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## Tactical Reform in the Late Roman Republic: The View from Italy

**ABSTRACT:** This article discusses the organizational and tactical changes in the Roman army during the Late Republic, a transformation often incorrectly dubbed the “Marian reforms.” It suggests that the most notable reform of the period, the rise of the cohortal legion, owed primarily to the influence of the Italian *socii*, the eventual outcome of recruiting, organizing and deploying allied troops in cohorts during the second and first centuries BC. The four cohorts that fronted a Late Republican legion correspond with the four cohorts of the Italian vanguard, the *extraordinarii*, suggesting the cohortal legion emerged out of a method of expeditiously deploying an allied wing.

*Keywords:* legion – cohort – tactics – *socii* – *extraordinarii* – Gaius Marius.

The Roman army deployed by Julius Caesar in the 50s and 40s BC was substantially different from the army described by Polybius a century earlier.<sup>1</sup> In particular, whereas Polybius detailed what modern military historians dub the “manipular legion,” Caesar deployed his legions based around a larger tactical unit, the cohort.<sup>2</sup> This article explores the evolution of the Roman army in the second and first centuries BC. It argues that the military transformations of the Late Republic, still frequently referred to as the “Marian reforms,” instead largely resulted from the tactical influence of Italian contingents, culminating with the enfranchisements of the Social War, which converted all allied wings into Roman legions.<sup>3</sup>

In the first part of this article, I argue that the so-called Marian reforms were far less consequential than much modern scholarship suggests.<sup>4</sup> This is not a novel posi-

- 1 I would like to thank Laura Pfuntner and Jonathan Prag for reading early versions of this article, as well as the anonymous peer reviewers at *Historia*. Initial research was undertaken during a productive postdoctoral fellowship at the Clements Center at the University of Texas at Austin. Thanks as always to my wife Kelsey, and our little Caroline and Elliot, for their love and support.
- 2 Rawson 1971 remains the definitive overview on Polybius as a source for the Mid-Republican Army. Bell 1965 provides a still relevant discussion of the transition from maniples to cohort, which the title of this piece deliberately evokes. Gilliver 1999, 18 sees little reason to credit Marius with any significant reform of legionary organization. Lendon 2005, 212–232 and Potter 2010 provide the best recent discussion of the Late Republican army, focusing on Caesar’s own evolution as a commander.
- 3 On the general impact of the Social War on the Roman army, see Keppie 1984, 68–70 and Cosme 2007, 53–55.
- 4 Indeed, there is the inclination to see Marius as a critical turning point in the history of the institution, evidenced by the titles of Rawson 1971, “The Literary Sources for the Pre-Marian Army” or Smith 1958, *The Post-Marian Roman Army*.

tion, but it is worth reiterating given the persistence of the concept in explaining the development of the Late Republican army. In the second part, I will discuss the tactical deployment of the new cohortal legion, to explain the extent that it deviated from the old manipular form. Here I suggest that the new cohortal legion was in fact quite similar to the old manipular structure in terms of the tactical space it could control, its methods of line support, and its ability to spin off independent maneuver units. The rise of a cohortal legion was therefore not the result of a deliberate reform seeking a radically new tactical paradigm. I suggest that the deployment of a cohortal legion evolved from a method of expeditiously deploying a Roman army from a marching column to a battle line. It is notable that prior to the Social War, the vanguard of a Roman army was comprised of Italian allies, usually the four picked cohorts of the *extraordinarii*, who could, if necessary, quickly form a front of four cohorts, the equivalent of the first line of the Late Republican legion deployed in *triplex acies*. Finally, while Roman maniples retooled as Italian-style cohorts, one key factor was missing: a commanding officer. While Italian cohorts had been commanded by native officers prior to the Social War, I suggest enfranchised Italian gentry preferred the Roman rank of military tribune over the traditional office of cohort commander (*praefectus cohortis*).

### Evolution or Reform? The Case Against Marius

Italians had driven the evolution of the Republican army from its earliest times. The first century BC historian preserved by the *Ineditum Vaticanum* manuscript believed that the early Romans imitated first Etruscan style hoplite fighting, and then coopted oval shields and javelins from the Samnites.<sup>5</sup> The manuscript is in keeping with a multicultural moment of historical writing that followed the Social War, which celebrated the contributions of Italians to Rome's imperial project.<sup>6</sup> The *Ineditum* presents an at best simplified vision of Roman military history, but is certainly correct in its basic claim that the Republican army developed in an Italian milieu.<sup>7</sup> Yet while Italian peoples are usually seen, not the least by the Romans themselves, as a bottom up source of military

5 First published in Von Arnim 1892 = Jacoby *FGrHist* 839.F1. Cf. Diod. Sic. 23.2.1, Ath. 6.273, Sall. *Cat.* 51.37–38.

6 See Erdkamp 2006 for how late annalistic historians celebrated the military contributions of Italian *socii*. Cagniard 2007: 82–83 emphasizes the role of Italians in the post-Social War legions, although primarily because he suggests that they were more likely than traditional citizens to support their generals' private ambitions.

7 On the influence of the Italian milieu on the early Roman army, see Kent 2012 (who situates the early Roman army and its *socii* as part of a network of genuine alliance) and Armstrong 2016, who argues that the early Roman army emerged not from top down state structures, but more organically from the retinues of Rome's aristocratic clans. Fronda 2010 explores the complexities of Italian relationships to Rome under stresses of the Second Punic War. Jehne 2006 provides some corrective to any notion that the Roman army was a "melting pot" in the Middle Republic, noting how units were segregated by ethnicity, although Rosenstein 2012, 91–100 notes the possibility for casual interactions in shared spaces in the camp. Taylor 2017, 278–280 on how ethnic identity might be parsed based on the equipment of Roman legionaries and *socii*.

inspiration in the Early and Middle Republic, modern scholars have tended to attribute the transformation of the Late Republican army to top down reforms, traditionally embodied in a single commander, the seven-time consul Gaius Marius.<sup>8</sup>

Yet top down innovation was especially difficult in the Roman Republic, given that few magistrates were in a position to command armies long enough to make major changes, and there was no overall “commander in chief” who might dictate policy across the force. It is notable how few Roman commanders can be linked with any concrete reform. Michael Carter has argued, for example, based on circumstantial evidence that Scipio Africanus played a top down role in the introduction of the *gladius hispaniensis* in 209 BC.<sup>9</sup> Scipio did have a sizable body of Iberian metalworkers at his disposal, who may have mass-produced swords of a local design, but if anything the adoption of the sword may owe less to Scipio’s prowess as a military innovator, and more to the pre-existing popularity of the sword within the ranks after nine years of campaigning.<sup>10</sup> A century later, Rutilius Rufus, the consul of 105 BC, enjoyed a reputation as a military reformer, but his primary innovation, the use of gladiatorial trainers, may have done little more than more professionally recapitulate the sort of drill already well in evidence in Scipio’s army a century earlier.<sup>11</sup> Rutilius did carry a law allowing for the appointment of military tribunes, who were usually elected for the consular legions, but this also proved an entirely temporary measure, as the election of tribunes had certainly resumed when Julius Caesar ran for the office in the late 70s BC.<sup>12</sup> Thus our only examples of top down military reform prior to Marius look rather tendentious. A Scipio or Rutilius could at best improve matters on the margins – a slightly better sword or somewhat more rigorous weapons drill.

Marius was no different. The ancient sources attribute only two specific reforms to Marius: placing a wooden rivet in the Roman javelin to make sure that the shank broke off in enemy shields (Plut. *Mar.* 25), and eliminating certain legionary symbols besides the Eagle standard (Plin. *NH* 10.16). Ample archaeological evidence of double riveted *pila* in the post-Marian period suggests that this design did not endure.<sup>13</sup> The prominence given to the *aquila* proved more permanent. However, there is no reason to link the *aquila* to any major tactical reform, such as the transition from maniples to cohorts. The prominence of the *aquila* standard may have instead stemmed from Marius’ own

- 8 The groundwork for the Marian reforms were largely laid by Mommsen 1855: 183–187, Marquardt 1876, 417–428 and Votch 1886, followed, *inter alia*, by Holmes 1911, 563, Delbrück 1920, 442–444, Parker 1928, 21–46, Carney 1961, 32–33, Gabba 1976, 13–20, Keppie 1984, 39–48, and Rankov 2007, 31–32. Bell 1965, 404 strongly attacks the notion. Potter 2004, 69–70 notes that many of Marius’ reforms were less than dramatic, but suggests that the sum of the reform was greater than its parts. Matthew 2010a provides a valiant rear-guard defense of the concept.
- 9 Carter 2006, 159.
- 10 Scipio captured 2000 artisans in New Carthage, who were put to work making and repairing weapons, Polybius 10.17.9–10, 20.7–8. Quesada Sanz 1997 conclusively demonstrates that the *gladius hispaniensis* was derived from Celtiberian models.
- 11 Rutilius’ employment of gladiatorial trainers: Val. Max. 2.3.2. Scipio’s training regime: Polyb. 10.20.2–6.
- 12 Rutilius’s law on military tribunes: Festus *Gloss. Lat.* 316–17. Caesar as elected military tribune: Plut. *Caes.* 5.1.
- 13 Matthew 2010b notes that the modified *pilum* design could have been little more than a one-time expedient, rather than a permanent development.

close identification with the eagle as a personal totem, rather than being part of any top down military reorganization.<sup>14</sup>

Much has been made of the fact that Marius engaged in a one-time expedient recruitment of *proletarii* into his forces (an expedient that had been utilized at other crisis moments).<sup>15</sup> But it is important to note that he discharged his volunteers, *proletarii* included, upon his return to Africa, and for his Cimbric campaign took command instead of two consular legions recruited under the normal circumstances by his predecessor and political rival Rutilius Rufus.<sup>16</sup> This fact alone would argue that Marius did not envision a professional army manned by *proletarii* personally indebted to him. His volunteers were simply a source of emergency manpower, compensating for the recent casualties suffered at the hand of the Cimbri and Teutones, to be discharged when no longer needed.<sup>17</sup>

Marius' measures to improve discipline in his forces, which caused his soldiers to refer to themselves as "Marius' mules," were little different from the actions of other successful Roman generals of the era, especially his mentor Scipio Aemilianus and his former boss Caecilius Metellus.<sup>18</sup> These relatively modest facts have been spun into the overarching "Marian reforms," which are ultimately the construct of modern scholarship.

## The Cohort Legion

As with so many other changes, there is no evidence that Gaius Marius was behind the regularization of the cohort as the standard tactical unit in the Late Republican and Early Imperial Legion. No ancient source associates him with the transition from maniple to cohort. Indeed, the impetus for the change has long puzzled military historians. The flexible and modular manipular legion worked very well for the Romans. It defeated

14 Eagle as a totem for Marius: Plut. *Mar.* 36.5–6; Cic. *De Div.* 1.47.106. Other legionary totems persisted into the Late Republic and Early Empire, including the bull and boar; see Domaszewski 1885, 55 for a compilation.

15 An earlier recruitment of proletarians is celebrated by Ennius: Gell. *NA* 16.10.1/ Non. 288.19L. See Rich 1983, 290–91 for discussion of other enrollment of non-*assidui* during the Early and Middle Republic.

16 Front. *Strat.* 4.2.2.

17 It is far from certain that any sort of long-term demographic crisis in Italy necessitated the recruitment of *proletarii*. While Brunt 1971 affirmed a pessimistic model of Italian demography suggesting a constant shortage of *assidui* by the late second century BC, recent studies have offered a less grim assessment of Italian manpower. Rosenstein 2004 has argued that the pressures of military service in the second century BC were largely absorbed into the life-cycles of peasant families, and thus did not necessarily contribute to the ruin of the free born peasantry. DeLigt 2012 has meanwhile produced a compelling new model of Roman demography in the Middle and Late Republic, allowing for modest growth of the free rural population. He notes (2012, 182–184), that several demographic models could provide a plausible background for Marius' proletarian recruits. While not discounting the land hunger readily apparent in the Late Republic, this did not necessarily mean that there was a long-term shortage of *assidui* to fill Roman armies – beyond the temporary gaps caused by recent losses against the Cimbri.

18 For Marius's mules, as his soldiers described themselves after he forced them to carry their own equipment and improved their marching discipline: Plut. *Mar.* 13, Polyaeus *Strat.* 8.16.2. For similar measures by Scipio Aemilianus, App. *Ib.* 85, and Caecilius Metellus, Sall. *Iug.* 44.1–5.

diverse enemies from Italian hill peoples, to the mighty Carthaginians, to Gallic tribes in northern Italy, to the juggernaut of the Macedonian phalanx.<sup>19</sup>

Everett Wheeler has framed the rise of cohortal tactics as the culmination of the phalangeal potential always latent in the legion.<sup>20</sup> But it was very easy to make a “legion as phalanx” with manipular building blocks. Roman commanders at Tunis (255 BC) and Cannae (216 BC) had presented especially deep and dense manipular formations, although in both instances these armies went down to spectacular defeats. More successfully, the military tribunes in 223 BC had created an ad hoc phalanx against the Gauls by arming the *hastati* with the thrusting spears of the *triarii*.<sup>21</sup> Fifty years earlier, the *principes* at the Battle of Beneventum in 275 BC were armed with cavalry spears to counter Pyrrhus’ Macedonian-style phalanx in a similar expedient.<sup>22</sup> Scipio Africanus ultimately collapsed his army at Zama into a single battle-line, which Polybius (15.14.5) dubs a “phalanx,” which triumphed in the final phase of the battle. Indeed, the phalanx was always one possible configuration of the manipular legion, so there was no need to switch to cohorts on this account.

Jon Lendon has suggested that Roman commanders drove the development of the cohort as an artificial brigade because it suited their need for to practice more sophisticated forms of tactical maneuver.<sup>23</sup> But Roman generals in the Middle Republic had achieved quite useful maneuver units by simply utilizing the three lines of legionary infantry into separate units: thus Scipio Africanus used his *principes* and *triarii* to extend his wings at Campus Magnus and Zama.<sup>24</sup> Titus Flamininus in 198 BC muscled the Boeotian assembly backed by a brigade of 2000 *hastati*.<sup>25</sup> At Cynoscephalae in 197 BC, the twenty maniples maneuvered to attack Philip’s rear probably represented the *triarii* of a Roman legion.<sup>26</sup> While Cato the Elder at Emporiae in 195 BC did maneuver with some of his Italian cohorts stationed on his flanks, he ultimately brought up the *hastati* and *principes* of a legion as a brigade to make the final assault on the Iberian camp.<sup>27</sup> Aemilius Paullus, besieged in his camp by a Ligurian army, used his *hastati* and *principes* as organized strike forces as he prepared to sally forth.<sup>28</sup>

So maniples were perfectly adequate at stopping Gallic charges, and the individual *acies* proved eminently serviceable maneuver units. The manipular legion had proven sufficient to defeat every opponent on three continents. Why retool the entire army into

19 Lendon 2005, 228–29.

20 Wheeler 1979.

21 Polyb. 2.33.4.

22 Dion. Hal. 20.11.2. It is often assumed that Dionysius has made an error, and is referring to the *triarii*. But as Nathan Rosenstein (2010, 302–03) has noted, the *triarii* were not armed with cavalry spears grasped with both hands but rather one handed infantry spears, correctly positing instead that the cavalry spears were a temporary measure to counter Pyrrhus’ *sarisai*.

23 Lendon 2005, 222–32.

24 Polyb. 14.8.11 (Campus Magnus), 15.14.4 (Zama).

25 Livy 33.1.2.

26 Polyb. 18.26.1–4; Livy 33.9.8.

27 Livy 34.14.8–15.7.

28 Livy 40.27.

a cohortal structure? I will suggest that process of tactical reform in the Roman army was largely driven by the fact that Italian units, tactically organized into maniples but recruited and administrated as cohorts, simply started fighting as cohorts.

### The Italian Cohort

The Italian cohort was itself an artificial administrative construct initially imposed upon Italian communities as a unit for conscription.<sup>29</sup> Yet Roman manipular tactics did not have a ready tactical use for Italian cohorts. Italians themselves preferred to fight in maniples: Pyrrhus, for example, interspersed maniples of his anti-Roman Italian allies in between sub-units of his phalanx.<sup>30</sup> While it might make sense to have a cohort of co-ethnics sharing a common front, to stand and fight together, manipular tactics required that the cohort be organized vertically according to age group, so that the maniple of *hastati* would fight abreast to *hastati* from other allied communities, with their co-ethnics standing behind them rather than beside them.

The earliest recorded use of the word “cohort” is Polybius, referring to Scipio’s complex maneuvers at Ilipa in 206 BC. In this instance, Scipio had divided his Roman and Italian infantry into two wings, with his Iberian troops in the center. Each Romano-Italian wing faced to the flank, marched forward as a column, and then executed a turn towards the enemy, marching towards the Carthaginian position while still in column formation. Polybius states that at the front of this column was “the unit of infantry called a cohort by the Romans” τοῦτο δὲ καλεῖται τὸ σύνταγμα τῶν πεζῶν παρὰ Ῥωμαίοις κοόρτις.<sup>31</sup> This cohort was not actually being deployed by Scipio as a tactical unit. Rather, the three maniples forming either side of Scipio’s extreme flanks (the *hastati*, *principes* and *triarii*) had simply become the vanguard when they faced into a marching column.<sup>32</sup> The Roman columns wheeled again before engaging the enemy, so that the front rank of the Roman battle line was again comprised of *hastati* arrayed in the traditional fashion. One element is notable here: Polybius’ κοόρτις, on the far flank of the Roman formation, is certainly Italian, given that Italians troops were always placed on the flanks, with the legions towards the center. This may be why Polybius introduces the term here in the first place, because it was natural to see the allied wing in marching column as a

29 Ilari 1974, 135–136, Pfeilschifter 2007, 30 and Erdkamp 2007, 49–6 for cohorts recruited along ethnic lines, from specific communities or broader ethnic groups. For ethnic cohorts, see Livy 23.19 (Praeneste), Livy 44.40.4–6 (Maurucii, Paeligni, Firmum, Vestini and Cremona), Sall. *Iug.* 38.6 77.4, 93.2 (Ligurians), 105.2 (Paeligni), Plut. *Mar.* 28.2 (1000 men from Camerinum, probably two cohorts).

30 Polyb. 18.28.10.

31 Polyb. 11.23.1. Polybius does not mention the term “cohort” when he describes three maniples working together at the siege of Heracleum (28.11.1, although admittedly most of his description is lost). It is possible that this was a true cohort (either an Italian unit or a maniple apiece of legionary *hastati*, *principes* and *triarii*), or equally that it was just three maniples combined for the purpose (say, all *hastati*), which would explain why Polybius does not reintroduce the term κοόρτις here.

32 Lazenby 1978, 147. Livy mentions “three cohorts” maneuvering in his narrative of the battle, but it is clear that he is simply garbling Polybius’ narrative. See also Scullard 1970, 90–93.

stack of ten Italian cohorts. Likewise, when Cato the Elder during the Battle of Emporia detached two picked cohorts (*cohortes delectae*) to swing around the right flank of his enemy, the troops taken from his own left flank would have been Italian allies.<sup>33</sup>

Michael J. V. Bell posited that Spain was the primary incubator of cohortal tactics, noting a pattern of references to cohorts in Spain, during the second century. Bell's philological analysis linking the cohort to the Spanish context has found archaeological validation in Michael Dobson's reevaluation of Adolf Schulten's fieldwork at Numantia. Dobson suggests that Scipio Aemilianus' force in 135/4 BC was organized into cohorts, not maniples, based on his reassessment of the surviving architecture of barracks blocks.<sup>34</sup> It is easy to see why cohorts might prove useful as detachments and garrisons in dispersed occupation operations. Still, even in Spain, the transition was gradual. Dobson himself notes that the Lager V at Numantia, which may date to as late as the early first century BC, has a manipular plan, suggesting that even in Spain, an incubator of tactical innovation, the manipule persisted.<sup>35</sup> But the evidence from camps does not explain changes to Roman formations in set piece battle.

Sallust's description of the Muthul River in 109 BC is the last literary attestation of a manipular army in action. Bell assumed that Metellus himself permanently transitioned his legions to a cohortal tactical structure, which Marius then inherited.<sup>36</sup> But it cannot be said for certain that Marius subsequently deployed his forces in cohorts for any set piece battle – there is nothing in Plutarch's descriptions of Aquae Sextiae or Vercellae that would explicitly rule out a manipular deployment.<sup>37</sup> Still, descriptions of legionary organization in the 80s all imply the cohort had become the fundamental building block of the legion in the aftermath of the Social War.<sup>38</sup>

## Deployment of cohorts in Battle

The sources are vague as to how cohorts actually formed up in battle, frustrating attempts to explicate the tactical significance of the switch to cohorts. Below, I argue that the capabilities of the cohortal legion in terms of control of tactical space and line support offered little benefit over the manipular legion. But first, it is necessary to determine just how much tactical space a cohort could hope to control.

33 Livy 34.14.8. Livy is of course famously sloppy in his military terminology, frequently using the term “cohort” in an anachronistic fashion. But one of Livy's sources is Cato himself, so that the passage reflects Cato's own distinction between his citizen legions and his Italian cohorts. Livy 9.37.8 describes *delectae cohortes* tasked with guarding the Roman camp in the late fourth century BC. If this is not Livian anachronism, it must refer to picked Italian units (proto-*extraordinarii*?).

34 Dobson 2008, 408.

35 Dobson 2008, 408.

36 Bell, 1965, 417.

37 Marius did use legionary cohorts when organizing his camp guard (Sall. *Iug.* 100.4).

38 Plut. *Sulla* 17.7, 19.1–3, 27.3, 27.7, 28.3–4, App. *B Civ.* 1.83, Vell. Pat. 2.20.4. See Bell 1965, 417–18. The fragments of Cornelius Sisenna, a military man who died in 67 BC, reference both maniples and cohorts (Cornell 2013, 620–23).

Recent attempts have been made to use legionary centurial symbols from Imperial inscriptions to reconstruct the arrangement of centuries within the imperial cohort. Michael Speidel has proposed a plausible reconstruction of the symbols that combines them to form a rectangle evoking a military formation, creating a cohort with the two centuries of *hastati* in the front, the *principes* in the middle and the *pili* (i. e. the *triarrii*) bringing up the rear.<sup>39</sup> This evokes how a Middle Republican legion was organized, so that the symbols anachronistically harken to this bygone deployment.

I strongly disagree, however, with Speidel's assertion that this schema represents the deployment of a cohort in combat.<sup>40</sup> It would in fact be quite dubious if the Late Republican or Early Imperial cohort only presented a front of two centuries. If this were the case, the standard *triplex acies* of the Late Republican period, with a legion fronted with four cohorts, would present a mere eight centuries to the enemy, in contrast to the Polybian legion with its front of twenty centuries.<sup>41</sup> Rather, the Imperial symbols fossilize a Middle Republican vision of the hierarchy of centuries within the cohort, but do not allude to its actual tactical deployment in the Late Republican and Early Imperial periods.

Dismissing the centurial symbols, the most plausible deployment would be that all six centuries stood in a single line.<sup>42</sup> Caesar reports that all six centurions in a single cohort were killed fighting at the River Sabis in 57 BC, suggesting that all were readily exposed to enemy violence.<sup>43</sup> Similarly, four centurions in a single cohort were blinded by a barrage of arrows at Dyrrhachium in 48 BC, again more plausible if they commanded centuries arrayed in a single line, rather than stacked on top of each other.<sup>44</sup> Caesar later notes that fleeing camp followers broke through his battle line and "disrupted the maniples."<sup>45</sup> It is difficult to see how fleeing camp followers could break through a cohort if each was arrayed three maniples deep: such a deployment would be more than sufficient to control an unarmed if panicked crowd. Such a proposition, however, becomes perfectly intelligible if the camp followers fled through cohorts arrayed in centuries deployed abreast, so that they simply needed to break through the relatively thin ranks of a single century.

Finally, at Dyrrhachium, Pompey positioned an entire legion before his fortifications, anchoring his third *acies* immediately below the ramparts, so that soldiers on the walls could hurl missiles against Caesar's attacking force.<sup>46</sup> The maximum range of a Roman *pilum* was about thirty meters, extended somewhat if thrown from an elevated

39 Speidel 2005, 289–90, with his interpretation confirmed by Faure 2008. *pilani* = *triarrii*: Varro *Ling.* 5.89.

40 Mann 1997 provides an alternative reading of the centurial signs, which has the cohort present all of its *centuriae priores* to the enemy, giving it a front of three centuries. This array would give a Late Republican legion in *triplex acies* a front of twelve centuries, still significantly narrower than the Polybian legion. Mann's reading of the symbols, however, is inferior to Speidel's.

41 Polyb. 6.24.8 is explicit that the two centuries in the manipular legion fought abreast; the ten maniples of *hastati* would therefore present twenty centuries to the enemy.

42 Rüstow 1862, 36–38 suggested all three maniples fought abreast.

43 Caes. *BGall.* 2.25.1.

44 Caes. *BCiv.* 3.53.

45 Caes. *BGall.* 6.40.1.

46 Caes. *BCiv.* 3.55.



fighting platform.<sup>47</sup> Let us calculate the depth of a legion, assuming that the minimum depth of Roman century was three ranks, and postulating no additional vertical spacing between each of the three *acies*.<sup>48</sup> Let us assume each man occupied a meter in depth and there was a meter in between ranks.<sup>49</sup> If each cohort was arrayed six centuries abreast, then the legion would have a minimum depth of eighteen meters, which would allow the supporting troops on the ramparts to comfortably hurl missiles over their heads. If each cohort had a depth of two centuries, however, then the legion would have a minimum depth of thirty-six meters, so that the front ranks would be pummeled by friendly fire. If we accept Speidel's argument that each cohort was arrayed three maniples deep, then the minimum depth of Pompey's legion would be fifty-four meters, so that the missiles hurled from the ramparts would primarily fall on the second *acies*! In order for Pompey to deploy the legion in *triplex acies* each cohort must have consisted of a single line of six centuries deployed abreast.

A Late Republican legion with a 4/3/3 deployment would thus present a frontage of twenty-four centuries, presenting 20% more combat power to the enemy than the old Polybian legion. Still, it is unclear that the cohortal legion controlled any more tactical space than its old manipular counterpart. Caesar's soldiers, assaulting up the ravine between two spurs at Ilerda, found only enough room for three *instructae cohortes*.<sup>50</sup> The topography of the ravine has been significantly altered by medieval and modern building, but it was around 150–180 meters at its approach, so that each cohort occupied approximately 50–60 meters.

Roman formations in close order were organized around the width of the shield, c. 65 centimeters judging from the Fayum *scutum*, and most Roman units in the Late Republic were 3–4 ranks deep when formed in close order.<sup>51</sup> This formula would suggest that Caesar's cohorts at Ilerda were about 300 strong, in order to have a rough frontage of 50–60 meters (Caesar was of course making an eyeball estimate). This is quite plausible, given that a few years earlier Caesar had reported two legions with a combined strength of 7000 men (or c. 350 a cohort) and later at Pharsalus, in 48 BC, his 80 cohorts

47 Verchère de Reffye 1884, 342; Goldsworthy 1996, 183; Connolly 2000 puts the maximum range of a heavy pilum at about 35 meters, with 25 meters being the optimal range. On the central importance of missile weapons in general to Late-Republican era infantry combat, see Zhmodikov 2000, 75–78.

48 Roman formations in three ranks: Plut. *Ant.* 45.2; Joseph. *BJ* 2.172, 5.131, *Veg. Mil.* 3.15.

49 Vegetius (*Mil.* 3.15) suggests that each soldier occupies three feet of depth and there should be three feet between men. Polybius (18.30.8) seems to suggest the same, reporting that the Romans require a meter gap between ranks.

50 Caes. *BCiv.* 1.45. Rüstow 1862, 36 noted this feature could be used to deduce the frontage of a cohort, although he measured the ridge at its narrowest (less than 120 meters). Since Caesar was making an eyeball judgment about how many cohorts to send up the ravine, the conclusions from this topographical exercise must be relatively rough.

51 Taylor 2014, 309. Close order infantry formations 3–4 ranks: Plut. *Ant.* 45.2, Joseph. *BJ* 2.172, 5.131. The *testudo* on Trajan's column is four ranks deep; the same formation on the column of Marcus Aurelius has three ranks. Width of the Fayum *scutum*: Kimmig 1940. Taylor 2014/15 argues that these close order ranks subsequently opened by having every other man step forward, a tactical phenomenon that can be detected in some visual representations of Roman soldiers, for example the Mainz Principia Relief.

contained only 22,000 infantry, or 275 men per cohort.<sup>52</sup> Using the same formula, a full-strength cohort of 480 men would have a standard frontage of 80–105 meters.<sup>53</sup>

It is unclear the extent of the gaps between cohorts in battle array, although gaps of some sort seem to have been maintained (the fight for the narrow draw at Ilerda being an exception). Caesar reports that two cohorts sent out from camp to repel a British sortie in 54 BC were arrayed with only a small space between them (*perexiguo intermisso loci spatio inter se*).<sup>54</sup> Given that these two cohorts sought to block the Britons' retrograde movement, this spacing may have in fact been exceptionally narrow – but notably still present! Gaps between the cohorts under ordinary conditions had significant tactical value, giving the line of cohorts a degree of tactical flexibility as maneuver units, in contrast to the brittle rigidity of an unbroken front.<sup>55</sup>

I have previously argued that manipular legions in the Middle Republic had a frontage of between 350 and 550 meters, based on the doctrinal frontages of Hellenistic formations ranged against them.<sup>56</sup> If we posit twenty-five meter gaps between the cohorts, a Late Republican legion at full strength in *triplex acies* (4/3/3) would have a frontage of about 400–500 meters. In terms of control of tactical space, the cohortal legion had little to advantage it over its manipular predecessor.

The mechanics of the two formations were likewise strikingly similar. Just as the *principes* closely supported the *hastati* in the manipular legion, the second line of a cohortal legion seems to have closely supported the first, plugging the gaps between forward units and serving as a reserve in the event that the relatively thin first line was breached.<sup>57</sup> The rear rank of cohorts provided a ready reserve of maneuver units, for example Caesar's shift of his third *acies* to his flank at Bibracte, or drawing cohorts from the third line at Pharsalus to form a bulwark against Pompey's cavalry.<sup>58</sup> But then again, the *triarii* had proven perfectly adept for this purpose at Campus Magnus, Zama and Cynoscephalae. So we are back to the original puzzle: If the cohortal legion looked so much like the manipular legion in terms of frontage and coordination between the first two lines, why shift to cohorts at all? Why not simply use cohorts as independent detachments as necessary, and then fall into the traditional manipular order of battle that had worked so well for centuries?

52 Cohorts with 250: Caes. *BGall.* 5.49.7. Rüstow 1862, 3 suggests that the strength of Caesar's legions generally stood between 3000–3600 men, or 300–360 men in a cohort. Cohorts at 375: Caes. *BCiv.* 3.89.

53 It is unclear if Late Republican legions had official strengths, although 480 emerged as the paper strength of early imperial cohort (except the reorganized first cohort; see Roth 1994). Pompey's legions at Pharsalus had a strength of 4000 infantry, although Pompey had also suffered casualties and attrition (Caes. *BCiv.* 3.88). Modern estimates for the frontage of a cohort vary widely. Rüstow 1862, 36 suggested 120 feet, or 37.5 meters. Goldsworthy 1996, 138 posits c. 145 meters for a 480-man cohort arrayed three ranks deep, assuming three feet (.9 meters) of frontage per man.

54 Caes. *BGall.* 5.15.4.

55 Veith 1907.

56 Taylor 2014.

57 Goldsworthy 1996, 137.

58 Caes. *BGall.* 1.25.7, *BCiv.* 3.89–94. Cf. *BGall.* 1.52.7.

## Deploying the Italian Vanguard

The shift from the manipular array to Caesar's cohortal *triplex acies* may have developed not so much from the mechanics of battle, but rather from how Roman armies deployed for battle. There was one major difference between the Middle and Late Republic, namely that the Middle Republican legion was screened by a large number of skirmishers, the *velites*. By the Late Republic, these had disappeared, a fact that in turn had major implication for how the Late Republican legion deployed on the battlefield.

### The End of the Velites

Light troops, known by various names (*ferentarii*, *rorarii*, *velites*), had been the mainstay of Roman armies since at least the fourth century BC.<sup>59</sup> Each Middle-Republican legion had a force of 1000 to 1500 *velites*, or roughly 30% of the total infantry strength.<sup>60</sup> Adam Anders has recently suggested that service as a skirmisher was in fact an excellent way to train young men in combat before graduating to the heavy infantry line.<sup>61</sup> Yet these designated skirmishers were all but gone by the Late Republic. Ad hoc skirmishers, the poorly documented *antesignani* fulfilled some of the key functions of the *velites*, but were seldom present in the same numbers, at least not in Caesarian armies.<sup>62</sup>

If light infantry was still useful, why had the *velites* gone away? Logistical factors may underlie their disappearance. *Velites* as a mass were integral to the overall tactical system, but each individual *velites* represented less combat power than a heavy infantryman. Given that Roman armies in the second century BC needed to be shipped great distances to their areas of operations, it may have increasingly been more attractive logistically to use local auxiliaries as light infantry, while reserving scarce space on troop transports for heavy infantry. There may have also been fiscal reasons. The Social War ended Rome's free supply of Italian soldiers: now Rome had to pay Italian draftees as citizen troops, rather than merely providing them with rations.<sup>63</sup> There was thus fiscal pressure to reduce the number of *velites*, so that each *stipendium* was spent upon a heavy infantryman.

It may have proven logistically and fiscally convenient to eliminate the mass of organic skirmishers from legionary rosters, but the legions still needed light infantry. This led to a reinvention of the wheel, as Late Republican heavy infantry at times retooled to fight as skirmishers. Already in 105 BC, Sulla had a cohort of Paeligni leave

59 On light infantry in the Early and Middle Republic, see Rawlings 2007, 56–57.

60 Quesada-Sanz 2006, 245–46.

61 Anders 2015.

62 *Antesignani*: e. g. Caes. *B Civ.* 1.43, 1.57, 3.75, 84. On Caesar's general neglect of light infantry, see Potter 2010, 315–318, who suggests that *velites* may have been less useful fighting tribal armies, who could be defeated by repelling their initial impetus.

63 Nicolet 1978.

behind some of their armor in order to accompany him on his secret mission to capture Jugurtha.<sup>64</sup> Pompey's legionaries in Spain were capable of seizing ground in fluid form, just like the *velites* of old.<sup>65</sup>

Still, these modified skirmishers could not do what the massive swarm of *velites* had done so effectively for Middle Republican armies, namely seize and hold significant tracts of ground to screen the heavy infantry deployment.<sup>66</sup> While Middle Republican armies could usually deploy from a marching column into a battle line in a relatively leisurely manner, Late Republican forces had to form up expeditiously with almost no screen at all. In searching for the origin of cohortal tactics is it necessary to examine the vanguard of Roman armies on the march, which prior to the Social War was comprised of Italians, in particular the picked cohorts known as *extraordinarii*.<sup>67</sup> With the decline of the *velites*, it became more tactically expeditious for the four Italian cohorts of *extraordinarii* to deploy as cohorts rather than maniples.<sup>68</sup>

#### From *extraordinarii* to *prima acies*

Polybius reports that the *extraordinarii* comprised one-fifth of the entire Italian infantry contingent, or generally four cohorts.<sup>69</sup> While not specifically mentioned by name, other large formations of “picked” (*epilektoi/delectae*) troops mentioned for the Middle Republican period were quite likely *extraordinarii*.<sup>70</sup> While they might be used as a maneuver unit, or assigned a special mission, one critical function of the *extraordinarii* was to form the vanguard of the marching column, the first troops to deploy in formation against the enemy. If an attack was expected from behind, the *extraordinarii* formed the rearguard. Either way, these picked Italian cohorts would be the first to deploy for

64 Sall. *Iug.* 105.2. See also *Iug.* 50.2, 103.1 where *expedites cohortes* are dispatched on special missions accompanied by cavalry.

65 Caes. *BCiv.* 1.44.

66 Potter 2010, 316–17.

67 Polyb. 6.26.5–8, cf. Livy 34.47.3, 40.27.3. On the *extraordinarii*, see Pfeilschifter 2007, 34–35; Kent 2012b, 115–119; Sage 2013b. Kent in particular stresses that the *extraordinarii* were picked cohorts, rather than picked individuals, despite the imprecise language of Polybius.

68 Bell 1965, 404 believed that the rise of the cohort was largely divorced from the disappearance of *velites*, but they were in fact closely linked.

69 Thus four cohorts of *extraordinarii* reported by Livy 41.27.3.

70 The following formations likely involved the *extraordinarii*, perhaps supplemented by additional cohorts (for example Livy 41.27.3 has four cohorts of *extraordinarii* supplemented by two additional cohorts): the five cohorts of infantry and 500 cavalry taken by Cato the Elder for a highland campaign in Spain (Plut. *Cat. Mai.* 11.1), the 3000 soldiers selected by Scipio Aemilianus to assault Diogenes' towers in the Third Punic War (ἄριστίνδην καὶ τοῖσδε ἐπιλεγόμενοις; App. *Lib.* 126), the 2000 soldiers deployed by Lucullus to occupy Cauca in 151 BC (ἄριστίνδην ἐξελεγμένους, App. *Ib.* 52), and perhaps the 3000 men used to envelop the Cimbri at Aquae Sextiae (Plut. *Mar.* 20.4). While it cannot be proven that any of these troops were *extraordinarii* or even Italian, the approximate strength adds up (2000–3000 infantrymen, roughly 4–5 cohorts 500–600 strong). Note in some cases the echoes of Polybius' description of the *extraordinarii*: τοὺς ἐπιτηδειοτάτους πρὸς τὴν ἀληθινὴν χρεῖαν ... ὁ μεθερμηνευόμενον ἐπιλέκτους.

battle.<sup>71</sup> It is therefore not coincidental that four cohorts became the standard frontage of a Late Republican legion deployed in the *triplex acies*.

When a manipular legion was on the march and expecting enemy contact, each line of *hastati*, *principes* and *triarii* marched in parallel columns.<sup>72</sup> When contact with the enemy was made from the front, the marching column would have to either turn or wheel at a right angle, so that the units in the vanguard now formed the extreme flank.<sup>73</sup> When Caecilius Metellus realized that he was marching to an ambush set by Jugurtha at the Muthul River, he hastily sought to form an appropriate manipular battle line by turning his column into the plain, with his leading maniples turning (*transvorsis principiis*) to form the flank of his battle line.<sup>74</sup>

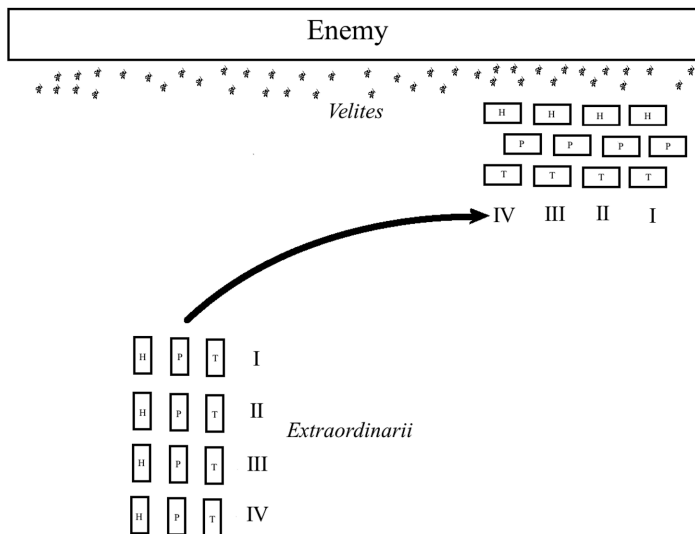


Figure 1: Four cohorts of Middle Republican *extraordinarii* perform a turning/wheeling motion to deploy as the extreme flank of a battle line.

This meant the *extraordinarii* were usually the first unit of a consular army to make the turn from marching column to battle line, assuming a position at the extreme flank: see Figure 1. In a manipular formation, the deployment of the twenty-four centuries of the *extraordinarii* would have only produced a frontage of eight centuries, waiting precariously on the flank until the rest of the army could slowly make the turn and come on line with them. This would have been feasible with a screen of *velites* charging forward into the entire battle-space, but quite precarious without them.

It would have therefore been more expeditious for a Roman commander lacking a

71 Polyb. 6.40.1–5.

72 Polyb. 6.40.10–13.

73 Gilliver 1999, 53–54.

74 Sall. *Iug.* 49.6; Paul 1984, 149–50.

light infantry screen to simply take his four cohorts of *extraordinarii* and use them to rapidly form a four cohort front without need for a lengthy turning maneuver. The first four cohorts could immediately present a front of twenty-four centuries. With this front formed, the other cohorts in the Italian wing would fall in behind the *extraordinarii*: see Figure 2. Thus, the *triplex acies* of 4/3/3 cohorts likely had its genesis in a technique for hastily forming up the Italian *ala* in the vanguard of the army.<sup>75</sup> Already before the Social War, Roman generals had realized that a legion might be hastily deployed in a manipular formation at the Muthul River when he had time and space to do so. But in the same battle, after suffering a sharp repulse, he hastily rushed a reformed legion back into the fray, presenting a front of four cohorts.<sup>76</sup>

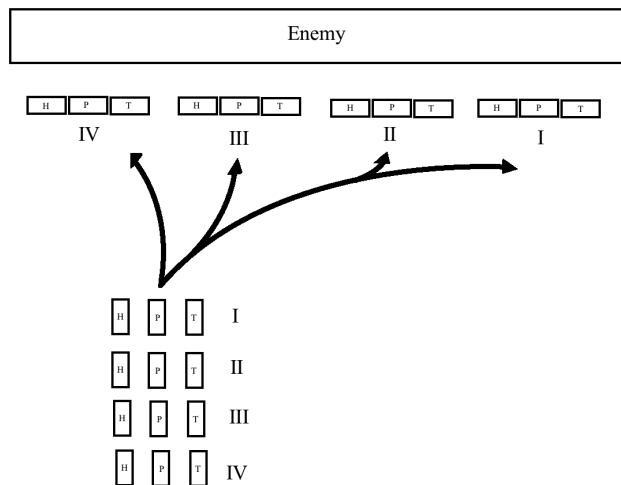


Figure 2: The first four cohorts of a Late Republican legion deploy rapidly to form a legionary frontage of four cohorts

### Command and Control: A Lost Opportunity

One of the distinctive elements of the Italian cohort had been the fact that it had an assigned commander, who by the late second century BC probably carried the formal title of *praefectus cohortis*, even if in many cases he was in fact a local magistrate of the com-

75 Caesar (*B Gall.* 4.14.1) was still marching *acie triplici instituta* in preparation for a hasty assault on the German camp; he fails to mention how his troops transitioned from marching column to battle line, but I am inclined to believe that Caesar was using the traditional marching pattern of three columns of maniples, only that these for him formed ready frontages of cohorts that could burst (*inruperunt*) into the German camp. 4/3/3 in Caesar: *B Gall.* 1.24.2, 52.7, *BCiv* 1.41.5, 83.3, 3.88–89; *BAfr.* 81.

76 Sall., *Iug.* 51.3.

munity that provided the unit.<sup>77</sup> Roman legions, meanwhile, had nothing in between the college of six military tribunes, who functioned as staff officers with no specific tactical responsibility, and the *prior* centurions who commanded individual maniples.<sup>78</sup>

Curiously, when the Romans transitioned all legions over to the cohort, they did away with the office of cohort commander.<sup>79</sup> There is one reference in Plutarch to a ἡγεμῶν σπεύρας (cohort commander) during the Mithridatic Wars of the 80s BC.<sup>80</sup> Since he is not described as a χιλίαρχος, the standard term Plutarch uses for Roman military tribunes, it is quite likely that this officer was assigned to a legion of recently enfranchised Italians who retained the traditional title of cohort commander.<sup>81</sup> This office, however, did not persist in the Late Republican army, so that Caesar's legions had no command echelon between the military tribune and the centurion.

Why dispense with this proven layer of command and control? Ironically, during the imperial period, non-Italian auxiliary cohorts enjoyed designated commanders, even as legionary cohorts lacked them. Perhaps the Italians themselves are more to blame than attempts to impose Roman organization on legions raised from former allies. The position of cohort commander, previously a strictly Italian title, seems to have been discarded in favor of an office with established Roman credentials, the military tribuneship, the first step of so many famous senatorial careers.<sup>82</sup> Better to serve as a Roman *tribunus militum* than as a quaint *praefectus cohortis*. Consider the brief military career of the upwardly mobile poet Horace. The son of an auctioneer from the recently enfranchised Latin colony of Venusia, Horace obtained the rank of military tribune in one of Brutus' legions.<sup>83</sup> We can compare his trajectory to the career of an earlier worthy from a Latin community, M. Anicius, who began his career as a civic scribe and subsequently was elected town praetor at Praeneste, commanding the local cohort during the Second Punic War. He celebrated his military and political accomplishments with a statue in his hometown that featured him wearing both a cuirass and a toga.<sup>84</sup> For Anicius, service as a cohort commander was the pinnacle of his career. For Horace, serving as a military tribune was merely a step towards bigger and better things.

77 Communities elect commanders: Polyb. 6.21.5. The term *praefectus cohortis* is first attested in Sall. *Iug.* 46.7. These are distinct from the *praefecti sociorum*, the six Roman officers appointed as staff officers over each Italian *ala*, essentially counterparts to the legion's military tribunes, perhaps instituted during the Second Punic War and then maintained as a mechanism of Roman control (Hantos 2003). Despite this Roman intervention, native officers, presumably at the level of cohort and below, make occasional appearances after the war, such as the Fregellan officer M. Trebellius (Livy 43.21.2) and Paelignian *hegemon* Salvius at Pydna (Plut. *Aem.* 20.1–3). See Ilari 1974, 137–140; Pfeilschifter 2007, 31; Kent 2012b, 106–08.

78 Polyb. 6.24.7.

79 While Parker 1923, 202 suggested that the senior centurion in each cohort had the official status as overall commander, a current consensus exists against the assignation of any sort of official “cohort” commander: Isaac 1998, 392–401, Goldsworthy 1996, 13–14; Gilliver 2007, 192. Still, the *pilus prior* was the senior officer in the unit, and his experience and prestige may well have made him *de facto* commander of the cohort.

80 Plut. *Cim.* 1.2.

81 Plutarch's use of χιλίαρχος for military tribune: e.g. *Flam.* 1.3, *Caes.* 5.1 *inter alia*.

82 Suolahti 1955, *passim* emphasizes the aristocratic bent of military tribunes.

83 Hor. *Sat.* 1.6.48; Suet. *Vit. Hor.* 1; Taylor 1925, 161–2.

84 Livy 23. 19.17–18. Cf. 25.14.4.

The popularity of the military tribuneship as a rank amongst recently enfranchised Italians is illustrated by the fact that Augustus would later honor local Italian worthies with the title of *tribunus militum a populo*.<sup>85</sup> This honor was somewhat akin to that of “Kentucky Colonel,” as honorees seem neither to have served in the army nor even have been elected by the people, but it epitomizes the Italian zeal for Roman titles in the Late Republic and Early Empire. Ironically, the desire of Italian civic elites to forgo the office of *praefectus cohortis* ensured that one of the most important tactical aspects of the Italian cohort, the fact that it came with a designated commander, did not transmit to the post-Social War Roman army.

## Conclusion

The primary drivers of tactical reform in the Late Roman Republic were the Italian soldiers who served alongside the Roman legions, who became increasingly integrated over the second century BC and fully enfranchised in the first. The cohort was a Roman concept in the sense that it was forced upon Italian communities as a conscription tool, but Italian cohorts themselves proved the tactical worth of this unit, in particular its ability to rapidly deploy a legion into tactical space that had not already been cleared by light infantry.

Italian military developments had been a driving force behind Roman military reforms since Rome was a village on the Tiber. Yet the transition from the maniples to the cohort was the last major instance where Italian martial praxis drove the evolution of Roman military forms. After Augustus transferred all of the legions out of Italy to distant frontiers, the future of the Roman army, in terms of tactics, equipment, organization, and culture, would be heavily determined by circumstances along the *limes*, rather than in Italy itself.

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