

The Homogenisation of Military Equipment Under the Roman Republic

Michael T. Burns

Institute of Archaeology, University College London

Introduction

Most studies of the Roman army introduce the legion as a fully developed and thoroughly Roman entity. Little attempt has been made to examine the technical and tactical developments that occurred in Italy before the third century BC, and the interaction between Rome and its Italic allies. Lawrence Keppie, in *The Making of the Roman Army*, passes over the allies with the brief summary that, ‘as far as can be determined, they were organised and equipped in more or less identical fashion to the Romans, with their own distinctive arms and tactics being gradually subsumed’.¹ This is a typically Romano-centric view, and equates the subsuming of distinctive arms and tactics with the Romanisation of the allies. To do so ignores a wealth of archaeological and representational evidence from the formative period of the fourth century BC, which shows that many items of equipment and tactical innovations, which are commonly associated with the ‘Roman’ legion, were already in use by the various Italic peoples long before Roman hegemony.

It is not the purpose of this paper to make definitive statements regarding the development of military equipment during the Republic; the evidence available to us, both literary and archaeological, is insufficient for this purpose. Rather, what I hope to offer is a new perspective on a very neglected and misunderstood aspect of the Roman army, by examining why regional variations in Italic military equipment came to be replaced by a largely homogeneous panoply and method of fighting by the middle of the third century BC. The usual answer to this question is based almost entirely on the assumption that after the Romans defeated various Italic peoples, the latter subsequently adopted Roman arms and armour. Such a conception of the Romanisation of the Italic allies’ military equipment presumes that this is a one-way process. It ignores and glosses over a complex and fascinating period of military evolution, development, and interaction in Italy. The results of this process would later provide Rome with the foundations of a military system that few ancient powers could resist.

¹ L. Keppie (1984), *The Making of the Roman Army* (London), 22.

Before examining the homogenisation of military equipment it is important that I address the use of terms such as Samnite, Campanian, and Lucanian. These ethnic terms carry with them many implied meanings when used by both ancient and modern writers. In modern usage, ‘Samnite’ often encourages the misconception that we are dealing with a nation-state, or a single bounded entity whose people identified themselves by this name.² But this is by no means clear. The history of the Italic peoples is a complex subject, where issues of identity, culture and political status were in a continual state of development and change. It is beyond the scope of this paper to enter into a discussion about the nature, or very existence, of the peoples of pre-Roman Italy posited in ancient literature. The author is well aware of the pit-falls inherent in an uncritical usage of these ethnic labels.³

One of the arguments advanced in this paper is that the homogenisation of military equipment occurred through a process of interaction with, and adoption of equipment and tactics from other Italic peoples, and not simply as the result of Roman design. Ancient sources repeatedly make reference to the Samnites as one of the most significant influences in the development of Roman arms and tactics. Uncritical acceptance of the ethnic term, Samnite, could lead us into the dangerous realm of the culture-historical framework, where we find ourselves ‘tracking down peoples associated with and distinguished by particular artifacts’.⁴ The triple-disc cuirass, for example, is frequently referred to by modern scholars as a Samnite cuirass, yet it is by no means certain that this was a sure symbol of ‘Samnite’ identity.⁵ Military equipment could certainly be used as a medium of expression to communicate identity on a number of different levels, such as those associated with regional, cultural, political, and societal affiliations. The trouble is trying to determine exactly what type of identity is being expressed.

This paper is divided into three sections. Part one is based largely on literary sources, and will look at the changing nature of warfare in Italy, and how this acted as a catalyst in the development of new Italic military systems. This is followed by the question of when and why the Romans abandoned the hoplite phalanx in favour of the

² S. Jones (1997), *The Archaeology of Ethnicity* (London), 15-24.

³ R. Whitehouse and J. Wilkins (1995), ‘Greeks and natives in south-east Italy: approaches to the archaeological evidence’, in T.C. Champion (ed.), *Centre and Periphery* (London), 120-26; E. Herring (2000), ‘To see ourselves as others see us!’, in E. Herring and K. Lomas (eds.), *The Emergence of State Identities in Italy in the 1st Millenium BC* (London), 45-77; E. Dench (1995), *From Barbarians to New Men* (Oxford).

⁴ Jones (1997), 16.

⁵ G. Schneider-Herrmann (1996), *The Samnites of the Fourth Century BC as Depicted on Campanian Vases and in Other Sources* (London), 46-48; E.T. Salmon (1967), *Samnium and the Samnites* (Cambridge), 62; A. Snodgrass (1967), *Arms and Armor of the Greeks* (London), 128.

manipular legion. Part two examines the archaeological evidence for regional variation in Italic military equipment during the fourth century by looking at the distribution of helmet types. The image and reality of Roman equipment in the second and first centuries is questioned, and connections are made with earlier Italic armour from the fourth century. Part three will focus upon the role of Roman hegemony in consolidating a process of tactical reform, the reasons why certain types of equipment eclipsed others. All dates are BC unless otherwise noted.

I. The Changing Nature of Warfare

A. The emergence of pan-Italic warfare in the fourth-century

Warfare in fourth-century Italy has largely been investigated as a topic of political and social significance, relating to the Roman conquest. The structures which brought about, or encouraged Roman expansion, such as the economic rewards of war, the need for land, the use of allied manpower, and expectation of fighting on an annual basis, have been examined with little consideration for the developments and changes that occurred in actual warfare.⁶ The fourth century represents a period in which there was a break with the traditional modes and cycles of conflict. The emergence of Rome, and possibly the Samnites if we are to believe Livy, escalated the pressure between various Italic peoples, and created a dynamic environment in which the scale, intensity, and duration of war increased.⁷ At the beginning of the fourth century Rome was a power of purely local consequence. Rome began the century involved in a conflict against the Etruscan city-state of Veii, which was finally captured in 396.⁸ This was a local war; Veii was a mere 16 km away and the forces involved were modest. At the most, Rome could hope for the assistance of Latin allies. Oakley describes the Roman army operating ‘in a rather circumscribed area around the city and the Latin plain against three main opponents’: the Etruscans, Aequi and Volsci. Annual warfare was endemic to early Rome, but this must have been true of many, perhaps most, other Italic states or tribes.⁹ The limited scale of the war with Veii was probably typical of most inter-Italic wars in the first half of the fourth century. In this environment the pressure to improve and adapt current fighting methods and tactics was probably low, and the examples from which one could learn new techniques were

⁶ S.P. Oakley (1993), ‘The Roman conquest of Italy’, in J. Rich and G. Shipley (eds.), *War and Society in the Roman World* (London, New York), 14.

⁷ Liv. 7.19, 7.29, 9.20.

⁸ Liv. 5.38-44.

⁹ Oakley (1993), 17.

restricted mainly to familiar foes. This does not mean that warfare remained a stagnant and unchanging activity, only that the impetus to develop and adopt new and more efficient weaponry and tactics was not as great as it would become later in the century.

Livy, in a prelude to his narrative of the Samnite wars states, ‘from now on the wars described will be of greater importance. Our enemies were more powerful, and campaigns lasted longer and were mounted in remote areas.’¹⁰ As dramatic as Livy’s introduction implies this period of Roman history to be, it is still a valid observation. The wars fought during the second half of the fourth century did indeed involve grander alliances, and larger armies, moving greater distances than ever before. The Samnite wars would, at one point or another, come to involve nearly every people in Italy as allies to either the Romans or Samnites. The pan-Italic nature of these wars would have had tremendous implications for the development of warfare. The intensity of interaction between the various Italic peoples, with their distinct military traditions, exposed them to a greater range of influences and ideas. It is likely to have encouraged the modification and adoption of more efficient equipment and tactics, and acted as a catalyst in speeding up processes of development already in motion. By the end of the fourth century the scale of conflict in Italy had increased significantly. At Sentinum in 295, the Romans and their allies fielded an army of 40,000 men; their adversaries, the Samnites and Gauls, opposed them with 50,000. Never before had Italy witnessed so many troops involved in a single battle. This was aside from sizeable Roman forces operating against other Italic enemies in Etruria and Campania at the same time.¹¹ Henceforth, war in Italy would be a truly a pan-Italic undertaking. At Asculum in 279, for example, we find the Romans, with ‘Latins, Campanians, Sabines, Umbrians, Volscians, Marrucini, Paeligni, Frentani and other subjects’, facing the army of Pyrrhus, who was supported by Samnites, Lucanians, Bruttians and Italiote Greeks.¹² Intense and continuous interaction between the Italic peoples from the middle of the fourth century onwards cannot have been without impact on military practices. It is perhaps significant that the Roman manipular legion emerged from this dynamic period.

B. Roman adoption of the manipular legion

The Roman army of the early fourth century was equipped and fought as a hoplite force. By the end of the century, however, it was armed and equipped with javelins

¹⁰ Liv. 7.29.

¹¹ Liv. 10.27-29.

¹² Dion. Hal. 20.1.1-5.

and the *scutum*, and fought in a more flexible manner that was very different from the hoplite phalanx. Livy tells us that, ‘The Romans had previously used round shields but after they began to serve for pay, they changed from round to oblong shields; and their previous formation in phalanxes, like those of the Macedonian army, afterwards began to be battle-line formed in maniples...’¹³ Livy and Plutarch date the transformation of the phalanx into the manipular legion to the start of the fourth century, in conjunction with the reforms of Camillus after the defeat of the Romans by the Gauls at the Allia in 386.¹⁴ But the defeat at the Allia, although a devastating blow to Roman prestige and morale, was hardly an instructive lesson in tactics and weaponry. Livy claims that good fortune and generalship were deciding factors in favour of the Gauls. More importantly, the defeat at the Allia did not result from the superiority of Gallic weapons or tactics, but the loss of nerve among the Romans themselves, who broke ranks and fled before the ferocity of the Gallic charge.¹⁵

It is doubtful that the Romans would have abandoned the phalanx without having a reason to doubt its effectiveness, and without a model on which to base changes. This is especially so when the equipment and tactics adopted were fundamentally different from the ones used previously. It is more probable that the Romans copied manipular tactics from an enemy who had shown this formation to be more versatile and effective than the phalanx over a prolonged period of time. While it is true that certain items of Gallic equipment were adopted, such as the Montefortino helmet and mail armour, their fighting methods and tactics were not. It is important to realise that fighting methods are predicated on the manner in which the individual warrior engages in combat, and in a broader sense therefore on the way in which he is armed. Military or tactical systems pertain to the larger formation, which exploits that particular fighting method. For example, a Greek hoplite armed with thrusting spear and round shield employs a certain type of fighting method, and the phalanx formation is the tactical system which exploits this. Snodgrass notes, ‘a hoplite remained a hoplite provided that he had the necessary degree of protection and fought in a particular way; but this allowed for considerable local variations in the style of his various pieces of equipment, especially the helmet.’¹⁶ A certain degree of latitude could be expected in items of equipment which were not essentially representative of a particular fighting method. This is most prevalent in defensive equipment, such as helmets and armour, whose use, quality and style may vary considerably depending on wealth, status and other factors. Thus, the Montefortino

¹³ Liv. 8.8 (trans. B. Radice).

¹⁴ Liv. 4.59; Plut., *Cam.* 40.4.

¹⁵ Liv. 5.37-38.

¹⁶ Snodgrass (1967), 63.

helmet and mail armour could be incorporated into the Roman panoply without any fundamental change to the fighting methods and tactics practised.

The Roman manipular legion is unlikely to have emerged through a process of self-inspired changes, uninfluenced by the practices of the Italic peoples they fought with, or against. The clearest evidence that the Romans came to recognise the advantages of the manipular legion over the phalanx comes from the *Ineditum Vaticanum*, which states:

‘. . . the Samnite oblong shield was not part of our national equipment, nor did we have javelins, but fought with round shields and spears . . . But when we found ourselves at war with the Samnites, we armed ourselves with their oblong shields and javelins . . . and by copying foreign arms we became masters of those who thought so highly of themselves.’¹⁷

This statement concurs with Diodorus’ assertion that it was through the deliberate adoption of weapons and tactics, which were ‘imitated’ from the Samnites ‘who introduced the excellent models’, that the Roman legion emerged.¹⁸ The javelin, and early forms of *pila*, had been commonly used by the peoples of southern Italy since the fifth century, and we must assume that methods of fighting which exploited the advantages of these weapons were also practised.¹⁹ The Samnite wars seem the most likely period when this transition to a manipular formation would have occurred. If we are to trust Livy’s account, almost fifty years of continuous conflict took place, from the outbreak of the first Samnite war in 343 to the conclusion of the third war in 293. The intensity of interaction between the Romans and the south Italic peoples, who fought with javelins and *scutum*, would have allowed ample opportunity for the adoption and integration of new weapons and tactics. It should not be imagined that the Romans instituted manipular tactics all at once. The adoption of new weapons, equipment and tactical methods are rarely implemented wholesale. As Snodgrass comments on the Etruscan adoption of the Greek hoplite phalanx, ‘equipment and weapons were adopted by degrees, and that survivals from older military systems might co-exist.’²⁰ We see this most clearly in the Roman infantry of the third line, called the *triarii*, who still retained the thrusting spear associated with hoplites and fought in a close-ordered formation reminiscent of the phalanx.²¹

¹⁷ *Ineditum Vaticanum*: H. Von Arnim (1892), *Hermes* 27: 118; trans. T. Cornell (1995), *The Beginnings of Rome* (London), 170.

¹⁸ Diod. Sic. 23.2 (trans. F.R. Walton).

¹⁹ P. Connolly (1997), ‘*Pilum, gladius and pugio* in the late Republic’, *JRMES* 8: 44-46.

²⁰ Snodgrass (1967), 75.

²¹ Polyb. 6.23.

Most of the ancient sources on which we rely for this period were written several centuries after the events they describe, and must be used with caution.²² Livy, who is our primary source for the Samnite wars, admits when writing of this period:

‘It is not easy to choose between the facts or the authorities. The record has been falsified, I believe, by funeral eulogies and fictitious inscriptions on portrait busts, when families try to appropriate to themselves the tradition of exploits and titles of office by means of inventions calculated to deceive. This has undoubtedly led to confusion both in individual achievements and in public records of events. Nor is there extant any writer contemporary with those times to provide the firm basis of a reliable authority.’²³

Aside from the dubious nature of the ancient writers’ sources, we must also allow for the variance in their understanding and interest in military topics. The descriptions we have of fourth-century armies are frequently riddled with anachronisms, contradictions, and outright conjecture in many cases, if they are mentioned at all. Subsequently, the interpretations which are made from these texts are often problematic, and should not be viewed as definitive. It is only when we consider the literary sources in the light of archaeological evidence that a more coherent picture can be conceptualised.

II. Italian Military Equipment: identity and continuum examined

A. Italian military equipment and issues of identity

In the period which preceded Roman hegemony, Italic military equipment and fighting techniques were characterised by distinctive regional types and methods. This is clearly evident from the representational sources and the archaeological remains, recovered mainly from burials. A. Small found in his study on ‘The use of javelins in central and south Italy in the fourth century BC’ that, ‘there was a good deal of regional variation. The light specialist javelin seems to have been the preferred weapon in Apulia and the more mountainous parts of Lucania, whereas the heavy dual-purpose spear was favoured in western Lucania and Samnium.’²⁴ To a certain degree, differences in the types and styles of equipment were probably perpetuated by inter-Italic warfare. No activity is so representative of the ‘us’ versus ‘them’ mentality

²² Livy, Diodorus Siculus and the *Ineditum Vaticanum* are all sources from the first century.

²³ Liv. 8.40 (trans. B. Radice).

²⁴ A. Small (2000), ‘The use of javelins in central and south Italy in the 4th century BC’, in D. Ridgway, F.R. Serra Ridgway, M. Pearce, E. Herring, R. Whitehouse and J. Wilkins (eds.), *Ancient Italy in its Mediterranean Setting: studies in honour of Ellen Macnamara* (London), 231.

as warfare; dress and the accoutrements of war are excellent mediums through which group affiliations can be expressed and reinforced.

In an era of shifting alliances, however, between tribes, states and communities, we should not envision the wholesale discarding of equipment every time war threatened with a different group. This is a crude conceptualisation of a complex and problematic topic. Instead, we must be aware of, and sensitive to discrete differences which might be used to express identity, especially when looking at culturally similar groups. A clear example of this differentiation in southern Italy can be seen in the tunic patterns of warriors depicted on vases from Campania, Lucania and Apulia. In all three areas warriors are dressed in an identical type of short, belted tunic, but each of these shows distinct regional differences. The Campanians, for example, tended to favour broad horizontal decoration on their tunics; the Apulians, on the other hand, preferred vertical stripes, while the Lucanians show a mixture of designs.²⁵ Livy describes two divisions of the Samnite army in 310, attired respectively in tunics that were multi-coloured or of ‘dazzling white linen’.²⁶ The frequency with which bloody tunics suspended from spears appear as trophies, with patterns always differing from those worn by their bearers, on south Italian frescos and vases, seems to indicate that these could be recognised and attributed to either friends or enemies.²⁷ Unfortunately, there is currently no serious study of tunic patterns as depicted in representational sources.

Where culturally distinct groups were involved differences in military equipment could be more pronounced. Dionysius, tyrant of Syracuse in the early fourth century, was clearly aware of this, and sought to use the distinctiveness of military equipment to his own advantage. Diodorus states that he had,

‘gathered skilled workmen from Italy, Greece and Carthaginian territories . . . as for the armour, he distributed among them models of each kind, because he had gathered his mercenaries from many nations; for he was eager to have everyone of his soldiers armed with the weapons of his people, conceiving that by such armour they would, for this very reason, cause great consternation, and that in battle all of his soldiers would fight to best effect in armour to which they were accustomed.’²⁸

²⁵ Schneider-Herrmann (1996), 4-9.

²⁶ Liv. 9.40 (trans. B. Radice).

²⁷ Schneider-Herrmann (1996), 122; R. Benassai (2000), ‘La tomba dipinta Nolana Weege 30’, in *Studi sull’ Italia dei Sanniti* (Milan, Rome), 81.

²⁸ Diod. Sic. 14.41.3-5 (trans. F.R. Walton).

Figuring prominently among Dionysius's mercenaries were many Campanians and Samnites, 'who enjoyed a high reputation as bold and capable fighters'.²⁹ Here, Dionysius hoped to use the warlike reputations of his mercenaries to 'cause great consternation' amongst his enemies. This could only have been possible if the armour used was immediately recognisable as symbolic of the mercenaries' identities. The belief that foreign mercenaries would 'fight to best effect' with the accoutrements of their own people implies the use of distinctive tactics. But just how far could the way in which a warrior was armed and equipped be equated with an identity?

Demosthenes states that, in a painting of the battle of Marathon, the Plataean hoplites could be differentiated from the Athenians by their Boeotian helmets.³⁰ It seems that different types of helmet could sometimes be associated with certain peoples or regions. But another Athenian, Xenophon, in his treatise *On Horsemanship*, advocates the use of the Boeotian helmet for cavalymen because it afforded good all-round visibility.³¹ In this case the Boeotian helmet may also have been associated with social class, if Xenophon's advice was followed by Athenian cavalymen. It is evident that there are no clear-cut answers regarding equipment and identity. When considering the archaeological evidence, it is significant that most military equipment recovered from fifth- and fourth-century contexts in Italy comes from high status warrior burials. The predominance of certain types of equipment in an area might reflect elite tastes, as well as regional and ethnic affiliations.

The Apulo-Corinthian type was an Italian derivative of the Greek Corinthian helmet, which first appeared in the seventh century but fell out of use in Greece towards the end of the fifth century (fig. 1).³² The Corinthian helmet provided excellent protection by enclosing the entire head and face, with eyeholes separated by a nasal piece, but this design also impaired hearing and vision, and limited ventilation.³³ In the close-ordered ranks of the hoplite phalanx these deficiencies would not hinder fighting effectiveness, but in the more open-order formations used by many Italic peoples, hearing, sight, and ventilation were important considerations. With these issues in mind the Apulo-Corinthian emerged as a helmet worn on top of the head like a cap, often with cheek-pieces added. The eye-holes and nasal guard of the Corinthian helmet remained, but only as vestigial decoration.³⁴ There are a total of 36 known Apulo-Corinthian helmets dating between the middle of the fifth and the

²⁹ Diod. Sic. 13.80 (trans. F.R. Walton).

³⁰ Snodgrass (1967), 94; Demosth. LIX.94.

³¹ Xen. 12.3.

³² P. Connolly (1981), *Greece and Rome at War* (London), 61.

³³ Snodgrass (1967), 57-58.

³⁴ *Ibid.*, 94.

late fourth century and with a provenance more specific than ‘Italy’ or ‘southern Italy’ (map 1). 24 helmets have been found in the modern region of Puglia, and within this area concentrations occur, with five from Ruvo, four from near Taranto, and ten from sites in the vicinity of Melfi.³⁵ Paddock believes that Apulia was probably the area of origin for this type of helmet, and that they spread to other regions from here.

The *pilos* was a Greek helmet that first appeared in Italy during the fifth century, and remained in use well into the fourth century (fig. 2). This type of helmet was of a simple conical shape, in imitation of a felt hat of the same name. Thucydides mentions the Spartans wearing *piloi* at Sphacteria in 415, although it is not certain he is referring specifically to the helmet.³⁶ It is perhaps through Spartan influence that this helmet was introduced into Italy, via its old colony, Tarentum. Like the Apulo-Corinthian helmet it provided unobstructed vision and hearing. There are few provenanced *pilos* helmets, but the distribution of the six such examples overlaps with that of the Apulo-Corinthian type (map 2).³⁷ Indeed, these two types of helmet are found depicted together in Apulian red-figure vases.³⁸ The *pilos* helmet has also been found in Lucania, as an example from Paestum dated to the first half of the fourth century attests.³⁹ It is difficult to determine the significance of finding *pilos* and Apulo-Corinthian helmets in the same area. Changes in fashion, cost, tactical advantage, affiliations with certain communities and social groups, or merely choices between two optional forms of protection, could all play a part at one point or another.

The Samno-Attic helmet was another variant evolved from a Greek prototype (fig. 3). Most of these helmets date from the fifth to the third centuries and have been found mainly in Campania and Lucania. The Samno-Attic helmet was an open-faced, close-fitting helmet with hinged cheek-pieces. It is the most frequently depicted helmet on Campanian red-figure vases, and on frescos from Capua and Paestum.⁴⁰ Examples of the helmet are dated to 370 (Cumae), 360-340 (Paestum),⁴¹ 340-330 (Eboli),⁴² and, in a sanctuary deposit from Pietrabbondante, to before the end of the

³⁵ J. Paddock (1993), *The Bronze Italian Helmet: the development of the cassis from the last quarter of the sixth century BC to the third quarter of the first century AD*, Vols. I and II (unpublished PhD thesis, University College London), 86-88.

³⁶ Thucyd. 4.34.3.

³⁷ Paddock (1993), 368-69.

³⁸ A.D. Trendall (1982), *The Red-Figured Vases of Apulia* (Oxford), 345-48.

³⁹ *I Greci in Occidente: La Magna Grecia nelle collezioni del Museo Archeologico di Napoli* (1996) (Naples), 25.

⁴⁰ A. Pontrandolfo and A. Rouveret (1992). *Le tombe dipinte di Paestum*. (Modena); Schneider-Herrmann (1996), 39-44.

⁴¹ M. Cipriani and E. Longo (1996). *Paestum e I Lucani*. (Paestum), 155-158.

⁴² G. Pugliese Caratelli (1996), *The Western Greeks* (London), 648-49 no.264.

fourth century. Currently, there are 32 known examples of this helmet, 16 of which have a meaningful provenance (map 3).⁴³

The Montefortino helmet was first introduced into northern Italy by the Celts in the early fourth century (figs. 4, 5). The Etruscans were probably the first Italic people to adopt this type of helmet, and it soon spread southward. A tomb of an Etruscan warrior in Orvieto, dating from the first half of the fourth century, contained a round hoplite shield, greaves, muscled cuirass, and a Montefortino helmet.⁴⁴ The ‘tomb of the reliefs’ in Cerveteri shows items of military equipment carved out of the walls; amongst these are several Montefortino helmets and also a single Phrygian type.⁴⁵ A fresco of a cavalryman from Nola shows that the type was in use in Campania by the middle of the fourth century.⁴⁶ Other examples have been found as far south as Taranto, where two Montefortino helmets from the fourth century were recently uncovered (unpublished, in Taranto Museum). This evidence indicates that the Montefortino helmet was in circulation throughout Italy before the Roman conquest of the peninsula. There are at present 145 known examples of the Montefortino helmet, 52 of which are provenanced (map 4).⁴⁷ Some helmets of this variety have been found with triple-disc cheek-pieces, the design for which must have found inspiration in Italic cuirasses of the same shape.⁴⁸ Distribution patterns show that although there were regional preferences in helmets, there was much overlap, and that no one type predominated in Italy during the fourth century. To what extent these preferences can be attributed to a particular class, or political or ethnic entity is difficult to say, considering that our knowledge of the peoples who used them is extremely limited.

B. Image, reality, and connections between the Italic peoples

Unlike the peoples of fifth- and fourth-century southern Italy, the Romans did not bury their dead with weapons and armour. It is not until the second century that our first clear image of the Roman soldier appears, and also the first contemporary description of the Roman army. It is therefore useful to examine the evidence from this known point, and then see how this relates to earlier material. Bishop, in his study

⁴³ Paddock (1993), 400-08.

⁴⁴ E. Macnamara (1973), *Everyday Life of the Etruscans* (London), 134-35.

⁴⁵ H. Blanck and G. Proietti (1986), *La Tomba dei Rilievi di Cerveteri* (Rome), 47-48.

⁴⁶ S. De Caro (1983), ‘Una nuova tomba dipinte da Nola’, *RIASA* 1-3, VI-VII: 71-74.

⁴⁷ Paddock (1993), 482-84.

⁴⁸ P. Connolly (1986), ‘Notes on the development of breastplates in southern Italy’, in J. Swaddling (ed.), *Italian Iron-Age Objects in the British Museum* (London), 114.

Roman military equipment from the Punic wars to the fall of Rome, points out, ‘Compared to later periods, our knowledge of republican military equipment is sadly deficient. Lacking detailed archaeological evidence, we are driven to depend upon literary accounts of dubious merit, and occasional pieces of representational evidence.’⁴⁹ The sculptural reliefs of soldiers on the Aemilius Paullus monument of the second century, and the so-called altar of Domitius Ahenobarbus of the first, are the usual starting point for studies of the republican Roman army. These two monuments show the Roman soldier of the second and first centuries equipped with mail armour, the Montefortino type helmet, and the *scutum*.⁵⁰ The purpose of these sculptures was to honour the status and achievements of Roman officials, and they present an idealised view of what a legionary should look like. Considering the dearth of archaeological evidence from the second century, to what extent is this image a reality?

One of the most reliable accounts of the republican Roman army comes from Polybius, a soldier and an eyewitness to the military equipment and methods which he describes. When Polybius’ account is compared to the contemporary representational evidence from the Aemilius Paullus monument it is clear that there are discrepancies. Polybius states that most Roman ‘soldiers also wear a brass breast-plate a span square [c.24 cm sq], which is placed in front of the heart, and called a heart protector. This item completes the panoply, but those who are rated at a property qualification of above 10,000 *drachmae* wear instead a coat of mail armour.’⁵¹ The Aemilius Paullus monument, however, depicts all Roman soldiers wearing mail armour, the most expensive and optimal form of protection available. The more common breast-plates of the less affluent are not shown at all, and this is due in part to the function of these sculptures as propaganda monuments, with the desire to show the best-equipped version of the Roman soldier at that time. This image of uniformity, however, is artificial and masks a much more complex reality.

The breast-plates described by Polybius correspond to the dimensions and details of the rectangular anatomical cuirasses which have been found mainly in the coastal regions of Campania, Lucania and Apulia (fig. 6).⁵² This type of armour first appears in the middle of the fourth century, and is derived from the triple-disc type cuirass, which was developed in the central Apennine region (fig. 7). The triple-disc

⁴⁹ M. Bishop and J.C.N. Coulston (1993), *Roman Military Equipment from the Punic Wars to the Fall of Rome* (London), 48.

⁵⁰ M. Feugère (2002), *Weapons of the Romans* (Stroud, trans. D.G. Smith; French original, Paris 1993), 71-73.

⁵¹ Polyb. 6.24 (trans. I. Scott-Kilvert).

⁵² Connolly (1986), 117-18.

cuirass is named for the three discs, two upper and one lower, which form a triangular-shaped pectoral. The earliest examples have been recovered from the necropolis at Alfedena in the Abruzzo and are dated to the second half of the fifth century.⁵³ Both the triple-disc and rectangular cuirasses are harnesses, consisting of breast- and back-plate pectorals, held together by shoulder- and side-plates. At present, I have been able to locate a total of 38 triple-disc cuirasses in museums and private collections, 23 of which are provenanced (map 5). Only two of these cuirasses have been found outside southern Italy, at Vulci and Carthage, and all come from burials when the context is known. Although no actual examples have been found in Campania, the triple-disc cuirass is the most frequently depicted type of armour on red-figure vases, which points to its use in this region.

The appearance of the triple-disc cuirass in tombs and on representational sources from Campania, Lucania and Apulia at the end of the fifth and into the fourth century coincides with the conquest of these regions by Samnite peoples.⁵⁴ The design of Greek armour appears to have influenced the peoples who gained control of the Greek and Etruscan urban centres of Lucania and Campania into developing modified versions of their own equipment. The rectangular anatomical cuirass, for example, shares many stylistic and technical features with the Greek muscled cuirass.⁵⁵ The breast- and back-plates have stylised musculature, and the side-plates are often secured to the back-plate by hinges, rather than by the ring attachments typical of the triple-disc cuirass. A decorative feature common among rectangular cuirasses is the sheet-bronze wave pattern applied along the border of metal work, which is similar to the wave motif found on many red-figure vases. Currently, there are 19 examples of the rectangular cuirass in museums and private collections, ten of which are provenanced (map 6). Examples of this cuirass have been dated to 350 (Paestum), 340-330 (Eboli), and 330-320 (Laos).⁵⁶ These are also depicted on representational sources, such as the warrior's return fresco from Nola, dated to 330.⁵⁷ Despite the apparent influence of Greek armour, the rectangular cuirass retains the harness form of the earlier and more purely Italic triple-disc type.⁵⁸ The appearance of the rectangular anatomical cuirass, with its traditional Italic form and Greek-inspired features, shows a complex layering of identities and ideas.

⁵³ V. Cianfarani (1969), *Antiche Civiltà d'Abruzzo* (Rome), 46-47.

⁵⁴ Liv. 4.37; Diod. Sic. 12.76; Strabo 5.4.7.

⁵⁵ Snodgrass (1967), 128.

⁵⁶ Pontrandolfo and Rouveret (1992), 381; Pugliese Carratelli (1996), 648-49 no.264, 721 no.266.

⁵⁷ Benassai (2000), 78-81.

⁵⁸ Connolly (1986), 118; Snodgrass (1967), 128.

The Samnite Wars, fought largely in Campania and Lucania, were probably the period when these types of armour were introduced to the Romans. Sallust's comment that, 'our ancestors . . . were never too proud to take over a sound institution from another country. They borrowed most of their armour and weapons from the Samnites', seems to refer to this tradition.⁵⁹ There undoubtedly would be some differences between the breastplates of Polybius' account, and those recovered from tombs in southern Italy, considering that they are separated by a span of some 150 years. But what is clear from this evidence is that there was a connection, and a continuum of development, between Roman armour and the types being used by other Italic peoples.

In a military system in which soldiers were equipped and 'organised on the basis of property',⁶⁰ the use and quality of body armour was very much dependent on the wealth and status of the warrior.⁶¹ Polybius' statement that Roman soldiers above a property qualification of 10,000 *drachmae* were equipped with mail, instead of a brass breast-plate, illustrates the direct link between the wealth of the individual and the type of armour used.⁶² It is probable that among the poor or more remote allied communities, far fewer could afford the luxury of mail armour. Sallust, in his account of the Jugurthine war, describes 'a cohort of Paelignians equipped with light armour, which allowed them to march at a good pace and yet protected them as well as heavier armour would have done against the light missiles used by the enemy.'⁶³ The only lighter alternative to mail armour in an Italic context would have been the bronze pectoral armour, and this is probably what is implied.

III. Impact of Roman Hegemony

Reasons for the primacy of particular types of equipment

Archaeological evidence indicates that by the middle of the third century the Montefortino helmet had eclipsed all other types in use. We may hypothesise that the primacy of the Montefortino occurred for a number of reasons, and not simply that it was technically superior to other helmets available. The Samno-Attic type helmet, for example, was extremely well made from a single piece of bronze. It was an open-faced helmet that had a close-fitting bowl to protect the skull, and a neck-guard,

⁵⁹ Sall., *Cat.* 51.37-38 (trans. S.A. Handford).

⁶⁰ Liv. 1.43 (trans. B. Radice).

⁶¹ Bishop and Coulston (1993), 59-60.

⁶² Polyb. 6.24.

⁶³ Sallust, *Bell. Jug.* 105.2.

which sloped down and under the ears without covering them.⁶⁴ These features did not hinder the vision or hearing of the wearer, and the close fit provided much more cranial and neck protection than the *pilos*, Apulo-Corinthian or Montefortino types. It is also true that well-fitting helmets are less tiring to wear for prolonged periods of time, and are less likely to be knocked askew while running, riding or fighting.

Why, then, did the Montfortino come to be the most commonly used helmet when the Samno-Attic helmet had so many excellent qualities? One of the reasons must be that it was good enough to provide an acceptable amount of protection for the type of fighting it was being used in.⁶⁵ Another reason was that its simple bowl design was vastly easier to produce, and for this reason may have been much cheaper. These technical and economic advantages must have been increasingly apparent when we look at the growing scale and duration of wars being fought by the Romans and their allies. Other types of helmet may have been just too time consuming and costly to produce on the same scale. What seems to support this view is that by the second century Montefortino helmets had become much less refined than the earlier examples from the fourth and third centuries.⁶⁶ Paddock states that second- and first-century helmets ‘show considerable decline in the standards of manufacture and finishing, and exhibit all the signs of hurried or mass production.’⁶⁷ The fittings for cheek-pieces and chin-straps on these later helmets were made from scrap metal, and show no signs of trimming or tidying up. The appearance of Latin makers’ stamps in the second century, which are never found on earlier examples, implies an increase in the scale of production.⁶⁸ New methods of manufacture, such as spinning helmets on lathes in the first century, show a continued concern with mass production. The preparation required to set up a lathe, and then to prepare blank helmet forms for spinning, would only have been worthwhile if they were to be produced in large numbers.

Aside from being an effective piece of protective headgear, it must be borne in mind that the Montefortino helmet had been in use among many of the Italic peoples since the fourth-century. The very fact that this helmet was not Italic in origin may have added to its popularity in the aftermath of the Roman conquest. The Montefortino may have been considered a neutral form of helmet, which did not carry any ethnic or political overtones that could be associated with either the conquerors or the vanquished. As military activities became focused against enemies outside of Italy,

⁶⁴ Paddock (1993), 400-05.

⁶⁵ P. Connolly has stressed the protection that the Montefortino offered from overhead slashing weapons used by Gallic warriors (pers. comm.).

⁶⁶ Bishop and Coulston (1993), 60-61.

⁶⁷ Paddock (1993), 45.

⁶⁸ *Ibid.*, 45-46.

from the second half of the third century onwards, there may have been a need, or a trend, to associate certain types of equipment with all forces serving the Roman Republic, be they citizens or allies.

The eventual adoption of the *scutum* and *pilum* was the result of a slightly different impetus than that behind the choice of helmets and body armour. The *scutum* and *pilum* were the primary means by which a soldier inflicted damage and protected himself from it. This fighting method was representative of the tactical system employed by the manipular legion. Many Italic peoples from at least the seventh century had used the *scutum*, and variations of it. That it came to replace other types of heavy-infantry shield, such as the round hoplite shield, which was used by the Greeks, Etruscans and Romans, was due in part to the increasing use of javelins and *pila*, especially in southern Italy.⁶⁹ Warriors carrying the *scutum* were capable of protecting themselves from missile fire and engaging in hand-to-hand combat. The *scutum* was a shield capable of resisting the ‘cutting strokes of swords . . . and the heavy impact of stones, pikes and weighty missiles in general’.⁷⁰

The round hoplite shield was made primarily for hand-to-hand combat, and was deficient in protecting a large area of the body from missile fire. Tactically, this resulted in the gradual abandonment of the hoplite phalanx, and the adoption, adaptation and progressive development of manipular tactics. This type of warfare was unlike any that had preceded it in Italy, or anywhere else in the Mediterranean. Manipular tactics combined the capability of a light infantryman to inflict damage from a distance with the capacity of a heavy infantryman to carry the fight to the enemy hand-to-hand. This gave the Roman army an operational flexibility that neither the Macedonian-, nor Greek-type phalanxes could ever hope to attain, and a tactical cohesiveness that more open forms of fighting could not resist. The Punic wars, and the successive conflicts of the second century, provided further impetus for the continued consolidation of equipment and tactics, as well as many modifications and refinements. In time, the origins of this Italic panoply and method of fighting would come to be identified with the political leader of Italy, Rome.

IV. Conclusion

The homogenisation of military equipment in Italy was a complex and fluid process driven by a number of interrelated factors. The inter-Italic wars of the fourth century

⁶⁹ Small (2000), 232.

⁷⁰ Polyb. 6.23 (trans.I. Scott-Kilvert).

fostered a dynamic and progressive environment for the development and adoption of new military equipment and tactics. A direct result of this interaction was the Roman adoption of the manipular legion. The establishment of Roman hegemony in the third century ended the continuous cycle of wars that permeated Italy, and focused military activities against external enemies. New ways of expressing ‘us’ and ‘them’ undoubtedly took shape, but this did not result in the immediate or complete elimination of other types of equipment. Individual wealth was still an important factor in determining how a warrior was equipped, and more remote regions were probably slow to change. But increasingly, regional variation in military equipment gave way to a more homogeneous panoply in Italy. We may speculate that as the scale, duration and intensity of conflicts increased so did the need for effective, yet economical forms of protection. In this way the Roman conquest accelerated and consolidated a process of technical and tactical evolution that was already developing at different rates throughout Italy.

The purpose of this paper has been to offer a new perspective on an aspect of the Roman army which has long been ignored or misunderstood. There is a definite need to look for, and examine, the antecedents to, and the connections between the equipment of the Italic peoples, who fought for and against the Romans. The continuum of change that resulted in the homogenisation of military equipment by the middle of the third century, should be viewed as a process of interaction, adoption and development in conjunction with other Italian peoples, and not assumed to be simply a consequence of Romanisation.

Acknowledgements

I would like to thank Peter Connolly for taking the time from a very tight schedule to read a draft of this paper. His observations and suggestions, as always, based on the practical, were of great help.



Fig. 1. Apulo-Corinthian helmet with incised decoration from southern Italy, formerly part of the Axel Guttman collection. fifth/fourth century BC.



Fig. 2. Pilos helmet with neck guard and cheek pieces from southern Italy, Nicholson museum. Svdnev. inv.82.29. fourth century



Fig. 3. Samno-Attic helmet from tomb 2, Gaudio necropolis. Paestum. inv.4801. 360-



Fig. 4. Montefortino helmet with triple-disc cheek pieces of unknown provenance, formerly part of the Axel Guttmann collection, fourth century BC.



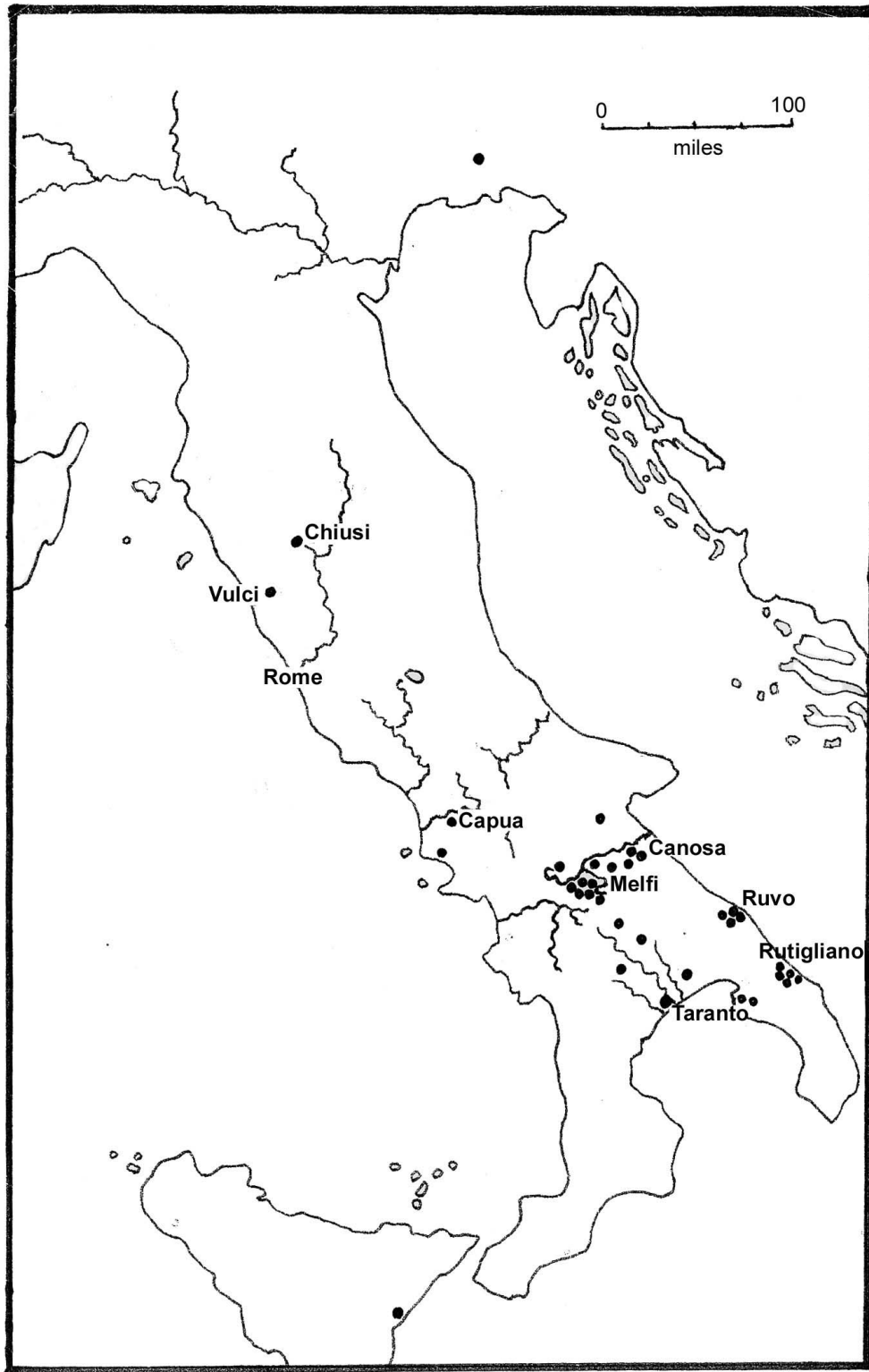
Fig. 5. A variant of the Montefortino helmet recently found near Taranto, Taranto museum (no inv. number), fourth century BC.



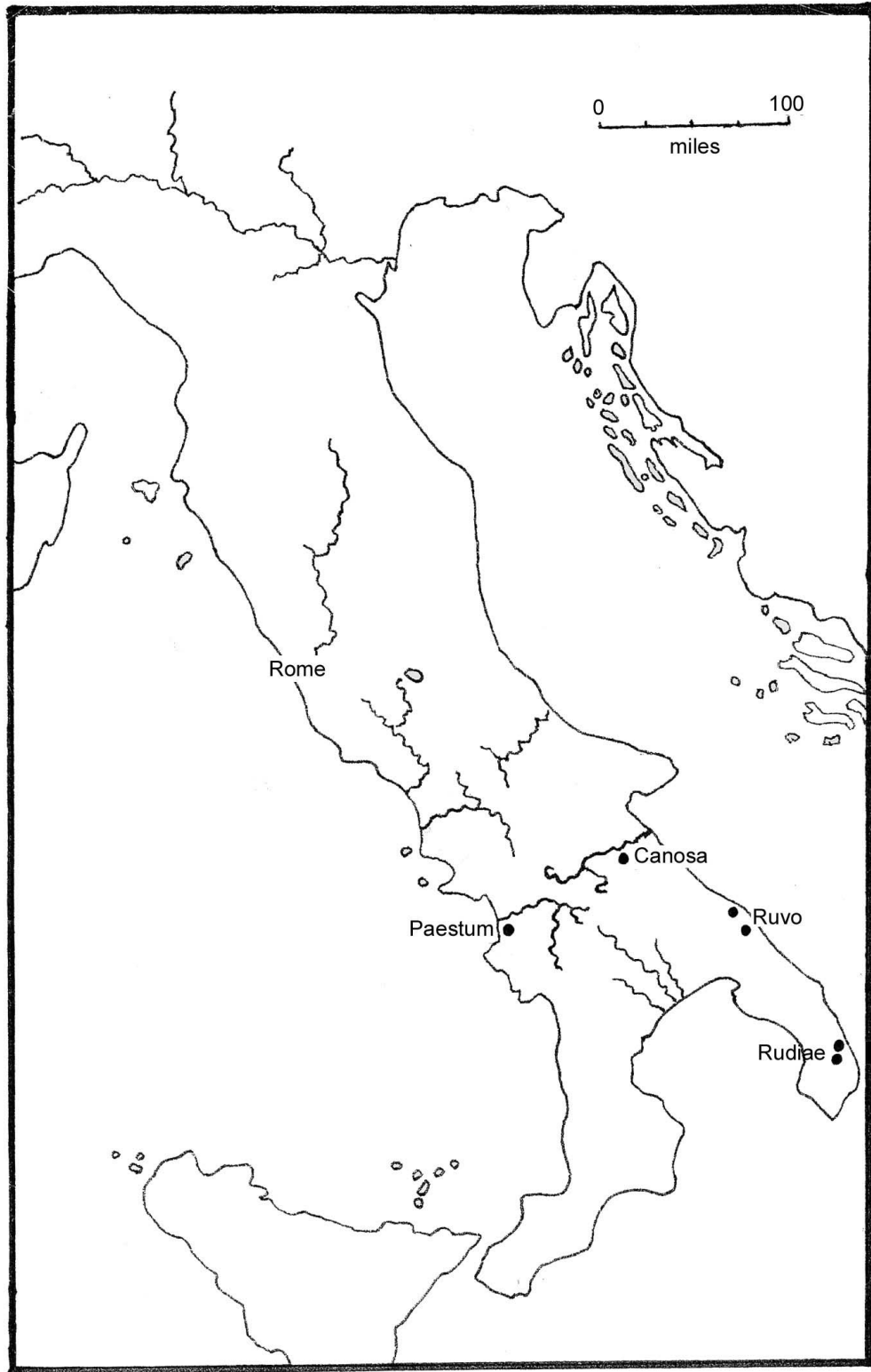
Fig. 6. Rectangular anatomical cuirass from southern Italy, Shefton museum, Newcastle, inv.565. fourth century BC.



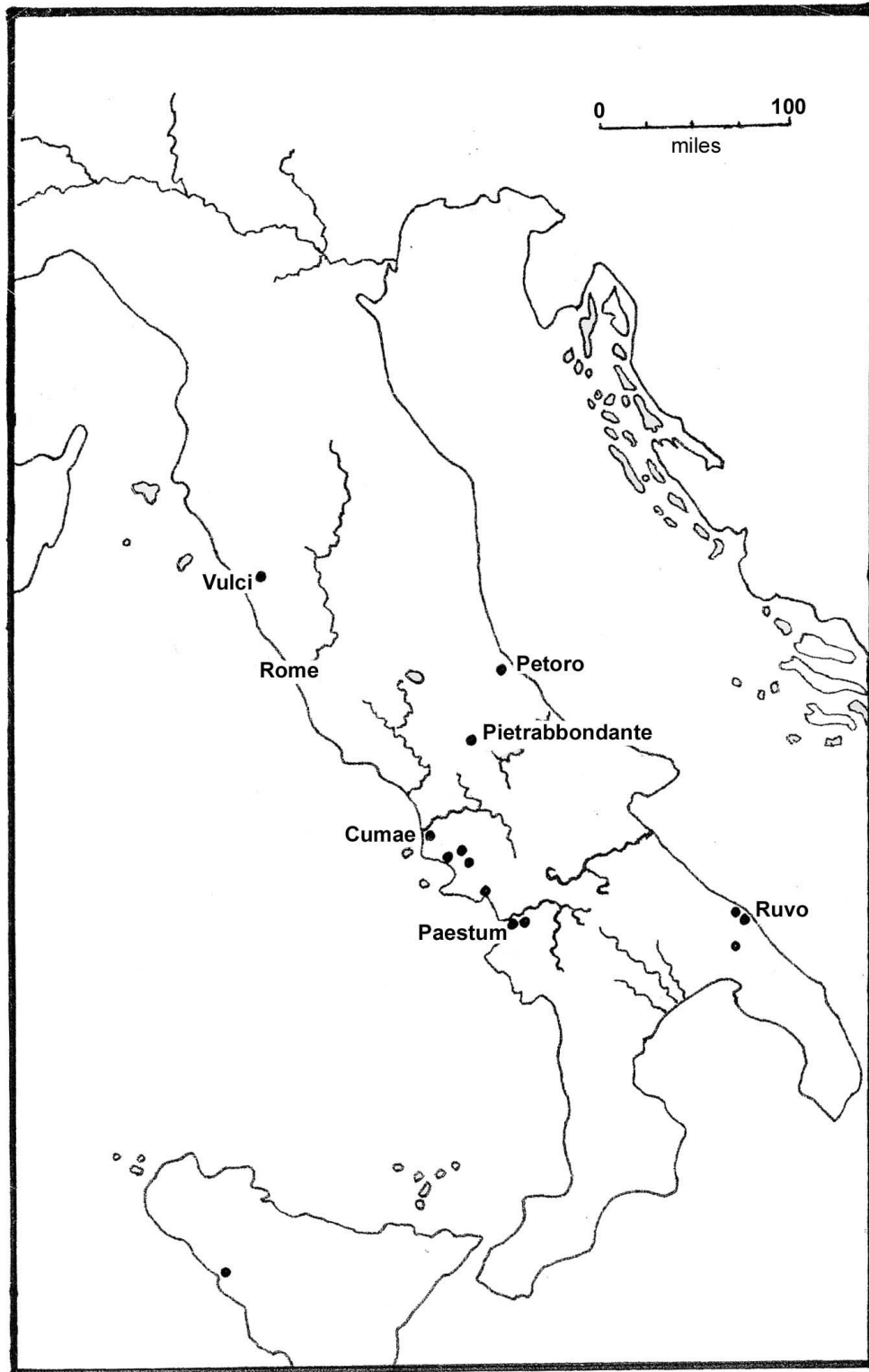
Fig.7. Triple-disc cuirass from tomb 136 Gaudio necropolis, Paestum, inv.103957, 420-400 BC.



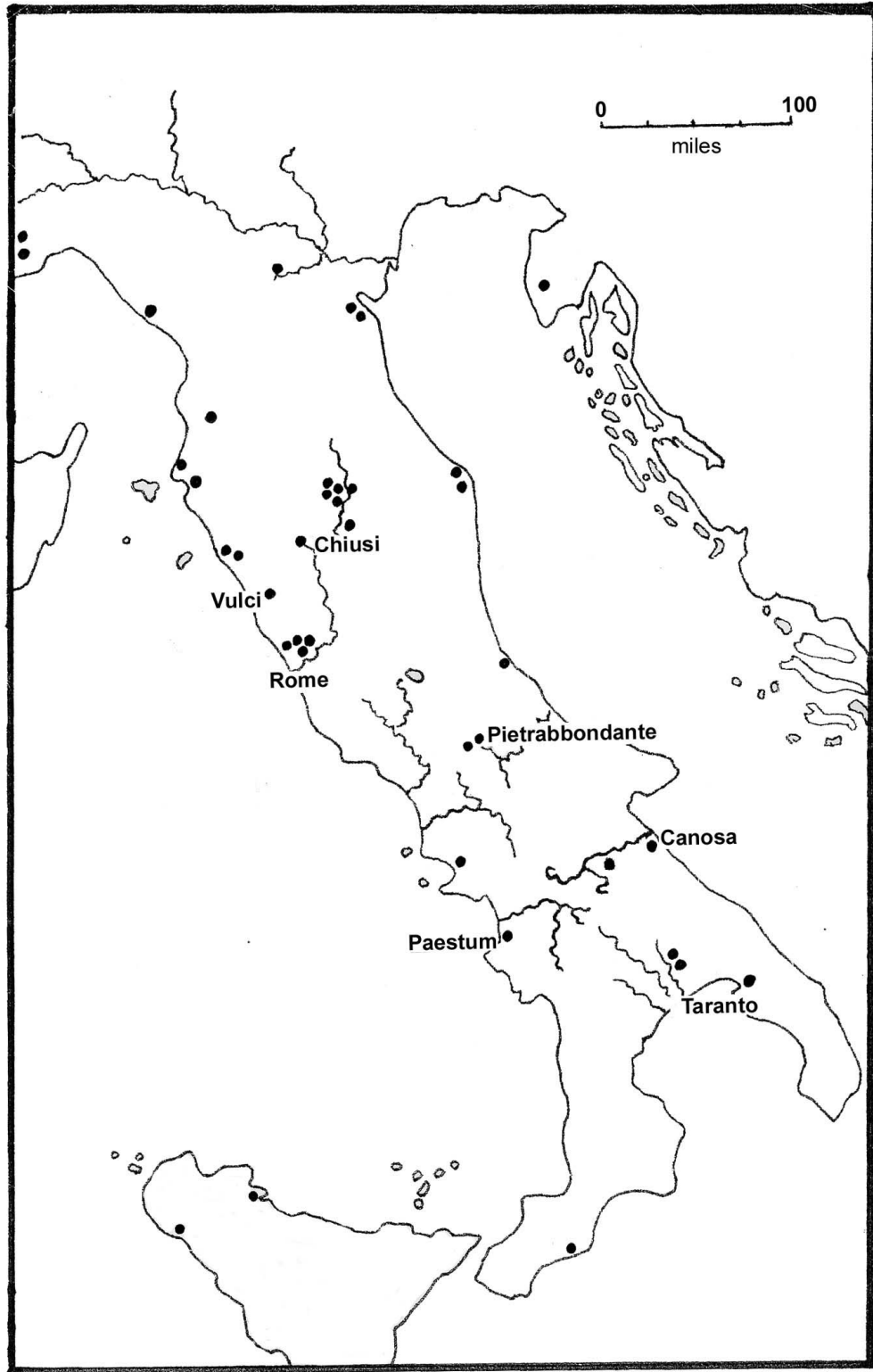
Map 1. Distribution of Apulo-Corinthian helmets (after Paddock 1993: 89).



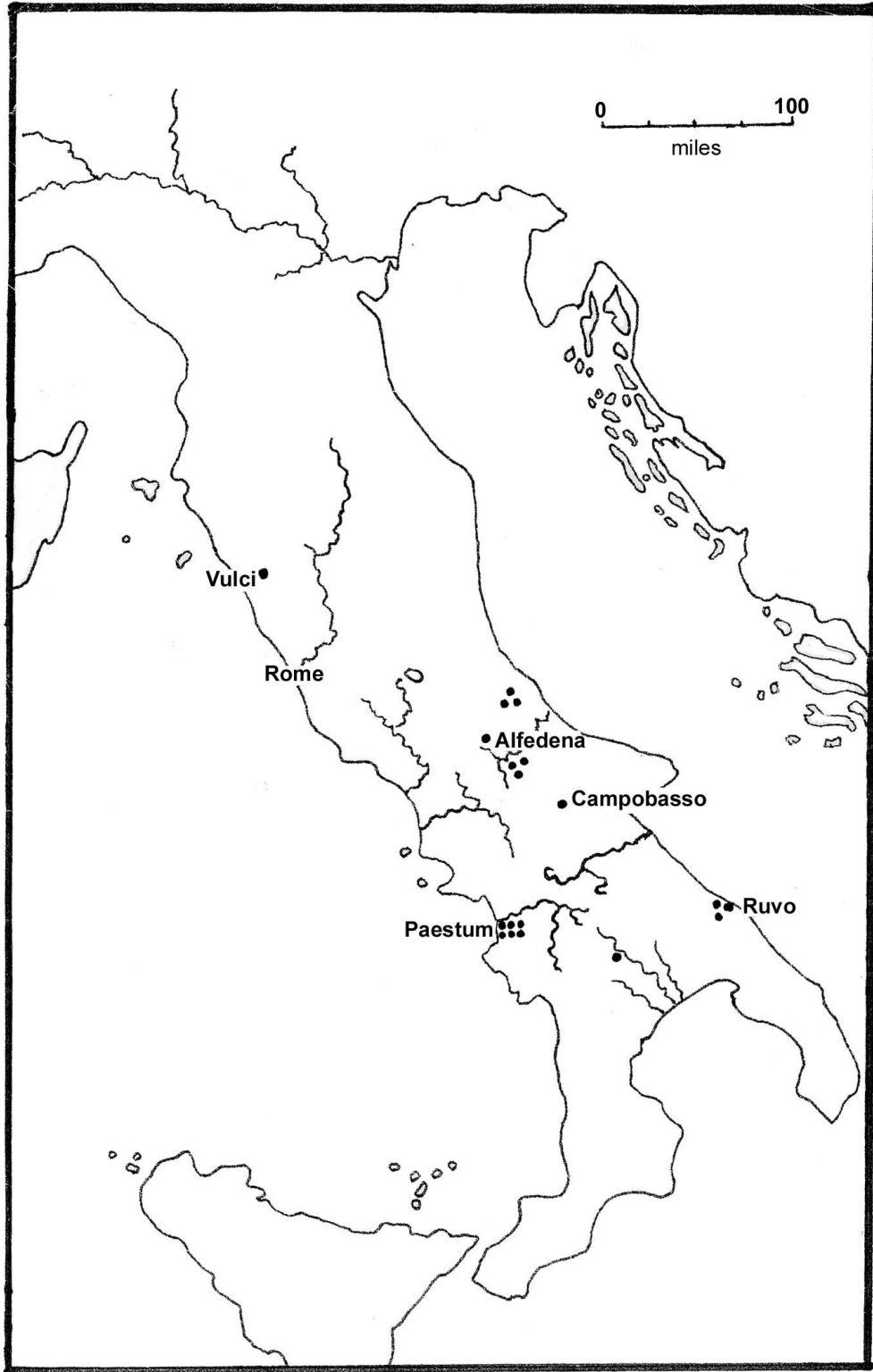
Map 2. Distribution of *pilos* helmets (after Paddock 1993: 370).



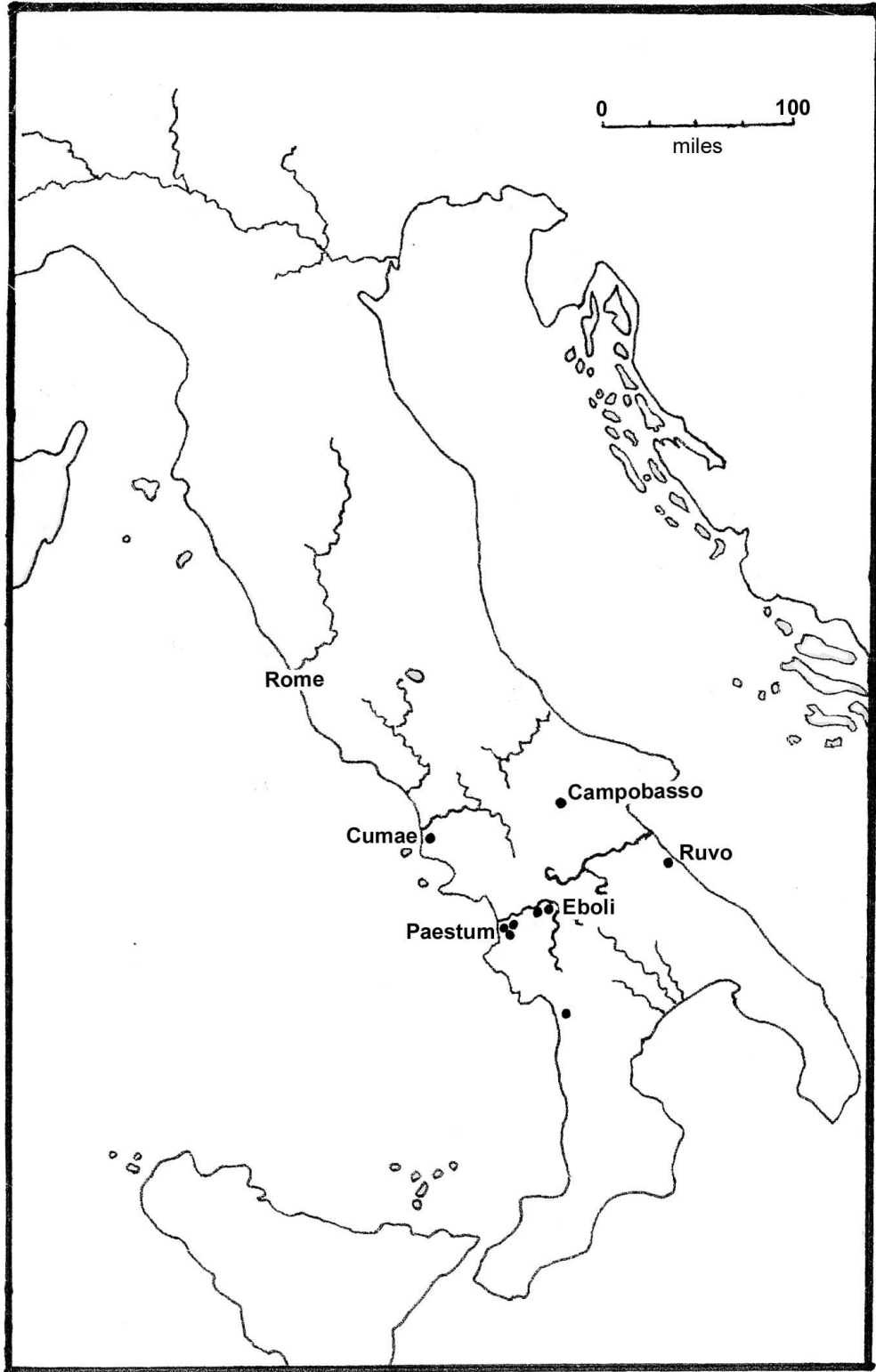
Map 3. Distribution of Samno-Attic helmets (after Paddock 1993: 407).



Map 4. Distribution of Montefortino helmets (after Paddock 1993: 485).



Map 5. Distribution of triple-disc cuirasses.



Map 6. Distribution of rectangular anatomical cuirasses.