3: The Roman Army and Navy

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Military Revolution

In the last decades of the fifth century B.C. and the first decades of the fourth, the army of the Roman *res publica* could lay claim to the unenviable title "least efficient military establishment" of any major state in the Mediterranean world. Despite advantages conferred by population and location, Rome had trouble controlling the other states of the Latin plain and was locked in a struggle with the much smaller city of Veii to its north. In the course of the fifth century B.C., it managed to add only about 200 square kilometers of land to the territory that it controlled. By 290 B.C., it was the dominant state in peninsular Italy, and its army was the most effective military force in the Mediterranean world.

The transition of the Roman army from ineptitude to lethal efficiency was the result of one of the most significant military revolutions in European history. A military revolution is defined by the transformation of a state's military and civilian administration to enable a high degree of coordination between the two.[1] Such structural change is often accompanied by significant developments in military equipment and doctrine that make the revolutionary state superior, for some period of time, to its rivals. Changes of this sort took place in fourth-century B.C. Rome, and the Roman military revolution was so profound that

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it shaped the course of the history of the Mediterranean, Europe, and the Near East for six centuries.

The Roman military revolution began with the reformation of the political system in the middle of the fourth century B.C. Domestic reform was accompanied by the growth of an efficient system of alliances that enabled Rome to take advantage of the military potential of states that it defeated, a new tactical doctrine based on the effective use of combined arms, and a switch from dependence on infantry armed with thrusting spears to infantry whose primary killing weapon was the sword. Other powers, wedded to traditional ways of making war, were simply unable to adjust to the complexity of the Roman system.

From Hoplites to Legionaries

Although there is little that we can really know about Rome in the fifth century B.C., it is significant that the Roman historical tradition, when it started to be written down in the late third century B.C., portrayed Rome as a small place, barely able to defend itself from its neighbors. This is somewhat misleading because a conservative estimate, based on the territory occupied by the Roman state, suggests that the population was around 30,000, of whom roughly 9,000 would have been free men of military age.[2] According to the most likely reconstruction, the organization of this army paralleled that of the *comitia centuriata*, the principal voting assembly of the fifth century B.C., which was divided into five classes, the first three providing men armed as hoplites, the next two providing men armed as light infantry. This reconstruction explains certain anomalies in the structure of the fifth-century B.C. army, in which there were three divisions of "heavy infantry" with similar tactical functions; archaeological evidence, admittedly scanty, suggests that there was some regularization of military equipment toward the end of the sixth century B.C., and elements of hoplite armor that are datable to this period have been discovered.[3]

An army of 9,000 men was not small by the standards of the fifth century B.C. Athens, at the end of the century, could field an army of roughly 10,000 hoplites; Sparta mustered perhaps 8,000 men, when Spartiates were combined with their Laconian allies, the *perioikoi*.[4] Both Athens and Sparta, of course, depended on their alliance systems to provide troops that would supplement their own contributions to a campaign. Rome likewise required the assistance of allies to muster

a potentially overwhelming force on the battlefield. To gather such a force, Rome needed to deal with the Latin League to augment its power. What little we know about the relationship between Rome and Latium suggests that Rome's ability to compel adherence to its desires was considerably less than that of Sparta in the Peloponnesian League or Athens in the Delian.[5] It might even be prudent to read the record of border wars with the peoples occupying the hills to the East of the Latin plain – the Aequi, the Sabines, the Volsci – as representing the sort of action that the members of the Latin League would support. If it is correct to see the fetial procedure as governing the relationship between states on the Latin plain, then this too may indicate that war was held to be an essentially defensive action.[6] The point of fetial embassies and requests for restitution was to ensure that the gods sided with Rome in righting a wrong – if there was no prior wrong, then there could be no war.

Dependence on an army made up of hoplites may also have restricted Rome's ability to fight. It is notorious that few hoplite battles in Greece ended in a decisive victory for one side or the other, and so too the inability of the peoples of the Latin plain to dominate their rivals to the West may stem from the difficulty of winning a decisive battle. Rome had no equivalent of the special Spartan training system for young citizens, the *agōgē*, that would enable its forces to gain a qualitative superiority over other hoplites, and it may have lacked the social unity necessary to mobilize its full resources for war. This is not the place to review the evidence for the "Conflict of the Orders," but it is of great interest that a Roman historian as well versed in the tradition of his own national history as Sallust could write that divisions between the *patres* and the *plebs* kept Rome weak.[7] Although there are obvious difficulties with Sallust's view in point of detail (he dates the end of the Conflict of the Orders to the years just prior to the outbreak of the First Punic War), it is not, a priori, an improbable understanding of the situation. The significance of Sallust's view may be underscored by the fact that the *comitia centuriata* comprised the essence of the army and that one of the major features of the legislative record of the fifth century B.C. suggests that inequitable social divisions remained a serious issue throughout the first century of the Republic. The fact that laws creating the tribunes of the plebs and other new magistracies and laws on marriage between plebeians and patricians and so forth were all passed through the *comitia centuriata* suggests that there were fundamental divisions between the group that provided the commanders of the army and those who served in it.[8] Among these laws, the two that

are most interesting relate to (1) the creation of tribunes with consular powers to command the army and (2) the division of land captured from peoples defeated in war.[9] The creation of the consular tribunes appears to have been an act to ensure civic harmony rather than one to ensure that the commanders of the army were better at their job. The failure of repeated tribunician bills aimed at dividing among the plebs the land captured from defeated peoples may suggest not only that there was serious division on this point but also that the magisterial class resisted pressure to reward soldiers with land.

The picture that emerges, albeit dimly, of Rome in the fifth century B.C. is of a state lacking any coherent imperial strategy. Military action was largely limited to self-defense. The reason for this was not so much that Rome did not have the strength for a more aggressive policy but rather that it did not then possess the social cohesion that would make such a stance possible. The hoplite army, which may have been politically viable, scarcely permitted the efficient exploitation of manpower resources, and it was tactically limited. It may be fair to say that this army was primarily a political institution that performed various tasks of self-defense with reasonable, but not spectacular, efficiency.

How and why did the Roman army become more efficient? It would perhaps be wrong to try to pin down any one cause or point in time; rather, as befits the circumstances of a military revolution, one must look for a series of events that could have served as catalysts for change. One of these events must surely have been the catastrophic defeat suffered by a Roman army at the battle of the Allia in 386 B.C.[10] Thirty years later Rome appears to be pursuing a far more aggressive policy toward its neighbors and to be doing so with vastly greater effectiveness. The other significant event in the interim was not military but political: the passage of the so-called Licinio-Sextian reforms in the early 360s B.C.[11] The issues at stake – including the unequal distribution of land, eligibility for office, and debt – appear to have divided Roman society for several generations. The limitations imposed by the laws on landholding and debt payments appear to reveal concerns about the landholding peasantry. The new requirements that one consul a year be a plebeian and that plebeians be added to an expanded college of *decemviri sacris faciundis* appear to have satisfied an emergent class of *nobiles*. A third process, one that began earlier than the sack of Rome but picked up speed in the immediate aftermath of the Gallic sack, was the annexation of new land to the *ager Romanus* and the foundation of new colonies. Colonies were seen, at least in part, as defensive settlements

that would enable Rome to gain advance intelligence of movements among potentially hostile peoples, while the confiscation of land from conquered states would restrict their ability to fight again.

Although the practices of colonial foundation and confiscation appear to have been defensive, they would also have provided a way in which the Roman peasantry could profit from victory in war. Perhaps the most important feature of the developments of the late fifth to mid-fourth centuries B.C. was that they gave tangible rewards for fighting to the classes that would make up the bulk of the Roman army, both as officers and men, rewards that took the form either of enhanced status or of access to new lands. The new aggressiveness of the Roman state plainly upset its traditional allies, the Latins, who rose in revolt against Rome in the year 341 B.C.[12] But now the balance of power had shifted decisively in Rome's favor; the Latins were defeated by 338 B.C. and were brought into a new relationship with Rome.

The settlement of 338 B.C. was dictated by Rome and involved the complete restructuring of Rome's relationship with its allies. Rome would no longer deal with the Latin League as a military institution. Instead, each city would have an individual treaty with Rome specifying the contribution that it would henceforth make to the Roman army as well as the relationship of its inhabitants to the Roman state – some were given citizenship, others were given a semi-citizen status (*civitas sine suffragio*), and others remained allies.[13] The alliance system was as important as the transition away from hoplite warfare, for it gave Rome the ability to mobilize the manpower of its allies with unprecedented efficiency.

It is to the second half of the fourth century B.C. that the adaptation of a new style of fighting should be dated. According to a tradition that was current in the early first century B.C.:

> In ancient times, when they used rectangular shields, the Etruscans, fighting in phalanxes with bronze shields, compelled them to adopt similar weapons, and were defeated. Then again, when other people were using shields such as they [the Romans] now use, and fighting in small units, imitating both, they defeated those who had introduced the excellent models. Learning siege craft from the Greeks, and how to destroy walls with machines, they compelled the cities of their teachers to do their bidding. (Diod. 23 2.1 tr. Walton adapted)

In two other versions of this tradition, it is specifically stated that the Romans learned how to use oblong shields from the Samnites.[14] That this change should be dated to the fourth century B.C. is confirmed by an invaluable picture of the army in action during the 280s B.C. from a highly unusual perspective: that of an enemy. Hieronymus of Cardia, who served with Alexander and a variety of his successors, used Pyrrhus' own memoirs when he wrote the description of the battle of Asculum in 283 B.C. that is the basis for a passage in Plutarch's *Life of Pyrrhus:*

> The Romans, not having the opportunity for sideways shifts and counter movements as before, fought, of necessity on level ground, face to face; and, hoping to defeat the hoplites before the elephants came forward, fought fiercely with their swords against the pikes, heedless of their own lives they looked to wound and to kill, holding their own suffering as nothing. (Plut. *Pyrrh.* 21.6)

In the sentence immediately preceding the passage quoted here, Plutarch has said that Pyrrhus had drawn up his own formation to deprive the Romans of their favored tactics. This Roman army is plainly capable of a degree of mobility impossible for dense lines of hoplites and also capable of using the sword in close combat.

It is this point that permits the interpretation of a passage from Dionysius of Halicarnassus, which must also derive from an account that is roughly contemporary with the Pyrrhic War: "Those whom the Romans call *principes*, fighting with cavalry spears held in the middle with both hands and aligned in close order accomplished many things" (20.11.2). The use of the present tense to describe a category of soldier that no longer existed in his own time suggests that Dionysius, who wrote this in the first century B.C., is following the wording of his source very closely. He thus provides the earliest evidence for the tripartite division of the legion into three groups: the *hastati*, the *principes*, and the *triarii*.[15] The most important question raised by this passage, when it is compared with the passage from the *Life of Pyrrhus*, is how to reconcile the description of the *principes* fighting with spears and the description of the army as a whole fighting with swords. The answer to this question is perhaps quite simple: Dionysius' source is identifying the *principes* by a weapon that immediately sets them apart from the other troops in the Roman line. What he is saying is that you can tell the *principes* because they are the ones with the long spears and because they initiate combat with their spears.[16] If they did not do this, there would

be no point in arming them with thrusting spears in the first place. The *hastati*, who engaged the enemy first, were armed with throwing spears (from which their name derived), while the *principes*, or "most important" men, would engage the enemy if the *hastati* failed to achieve a breakthrough, beginning their attack with a different weapon.[17] The use of a thrusting spear makes sense if they were expected to engage after an initial phase of combat where missile weapons would play a significant part; they may be the "most important" because their intervention would be expected to prove decisive. If they failed, the battle would fall to the *triarii*, who are described by Plautus as men who come to the aid of others in an emergency.[18]

While the passages in the *Life of Pyrrhus* and Dionysius of Halicarnassus are invaluable as descriptions of the Roman army in action in the 280s and 270s B.C., the value of the tradition represented by Diodorus is less clear. The ultimate source for this tradition clearly intended to establish a pattern, identifying changes in Roman armament with each major adversary in Rome's past, but the assumptions that the author makes are plainly problematic. Why should we think that the Romans required contact with the Etruscans to learn about hoplite armor when they had their own contacts with the Greek world? And when we know that the Roman army captured numerous cities in Italy in the course of the fourth century B.C., why should we think that the development of effective siege technologies postdated the development of the legion organized into maniples? There is really no good reason to believe any of this. Archaeological evidence shows that hoplite armor was available in the sixth century B.C., but there is no direct evidence other than the passage in Plutarch that enables us to date the adoption of the new legionary tactics. It is possible that it should be dated as late as the Samnite war, but the enhanced efficiency of the Roman army in the 340s B.C. might well suggest that the development took place in the middle rather than at the end of the century. One passage that is sometimes adduced to support a late date for the new system – Livy's statement that the people passed a law in 311 B.C. requiring that the tribunes commanding the four legions of the Roman army be elected rather than appointed by the consuls – simply means what it says.[19] The problem with using this passage to establish the date for the introduction of the manipular legion is that it presupposes an earlier reform that was more substantial (the doubling of the size of the army). If the doubling of the number of legions can be associated with the introduction of the new tactics, this passage is in fact evidence for the earlier introduction of the new organizational scheme, placing it before the turning point of the

Third Samnite War. As the Roman army appears in the account of the war with Pyrrhus to be well versed in its tactical scheme, there is no good reason to follow some scholars who would associate the references to the manipular legion to the time of that war. What is important is not the fact that our first reference to these tactics dates to the 280s B.C., but rather that the description of Roman behavior suggests a well-practiced force.[20]

Although the lack of evidence prevents us from dating the introduction of the manipular legion with precision, it is nonetheless clear that the conditions of a military revolution had been satisfied by the end of the fourth century B.C. The Roman state had been reorganized to permit the more efficient use of its resources, it had developed a new tactical doctrine, and it had developed a political culture in which aggressive war was seen as bringing benefits to the population at large. This last point will continue to be of extreme importance for the history of the army in the Republic. To return again to Sallust, it was his view that Rome was able to conquer the Mediterranean world because the governing class was united in its aims with the broad mass of the Roman people. The crisis of the Republic stemmed from the alienation of the lower classes from the governing class, which sought its own enrichment without regard for the interests of other elements of the body politic.[21] This interpretation of Roman society was not his alone; it is implicit in the Augustan settlement as the *principes* sought to define roles for different constituencies within the state after the civil wars of the first century, and it is implicit in Polybius' analysis of the Roman constitution in the second.[22] It was Polybius who stressed the point that the Roman army was more effective than others because it was made up of citizens who saw themselves as the defenders of their homeland. When the organs of civil government failed to provide for the interests of the peasantry and the poor, it would be the members of those groups under arms who would bring down the Republic.

Imperialism and the Nature of Battle

By the beginning of the third century B.C., the Roman state was capable of mobilizing extraordinary manpower reserves, and of employing those troops with great flexibility on the battlefield. The Roman people, who decided on matters of war and peace through the votes that they took in the *comitia centuriata*, were evidently predisposed to vote for war. Their response to an incident off the port of Tarentum in 282 B.C. was to

vote to send an embassy to Tarentum demanding the surrender of the city.[23] In 264 B.C., when even the senate demurred at the prospect of sending an army to support the people of Messina in Sicily, the Roman people voted to send the consul Appius Claudius with an army to their aid, allegedly because they were convinced that the war would be profitable.[24] In 218 B.C., the Roman people voted to send ambassadors to Carthage to demand the withdrawal of Hannibal's army from the city of Saguntum in Spain, and they did so on the understanding that the ambassadors would declare war if their demands were not met.[25] In 229 B.C., the Roman people had voted to send a large expedition to Illyria to avenge the murder of some ambassadors who had been sent to order the Illyrian queen to restrict the piratical activities of her people,[26] and they would send another expedition there in 219 B.C. Much earlier, in 238 B.C., they had also voted for the seizure of Sardinia and Corsica.[27]

This series of decisions raises the question of whether or not the Roman state was preternaturally belligerent.[28] The answer to this question is probably no. In the third century B.C., war was seen as a basic element of the relations between major states. Minor states in the Greek world would normally resort to arbitration to solve disputes in this period, but the rulers of the post-Alexandrine successor states in the East appear to have regarded the demonstration of their military might as a feature of their claim to royalty.[29] Well after the death of Alexander, the desire to rule "the whole" of the world that he had ruled was a respectable one.[30] What is striking about the events outside Messina in the summer of 264 B.C. is not simply that the consul Appius Claudius would attack both his potential allies, the Carthaginians, and his ostensible foes, the Syracusans. Perhaps even more significant is that both Hieron of Syracuse and the Carthaginian generals were ready to fight him. Romans did have reason to fear aggression from other states and were not necessarily more apt to fight than others were.[31]

What set Rome apart from either Carthage or a Hellenistic kingdom is that the people who would do the fighting decided to do so.[32] In a monarchy, people did as the king decided, and he had a professional army with which to fight his wars. At Carthage, the bulk of the fighting was done by mercenaries. Why then were the Roman people willing to declare war and bear the consequences with their own persons? We cannot answer this question for certain; arguably one factor was that the Roman people shared with their leaders the vision that a war would consist of a battle or two, at which point the enemy would sue for peace. It appears that the armies of the Italian wars fought, at best, about one major battle per campaigning season, and even in a conflict like the

Third Samnite War, the bulk of the summer was spent besieging towns in the hinterland.

When the Roman army entered battle, it did so with the intention of annihilating its foes. Hoplite warfare tended to be deadly only if one side broke and ran, and a battle involving phalanxes would be decisive only if the auxiliary troops – be they cavalry, light infantry, or exotica like elephants – could achieve clear superiority in another part of the field so that one of the phalanxes would be outflanked. Roman tactics, however, were designed to attain victory in the main battle line.[33] After an initial barrage of spears, the *hastati* would advance with their swords, seeking gaps in the enemy ranks (as implied by Plutarch's reference to the mobility of Roman formations).[34] If they could not break through, they would fall back and the missile barrage would continue until another opportunity for close combat presented itself.[35] Pyrrhus, who was plainly a very able soldier, recognized the tactical prowess of the legion very rapidly and so varied his own formations after his first encounter with the Romans. According to Polybius, he "used not only Italian weapons, but even Italian soldiers, placing units of these and units from the phalanx in alternate order in his battles with the Romans" (18.28.10).[36]

With an army whose strength lay in the attack, Roman generals were notoriously aggressive. There may be no more telling observation on this point than Polybius' discussion of the difficulties that Roman admirals had in dealing with storms at sea:

> In general terms the Romans rely on force in all matters, thinking that it is necessary for them to carry on, and that nothing is impossible once they have decided upon it; they succeed in many cases because of this; in some, however, they fail spectacularly, most of all at sea. On land, attacking men and the works of men they usually succeed because they are matching force against equal force, although they do sometimes fail; but when they encounter the sea and the weather and fight them with force, they suffer great disasters. (I.37.7–8)

This tendency was readily observed by their adversaries, though there was not always much that they could do about it. In the First Punic War, the Carthaginians rapidly abandoned set battles, unless, as was the case with Regulus' invasion of Africa, they had no choice. Instead they

forced the Romans to engage in a series of long sieges against powerfully fortified positions. In the Second Punic War, Hannibal's great early successes stemmed from his ability to take advantage of Roman tendencies, using his cavalry to outflank Roman armies after extended periods of conflict and so to demoralize them.[37] The campaign that ended in the battle of Cannae is in many ways a perfect example of the way that the inherent aggressiveness of the Romans' approach to war played into the hands of their enemy. Although the historiographic tradition blamed the catastrophe on the folly of Varro, he is hardly to be criticized for seeking a decisive battle – despite the fact that Fabius had shown how to frustrate Hannibal in the previous year.[38] The Roman people did not vote to give the consuls an especially large army only to have them hide in the hills: they expected them to bring Hannibal to battle and end the war.

The rather simplistic approach to war as an instrument of policy revealed by the actions of the Roman people made it impossible to construct any sort of plan for the conquest of the Mediterranean. They viewed war as an event that should end with a decisive battle, to be followed by the defeated state placing itself at the mercy of the Roman people, and this may help explain the halting steps toward empire that were taken in the course of the third century B.C.: Sicily, Sardinia, Corsica, and Spain appear to have been occupied so that the Carthaginians would be deprived of bases. Evidence from Greece in the wake of the Illyrian wars reveals that land was taken from cities as *ager publicus* without there ever being a garrison. The policies used in Italy were simply applied to a new region.[39]

The Roman Navy

The First Punic War saw a radical change in the structure of the Roman fleet. In the fourth and early third centuries B.C., we hear of officials known as the *duumviri navales* who commanded a fleet of twenty ships.[40] Although we know of only two actions undertaken by this fleet – one in 311 B.C., when an effort was made to implant a colony on Corsica, and one in 282 B.C., when a squadron was destroyed by the Tarentines – it is likely that the main purpose of these ships was to control piracy.[41] This fleet appears to have been replaced in 278 B.C., when the Roman state decided to depend entirely on the naval forces of allied states.[42] The existence of a large seafaring population would prove decisive in the years of the first war with Carthage, for, while Rome

assumed responsibility for building the necessary ships, it required the preexisting skills of naval architects throughout Italy to help in the actual construction of the ships. Livy's detailed account of the distribution of responsibilities among various Italian communities for the construction of the fleet that Scipio would use to sail to Africa in 205 B.C. gives a good sense of the system, though in this case he specifically says that the *socii navales* bore the expense of building the ships because the treasury at Rome could no longer do so.[43]

The main line of battleships in the third century B.C. were the trireme and quinquireme, ships that were somewhat similar to each other in that both used rowers disposed in three banks of oars – in fact, the quinquireme seems essentially to have been an overgrown trireme – and were designed to be used as weapons.[44] These warships were also the mainstays of the battle fleets in the eastern Mediterranean, and the Roman tradition stressing difference between the Carthaginian fleet and their own appears to be somewhat exaggerated (basically, if you were going to fight at sea, there was, at this point, one way to do it). Moreover, even if Rome did not have a major battlefleet of its own before 264 B.C., there was ample maritime experience in Italy from which the Romans could draw, and, with the exception of the battle of Mylae in 260 B.C., in which the Romans surprised the Carthaginians with the novel deployment of the corvus, a boarding bridge, the two fleets appear to have contended with each other on an equal footing and to have taken each other's captured vessels into service. The real problem with a fleet based on these ships was that they were prohibitively expensive to maintain over time and that the loss of life when they were mishandled (as happened on several occasions in the First Punic War) could be horrendous. It is perhaps significant that, with the exception of the fleet that Antony brought to Actium, which included the fleet of Ptolemaic Egypt and was very much on the old-style Hellenistic model, the fleets used in the civil wars at the end of the Republic consisted of lighter, more nimble craft.[45]

Although we have little direct evidence on this point, it appears that the command of individual ships was left to navarchs who were experienced sailors. If it is correct to generalize from the evidence of the later imperial fleets, where rowers and sailors were regarded as *milites*, the navarch was held to be equivalent in rank to a centurion, and the commander of the marines was a decurion, then we may surmise that Roman soldiers on the ships of the First Punic War were commanded by allies.[46] This may help explain why, when there were no extraordinary demands on regular military manpower, the regular

complement of forty marines was drawn from the *proletarii*, who were otherwise not recruited into the army.[47] Overall command of the fleet, of course, devolved on the shoulders of a Roman magistrate, and many magistrates, as the passage from Polybius earlier above suggests, were novices.

Perhaps as a result of the fact that the fleet was dominated in its day-to-day operations by non-Romans, naval activity was always regarded as somehow other than Roman. It was not considered necessary to maintain a major fleet between wars, and when fleets were raised in the late Republic, the burden was largely borne by the allies – Caesar's description of the enormous fleet gathered by Pompey in the winter of 49–48 B.C. gives some impression of the capacity of the allies in this regard and of the way that the fleet was assembled. In his list he divides units of the fleet according to the provinces in which they were raised, suggesting that Rome had simply transferred the style used in Italy to its new lands.[48] The speed with which Pompey was able to raise this fleet gives us some perspective on his other great ship-raising endeavor, the campaign against the pirates in 67 B.C. Given the speed with which the Republic could raise fleets like this when the need was felt to be great enough, the fact that the "pirate crisis" should have occurred at all (assuming that the crisis was real) raises questions about the capacity of late Republican government to govern.

Despite the immense importance of fleet actions at various points in the history of the Republic, and the decisive nature of fleet actions in the civil wars after Caesar's murder in 44 B.C., the Roman navy would always remain a second-class institution as compared with Rome's land forces. Rome's dependence on its subjects to supply the fleet made it something of an "un-Roman" activity, and the un-Roman nature of the fleet was finally confirmed in the Augustan age when command of ships in the standing fleets at Misenum and Ravenna was given over to freedmen.

New Tasks

With the defeat of Carthage in 241 B.C., the Roman state was confronted with a new problem: how to govern a region outside of Italy On a conceptual level, the word *provincia*, which appears to have originally meant "an area where the Roman state sent its army," had come to mean a "task assigned a person," "territory where a magistrate was sent on a mission," or "territory subject to Rome."[49] Polybius refers to

provinciae in Italy prior to the First Punic War, and in his translation of the treaty between Rome and Carthage in 241 B.C. he uses the plural to refer to lands ruled by Rome, both in Sicily and, by implication, in Italy as well.[50] Shortly thereafter, Sardinia and Corsica were seized from the Carthaginians, though it appears that they were not placed under the control of magistrates until 227 B.C. So too in the wake of the First Illyrian War, Rome acquired *ager publicus* from the lands of Pharos and very probably other places as well, but in this case no magistrate with *imperium* was appointed to oversee the administration of these lands, which may simply have been leased by the censors.[51] In none of these areas was there a permanent garrison. This style of administration changed dramatically in the wake of the Second Punic War with the acquisition of the former Carthaginian lands in Spain. In the first few years of Roman rule, it appears that area was ruled *pro consule* and that Roman troops were sent home in 199.[52] In 198 B.C., the election of six praetors instead of four, as had been the practice since 227 B.C., indicates a shift in policy. Livy says that the first praetors were ordered to fix the boundaries of their *provinciae*.[53] The result of this decision by the senate was to spark a series of conflicts with local tribes that would continue, with few interruptions, until the reign of Augustus. It would also lead to the transformation of the conditions of service in the Roman army, for, after the first couple of years, new magistrates tended to bring new drafts of troops to reinforce the existing garrison.[54] The senate appears to have recognized that this was a problematic situation at first – especially as military service in the wake of the Second Punic War had lost much of its appeal for the Italian peasantry – but there was little that could be done about it. Because troops were hard to raise, those who had been conscripted had to be retained, and this made service in Spain ever more unpopular.[55]

Although we learn of the dispatch of new drafts to Spain from the narrative of Livy, we are not told anything of the impact that long-term service had on the soldiers themselves. At some point regular winter camps had to be established and regular systems of supply had to be set up. Some system was evidently in place by 171 B.C., when ambassadors from Spanish towns showed up in Rome to complain that they were being robbed, leading to the first recorded case *de repetundis*.[56] Soldiers stationed abroad for long periods of time would have formed relationships with the local inhabitants, and new communities would have begun to form around the legions. Men who left the service may have decided that they no longer wished to return home, and deserters would have found ways to live with the local population. By the middle

of the century, it appears that the army had developed a reputation for luxurious living and poor discipline. Mancinus blamed his failure before Numantia on the poor quality of the army that he had inherited from Pompeius, who had been defeated by the Numantines the year before.[57] Scipio Aemilianus, by implication, agreed with him when he ordered all the prostitutes and camp followers away from the army so that he could restore appropriate discipline before setting out for Numantia in 133 B.C.[58] As he did so, Tiberius Gracchus was claiming that the peasant stock that had made the army great had been ruined by the growth of large estates, necessitating his proposals for land reform.

Gracchus' claims about the depopulation of Italy have long since been shown to be false, and while Scipio's actions in reforming the army made edifying reading in later handbooks, both men – and it is safe to take them as representative of the ruling class at Rome – had missed the point. Despite the fact that trouble had been brewing over conditions of service in Spain for twenty years before the tribunate of Tiberius Gracchus, the senate had failed to address the real issues.[59] Soldiers who were sent to Spain had to make lives for themselves there because they did not know when, or if, they would come home. The regular rotation of magistrates through the Spanish commands made it impossible for the soldiers to form close relationships with their generals, or to feel that their generals would become their advocates before the governing body of a state that may have seemed to have forgotten them. The soldier who lacked an advocate would become an advocate for himself, either through mutiny, desertion, or simply by refusing to buy into the system of military discipline. The problem would become worse in the course of the next twenty years.

Marius

It is regrettable that we have no coherent narrative other than the summaries of Livy's history for the last quarter of the second century B.C., for if we did, we might better be able to appreciate the problems that beset the Roman army. What we do know, however, is highly suggestive. The decade and a half inaugurated by the construction of the *via Domitia* – a significant event, as it is connected with the establishment of a permanent Roman presence north of the Alps – witnessed an unprecedented string of defeats at the hands of a variety of enemies. In 119 B.C., a Balkan tribe, the Scordisci, defeated Sextus Pompeius, the governor of Macedonia.[60] In 113 B.C., Germanic tribesmen who had

entered Gaul in the previous year defeated a consular army under the command of Papirius Carbo.[61] In 110 B.C., the army sent to deal with Jugurtha of Numidia surrendered, and in 109 B.C., the same tribesmen who had defeated Carbo defeated a second consular army, this time commanded by Junius Silanus.[62] The consul Lucius Cassius was defeated by the Tigurini in 107 B.C., and in 105 B.C., the Cimbri destroyed a pair of armies at the battle of Arausio.[63]

Whatever the reasons for these disasters – and they should not, by any means, be attributed to a single cause – the overall impact was to predispose both the Roman people and, as the lack of recorded opposition may indicate, the nobility to allow one man to make the army better. Gaius Marius, who had gained credit by defeating Jugurtha, was elected to five successive consulships from 104 B.C. to 100 B.C. so that he could repel the threatened invasion of the Cimbri and the Teutones.

Marius, one of whose claims to office had been that he was well versed in the military arts, appears to have been a genuinely competent officer who had a genuine understanding of both military technology and organization, beginning, it seems, with the way that the army was recruited. Up until 107 B.C., the fiction existed that Roman soldiers were men of property. In fact, the definition of an *adsiduus*, or a citizen with the necessary property to become a legionary, had been reduced to such a low level prior to 107 B.C. that the elimination of the requirement altogether had little practical effect in the short term.[64] In the long term, however, it had significant impact, strengthening the soldier's identification with his unit and his general.

None of this would have mattered so much, perhaps, if Marius had not proven an able field commander, and it may have been the authority that accrued to his reputation as a general that caused his other reforms to be adopted by other armies of the Republic (there was no central command that could mandate their adoption). The chief reforms of Marius on the operational level were as follows:

- Enhanced training of individual soldiers by using the techniques employed in gladiatorial *ludi*
- A new *pilum* designed so that its shaft would break off on contact with an enemy shield, making it harder to withdraw
- The requirement that soldiers carry two weeks of supplies in their packs while on campaign
- Institutionalization of the cohort instead of the maniple as the basic tactical unit within the legion
- The use of the eagle standard for all legions

Not all of these reforms were completely original. The grouping of maniples into larger formations called "cohorts" (the word is used by Polybius) dates at least as far back as the end of the third century B.C.[65] The order concerning packs appears to have been a return to an earlier practice that had been generally abandoned during the previous thirty years as armies based in the provinces acquired civilian followings.[66] The new design for the *pilum*, which is specifically attributed to Marius, may not be particularly significant; the nature of the reform, however, suggests that the tactical use of the *pilum* was already well established. If that is the case, then the basic style of battle that its use implies was also established.[67] Caesar makes it plain that a Roman army would approach to within a certain distance of the enemy (he does not specify what this distance was) and halt to throw volley after volley of *pila* at the enemy with the intention of breaking up the front ranks; these enemy soldiers would become vulnerable after they dropped shields encumbered by the *pila*.[68] It is precisely this phase of the battle that he ordered his men to cut short at Pharsalus so that they could come to blows with Pompey's front rank more quickly.[69] Training by gladiatorial instructors is likewise a sign that the use of the sword had remained preeminent in the army. That said, the author of the pseudo-Caesarian *African War* gives a fascinating insight into what exactly this training entailed when he says that Caesar rallied his frightened troops by calling off the paces at which the weapons of their enemy would be effective – acting like a "*lanista*."[70]

Although some of the Marian reforms are less dramatic than they may seem at first glance, the overall impact of his regime appears to have been significant. The eagle clearly became the focus of a soldier's emotions, and people remembered individual eagles. Thus Catiline displayed an eagle that was specifically said to have been Marian when he was attempting to draw supporters to his cause in 63 B.C.[71] The formalization of the role of the cohort led to a significant improvement in the tactical flexibility of the legion, as a legion of ten cohorts is in fact a more complex organization than a legion of thirty maniples. In the manipular legion, a general had to deal with thirty unit commanders, something that limited his ability to issue complex orders. When the general could deal with ten unit commanders who would be responsible for making sure the men under their command followed orders, he could expect more of them.[72]

The sum of the Marian reforms was greater than its constituent parts. By giving units permanent standards, Marius created a sense of unit loyalty that appears to have been far greater than before. Caesar's

account of the Gallic and Civil Wars reveals that men felt a very strong attachment to their units, took pride in the history of their collective accomplishments, and felt a positive sense of rivalry with other units in the same army. By stressing greater training and discipline, Marius reversed the trend of the previous decades, during which the army appears to have become less and less efficient. In so doing he laid the foundations for the professional army of the principate. What was lacking, however, was support from the state for what had become, de facto, an army of long-serving professional soldiers as opposed to the highly trained and motivated militia described by Polybius.

The critical issue with the professional army was its demobilization. Soldiers who had been away from home for a long period of time were harder to reintegrate into civilian society. They had formed close bonds with colleagues, and they needed the wherewithal to make new lives for themselves. Because the state had no formal way of providing for those needs, the terms under which an army would be disbanded were determined by the general.

Land ownership was often the key to enabling a man to leave the legions successfully. Although grants of public land, *ager publicus*, had been made to soldiers in the early part of the second century, the practice appears to have ceased by about 150 B.C., quite possibly because the absorption of *ager publicus* by members of the upper class, together with the complaints of allies who might otherwise have been making use of the land, created a sufficiently strong interest group to make an end to it.[73] Marius reintroduced the notion that soldiers should be given land on a very large scale at the end of a campaign, and in so doing he altered the relationship of the army to the state.[74] Because the state could never bring itself to institute a regular retirement package for soldiers, it was left to individual generals to negotiate for their men as best they could. The result was that the more powerful the general, the better the chances of substantial rewards for his men and the greater the personal loyalty they would feel to their leader.

The Role of the Army in the Destruction of the Republic

The first century B.C. was an exceptionally violent period in the history of the Mediterranean world, and the Roman state was required to raise armies on a scale unmatched since the Second Punic War (especially large armies were assembled during the periods of civil war). A society

as highly militarized as first-century Italy was a society in which there could be – and would be – extreme pressure for change.[75] The conservative policies favored by the bulk of the governing oligarchy only made these pressures worse, and the disloyalty of the army to the state was only one feature, albeit the most significant one in the long run, of the unrest generated by the conservative tendency in Roman politics.

It is something of a paradox that, while Marius made the Roman army a better fighting force, he also made it less loyal. The person who was ultimately responsible for the loyalty of an army to the state was the general, and although it was indeed a rare general who would wish to jeopardize his future standing in the aristocracy by siding with his men, such generals did exist. It is a striking illustration of the difference between the members of the senior officer class and those who served as centurions and soldiers that when Sulla decided to march on Rome in 88 B.C., only one of his senatorial officers would initially follow him, whereas the army did. Sulla's message to his men had been simple: crooked politicians at Rome were cheating them of rewards that were justifiably theirs. Sulla's sense of the soldiers' feelings toward the government of the *res publica* is all the more striking because he had not been in command of this army for more than a year. As a result of the levy that Marius and his supporters were able to raise in 87 B.C., the troops assembled to attack the state vastly outnumbered those left to defend it, and this is further testimony to the frustration of the peasant class in the early 80s B.C. When Sulla returned in the late 80s B.C., the men who had followed him through Greece and Asia Minor probably cared little, if at all, for constitutional issues – or, by this time, for issues of class. Sulla's soldiers saw their self-interest linked with the success of their general and were willing to massacre thousands of prisoners after the battle of the Colline Gate.

The willingness to slaughter fellow peasants and to settle on land seized from Italian communities makes it plain that Sulla's veterans cannot be seen as representatives of the interests of a class other than that constituted by the soldiers of Sulla. Military discipline and unit loyalty became the most powerful forces in determining the way that soldiers would act in the course of the first century B.C. Of this point there may be no better illustration than an incident that occurred in Caesar's campaign against Pompey's generals Afranius and Petreius in Spain during the latter part of 49 B.C. After having thoroughly outmaneuvered his rivals, Caesar had held his men back from an attack that, so he says, would have resulted in a bloody but complete victory. On the day after

this act of mercy, the men from the two armies began to fraternize. As Caesar presents it, the soldiers looked first for men whom they knew or who had come from their home territory. Afranius' soldiers then thanked Caesar's men for not having attacked on the previous day and asked whether they could trust Caesar if they surrendered to him.[76] Assured on these points, the troops of Afranius and Petreius asked whether Caesar would spare the lives of their generals, and they then sent senior centurions to negotiate the surrender of the army, which would be signified by their bringing their standards into Caesar's camp. Not for these men were the great issues of the day, the state of the *res publica*, the safety of tribunes, and such like; they were interested in themselves. What is perhaps even more striking is that, although they had been on the verge of surrender, the soldiers of Afranius and Petreius remained loyal to their generals when Afranius armed his guards and servants to restore discipline. Petreius then summoned the army to a meeting before the generals' tent and asked that each man swear an oath that he would "not desert or betray the army and its generals, and would not take council for himself, separately from the others." Petreius swore the oath first, followed by Afranius, the tribunes and centurions, and finally the soldiers who were called forward century by century. Once the swearing of the oath was complete, the generals ordered that any person harboring one of Caesar's men in the camp should bring him forth so that he could be executed.[77] Caesar admits that these actions restored the army to its former willingness to fight.

By the beginning of the first century B.C., the Roman state had acquired what was essentially a professional army that was fast on its way to becoming the "total institution" of the imperial period – that is, an institution dominated by its own interests against those of "outside groups."[78] What the Roman state had not acquired by the beginning of the first century B.C. was the bureaucracy needed to handle such an army. The army of Rome had always been an instrument of politics, representative of the political system of its time. In the early centuries of the Republic, its structure mirrored the highly stratified society of the preceding regal and patrician periods. In the fourth to third centuries B.C., the emergent community of interest between the men who served and the aristocrats who commanded the army contributed mightily to the acquisition of empire. In the later second century B.C., the army evolved from a highly skilled militia, composed of soldiers whose service was defined on a campaign-by-campaign basis, into a long-serving professional army, and there are signs that it lost its sense of direction.

The reforms of Marius reinforced the growth of professionalism while at the same time creating a sense of class identity, divorced from civilian life, that made the army the tool that would permit Sulla and then Caesar to dismantle the government of the Republic.

Notes

1 See the classic essay, Roberts (1967, 195–225; reprinted in Rogers 1995, 13–36). The essays collected in Rogers (1995) offer an excellent introduction to the debate as to whether a military revolution actually occurred as Roberts suggests. For a somewhat more wide-ranging discussion of military revolutions, drawing on the work both of historians and modern defense analysts, see M. Knox and W. Murray (2001, 1–14, esp. p. 7) for the definition accepted here.

2 Cornell (1995, 207), for 500 B.C. On the principle he accepts, there would be no substantial increase in the next century, as the territory of Rome increased only slightly.

3 Cornell (1995, 181–94); for a usefully skeptical approach to this evidence see MacMullen (2011, 52–3); Cascorino (2007, 11–72) is very useful on what can be known.

4 Both these numbers are the object of controversy. I have adopted here the high figure for Spartans favored by A. Andrewes, in Gomme, Andrewes, and Dover (1970, 110–17); for Athenian numbers, see Hansen (1981, 19–32).

5 Cornell (1995, 299–301).

6 Watson (1993, 62) pointed out that the procedure was intended to preserve peace. See also Oakley (1993, 13–14), who likewise observes the defensive mentality of the fifth century.

7 Sall. *Hist*. fr. 11 (Reynolds). See discussion in McGushin (1992, 76, on the text; 76–81, on the thought).

8 Millar (2002, 105; = Millar 1989, 148).

9 For the creation of consular tribunes, see Livy 4.6.8; Cornell (1995, 335–8); Drummond (1989, 192–5). For attempts at agrarian legislation, see Livy 4.36.2–4 (424); 43.6 (421); 44.7 (420); 47.8 (416); 49.11 (414); 51.5 (413); 52.2 (412); 53.2 (410).

10 For this date, see Polyb. 1.6.2; 18.2; cf. Walbank (1957–1979, 1:185–7).

11 Livy 6.34.1–42.14; cf. Oakley (1997, 1:645–61).

12 Livy 8.3.8–12.3; Oakley (1997–2004, 2:407–51, 477–538; considering other accounts as well); Cornell (1995, 347–52); Humm (2005, 282–3), in an important discussion, argues that the reform arose out of the need to raise more troops for the second Samnite war, though I suspect that the war could have been undertaken only if the reform was already in place. I cannot follow him in transposing the essential elements of the Servian constitution to the end of the fourth century B.C.

13 Livy 8.14.1–12; cf. Oakley (1997–2004, 2:538–59); for Rome's relations with Italian communities in general see Terrenato (2008).

14 Von Arnim (1892) for the text of the "*vaticanum ineditum*," which is reproduced as *FGrH* 839 fr. 1; see also Ath. *Diep*. 6.273, a section that contains fragments of Posidonius. The phrase *kata speiras* can indicate either maniples or cohorts (LSJ s.v. *speirê* is inadequate on this point, while Mason (1974) ignores Polybian usage on

which see Walbank (1957–1979, 2:302), but in an author of first century B.C. date must mean cohorts – or less tendentiously, as suggested above, small units. The phrase *kata speiras* is also used in the *vaticanum ineditum* with reference to Roman formations prior to the introduction of the Etruscan phalanx!

15 For Hieronymus, see Hornblower (1981, 141–2); for details of the passage, see Rawson (1991, 48–50).

16 See Rawson (1991, 49–50) on the nature of the spear.

17 See Rawson (1991, 50) for the meaning of *principes* and the role of the *hastati*, on which see also Ennius fr. 266 and the discussion in Skutsch (1985, 446), who shows that this cannot be an accurate picture of the *hastati* at the time that Ennius wrote or in the battle that would have been described in Book 8, the source of the fragment. Book 8 of the *Annales* dealt with the Second Punic War.

18 Varro, *L.L.* 5.89, for Plautus; *cf.* Rawson (1991, 56); Oakley, vol. 1 (1997, 464).

19 Livy 9.30.3. Cornell (1995, 354) takes this as evidence for the date of the manipular reform. Livy himself appears to have thought that it coincided with the introduction of the *stipendium* in 406, on which see Livy 4.59.11; Diod. 14.16.5; Oakley (1997, 1:630–2).

20 See Keppie (1984, 19) on a mid-fourth-century date for the reform; Oakley (1997–2004, 2:456) places the change in tactics at the end of the fourth century B.C.; see also MacMullen (2011, 103–5) on the pace of reform suggesting that it took some time (true), but it needs be noted that the change was happening at a much faster pace than before.

21 Sall. *Jug.* 41–2.

22 For the Augustan reform, see Rowe (2002, 21); for the link between the description of the constitution and the description of the army, see Walbank (1972, 132).

23 App. *Sam.* 7.1–8; Dion. Hal. 19.5–6; Dio Cass. fr. 39; cf. Franke (1989, 456–8).

24 Polyb. 1.11.2–3.

25 Polyb. 3.15.4–13; 20; cf. Rich (1976, 38); Harris (1979, 200–5); Briscoe (1989, 44–7).

26 Polyb. 2.8.1–13; App. *Ill.* 7.17–19; Dio Cass. 12 fr. 49; cf. Derow (1973, 118–34); see Errington (1989, 86–90) on problems in the narrative.

27 Polyb. 3.16 (Illyria); cf. Errington (1989, 91–4). Polyb. 1.88; 3.10.3; Plin. *NH* 22.5; cf. Harris 1979, 168 (Sardinia and Corsica).

28 See Harris (1979, 1–53) for the classic statement that Rome was preternaturally belligerent; see, though, the balanced response in Rich (1993, 38–68) and Oakley (1993, 28) to the notion that Roman society was shaped by war, which is not the same thing as saying that it was exceptionally prone to war. See too Dyson (1985, 271–9), who looks at the "frontier" mentality of the Roman people and their tendency to believe that they were at risk. Eckstein (2006) and Burton (2011) pose important challenges to Harris' approach, pointing to the inherent instability of interstate politics in the third and second centuries B.C. and to the mechanisms of Roman diplomacy.

29 Ager (1996, 20–2).

30 Hornblower (1981, 166–71).

31 Rich (1993, 63).

32 Polyb. 6.52.4, 6–7.

33 Keppie (1984, 19).

34 See especially Polyb. 18.30.5–11.
35 On the alternation between missile and sword combat, see Sabin (2000, 14–16).
36 This passage surely derives from the same source as that used by Plutarch in his *Life of Pyrrhus*, as the formation that Polybius is describing appears to be the same as that described at Plut. *Pyrrh*. 21; see also Polyb. 2.66.5; cf. Walbank (1957–1979, 1:280).
37 Sabin (1996, 73–7).
38 Polyb. 3.106.7, 108.1, on the senatorial support for the aggressive approach to Hannibal in 216 B.C.; for the problem with the tradition concerning Varro, see now the lucid summary in Briscoe (1989, 51–2).
39 Derow (1991, 261–70); Potter (2012); Prag (2013); Russo (2012).
40 Thiel (1954, 32).
41 For Corsica, see Theophr. *Hist. plant*. 5.8.2 (the authenticity of the account is shown by Thiel 1954, 19). The main sources for the debacle at Tarentum are App. *Sam*. 7; Livy *Per*. 12; Dio Cass. fr. 39, 4; Flor. 1.18.4–5; Oros. *Hist. contra paganos* 4.1.1.
42 Polyb. 1.20.13–14 on the absence of a Roman fleet in 264 B.C.; for the date of the change to 278 B.C., see Thiel (1954, 29); for reorganization of the system in 267 B.C., see Thiel (1954, 333), which points to the creation of the *quaestores classici* in that year.
43 Livy 28.45.14–21.
44 Thiel (1954, 100) argued that the quinquireme was easier to train rowers for, but this is based on what is now seen to be an inaccurate view of how the ship worked; the most important development in our understanding of the Roman fleet in this period stems from the recovery of rams from the site of the battle of the Aegetes islands; see Tusa and Royal (2012).
45 Kienast (1966, 15–16).
46 Kienast (1966, 23–4, 39–40); on marine officers, see n. 44, which adduces Livy 28.45.17 for continuity from the middle Republic.
47 Polyb. 6.19; cf. Thiel (1954, 77).
48 Caes. *B Civ*. 5.3. The anomalies are a separate division for Rhodian ships (Rhodes retained an independent navy of some capacity even into this period) and a *classis liburnicae atque Achaicae*, a combined squadron of ships drawn from the Dalmatian coast, identified by distinctive type and a standard provincial fleet. As neither place was as big as, for example, Asia or Syria, the two units may have been combined so that they would be of roughly the same strength as the others.
49 Betrand (1989, 214–15), though not admitting the final version offered in the text, which seems to me to be necessitated by what appears to be the case, that magistrates were not regularly dispatched to Sardinia/Corsica or Sicily until 227 B.C., on which point see Ferrary (1988, 18–19).
50 For Italy prior to the First Punic War, see Polyb. 2.19.2; cf. Ferrary (1988, 15 n. 33). For the treaty of 241 B.C., see Polyb. 3.27.4; cf. Ferrary (1988, 13–18), though his suggestion that the word *eparchia* could translate *imperium* (which is true) does not seem to hold here in light of the plural *eparchiais* in the text.
51 Derow (1991, 261–79); for doubts about the date see Eckstein (2008: 45–8); for a defense of Derow's date, see Potter (2012: 138 n. 7).
52 Richardson (1986, 75); Harris (1989, 122–3); Potter (2012).
53 Livy 32.28.11.

54 Livy 32.28.11; contrast Livy 33.43.7–8 with Richardson (1986, 83, 86); for the infrastructure, see now del Hoyo and Principal (2012); Castro (2013).
55 Richardson (1986, 95–100).
56 Richardson (1986, 114–15).
57 App. *Hisp*. 83; cf. Rosenstein (1990, 100).
58 The sources are collected and discussed in Phang (2001, 246–7); for the Roman siege works, see now Dobson (2008).
59 Taylor (1962, 19–27); see now Rosenstein (2004, 141–69) pointing out that the real problem was population growth, which led to poverty; De Ligt (2012, 157–92).
60 *SIG*[3] 700.
61 Livy *Per*. 63; App. *Celt*. 13; Vell. Pat. 2.12; Obsequens, 98.
62 Livy *Per*. 64; Sall. Jug. 37–8; Oros. *Hist*. *contra paganos* 5.15; Eutr. *Brev*. 4.26; Flor. 1.36 (Jugurtha); Livy *Per*. 65; Flor. 1.38; Vell. Pat. 2.12 (Silanus).
63 Livy *Per*. 65; Caes. *B Gall*. 1.7; Oros. *Hist*., *contra paganos* 5.15; [Cic] *Ad Herenn*. 1.15.25 (Cassius); Livy *Per*. 67; Granius Licinianus 33.1–17; Dio Cass. fr. 91; Plut. *Luc*. 27, *Mar*. 11, *Sert*. 3; Vell. Pat. 2.12; Diod. Sic. 36.1; Oros. *Hist*., *contra paganos* 5.16; Eutr. *Brev*. 5.1.
64 Gabba (1976, 9–15); De Ligt (2012, 150–54; 183–4).
65 Polyb. 11.23.1; cf. Walbank (1957–1979, 2:302) and Dobson (2008, 58–64).
66 Roth 1999, 71–2.
67 Plut. *Mar*. 25; cf. Keppie (1984, 66).
68 Caes. *B Gall*. 1.25.3–4; 52.3; 2.27.4; see also Sabin (2000, 12).
69 Caes. *B Civ*. 3.93.1. Caes *B Civ*. 1.4.6.1 suggests that a large supply of missile weapons was available. Although the action described outside Ilerda in 49 B.C. was not a set battle, it does suggest that regular legionaries were trained to engage in extended missile combat if necessary.
70 [Caes.] *B Afr*. 71.1.
71 Sall. *Cat*. 59.3; Keppie (1984, 67).
72 Goldsworthy (1996, 33–4).
73 For grants in the first half of the second century, see Brunt (1988, 241, n. 4).
74 Brunt (1988, 278–80).
75 Patterson (1993, 92–112).
76 Caes. *B Civ*. 1.74.1–4.
77 Caes. *B Civ*. 1.76.
78 Pollard (1996, 212–27).