillment.¹³⁴ Military service, whether as an individual volunteer or as part of a larger national force, was an important means for young nobles

¹³¹ Williams, *Brief Discourse*, 29-30.

¹³² *CSP Foreign XX*, Sept 30, 1585, Oct. 8, 1585.

¹³³ Adams, *Leicester and the Court*, 71.; Bush, *The English Aristocracy* 106-107.; Kelso, *The Doctrine of the English Gentlemen*, 44-5.

¹³⁴ Adams, *Leicester and the Court*, 70-71.

to earn the respect of their peers through acts of valor.¹³⁵ Those nobles who wished to advance their social position through military service sought out patronage due to the opportunities it provided. The good word of a respected patron opened doors for soldiers looking to serve as captains. Leicester commended Norris for his exemplary service saying, “for his birth and virtues' sake have specially requested for him the colonelship of the English soldiers... he is the fittest man in all respects, for birth, skill, courage, wisdom, modesty, and faithfulness to the Prince, to take that charge.”¹³⁶ Leicester also sent a recommendation regarding Williams, “I had forgotten to request your favour towards Roger Williams” praising “the valour of the man, who is indeed a very good soldier.”¹³⁷

It is imprudent to assume that, because of the newly recognized importance of lawyers and other civil servants, the military function of the aristocracy withered. The values of the aristocracy did not lose their military character as honor, valor, and skill at arms partially defined their identity as a social group. This held true for the upper, titled peerage as much as for the lower orders of knights, esquires, and gentry.¹³⁸ Clear social distinctions became increasingly important in a highly stratified society, such as Elizabethan England that was experiencing a transition in social composition. Cultural assumptions of how a nobleman should spend his time, what sorts of skills were necessary and proper for him to pursue, and the marriage of personal honor with service to the monarch meant that there was still fertile ground for martial values to grow. The

¹³⁵ Adams, *Leicester and the Court*, 76.; Kelso, *The Doctrine of the English Gentlemen*, 93-95.

¹³⁶ *C.S.P. Foreign*, XII, May 26, 1578, no. 913.

¹³⁷ *C.S.P. Foreign*, XII May 17, 1578, no. 880.

¹³⁸ Bush, *The English Aristocracy*, 5.

fact that the aristocracy still held on to martial values, even if only in word, indicates the importance of a warrior ethos to the aristocratic identity.¹³⁹

Despite the diminished bellicosity of the nobility, there was still a sense of pride in the ancient privileges to bear arms and use them in service of the monarch. William Harrison, an English historian writing at the end of the sixteenth century, describes the mentality of the noble class with regards to skill at arms when he writes that knights are “made either before the battle, to encourage them the more to adventure and try their manhood, or after the battle ended, as an advancement for their courage and prowess already showed.”¹⁴⁰ He goes on to say that, when called upon to fight, the knight will “both array and arm himself accordingly and show the more manly courage.”¹⁴¹

Fighting atop a horse was an expression of political and social power as much as it was a fulfillment of a vital military role.¹⁴² A close connection between mounted warfare, knighthood, and lordship still captured the imagination of Elizabethan aristocrats. The merging of warrior status and social importance as embodied in the ideal of a literal knight on horseback served as an important internal motivation. As cavalry, the aristocracy aligned perfectly with aristocratic social, political, and military traditions.

Mounted warfare offered the optimal balance of opportunities to display personal courage, lead a company in battle, and satisfy social expectations regarding the place of a gentleman in battle. Command of a company required professional knowledge of the latest advances in military theory and practice because, in the emerging system of military professionalism, command was as good as individual acts of bravery. Traditional

¹³⁹ Stone, *The Crisis of the Aristocracy*, 200, 265.

¹⁴⁰ Harrison, *Description of England*, 102-103.

¹⁴¹ Harrison, *Description of England*, 114.

¹⁴² DiMarco, *War Horse: A History*, 152-53.

notions of chivalric courage and newer ideals of personal honor created an environment where the performance of a company became the personal responsibility of the captain. A captain reaped the honors won by his company on the battlefield and satisfied the need to win honor with their identity as a warrior elite. Even when commanding foot companies, captains remained mounted or joined horse companies for the battle itself, reflecting the prevailing assumption that the proper place of a noble in battle was astride a horse.¹⁴³

During this time, the values of martial honor and the roles of education and training for war were undergoing a transformation. In order to be victorious in cavalry combat, English aristocratic soldiers had to stay connected to currents of military practice on the Continent. Keeping current with changes in warfare meant they had to incorporate traditions of cavalry service with innovations in tactics and technology.

Broadly speaking, the training aristocrats received fell into two categories: informal and theoretical. Informal training took the place of formal drill as the means by which they acquired the necessary weapons handling and riding skills. Theoretical education consisted mainly of memoirs of soldier-authors and books on general military instruction. As Renaissance historian J. R. Hale points out, informal training for war came from the traditional leisure activities of the aristocracy: riding, hunting, jousting, and dueling.¹⁴⁴ Ruth Kelso makes the same point in her book about the mindset of English aristocracy when she claims that the physical activities of gentlemen continued to be a part of aristocratic identity into the early modern era.¹⁴⁵ While Kelso draws the connection between hunting, fencing, and riding as the skills necessary for defense of the

¹⁴³ Delbruick, *Dawn of Modern War*, 123.; Hyland, *The Warhorse*, 112. (Smythe, ?)

¹⁴⁴ Hale, *Renaissance War Studies*, p.234, 236.

¹⁴⁵ Kelso, *Doctrine of the English Gentleman*, p. 49.

country, she does not make the connection between the values of martial skills imparting confidence on the part of the aristocracy as cavalry soldiers. This is of vital importance because any contribution to an individual horseman's morale strengthened the company as a whole.

The most essential skill for any cavalryman is the ability to control a horse in the chaotic environment of battle. Instruction in riding came from two parallel sources that each focused on a particular aspect of the type of horsemanship needed for combat: informal practice from hunting and instruction from riding masters. Riding learned on the hunt trained both horse and rider for nimble action while equestrian instruction taught discipline and control. Of the two, the more important was the former, as English aristocrats learned how to ride primarily from hunting before formalized equestrian schools from the Continent became popular.¹⁴⁶

English writers in the late sixteenth century described the prevailing opinion that horsemanship was the true calling of an aristocrat. In his 1609 treatise *The Perfection of Horsemanship*, Nicolas Morgan reminded his readers that the practice of riding is essential to maintaining the honor of the King and the "preservation of the whole body of the common-weal."¹⁴⁷ He further asked his readers, "can any calling be more noble then a good horseman? Are they not triumphers [sic] both in camp and courts?" adding that, "hath not the same from all beginning been hereditary in the most noble persons?"¹⁴⁸ Equating gentle status with riding was a continuation of sixteenth-century thought. In 1570, royal tutor Roger Ascham declared that riding was the best way for a young

¹⁴⁶ DiMarco, *War Horse*, 173.; See chapters 3 through 6 of historian and riding instructor Vladimir S. Littauer's book *The Development of Modern Riding* for a detailed account of the rise in importance of formalized riding styles.

¹⁴⁷ Morgan, *The Perfection of Horsemanship*, quoted in Kelso, *Doctrine of the English Gentleman*, 155.

¹⁴⁸ Morgan, *The Perfection of Horsemanship*, quoted in Kelso, *Doctrine of the English Gentleman*, 155.

gentleman to exercise his body and serve his country, adding that, “the greater he is in blood, the greater his praise the more he doth exceed all other therein.”¹⁴⁹

The aristocratic pastime of hunting imparted the equestrian skills necessary to accustom the rider to combat. Hunting mimicked battle in its pace and uncontrolled nature, and both activities required quickness of thought and action to take advantage of the speed of their mounts to attack. Hunting, like combat, required skill at adapting to an uncertain riding environment.¹⁵⁰ The nineteenth-century cavalry commander Louis E. Nolan advised that quickness and adaptability were fundamental to a cavalry attack as the pace of action limited reaction times.¹⁵¹ Echoing Sir Roger Williams, Nolan declared that once the cavalry commander decides on an attack it must be carried out without hesitation or lack of resolve.¹⁵² Confident in his equestrian talents, a skilled cavalryman was all the more prepared to face the challenges of melee.

Hunting prepared a gentleman for war by exercising the body through rough riding and the mind through focus in tracking down prey. Hunting and war differed in terms of the risk of personal harm but shared common fundamental characteristics. Enduring hardship and the use of stratagems for victory meant that the sport of hunting gave aristocrats the means to prepare for horse combat outside of formal training. Writing in 1591, Sir Thomas Cockaine reminded his readers that hunters’ “continual travel, painful labor, often watching, and enduring of hunger, of heat, and of cold”

¹⁴⁹ Ascham, *The Schoolmaster*, 29.

¹⁵⁰ DiMarco, *War Horse*, 173.

¹⁵¹ Nolan, *Cavalry: Its History and Tactics*, xvi. Nolan’s views on the use of cavalry are instructive of the qualities of a good cavalryman. However, they did not help him in the fateful charge of the Light Cavalry Brigade at the Battle of Balaklava, October 25th, 1854, where he was the first man killed by the Russian guns.

¹⁵² Nolan, *Cavalry: Its History and Tactics*, xvi.

increased the strength and physical endurance of the rider.¹⁵³ Consequently, the exercise of riding “much enabled [hunters] above others to the service of their Prince and Country in the wars” and made their minds and bodies fit to practice the other exercises of a gentleman.¹⁵⁴

Hunting had benefits for horse as well as rider. Claudio Corte, the Italian riding master, wrote that hunting was the most effective way of making a horse fit for service. In his *The Art of Riding*, translated into English in 1595, he stated that, “above all things you must accustom an horse of service to hunting, where many other horses are assembled, and where is great noise and shooting.”¹⁵⁵ Riding with a small group of horsemen during the chase was not unlike the squadrons of a troop of horse operating of the battlefield. Hunting also helped familiarize a horse to the experience of war by riding cross-country in adverse conditions. Such riding increased a horse’s strength, nimbleness, and endurance through riding “up and down hills and uneven ground...leap ditches and hedges” and making it “endure hunger and thirst, cold and heat.”¹⁵⁶

Navigating the countryside or chasing down prey during a hunt required careful knowledge of terrain. The ability to set ambushes, ride over uneven ground, and leap streams and ditches were skills useful in both hunting and war. Williams wrote that lancers “often are commanded to great marches, to do exploits...they must scout, discover, with all duties that belongs unto an army, either in lodging or marching.”¹⁵⁷ He goes on to add that harquebusiers’ duties “consist chiefly...to surprise companies a far off in their lodgings or marches; likewise to defeat convoys and to conduct convoys...to

¹⁵³ Cockaine, *A Short Treatise of Hunting*, A₃.

¹⁵⁴ Cockaine, *A Short Treatise of Hunting*, A₃.

¹⁵⁵ Corte, *The Art of Riding*, 94.

¹⁵⁶ Corte, *The Art of Riding*, 93.

¹⁵⁷ Williams, *Brief Discourse of War*, 31.

scout and discover...to spoil foragers.”¹⁵⁸ Eight years later, Barret echoed Williams’ description of actions that relied upon hunting skills when he wrote that all cavalry’s chief use is “to scout, to discovery, to guard any convoy, or to surprise any convoy...to render the passage [over rivers] more easy for the footmen...to make *cavalcades* or great marches...or to spoil forage.”¹⁵⁹ When outlining the specific duties of light cavalry he said, “they serve to watch, to ward...to forage, to skirmish, for *ambuscadoes*, for gaining of a straight, hills, and ground of advantage...wherein they may do many good pieces of service to the enemy’s annoyance.”¹⁶⁰

In James Cleland’s 1609 publication, *The Institution of a Young Noble Man*, the author described how hunting “formeth the judgment, and firmisheth a thousand inventions unto the imagination: it maketh a man courageous and valiant, in his enterprises.”¹⁶¹ Furthermore, knowledge of terrain imparted the skills necessary for scouting and setting ambushes which were the “stratagemes used for the obtaining of victory...which are requisite and employed without difference at the wars.”¹⁶² Cleland drove his comparison home by reminding his readers that war is the “hunting of men, for at them both your whole endeavors are to take, or kill.”¹⁶³

Hunting and combat resembled each other in another way as well. Spotting the target, striking at the most opportune moment, and chasing down prey had their equivalents on the battlefield. Barret described the need for proper timing in charging an enemy as cavalry’s purpose was to “give sudden charge upon the enemy’s flanks, or

¹⁵⁸ Williams, *Brief Discourse of War*, 33.

¹⁵⁹ Barret, *Theory and Practice of Modern Wars*, 141.

¹⁶⁰ Barret, *Theory and Practice of Modern Wars*, 143.

¹⁶¹ Cleland, *Institution of a Young Noble Man*, 222.

¹⁶² Cleland, *Institution of a Young Noble Man*, 223.

¹⁶³ Cleland, *Institution of a Young Noble Man*, 223.

rearward; and to espy any advantage if the enemy disarray” and “to break on a squadron of pikes, first shaken or disarrayed by shot...to surprise the enemy’s troops upon any advantage spied.”¹⁶⁴ Maneuvering into proper position and knowing the right moment to spur a horse into action were critical when facing either infantry or cavalry. Surprise, the chief means of inspiring panic, relied heavily on timing, as an enemy given the opportunity to brace for an attack dramatically shifted the odds of victory against cavalry. Once an enemy’s nerve broke, the skills acquired in the hunt came into play, as the cavalry spread amongst their panicked, defenseless foes and killed with impunity.

Two battles illustrate the deadliness of cavalry set loose among a scattered enemy: Gembleux, January 31, 1578 and Turnhout, January 24, 1597. They bookend the period of transition from lance to pistol as the main weapon of cavalry, but each encounter reveals how weapons technology played a secondary role to the cavalry’s ability to test the nerves of their opponents. The battles show how horsemen were able to overcome the defensive superiority of early-modern infantry through panic born of speed and timing.

In the case of Gembleux, a Spanish force of 800 light horsemen attacked the cavalry rearguard of the retreating Dutch rebels. Spotting an opportune moment, the Spanish officers charged the contingent of Dutch and French men-at-arms covering the Dutch army’s withdrawal and put them to flight. According to one account, the Spanish cavalry “set upon the Frenchmen and overthrew them, and immediately pursued the Scots.”¹⁶⁵ As the hindmost infantry, the Scottish regiment turned to face the attacking Spanish horsemen but found themselves scattered by their own retreating cavalry

¹⁶⁴ Barret, *Theory and Practice of Modern Wars*, 141.

¹⁶⁵ *CSP Foreign*, XII, February 1578, nos. 620, 623, 627.

rearguard “which the bands of 'lances of ordinance' for the States drove back again to their 'battle'.”¹⁶⁶

The cavalry action at Gembleux is an example of the power of surprise and resolve in attack that is the hallmark of cavalry. Taken off guard, the Dutch and French cavalry were unable to stand against their attackers despite being more heavily armed than the light cavalry of the Spanish. The account states that “the Spaniards charged ... and our [the Dutch] lances, seeing that, ran quite through the Scots and overthrew them.”¹⁶⁷ William Davison, England’s chief diplomat in the Netherlands, gave a slightly different account of the massacre: the Scots and French stood their ground until they were “put out of order by the States' own horsemen, who, in flying, broke in pele-mele among them.”¹⁶⁸ Emmanuel van Meteren, a contemporary Dutch historian, wrote that the Spanish “discomfited them with great spoil and overthrew them.”¹⁶⁹ Bereft of cavalry support, the whole of the Dutch infantry scattered before the Spanish horsemen, who, being lightly armed, were able to keep pace and slaughter approximately 2000 before the Dutch found refuge within the walls of Gembleux.¹⁷⁰

Strategically speaking, the Spanish victory did not bring the Dutch rebellion to an end. Writing to Walsingham, Davison chides the Spanish commander Don Jon of Austria for not pressing his advantage or moving onto Brussels where “he might, with his horsemen, have occupied the passages above the town.”¹⁷¹ This passage illustrates how even two diplomats were aware of the importance of cavalry to tactical and strategic

¹⁶⁶ *CSP Foreign*, XII, February 1578, nos. 620, 623, 627.

¹⁶⁷ *CSP Foreign*, XII, February 1578, no. 620.

¹⁶⁸ *CSP Foreign*, XII, February 1578, no. 623.; Van Meteren, *A True Discourse*, 29.

¹⁶⁹ Van Meteren, *A True Discourse*, 29.

¹⁷⁰ *CSP Foreign*, XII, February 1578, no. 623.; Oman, *A History of the Art of War*, 565-566.

¹⁷¹ *CSP Foreign*, XII, February 1578, no. 627.

success. Even though he failed to fully pacify the region, Don Jon was able to prevent the Dutch rebels from marshaling the soldiers necessary to relieve the remnants at Gembleux because of his superiority in cavalry.¹⁷²

The battle of Turnhout is another example of cavalry using speed and surprise to overcome the defenses of infantry. Like Gembleux nineteen years prior, Turnhout involved multiple companies of cavalry, pistoleers, working in coordination to spread panic and confusion through an infantry column on the march. The advantage of Turnhout is that the documentation for the encounter is more robust and includes an eye-witness account from the commander of the English cavalry, Sir Francis Vere. The availability of multiple detailed accounts makes it possible to see how cavalry commanders viewed the use of mounted soldiers and how the horsemen themselves performed on the battlefield.

The battle began with a small, mobile detachment slowing the advance of a much larger force. Vere encountered a Spanish army of 5,000 infantry and approximately 500 heavy and light cavalry as it marched out of the town of Turnhout. Maurice of Nassau, Prince of Orange, sent Vere ahead to locate the Spanish while the main army, which included sixteen companies of cuirassiers, marched to keep up. Once Vere spotted the enemy, he maintained a running skirmish against the column using a small scouting party of thirty horsemen and 200 musketeers. The harassment caused the enemy infantry to “look back, and to hinder their marching, otherwise it had been impossible for us to have come unto them.”¹⁷³ In his own account, Vere described how, “when they marched, I

¹⁷² *CSP Foreign*, XII, February 1578, no. 627.

¹⁷³ *A True Discourse of the Overthrow Given to the Common Enemy at Turnhout*, 3.

followed; when they stood, I stayed, and standing and marching I kept within reach...and in this manner held them play at the least four hours”¹⁷⁴

Thanks to Vere, the 800 Dutch and English cuirassiers caught up with him and joined in the skirmish just as the Spanish marched into an open plain. The cuirassiers’ presence unnerved the infantry and, “made the enemy mend his pace, and gave us more courage to follow them, for as now we omitted no endeavor which might hinder their way, falling again into skirmish with them”¹⁷⁵ The sight of five regiments of some of the most renowned footmen in Europe retreating before them filled the horsemen with the resolution needed to carry out a successful attack against overwhelming odds. For a time, the companies of cuirassiers shadowed their opponents, forcing the infantry to shift from marching column to defensive formation multiple times. This further slowed the Spanish, and, as they crossed the field, their cavalry escorts and baggage outpaced them, leaving the infantry bereft of mounted soldiers of their own.

With the enemy infantry isolated, the Dutch cavalry commanders Counts Hohenlohe and Solms took the opportunity to charge the front and right flank of the infantry regiments while Vere and Sir Robert Sidney attacked the rear and left flank. The Dutch chronicler Jan Orlers wrote that the Dutch routed the lead regiment and attacked the next, “with such fury, as the enemies were only content to make slight trial of their valor...betaking themselves to flight”¹⁷⁶ Vere’s description is much more detailed in its portrayal of the specifics of a cavalry charge with pistols against unprepared infantry. As the English horsemen approached the hindmost regiment, the enemy musketeers, “after their first volley shifted for themselves,” and withdrew into the mass of pikemen, “not

¹⁷⁴ Vere, *Commentaries*, 76.

¹⁷⁵ Vere, *Commentaries*, 77.

¹⁷⁶ Orlers, *Triumphs of Nassau*, 199.

well ordered, as in that case they should have been, to succor their shot, and abide the charge of horsemen.”¹⁷⁷ An anonymous witness wrote that the charging cuirassiers, “drove the musketeers upon their own pikes, from whence arose the beginning of the victory.”¹⁷⁸

Whether they used lance or pistol, the primary purpose of cavalry was to break the solidarity of disciplined soldiers and, in doing so, spread panic through the ranks. The horsemen rode up to the crowded infantry formation and, “so charged their pikes, not breaking through them at the first push (as it was anciently used by the men of arms with their barded horses)” nevertheless caused disruption.¹⁷⁹ Vere’s mention of the ability to lance-armed heavy cavalry breaking into pike formations is curious, as it is evidence that the offensive power of cavalry was not always completely negated by infantry’s defensive strength. He followed up by stating that, “as the long pistols delivered at hand, had made the ranks thin; thereupon the rest of the horse got within them.”¹⁸⁰ Thus broken and surrounded, the Spanish, “fell into open flight; which was to no purpose, as being on the one side encompassed by our cavalry on a plain ground, and on the other with a river and trees.”¹⁸¹

At the start of the action, several companies of Dutch cavalry broke off from their assault on the head of the column and chased after the Spanish cavalry and baggage of the vanguard. The enemy cavalry, consisting a lancers and harquebusiers, “had withdrawn themselves in good order” and were preparing for a counter-attack and, “fell

¹⁷⁷ Vere, *Commentaries*, 79.

¹⁷⁸ *A True Discourse of the Overthrow Given to the Common Enemy at Turnhout*, 4.

¹⁷⁹ Vere, *Commentaries*, 79.

¹⁸⁰ Vere, *Commentaries*, 79.

¹⁸¹ Orlers, *Triumphs of Nassau*, 199.

upon those whom in disorder they saw busied in pillage.”¹⁸² Vere, fearing for his allies’ safety, tried to form a reserve from the scattered horsemen and what infantry were available. His foresight, no doubt born from extensive experience, proved valuable, as the Dutch came fleeing back from their pillaging with Spanish horsemen in pursuit, but the reserve gave the fleeing cavalry cover, and their pursuers broke off the attack.¹⁸³

Vere’s account of the battle is evidence of how effective use of cavalry can have an effect disproportionate to the number of combatants involved in a fight. Sixteen companies of horse, approximately 800 mounted soldiers, managed to rout a force primarily consisting of infantry through spread of confusion and panic. If cavalry’s primary function was to spread fear and confusion, then the specific weapons or tactics used to cause psychological ‘shock’ were secondary to the resolve needed to carry out an attack. A cavalry assault was a test of the nerves of the horseman, his mount, and the enemy. Careful conditioning through hunting and immersion in a martial ethos that prized valor were of more importance in a fight than specific weapons. To be clear, technology played an essential part, but, as Turnhout shows, the skillful use of the pistol could produce the same result as that of a charging man-at-arms.

Speed and decisiveness were the essence of early-modern cavalry combat. The swiftness of the Dutch and English attacks on the Spanish caught the infantry off guard and negated the advantage that the combination of pike and shot gave infantry. By shadowing the lumbering column of infantry, Vere and the other horse captains kept their opponents uncertain of where the horsemen would strike. With cavalry hovering around them, the foot soldiers could not maneuver effectively enough to either continue their

¹⁸² Orlers, *Triumphs of Nassau*, 199.; Vere, *Commentaries*, 79.

¹⁸³ Vere, *Commentaries*, 80.

march or adopt a defensive formation. The Spanish found themselves caught in the open bereft of their own cavalry support. Vere described their confusion as the infantry intermingled to try to get away from the swarming horsemen. His cuirassiers fired into the confused mass to thin the ranks in preparation for hand-to-hand combat. Once inside the infantry formation, the horsemen discharged their pistols at point blank range against infantry unable to fight back. The result was utter panic, with more than 2,000 slain, including the Spanish commander Count Varax, and another 500 taken prisoner. The combination of speed, surprise, and firepower managed to overcome the defenses of pike and shot infantry.

Gembleux and Turnhout highlight mounted soldiers' psychological advantage of speed and surprise and how the dynamics of a civilian pastime, hunting, played out when applied to violence among men. The slaughter of broken soldiers was the part of battle where cavalry had the biggest impact, but, as the troopers rode down their enemies the horsemen dispersed and became open to attack. As the Spanish counter-charge of the Dutch cavalry at Turnhout shows, it was in the moments of confused pursuit that cavalry were the most vulnerable to counterattack or, in getting carried away in the exhilaration of pursuit, chasing their enemy too far away from the battlefield.

The ill-discipline of combat riding based on hunting was most evident in the chase to ride down broken men. Too often, once cavalry chased fleeing soldiers off of the field the mounted element of the army played no further role in a battle. The battles of Edgehill in 1642 and Naseby in 1645 illustrate how important it was for cavalry to reform after a successful charge and not get swept away in the pursuit, as the Royalist cavalry did in both battles. In order to counter this tendency, English aristocrats sought to

inculcate discipline in horse and rider through equestrian skill. They initially turned to the Continental riding masters who had developed the High School of Dressage, a formalized riding method, as a means to condition the horse to obey its rider and provide some form of instruction to noblemen who served on horseback.

As early as 1560, Englishmen concerned with the state of riding in their country turned to the Continent to find remedies. Thomas Blundeville's *The Art of Riding and Breaking Great Horses*, published in 1560, was a translation of *Gli Ordini di Cavalcare* written by the Italian riding master Federico Grisone in 1550. Vladimir Littauer, renowned riding instructor and one-time Russian cavalry officer, marks *Gli Ordini di Cavalcare* as the first book of "educated equitation" which became the foundation of the High School of Dressage.¹⁸⁴ Grisone's method was a way to showcase the magnificence of the horse and skill of the rider through a system of leaps, kicks, and rearing on hind legs.

The mastery of rational man over beast certainly fit within the intellectual and social framework of the time but was of dubious value in battle. According to Littauer, Grisone claimed that his techniques were of particular use in fighting infantry because of the power of rearward kicks and leaps forward.¹⁸⁵ The three principle maneuvers—the *levade*, rearing up with front legs tucked under the horse's body, the *capriole*, a backwards kick while jumping forward, and the *courbette*, a short leap from a rearing position—were of limited value in the chaos of melee. Blundeville comments that riders should take caution in teaching their warhorses Grisone's leaps because, "being once

¹⁸⁴ Littauer, *The Development of Modern Riding*, 26.

¹⁸⁵ Littauer, *The Development of Modern Riding*, 54-55.

used to such delighting toies, do forget in time of need their necessary feats” and “fall a hopping and dancing up and down in one place.”¹⁸⁶

English horsemen rejected the High School, as hunting was their primary method for learning to ride. As both DiMarco and Littauer make clear, England’s aristocracy preferred the exhilarating gallop of the hunt to the precise motions of Grisone’s method.¹⁸⁷ In Littauer’s estimation, the rise of the rural gentry in Tudor England explains their preference of riding for sport over riding as art.¹⁸⁸ What the English took away from Grisone and the other Continental instructors was practical instruction for making horses suitable for war. Blundeville explains to his readers that he had distilled passages from *Gli Ordini di Cavalcare* into the essentials of training horses for service.¹⁸⁹

John Astley, one of Henry VIII’s Gentlemen Pensioners, wrote of his experiences with the High School and commented on what was of principle value for cavalry. For Astley, the, “true use of the hand” that he described in his 1584 *Art of Riding*, “belongeth to the war and feats of arms” and that the, “the said kind of riding in an art to make an horse, for the service aforesaid, obedient to his rider.”¹⁹⁰ He goes on to add that the style of riding he sets forth in his book is of chief use to the mounted soldier due to its compatibility with fighting hand-to-hand.¹⁹¹ In teaching the, “right use of the hand” so that with a horse trained for war a soldier needs only to use the left hand because “the other must serve us for our weapon whatsoever it be.”¹⁹² Astley’s book is a manual for

¹⁸⁶ Blundeville, *The Art of Riding*, quoted in Littauer, *The Development of Modern Riding*, 55.

¹⁸⁷ DiMarco, *War Horse*, 173; Littauer, *The Development of Modern Riding*, 68.

¹⁸⁸ Littauer, *The Development of Modern Riding*, 68.

¹⁸⁹ Blundeville, *The Art of Riding*, A_{iii}. Blundeville does devote considerable space to riding for pleasure, including High School Dressage, but he explicitly delineated between the two riding styles to facilitate instruction for each.

¹⁹⁰ Astley, *The Art of Riding*, 1-2.

¹⁹¹ Astley, *The Art of Riding*, 4-5.

¹⁹² Astley, *The Art of Riding*, 52.

riding with a minimal amount of pain used to compel a horse's obedience. Instead, he recommends a union of horse and rider through gentle guidance to maintain the "lustiness of courage and freshness of feeling" in the horse so "these two several bodies may seem in all their actions and motions to be as it were but one only body."¹⁹³ Referencing the Greek historian and soldier Xenophon, Astley promises that, once mastered, his method makes the horse "take great pleasure in the riding, so as therein he shall appear very noble, terrible, and beautiful to behold."¹⁹⁴

Until the publication of John Cruso's *Militarie Instructions for the Cavallrie* in 1632, there was no formal manual for training cavalry companies. Until then, most military manuals contained some mention of cavalry, but those passages focused more on the hierarchy of officers. Modern historians have noted that unlike infantry drill books, which drew on a whole array of classical and contemporary literature, training manuals for cavalry were curiously absent.¹⁹⁵ This meant that whatever training an individual cavalryman received was informal and acquired through the different systems of education available to the aristocracy.

Leisure, wealth, and political power gave an aristocrat the time and means to acquire the skills necessary to make an able cavalryman. This social arrangement shows how the incorporation of medieval traditions survived into early-modern warfare. Under the feudal military obligation system, military service carried with it certain economic and political privileges necessary to produce skilled warriors. By removing the burden of having to provide for their sustenance, the aristocracy gained the leisure time necessary to engage in martial pursuits, among them hunting and attending tournaments.

¹⁹³ Astley, *The Art of Riding*, 5.

¹⁹⁴ Astley, *The Art of Riding*, 67.

¹⁹⁵ Lawrence, *The Complete Soldier*, 261.; Webb, *Elizabethan Military Science*, 109.

The noble pastimes of hunting and riding gave gentlemen familiarity with controlling a horse, and aristocrats social standing gave them the moral confidence to become effective mounted fighters. Leisure and noble virtues such as honor and valor were the social underpinnings of cavalry soldiers and, while diminished in comparison with the virtues of gentlemen dedicated to peaceful means of service to the state, honor and valor did not completely disappear with changes in military technology or tactics.

Patronage of the crown meant permission to serve in foreign armies, appointments to captaincies, and a direct line of communication to members of the court who could provide money and supplies. Beginning in 1572, when the first English volunteers set out to aid the Dutch in their rebellion, Elizabeth I's captains and advisors frequently corresponded about the state of English soldiers and the conduct of the war. The content of the letters nearly always stressed the success of a certain encounter with the enemy and even when self-promotion is taken into account, the letters provide a way to see how important honor was for English officers. Furthermore, from these letters emerge a picture of the importance of cavalry to the aristocrat concept of war as a path to honor.

Having one of the peerage as a patron gave other nobles the opportunity to attach themselves to his personal following. Such was the case with the 700 gentry, knights, and peerage who traveled to the Netherlands in 1585 as a part of Robert Dudley, the Earl of Leicester's expedition. They came from his tenantry, current and former household servants, religious clients, and his armed retinue and formed the bulk of his cavalry contingent as well as the core of his officer cadre.¹⁹⁶ In this situation, the old feudal system of personal loyalty remained but only at the permission of the queen.

¹⁹⁶ Adams, *Leicester and the Court*, 380-381, 393.

Elizabeth inherited a hybrid system of military recruitment that combined militia duty, feudal obligations, and retaining. While the militia grew more important during the sixteenth-century, the crown had to rely upon the aristocracy to raise large numbers of soldiers.¹⁹⁷ As a series of separate sources of recruitment, it made raising soldiers difficult but also fragmented military power and dispersed financial burdens. Relinquishing some authority to the aristocracy to provide soldiers helped to lower the considerable costs of war. Members of the peerage kept private armories that they used to equip soldiers raised from their tenants and followers.¹⁹⁸ In this way, the aristocracy eased the costs of fielding large numbers of horsemen. While this system bore similarities to the practice of keeping large bodies of armed retainers, aristocrats were only able to raise large numbers of soldiers with the permission of the crown.

In order to meet the demands of supplying a thousand cavalymen as part of her treaty with the Dutch, Elizabeth authorized Leicester to recruit the horsemen from his client base, a method of recruitment that had fallen out of use by the 1560s.¹⁹⁹ In the sole surviving letter to one of his “servants,” John Wynn, Leicester requested that Wynn equip himself with horse and armor and raise “as many demi-lances [lancers] to serve in that country as I can get amongst my own servants. And if you will furnish any more horse...let them be good able light horse.”²⁰⁰

Leicester’s cavalry differed markedly from the volunteers of 1578 not just in experience but also in social standing. The new cavalry were generally inexperienced in contemporary warfare and fought as heavy cavalry, as opposed to the predominantly light

¹⁹⁷ Adams, *Leicester and the Court*, 78.; Stone, *The Crisis of the Aristocracy*, 203, 206-207

¹⁹⁸ Harrison, *The Description of England*, 237.

¹⁹⁹ Adams, *Leicester and the Court*, 177, 182.

²⁰⁰ Leicester, “The Summons of the Earl of Leicester to John Wynn of Gwydir, 26 September 1585.”, Quoted in Adams, *Leicester and the Court*, 246.

cavalry of the English veterans from the 1570s. Leicester managed to raise 744 cavalymen across nearly 199 retinues of the nobility of England with at least 200 coming from Leicester's following.²⁰¹ This was a considerable expense and that he could field such a large contingent from his own finances speaks to the power of Leicester as a patron. Among those who accompanied Leicester were the "Earl of Essex, Lord Audley, the Lord North, with diverse knights, and many esquires and gentlemen...all voluntaries of his own friends, followers, and servants."²⁰² The nobles contributed to the contingent with their own followers as well.

Once nobles were in favor with a great lord, personal ties often mattered more than reputation or competence.²⁰³ When Leicester landed in early 1586, he largely ignored the previous commander of the English forces, Sir John Norris, in favor of his own men, much to the frustration of Norris. Norris had requested to be placed in charge of a regiment of cavalry in the fall of 1585 but was denied despite his experience and instead placed as the commander of the infantry. This was a considerable insult to such a distinguished veteran and remained a source of friction between him and Leicester. Such was the importance of cavalry service that not even complete command of the infantry was enough to assuage Norris' anger.

A reputation as a skilled captain also opened opportunities for service in the employ of foreign monarchs. In a society where religion mattered as much - if not more than - nationality, aristocrats who wished to continue their military careers fought on behalf of their coreligionists. For the English, this meant fighting for the Huguenots in the French Wars of Religion, for the Dutch in their revolt against Spain, or for German

²⁰¹ Adams, *Leicester and the Court*, 185.

²⁰² Thomas Digges, *A Briefe Report of the Militaire*, A³.

²⁰³ Manning, *An Apprenticeship in Arms*, 39.

Protestant princes. A recommendation from one of the great lords or the queen's advisors sometimes meant the difference between further employment or a return to England.

English companies of horse that served in the Netherlands were composed of volunteers, both gentry and commoners, who answered the call of recruiters. In 1572, 300 recruits, Londoners inspired by the plight of the Dutch, had among them "diverse captains and soldiers, who had served some in Scotland, some in Ireland, and others in France... amongst whom were diverse officers which had commanded before, with many gentlemen, at least above one hundred."²⁰⁴ The loyalty of these men to their captains was considerable. Now veterans of the new style of Continental warfare, these soldiers continued to serve with their original captains and formed the core of future cavalry companies.²⁰⁵

English soldier-authors were keenly aware of the influence of the past on contemporary attitudes towards soldiering in general and mounted warfare in particular. According to Barret, the English preference for fighting on foot stemmed from the cultural memory of the Hundred Years' War.²⁰⁶ Part of this was due to the fact that the Wars of the Roses exhausted English horse stock.²⁰⁷ Internecine war disrupted regular patterns of horse breeding in the royal stud herds. For private horse breeders, opportunities to enrich themselves at the expense of national horse reserves further exacerbated the shortage of horses available for war. By the time of Henry VIII's

²⁰⁴ Roger Williams, *The Actions of the Lowe Countries* (London, 1618), 56.

²⁰⁵ Mark Charles Fissel, *English Warfare, 1511-1642* (London, UK: Routledge, 2001), 142.

²⁰⁶ Barret, *Theory and Practice*, 139-140.

²⁰⁷ Hyland, *The Warhorse*, 88.

invasion of France in 1511, the King had to rely upon considerable numbers of foreign mercenaries to supply the cavalry contingent of his army.

An examination of correspondence between English captains on the Continent and the Privy Council is necessary in order to appreciate the prevalence, and thus the importance, of small-scale cavalry actions. Numerous entries in the *Calendar of State Papers Foreign* for the years 1572 to 1586 contain accounts of the types of cavalry combat typical of campaigning in the Low Countries. These actions typically involved fewer than 500 horsemen per side, occasionally supported by infantry. Raids, whether to destroy villages or intercept convoys, were by far the most common tasks of cavalry. Somewhat less common were ambushes or skirmishes between rival horse patrols. Skirmishes, unexpected fights between rival patrols, involved small numbers of soldiers and could be very deadly.²⁰⁸

Denying the enemy the necessary supplies to conduct a campaign was a near-daily occurrence.²⁰⁹ Due to their poor defenses, the outlying villages surrounding enemy-controlled cities were the obvious targets because of their military value. This is the type of duty best suited for arquebusiers. In February of 1580, Sir John Norris, an English colonel who commanded four mixed-type companies of horse, sent 200 of his men to raze a village supplying the enemy and carry off its supplies. Among the provisions brought back from the raid were 100 horses to serve as mounts.²¹⁰ Several villages near Antwerp were burned down in this manner in the winter of 1583 to deny the Spanish

²⁰⁸ Charles Carlton, *This Seat of Mars: War and the British Isles, 1485-1746* (New Haven, CT: Yale University Press, 2011), 108.

²⁰⁹ *CSPF*, vol. 17 no.; *Ibid.*, vol. 18, no. 83, 148.; *Ibid.*, vol. 21.2 17 June 1586 Andrea de Loo to Burghley

²¹⁰ *CSPF*, vol. 15, no.67.

shelter and provisions.²¹¹ In this instance, the inhabitants of Antwerp joined in and razed three enemy villages themselves.²¹² By November of that year, the fields of northeast Flanders were so devastated that “the trade over all these countries greatly decayeth, and so the means to maintain wars lessened.”²¹³

Skirmishes between rival patrols were violent affairs which happened quickly and unexpectedly. Scout patrols, watch duties, and escorting convoys all carried the risk of encountering another enemy. It was because of this risk that Williams recommends that lancers accompany arquebusiers when conducting “great marches.”²¹⁴ Because they occurred suddenly, small-scale combats such as skirmishes were frantic fights that lacked the cohesion or purpose of a set-piece battle.²¹⁵ On 5 March 1582, Williams was involved in a skirmish involving his company of lancers and four companies of enemy horsemen. Williams was said to have done, “most valiantly, having sundry shots in his armor and blows with cutlasses and pistols on his head, but no hurt done save his horse shot twice.”²¹⁶

Chivalric traditions exerted a strong influence on combat motivations among the aristocracy. Even as the linkage between honor and public duty grew, conformity to the aristocracy’s warrior ideal served as an internal motivation for a willingness to engage in hand-to-hand combat. The documentary evidence is full of accounts of the honorable behavior of aristocratic soldiers to such an extent that witnesses ascribe the conduct of a company in combat solely to its captain. In this way, the company became an extension

²¹¹ *CSPF*, vol. 15, no. 400.

²¹² *CSPF*, vol. 15, no. 400.

²¹³ *CSPF*, vol. 18, no. 241.

²¹⁴ Williams, *A Briefe Discourse of Warre*, 31, 33.

²¹⁵ Carlton, *This Seat of Mars*, 108-109.

²¹⁶ *CSPF*, vol. 17, no 610.

of the captain, serving to underline the significance of why command was so important. Confirmation of a soldier's honorable service was vital to their continued participation in war.

New means of waging war did not invalidate the military function of the aristocracy because innovations in weapons and tactics did not render cavalry obsolete. The evolution of cavalry from knight to horse soldier coincided with the transformation of the nobility's composition and its role in society. Just as English aristocrats adapted to changing social circumstances, they slowly altered their ideas of the effective use of cavalry. This process of military adaptation mirrored social adaptation in that it proceeded unevenly and with some reluctance by aristocrats who did not want to accommodate change.²¹⁷ The transition did not change the fundamental fact that the values of the aristocracy reflected the tradition of mounted warfare as a prerogative of the noble class. The shared aristocratic culture gave the officer class the skills and mentality necessary for cultivating effective cavalry.

The aristocrat did not disappear from the battlefield due to changes in social views of warfare, just as cavalry did not disappear due to technological changes. Cavalry reflected noble privilege, and horsemen were an integral part of early-modern warfare. What changed were the material trappings of mounted warfare and accommodation of old chivalric virtues with a newer code of personal honor. In the 1580s, the men mounted atop their warhorses were largely drawn from the same social classes as they had been in the 1480s, and their motivations were similar as well.

I have tried to explore the motivations of cavalrymen and the circumstance in which they found themselves in order to move past understanding military history from a

²¹⁷ Sir John Smythe was a vehement critic of military reformers, in particular Sir Roger Williams.

purely technological point of view. Technology did play an important role in the development of early-modern European armies, but it was not the sole, or even dominant, factor in driving change. It was part of a multitude of co-existing factors that helped influence the behavior of actual people caught up in horrific events. Culture, the ways that people impart meaning onto their world, was the driving force behind many of the changes in military practice because culture helped shape the actions of the people involved. It is important to examine these cultural influences because doing so helps military historians see beyond technological determinism.

Moving past the dominant way of analyzing and interpreting historical events opens up new avenues for inquiry for any field of history, but for military history this method is particularly welcome: it allows us to use the insights gained in other historical disciplines and use them in our own research. As seen through the lens of technological determinism, aristocratic cavalymen of sixteenth-century Europe were outdated, ineffectual, hidebound, and obstinate by failing to recognize the superiority of infantry. To the technologists, horsemen seem buffoonish and quaint, holding to their chivalric traditions, cumbersome armaments, and antiquated tactics. When viewed through the multi-faceted lens of culture, though, these same soldiers take on a complexity that more accurately reflects their lived experience. Their attitudes towards the changes in military practice become more nuanced, with some advocating reform and others cautioning restraint. The variety of equipment and tactics used represent a stream of cultural traditions that co-existed with a willingness to experiment and innovate. When military historians take culture seriously, what seems buffoonish or antiquated often makes a great

deal of sense. What might look odd to modern eyes, affected as they are with hindsight, becomes much clearer when placed in a broader historical context.

An over-emphasis on the impact of firearms, both in their utilization by infantry and in their adoption by cavalry, devalues the importance of cultural assumptions and the intellectual climate that influenced aristocrats. Ideas and shared values formed the core of an aristocratic warrior ethos based on honor, glory, and valor. The men who identified with this older, more bellicose view of the aristocracy had to find room for themselves in a complex web of patronage and influence in a society undergoing profound changes. All of these factors impacted the use of cavalry, as early-modern English captains had to adjust their expectations of performance, seek qualified recruits, and experiment with ways to accommodate changes in warfare.

Given the prominence of technological progress in modern Western society, it should not come as a surprise that technology has dominated the discussion of early-modern warfare. In comparison with technological improvements in artillery and infantry, cavalry does seem irrelevant, but, in observing what contemporary soldiers wrote about their experiences, we can see that cavalry was undergoing the same sort of slow-moving evolution punctuated by bursts of rapid change that the other combat arms were experiencing. Jeremy Black points out that as technology becomes more complex so must the people who seek to use it to effectively develop more complex skillsets.²¹⁸ This is especially true, as he points out, when trying to integrate the various combat branches into an effective fighting force.²¹⁹ The process of determining how each combat arm worked best in relation to the other was not a smooth progression. Changes in each

²¹⁸ Black, *Rethinking Military History*, 9.

²¹⁹ Black, *Rethinking Military History*, 9.

branch developed into tactical dead ends, precarious equilibrium, and situational dominance all in relation to each other.

The variety of ways in which cavalry companies employed pistols shows how cultural factors influenced combat. Trotting up to an enemy and firing volleys mimicked infantry firearm tactics but also showed reluctance on the part of cavalymen to engage in melee combat. Even this seeming reluctance needs to be tempered with an understanding of the dangers inherent in engaging in hand-to-hand combat with soldiers wielding weapons specifically designed to counter the advantages of riding a horse. Nevertheless, cavalry, both heavy and light, did engage with enemy infantry, and, as at the battles of Pinkie Cleugh in 1547 and Dreux in 1562, cavalry firepower had the means to devastate infantry formations. On the other hand, reserving pistol use for once horsemen made contact with their enemy, as recommended by Williams and his mentor de la Noue, or further still in pursuit of a broken unit, reflected a willingness to place themselves in harm's way which undermines any charges of timidity.

In a way, the turn toward culture as a tool of interpretation in military history is part of a larger development to link military history with its related historical disciplines. After all, Michael Roberts was trying to situate early-modern military practices into larger historical trends when he developed the theory of the military revolution. The so-called cultural turn is both a reaction to, and a continuation of, Roberts' efforts to broaden the relevance of military history.²²⁰ Unfortunately, as with so many other seminal works, Roberts' analysis of early-modern warfare sets a very rigid boundary for debate that has mostly focused more on infantry and gunpowder technology.

²²⁰ Jeremy Black explores the idea of using culture as a tool of interpretation in his book *War and the Cultural Turn*. Jeremy Black, *War and the Cultural Turn* (Cambridge, UK: Polity Press, 2012).

So far, military historians have paid little attention to cavalry of the sixteenth-century in their scholarship. Notable exceptions to this are Gervase Philips and David Eltis, who have criticized proponents of the military revolution's assertions of the ineffectiveness of cavalry. They have done so only as part of larger reassessments of the military revolution and not as the sole focus of analysis. While their observations are vital to more accurately portraying mounted soldiers, they do not delve into cultural elements and instead keep their counterarguments confined to the realm of technology and its effective use. Philips comes the closest in his analysis of the variety of cavalry and its uses by mentioning the aristocracy's willingness to experiment with firearms.²²¹ Ultimately though, he does not further investigate the group's perceptions of the purpose of mounted warfare or their motivations for fighting.

The use of culture as a means to evaluate historical phenomena is, in part, a rejection of mono-causal explanations in favor of nuance and complexity. It is a difficult interpretive tool precisely because culture, as a concept, is nebulous and multi-faceted. In rejecting the simplistic view that cavalry during the period under examination were ineffectual, I had to draw upon a wide array of sources, many of them far beyond the bounds of conventional military history. By drawing upon a multiplicity of source material, I have attempted to bring to light the various influences that played upon cavalry. For too long, military historians' neglect of cultural analysis on cavalry, and the sub-field as a whole, means that debate has largely remained fixated on technology and tactics.

²²¹ Phillips, "Of Nimble Service": Technology," in *Warfare in Early Modern Europe*, 6.

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