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Storia Militare Antica e Bizantina (6)

a cura di
Marco Bettalli, Elena Franchi e Gioacchino Strano

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Bronze statue (2nd/3rd century AD) of the genius of a legion.
Enns (Upper Austria). Museum Lauriacum.
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Early Roman Cavalry in Combat (6th – 3rd centuries BCE)

by Jeremy Armstrong and Gianluca Notari

Abstract. The early *equites*, or citizen cavalry of early Rome, have traditionally been viewed as the impractical, aristocratic complement to the community's core force of heavy infantry. Based largely on the testimony of Polybius, Rome's early cavalrymen were understood to have been brave and elite, but also – and confusingly – equipped with substandard equipment and seemingly ineffective in battle until c. 200 BCE. This article argues that Polybius' account offers a skewed vision of the early *equites*, shaped by his own literary goals and experience. In contrast to the negative image he offers, a growing body of evidence suggests that early Roman cavalrymen were actually relatively well-equipped and effective in battle. However, the nature of that equipment and the style of battle they engaged in were not those that Polybius was familiar with. Additionally, and perhaps more importantly, they also did not align with his vision for Rome's military and society. This article, therefore, offers a reappraisal of the practical capabilities of early Roman cavalry in combat, looking beyond Polybius' account.

Keywords: Archaic Italy. Roman Republic. Cavalry. Equites. Polybius.

Polybius (6.25.1-10), writing in the middle of the second century BCE, famously noted the following concerning the Roman cavalry:

In like manner, [the Romans] divide the cavalry into ten squadrons (ἴλας) and from each they select three officers (ἰλάρχας), who themselves appoint three subordinates (οὐραγούς). The first commander (ἰλάρχης) chosen commands the whole squadron, and the two others have the rank of decuriones (δεκαδάρχων), all three bearing this title. If the first of them should not be present, the second takes command of the squadron.

The equipment of the cavalry is now similar to that of the Greeks, but in the past they had no cuirasses (θώρακας) but fought in light undergarments (περιζώμασιν), the result of which was that they were able to dismount and mount again at once with great dexterity and facility, but were exposed to great danger in close combat, as they were nearly naked. Their spears (δόρατα), too, were unserviceable in two respects. In the first place, they made them so slender and flexible that it was im-

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possible to take a steady aim, and before the head stuck in anything, the shaking due to the mere motion of the horse caused most of them to break. Next, as they did not fit them with sauroters (σαυρωτήρων),[1] they could only deliver the first stroke with the point and after this, if they broke, they were of no further service. Their shield (θυρεὸν) was made of oxhide, similar in shape to the round cakes (ποπάνοις) used at sacrifices. They were not of any use against attacks, as they were not firm enough; and when the leather covering peeled off and rotted owing to the rain, unserviceable as they were before, they now became entirely so.

Since therefore their arms did not stand the test of experience, they soon took to making them in the Greek fashion, which ensures that the first stroke of the spear-head shall be both well aimed and telling, since the spear is constructed as to be steady and strong, and also that it may continue to be effectively used by reversing it and striking with the sauroter. And the same applies to the [Greek] shields (θυρεῶν), which are solid and firm and do good service against both missiles and in close-quarters combat. The Romans, when they noticed this, soon imitated it; for they are as good as any others in adopting new fashions and instituting what is better.[2]

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1 A sauroter is also known as a 'spear-butt' or 'spear foot' and typically represented a sturdy metal point attached to the bottom of the spear haft. The name literally means something like 'lizard killer' in Greek (σαύρα- or "lizard" +῎-τήρ), and so was presumably intended to deliver a strong, downward thrust to finish off a defeated or prone enemy as well as providing a backup weapon. It was also referred to as a οὐρίαχος or ferrule, amongst other names.

2 Παραπλησίως δὲ καὶ τοὺς ἱππεῖς εἰς ἴλας δέκα διεῖλον, ἐξ ἑκάστης δὲ τρεῖς προκρίνουσιν ἰλάρχας, οὗτοι δ᾽ αὐτοὶ τρεῖς προσέλαβον οὐραγούς. ὁ μὲν οὖν πρῶτος αἱρεθεὶς ἰλάρχης ἡγεῖται τῆς ἴλης, οἱ δὲ δύο δεκαδάρχων ἔχουσι τάξιν, καλοῦνται δὲ πάντες δεκουρίωνες. μὴ παρόντος δὲ τοῦ πρώτου πάλιν ὁ δεύτερος ἰλάρχου λαμβάνει τάξιν. ὁ δὲ καθοπλισμὸς τῶν ἱππέων νῦν μέν ἐστι παραπλήσιος τῷ τῶν Ἑλλήνων· τὸ δὲ παλαιὸν πρῶτον θώρακας οὐκ εἶχον, ἀλλ᾽ ἐν περιζώμασιν ἐκινδύνευον, ἐξ οὗ πρὸς μὲν τὸ καταβαίνειν καὶ ταχέως ἀναπηδᾶν ἐπὶ τοὺς ἵππους ἑτοίμως διέκειντο καὶ πρακτικῶς, πρὸς δὲ τὰς συμπλοκὰς ἐπισφαλῶς εἶχον διὰ τὸ γυμνοὶ κινδυνεύειν. τὰ δὲ δόρατα κατὰ δύο τρόπους ἄπρακτ᾽ ἦν αὐτοῖς, καθ᾽ ἃ μὲν ᾗ λεπτὰ καὶ κλαδαρὰ ποιοῦντες οὔτε τοῦ προτεθέντος ἠδύναντο σκοποῦ στοχάζεσθαι, πρὸ τοῦ τε τὴν ἐπιδορατίδα πρός τι προσερεῖσαι, κραδαινόμενα δι᾽ αὐτῆς τῆς ἵππων κινήσεως τὰ πλεῖστα συνετρίβετο· πρὸς δὲ τούτοις ἄνευ σαυρωτήρων κατασκευάζοντες μιᾷ τῇ πρώτῃ διὰ τῆς ἐπιδορατίδος ἐχρῶντο πληγῇ, μετὰ δὲ ταῦτα κλασθέντων λοιπὸν ἦν ἄπρακτ᾽ αὐτοῖς καὶ μάταια. τόν γε μὴν θυρεὸν εἶχον ἐκ βοείου δέρματος, τοῖς ὁμφαλωτοῖς ποπάνοις παραπλήσιον τοῖς ἐπὶ τὰς θυσίας ἐπιτιθεμένοις· οἷς οὔτε πρὸς τὰς ἐπιβολὰς ἦν χρῆσθαι διὰ τὸ μὴ στάσιν ἔχειν, ὑπό τε τῶν ὄμβρων ἀποδερματούμενοι καὶ μυδῶντες δύσχρηστοι καὶ πρότερον ἦσαν καὶ νῦν ἔτι γίνονται παντελῶς. διόπερ ἀδοκίμου τῆς χρείας οὔσης, ταχέως μετέλαβον τὴν Ἑλληνικὴν κατασκευὴν τῶν ὅπλων, ἐν ᾗ τῶν μὲν δοράτων τὴν πρώτην εὐθέως τῆς ἐπιδορατίδος πληγὴν εὔστοχον ἅμα καὶ πρακτικὴν γίνεσθαι συμβαίνει, διὰ τὴν κατασκευὴν ἀτρεμοῦς καὶ στασίμου τοῦ δόρατος ὑπάρχοντος, ὁμοίως δὲ καὶ τὴν ἐκ μεταλήψεως τοῦ σαυρωτῆρος χρείαν μόνιμον καὶ βίαιον. Translation lightly modified from Paton's in the 2010 Loeb Classical Library edition.

This represents the most complete literary description we have of early-mid Republican Roman cavalry, relating to their practical capabilities. Livy, in his description of the organization of the Roman army of the middle Republic, in book 8 of the *Ab Urbe Condita,* barely mentions the cavalry. He notes only that each legion of 5000 men contained a contingent of 300 cavalry (8.8.14) – a figure also supported by Polybius (6.19.7). While Livy regularly mentioned the cavalry in his battle descriptions (e.g. Livy 4.34 or, famously, at Cannae in 22.44-47)[3], and discussed the cavalry at various points in his narrative of the regal period (most notably its organization and expansion under various *reges*),[4] these have always been considered of dubious value – at least when it comes to concrete, tactical details. Indeed, most scholars have discounted both the regal details and later battle descriptions as little more than antiquarian speculation and literary embellishment.[5] While it is unlikely that later authors were inventing material from scratch, and, in fact, they were probably working from a rich oral tradition that – not coincidently – seems to find some support in early iconography (as we shall see), most of the details for early Roman warfare found in the literary narrative have been rightly questioned.[6] As a result, we have been left with Polybius' rather negative portrayal of Roman cavalry as our primary evidence for how they may have equipped themselves and behaved on the battlefield in the early and middle Republic. While he suggests they had improved in recent years, c. 200 BCE, following the example of the Greeks (and adopting their equipment and customs), the early Roman cavalry are presented as being almost comedically inept.[7] Although doubtlessly brave, the equipment of the early cavalry was seemingly substandard, and they seemed to have been wholly ineffective in battle.[8]

3 Daly (2002) 178.

4 See Armstrong and Notari (2024) for discussion and references.

5 The debates on the nature and reliability of the literary tradition for early and middle Republican Rome are extensive. See Cornell and Rafflaub in Raaflaub (2005) for a broad outline and history of the issue. See Bradley (2020) for a recent synthesis.

6 This is the (very good) reason why McCall began his study c. 300 BCE, and even still focused largely on the period c. 200 BCE and after. See also Armstrong (2016) for discussion of the fifth and fourth centuries BCE..

7 This is usually seen as a singular 'reform' from light cavalry to heavy cavalry – see McCall (2001) 26-52.

8 While one might charitably call this a transition from 'light' to 'heavy' cavalry (see, for example, *ibid*. 26), the early Roman 'light' cavalry seem to have lacked a practical purpose or function on the archaic Italian battlefield.

Figure 1: Cista from Praeneste with a line drawing of top decoration (after Battaglia [1979] Vol. 1, Tav. IVa). Likely fourth century BCE. British Museum, Inv. 1873,0820.263.

This understanding of the early Roman cavalry, as a small and rather ineffectual wing of the early Republican army, has stood for generations – in large part because we have had very little to put against it. As McCall noted in 2001, "Polybius may have been mistaken in his account; certainly, there are inconsistencies. Nevertheless...the kernel of his account must be accepted as essentially accurate."[9] However, the more we have learned about warfare in the ancient Mediterranean basin during this period, and indeed war and society in Italy, the more we have come to realize that it is unlikely to be the full story – as it exists in tension with virtually everything else we know. Horses were symbols of elite status, and it is likely that the Roman cavalry was composed of the community's wealthiest and, at least potentially, best-equipped warriors.[10] Indeed, we know from both

9 *Ibid*. 29.

10 Petitjean (2022) 24-25.

mortuary evidence and iconography that military equipment was an important part of elite self-representation. Fighting on horseback, or at least with horses as part of their equipment, seems to have been important for early Italian elites.

We must also consider the wider context that Italian elites, communities, and their armies were operating in. Armies in the ancient Mediterranean basin did not operate or develop in isolation. While military systems were always products of their society,[11] shaped by local (and often quite conservative) cultural norms, the ancient Mediterranean region featured a deeply connected military landscape.[12] Armies, military groups, and soldiers moved around quite a bit, and not just when engaging in open warfare. Networks of friendship, obligation, alliances, and mercecnarism, evident from at least the Bronze Age onward, meant that armies were always at least exposed to developments and trends from elsewhere in the region.[13] Indeed, the composite nature of many armies, from the fifth century BCE onward, often resulted in the regular integration of 'foreign' troops. The recently excavated finds from the western (Buonfornello) necropolis at Himera on Sicily, connected with the battle at the site in 480 BCE, give hints as to what this may have looked like in practical terms. The site has yielded almost 11,000 burials including two mass graves plausibly associated with fifth-century battles in 480 and 409 BCE.[14] While the literature (Diod. 11.20) reports the forces in 480 BCE contained allies, it does not indicate anything particularly unusual about their composition. However, isotopic work on the preserved remains indicates that combatants not only contained a very high level of 'non-locals' but that they came from across an incredibly wide region, from North Africa to the Caucuses and the Levant to Iberia.[15] The armies active across the ancient Mediterranean basin, even as early as 480 BCE, seem to have been incredibly diverse and pulled from a very wide region. From Persia in the east to Carthage in the west, war was a multicultural phenomenon.[16] These outside influences were always existing in tension with local norms, and the same must have been true of Roman cavalry.

11 Famously, see Keegan (1993).

12 Trundle (2017).

13 Echeverría (2011).

14 Lonoce et al (2018) and Viva et al (2020).

15 Reinberger et al (2021), Petitjean (2022), and Reitsema et al (2022).

16 *Ibid*. Much of this builds off of the seminal work of Horden and Purcell (2000), Morris (2003), and Broodbank (2013).

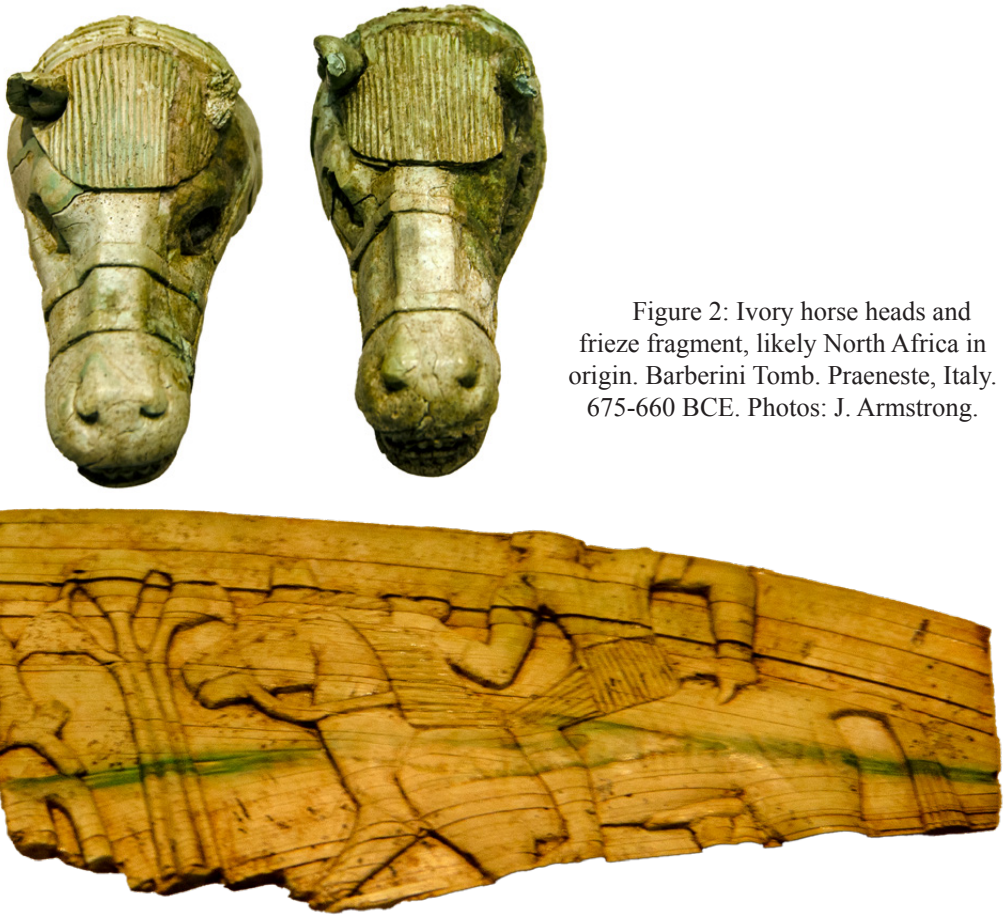


Figure 2: Ivory horse heads and frieze fragment, likely North Africa in origin. Barberini Tomb. Praeneste, Italy. 675-660 BCE. Photos: J. Armstrong.

Throughout this broad region, cavalry was important – indeed, arguably central – to the way war was pursued.[17] This is particularly true when considering the period from the fifth century BCE onward. Already the elite in Persian armies, cavalry also formed the strike wing of the armies of Philip II and Alexander III in Macedon, and were increasingly prominent in the south and west of the Mediterranean basin as well.[18] Although infantry was also important, and often takes pride of place in modern discussions,[19] cavalry was key – in no small part because it was consistently composed of the wealthiest and most influential members of society. However, its importance was not strictly due to this socio-economic and

17 See Rene (2018) and Konijnendik (2021) for discussion.

18 Wrightson (2019) 184-5. For the example of Spain, see Quesada Sanz (2016).

19 Famously see Hanson (2009). See also Kagan and Viggiano (2015).

political aspect. As has been increasingly demonstrated in scholarship over the past 20 years, ancient cavalry was quite important practically and tactically as well.[20] Their actions, in victory or defeat, often decided the ultimate outcome of battles. While it is likely the Romans were always aware of these developments, they would have been directly impacted by them as they integrated south Italic communities and came into direct conflict with Hellenistic powers in the late fourth and third centuries. The allied soldiers, who made up over half of Rome's forces in the middle Republic (as well as an increasing number of the community's citizens), were being drawn from the elite segments of society within communities and contexts that were already firmly integrated into a Hellenistic mode of warfare.[21] It is highly unlikely that this warrior elite would have chosen to equip themselves and operate in a way that would sideline or marginalize them.

Given this situation, Polybius' depiction of early Roman cavalry is, therefore, long overdue for reappraisal. This article will suggest that, while Polybius is not wholly incorrect, he was presenting a skewed image based on a (perhaps conscious) misunderstanding of how Roman cavalry looked and operated in battle in earlier periods. While the nature of Roman and Italian cavalry was changing, the shift was not from 'ineffective' to 'effective', or even from 'light' to 'heavy' (as sometimes argued), but from 'elite and individual' to 'state-based and cohesive'. This transition was also not a singular reform, but a gradual process shaped by both the wider military landscape Romans and Italians operated in, and the changing composition of Rome's armed forces themselves.

Polybius and Warfare c. 200 BCE

As with all aspects of early Roman history, the problematic nature of the literary sources sits 'front and center' in this debate. Our singular reliance on Polybius for the nature of early Roman cavalry means that his specific argument and model have had an outsized impact on our understanding of this group. Polybius' goal was not, of course, to present a sober and objective description of the factual reality of the Roman army, but rather to argue a specific set of points concerning

20 See Sidnell (2006) for discussion of the effectiveness of cavalry across the ancient Mediterranean, especially as a 'shock' element.

21 Tagliamonte (1994).

Rome's rise to power c. 200 BCE and the Roman system of government.[22] While we often fixate upon his detailed military descriptions, we must remember that this was only a means to an end. Within this, Polybius, like many other ancient historians, prioritized infantry in his model, as this segment of the army embodied the principles of order, organization, and power he sought to present as being at the core of the Roman approach.[23] Additionally, for Polybius, the evolution of the Romans' cavalry could be seen as part of a wider set of developments, all of a similar type (typically 'learning' and 'adapting' from their neighbors), that were key to the Romans' meteoric rise to power c. 200 BCE. The suggested improvement of the Roman cavalry in the third and second centuries BCE, learning from Greek cavalrymen (incidentally a group which Polybius, as a *hipparchus* of the Achaean League 170/169 BCE, would have had a personal attachment to), was symptomatic of a wider phenomenon.[24] Similar principles can be seen in his discussion of the Roman navy, where the aspiring Romans supposedly learn from other peoples, ultimately becoming better than their teachers. However, we should not take this argument at face value. Just as Polybius' comparable arguments about the early Roman navy have come under fire in recent years,[25] his model of early Roman cavalry misrepresents the situation. Polybius presented a highly theorized and idealized version of events that aligned with his overall goals and argument. In short, Polybius does not present the reader with concrete historical details, which he then explains and contextualizes, but rather with a historical model, designed to reinforce his more philosophical points and built upon comparisons with Greek military models. While this does not mean we should discount the details he gives us, we must always remember why he is giving them and the purpose they serve.

In addition to these more rhetorical points, Polybius' grasp of the realities of early Roman cavalry was likely shaped by relatively recent shifts within the nature of both the cavalry and the *equites* in Rome. Even if he had wanted to relate

22 See Baronowski (2011) for discussion. This is symptomatic of the wider approach to the Roman cavalry in our literary sources – see Petitjean (2022).

23 Champion (2004, 135), for instance, comments on Polybius' use of infantry formations as a representation of social and political unity. See Konijnendik (2021) for discussion of the Greek context.

24 Polyb. 28.6.9.

25 See, for example, Steinby (2007) and more recently Harris (2017).

Figure 3: The Alexander Mosaic from the House of the Faun, in Pompeii. c. 100 BCE. National Archaeological Museum, Naples. Photo: J. Armstrong

the true nature of early Roman cavalry, he may not have been able to. As Rome expanded across the Italian peninsula during the fourth and third centuries BCE, the nature of the Roman army changed – shaped by the massive influx of new citizens and allies.[26] What had previously (c. 400 BCE) been a local force, drawn from around the urban area of Rome, became a Latin force c. 338 BCE, and, ultimately, a pan-Italian force by c. 250 BCE. This was not a stable entity, but an evolving conglomeration. In addition, the nature of warfare the Roman army engaged in also shifted across these centuries, moving from local raids against other local communities and clans, to years-long wars against increasingly far-flung powers and states.[27] This changing reality resulted in marked changes on the ground, especially for the cavalry.

To summarize the forthcoming argument, it will be suggested that, in the late regal period and early Republic (sixth through third centuries BCE), Roman and

26 See Helm (2021) on Roman expansion and the development of Roman citizenship and alliances in this period.

27 These shifts have been discussed at length in recent scholarship. See Armstrong (2016) and Helm (2021) for the fourth century BCE. See particularly Rosenstein (2005) and (2012) for the third.

Italic cavalry operated in a fundamentally different manner to how they functioned in later years (and in the age of Polybius). Warfare in Italy in the early period was evidently a much looser activity, dominated by raiding, dueling, and individual feats of bravery. With the recent deconstruction of the 'Roman hoplite phalanx', and the use massed heavy infantry in general in the early period, it is increasingly likely that early central Italian battles were much more dynamic affairs.[28] Rather than having two blocks of infantry crash into each other (an idealized situation that likely only rarely occurred, even in the Greek context),[29] battles were likely more fluid and open, with individual units – and indeed individual soldiers – operating in a more independent manner. In this context, central Italy's warrior elite seemed to have engaged in a form of warfare that often involved quite a bit of movement, both across the battlefield and jumping on and off of horseback. This does not mean that early Roman cavalry was equipped more lightly – and indeed the reverse may have been true – although it is likely that their equipment did reflect this more fluid and individualistic form of combat. Although often operating as part of a group, they also fought independently, regularly dueling and jumping off and onto their mounts as they engaged opposing elites. Despite this seemingly chaotic character, cavalry formed a vitally important – and indeed, arguably, the central – part of Italic combat. In these cavalry clashes, individual elites were able to achieve personal renown and glory against (and at the expense of) other elites, gain wealth (in the form of armor and personal spoils), as well as strike definitive blows against the enemy army by defeating its leadership. In many ways, this was the entire point of archaic Italian warfare. These were not yet wars focused on the acquisition of land or the domination of communities and populations, but an arena for much more individual and familial displays of valor and the acquisition of spoils.

At the end of the fourth and beginning of the third century BCE, however, the Romans were influenced by the wider shifts in warfare occurring across the Mediterranean, whereby the role of cavalry changed. Rather than operating independently, in a more fluid form of warfare, cavalry increasingly formed an important part of a wider military system. War was changing across the region, with larger armies, featuring more specialized parts, operating in a more orga-

28 Rosenstein (2010), and now many others.

29 Famously, see van Wees (2004). See also the debates in Kagan and Viggiano (2015).

nized and planned fashion, for longer periods. We see the rise of a 'combined arms' approach to combat.[30] The purpose of Roman warfare also shifted, moving away from the more personal and clan-based approaches seen in earlier periods and towards a coherent, state-based approach, increasingly focused on conquest and control.[31] In this environment, Roman cavalry shifted towards what we might consider a more 'Hellenistic' mode of operating – although this label should be understood as a product of the evidence (i.e. best attested in evidence from the 'Hellenistic world'), rather than a true point of origin. Indeed, this change did not occur through the Romans learning new techniques or modes of operating, or at least not primarily, but rather through their integration of new soldiers and units as part of the Romans' wider expansion in Italy.

During the 16-year period from 339 to 323 BCE alone, Rome's citizen population supposedly rose from a reported 165,000 (Euseb. *Ol*. 110.1) to 250,000 (Livy 9.19). By 251 BCE, it was almost 300,000 (Livy *Epit*. 18). Most of these men would have come from central and southern Italy, as part of Rome's settlement after the so-called Latin War and the creation of new tribes and citizen colonies during this century of expansion. This does not include the huge number of allies (*socii*) Rome added during this period from the same regions, all of which were firmly enmeshed in the wider Hellenistic military landscape – having regularly supplied mercenaries for armies across the Mediterranean basin.[32] This was not so much a case of 'traditional Romans' changing their behavior, although that did happen as we will see (albeit not on the battlefield), but a case of 'new Romans' bringing their traditional mode of battle with them. Most notably, they may have moved towards fulfilling certain specific functions, including protecting the sides of the main infantry formations – from which they likely earned the name *alae* or 'wings'[33] – and serving as the main strike force to break opposing infantry formations and pursue retreating forces. In this context, cavalrymen needed to stay in formation, and on horseback, in order to fulfill their set roles.

As the Romans began to fight in this way, the nature of their cavalry shifted,

30 See Wrightson (2019) for a wider discussion of the phenomenon.

31 See Armstrong (2016) for discussion.

32 Tagliamonte (1994).

33 It is also a possibility that the Latin *alae* may have been connected to the Greek ἴλας, or that this term for cavalry may have had a fortuitous double-meaning.

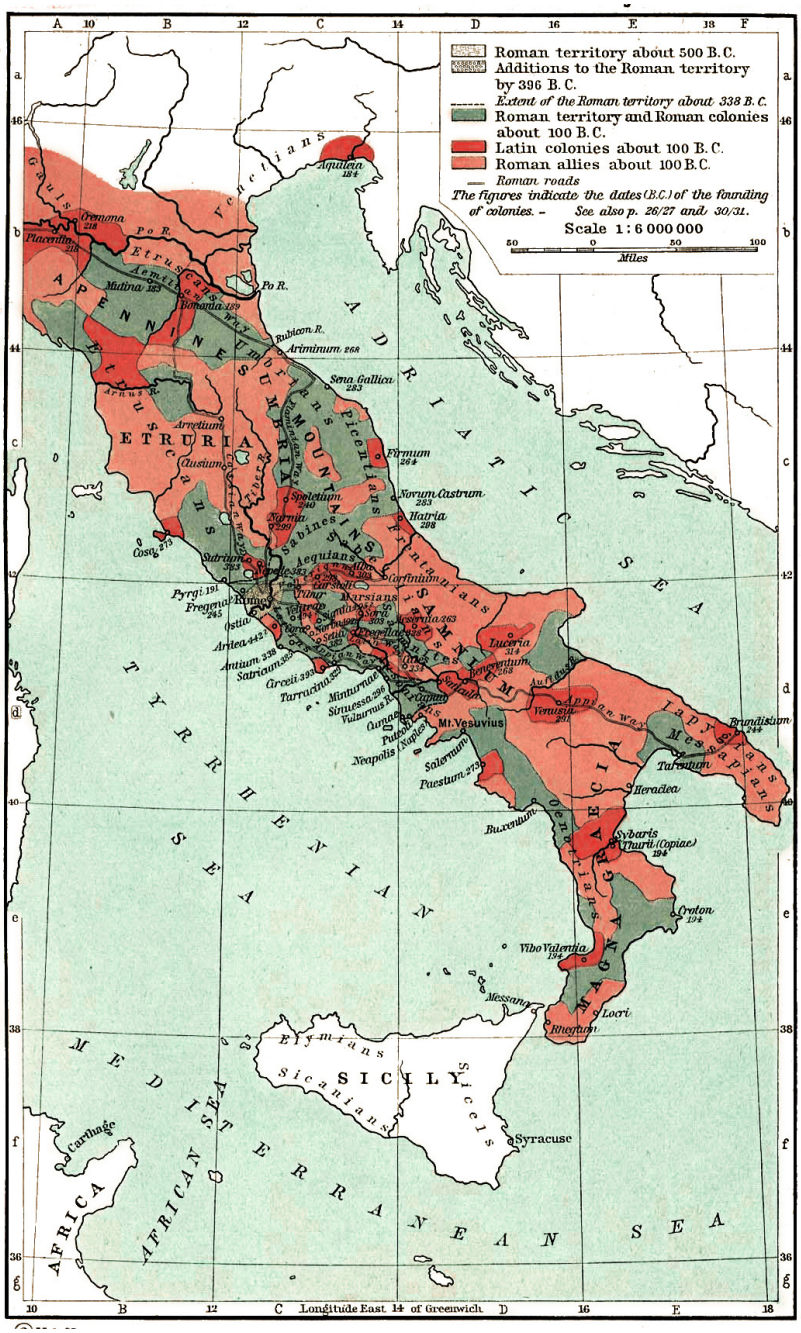


Figure 4: Indicative map of Roman and allied territory by c. 100 BCE.
Map courtesy of the USMA, Department of History. Used with permission.

and they also integrated new (and more) cavalry forces – largely from the *socii* – that were able to operate in this context. While the cavalry was still an elite segment of the army, due to its traditional prestige and the increased costs and investment involved in owning and maintaining a horse, it was now more fully integrated into a state-based military system. Independent actions were curtailed, and equipment slowly shifted to suit this new context.

In this period, we also see the beginnings of a split between the elite *equites* as a socio-economic class, who clung to their traditional prerogatives and shifted many of their traditions to the social, political, and religious realms, and the military *equites*, who became more homogeneous in equipment and organization, in a certain sense more like 'soldiers' and less like 'warriors', and were strongly supported by the state. Rituals associated with the *equites* became public festivals. Famously, the *transvectio equitum* – a parade of the *iuventus* of the Roman *equites* which supposedly dated back to the early fifth century BCE[34] – was transformed into a public festival in 304 BCE, as part of reforms brought in by the censor Q. Fabius Maximus Rullianus.[35] While there was always significant overlap, they were no longer a single, unified group.

Nature of (Cavalry) equipment in the early Republic

The overall goals and nature of Roman and Italic warfare in the early and middle Republic have been extensively discussed in recent scholarship and are beyond the scope of this article.[36] While the details are still debated, there is a growing consensus that most early Republican warfare was focused on raiding for portable wealth with very little, if any, territorial conquest until the fourth century BCE. It is also clear that clan-based groupings played a vitally important role, both organizationally and tactically, far later than traditionally supposed. While we used to think that the sixth-century BCE reforms of Servius Tullius severed many of the familial bonds that underpinned Roman politics and warfare previously, this is no longer the case. If the reforms actually occurred in the sixth century (admittedly, a big IF), they were likely neither complete nor a fundamen-

34 Liv. 2.9.; Dion. Hal. *Ant. Rom*. 6.3; Cic. *Nat*. 2.6

35 Liv. 9,46,15; *Vir. ill*. 32,2.

36 See, particularly, Armstrong (2016).

tal shift but rather part of a gradual organization and acknowledgment of existing practices.[37] Clans, many incorporated as 'tribes' (*tribus*) in the state-based system, remained the key organizing principle of the Roman military system that continued to operate following age-old norms – albeit now in an increasingly unified fashion under the banner of 'Rome'.[38]

The roles of cavalry and infantry in this early Republican context are hard to pin down and likely varied quite a bit depending on the context and situation. Warfare in this period operated on a smaller scale, both in terms of the size of the forces involved and the length of time they were in the field. Wars may have only involved a few thousand men on each side, may have often taken place over the course of a week or two (rather than months or years), and occurred in theatres that were close to home. While most warfare likely occurred at specific times of year, coinciding with particular points on the agricultural, pastoral, religious, and political calendars, it was also more firmly embedded in everyday life. At least the threat of violence, both individual and group, was an ever-present concern.[39] As a result, it is likely that roles and positions that different individuals held in everyday civilian life, and the relationships that supported them, were continued on the battlefield.

All our evidence suggests that all early Italian warriors should probably be considered 'elite' in some sense. Because warriors, or more accurately warriors' families, would have supplied their own equipment, all of them must have come from families with enough wealth, resources, and connections where this was a possibility. Within this, however, there were clearly gradations. While it is likely that the specific panoplies associated with the different classes of the centuriate assembly (see Fig. 5 below) are highly idealized, this broad system found in our literary evidence does demonstrate a clear awareness that warriors would often come equipped with different equipment based on their socio-economic status.

37 *Ibid*. 75-86.

38 Armstrong (2020) and Helm (2022).

39 Lintott (1999).

Class	No. of Centuries	Required wealth (*asses*)	Assigned Military Equipment
Equites	18	100,000(?)[1]	Cavalry
1st	80 + 2[2]	100,000	Helmet, round shield, greaves, breast-plate, all of bronze, sword, and spear
2nd	20	75,000	Helmet, oblong shield, greaves, sword and spear
3rd	20	50,000	Helmet, oblong shield, sword and spear
4th	20	25,000	Spear and javelin [oblong shield, sword][3]
5th	30 +2[2]	11,000 [12,500][3]	Slings and stones [javelin][3]
Capite Censi	1	<11,000 [12,500][3]	N/A

In each class, half of the centuries would be labeled *seniores* (composed of men aged 46-60) and half *iuniores* (composed of men aged 17-45). 1. Equites were required to be of 'highest birth' (Dion. Hal. Ant. Rom. 4.18), or the 'principal men of the State' (Livy 1.43), however, the text does seem to hint at a required level of wealth as well. 2. Two centuries of engineers and two of trumpeters are included respectively in the first and fifth class. 3.Square brackets denote variations present in Dionysius' account, but not Livy's.

Fig. 5: An outline of the Servian Constitution as given in Livy and Dionysius of Halicarnassus. Adapted from Armstrong (2008) 62.

This is not to say, however, that warfare was conducted by undifferentiated and unorganized mobs of warriors. Although Roman Republican soldiers would have equipped themselves, wars (and armies) still required quite a bit of central organization and planning. It is likely that warriors were recruited based on what they could provide, that they shared broad social-cultural norms (many may have been linked by family or socio-religious interests), and that they could be expected to behave in broadly comparable – or at least complementary – manners. Armies, and especially those that were only together for a few short days or weeks, must have relied on existing relationships and hierarchies in order to

operate effectively. Leaders needed to know that their men would come equipped appropriately and would follow orders if a war was to be successful. In this era and context, there was no time to institute new hierarchies or create new systems of control and command. Men showed up, fought, and returned home in relatively short order.

For cavalrymen, this would have obviously meant owning a horse that was capable of operating in a military setting – so of the right age, size, and health. It would have also meant having armor and bearing weapons appropriate to their social station. Cavalrymen would have also likely had a groom or other support personnel and would have needed to have thought about the supply of food and water for their animals and men – even after the advent of *tributum* and *stipendium* c. 400 BCE.[40] It meant being able to use that horse appropriately and likely already being part of an existing unit or tactical group – or at least being able to be quickly integrated into one. It was likely that the men in the early citizen cavalry were well acquainted with one another before mobilizing and required little centralized support or direction upon arrival.

Polybius' disdainful description of the traditional equipment of early Roman cavalry has long been accepted as accurate, despite the fact that it is not supported by either the archaeological or iconographic evidence. While this evidence must always be interpreted with some caution, there is an ever-growing corpus of material pointing towards Italic cavalry wearing quite a lot of armor – relatively speaking. For instance, the disc with the cavalryman (*desultor*) from the 'Tomb of the Warrior' at Lanuvium (c. 500 BCE) shows a warrior with a linen cuirass, and (presumably bronze) helmet and greaves (see Figure 6). Alternatively, the sixth-century BCE disc from Ancona shows two comparably equipped cavalrymen, here fighting from horseback against a downed infantryman carrying an *aspis* (see Figure 7).

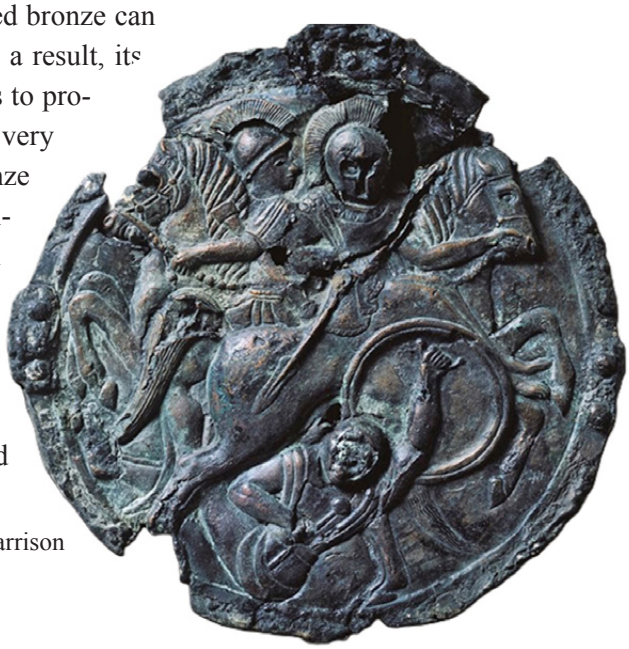
A key point in this discussion is that the nature of ancient bronze armor has all too often been misunderstood. Scholars have assumed that it functioned in a similar way to iron or steel armor, which relies on high strength, impact re-

40 See Roth (1999) 78-79 for discussion of cavalry rations, and 91-93 for support personnel. The extra costs associated with these are likely reflected in the varying levels of *stipendium*, with Polybius (6.39.12) indicating that by the second century BCE Roman infantrymen received the equivalent of two obols per day, while cavalrymen received the equivalent of one drachma per day. See Rosenstein (2016) for discussion.

Figure 6: Disc with the desultor from the Lanuvium warrior burial. c. 475 BCE. Inv. no. 360111 317480; Museo Archeologico Nazionale di Roma. After Zevi (1993) Fig. 9.

silience and rigidity to protect its wearer. Bronze amour, however, works a little differently. Bronze can function effectively as armor despite being quite thinly hammered, provided it is part of an amour system that also uses organic elements – most notably wood, leather, felt, and linen.[41] Bronze is naturally quite malleable, and thus sheeted bronze can be bent or dented relatively easily. As a result, its primary function in ancient armor was to protect against piercing, which even a very thin layer can do. Consequently, bronze actually formed a highly visible but relatively small part of armor systems in the Classical period, down to about 200 BCE, when cast bronze, iron, and eventually mail began to be used more widely. Prior to this, most armor, worn by both cavalry and infantry, was based

Figure 7: Disc or pectoral/cardiophylax from Ancona. Sixth century BCE, Ancona. Museo Archeologico Nazionale delle Marche. Inv. 1100090086.



41 De Groote (2016) and Armstrong and Harrison (2021a, and 2021b).

around organic elements and layers, which only sometimes had a thin layer of highly polished bronze on the outside to protect against piercing.[42] The iconic Greek *hoplon*/*aspis* is a prime example of this, with its core of wood, backed by leather, and only a very thin – typically less than 0.5mm thick – layer of bronze on the outside. Accordingly, a 'heavily armored' cavalryman from the fourth century BCE may not have looked as Polybius, writing in the second century BCE, or a modern observer may have imagined – when iron mail was more prevalent (as seen with the cavalrymen on the 'Altar of Domtius Ahenobarbus', Figure 8).

Even so, this should not be pushed too far, as the differences between sixth/fifth century BCE equipment and fourth/third century BCE equipment may not have been extreme. As the current authors discussed elsewhere,[43] it is likely that the early fifth-century BCE warrior burial from Lanuvium was a cavalryman, and his equipment is fascinating in that context as he was buried with an anatomical bronze breastplate, a splendid helmet, two light throwing spears, a thrusting lance, an axe, as well as a large (over 80cm in length) *machaira*/*kopis*-style sword (Figure 9).[44] The sword is particularly interesting, as it is of a type that Xenophon (*Eq*. 12.11) deemed particularly useful for cavalry and of a length that effectively precluded its use by infantry.[45] This was an incredibly well-equipped warrior, demonstrating at least one end of the cavalryman spectrum. It is also not a dramatically different panoply from that found at Forentum (Lavello), dating to the first half of the third century BCE (Figure 10).[46] This is clearly a cavalryman, due to the presence of a chanfron for the horse, and he was evidently buried with a range of spears with sauroters. Although the grave assemblage from Lavello dates more than two centuries later, the changes are minimal. The helmet is of the new, Montefortino type and construction, and the spearheads show a marked shift in type, size, and quantity. However, the body armor is of the same basic type – a thinly hammered bronze, bi-valve, muscled cuirass. It is worth returning to the spears, though, which are noteworthy as they both support an aspect of Polybius' narrative – with the spearheads being more robust and coming with sauroters as

42 Mödlinger (2016).

43 Armstrong and Notari (2024).

44 Zevi (1990) and (1993).

45 See Quesada Sanz (1997) and Verčík(2011) for discussion.

46 Initially dated to the fourth century BCE, this burial has now been backdated to the first half of the third century BCE. See Bottini, et al (2018).

Figure 8: Scene from the so-called 'Altar of Domitius Ahenobarbus'. Musée du Louvre in Paris. Late second century BCE. Photo: J. Serrati

he describes – and also how this may not indicate a wider 'reform', so much as a gradual set of shifts which saw different changes occurring at different times. Polybius, if he was aware of this at all, seems to have simplified things for his narrative.

These basic principles are also visible when it comes to shields and spears described as being poorly constructed, but this likely reflected three different issues. First, it relates to the overall nature of military equipment before c. 250 BCE, which favored more organic elements, relative to that of c. 150 BCE when Polybius was writing, which was of a different construction. One was not necessarily

Figure 9: Cuirass and helmet from the Lanuvium Warrior Burial. C. 500 BCE. Museo Nazionale Romano - Terme di Diocleziano. Photo: J. Armstrong.

more effective than the other, although their construction would have been noticeably different.[47] Oxhide, or boiled leather (*cuir-bouilli*) is actually very effective at stopping edged weapons – with testing suggesting it requires 90J of force to be defeated by a sword and 30J for a more focused point like that of a spear.[48] A 30J strike with an iron spearhead is also enough to split and pierce a bronze-faced

47 See Devereaux (2022) for discussion of Roman armour changes in this period.
48 Williams (2003) 948.

Figure 10: Cuirass, helmet, chanfron for a horse, along with spear points and likely sauroters (the three on the far right). Third century BCE. Forentum (Lavello) tomb 669.
Photo: J. Armstrong.

aspis.[49] We should not assume the shield with metal is more effective. Second, the examples of early cavalry equipment that Polybius saw (if, indeed, he personally saw any) likely came from ritual contexts, such as the *transvectio equitum*, and so may have represented lighter and more stylized versions. Polybius explicitly notes that Roman cavalry no longer used the earlier, and seemingly inferior, equipment he describes, so it is not entirely clear how he would have known about it. Presumably, this information would have come from non-military contexts, like

49 De Groote (2016) 208.

Figure 11: Frieze fragments from the *Forum Romanum*. Museo Nazionale Romano - Terme di Diocleziano Photo by J. Armstrong.

seeing it in ritual processions, or simply word of mouth. Third, as previously mentioned, Polybius was consciously trying to show development and improvement over time in Rome's armed forces, often through adoption and emulation of Greek models for cavalry, as part of his wider argument.

Bearing this in mind and reconsidering the wider body of (especially archaeological) evidence which now exists, a rather different view of early Roman and Italian cavalry equipment emerges. Terracotta reliefs from across Etruria and Latium show us horsemen equipped with a large round shield, possibly an *aspis*, and a single spear.[50] Three of the four fragments of frieze from archaic Rome attest to the use of large circular shields by Roman cavalry (see Figure 11). In two fragments one can see warriors on horseback carrying circular shields and long spears, while a third depicts a warrior on horseback wearing a large crested helmet. Polybius does not mention the sword, but swords are common in both graves associated with cavalrymen and depictions of them from Italy. For instance, they can be found on fourth-century Praenestine *cistae* (see e.g. Figures 1, 12, and 13) and the famous fifth-century warrior burial from Lanuvium (see Figure 9 above). But looking more broadly, from iconography and mortuary evidence at least, it appears that most cavalrymen were well-protected by a shield, helmet, and body armor and armed with a sword or spear. So much so, in fact, that they have often been described as "mounted infantry".[51] This term, however, does the cavalry a severe disservice. They are not mount-

50 Crouwel (2012).
51 Furet (2012).

ed infantry, but simply well-equipped cavalrymen. The fact that these could be mistaken, however, does highlight the fact that the approach to battle utilized by these two groups may have overlapped more than in later periods.

Nature of (Cavalry) Battle in the Early Republic

In terms of their behavior, how these men acted on the battlefield would have varied significantly based on context, but in the early period, it seems to have involved feats of individual heroism and the pursuit of wealth and glory. While they are very difficult to trust, early battle narratives are full of monomachy (single combat) and dueling. The fa-

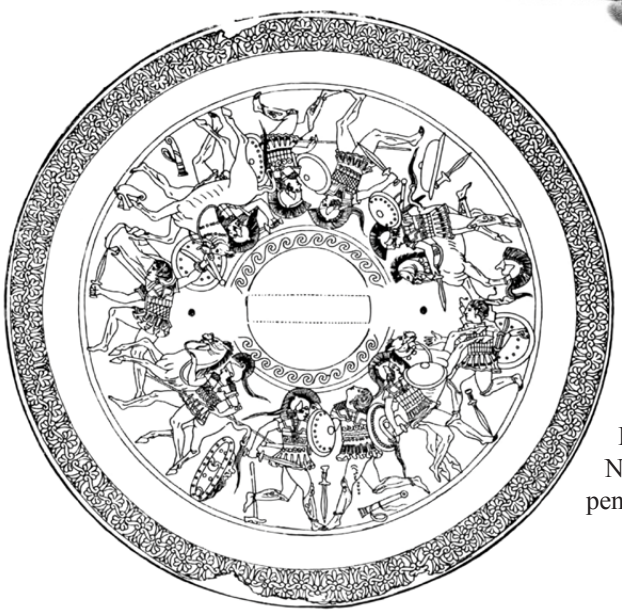


Figure 12: *Cista* from Praeneste with a line drawing of top decoration (after Battaglia [1979] Vol. 1, Tav. VII). Likely fourth century BCE. NY Carlsberg Glyptotek, Copenhagen.

mous duel between Lucius Junius Brutus and Arruns Tarquin in 509 BCE offers a prime example. Livy (2.6.6-9, trans. Foster) notes:

> So it came about that two armies, representing two nations, followed Tarquinius, to regain his kingdom for him and to chastise the Romans. When they had come into Roman territory the consuls went out to meet the enemy: Valerius led the foot in defensive formation; Brutus, with the cavalry, went ahead to scout. In the same fashion the enemy's horse headed their march, commanded by Arruns Tarquinius, the king's son, while the king himself followed with the legions. Arruns, perceiving a long way off by the consul's lictors that it was he, and then, as they drew nearer together, recognizing Brutus more unmistakably by his countenance, blazed with resentment. "Yonder," he cried, "is the man who drove us into exile from our native land. Look! He is himself decked out with our trappings, as he comes proudly on! O gods, avengers of kings, be with us!" Spurring his horse, he charged straight at the consul. Brutus saw that he was the object of the man's attack. In those days it was to a general's credit to take part in the actual fighting, so he eagerly accepted the challenge, and they rushed at one another with such desperation, neither of them taking thought for his own defence if only he might wound his adversary, that each was pierced right through his shield by the[2] other's thrust, and, impaled upon the two spears, they fell dying from their horses.[52]

Accounts like this are almost certainly also – or, indeed, primarily – narrative devices and contain a high degree of elaboration on the part of ancient authors. Although, if the oral tradition was going to preserve any factual details of early warfare, duels amongst the elite represent one of the more likely options. This approach to warfare amongst the elite also makes quite a lot of sense given what else we know. Warfare seems to have been a vital part of early elite self-representation and power, as seen particularly through the burial and display of arms and armor, and even in later periods the demonstration of *virtus*, display of battle scars, and tradition of the *spolia opima* all hint at the importance of monomarchy

52 *Valerius quadrato agmine peditem ducit; Brutus ad explorandum cum equitatu antecessit. eodem modo primus eques hostium agminis fuit; praeerat Arruns Tarquinius, filius regis; rex ipse cum legionibus sequebatur. Arruns ubi ex lictoribus procul consulem esse, deinde iam propius ac certius facie quoque Brutum cognovit, inflammatus ira "ille est vir," inquit, "qui nos extorres expulit patria. ipse en ille nostris decoratus insignibus magnifice incedit. Di regum ultores adeste." concitat calcaribus equum atque in ipsum infestus consulem derigit. sensit in se iri Brutus. decorum erat tum ipsis capessere pugnam ducibus; avide itaque se certamini offert, adeoque infestis animis concurrerunt, neuter, dum hostem volneraret, sui protegendi corporis memor, ut contrario ictu per parmam uterque transfixus duabus haerentes hastis moribundi ex equis lapsi sint*.

amongst members of this group.[53] This is broadly supported by the nature of cavalry equipment, which seems to emphasize individual protection and, indeed, was arguably designed for dueling.[54]

This is not to say, however, that cavalrymen operated entirely independently. It has been argued, based in part on the later Roman use of maniples and similar divisions, that most Roman (and Italic) armies were divided up tactically into small groups – likely representing the families, clans, and communities that made them up.[55] Rather than attempting to integrate the various groups that contributed to the army, or indeed break up and redistribute the individual warriors into new groups or formations, it is far more likely that these pre-existing entities operated as distinct units on the battlefield. What this means for the cavalry, in particular, is unclear. While the literary sources give us some information on the organization of the *equites*, it is likely that much of it relates more to political contexts than military ones – most notably the division into centuries, which were connected to voting practices. In battle narratives, the cavalry are often described as an undifferentiated mass – e.g. "There the Tusculan horse were stationed, under the command of Geminus Maecius, who was in command [of the Tusculan cavalrymen], a man of high reputation amongst his own people, recognized the Roman cavalry and the consul's son at their head, for they were all — especially the men of distinction —known to each other." (*ibi Tusculani erant equites; praeerat Geminus Maecius, vir cum genere inter suos tum factis clarus. Is ubi Romanos equites insignemque inter eos praecedentem consulis filium — nam omnes inter se, utique illustres viri, noti erant — cognovit*. Livy 8.7.2-3, adapted from Foster's translation). However, when horsemen are described as operating in smaller or tactical groups, these are mostly commonly referred to as *turmae* by the sources.[56]

53 Oakley (1985) and Burns (2003).

54 A key component here is the large circular *aspis*. Although this is typically associated with infantry formations, like the hoplite phalanx, van Wees (2004) has convincingly argued for its origins and utility in dueling. The same is true for the rest of the armour, which seems to be designed for full-body protection, as would be required in a duel. Cavalry weapons also seem to be quite diverse, with panoplies having swords, spears (both throwing and thrusting), as well as knives and axes. None of these seem to indicate a specific form of group combat.

55 Armstrong (2019).

56 *Acies*, meaning simply 'unit', is also sometimes used, as at Livy 8.39.1 and 25.6.20 – both times "*acies equitum*". *Turma* appears more frequently in Livy's second pentad (15 times) than in the first (4 times – including the reference to the enlistment of the Albanians

Intriguingly, *turma* has the same root as *turba*, meaning both "a crowd" and "tumult", which seems to emphasize both dynamic aspects – the word is ultimately derived from the Proto-Indo-European **(s)twerH*, meaning "to rotate" or "swirl" – as well as the socially and ethnically indistinct character of its members.[57] By the late Republic, it is clear that *turma* had become more formalized, and related to a group of c. 30 men, led by three *decuriones* – each commanding ten men, with one of them also providing overall command.[58] While it is likely that these men shared bonds of kinship (broadly understood), and indeed may have been from the same tribe or clan,[59] there is evidence to suggest they were also bound by some form of religious-military connections – which may have helped to bind together warriors fighting together from separate clans or communities.[60]

How this is related to combat is, yet again, uncertain. As noted above, it is likely that most combat was individual, as revealed by both the equipment the cavalry used and the traditions and activities they are associated with. However, the close proximity of men from the same social group was likely important, as appropriate witnesses and audience of their actions. It is also likely that the wider group supported their comrades, and there are depictions – most famously, in the form of handles on *cistae* (see Figure 13 below) – that seem to show comrades either protecting the wounded cavalryman or, more often, bringing his body back.

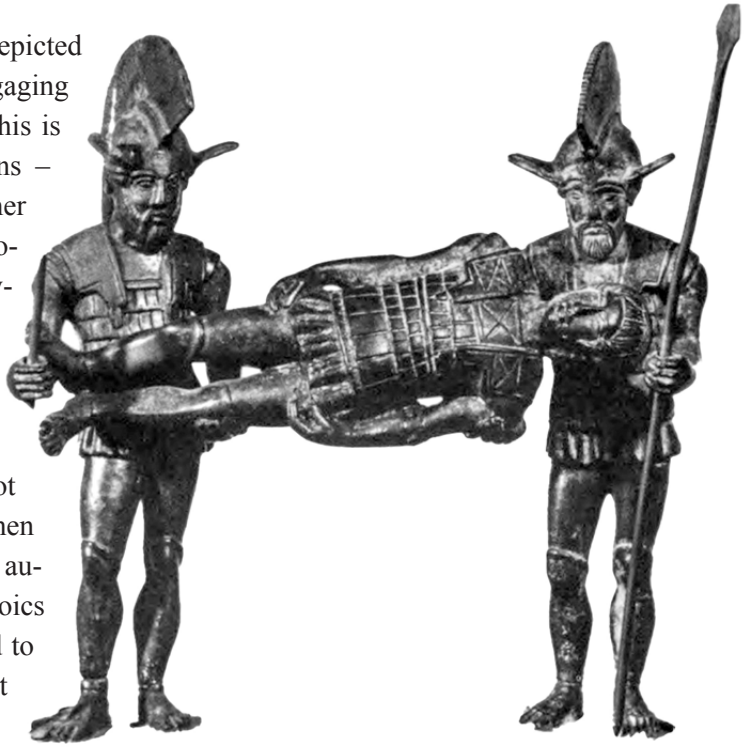
[1.30.3], the Fabians in 480 BCE [2.47.3], the episodes of Cosso [4.19.2], and Tempanius [4.38.3]). This may simply be a stylistic choice, although it may also indicate the increasing importance of such units and divisions in this later period.

57 Livy (8.8) uses a similar term, *turba scutatorum,* when referring to the light infantry (*leves*) who supported the maniples of hastati of the maniples, as part of his broader discussion of the mid-Republican army in the lead up to the battle of the Veseris River in 340 BCE. This term seems to indicate a distinct group, but one lacking rigid order.

58 Festus 485L. See also Varr. *LL* 5.16.26; *Veg. Mil*. 2.14; Caes. *BG* 4.33 etc.

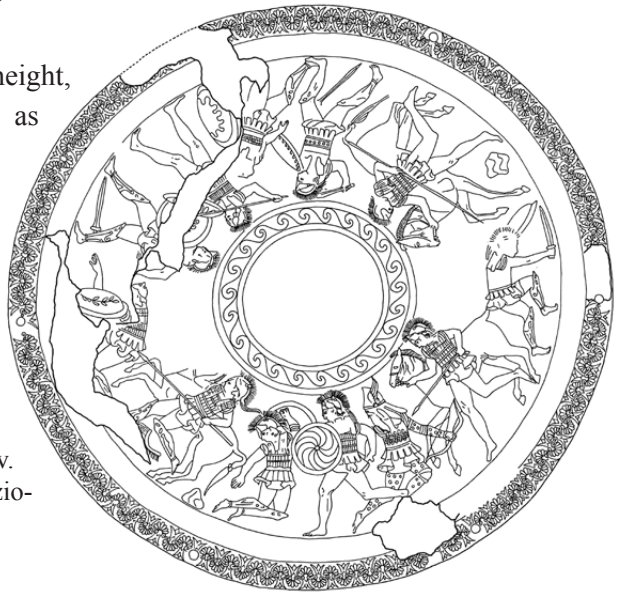
59 Our sources consistently connected with *equites* with the original *tribus* of Romulus (Livy 1.13, Dion. Hal. *Ant. Rom*. 2.13, Var. *LL* 5.91, Plin. *NH* 33.9), perhaps hinting at this tribal/familial association.

60 The most obvious association would be with the cult of the Dioscuri (Castor and Pollux), which was common throughout central Italy, with early evidence from sites like Lavinium (the Dioscuri are attested on one of the famous altars) and a strong tradition within Rome (Gartrell 2021). Religious rites and beliefs are also hinted at in iconography, as in the Prenestine *cistae*, although the connection of role of horses and cavalry to the rites are uncertain. These sorts of connections may also be applicable to the infantry, possibly inferred by some of the various rituals associated with the *comitia centuriata* (which seem to have gone further than simple political and legal formula – for instance the *lustrum*), although they seem to be much stronger and more visible within the elite groups of the *equites*.



Cavalry is often depicted and described as engaging with other cavalry. This is likely for two reasons – one social and the other practical. The first, social reason is that cavalrymen were likely interested in engaging with their peers, both as comrades and as opponents. Not only did cavalrymen want an appropriate audience for their heroics in battle, they needed to perform them against appropriate rivals. This seems to be true across many periods, and not just archaic Italy. The Homeric parallels are most obvious here.[61] The second reason is practical and relates to maximizing the benefits that being on horseback brings, while also minimizing its weaknesses.

Horses provide greater speed, height, and bulk for cavalrymen, as well as



61 See Sears (2019) 1-30 for discussion.

Figure 13: Handle and lid from a *cista*. Handle depicts two warriors carrying an injured/dying third, while the lid contains a battle scene with cavalry (after Battaglia [1979] Vol. 1, Tav. XVII and XIX). Praeneste. Museo Nazionale di Villa Giulia. Inv. 25210.

adding the horse's natural weapons to their own – there is iconographic evidence, especially from the Praenestine *cistae* and disc like that from Ancona (see Figure 7), showing horses trampling or kicking to keep the enemies at bay. They were, in modern terminology, a true "weapon system" that combined and multiplied the capabilities of the horse and rider. However, cavalry were of limited value against organized infantry. Cavalry would typically only be able to charge an infantry formation that lacked strength and was in disorder. While being on horseback gave the rider significant benefits, it also limited his reach and nimbleness and offered a larger target for his opponent – and would have particularly left the legs exposed (a point emphasized in much later medieval treatises on cavalry warfare).[62] Indeed, as particularly well demonstrated by later evidence, men on horseback, along with their valuable mounts, are actually quite vulnerable when stationary.[63] As a result, cavalrymen, at least while on horseback, likely sought to keep moving while fighting.

Operating in this way, cavalry may have been able to effectively engage the more dispersed infantry formations that seemed to be used in Italy, in contrast to the larger and more cohesive blocks of infantry favored in Classical and Hellenistic Greece. However, even here, the benefits would be limited. When engaging these forces, they would typically not have been creating new gaps, but simply riding into existing ones. Our sources do discuss cavalry charges against infantry on occasion and, provided these were supported by infantry, they may have been effective. For instance, see Livy 8.30.6-7 (trans. Foster):

> The cavalry, too — at the suggestion of Lucius Cominius, a tribune of the soldiers —after charging a number of times without being able to break the enemy's lines, pulled the bridles off their horses and spurred them on so hotly that nothing could resist the shock, and arms and men went down before them over a wide front. The foot soldiers, following up the cavalry charge, advanced on the disordered enemy.[64]

However, these sorts of references seem to be both relatively late – the above relating to the battle at the Veseris River in 340 BCE (a point and battle we will

62 Harbinson (2021).

63 Harbinson (2023) esp. 189-201.

64 *Eques etiam auctore L. Cominio tribuno militum, qui aliquotiens impetu capto perrumpere non poterat hostium agmen, detraxit frenos equis, atque ita concitatos calcaribus permisit ut sustinere eos nulla vis posset; per arma, per viros late stragem dedere; secutus pedes impetum equitum turbatis hostibus intulit signa.*

come back to) – and rather exceptional. Most cavalry engagements with infantry were likely focused on pursuing fleeing or isolated groups. In general, cavalry engaged with other cavalry.

When attacking infantry, and especially a broken infantry formation, it is likely the cavalry would have made the most of their increased size and speed, riding down fleeing infantry and stabbing them from behind and from their elevated position. It is also likely that cavalry made use of the natural advantages being on horseback brought when facing off against each other. However, given the absence of stirrups or even the Gallic horned saddle, combat from horseback would have looked markedly different from that envisaged by many modern readers used to imagining medieval cavalrymen with couched lances. Italic cavalrymen seem to have ridden either bareback or using a simple blanket (see Figure 14), meaning that their position on the horse was somewhat precarious. Without anything to keep them firmly on the horse's back, it would have been difficult to use the momentum of a charge to increase the force of a blow or strike without risking being unhorsed in the process. Charging with a couched lance would have quickly unseated the ancient cavalryman, pushing him off the rear of the animal. As a result, while some aspects of combat may have been conducted on horseback, they likely involved using the horse as a vehicle to get close to an opponent, as a platform to fight from, and as a co-combatant.[65] Indeed, in combat itself, cavalrymen may have wheeled and pushed with their horse, but probably did not charge or ride past slashing. There is no evidence for the use of sabers or similar weapons favored by later cavalrymen after the adoption of saddles and stirrups. In fact, the iconic *kopis* or *machaira*-style sword is actually the reverse of a saber – a hacking or chopping weapon (with the cutting edge on the inside, rather than the outside of the curve), which would have been decidedly ill-suited to the usual, slashing stroke favored by more modern cavalry units.

It is also likely that some aspects of combat may have occurred on foot, and

65 It is worth emphasizing that combat was not just between warriors; it involved the horse as well. As demonstrated by modern horseback police in 'crowd control' situations, the mass of a horse can be very effective in pushing people together. Its defensive role is also evident, able to act as a type of shield at times. However, it could also be an offensive weapon, using hooves and teeth – see, for instance, Figure 7 for an example of this. The value of a warhorse is explicitly highlighted in the episode of Coriolanus being rewarded for his bravery with a warhorse captured from the enemy (Plut. *Cor*. 10)

indeed the distinction between cavalry and infantry may not be as clear as often assumed – at least in some contexts. Most notably, there is a strong tradition in Italy of '*desultores*', or cavalrymen who are shown jumping from the horse to the ground and back onto the horse again. These are mentioned by Polybius and seem to have been particularly common in southern Etruria, Latium, and Picenum, but can also be found more widely – for instance in Corinth.[66] We can see in the already mentioned *cistae* from Praeneste (Figures 1, 12, and 13), cavalrymen depicted in the characteristic pose of dismounting from the horse, a pose that can also be found on one of the faces of the Lanuvian warrior disc. Here, the precariousness of the cavalryman's position on the horse becomes an advantage, as it allows and indeed encourages him to dismount and mount quickly. This would have been a particularly important technique when engaging individually against an active opponent on foot – and one which is found in use in later periods, as well, in this sort of context.[67] In combat between two, relatively stationary opponents, being on horseback offered both benefits and risks. While it increased the height of the warrior, it also offered a much larger target to hit. The choice to stay on one's horse was, therefore, an important and contextual one.

When early Roman cavalry engaged other elite warriors, as part of the wider context of battle focused on individual heroism and spoils, horses likely represented an important part of the battle. Riding into battle on horseback, the mounts would have been a highly visible and impactful part of their military equipment. Alongside their gleaming bronze armor, feathered and crested helmets, and bright clothes, the horses would have enhanced the image and visibility of these men – reinforcing their status and position on the battlefield. As noted above, the horse itself would have also represented a powerful addition to the warrior's arsenal, not only increasing his height and mass, but adding new weapons, like hooves and teeth. Additionally, when engaging other cavalrymen, equipped in a comparable fashion, the practical benefits and risks of being on horseback were, in many ways, equalized. Once engaged in combat, however, it is likely that a range of practical considerations came to bear. As noted, it is likely that cavalrymen fought quite a lot on foot, and not only when facing off against infantry. If a horse was killed or wounded, a cavalryman would obviously need to dismount. Some

66 Brouwers (2007).
67 Harbinson (2023).

Figure 14: Tomb painting depicting a warrior's return
(Paestum, Tomba Adriuolo 12 – eastern slab, 375-370 BCE)
Picture from the National Archaeological Museum of Paestum.
Photo by Francesco Valletta and John Grippo.

may have also preferred to fight on solid ground. Further, as noted, there is a wide body of evidence from other, better documented periods of warfare, indicating that, in a fight between two stationary opponents, a warrior on horseback may not have the advantage against a warrior on foot – and indeed, the reverse may be true.[68] For all their performative and display elements, one must also remember that these were quite violent fights to the death, and warriors were likely in constant search of advantage to both save their own skin and defeat their opponents. Some of this is likely captured in iconography like that seen on the Prenestine *cistae*. These consistently present quite dynamic scenes of combat, where men and horses intermix in a complex set of duels – interestingly, with the combat depicted almost entirely on foot. Clearly the intent is to depict the messy chaos of hand-to-hand combat with fallen or wounded warriors, while others who have just dismounted from their horse run with their weapons outstretched and shields, scabbards, helmets, and other parts of their equipment on the ground.

Thus, in the early period, while cavalrymen obviously fought on the same side as their infantry, Roman and Italian cavalry seem to have operated in way that only sometimes included the infantry, and often only at the end of the battle when the opposing infantry had broken. This was a conscious decision, based on both social and practical considerations. Cavalrymen sought to engage their peers in a specific type of combat, and also sought to avoid fighting against infantry, who were not only of a different class but also represented an unacceptable risk to them. Early cavalry combat was much more chaotic, disjointed, and individual compared to norms in the Greek and Hellenistic worlds. However, this is because this more individual approach suited their needs at that time.

Changing Nature of (Cavalry) Battle in the Middle Republic

While the traditional Roman military reforms of the fourth century BCE, and the notional shift to a 'new' manipular structure, have been called into doubt – as it is likely that the Romans and Italians had always fought in something resembling this manner – there were significant changes occurring across Italy, and in Rome, during this period. Most notably, the Roman military system was expanding, incorporating new peoples across Latium, Campania, and the rest of

68 *Ibid*.

central and southern Italy. More importantly, the wider military context within which the Romans were operating was also changing, with the rise of Macedon and then the Hellenistic kingdoms in the east. Armies were getting bigger, often composed largely of allies and mercenaries, and wars were lasting longer and occurring further away from home against more distant enemies. These factors had a gradual but profound impact on how the Romans engaged in warfare, particularly amongst the elite.

In this new context, elite cavalrymen were no longer consistently facing off against other local elites that they knew. Instead, they were increasingly facing cavalry from much further afield, and perhaps not even drawn from the elite – or at least not an 'elite' they would recognize – but made up of soldiers pulled from across the Mediterranean, Europe, and the Near East. This was not the type of engagement where they could show their mettle against social equals, as they might have hoped, but a more pragmatic affair where the glory and spoils would be won and held more corporately. While individual feats still carried some merit, the shifting nature of warfare had changed the equation. Increasingly, elites won glory through leading armies and units, rather than individual combat. Cavalry also formed an important tactical wing of armies in this period, used more holistically and in synergy with infantry, often supplying a decisive charge to capitalize on an emerging weakness to break opposing formations.[69] This is the more conventional use of cavalry, seen throughout the medieval period as well, where horsemen would ride *en masse* and as part of a formation, and the sheer weight of the moving body of horses and men would force opposing formations apart. This is seen most clearly in the well-documented campaigns of Alexander the Great and the Wars of the Successors. However, it was evident in Italy as well. As we near the end of the fourth century, the number of references to cavalry charges on infantry formations increases in Livy – and it is here that we find the account, like that given above, of the cavalry breaking the infantry at the battle of the River Veseris.[70] Indeed, despite Polybius' general disdain for Roman cavalry before c. 200 BCE, other scholars (going back to Helbig in the early twentieth century) have commented on the shift we seem to see in Roman cavalry in the late fourth century.[71]

69 For a discussion of this approach and its importance in a later Roman context, see Petitjean (2022) esp. 30-33.

70 Livy 8.30.6-7.

71 Helbig (1904). See Humm (2005) for the likely importance of the reforms of Appius Clau-

This is also the point in time where we seem to have an increased focus on cavalry discipline. Indeed, in Livy's account of this same battle, we have another important instance showing changes in cavalry tactics, this one associated the great Roman commander Titus Manlius Imperiosus Torquatus. Famously, in 361 BCE, Livy (7.10) records that Manlius won great renown by dueling and defeating a Gallic warrior in single combat, taking his golden torc as a spoil of war and consequently the name 'Torquatus' for his family. However, in 340 BCE, in the lead up the battle of the River Veseris, Manlius' son also sought out single combat, with a very different result. Livy (8.7) records that the young Titus Manlius was part of the Roman cavalry, which was facing off against a group of cavalry from Tusculum. In a passage already referenced above, Livy (8.7.2-3) explicitly notes that "Geminus Maecius, who was in command [of the Tusculan cavalrymen], a man of high reputation amongst his own people, recognized the Roman cavalry and the consul's son at their head, for they were all — especially the men of distinction —known to each other." He then challenged Manlius to a duel. Livy (8.7.8-12, adapted from Foster's translation) records that:

> The rest of the cavalry retired to remain spectators of the fray; the two combatants selected a clear space over which they charged each other at full gallop with levelled spears. Manlius' lance passed above his adversary's helmet, Maecius' across the neck of the other's horse. They wheeled their horses round, and Manlius, raising himself up, was the first to get in a second stroke; he thrust his lance between the horse's ears. Feeling the wound, the horse reared, shook its head violently, and threw its rider off. Whilst he was trying to rise after his heavy fall by supporting himself with his lance and shield, Manlius drove his lance right through his body and pinned him to the earth. After despoiling the body he returned to his men, and amidst their exulting shouts entered the camp and went straight to his father at the headquarters' tent, not in the least realizing the nature of his deed or its possible consequences, whether praise or punishment.[72]

dius Caecus to the cavalry in this period. See Petitjean (2022) 25-49 for general discussion.

72 *Movet ferocem animum iuvenis seu ira seu detractandi certaminis pudor seu inexsuperabilis vis fati. oblitus itaque imperii patrii consulumque edicti, praeceps ad id certamen agitur, quo vinceret an vinceretur haud multum interesset. Equitibus ceteris velut ad spectaculum submotis, spatio quod vacui interiacebat campi adversos concitant equos; et cum infestis cuspidibus concurrissent, Manli cuspis super galeam hostis, Maeci trans cervicem equi elapsa est. Circumactis deinde equis cum prior ad iterandum ictum Manlius consurrexisset, spiculum inter aures equi fixit. ad cuius volneris sensum cum equus prioribus pedibus erectis magna vi caput quateret, excussit equitem, quem cuspide parmaque innixum attollentem se ab gravi casu Manlius ab iugulo, ita ut per costas ferrum emineret, terrae*

Livy, therefore, indicates that this was a classic cavalry duel, of a type which would have been common in Italy for centuries. From the known combatants to the audience of peers, this fits the stated model of early cavalry combat quite well. However, unluckily for Manlius, the rules seemed to be changing. Livy (8.6.9-10) reports that, before the armies had arranged themselves, the Roman generals had made a very specific order: "it was also urged in the council that if ever any war had been conducted with stern authority, now was the occasion of all others for recalling military discipline to its ancient courses…the consuls proclaimed that no man should quit his place to attack the foe" (*agitatum etiam in consilio est ut, si quando unquam severo ullum imperio bellum administratum esset, tunc utique disciplina militaris ad priscos redigeretur mores….ne quis extra ordinem in hostem pugnaret*). This represents a marked shift in behavior, and a plausibly historical one. With the rise of larger armies, and more organized tactics and approaches, the ability to break opposing infantry formations into smaller (and perhaps more isolated) groups was increasingly important. This required a change in approach and much more unity of purpose and tactical cohesion, but the benefits on the battlefield were made clear by the success of the armies that adopted it. Unfortunately for the young Manlius, who was trying to achieve renown in single combat as his father had done, this sort of individual behavior was no longer allowed. The elder Manlius, in a famous anecdote demonstrating 'Manlian discipline', ordered his son to be executed as a result.[73]

Despite this extreme example placed in the narrative for 340 BCE, it is likely that the transition to this new mode of cavalry combat was neither quite so early, so immediate, or so drastic. Any shift in tactics was almost certainly contextual (as it required facing an opponent where staying in formation and disrupting an infantry formation was an advantage), as well as being both gradual and never complete.[74] Indeed, we continue to have evidence suggesting that Roman cavalry

adfixit; spoliisque lectis ad suos revectus, cum ovante gaudio turma in castra atque inde ad praetorium ad patrem tendit, ignarus fati3 futurique, laus an poena merita esset.

73 See Phang (2008) 111-52 for discussion.

74 As Dionysius of Halicarnasus (2.13) noted of the early *Celeres* "They fought on horseback where there was level ground favourable for cavalry manœuvres, and on foot where it was rough and inconvenient for horses." (ἱππεῖς μὲν ἔνθα ἐπιτήδειον εἴη πεδίον ἐνιππομαχῆσαι, πεζοὶ δὲ ὅπου τραχὺς εἴη καὶ ἄνιππος τόπος). While referring to the archaic cavalry of Romulus, this likely held true in later periods as well. See also Petitjean (2022) 32-39 for the importance of dismounting and fighting on foot amongst the cavalry down into the second

sought to fight relatively stationary battles of hand-to-hand combat on foot – and perhaps in a dueling context. Dionysius (*Ant. Rom*. 20.2) describes the Roman cavalry at the Battle of Asculum in 279 BCE in remarkably similar terms to early battles, with the Roman cavalry regularly dismounting and remounting, preferring to fight on foot in contrast to Pyrrhus' cavalry. Also at Asculum, we have the famous incident of Oplax the Ferentanian, leader of a cavalry unit amongst the Roman *socii*, who sought out Pyrrhus on the battlefield. While the Italian Oplax seems to have wanted to engage Pyrrhus in a duel and managed to kill his horse, he was quickly cut down by Pyrrhus' companions – perhaps highlighting how things had changed. Moving further in time, we continue to see some of these 'archaic tendencies' in evidence in Roman cavalry forces – albeit increasingly interspersed with more cohesive and 'Hellenistic' actions. In Polybius' narrative (2.27) for the battle of Telamon, he describes how the cavalry and infantry fought "mixed with each other", and likely on foot. Livy (31.35) describes a skirmish in 200 BCE between Macedonian and Roman cavalry, where some of the Roman cavalry (probably Roman-Latin citizens and not Campanian ones) dismounted to fight alongside the light infantry, which surprised the Macedonians. This was evidently not the standard way for cavalry to operate in Greece. However, it may have been more common elsewhere. For instance, when Polybius (3.115) describes the battle of Cannae, he points out that both Carthaginian (Spanish and Celtic) and Roman cavalry dismounted and fought on foot.[75] This is intriguing, both because of how late it is, and how Polybius evidently considered this technique contrary to the regular practice of cavalry. However, the Romans were changing their ways as in the same year as the example above (and in marked contrast), in 200 BCE, Livy (31.22) reports the other Roman consul used his cavalry to break the infantry formation of a group of Gauls in Italy.

century BCE.

75 This makes practical sense, for the reasons noted above about the benefits and risks of fighting from horseback. There are parallels for this in later periods, as dismounting was always a common strategy amongst cavalry in certain situations – and especially those involving more static combat. See Harbinson (2023) for detailed discussion.

The Changing Nature of the Roman Cavalry and Equites

The most significant change in Roman cavalry during the fourth and third centuries BCE likely relates to its composition, and the increasing reliance on allied forces to supply horsemen instead of Roman citizens. By the second century BCE, Polybius (6.20-26) claims that while each Roman legion contained a contingent of 300 citizen cavalry, the allies were required to supply 900, to bring the total up to 1200. These figures are interesting, as despite the growing size of the army in terms of manpower (incl. cavalry) during the fourth and third centuries, Roman citizens evidently played a smaller role in cavalry operations. This may reflect a recognition of stronger cavalry traditions in areas of Italy that were not integrated as citizens, although given how widely dispersed and intermixed citizen and allied communities were (see Figure 4 above), this probably does not explain the overall phenomenon. Rather, it likely reflects the limited value that cavalry service had for Roman citizen elites during this period.

While cavalry actions were still important parts of Roman military operations in the middle Republic, the nature of cavalry combat had changed, and it no longer afforded elites consistent opportunities to gain glory and status through combat with other elites. Cavalrymen were now expected to fight against both opposing cavalry and infantry in a more holistic fashion and in service of larger tactical and strategic aims. Cavalrymen were still members of the social and economic elite, at least relatively speaking, and would gain some level of status through service and networking while on campaign. However, many men could advance their careers further through non-military means, especially as military service increasingly meant long periods of time away from home – and eventually away from Italy. Those who occupied the true upper echelons of Roman society would likely serve as legates or tribunes, and not as regular cavalrymen.

Due to this shifting character, and the changing nature of battle for cavalrymen, the equipment would have also changed. While soldiers would have evidently still needed to be able to fight on and off horseback, their important function as part of larger, ‘combined arms’ forces and the need to be able to engage with heavy infantry likely resulted in shifts in equipment as noted by Polybius. He is almost certainly correct that, as Roman cavalry began to fight like Greek and Hellenistic cavalry, they began to favor similar equipment that suited this environment. Alongside this are wider shifts in military equipment production,

which saw the move away from armor made of thinly hammered bronze over organic layers, and towards more cast bronze and iron options – including the increasingly widespread use of mail.[76] Javelins and *machaira*/*kopis*-style swords also gave way to stronger thrusting spears and lances across the Mediterranean. While these changes may have been particularly obvious in Italy, given their contrast to previous equipment, they were not exclusive to it.

With the decline of Roman cavalry as a venue for elite display and camaraderie, the nature of the *equites* shifted as well. This socio-political group, which had once been synonymous with the cavalry, gradually transitioned into a slightly different role. Elite display and camaraderie were still central, but increasingly performed within a ritual context. The *equites* and their associated festivals and rituals, like the *transvectio*, became increasingly important for young members of this class. It performed similar functions to the practices of archaic equestrians, with public displays of athleticism and a strong sense of elite group membership. It was within this increasingly expansive class of citizens that the socio-economic and political class of the *equites*, as understood in the late Republic and early Empire, developed. This group numbered in the thousands, and formed the backbone of Rome's emerging imperial bureaucracy. While its connection to the strictly military aspects seems to have waned, its importance to the emerging empire seems to have grown.

Within this context, the *equites equo publico* has always caused issues for scholars. Out of all the *equites*, the Roman censors only granted 1800 the *equus publicus*, or 'public horse'. However, as many have argued, it seems unrealistic that the *ordo equester* only contained 1800 men, given all of their importance and duties.[77] So, with the *equites*, there evidently existed at least two groups – the wider class, which included all of those with over 400,000 sesterces (by the late Republic at least), and the 1800 to whom the censors granted the *equus publicus*. Why this group was granted a public horse is never stated, as the institution seems to have been largely vestigial by the late Republic, but there are some clues. As Mouritsen has suggested, the *equites equo publico* seem to have been younger, and were often those engaged in the more militaristic displays and festivals asso-

76 Deveraux (2022).

77 See, most recently, Mouritsen (2022) 60, amongst others, including Davenport (2019) 66.

ciated with the *ordo equester*.[78] It is, therefore, possible that *equus publicus* was introduced to ensure a Roman cavalry citizen contingent was available, possibly as part of the myriad reforms to the census in the late fourth century BCE, as the Roman elite began to move away from martial displays on the battlefield – and risking their own life, limb, and property. The *equus publicus* was possibly granted to 1,800 of the *equites* – enough to support six legions (each with 300 citizen cavalry), or requiring service every two to three years – as the designated military subsection of the *ordo*. This obviously did not preclude members of the senate or wider equestrian class from participating in warfare if they chose, although it is clear that most did not. Instead, it created a form of social, political, and economic obligation amongst a certain group to regularly participate in warfare, while also alleviating some of the personal risk. The men were paid the *aes equestre* and the *aes hordearium*, and in exchange were expected to serve the state militarily, just like the *milites*. But whether composed of the *equites equo publico* or not, it seems clear that, by the middle Republic, active cavalrymen formed only a subset of the wider equestrian class.[79]

Conclusions

Polybius, writing in the middle of the second century, sought to make sense of the reality of the Roman military and political order he saw around him, and contextualize it within an historical and analytical framework. He would have seen, first-hand, Roman cavalry in the field and knew them to be an effective military force. He was himself a cavalry commander (ἵππαρχος) in the Achaean league in either 170 or 169 BCE, and would have been very aware of the Roman cavalry forces during the Third Macedonian War. He would have also been aware of the nature of battle in this period, and the vital importance of solid equipment and the associated tactics necessary to engage with contemporary cavalry and infantry. However, Polybius was either ignorant of or chose to consciously ignore the long history of the *equites* in Rome – perhaps because of their oligarchical nature. They did not align with his model for the success of the imperial Roman state and army. Thus, he misconstrued their early character, and the reputation of the early

78 Mouritsen (2022) 61-63.

79 See also Petitjean (2022) 25-27.

Roman cavalry has suffered ever since.

In contrast to the testimony of Polybius, we can now say that Rome's early cavalry formed an important part – perhaps the most important part – of early Roman battle. In this, they were comparable to cavalry forces from across the ancient Mediterranean. The men who made up Rome's *equites* were the community's social and economic elite, were likely equipped with high-quality (and relatively heavy) armor, and were able to operate as effective soldiers both on horseback and on foot.. While they seem to have preferred to engage other cavalrymen on the battlefield, especially in duels, in pursuit of personal glory and spoils, this should not diminish their practical and tactical importance. These were engagements between elites who knew each other, and who represented the upper echelon of their societies. As a result, rather than a "sideshow," these engagements between each army's elites were the "main event" and, in the early periods, may have actually decided the outcome of the entire battle.

As warfare shifted in Italy and Rome during the fourth century BCE, however, the role of cavalry – and its appeal for members of the Roman elite – also changed. For the Roman citizen elite, the risks seemed to have increased while the benefits decreased, as cavalry were expected to fight against larger and increasingly mercenary forces, much further from home, and against both infantry and cavalry. Certainly, some members of *equites* still sought to fight, and especially lead units of cavalry. Participation in Roman warfare offered opportunities to increase personal wealth and connections, and remained an important mechanism for social and political advancement. However, by the middle Republic, it was not the only mechanism and it seems as if many members of the growing equestrian class opted for more peaceful (and less risky) approaches. As a result, Roman citizen cavalry seems to have become a much smaller and heavily subsidized segment of the Roman army, with the Romans increasingly relying on allies to supply this segment of their forces.

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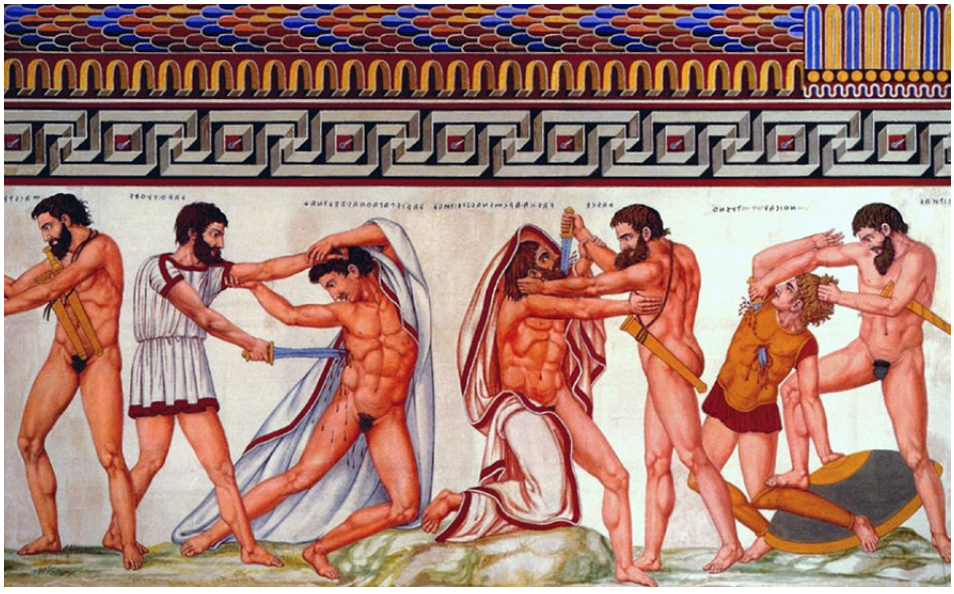

Carlo Ruspi (1798-1863), copia (1862) dall'affresco nella Tomba François di Vulci. Wikimedia Commons.

Cristo appare a San Mercurio e a Santa Caterina di Alessandria nell'atto di calpestare Giuliano l'Apostata la cui morte, supplicata da San Basilio difronte ad un'icona di San Mercurio, fu attribuita all'intercessione del santo. Icona del laboratorio di Georgios Klontzas, Creta, ca 1560/70. Yale University Art Gallery, ID 255. Connecticut, U. S. Wikimedia Commons

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