



THE CAMBRIDGE HISTORY OF GREEK AND ROMAN WARFARE

Volume I: Greece, the Hellenistic World and the Rise of Rome

EDITED BY PHILIP SABIN, HANS VAN WEES AND MICHAEL WHITBY



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Warfare was the single biggest preoccupation of historians in antiquity. In recent decades fresh textual interpretations, numerous new archaeological discoveries and a much broader analytical focus emphasizing social, economic, political and cultural approaches have transformed our understanding of ancient warfare. Volume 1 of this two-volume *History* reflects these developments and provides a systematic account, written by a distinguished cast of contributors, of the various themes underlying the warfare of the Greek world from the archaic to the Hellenistic period and of early and middle Republican Rome. For each broad period developments in troop-types, equipment, strategy and tactics are discussed. These are placed in the broader context of developments in international relations and the relationship of warfare to both the state and wider society. Numerous illustrations, a glossary and chronology, and information about the ancient authors mentioned supplement the text. This will become the primary reference work for specialists and non-specialists alike.

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VOLUME I

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EDITORS' PREFACE

Warfare was the single biggest preoccupation of historians in antiquity, but modern academic interest in the subject has revived only in the last few decades. The narrowly focused studies of war written before the First World War by Delbrück, Kromayer, Veith and others have now been superseded by a much wider spectrum of work, ranging from the individual soldier's experience of battle to the place of ancient warfare within wider social, economic, political and cultural structures. Partly as a result of this broader focus, and partly through richer textual analysis and a flood of new archaeological discoveries, our understanding of ancient warfare has been transformed.

With the exception of popular survey works, however, there is no comprehensive overview of this burgeoning field of study. The *Cambridge History of Greek and Roman Warfare* aims to fill this gap: its two volumes survey the advances made since the 1970s in all aspects of research on ancient warfare, and provide an opportunity for a distinguished group of experts in the field to take the subject further still by presenting an array of new ideas and suggesting many new directions. Our aim in this work is not to provide a narrative account of the countless wars which took place across a period spanning fifteen centuries – such accounts are readily available from any number of other sources, not least the *Cambridge Ancient History* – but to offer a thematic analysis of the main aspects of warfare in the ancient world.

Three important introductory chapters set the scene: the first puts the present volumes in their historiographical context and explains further the rationale for their publication; the other two address the nature of evidence and the problems of its interpretation, two issues which are fundamental to a new and better understanding of ancient warfare. The bulk of the volumes is divided into four chronologically ordered parts, each covering a span of three or four centuries. These chronological divisions serve to draw attention to the broad changes which occurred in warfare and the societies in which this warfare was practised and pursued. Detailed chronological tables at the end of each volume also help readers to place the discussion in its proper historical frame. The first part of volume I covers the earliest

centuries of Greek society, which generated our most famous accounts of ancient warfare, Homer's *Iliad* and *Odyssey*, as well as the first 'proper' historical accounts of conflicts, with Thucydides' record of the Peloponnesian War often regarded as the acme of ancient historiography. In the second part, early Rome and the Hellenistic world are dealt with in parallel, a rather unusual combination designed to stimulate a fresh analytical perspective and to overcome the common tendency to keep the Greek and Roman worlds in entirely separate compartments. The first part of volume II bridges one of the great political transitions of the ancient world, that from the Roman Republic to the Principate of Augustus and his successors, with the intention of highlighting continuing issues and recurrent themes. The final part deals with the later Empire, a period long seen through the prism of 'Decline and Fall' but one in which most scholars now identify a robust and protracted defence of imperial interests in a world which was experiencing profound changes, internally through the adoption of Christianity and externally through the arrival of the Huns.

Within each chronological part, the sub-divisions are thematic and reflect the key aspects of ancient warfare identified in modern historiography: (1) the role of war and peace in international relations; (2) the nature, composition and status of different kinds of armed forces; (3) the practicalities and ethics of the conduct of wars and campaigns; (4) the nature and experience of combat in pitched battles and sieges; (5) the political and economic dimensions of war; and (6) the social and cultural dimensions of war. The same sub-divisions are applied in each of the four parts, so as to enable readers to make comparisons and to pursue particular themes throughout antiquity. (All dates in volume I are BC unless indicated.)

'War is terrible', said Polybius, 'but not so terrible that we should put up with *anything* to avoid it' (4.31.3). These volumes examine both the forms taken by the terror of war in the ancient world and the forces which all too often made it seem necessary to resort to violence at the cost of giving up 'the thing which we all pray that the gods may give us . . . the only incontestable blessing among the so-called good things in life – I mean peace' (4.74.3).

Phil Sabin

Hans van Wees

Michael Whitby

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'The map which appears here in the printed edition has been removed for ease of use and now appears as an additional resource on the chapter overview page'.



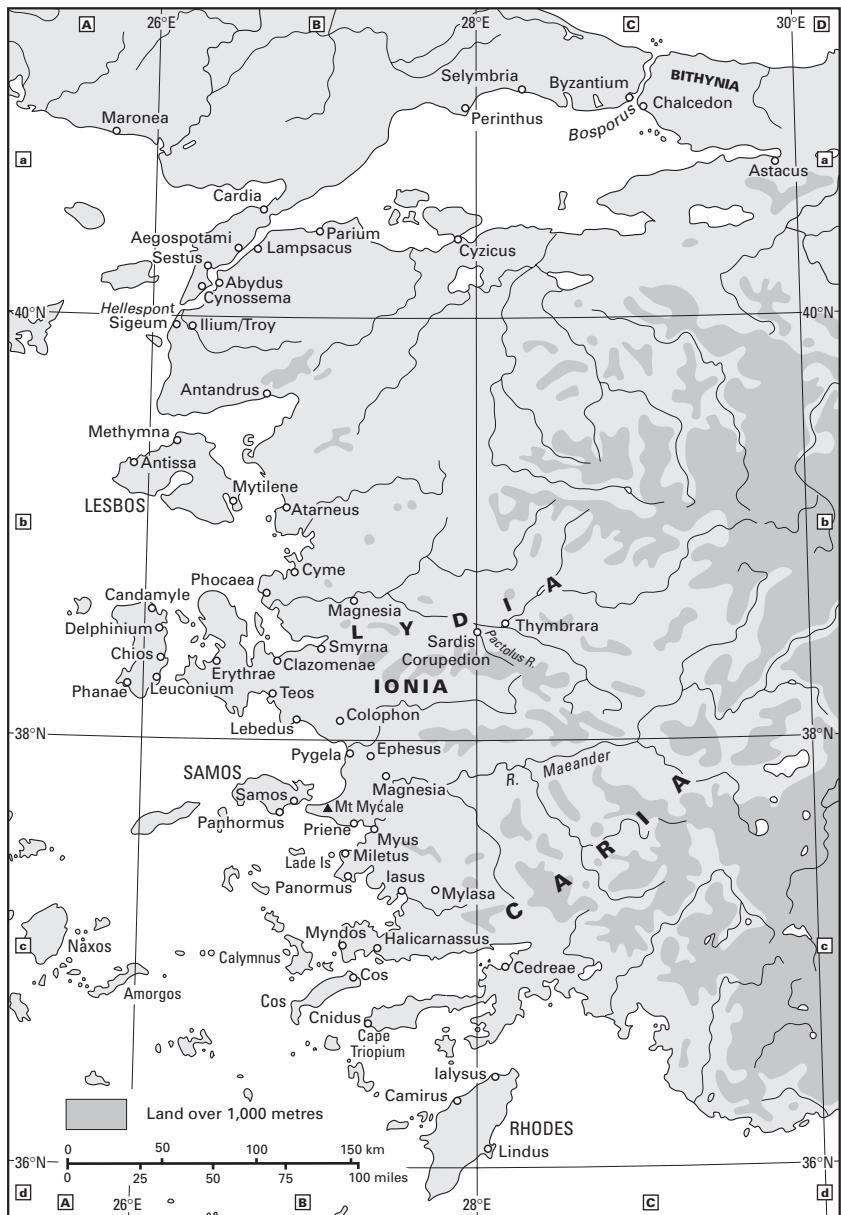
Map 2 The eastern Mediterranean

'The map which appears here in the printed edition has been removed for ease of use and now appears as an additional resource on the chapter overview page'.

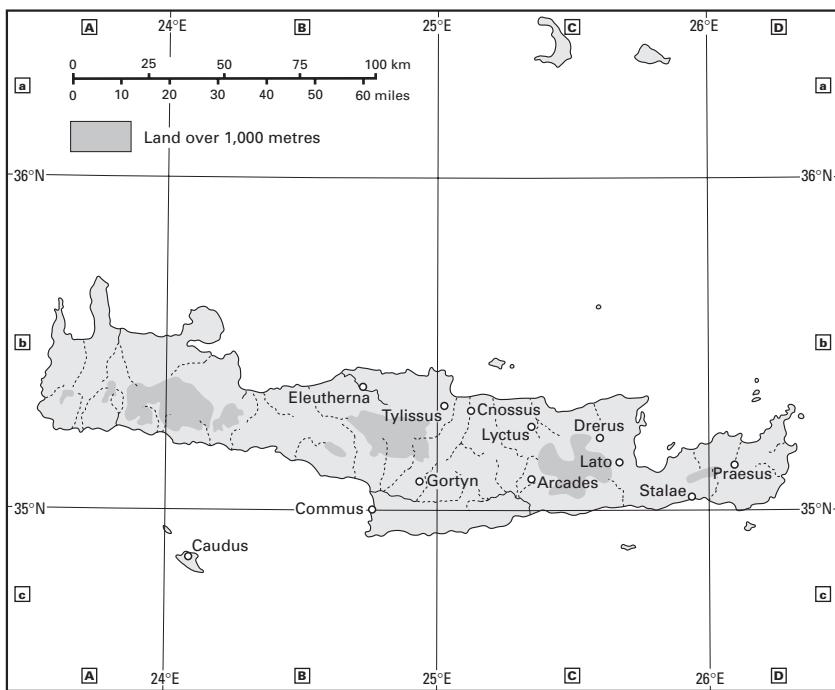


Map 4 Greece





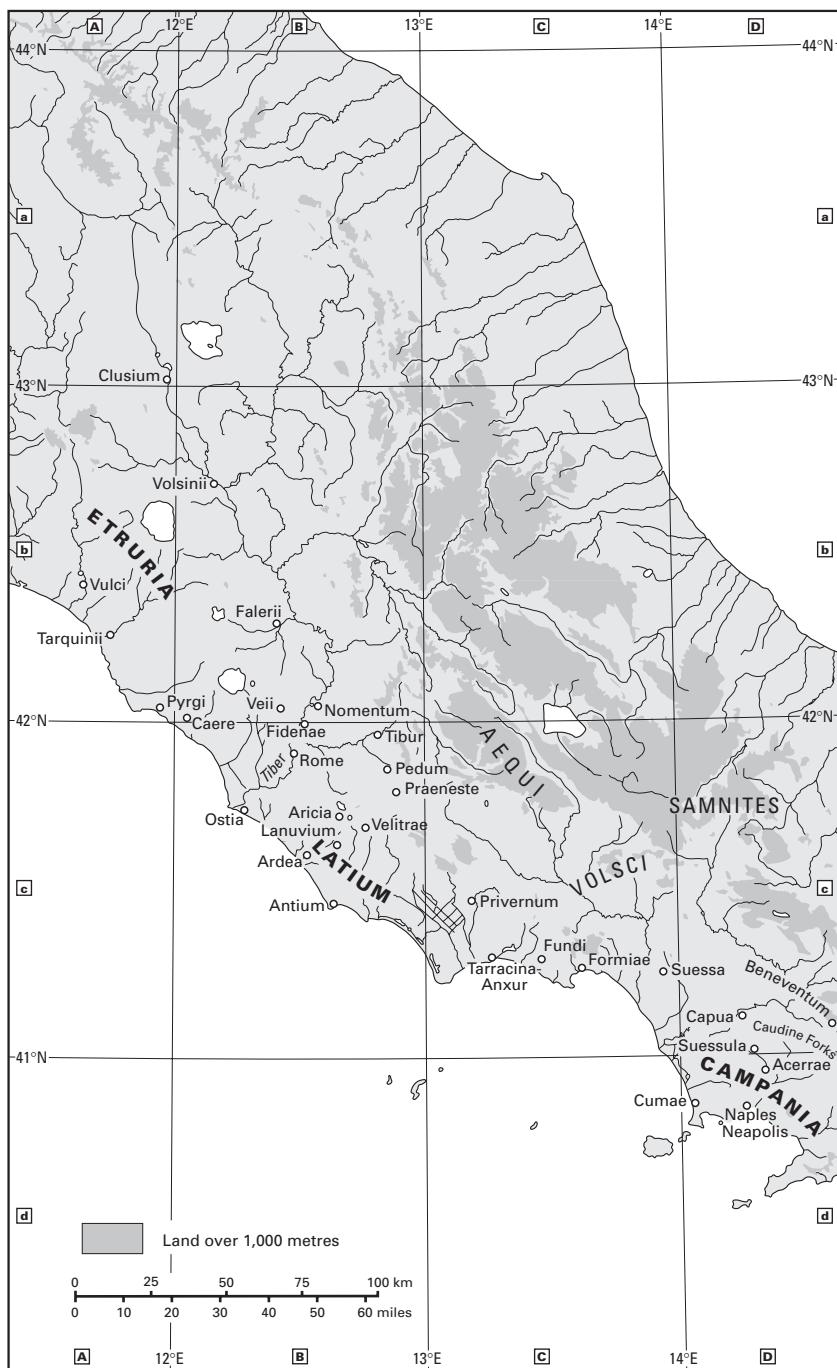
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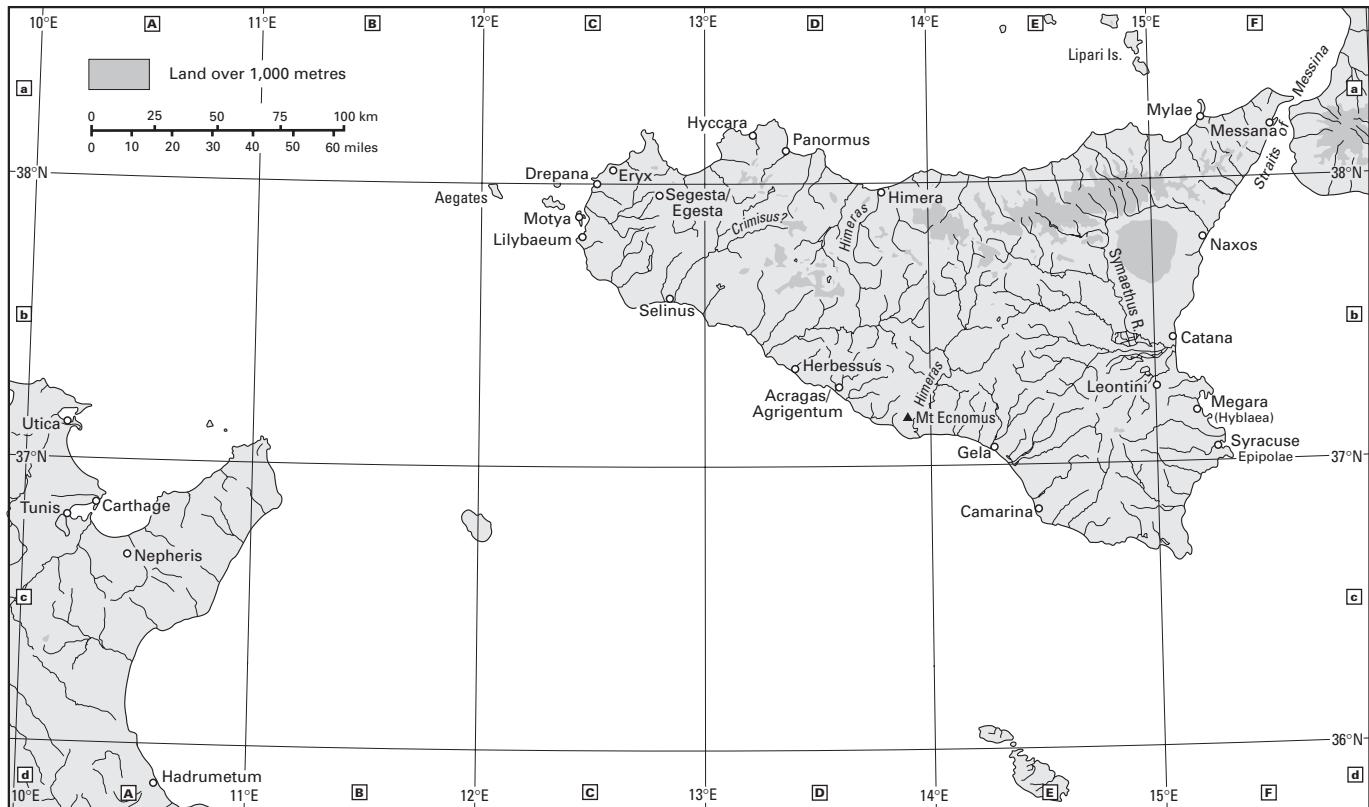
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Map 9 Central Italy



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INTRODUCTION: THE HISTORIOGRAPHY OF ANCIENT WARFARE

CHAPTER 1

THE MODERN HISTORIOGRAPHY OF ANCIENT WARFARE

VICTOR DAVIS HANSON

Western military scholarship has a long and distinguished history, beginning with the classical Greeks themselves. Originally fourth-century BC essays such as Xenophon's *Cavalry Commander* or Aeneas Tacticus' *On the Defence of Fortified Positions* were probably intended as pragmatic guides for commanders in the field. These works were not – as was often true of contemporary military writing in the non-Western tradition – integrated within larger religious or philosophical concerns. Nor were they subject to political censorship by the state. The popularity of such treatises apparently hinged on the degree to which they met real needs and were found useful by generals and military planners of the city-state.

By Hellenistic and Roman times formal contemplation about war-making became more academic and theoretical, both in the scientific realm (Heron and Philo on the construction of war-catapults) and on matters tactical (Posidonius and Asclepiodotus concerning the Macedonian phalanx) – in addition to becoming simply antiquarian, such as the collections of stratagems by Frontinus and Polyaenus. Most Roman handbooks are lost, but Vegetius' *Epitoma Rei Militaris*, written sometime around AD 400, survives and provides some idea of the level of practical detail and standardization with which such manuals sought to provide Roman officials.

A number of excellent texts, translations and commentaries of nearly all these ancient military theorists has now appeared to replace earlier and often inexact editions. The recent interest in such work is not merely the result of the continual advance of classical scholarship, but rather reflects a renewed appreciation for the value of these observers as empiricists rather than dry pedants. Often even the more abstract writers such as Asclepiodotus and Onasander contain invaluable information on a variety of both narrow and quite broad topics from the nomenclature of ancient drill to consideration of what properly should constitute reasonable causes of war.¹

¹ Aeneas Tacticus: the reliable work of the Illinois Greek Club (1923) and Köchly and Rüstow (1853–5) has now been expanded, and in some cases replaced, by Whitehead (1990); Polyaenus: Krentz and Wheeler (1994); Arrian: Devoto (1993); Aelian: Devine (1989); Vegetius: Milner (1993). Marsden (1969), (1971) on the mechanical writers remains invaluable. For the *Notitia Dignitatum*, a late Roman

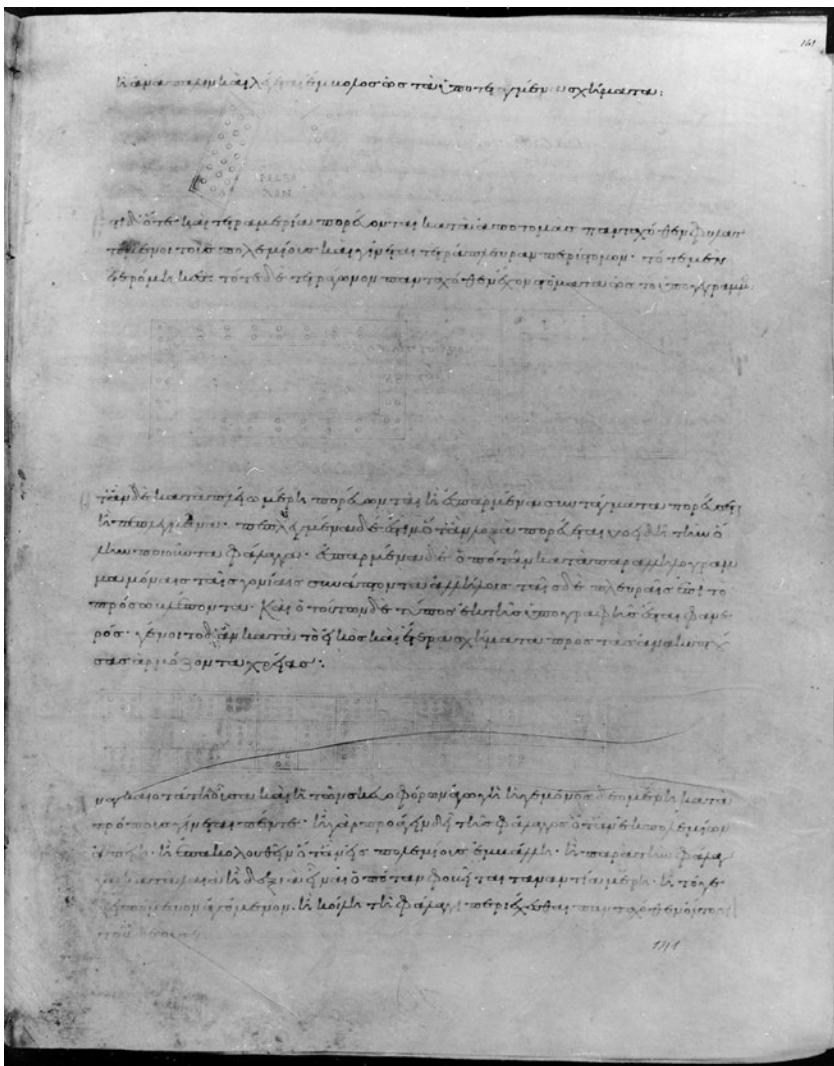


Figure 1.1 Page from a tenth-century Byzantine copy of Asclepiodotus' *Art of Tactics*, with drawings of 'chequerboard' and other formations.

Although Greek philosophers accepted both the ubiquity and inevitability of state conflict, no single analytical or philosophical monograph on the nature of warfare exists in either Greek or Latin literature. The lamentable absence of such systematic ancient discussions in part may explain the

treatise that outlines the structure of civilian and military governance of the Empire, see Goodburn and Bartholomew (1976); Hoffmann (1969–70).

similar dearth of a modern scholarly work on the place of war within Greek and Roman intellectual life at large – and hence the legacy of the classical military tradition in later Western culture. Although there exists an extensive scholarly bibliography about the conduct of war in the ancient world, very little work has been devoted to how classical warfare was seen abstractly by Greek and Roman thinkers themselves.²

Military scholarship about ancient warfare continued in both applied and theoretical approaches through the Middle Ages (the works on Roman military and civic foundations by Egidio Colonna and Christine Pisan), into the Renaissance (Machiavelli and Maurice of Nassau) and early Enlightenment (Henri de Rohan and Chevalier de Folard).³ However, by the nineteenth century the rise of industrial warfare and sophisticated military technology meant that rarely were practical lessons any longer to be learned from the catapults, pikes and swords of the ancient world. Research into the classical world at war evolved into an armchair historical rather than a didactic exercise. Europeans increasingly were more apt to elucidate ancient fighting from their own combat experience than to look back to the Greeks and Romans for contemporary guidance in killing one another.⁴

While nineteenth-century ancient military historians themselves were often officers, nevertheless the modern discipline was formally born under the aegis of the renaissance in classical scholarship of the times. The appearance by the mid-nineteenth century of comprehensive lexica of the classical languages, epigraphical compendia, scholarly journals and systematic archaeological exploration and publication meant that ancient fighting would not remain the domain of retired officers or interested autodidacts. Instead, serious thinking about classical war was properly to be explored in universities through reference to ancient Greek and Roman texts and inscriptions, and first-hand reconnaissance of the topography of Greece and Rome. Consequently, at the dawn of ancient military historiography a paradox arose: those in the university most qualified to analyse ancient literary evidence, inscriptions and archaeological data concerning classical warfare were by their very nature as academics often most removed from pragmatic knowledge of the battlefield.

² Dawson (1996), Kagan (1995), and Hanson (2001) emphasize the classical acceptance of the inevitability of conflict and the influence of such attitudes about warfare in later Western culture. Some preliminary work on perceptions of war in Greek literature are found in Arnould (1981) and Spiegel (1990).

³ The interest in classical warfare shown by later European theorists is discussed in Dawson (1996) 169–91; Garlan (1975) 15–21; Earle (1971) 3–25, 260–86.

⁴ On occasion, however, nineteenth-century generals claimed to have benefited from classical military doctrine, especially the tactics of envelopment such as Hannibal's plan at Cannae. See Kerséz (1980); von Schlieffen (1931); and in general Ardant du Picq (1987).



Figure 1.2 Illustrations from the pamphlet *Mars his Field*, first printed by Roger Daniell in 1595, showing drill positions for pikemen equipped with shield and spear, a type of infantry recently introduced under the influence of ancient military treatises.

At first, however, a gifted generation of Germans bridged the wide divide between philology and the traditional prerequisites of military pragmatism. True, it is easy now to find fault with the rigidity and narrowness of the *Handbücher* of Delbrück, Droysen, Köchly and Rüstow, and Kromayer and Veith, or the articles under the traditional rubrics such as *legio* or phalanx in the multi-volume *Real-Encyclopädie der klassischen Altertumswissenschaft*.⁵ Most of these authors were exclusively aristocratic in outlook. They were also occasionally overtly militaristic and nationalistic, viewing ancient war either as a timeless tactical or strategic science of the ages, or simply an extension of classical politics and diplomacy with little reference to social and economic realities of the Greeks and Romans. Despite the inclusion of the formal academic discipline of classical military history in the university, the feeling still persisted in Germany that to write about ancient warfare, scholars should have some real experience with contemporary command and be sensitive to the interplay between conflict and politics. That spirit is perhaps best epitomized in the career of Hans Delbrück, the author of a multi-volume history of Western warfare, who was at various times an officer in the Franco-Prussian War of 1870, member of the German Reichstag, tutor to the German royal family and historian at the University of Berlin.

This first generation of military historians is owed a great deal of credit, inasmuch as their practical work never abandoned the philological basis for military history – the Greek and Latin terms for military formations and operations were established; the key classical passages identified and collated, and the main battles of Greek and Roman history reconstructed through a combination of topography and philology. But even more importantly these mostly German scholars also brought a utilitarian awareness of how armies drilled and functioned in the field – essential in understanding the close-ordered formations of the phalanx and legion. English historians, of course, have long been bothered by Delbrück's ironclad method of *Sachkritik* – critiquing military operations as recorded in ancient accounts on the basis of perceived scientific plausibility – which often degenerated into rejecting descriptions in Herodotus or Caesar through wooden comparisons with the experience and practice of the contemporary German army. In addition, the aftermath of the First and Second World Wars only accentuated the vast differences between German and British and American approaches to writing about ancient armies, and perhaps led to a general neglect in the English-speaking world of many Prussian-authored books and articles on ancient tactics and drill.

⁵ Delbrück (1975); Droysen (1889); Köchly and Rustow (1852); Kromayer and Veith (1928); Lammert (1938); Ritterling (1925). Cf. the remarks of Craig (1971) 282: ‘The military historian has generally been a kind of misfit, regarded with suspicion by both his professional colleagues and by the military men whose activities he seeks to portray.’

Nevertheless, Delbrück first enshrined the vital concept that military historians must assess ancient figures concerning army size, casualties and expenditures within scientific, geographical and demographic parameters – Herodotus' numbers for Xerxes' invasion are as exaggerated as Caesar's boasts of the gargantuan size of enemy Helvetian migrations in Gaul. In some sense, all later pragmatic work in areas as diverse as logistics, ship design or agricultural devastation follow in Delbrück's spirit of subjecting ancient battle accounts to consideration of what men and their tools are capable of in the physical world, to what he called 'the reality of the thing'.⁶

If there is less use of *Sachkritik* in present studies of the ancient world at war, it is not so much attributable to the excesses of Delbrück's method – albeit both real and documented – as to the dearth of first-hand experience on the part of classicists with relevant army life and the changing nature of war itself. Modern scholars have been just as ready as Delbrück to question the accuracy of ancient descriptions, but rarely have they been able to draw on any reservoir of similar practical military expertise. After the First World War most European armies were without horses, abandoned edged weapons and relied less on drilling and marching – and so for the first time in a 2,500-year Western military tradition contemporary soldiers were radically different forces from phalangites and legionaries of the classical past. In matters of equipment and tactics the combatants of the Second World War or Vietnam, then, had little in common with Alexander's phalangites.

In one instance at least, the blinkered Germanic interpretation of classical military history as the nexus of war and politics has endured and its legacy is still felt today. The monumental work of W. K. Pritchett – in many ways the pre-eminent ancient Greek military historian of the twentieth century – and other standard texts on classical armies by F. E. Adcock, J. K. Anderson, R. Davies, L. Keppie, J. Lazenby, R. E. Smith, G. R. Watson and G. Webster follow in this hallowed tradition of identifying key vocabulary, reviewing recruitment and equipment with attention to archaeological finds, reconstructing tactical and strategic practices from ancient texts and then interpreting war largely as an affair of the state. In none of these fine surveys is there any expressed need to identify the purpose of ancient military history. The authors instead assume that war always was – and is – integral to European society, and thus serves as one of the touchstones for understanding Greek and Roman civilization in general.⁷

⁶ See, e.g., the reliance on practical considerations concerning logistics: Adams (1976); Engels (1978); Roth (1999); agriculture and warfare: Hanson (1998), (1999c); shipbuilding: Morrison and Coates (1996).

⁷ See Pritchett (1971–1991), (1994a). Cf. the general surveys of Adcock (1957); Anderson (1970); Davies (1989); Keppie (1984); Lazenby (1978), (1985), (1993), (1996); Parker (1971); Smith (1958); Watson (1983); Webster (1985). It is sometimes forgotten that Grundy (1948) presents an invaluable cultural and geographical analysis of classical Greek warfare. Knowledge from both Pritchett and Grundy is incorporated into contemporary scholarship far more than is formally cited.

None of these introductory studies could be dismissed as nineteenth-century relics confined to mere tactics and strategy, despite their unquestioning adherence to the philological basis of classical scholarship and their Clausewitzian assumption that war was primarily an affair of states to keep or acquire political power. Despite the claims of social science and more recent theoretical interpretations, there is no reason to think such traditional positivist approaches to classical military history will decline. For now at least, questions as varied as the nature of the hoplite armour and the organization of the Roman legion are answerable only through close reliance on the hallowed triad of ancient texts, inscriptions and archaeological finds. Theory as of yet has not taught us how soldiers were armed, arrayed in battle or conducted themselves in combat. In that sense, traditionalists were only following the predilections of ancient historians like Thucydides, Xenophon, Polybius and Caesar who saw war first-hand and wrote of it largely in the context of politics and statecraft.

After the First World War a few French, English and American students of ancient warfare, perhaps under the influence of the new disciplines of anthropology, linguistics, folk studies and sociology, broadened considerably the scope of military enquiry – even though they were not always sure that they could offer concrete answers to the broader questions that they had raised. At first, the expansion of the field was topical, not one of method – more fields of enquiry rather than revolutionary approaches and interpretations. Historians simply looked to a wider canvas without employing newer ideas about the reliability of ancient evidence or necessarily even pursuing the logical cultural ramifications of their own research. For example, new books about Greek mercenary service in the 1930s broached social questions of the conditions under which professional armies expanded, but they did so only narrowly within the framework of philology: identifying and tracing the vocabulary of bought soldiers through literature and inscriptions rather than investigating the imbalance in wealth that prompted such mass enlistments in the first places, much less recovering the ‘mentality’ of a hired phalangite.⁸

By the same token the prior comprehensive work in military topography by Kromayer and Veith was followed in spirit by W. K. Pritchett who exhibited similar reverence for the authority of ancient texts, but surveyed the military landscape of Greece through much wider lenses of religion, economics and cultural life in his reconstructions of ancient battles and campaigns.⁹ Many of the subsequent works of military topography and archaeology reflect this widening interest in cultural and social questions. How were fortifications financed and at what general cost to society? What

⁸ Contrast, e.g., the recent work of Marinovich (1988) and McKechnie (1989), on mercenaries and outsiders that emphasize cultural issues, with the standard introductions by Parke (1933) and Griffith (1935).

⁹ Pritchett (1965–92), (1971–91); Kromayer and Veith (1903–31).

were the status and class of sailors who manned the fleet? Was the aristocracy enriched or ruined by wars? Yet such histories were still entirely empirical in their allegiance to the primacy of 'facts' drawn from excavation, epigraphy and literary texts, rarely questioning accepted traditions of conducting research.¹⁰

Changes in methods in addition to the expansion in the topics of enquiry, however, followed, most notably in France – reflecting a trust in contemporary anthropology and especially analyses from theories of structuralism that were in vogue by the 1960s. J.-P. Vernant, P. Vidal-Naquet, P. Ducrey and Y. Garlan were interested in ancient armies as tools of the state to kill enemies and occupy ground, less than as social institutions that reflected class tensions in the *polis* and Republic, or served as rites of passage for youths coming of age, or even relics of earlier and often pre-state tribal rituals.¹¹

Some of this continental influence upon English-speaking countries was apparent in the work of M. I. Finley and his students and admirers, who often wrote about classical warfare in terms of cult, ritual, psychology, gender, demography and cultural issues in general – with the assumption that ancient conflict was far more than the extension of politics by other means, if not a tragic aberration in its own right.¹² In that sense, by the 1970s the old species of military historian such as a Delbrück, Kromayer or Tarn was almost extinct, except for a few Roman military archaeologists.

Very few classicists at this time would have identified themselves exclusively as scholars of ancient warfare – or even have acknowledged that a discipline of 'military history' existed apart from anthropology and sociology. Less frequently did the terms of the past like 'art', 'practice' or 'science' find their way into titles connected with ancient warfare, inasmuch as classical scholarship was often uninterested in operations, battle narratives and reconstruction, and tactics and strategy.

Indeed, there was some question whether traditional military study of the ancient world would ever re-emerge with its emphasis on armies as

¹⁰ On the political and cultural aspects of fortifications, see, e.g., the representative work of Adam (1982); Lawrence (1979); Munn (1993); Ober (1985a); Winter (1971). Garlan (1974) is a model blend of archaeological, literary and practical information. For arms and armour, consult Bishop and Coulston (1993); Jarva (1995); Snodgrass (1964), (1967).

¹¹ See most prominently two collections from le Centre de Recherches Comparées sur les Sociétés Anciennes, Vernant (1968) and Brisson (1969b). Cf. also the economic studies of Garlan (1989), and Brulé and Oulhen (1997), in addition to those on religion by Lonis (1979), and sociology by Vidal-Naquet (1986).

¹² Finley (1981); and the respective collections on Greek and Roman warfare by Rich and Shipley (1993a), (1993b). Cf. too van Wees (2000b). On the disdain that military history can incur among humanists, see Oman (1969) 159: 'Both the medieval chronicler and the modern liberal historiographer had often no closer notion of the meaning of war than that it involves various horrors and is attended by a lamentable loss of life. Both classes strove to disguise their personal ignorance or dislike of military matters by deprecating their importance and significance in history.'

fighting units and the story of wars between sovereign states. Other reasons also contributed to this reluctance to embrace military history in the ancient sense as the formal business of killing between national armies. Given the hundreds of millions of soldiers and civilians who perished in the twentieth century – a frightful carnage in comparison with the less lethal war-making of the nineteenth – and a growing disgust with nationalism, it was understandable that traditional military historians in all fields were in retreat. Many worried that their view of war as statecraft and as an inherently natural human enterprise might suggest to some either empathy with nationalist leaders who had caused such upheaval, or that their academic interest in ancient warfare was tantamount to approval of settling differences by force. As trust in political, strategic and tactical narrative declined, confidence grew that expertise in anthropology and sociology possessed universal applicability and thus might offer answers to fields as distant and unappealing as ancient military history in ways the so-called ‘experts’ of war could not.

The new theoretical treatment of military history as sociology for the most part avoided the age-old stigma of militarism and soon became more than a narrowly academic enterprise. Structuralist and comparative methods eventually found their way into handbooks for a general readership that were also quite different from those of the past. For example, the intent of introductions by Y. Garlan and P. Ducrey was not to provide concrete answers to practical questions, but rather to raise controversies or unexplored issues.¹³ Many of these volumes are impractical for use as general reference tools; they rather unsystematically and without a clear chronology introduce questions of booty, the fate of the vanquished, and the role of ritual in framing conflict. But implicit in their work is the idea that war is important for what it can tell us about cultural tension, class strife, or deeply embedded psychological urges among humans: the Greeks and Romans in battle, then, share practices with people of every age, and cross-cultural comparisons with pre-state Zulu or Amazon tribes can at times provide as much elucidation of ancient conflict as Herodotus or Thucydides. The use of comparative anthropology and sociology were seen as valid as earlier references by positivists to nineteenth-century European armies of the industrial state.

¹³ Ducrey (1985); Garlan (1975); Harmand (1973). Cf. the more pragmatic and systematic approach of Bohec (1994). For the expressed aims of the French school, see Garlan (1975) 20: ‘In so far as historical research is now carried out at a much deeper level, liberated from the grip of positivist and “humanist” tendencies and opened to the influence of other human sciences, the total character of contemporary wars, whether foreign or civic, has helped us to discern that ancient war has a reality, a manner of being, a practice and a mode of behaviour that are as wide as society itself. We have rediscovered the function of war on the community level, with its institutions, its rites, its ideology, representing the reactions aroused in any given society by the natural, if not permanent threat of the foreigner.’

The later emergence of feminist, postmodernist and post-Marxist discussion of ancient warfare, with reliance on theory and explicit scepticism of ancient accounts of the major historians, were logical successors to the French school. The early results have recently appeared in anthologies in the English world devoted to the social experience of ancient warfare – especially the deleterious effects of Greek conflict upon women, slaves and foreigners. The challenge of such unorthodox approaches is to calibrate the importance of the ‘other’ in ancient armies, inasmuch as battle was ostensibly primarily the business of adult male citizens. Consequently, new interest in sieges, postbellum commemoration, mourning and burial, and the economic foundations of war-making received renewed attention, in efforts to emphasize how the entire resident population was involved in war. There arises a dilemma, however, inherent in the new social military history. Turning attention away from the battlefield to noncombatants and questions of class, gender and race is invaluable in expanding our general knowledge of ancient conflict, but at some point there must be some expressed interest in the fighting itself – discussion, in other words, of the act for which ritual, training and commemoration were all ultimately intended.¹⁴

The influence of such nontraditional methodologies that question ancient sources or that raise problems but do not attempt to provide concrete solutions can be problematic in another regard. Until the appearance of this present volume, there has never been a comprehensive successor to the reference handbook of Kromayer and Veith (*Heerwesen und Kriegsführung der Griechen und Römer*) in any modern language – perhaps because of the fragmentation of the discipline and the confusion about what properly constitutes ancient military history. The result is that scholars have had no encyclopedia of ancient warfare that includes both tactical and strategic questions as well as cultural issues in a chronological review from the early Iron Age to the end of the Roman Empire. Because of the absence of accessible reference works, military history of the ancient world, as in the case of ancient agriculture, in the last half century has never enjoyed the popularity of religion, mythology, architecture or art, fields replete with masterful scholarly guides. Yet one could make a convincing argument that fighting and farming served as the foundations of the classical civilizations.

¹⁴ For the role of slaves in classical warfare, see now Hunt (1998); Welwei (1974). Kern (1999) discusses the fate of noncombatants during sieges. See Shipley (1993) 23, for summation of the new approach to ancient military history: ‘The selection of war as the paramount activity can be regarded as an attempt to direct energy towards maintaining a particular social structure, in which citizen was dominated by aristocrat, non-citizen by citizen, female by male, and barbarian by Greek. It is only by understanding the interplay between these social categories, and the ideological use made of them, that Greek warfare can be understood.’

Other more recent causes have contributed to the relative decline in traditional ancient military history in the mid-twentieth century. With the end of the Second World War and the absence of universal conscription, an increasingly hostile attitude arose towards military affairs on Western university campuses during the era of the Cold War and third-world conflicts surrounding European decolonization. Rarely were ancient military historians any longer veterans of conflict or even military service *per se*. And those who wrote about war after 1970 were likely to be apologetic or at least careful to suggest a social or cultural rather than an overtly military interest in ancient fighting. Unlike their nineteenth-century German predecessors whose own experience led them to believe that ancient warfare was a natural occurrence, possessed of a science, and almost exclusively directed at furthering the political interest of the city-state or republic, almost no classical scholars had seen combat or even knew the rudiments of drill, and considered the entire business both odious and unnatural. This in part explained why military history increasingly became interdisciplinary and written by those isolated in the university; ancient war was seen less as an exercise – much less an art – of killing, and more as a social phenomenon. The irony was that in efforts to understand classical warfare as a very human experience beyond mere fighting, social historians became almost clinical in their neglect of the awful encounters on the battlefield between soldiers who did the actual fighting.

Nevertheless, despite wide differences in the manner of investigation of ancient warfare, it would be misleading to suggest that ancient military history has experienced any truly divisive schisms in ideology or methodology – at least in comparison with other disciplines such as literary criticism or archaeology. War, after all, is a relatively indisputable fact, not merely a social construct. It is hard to argue over the reality of corpses or to doubt the existence of excavated spear heads and body armour. There is no doubt that Herodotus, Thucydides, Xenophon and Polybius centred their narratives on conflict. Consequently, far more important than the employment of new methods in changing the direction of ancient military history were other major developments that had little to do with ideology.

First was the enormous increase in the archaeological record, particularly in the case of Roman military history. The continuing excavation during the half century of peace in postwar Europe of military camps, forts, walls and burials – especially in England and along the Rhine and Danube – has resulted in a marked reinterpretation of legionary daily life, imperial military architecture, and the very nature of frontier studies. The general effect of the new archaeological material has led to a renewed appreciation of the competence and diversity of the Roman army, certainly the degree to which legionaries were well supplied with provisions, medical care and writing materials. The sheer extent of the equipment and baggage that was

necessary to field a Roman legion is a world away from primitive warfare. Indeed, no army until the eighteenth century marched with such a rich supporting infrastructure. Archaeology at least seems to point to a better-fed, better-equipped and better-organized Roman soldier than once was believed.

Excavation of Roman sites will only accelerate with the end of the Cold War and the gradual inclusion of eastern Europe into the European Union, as universities receive increased budgets and operate in free environments. The on-going withdrawal of modern armies from historic European border defences and the demilitarization of the Rhine and Danube will invite new efforts to excavate ancient forts and walls. The challenge will be simply to publish in accessible formats the huge number of letters, diplomas, decorations, medical instruments, kitchen utensils and sanitary appurtenances, so that such information makes its way into standard histories of the Roman army.¹⁵

The growing amount of material unearthed and published each year also highlights the radical difference that is emerging between Greek and Roman military studies – perhaps not surprising if we remember that there is a millennium of history from the early Republic to the end of the Roman Empire, in a geographic area ranging from Scotland to the Middle East, and from the Rhine to the Sahara. Thousands of Roman archaeological sites are now published in over a dozen modern European languages. Hundreds of thousands of inscriptions and coins and a vast corpus of Greek and Latin literature of the Imperial period have still not been adequately surveyed, much less incorporated into general scholarly studies. To be candid, it is simply much more difficult to master in any comprehensive sense Roman rather than Greek military history; the latter's parameters of epigraphic and archaeological discovery are in a much more narrow geographical and chronological landscape, and classical Greek armies as a rule were generally less likely to leave behind substantial camps and garrisons.¹⁶

While there is always the chance that a spectacular find in Greece will alter traditional ideas about Hellenic warfare, there is far less assurance that any new Greek military sites will emerge. By the same token, it remains a general rule that the growing preponderance of evidence for Roman military

¹⁵ New archaeological work on the Roman army derives from finds as diverse as camps, equipment, graves, inscriptions and papyri. For a small sampling of recent work, see Anderson (1984); Bishop (1983); Fink (1971); Junkelmann (1994), (1997); Mann (1983); Maxfield (1981).

¹⁶ The expansion of the corpus of Greek vases and inscriptions continues, together with re-examination of previously unnoticed evidence that has allowed for new theories about early warfare of the *polis*. See, e.g., Ahlberg (1971); Büchholz (1977); Greenhalgh (1973). On rare occasions work on Greek warfare arises from fresh excavation; e.g., cf. McCredie (1966). And in the case of ancient cavalry, new interpretations have recently emerged often based on finds of both artefacts and re-examination of epigraphical evidence. For Greece, consult Bugh (1988); Spence (1993); Worley (1994); and for Rome, cf. Dixon and Southern (1992); Hyland (1993); Speidel (1994).

practice has made generalization about the Roman army over centuries and a vast landscape nearly impossible, whereas the relative dearth of Greek military finds and lacunae in our literary sources between 700–500 have invited sometimes unsubstantiated ideas about Hellenic military practice. The perils of narrow specialization that have characterized Roman military studies are as great as the wide and often unsubstantiated speculation that abounds about the classical Greek world at war.

Second, the completion and updating in the 1980s of the computerized *Thesaurus Linguae Graecae* ensured that the key vocabulary of Greek and occasionally Roman military protocols could be accessed both instantaneously and comprehensively. The increasing use of the *TLG* by military historians has had two profound effects on classical military scholarship: a number of old controversies – the use of slaves and mercenaries, the nature of hoplite battle, the role of plundering and booty – could be reopened as historians found previously overlooked philological evidence. For example, in a few minutes, every single occurrence in the entire corpus of Greek literature of any word such as ‘spear’ or mention of the general ‘Pelopidas’ could be accessed – sometimes in obscure and untranslated texts not readily known even to classicists. The ultimate ramifications of this new tool in revising past military history that relied on either incomplete and inexact concordances or had no such resources at all are still not known.

Danger looms, however, in such an open-ended invitation to word-gathering – if historians are not broadly trained enough to put their new information in service to larger ideas rather than allowing philological retrieval and analysis to be an end in itself. Some scholars equipped with new information about the use of ancient terminology tried to apply those results to larger issues at hand: not only were journal articles devoted to past controversies, but entire books have emerged based on the particular usage of just a few important items of vocabulary. In that sense the *Thesaurus* has had the unintended effect of returning military studies to its original nineteenth-century reliance on classical philology.¹⁷

A third development was a resurgence in studies of the the military forces of the Hellenistic world, brought about by a general reawakening among classicists of interest in the eastern Mediterranean between 323 and 31. In theory, the transitional nature of the Hellenistic era between city-state and republic, largely in an area outside both Greece and Rome, has traditionally meant that literary and historical studies concentrated more on classical times. In any case, the past scarcity of books devoted to Hellenistic warfare reflected larger trends prevalent in literary, archaeological and artistic

¹⁷ There is a number of philologically based studies that attempt to draw larger conclusions about tactics, finance, generalship and military culture from a systematic collation of a few key terms: e.g., Austin and Rankov (1995); Gabrielsen (1997); Hamel (1998a); Kallet-Marx (1993); Roisman (1993); Wheeler (1988d).

studies. However, in the 1970s and 1980s the multi-culturalism of the Hellenistic world invited obvious comparisons with the changing nature of contemporary Western societies. In addition, many scholars realized that truly novel insights about ancient literature and art were more likely found in areas less well-studied outside classical Greece and Rome. Disappearing too was the nineteenth-century sense of decadence that had prejudiced attitudes towards Hellenistic culture, as its art, literature and politics were reinvestigated on their own terms without an overt sense of either decline from the classical *polis* or mere transition to the republic.

Evidence of this re-examination about the nature of Hellenistic society is now beginning to be felt in ancient military historiography. Do the inscriptions and texts that attest to local wars between militias in hundreds of Greek city-states signify a continuity of practice from the classical world? Or are such regional battles simply the natural backwaters of conflict, not indicative of the enormous and largely mercenary national armies that were in service to autocrats and not subject to traditional civilian review – a clear departure, in other words, from the hoplite fighting before the battle of Chaeronea (338)? Was the spread of mercenaries a sign of a general economic collapse, once society became two-tiered, as a small élite lorded over a vast peasantry? Or were hired soldiers indicative of economic expansion and energy, as Greek adventurers flocked to Asia, Egypt and Italy to take advantage of new land, plentiful employment and easy money?

Recently, new books on Hellenistic armies, fleets, pay, finance and mercenary service have appeared at rapid rate. Most incorporate research found in journal articles and excavation reports, bolstered by the inclusion of some epigraphic material available in computerized retrieval formats and the on-going publication of new Hellenistic inscriptions, which appear in greater numbers than either archaic or classical stone documents.¹⁸ As of yet, however, this new material has not been synthesized into a comprehensive account of Hellenistic fighting. Any proposed handbook of Hellenistic warfare presents a daunting enterprise that would require philological acquaintance with a number of little-known texts, knowledge of thousands of mostly untranslated Greek inscriptions, and familiarity with archaeological sites throughout Asia and Egypt. In place of such an encyclopedic treatment of Hellenistic war, the completion of first-rate commentaries on Polybius and Arrian for the time being serves as the best guides to the nature and composition of the Hellenistic militaries.¹⁹

A fourth landmark in the evolution of ancient military history was the sudden interest in the actual conditions of war-making. Rarely does the

¹⁸ The accounts of various aspects of Hellenistic warfare by Bar-Kochva (1976); Launey (1949–50); and Tarn (1930) have now been supplemented by Billows (1990); Gabrielsen (1997); Hammond (1989c), (1993–7); Hatzopoulos (2001); McNicoll (1997); van't Dack (1988).

¹⁹ Bosworth (1980–95); Walbank (1957–79).

work of a single scholar outside classical studies prompt a new school of thought. But the publication of John Keegan's *The Face of Battle* in 1976 soon resulted in novel reinvestigations of Greek and Roman warfare from the perspective of 'what it was like' for the actual combatants.²⁰ For the first time, phalanxes and legions were not seen either as tactical units or social institutions alone, but rather as formations of young men asked to kill and die under the most wretched of circumstances.²¹

This new field of battle studies also had the effect of legitimizing military history as never before, as pragmatic discussion of the tools of war and the conditions of giving and receiving blows were not seen so much as a cruel science in service to the nation state, but as critical information in learning how average soldiers fought, were wounded and died. The moral dilemma inherent in ancient military scholarship now shifted somewhat, as those who talked of the real conditions of warfare were not seen as militarists in the spirit of the past German school, but rather as chroniclers of the lives of ordinary people who fought often for reasons other than political or economic aggrandizement. Empathy with, not glorification of, soldiers was thematic, as misery rather than glory characterized battle narratives of ancient armies.

The shift to battle history has also had a salutary effect of democratizing the sometimes narrow academic discipline of ancient military history. Investigations of the reality of ancient battle have prompted a number of non-academics to write about warfare, usually in the context of their own professional medical expertise, past military service, or other professional legal, artistic and government training. The effect has been more than just the inclusion of war-gaming or 'blood and guts' aficionados: some of the most popular recent studies of ancient military history have been written by those outside the university – in addition to a number of novels about ancient battles and armies that seek to capture general readers through graphic accounts of fighting and campaigning.²²

The ultimate contributions of this new direction in military history are under debate, but its unique moral claims suggest that historians of the past two decades who study war simply as social or cultural phenomena have an obligation to think of battle's concrete effects on hoplites and legionaries. In theory, social scientists can be every bit as detached as nineteenth-century tacticians when they write of war as something divorced from the battlefield.

²⁰ Keegan (1976); and cf. chapters on Greece and Rome in Keegan (1993).

²¹ See Goldsworthy (1996); Hanson (2000b); and the various articles in Hanson (1991b); Lloyd (1996a).

²² For work on ancient warfare by nonclassicists, see Gabriel and Metz (1991); Gabriel and Boose (1994); Montagu (2000); Shay (1994). For novels about the battle of Thermopylae and the march of the Ten Thousand, in which graphic accounts of battle are central, see Ford (2001) and Pressfield (2000).

In a more practical sense, the Keegan school of ancient military history has also spawned an entirely new genre of introductory texts for the general reader: richly illustrated and often replete with water-colour renditions that attempt to capture visually how ancient soldiers looked and fought.²³ The challenge for the next generation of battle historians is to ascertain whether such a concentration on the nature of fighting is sustainable within a comprehensive narrative history: can a full-length combat history of the Peloponnesian or Persian Wars, for example, be written that presents the major battles and campaigns through the eyes of those who did the fighting and killing while still doing justice to larger political and strategic issues? Do our ancient sources of warfare – mostly aristocratic writers who held privileged positions in government and the military – provide enough information about the rank-and-file in ancient combat to sustain a lengthy combat history?²⁴

Currently no particular school dominates classical military history. If any single approach seems more pre-eminent than others it is a general adherence to realism throughout many disciplines. Perhaps reflecting the scepticism of the present age, or more likely attuned to past omissions in military research and the renewed interests of the general public in ancient war, scholars now strive to ask practical questions whenever possible: Roman imperial frontiers are not mere static lines between civilization and barbarism, but more amorphous zones of cultural osmosis akin to modern borders with all the accompanying social and cultural paradoxes that arise.²⁵ Alexander the Great is judged not on what he professed or the size of the empire he conquered, but in terms of the millions of ordinary lives he altered.²⁶ Ancient navies are not mere tools of empire, but collections of often fragile wooden ships powered by hundreds of slaves and poor, under taxing if not dreadful conditions of service. A proper understanding of triremes is not found solely in re-examining traditional sources of evidence,

²³ Connolly (1981); Hackett (1989); Humble (1980); Warry (1980). Cf. also chapters on Greece and Rome in Parker (1995). There is a large number of richly illustrated short paperbacks in the introductory Osprey *Men at War* series on Greece and Rome by N. Sekunda; see, e.g., most prominently Sekunda (1998), (2000).

²⁴ John Keegan (1997–) has now edited a multi-volume series on the history of warfare, in which the face of battle is central. For the initial two volumes on Greece and Rome, see Goldsworthy (2000b); Hanson (1999e). For narrative history that includes emphasis on the conditions of battle, see Goldsworthy (2000a).

²⁵ Frontier studies deal with a variety of topics and methodologies, ranging from the question of the Empire's collapse to the nature of what constitutes 'aliens' and 'borders' – ancient and modern. Much of the controversy also surrounds methods of Roman protection, ranging from fortified lines to mobile defence in depth. Cf. Elton (1996a); Ferrill (1986); Isaac (1990); Luttwak (1976); Whittaker (1994); and the review of literature in Wheeler (1993). Specialized studies on border areas that incorporate recent archaeological material: Burnham and Johnson (1979); Fentress (1979); Holder (1982); Lieu (1991); Mitchell (1983); Webster (1982); Wells (1972).

²⁶ For a reassessment of Alexander, see Bosworth (1988a); traditional praise for his military exploits: Ashley (1998); Hammond (1981); Fuller (1960).

but in building a modern replica to traverse the Aegean.²⁷ The nature of Homeric warfare cannot be categorized as either mere myth or history, but becomes comprehensible only through knowledge about the conditions of oral poetry and epic delivery, in which in an era of nascent literacy oral bards sang to mostly aristocratic and reactionary audiences folk tales that evolved over centuries.²⁸

If any trend has hampered ancient war studies, it remains the problem of balance in assessing the relative importance of particular topics of investigation – indicative of the overspecialization that continues to characterize graduate training in classics and the general neglect by ancient military historians of comparative studies outside, and after, Greece and Rome. Often the parameters of present investigations simply reflect old controversies of the nineteenth century while fruitful new fields of enquiry are left unexplored. For example, there are dozens of new treatments of traditionally narrow topics such as the hoplite push or the battle of Marathon while we still have no comprehensive account of Epaminondas' unconquerable Boeotian army, much less a wider enquiry into the role of ancient political organization – oligarchy, democracy and autocracy – on military efficacy. Examination of ancient armour through excavation and vase-painting is vital, but the implications of recent archaeological surveys of the Italian and Greek countrysides have not been systematically woven into military history in relating how the size and quality of particular landscapes affected recruitment, logistics and the size of ancient armies.²⁹

Often the questions that the general public, novelists and film makers pose about classical warfare go unanswered, while a preponderance of published research remains unread by any outside the university and few within. While efforts have been made to provide some general reference work to meet obvious interest, more is probably needed – information about the relative quality of particular legions, the effect of Roman armies on the ancient countryside in peace and war, the ability of particular types of land to support local militias, demographic analysis of the effects of war casualties on communities for subsequent generations, and a systematic and comparative review of the battle efficacy of classical Greek armies (Athenian, Spartan, Theban, Argive and Corinthian).

There are also renewed opportunities for classicists to apply their unique expertise in the ancient world in the service of general military history, by

²⁷ For the reality of service on ancient warships, see Morrison and Coates (1996), (1987); Morrison, Coates, and Rankov (2000); Morrison and Williams (1968); Wallinga (1993).

²⁸ The complexities of Homeric warfare are discussed in the context of both eighth-century land warfare and the nature of oral poetry by Latacz (1977); van Wees (1992).

²⁹ There are foundations for interesting analyses of military manpower in a demographic context in Brunt (1971); Cartledge (1979); Cartledge (1987); Osborne (1987); Sallares (1991). A number of works have outlined the social and cultural contexts of Roman military service, e.g., Alston (1995); MacMullen (1963); Mann (1983).

providing comparative studies of ancient, medieval and Renaissance military foundations, tracing the legacy of classical Greek and Roman armies on later Western militaries, and appreciating the radical originality of classical protocols such as civilian control of military practices or contractual agreements of military recruitment. In some sense, classicists are the least visible among general military historians and yet through their training the best equipped to write general surveys of Western warfare.³⁰

The standard practice in ancient history in the last two decades has also been to understand the classical worlds in the general cultural context of the eastern Mediterranean.³¹ An approach through Mediterranean studies is understandable given the clear cross-fertilization that took place between southern Europe and Asia and Africa in matters religious, artistic and commercial – and past chauvinism concerning the European achievement. However, Greek and Roman armies proved themselves uniquely lethal when pitted against their neighbours to the north, south, and east, who nevertheless drew on much larger reservoirs of manpower, matériel and territory. Consequently there is some need for perspective – or at least a comparative study that seeks to account for this mystery of how and why classical militaries were so deadly when pitted against Xerxes, Darius III or the hosts of the Caesars' enemies in north-western Europe, Asia and Africa.

Classicists so far have not been prominent, in the past great tradition of Oman, Delbrück and Fuller, in writing about the evolution of Western military practice over some 2,500 years, which had its origin in classical times – much less in identifying protocols unique to the Greeks and Romans that gave their armies advantages not commensurate with the rather small population and territory of Greece and Italy. Over a hundred years ago Hans Delbrück believed that superior discipline and tactics alone accounted for the success of classical armies. In an age in which we have vastly more knowledge than did nineteenth-century military historians, it is worrisome that we are reluctant to pose, much less, answer such sweeping questions.

Despite occasional controversies concerning the methods and topics of investigating the ancient world at war, classical scholarship continues to ground the field firmly in the philological and bibliographical traditions of the last two centuries. In addition, narrative history is still in vogue, especially lengthy and sometimes multi-volume accounts of the major wars of Greece and Rome that are based closely on ancient historical accounts. Especially welcome in this regard are general studies of the once neglected

³⁰ For comparative studies that seek to place classical warfare in a larger chronological context, often to highlight and contrast later military problems and challenges, see McCann and Strauss (2001); Raflaub and Rosenstein (1999); Strauss and Ober (1990). Cf also Hanson (1999c).

³¹ Carman and Harding (1999); Drews (1993); Ferrill (1985).

area of Roman warfare in late antiquity.³² And in a narrower sense, at the close of the millennium, there has been a continued interest in providing new sourcebooks of primary evidence that describe ancient warfare, as well as updated bibliographical essays and annotated lists of books and articles in the major European languages.³³

At no time in the past have scholars of ancient military history had access to such wide-ranging research tools. A rare opportunity presently exists to publish reference works, general history and popular accounts on ancient war that draw on these specialized sources of information, reflecting the energy of the creators of the field without blind allegiance to a single method of enquiry of the past. In an era of the most sustained peace in Europe in several centuries, the study of Greek and Roman warfare is nevertheless enjoying a renaissance akin to the popularity that it once enjoyed toward the close of the nineteenth century – suggesting that so far the widely diverse approaches and methods of research have enhanced rather than diluted interest in the story of the classical world at war.

³² Classical narratives of the major wars: Hignett (1963); Kagan (1969), (1974), (1981); Lazenby (1978), (1993), (1996). For warfare in late antiquity, see, e.g., Austin (1979); Bachrach (1993); Elton (1996b); Matthews (1989).

³³ Two recent collections of translated primary texts concerning ancient warfare are Campbell (1994) on Rome, and Sage (1996) for Greece. The earlier collation of scholarly books and articles about Greek warfare by Lammert (1941), and the series of articles on Roman military bibliography by Blümlein (1925), (1928), (1935), (1941), have recently been continued by Lonis (1985) for subsequent scholarship on Greek warfare between 1968 and 1983. Ducrey (1997) more systematically attempts to update Lammert for Greek warfare between 1945 and 1996. See Hanson (1999d) for recent appraisals of books on both Greek and Roman warfare.

CHAPTER 2

WARFARE IN ANCIENT LITERATURE: THE PARADOX OF WAR*

SIMON HORNBLOWER

I. INTRODUCTION

Wars and fighting are very prominent in the literature of classical antiquity. That is notoriously true of Greek historians from Thucydides on. It is true of those early Greek poets who wrote about real events, like Simonides,¹ and of those many others who wrote about a mythical world but one realistically set. It is even true of a poet like Sappho for whom a troop of horse, an infantry battalion, and a fleet of ships are numbers two, three and four in a list of desirables in which number one is the love-object (fr. 16 LP); and L. H. Jeffery once pointed out that the names of the Spartan girls in Alcman's *Partheneion*, Astymeloisa and so on, stress that they are the 'daughters of a warrior aristocracy'.² But in neither Greek nor even Roman culture was war glorified or regarded as the natural state of affairs,³ though winners naturally 'glorified' one aspect of war – their own victories. I will argue that war, at least of the full-scale ritual *agonal* sort found in literature, was not so common a feature of actual life as is often thought;⁴ also that non-literary evidence attests a range of institutionalized ways of avoiding armed conflict, about which literary sources are nearly silent. So if this was the reality, why the literary prominence of crude male war? This is the paradox of the sub-title of the present chapter; but there are really two related paradoxes, first that literature professes a dislike of war, and is yet fascinated by it; second, that the prominence of war is disproportionate to its frequency and significance in practice.

At the end of the chapter I suggest how the paradox or paradoxes might be explained or alleviated. But first I shall discuss the military but essentially non-militaristic reality, insofar as it can be treated separately from the literary evidence from which our understanding of it mainly derives. Then

* In a different form, the material in this chapter formed the basis for the Gaisford Lecture on Greek literature which I gave at Oxford University in May 2002, and I am grateful to several members of the audience for their comments after the lecture.

¹ See Boedeker and Sider (2001) for the extensive new fragment dealing with the battle of Plataea in 479.

² Jeffery (1976) 121. ³ See below, p. 27.

⁴ See also Shipley (1993) 23 (cited below, at n. 70), and ch. 9 in this volume.

I look specifically at the literary sources and at the problems of using them; I concentrate on their handling of three topics: archers, women, slaves. Already in the previous section I shall prepare for this by introducing the main literary sources and noting the way they interrelate, by exploiting them for what they imply or take for granted about war and fighting, by identifying recurrent historiographical themes, and by issuing cautions to do with the essentially rhetorical and sometimes downright tendentious character of much of the literary evidence, narrative as well as speeches. This discussion will not attempt a comprehensive account but will have as its main topic the interaction between military and non-military institutions: the relationship between the state and organized violence, and attitudes to that relationship as they are displayed in the literary sources, are topics of central importance to the ancient historiography of warfare.

II. THE HISTORICAL REALITY

I shall first try to deal with a simple and obvious objection. The objection denies the paradox. That is, one could protest that natural and common are not the same thing: to say that war was not thought natural is compatible with its having nevertheless been very common and frequent; and we need look no further than its commonness and frequency for an explanation of why people wrote about it so much. It is often said that war was common. We have recently been reminded⁵ that even minor Hellenistic cities, so far from losing the ability or taste for petty fighting among themselves under the umbrella of the great monarchies, went on doing so. For classical Greece, scholars are fond of saying that down to 338 (and presumably from 490) the Athenians were at war for on average two years out of three.⁶ An answer to that might be to insist on the untypicality of Athens, an imperial and notoriously meddlesome people, whose literature has skewed the picture (the writings of the Athenians Thucydides and Aristophanes are full of war but under-reported Argos was at peace and prosperous for thirty years from 451). But let that be. The orthodox view is that war was a common fact of life. If that were right, an answer to my paradox might be to say Greeks and Romans wrote about war so much not because they liked it; on the contrary, they did not like it and were not militaristic and Greeks were even less militaristic than Romans. No, they wrote about war so much because it was a fact of life.

That argument would still I think leave unexplained the insistence on the repulsive detail, what one might call 'the Homeric paradox': emphatic

⁵ Ma (2000).

⁶ See, e.g., Sage (1996) xi. Something similar can be found in many books about Greek history and warfare, though I have never seen the case made out in detail.

statements of dislike of war combined with a taste for relentlessly repeated fighting and extreme attention to the anatomical detail of wounds and so on. Richard Rutherford has collected a few extreme Homeric ones, brains oozing out of eye-sockets along the spear, eyeballs popping out onto the ground, not to mention medically impossible wounds: the classic example has a non-existent vein running straight up the back to the neck.⁷ As for later writers, I think the paradox remains here too even though the authors in question rarely reproduce Homer's anatomically repulsive detail. In any case, I want to suggest that the literary sources are misleading about the commonness of war. I want to make two points: the first has to do with activities unrelated to war, the other has to do with conflict-avoidance.

First, other ways of spending time. Even if we accept that war was common, there were activities other than war which preoccupied Greeks much of the time and which were part of their normal experience even more than warfare was. Those who complain that there is too much about war in ancient literature ought at least to say what else they think the ancients might have written about and which could (unlike, say, drinking songs or love poems) have satisfied a desire for the heroic and the exciting. There were other activities which could have been presented heroically and excitingly, unlike for instance farming – although there was nothing unaristocratic about farming and agriculture, which must have preoccupied people of every social class at all periods. There is no problem about why no decent poems about farming were written between Hesiod and Virgil: it was just too boring and static a topic. But not every mainstream Greek activity was so dull.

At the élite level there was athletic competition, which was indeed the subject of poetry by such great authors as Pindar and Bacchylides, but only until the late fifth century. A more widely shared activity was exploration by sea and its permanent product colonization, both linked with the sheer delight in travel and the curiosity which must have accompanied such voyages. Herodotus goes far to satisfy this kind of interest, but the only early works of Greek literature which dealt specifically with this theme were the now lost Argonautic epic and Pindar's *Pythian 4* about the same expedition. The second certainly, the first possibly, were copied by Thucydides in his picture of the excited departure of the Athenian expedition to Sicily in 415, where in Pindaric language he refers to a *pothos*, longing, for unknown sights.⁸ I do not quite put the *Odyssey* in this category of literature, though historians of colonization have extracted material from the books about the Phaeacians, and there is much in the poem that caters to a love of the exotic

⁷ Rutherford (1996) 43, 55 n. 54; but see Saunders (1999) for an attempt to show that some surprising Homeric wounds are after all possible.

⁸ Thuc. 6.24.3. See Hornblower (2004) 40, 334.

and the foreign. Odysseus however does not, with the fateful exception of the visit to the Cyclopes, succumb to mere curiosity about what lies over the horizon: he wants to get home. Odysseus' focused desire to get home was unusual; there must also have been, in much Greek sea-travel, a romantic desire to see the world. A. J. Graham announced that 'we may take it as axiomatic that no one leaves home and embarks on colonization for fun'.⁹ Why should we accept any such 'axiom'? It is not chance that the word *pothos* or longing for far horizons is associated with Alexander and his drive east to the unknown; he surely was not alone among the participants in that expedition in feeling as he did. In Xenophon's *Anabasis* not everyone wants to go home; the Persian satrap who chivvies them along worries precisely because he fears the Greek army may settle down and turn itself into a permanent colony, exactly the Syracusan fear about the Athenian army in 415–413. We should not forget that colonization can be linked with violence ('it's murder to found a colony', as it has been wittily put),¹⁰ but there was also often inter-marriage with locals, happy coexistence, and profit.

Again, consider Thucydides' excursus on the fifty years between the Persian and Peloponnesian Wars. It is designed to make a point about the growth of Athenian power and does this almost exclusively by means of war and fighting. This relentlessly war-based approach excludes specific mention even of such diplomacy as the mid-century peace with Persia, let alone the growth of the physical city of Athens and the non-military processes which created its lure as a splendid imperial capital and a lucrative employer, thus a magnet for immigration. Thucydides also ignores the Athenian hankering for the west – Italy and Sicily – in this period. But from fragments of lost plays of Sophocles such as the *Antenoridai* and the *Kamikioi* we know that Athenian public drama was interested in western colonization legends and in western myths like that of Daedalus. These are the popular Athenian background to the Athenian expedition of 415 which Thucydides eventually describes in his own way.

Now my second point. I want to make a bolder suggestion and challenge the premise that war was common. Later I shall suggest that in the classical period the character of much actual war was different from the way historians and poets present it. Much of it was not *agonal* competitive male ritual events but non-ritualized scrambles in defence of territory by entire communities including women. But there is a more fundamental point. There is a whole range of alternatives to warfare, in the sense of ways of avoiding it, about which literary sources are almost completely silent, but about which we are well informed from inscriptions.

The kinds of thing I mean are foreign judges and other forms of interstate arbitration, kinship diplomacy, and federal institutions. In an essay on

⁹ Graham (1982) 157.

¹⁰ Dougherty (1993).

Greek epigraphy in 1970, Louis Robert took foreign judges, the system by which panels of outside judges from *polis* C were formally invited to settle disputes between *poleis* A and B, as a classic case of an institution known to have been extremely common and important but about which literary texts say nearly nothing, though there are a few early and general literary references to arbitration by famous individuals.¹¹ Before Robert, his teacher Maurice Holleaux¹² had fastened on what is almost the sole literary evidence, a passage of Polybius mentioning Rhodian judges, from which the word 'Rhodian' had been emended away by editors. Holleaux reinstated the word by invoking epigraphic evidence for Rhodian judges as favourite recourses in Hellenistic times. Nor was this institution purely Hellenistic, that is post-classical, because Martin Dreher, following the lead of David Lewis,¹³ has reinterpreted some texts about the fourth-century BC Athenian naval confederacy as attesting the institution there.

As for arbitration generally, I disagree with John Ma's view (above, n. 5) that the disputes it presupposes are further evidence for hostility and violence, though it no doubt was at some times and places like that notorious hot-spot, third-century BC Crete. I read Sheila Ager's collection of such decrees differently;¹⁴ it indicates to me conflict-avoidance, sometimes brokered by kings for obvious motives. As she puts it about a new Ptolemaic arbitration between Arsinoe and Nagidos, 'this case provides a good example of the concerns and interests of the hellenistic kings and their subordinates when it came to arbitration or mediation among the Greek city-states. Peaceful relations were sure to lead to profitable ones, in terms of goodwill and in terms of revenues'.¹⁵ Philip II crushed the Greeks at Chaeronea but the same Philip constructed the system by which as an inscription shows the Argives arbitrated between the islands of Melos and Cimolos (Tod no. 179 = RO no. 82).

Finally there is what C. P. Jones has called kinship diplomacy,¹⁶ exploitation of kinship ties between founding city and 'daughter'-city. Jones studies these complex networks, the basis for which was often invented or mythical. One important result was to create or cement good peaceful relations between politically or geographically distinct *poleis*. I have myself argued that though the bulk of detailed evidence is Hellenistic it was already going strong in Herodotus' and Thucydides' time.¹⁷

If there were many suitable subjects for literature other than war, and if war was in fact not as common as is widely believed, should we attribute

¹¹ Robert (1970). From literature there are such passages as Aesch. *Sept.* 941–3; cf. Hutchinson (1985) 163f. n. on lines 727–33. I am grateful to Gregory Hutchinson for reminding me of this at Oxford (n. * above).

¹² Holleaux (1938), elucidating Polyb. 28.7.8–10. ¹³ Dreher (1995) 143–52.

¹⁴ Ager (1996). ¹⁵ Ager (1996) 129.

¹⁶ Jones (1999). ¹⁷ Hornblower (1991–6) II.61–80.

the prominence of warfare in ancient literature to the militarism of ancient societies? I define a ‘militaristic’ society as one geared virtually exclusively for war, one whose male citizens enjoy war for its own sake and in which the behaviour of its women mirrors that enjoyment, and in which preoccupation with war overshadows most else. The contrast is with societies with an instrumentalist view of war, which wage war for specific aims – a crude distinction because you can have bloodthirsty individuals in tame societies. In militaristic societies, military institutions determine civic. In non-militaristic societies, it is the other way round: the civic is the dominant model, which the army structure reproduces. Most societies have military institutions, but only a few are militaristic. I argue that neither the Greeks – not even the best fighters among them, the Spartans and Macedonians – nor the Romans were militaristic, though on a sliding scale the Romans are further towards the militaristic end.

I return to the question, was war considered the natural state of affairs (as is commonly said)? I accept the view of Hans van Wees that Greeks at any rate did *not* regard war as a normal or natural state, contrary to the view of Vernant.¹⁸ Van Wees shows that a much-used passage of Plato to the effect that Greek states are by nature in a state of permanent war (*Leg.* 626a) is advanced purely theoretically. By contrast Homer, as we shall see, is radically ambivalent on war, and Thucydides for all his relentless coverage of it makes a favourite speaker, Hermocrates, echo Pindar for the view that war is sweet to those who have no experience of it.¹⁹ Thucydides’ pages are full of war and fighting, but it is with personally and explicitly expressed outrage and pity that he describes and comments on the massacre of schoolchildren at Boeotian Mycalessus by some bloodthirsty Thracian mercenaries let loose by the Athenians and their commander (7.29–30).

The idea that Greeks were less warlike than Romans is, however, stated or implied not only by Roman writers but by Greek. Plutarch’s *Parallel Lives* almost always have the Greek life first then the Roman. The main exception²⁰ is instructive, the *Sertorius* and *Eumenes*. Plutarch does not explain his decision but a reason is, I suggest, implied in the comparative essay at the end where he says Eumenes was a lover of war and strife, but Sertorius was fond of peace and mildness. That is, the two men reverse the national stereotypes so the order of the *Lives* is reversed. Polybius is sometimes said to believe that Romans were more warlike than the Greeks (see ch. 15 in this volume, p. 509). True, he says that ‘Romans carry out everything by force’ and ‘all men value bravery, *andreia*, but especially the Romans do’. These are not exactly comparisons; they can be read as such

¹⁸ Vernant (1990a) esp. 29, 47; van Wees (2001b) 38–9.

¹⁹ Thuc. 4.59.2; Pind. fr. 110. See Cobet (1986) 7.

²⁰ The *Flamininus* and *Philopoimen* is another (but not all modern editions print them this way round).

only if we assume that there is an implied comparison in everything he as a Greek says about Romans, and perhaps that is right. We shall see below that his account of Roman military discipline as especially ferocious is in contrast to Greek armies, so no doubt there is implied comparison there.

I have spoken so far of 'the Greeks' and 'the Romans' as if those expressions were on all fours. 'The Greeks' is however too inclusive a term to be helpful. We must distinguish between, for instance, the Ionian Greeks, who had a reputation for softness, and the supposedly tougher Dorians. But even the Dorian Spartans, who put their young males through a punishing period of military training and kept them thereafter in a high state of military alertness, cannot be truly described as militaristic. Moses Finley noted²¹ that the dedications at the Spartan sanctuary of Artemis Orthia in the archaic period – 100,000 lead figurines – show no special obsession with fighting or the symbolism of fighting. True, classical Spartans were unusually prone to violence towards other Greeks, perhaps because they sub-consciously assimilated foreigners to their own large under-class, the 'helots'.²² But violence and militarism are not quite the same thing.

The civic organization of Greek societies mirrored the essential governing idea that the community was defined as the totality of the heavy-armed citizens: 'the men are the city', as the Athenian general Nicias is made to say to his army in Sicily before their final defeat in 413. The Greek for 'men are the city' is *andres gar polis*, and it expresses an idea which can be traced back to the archaic poets. A more prosaic and less rhetorical, but just as valid and venerable, expression of this same idea is the closeness of the relationship between political and civic categories on the one hand and military on the other.

This point must be expanded, because of the complication that the non-military categories themselves subdivide into kinship (gentilician) groupings and more contingent and artificial civic groupings based on residence and the actions of political reformers. The names for Greek civic subdivisions and for kinship groupings varied somewhat from *polis* to *polis* and between Dorians and Ionians. And civic categories were sometimes parallel to and separate from kinship categories, and sometimes overlapped with them. Thus the Ionian 'phratry' or brotherhood retained some – but only some – of its social and religious functions at Athens after the democratic reforms of Cleisthenes in 508 sorted the Athenians into ten new sub-divisions in whose definition and make-up the criterion of residence played a part, unlike the old four descent-based Ionian sub-divisions which they replaced. Old and new sub-divisions were alike called *phylai*, usually translated 'tribes'. The Dorian equivalent of the phratry was the *patra*, and at for instance Dorian Aegina the *patra* retained its central importance well

²¹ Finley (1986) 171. ²² Hornblower (2000).

into the fifth century, so that the poet Pindar regularly speaks of athletic victories as bringing glory not only to the individual but to his *patra*.²³ Thus his eighth Pythian ode praises both Aristomenes of Aegina and his *patra* the Meidylidai (line 38).

Now the phratry is for the most part not at all prominent in the epics of Homer,²⁴ but early in the *Iliad* a speaker gives Agamemnon the advice to 'draw up the men by *phylai* and phratries' (2.363). This may be an anachronism in that the phratry has perhaps been grafted on to an assumed background system which is generally earlier; but the line shows that it came naturally to Homer to talk of *phylai* and phratries as brigading units. So too in Thucydides' account of the Athenian attack on Dorian Syracuse in Book 6, we hear of both Athenian and Syracusan *phylai* in the sense of 'brigades'.²⁵ But the Syracusans have three tribes in the normal Dorian way, and three generals, presumably one for each tribe; while the Ionian Athenians and their allies (both the Ionians among them and probably and interestingly the Dorian minority of allies as well) operate according to the Cleisthenic ten. Indeed one of the most important ingredients or consequences of Cleisthenes' decimal system at Athens was the creation of a new annually elected panel of ten generals (*strategoi*), and this was a natural focus of much political ambition after c. 460 BC when fresh changes dictated that much else in the Athenian democracy should be determined by the lot. Curiously the ten-tribe system does not seem to have been used as the basis for the organization of the Athenian fleet (except that the 'generals' were also admirals), though it was the city's main weapon.

So far I have been developing the basic and uncontroversial point that in the Greek world, military organization permeated civic life, a principle to which I shall refer as the 'men are the city'-principle. Just occasionally we find expression of an opposite and more modern-sounding assumption, one implying that the army is distinct from and subordinate to the civil authority, like the professional armies of today. So in his account of the year 411 Thucydides attributes to some dissident and absent Athenians the view that under normal circumstances 'good counsel is the justification for the control of armies by the *polis*' (8.76.6). The circumstances in that year were far from normal, and the remark is rhetorically tendentious; but it is remarkable that such a generalization could be made at all. Nevertheless it is safe to say that the *andres gar polis* view is the ordinarily prevalent one.

Something similar can be said about Rome and with reference to similar evidence: the voting blocs called 'centuries' were originally military units, and the *tribus* (the Roman counterpart of the *phylai* and another

²³ Parker (1996) 63 n. 26. ²⁴ Andrewes (1961).

²⁵ Thuc. 6.98.4 and 100.1. Diod. Sic. 18.10.2 shows that this tribal method of brigading was still in use at Athens after the death of Alexander.

sort of voting unit) were the basis of army recruitment; and the greatest offices of state, such as *dictator*, *consul* and *praetor*, were military in origin and continuing function. In addition, the peculiarly Roman concept of *imperium*, which defined the powers of the top magistrates, meant among other things command in war. On the other hand the Romans did not like displays of military power inside the city of Rome, a dislike formalized in a non-Greek fashion by the rule which deprived a home-coming commander of his *imperium* once he had crossed the religious boundary of the city, the *pomerium*. Like other enlightened-looking Roman rules, such as the strict controls on extortion from provincials in and after the second century (controls which again had no equivalent in Greek imperialisms), this may reflect jealousies within an intensely competitive ruling élite at least as much as high-minded principle. But it, and the clear distinction drawn between *imperium* 'at home' and military *imperium*, shows that Roman militarism was not crude and all-pervasive, though it was certainly more marked than in any Greek state. It was more markedly military in ethos even than the Sparta to whom the second-century Greek historian of Rome, Polybius, compared Rome in his celebrated Book 6, which was dedicated mainly to the Roman constitution and the Roman army. (That is itself, incidentally, a revealing 'men are the city'-bracketing.)

The 'men are the city'-principle elaborated above, and applied to Greeks and Romans alike, might seem to tend against the initial assertion of this chapter, that war and fighting were not regarded as normal or automatic states of affairs. After all, what more telling proof of the opposite could there be than the near-complete equivalence of civic and military structures? Things are however not so simple, at least not in the Greek world, and here our treatment of Greeks and Romans must diverge, because the writings of the Greek historians permit us to reverse the proposition that civic institutions merely reflect a military organization which is thus seen to be paramount. That is, I shall argue that Greek armies (unlike Roman armies with their more rigid hierarchy and discipline) tend to function like miniature political entities, and the dominance of this political model is both proof of the paramountcy of civic institutions and in a real sense a disproof of the notion that war and fighting were basic to Greek society.

The standard example of 'army as *polis*' is the Greek mercenary army of the Ten Thousand. Its march back to the Mediterranean from the heart of the Persian Empire in about 400 was the subject of the autobiographical *Anabasis* of Xenophon, which ranks as one of the great military classics of Greco-Roman antiquity alongside Julius Caesar's *Gallic Wars*. Both works are lucid and lively but in different ways deeply apologetic and need careful reading where their authors' motives for action are at issue. But for our present purpose the *Anabasis* is good evidence. When the Ten Thousand's

commanders had been treacherously killed by the Persian satrap Tissaphernes, the decapitated army elected its own new commanders, including Xenophon himself. Thenceforth, if intermittently, the Ten Thousand made their decisions by voting methods familiar from the political decision-making bodies back home, and not just the democratic ones either (i.e. the Athenians and some of their dependencies) because Spartans and other non-democratic Peloponnesians participated in the expedition as well. For instance both the Spartan Clearchus and the Athenian Xenophon invite the soldiers to ‘raise their hands’ and vote as in an assembly, which they duly do (3.2). The resulting decisions are duly registered in the language of politics, ‘so it was decided’ (*edoxē tauta*).

This view of the Ten Thousand is far from new; long ago Edward Gibbon contrasted the shameful capitulation of the Roman emperor Jovian, in the same part of the world, with the behaviour many centuries earlier of the Ten Thousand who, instead of ‘tamely resigning themselves to the secret deliberations and private views of a single person’, were ‘inspired by the generous enthusiasm of a popular assembly’.²⁶ Recent work has refined but not replaced this picture of army-as-*polis*: for instance it has been plausibly suggested²⁷ that the *polis* model for the Ten Thousand was not so much the old *polis* of Greece but the *polis* abroad: the colonial *polis*, in fact, where immediate dangers and a hostile environment created a new blend of self-determining community and armed camp, which was run – at least initially – on more or less autocratic lines by a founder-figure, an *oikist*. Violence and fighting are after all at the very root of the colonial experience, as has been stressed in studies of the Greek colonial myths (above, n. 10). Another model for the Ten Thousand may have been literary, namely the mechanisms attested in Homer for the distribution of booty, that powerful engine of all ancient warfare.²⁸ Such models should never, in the study of the Greco-Roman world, be regarded as ‘purely’ literary, and that is especially true where the model is Homer, because his epic poems were, apart from some idiosyncratic complaints by the philosopher Plato in the fourth century, considered a good guide to moral decision and practical action, and were assumed to be historical even by so tough-minded a critic as Thucydides. This fixation with Homer (for which see further below, p. 48) generates special problems in the assessment of the Alexander-historians, of whom the most important is Arrian, because there are four, not mutually exclusive, explanations for the depiction of Alexander as Homeric hero: Arrian imitated Homer, Arrian’s immediate sources such as Ptolemy imitated Homer, Ptolemy’s own source Callisthenes imitated Homer, and Alexander himself imitated the heroes in Homer.

²⁶ Gibbon (1896–1900) II.523 and n. 119. ²⁷ Dalby (1992); cf. Marinovich (1988).

²⁸ Dalby (1992).

Let us return to the idea of army as *polis*, an idea generally accepted for the Ten Thousand. Less familiar is the idea, which I have argued for elsewhere,²⁹ that the Ten Thousand were not unique and unusual³⁰ but merely an extreme instance of a regular feature of Greek armies: their tendency to slide back into political habits at short notice and their more or less permanent, but still very surprising and un-Roman, assumption that they can call their commanders to account if they are displeased with them. There are already glimpses of Ten Thousand-style behaviour in Thucydides' account of the Athenian expedition against Sicily of 415–413.

This account, in two whole books of the *History*, a whole quarter of Thucydides' surviving work, ought to rank as another classic of ancient military historiography, although the mechanisms of decision making which it reveals or takes for granted have been curiously neglected by modern scholars, who have perhaps been dazzled by the self-consciously epic and tragic nature of the narrative. Well before the final defeat and partial disintegration of the expeditionary army as a fighting force, it is clear that the Athenian commanders fear the adverse opinion of the ordinary soldiers. Weighing the option of withdrawal from the island, Nicias predicts that the troops who are now saying so loudly that they are in such a dire plight will turn round when they get home and say that their generals had been bribed to withdraw (7.48.4). This seems to treat the whole army as if it was Athenian, whereas in fact it was a mixed force, and this (as with the Ten Thousand, and as with many coalition armies up to the present day) surely made for an atmosphere in which dissent was to be expected and could be more readily expressed, a situation calling for special tact and even deference on the part of the commanders. Most striking of all in this Sicilian narrative is the statement that Nicias did not want the option of retreat to be 'voted on openly among many' (7.48.1). The precise meaning of the words 'among many' is not quite agreed, and some have desperately but illegitimately tried to remove them from the text. But I take them to be sound and to refer to a body considerably larger than just the commanders and the senior officers, in fact something like the mass of the soldiery. One must not exaggerate: even at this advanced stage of the campaign, when communication with Athens was no longer a realistic possibility, the commanders in Sicily do not forget their masters back home in the Athenian assembly. Nicias' colleague Demosthenes is said to be well aware that it will be impossible to abort the expedition without a vote of 'the Athenians' (7.48.3), where the reference is clearly to the Athenians back home, not those present in the army.

One notable aspect of this phase of the expedition is religious, the superstitious interpretation of the eclipse which made 'most of the Athenians'

²⁹ Hornblower in Lane Fox (2004) 243–63.

³⁰ So, e.g., Nussbaum (1967) 9, 11.

urge their generals to wait (7.50.4). Now even Alexander the Great found himself obliged to resort to a trick to overcome a religious scruple felt by his men, before the battle of the River Granicus in 334. Some thought the river was too deep, others were nervous about fighting contrary to (religious) custom in the month Daisios. Alexander ignores the first objection but does something about the second, by the ‘Gordian knot’ solution of renaming the month as a second Artemisios (Plut. *Alex.* 16.2). An army felt more free to articulate discontent if it thought the god was on its side, because the god outranked even the ‘top brass’. That was apparently true up to a point even when the commander was a decisive and charismatic king like Alexander, and it was certainly true when he was a pious susceptible ditherer like Nicias.

Be that as it may, the armies of ancient Greece were, I suggest, in the habit of voicing opinions and grievances, and expected to go on voting on campaign in some of the ways they were used to voting at home, whether ‘home’ was a democracy or an oligarchy. Even Spartans felt able to criticize their commanders. One example is the anonymous old soldier who in 418 BC shouts at king Agis from the ranks that he is ‘curing ill with ill’ (Thuc. 5.60). Or there is Amompharetos who in 479, before the battle of Plataea against the Persians, throws a great stone at the foot of his commander Pausanias and says, in a nice piece of non-verbal communication, that he is ‘casting his vote (pebble) against retreat’ (Hdt. 9.55), a parody of Athenian voting habits. Good Spartan generals might even pre-empt criticism by apologizing and taking the blame themselves, a most unusual procedure in any walk of life, then or now. A striking example concerns Gylippus, the Spartan commander sent to help the Syracusans in Sicily. After a minor military fiasco, involving loss of life, he takes the risky course of apologizing and so lifting morale (Thuc. 7.5) – risky, because of the ‘jealousies of their first men’ inherent in Spartan public life (Thuc. 4.108.7).

Nor did the Macedonian soldiers of Alexander confine their views and criticisms to religious matters, though outside the relative safety of religion they could not expect impunity for rebuking their king in public. Cleitus notoriously paid for his *parrhesia* (outspokenness) with his life when in northern Afghanistan in 329 he criticized a tactical error of Alexander’s by quoting lines spoken by Achilles’ old father Peleus to Menelaus, in Euripides’ tragedy *Andromache*: ‘alas what a bad custom it is in Greece . . .’. He stopped short there, but Euripides at the end of his life moved to and worked in Macedon, so that everybody present knew how the speech went on: ‘when an army wins a victory,/ the soldiers get the sweat and trouble/ but the generals get the glory’.³¹ The lines were not only quoted by Cleitus a century after the play’s original production at Athens in about 426, but

³¹ Eur. *Andr.* 693ff. with Plut. *Alex.* 51.10, brilliantly elucidated by Aymard (1967).

are echoed in Xenophon's *Anabasis* in 399: some disaffected Arcadians and Achaeans grumble that 'they did the hard work and others got the glory' (Xen. *An.* 6.2.10). Peleus' complaint thus neatly joins the disputatious world of the democratic Athenian *polis* to the imperfectly autocratic Macedon of Alexander, *via* the multi-*polis* and multi-*ethnos* army of the Ten Thousand.

'Army-as-*polis*' attitudes did not end with the end of the classical period or even with Alexander. In the excellent military narrative of the wars of Alexander's Successors preserved in Books 18–20 of the universal history of Diodorus of Sicily and traceable back to the lost account of Hieronymus of Cardia, we hear of an interesting proposal made in 317 by Hieronymus' uncle, the Greek commander Eumenes. Daily council meetings are to be attended by 'all the satraps and generals who had been chosen by the mass of the army'. Diodorus/Hieronymus goes on 'since all approved his proposal as made in the general interest, he called a council each day like that of *some city ruling itself on democratic principles*' (*hoion demokratoumenê polis*).³² The Hieronymian narrative, which portrays on a vast canvas the struggle of armies and their leaders for power previously concentrated in the hands of one man, Alexander, has a parallel in and was perhaps one model for the *Histories* of Tacitus, which deals with the Roman Civil Wars of AD 69, the Year of the Four Emperors.³³ In this book, armies proclaim emperors just as in Hieronymus they sometimes unmake their commanders, including Eumenes himself, but we do not find the explicitly democratic analogy, nor is the military narrative nearly so good.³⁴

I have so far written as if things stayed the same, but in fact there was change in the fourth century BC, with the invention of artillery and wider use of mercenaries. I have however deliberately stressed continuity, as a provocative reaction against a modern tendency to see the years after 400 as ones of 'ignoble warfare' and the decline of the citizen-soldier. This is itself based largely on rhetorical exaggerations in the orator Demosthenes, and on modern failure to appreciate that there were mercenaries in plenty before 400, and what have been neatly called citizen-mercenaries thereafter.

All this helps to explain a striking feature of ancient Greek as opposed to Persian or Roman warfare: the marked lack of physical discipline and the laxness of any other sort of discipline.³⁵ At Athens, desertion was something for which you could be civilly prosecuted, and an Aristotelian treatise on the Athenian constitution tells us that the ten generals had certain limited powers (fining and so on) in cases of insubordination; but nothing in this treatise prepares us for the story that Lamachos, another of the generals in Sicily, inflicted the death penalty on a man caught signalling to the

³² Diod. Sic. 19.15 with J. Hornblower (1981) 188 and n. 22; cf. Plut. *Eum.* 13.5, 15.3.

³³ J. Hornblower (1981) 87 n. 46. ³⁴ On the *Histories*, see Ash (1999b).

³⁵ Pritchett (1971–91) II.232–45.

enemy. Even in Athenian civic contexts, corporal punishment was evidently considered too demeaning to be inflicted on citizens by citizens and was left to be administered by the Scythian slaves who policed the city.³⁶ Such evidence as there is for physical punishment of soldiers tends to be about Spartans, and much of it comes from the writings of Xenophon who knew a lot about Sparta. Spartan officers did go round threatening or hitting people with sticks, *bakteriai*, but this was bitterly resented by other Greeks because sticks were for helots, i.e. slaves, and to treat someone like a slave was *hybris* or intentionally inflicted humiliation.³⁷

There is even some negative evidence that the concept of military hierarchy was fundamentally un-Greek: Thucydides comments, as if on a peculiarity, that the Spartan kings give orders to the *polemarchoi*, and the *polemarchoi* to the *lochagoi*, and so on down the line. It is almost as if, to caricature slightly, he is saying 'they have this strange thing, a chain of command' (Thuc. 5.66). The implication for normal Greek armies is startling, but perhaps no more so than the idea that Greek troops, including but not only Athenians, lacked most conventional disciplinary structures and might even expect to cast a vote on whether to fight or not. If this were the entire and literal picture it would be hard to see how Greek armies could ever win battles, even against each other. It is after all of the essence of regular armies that they obey orders without questioning or discussing them. And in fact a calm reading of the whole of Xenophon's *Anabasis* shows Xenophon himself giving orders of the usual brisk military sort and expecting to be obeyed in the usual unquestioning military way. We must be careful, in this whole area, of the polarities and exaggerations of the literary sources: the Athenian statesman Pericles, in the Funeral Oration put in his mouth by Thucydides, comments with pride on the casualness of Athenian military arrangements compared to the 'laborious exertions' of the Spartans (2.39). This is not a very encouraging thing to be told, and if Pericles really said anything of the sort (and speeches in Thucydides and other Greek historians are not always much more historical than that of Peleus in Euripides' play), it is part of a conventional and misleading rhetorical opposition between relaxed open Athens and rigid closed Sparta.

The Athenians may not have put their cadets through anything as ferocious as the Spartan *agogē*, but there are good reasons for thinking that the initiation into public life of Athenian 'ephebes' (young men on the threshold of citizen hoplite status) goes back into the fifth century and dates well before the first attestation of the 'ephebe' on public inscriptions.³⁸ We cannot be sure how much formal training this fifth-century institution

³⁶ Dem. 21.103; Lys. 13.65; Hunter (1994) 181.

³⁷ Hornblower (2000) on Thuc. 8.84 and many other passages; cf. above, p. 28.

³⁸ Vidal Naquet (1986); Siewert (1977), adducing among other evidence the language of Greek tragedies like the *Antigone* of Sophocles.

involved, but it cannot surely have been merely ritual and religious. So too the ‘chain of command’ remark cited above from Thucydides cannot really imply that such notions were completely alien to Athenian military practice. It is not from a speech, but may nevertheless be another echo of unreliable Athenian wonder at the relatively greater efficiency of Spartan drill.

If discipline was lax and non-physical, and hierarchy was loose, how did Greek, especially Athenian, armies hold together? My answer cannot be elaborated here but it would have to do with the cohesive hoplite ethos, solemnized in soldierly oaths and expressed in poetry like that of Tyrtaeus at Sparta. This made it a matter of shame to abandon or let down the man standing next to you in line.

Persian and Roman methods were very different, as far as our literary evidence allows us to say. Thus Herodotus has more than one story about the harshness of Persian military discipline. At least one of these stories illustrates, perhaps over-neatly, the clash between such methods and greater Greek respect for bodily inviolability: the humiliating Persian punishment of the Greek Scylax of Myndos (Hdt. 5.33). As for the Romans, Polybius in Book 6 dwells at horrified but evidently fascinated length on the military punishment of death by cudgelling (6.36–7). Polybius was, however, a Greek studying Romans, and the earlier, political, part of Book 6 contains gaps, misapprehensions, and exaggerations. So we should not drop our guard when we come to the military section, just as it might be unsafe to take at face value all the picturesque details in the account of a Roman aristocratic funeral nearer the end of Book 6. So both the authors cited in the present paragraph illustrate a possibly distorting tendency in ancient writers, a tendency from which modern anthropology is not always free, to look to ‘the other’ (i.e. other and partly alien cultures) for symmetries and opposites.³⁹ But even allowing for such distortions, it is likely enough that Persian discipline was harsher than Greek, though the Persians as such are not the subject of this chapter or this book and the question cannot be further explored here. As for the Romans, the general picture of respect for military order and hierarchy must correspond to Roman reality, or at least to Roman self-perception as well as Greek perception, given the number of stories in which, for instance, Romans are shown dutifully putting respect for superior *imperium* above even paternal authority, something Romans normally took very seriously indeed.⁴⁰

In Roman historiography there is not much evidence for democratic pressure exerted on commanders from below, of the kind I have noted

³⁹ Another example: Polyb. 10.15–16 with Rich (2001) 65, possible exaggeration of the extent to which Roman discipline was maintained when sacking cities.

⁴⁰ Gell. 2.2.13, with Mommsen (1887–8) 1.25 and n. 3

for ancient Greece and even Macedon; nor is there much evidence for armies behaving like *poleis*. The big exception is the so-called triumviral period, when Mark Antony, Lepidus and Octavian struggled for supreme power in 40–30. In this exceptional period armies more than once forced their commanders to find an alternative to battle, notably in 40 (App. *B Civ.* 5.246). It may be significant that the main surviving sources for this period – Appian and Cassius Dio – are both Greeks. Thereafter there are instances of actual mutiny, the Greek word for which is a compound of *stasis* or civil strife, *estasiazon* (App. *B. Civ.* 5.528). Neither Greek nor Latin have a separate word for mutiny; both use civil vocabulary for unrest: *stasis*, *seditio*. Alexander's army mutinies at the Beas and at Opis but it is called 'disturbance' and 'demoralization', *tarachē* and *athumia* (Arr. *Anab.* 5.25.2; 7.8.3, 11.4).⁴¹ Both the triumviral armies and Alexander's army on these occasions are in effect mutinous armies and mutinies are not evidence for the norm, however we define mutiny in English, which is not easy. For regular non-mutinous popular voting or pressure from below in Roman armies, evidence is sparse. The Greek Polybius says that Marcellus in 212 BC held a council of military tribunes, at which 'it was unanimously decided to resort to any means rather than take Syracuse by storm' (Polyb. 8.7.5). But this is not surprising: senior councils of war happened even in Persia and the armies of Macedon.

At this point it is very tempting to correlate Roman deference to military authority on the one hand and Roman political arrangements on the other, because the usual view is that Rome of the Republic was the preserve of an *imperium*-wielding élite whose control of politics was exercised *via* factions and deferential clients, and was tempered only by the activities of the tribunes. But this view has seen some challenge in recent years. The more democratic aspects of Roman politics have been strongly emphasized – or rather re-emphasized because some of the 'new' view implies that things said by Polybius were not so foolish after all.⁴² This is refreshing and largely sound, but authoritarianism and its converse, obedience to authority, must not be written out of the picture too completely. For instance, formal popular meetings (*comitia*) were summoned by a magistrate, rather than taking place at definite intervals as at Athens and even Sparta;⁴³ and the same was true even of informal meetings (*contiones*) which could not just happen unbidden. And in the final century of the Republic the sheer vastness of the financial and military power exercised by the military dynasts subverted the democratic power of the mass assemblies and eventually the authority of the Senate itself. But the final collapse of the Republic became a certainty

⁴¹ Note the 'meetings', *syllogoi*, between disgruntled soldiers, at Arr. *Anab.* 5.25.2, presumably recorded because unusual.

⁴² Millar (1984b), (1986), (1989), (1995) and (1998); for reservations: Lintott (1987); North (1990).

⁴³ For Sparta, see Plut. *Lyc.* 6.

only as late as the end of the 60s, when the Senate obstinately chose to refuse to ratify Pompey's Eastern arrangements and his attempts to provide land for his returning troops. That is, the landslide by which the freedom of action of the political class was smothered by armed force was arguably avoidable until that point.

A caution is however needed here. 'The "political class" is, on a cynical but perfectly legitimate view, merely a way of saying "people like Cicero", who is our main source of day-to-day knowledge and hardly a disinterested observer. He wrote no formal history of the period, except for a history of oratory, the *Brutus*, which is historiographically valuable only for a period rather earlier than his own active political career. But his correspondence is a prime historiographic source for the last generation of the Republic. His younger contemporary Sallust was a historian of a more recognizable sort, but he wrote in some bitterness after the end of the Republic and these contemporary preoccupations may tinge his account, which therefore also lacks detachment. Such anachronism or historical 'double vision' is a feature of ancient historiography. For instance it affects Sallust's imitator the early imperial historian Tacitus, whose picture in the *Annals* of the Julio-Claudian dynasty inaugurated by Augustus is warped by his own experience of their successors the Flavian emperors.

To conclude, the societies of Greece and Rome were not militaristic in the sense that they were geared for war and organized their other institutions accordingly; rather those other institutions had priority in the Greek world and tended to invade the military sphere, and not just in Xenophon's Ten Thousand either. Roman militarism was more marked than Greek, as recent students of Roman imperialism have insisted;⁴⁴ for Virgil, his hero Aeneas is conspicuous, *insignis*, for his *pietas* (dutifulness) and his excellence in fighting (*et armis*). But even Roman militarism had its deliberately built-in limitations, and the eventual triumph of armed force over 'legitimate' political authority seems not to have been an inevitability until a relatively late date in the history of the Republic. Once the disguised military monarchy had been established by Augustus, the relief expressed by the poets (Virgil and Horace) at the end of the long century of the Civil Wars, is hardly the response of a blindly militaristic society. People were simply tired of fighting, and the millenarian fourth *Eclogue* of Virgil expresses this in semi-mystical terms, as does the curiously prevalent poetic concept that the Civil Wars were somehow a divine punishment for collective immorality. Poetry of this sort is however slippery evidence, and it is hard for the historian to know how far to use poems which were neither at one extreme written to commission (that is, they do not simply parrot the policies of the régime) nor at the other extreme culturally all-pervasive at many levels of

⁴⁴ Harris (1979) part 1.

society in the way the Homeric epics had been. For one thing, the Greeks who still formed a substantial part of the population of the Roman Empire bothered very little with the literature of their conquerors.⁴⁵

The conclusion we derive from the literary sources is thus that Romans did indeed differ somewhat from the Greeks in their attitude to war. And I have argued that these differences are a secondary expression of primary facts about political and social structures, rather than vice versa. But literary sources are only part of the evidence and I end with a salutary story about gladiatorial fighting, a military sport if ever there was one (Greek athletic competition and warfare is something I shall say more about later). The detail is known to us from inscriptions rather than from historiography. Classical Greeks did not know gladiatorial fighting, which began in Republican Italy. For this reason it was once thought that gladiators were a nastiness characteristic of degenerate and bloodthirsty Roman taste. The argument is however flawed, because sixty years ago Louis Robert showed from inscriptions that as soon as the Greeks of the Eastern provinces got acquainted with gladiatorial combat, it spread there like wild-fire.⁴⁶ Peace-loving cultured Greeks versus gory regimented Romans is a simplification. But it is a simplification rather than an outright lie.

III. HOW FAR CAN WE TRUST THE ANCIENT HISTORIOGRAPHY OF WAR?

We have so far drawn heavily on the ancient literary sources, while noting respects in which those sources are in certain respects treacherous – overschematic in their contrasts between Greeks and others, including Romans, rhetorically tendentious, and so on. On war and battles in particular, there are some very large areas of doubt, and this continues into the more militarily proficient Roman period. Thus it has been shown that military narrative in Roman historiography is shot through with influence from epic, what has been called ‘cross-generic splicing’.⁴⁷ Speeches in military historians are even more obviously vulnerable to rhetorical embellishment – or worse. All speeches in Greek historians are beset by problems of authenticity, although it was only Thucydides among ancient writers who addressed this methodological problem directly, in a celebrated chapter (1.22). The best view is that every speech must be examined on its merits. On one modern view, speeches of pre-battle exhortation, which form so large a part of military writing from Homer to the Roman historians of the imperial period, are to be dismissed *generically* as rhetorical fabrications.⁴⁸ My own view is that the

⁴⁵ Williams (1978) 124–38 for the few exceptions.

⁴⁶ Robert (1940) 13–15. ⁴⁷ Ash (2002); cf. Ash (1999a).

⁴⁸ Hansen (1993), but see Ehrhardt (1995); Pritchett (1994b), (2002); cf. Hornblower (1991–6) II.82–3.

general principle (each on its own merits) applies to this genre of speech as to others; in particular I would place much weight on a chapter of Thucydides (5.69.2) which is not direct speech at all. It summarizes the things said in encouragement by the Spartans' enemies on the eve of the battle of Mantinea in 418, then says that the Spartans did not bother with any of this because they knew that long previous training is more reliable than eloquent exhortations. This casual authorial remark implies that the sort of speech presupposed was a recognized and usual form of address in real life. It is not the purpose of this section or this chapter to estimate how far the poems or histories under discussion depict the way fighting was actually done. Rather, I am concerned with mentalities and the extent to which historiography is a reliable source of evidence for those values. But our separation between the study of military practice on the one hand and military ethos on the other cannot really be so complete.

Sir Michael Howard says at the beginning of a good short book called *War in European History* that he will confine himself to the last millennium; he starts in about 1000 AD, as being the period 'for which we have reliable records'.⁴⁹ His implied dismissive position, if made explicit by a classically minded critic, might go something like this. The battle and war descriptions of Greek antiquity are more or less unvarying literary constructs, in which highly organized bodies of élite citizen males make or listen to stylized speeches, then fight each other in agonized ritualized fashion. And yet (the sceptical critic might continue) Greek life and fighting can have been like this only a fraction of the time. Peter Krentz (ch. 6 in this volume, pp. 169–70) notes that even in Thucydides' account of the Peloponnesian War there were only five major land battles as opposed to 101 separate 'poliorcetic incidents', as he calls them, assaults on, or sieges of cities. But it is the battles that take up the space: a few not very decisive days and hours at Delium and Mantinea occupy an amazing one-eighth of Books 4 and 5 of Thucydides, which otherwise cover ten years of Greek history. The fraction has somehow made itself the dominant element. Can we correct the dominant element from evidence internal to those same literary sources? I think we can. I shall take three types of fighter whose activity, properly considered, may help to a more rounded view. The three are archers, women, slaves.

Archers can be painted as cowardly fighters who operate from a safe unmanly distance (fig. 2.1). In Homer the Greek hero Diomedes aims at the Trojan Paris a wonderful series of abusive words, of which the first is 'you archer!' (*toxota*) and the fourth is 'you seducer of girls!' (*parthenopipa*), a reference to the abduction of Helen (*Il.* 11.385). Later writers voice much the same attitude. Thucydides describes the mocking by Athenian allies of some Spartan prisoners taken to Athens: 'Did all the brave gentlemen

⁴⁹ Howard (1976) ix.



Figure 2.1 Scythian archers engaged in long-range missile combat while their hoplite companions crouch behind their shields, on a late sixth-century Athenian amphora in Berlin. The hoplites are presumably waiting for their turn to spring into action and engage in shorter-range missile combat with the pair of throwing spears which each man carries – instead of the usual single spear for close combat.

among you die, then?', implying that the survivors were cowards. One Spartan replies 'the spindle, meaning the arrow, would be a fine weapon if it could tell brave men from cowards' (4.40.2). Part of the point of this good retort consists in the feminine associations of 'spindle' (*atrakton*). Manly hoplites, unlike marginal archers, stand their ground and fight at close quarters on behalf of their *polis*. But things are not straightforward because it is only Odysseus who has the strength as well as the skill to string his own mighty bow at the end of the *Odyssey*; no feminine connotations here.⁵⁰

⁵⁰ But Jasper Griffin pointed out to me at Oxford (n. * above) that in this final phase Odysseus starts to behave in effect like a hoplite.

It is often said that direct Achilles and wily Odysseus are two enduring paradigms of warfare, force and guile, and there is some truth in this. But Odysseus' bow shows that its owner blends the two. And the Alexander-historians knew the real value of auxiliary troops like archers. It is ridiculous to suppose that archers, who in pre-artillery days before 400 held off many a city-besieger, were held in universal contempt. Even at Athens, with its very high citizen/outsider barriers, it is remarkable that in the official casualty lists of the city 'barbarian archers' are honourably recorded alongside the citizen dead.⁵¹

Some of the passages just considered raise the question of attitudes to women as well as to archery, and women are my second example. The passages cited might be thought to imply a crude sexism. But it has been well observed by Jasper Griffin that although Agamemnon's definition of female virtue – beauty, stature, sense, handiwork – might seem to define a woman in terms of her value to a man, nevertheless it is also true that the 'overriding emphasis on courage and strength as the virtues of a man largely defines him, too, in terms of his value to his women-folk'.⁵² If this is right, it shows that even the glorification of military values as undoubtedly exists in the Homeric poems has an aim beyond itself.

How far did Homeric assumptions about women and war affect later attitudes and later historiography? Homer was considered a good general guide to conduct, as we have seen, but as with all revered but occasionally inconvenient texts (the Bible, the Koran), much latitude of interpretation was always available given sufficient ingenuity. 'Let war be for men to take care of' were originally the consoling words of the Homeric Hector to Andromache, and were spoken in a context full of concern for his family (*Il.* 6.492). This famous half-line is entertainingly redirected in the Athens of the 420s in the mouth of a male speaker in Aristophanes' *Lysistrata*: here, as Alan Sommerstein remarks, it merely serves as justification for ignoring the opinions and feelings of his wife.⁵³ A little later Aristophanes makes his heroine Lysistrata neatly turn the Homeric tag round, 'let war be for women to take care of' (*Lys.* 492, 520). That war could be 'for women to take care of' is not a totally un-Homeric notion, in that goddesses as well as gods are depicted fighting against human beings in Book 5 of the *Iliad* and against each other in Book 21. There is humour in the way this is presented: Aphrodite, wounded by the human Diomedes, runs to her mother Dione who says 'who did this naughty thing to you?' Zeus's subsequent amused rebuke to Aphrodite partly anticipates Hector's comment to Andromache: 'war's work, my child, is not your province; you should busy yourself with marriage and the work of love', but then he goes on 'all this will be for quick

⁵¹ Bradeen (1974) nos. 14.35, 17.27, and 22.252; cf. Loraux (1986) 32f.

⁵² Griffin (1980) 30, discussing Hom. *Il.* 1.113–15. ⁵³ See Sommerstein (1990) 180.

Ares and Athena to see to' (*Il.* 5.428–30). In the last sentence, the addition of the goddess alongside the god is a mild surprise: we expect a variant of Hector's comment, something on the lines of 'war should be for *male* gods to take care of', but the actual formulation reminds us that Athena, the goddess of the arts, had a martial aspect too.⁵⁴ Military participation by females is not quite ruled out by this: if goddesses fight, that conjures up, if only to ridicule or reject, the idea that mortal women might do so too.

In the actual historiography of war, women's role is – apart from a few exotic foreign female commanders like the Carian Artemisia in Herodotus' account of the battle of Salamis, the Macedonian Olympias in Hieronymus, Cleopatra in Plutarch – essentially marginal (like that of archers) and disruptive. They throw tiles from roof-tops in sieges, and so on, down to baking bread at the siege of Plataea (*Thuc.* 2.78).⁵⁵ Historians record and endorse male disapproval of female involvement in fighting: Herodotus says that one Euelthon sent a golden spindle (*atrankton*) and distaff to Pheretime of Cyrene, who had asked for an army. 'That's a present more suited to a woman than an army', he told her (*Hdt.* 4.162). Symbolic work is again being done by the word *atrankton* and on this occasion by the physical object itself. And in the Roman imperial period, Tacitus, who had himself governed a large Roman province (albeit a fairly peaceful one) and thus like Thucydides five centuries earlier had troops at his disposal, shows a distinct interest in the question of whether women should be allowed in camp.⁵⁶ Tacitus does not commit himself on the desirability of the proposal.

On the other hand Plutarch, a Greek nostalgically interested in the Greek past, records with evident admiration the extraordinary story of the early fifth-century BC Argive poetess Telesilla who armed the women of her city against a Spartan attack under king Cleomenes I and fought them off. Plutarch's Greek contemporary Pausanias adds that after their initial repulse by Telesilla and her women, the enemy decided that whatever happened they could not win, because to be defeated by the women would be shameful but to defeat them would bring no glory. So they withdrew (*Plut. Mor.* 245; *Paus.* 2.20.8–10).⁵⁷ Scholars argue about the historicity of this story, which tends to be rejected as patriotic Argive fabrication because it does not feature in Herodotus' full account of Spartan–Argive hostilities at this period, and because Herodotus, unlike Thucydides, was normally happy to give coverage to women and their doings. The truth or falsity of the story matters less, I suggest, than the implication that patriotic Argive historiography could take this particular form. It is possible that the

⁵⁴ Deacy (2000). ⁵⁵ Wiedemann (1983); Harvey (1985); Loraux (1985).

⁵⁶ See esp. the senatorial debate at *Tac. Ann.* 3.33–4, with Marshall (1975) and Woodman and Martin (1996) 11–17, 283–309.

⁵⁷ Stadter (1965) 45–53. See now Piérart (2003) for the best discussion of Telesilla and the historicity of her military achievement (her existence as poet is not in doubt).

completeness of the invisibility of fighting women in the classical historians is conditioned by literary convention and male bias. Nobody in their right mind would want to suggest that unknown to modern historians women might after all have fought in the hoplite phalanx, in one of the set-piece battles which naturally attracted the historians of antiquity. But in reality not all warfare was regular warfare, and the Telesilla-like role of women in sieges and in the improvised defence of territory (surely a very frequent occurrence) may have been much commoner than Homeric minded male historians of antiquity allow us to think. So perhaps it is not just the male Spartans of 494 who were ashamed to fight the women but the male historians of Greece and Rome who were ashamed to mention them (fig. 2.2).

A closely relevant example in which female participation is specifically attested comes in Thucydides' dry narrative of activity in the Peloponnese in 417. It is relevant because, curiously enough, it concerns Telesilla's home city of Argos. There was a scramble in the face of oligarchic and Spartan threats to build some Long Walls and Thucydides casually says the whole population including women and slaves, *oiketai*, joined in, and carpenters and stonemasons came from Athens to help (Thuc. 5.82.6).⁵⁸ It would not surprise me much if, say, the Peloponnesian booty-raid casually mentioned by Thucydides in the course of his otherwise mainly Sicilian narrative (6.95) involved in reality some impromptu female activity. Women certainly feature in the great sieges of antiquity, and not just in the disruptive roof-tile-throwing role modern historians have identified for them. Their gifts of hair for torsion siege engines are well attested, as in the Greek historian Appian's account in his *Libykê* of the final siege of Carthage, where they also help in improvised weapons-workshops in an equal and honourable role alongside men (App. *Pun.* 93).

There is, to repeat, an important general point here. Historians and poets tend to fasten on the big '*agonal*' or ritually competitive pitched battles, but much fighting would have been what Germans call *Kleinkrieg*, guerrilla warfare, attacks on cities or villages, impromptu raiding and response to raiding (the Greek for impromptu being *ex epidromês*). The *Iliad* knows about this sort of thing as well as about the great main siege, but tends to refer to it retrospectively as explaining how female prisoners were acquired. In such informal non-ritualized fighting, scope for Achillean heroism was less, and involvement of women in an active role, not just as passive walking booty, made it uncomfortable material for poets with pretensions. Such an actual but historiographically suppressed female role as I am postulating may be not altogether invisible because it helps to explain the striking

⁵⁸ Schaps (1982). Thuc. 1.90.3 is also relevant; there is no need to doubt the authenticity of the relevant words; see Alberti's apparatus.

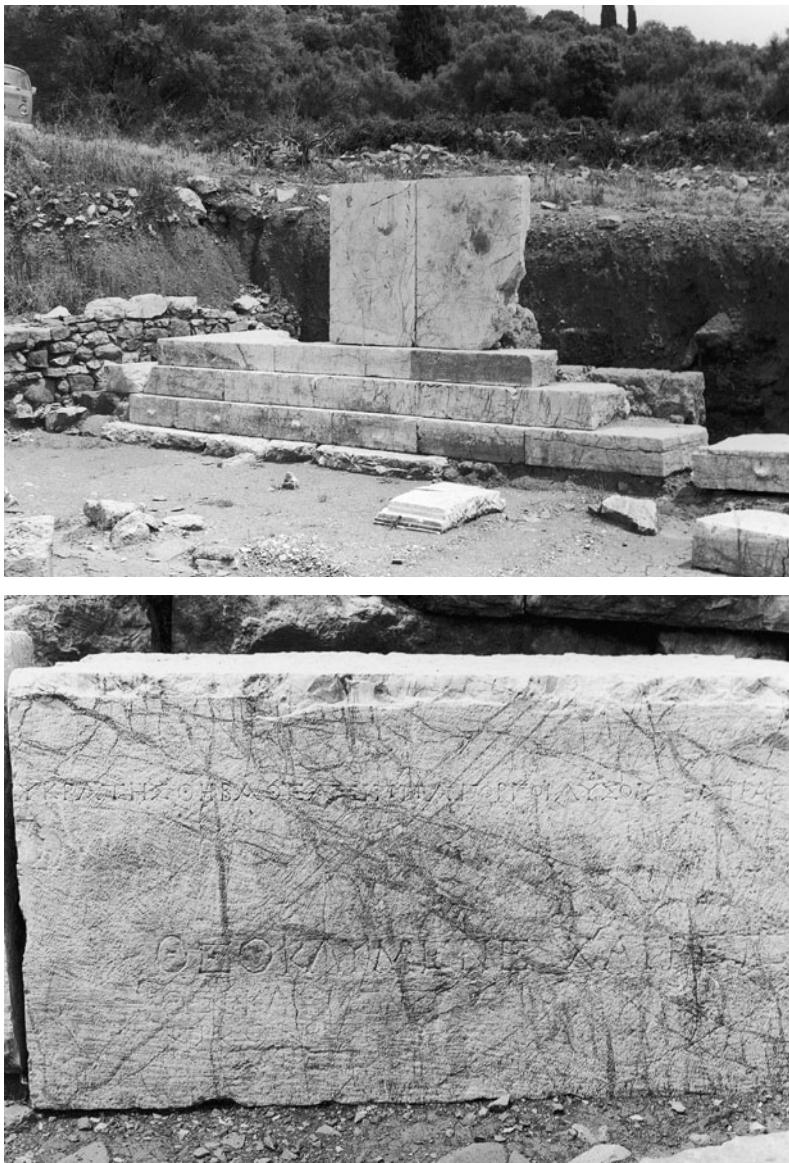


Figure 2.2 Commemoration of female casualties of war. This monument was set up in the centre of Messene, c. 200–150 BC, to honour those who had fallen in one of several recent attempts to capture the city, perhaps on the occasion in 214 BC when Macedonian troops seized part of the fortifications but were driven back by citizen troops and ‘women throwing tiles and stones’ (Paus. 4.29.5).

The inscription on the capping stones of the monument recorded six male and four female names: the latter are shown here, in small letters at the top of the stone: ‘[Poly]ykrates, Theba, Thelxippa, Gorgoi, Lysoi’. The inscription in larger letters at the bottom, ‘Farewell Theoklymenos’, is one of many added later, again featuring both male and female names.

prominence in Greek tragedy and myth of the notion of women as self-sacrificing saviours of their cities. Emily Kearns has explored this topic very well, and Joan Connolly has argued that the notion is reflected in the Parthenon frieze.⁵⁹ In tragedy we may compare the role of Macaria in Euripides' *Children of Heracles*.

In another aspect of war, namely the causes of wars, it might seem that we have a clear case of literary convention determining historiographic handling. Helen caused the war against Troy in Homer; accordingly the narrative of Herodotus starts with a series of rapes and counter-rapes including that of Helen but also of two other mythical females Io and Medea, and in his account of the Ionian Revolt against Persia in 499 he borrows Homeric language about Helen when he calls the revolt a 'beginning of troubles' (because it escalated into the main Persian War: see 5.97.3 and other passages). Again, the non-Thucydidean tradition gave a prominent role to Pericles' mistress Aspasia in the origins of the Peloponnesian War. And for Polybius, the Illyrian Wars, which first brought Rome in force across the Adriatic, were in part provoked by the headstrong Illyrian queen Teuta and her 'natural female inability to think beyond short-term successes' (Polyb. 2.4.8).

'Obviously conventional and worthless', later historians conclude about this sort of thing, 'how much wiser and more realistic was Thucydides who leaves out the silly female angle altogether'. That would however be a premature and mistaken conclusion. If we go deeper into Thucydides' account of the origin of some sub-wars, we see that women were important after all. Take the chapter where he traces the beginnings of the local Sicilian war which brought the Athenians in force across the Adriatic (in the opposite direction from the Roman contemporaries of Teuta), precipitated the calamitous expedition of 415, and ultimately contributed to the fall of the Athenian empire. Two communities in the far west of the island, Selinus and Egesta, had gone to war 'about certain matters to do with marriage and disputed land' (6.6.2). The word I have rendered 'marriage matters', *gamika*, is usually translated 'marriage rights', but 'rights', I suggest is too narrow; it also covers rejected proposals, broken betrothals, and all matters of that sort, matters which in societies driven by a touchy Mediterranean sense of honour⁶⁰ could be highly inflammable, as anthropological fieldwork in modern Greece shows.⁶¹ Naturally, marriage rights and thus questions of inheritance are *also* implied by the Greek word Thucydides uses, and 'disputed land' may be to that extent just an amplification of *gamika*. So even Thucydides, read properly, shows that women did indeed, outside fable

⁵⁹ Kearns (1990); Connolly (1996).

⁶⁰ For honour as a motive for wars see Lendon (2000) and van Wees (2001b).

⁶¹ Campbell (1964) and du Boulay (1974); against, Herzfeld (1987), but for a vigorous reaffirmation see Horden and Purcell (2000) 485–523.

and fairy-tale, cause wars; and Thucydides sometimes recognized that they did. But what he does not do is give detail. Was he embarrassed about doing so? If so we have another instance of unconscious male editing.

Even Homer plays down the story of the ‘Judgement of Paris’ which favoured Aphrodite, and ‘actually’ – i.e. in the traditional version of the myth – led to the anger of the spurned goddesses Athena and Hera and eventually the fall of Troy. He postpones it to the final book of the *Iliad* and many have wished to excise even that apparently off-hand passage from the text. On one view ‘the poet keeps it in the background because it does not suit him to attribute the gods’ hostility to such a petty motivation’.⁶² But the idea that the slighting of a woman or goddess as unattractive or otherwise unworthy could trigger male protective violence is very plausible: Thucydides hints at it when he describes how the sister of the Athenian Harmodios was, in a deliberate insult, sent home by the tyrant Hippias’ brother as unworthy to carry a basket in a sacred procession (Thuc. 6.56). This led to the assassination of the brother and the worsening of the tyranny, which fell four years later and was replaced by democracy after that. But male historians – Herodotus is the chief exception – were not always comfortable with giving detailed coverage to the female dimension to fighting and the causes of wars.

A comparable discomfort affects my third example, use of slaves in war; the women and slaves helping build the Argive walls provide a bridge to this topic. In all Thucydides, for instance, there are only two cases of slaves being freed for military purposes (3.73, Corcyra; 8.15, Chios) and it is a well-known puzzle why the Athenians did not shorten the Peloponnesian War by doing more to stimulate helot unrest at Sparta. Peter Hunt suggests that there was much more slave participation than literary texts allow us to see.⁶³ The reason for the unconscious ‘censorship’ of this aspect of ancient warfare is (the suggestion goes) that recruitment of slaves was ideologically awkward because of the close relation between military service and citizenship – *andres gar polis* (‘men are the city’) again. If this is right, we have another important area where the historiography of ancient warfare is crucially unreliable.

IV. CONCLUSION: THE PARADOX AND SIX SUGGESTIONS FOR ITS RESOLUTION

I now return to my initial paradox: why is there so much about war in ancient literature if war was not regarded as the natural, normal state of

⁶² Richardson (1993) 277, summarizing Reinhardt (1960).

⁶³ Hunt (1998), and ch. 5 in this volume, pp. 139–40. Note that slaves, like archers (above, n. 51) sometimes feature on the Athenian casualty lists: Loraux (1986) 33.

affairs? Homer's *Iliad*, with its nearly incessant fighting, might seem to provide a complete reply to any notion that war was viewed by Greeks as unnatural. There is an abundance, even superabundance, of fighting in the poem. Michael Silk dares to say 'it is difficult not to feel that the long sequence of fighting books in the middle of the *Iliad* is too long – not in any one part, but simply too long overall: its elaboration is insufficiently decisive – or incisive . . . The constructional problem represented by the *Iliad*'s central books is its most serious limitation.'⁶⁴ Add to that general relentlessness of military description, the gruesome precision of anatomical detail which marks Homeric battle-wounds (above, p. 24). This is a feature rarely imitated in later historiography, which took so much else from Homer.⁶⁵ It was not copied even by the detailed Thucydides; he hardly ever describes a battle-wound except for the consciously Homeric account of the wounding of Brasidas. (This is only a partial exception because not very anatomically specific.) There is imitation of Homeric wounds in the Alexander-historian Arrian, a self-declared prose Homer, for instance in his description of Alexander's wound at the Malli town (*Anab.* 6.10). And Hieronymus of Cardia has an extraordinary Homeric duel between Eumenes and Neoptolemus in 321 BC, so naturally he adds Homeric wounding (Diod. Sic. 18.31). What ancient literature does do is copy the epic, though not actually Homeric, depictions of the horrors of the sack of a city, the *Iliou Persis* (Fall of Troy) theme.⁶⁶ Some such Greek epic may have been fleetingly in Thucydides' mind when he compares the suffering Athenians after their total defeat at Syracuse to refugees from a sacked city (7.75.5). But the greatest and fullest example of a surviving work influenced by this lost Greek genre is Virgil, *Aeneid* 2: Aeneas recounts the fall of Troy to Dido.

A possible answer to the 'constructional' problem of the *Iliad* is that fighting and wounds are there because the audience enjoyed them so much. (I develop this later.) But, if so, Homer might, depending on his date and that of the first sea-battle, have been expected to find a place somewhere for some naval warfare, which many – not only Athenian – listeners would have appreciated, and which is absent from the epics. Unless we count as 'naval warfare' the Cyclops throwing rocks at Odysseus' ship.

So, there is a surfeit of land fighting in the *Iliad*. The poet himself seems aware that you can have enough. He makes an indignant Menelaus say 'men reach their fill of all things, even of sleep, love, sweet music and delightful dance, things in which a man would rather slake his pleasure than

⁶⁴ Silk (1987) 45, 46.

⁶⁵ But Shaw (1999) 133 strangely forgets Homer when he says that Procopius in the sixth century AD was not dependent for his account of face-wounds on 'rhetorical devices and images adopted from earlier historians'.

⁶⁶ See Paul (1982) and Anderson (1997).

in war: but the Trojans cannot have their fill of battle' (*Il.* 13.636ff.). And in all the epithets applied to war, fighting or the war-god, 'the vocabulary of suffering predominates overwhelmingly'.⁶⁷ Ares the war-god is told by Zeus that he is 'most hateful to me of all the gods that hold Olympus; always your delight is in strife, war, fighting' (*Il.* 5.891f.). There is no simple glorification here, though it is acknowledged that war is a bringer of glory to the victor. In the long similes, above all the description in Book 18 of the scenes on the shield which Hephaestus made for Achilles, peaceful life is presented without wistfulness or sentiment, but as a more desirable and normal alternative to the war and bloodshed elsewhere in the poem – and elsewhere on the shield. Thucydides does the same when in some tedious military narrative he inserts a delightful picture, quoted from a Homeric Hymn, of a Delian festival (3.104). Returning to Homer proper, if we see poignancy in this sort of counterpoint, that is our interpretation not the poet's. The French critic Simone Weil quoted Homer about Hector's wife Andromache preparing a hot bath for him not knowing Achilles had felled him far from hot baths. On this Weil commented 'nearly all the *Iliad* takes place far from hot baths. Nearly all human life has always passed far from hot baths.'⁶⁸

Despite the *Iliad*'s reservations about war and military death, the war and fighting is there and it is prominent, and one answer to our paradox might be in terms of the pervasive and possibly distorting influence of Homer on all later ancient historiography, down to and including Procopius; the classic exposition of this debt is by Hermann Strasburger.⁶⁹ A recently discovered poem about the Persian Wars by Simonides (above, n. 1) reinforces this insight, because the parallel between the Trojan and Persian Wars is drawn even more explicitly than in Herodotus. But the insight, though sound in a general sort of way, takes us only some of the distance, because as we have seen it was not until Procopius that ancient writers copied the very detailed battle-wounds which are such a feature of Homeric narrative. And it cannot be said that, for instance, Thucydides' accounts of battles owe much to Homer at the level of detail: there are Homeric aspects to his books about Sicily but battle-detail is not where they are to be looked for. The great military climax is anyway a sea-battle and so as we saw has no exact counterpart in Homer, though rich in poetic unusual vocabulary. Another simple point is that the *Iliad* is only half of Homer: the *Odyssey* is notably short on fighting till Odysseus' slaughter of the suitors at the end. And finally, although there is a good deal of later imitation of Homer by the classical historians, there is also imitation of reaction to and polemic against each other, though admittedly there is a sort of snowballing effect

⁶⁷ Silk (1987) 74.

⁶⁸ Weil (1957) 25.

⁶⁹ Strasburger (1972).

in that once Homer and his early imitators had set the military trend it was hard for anyone to escape it.

There is no easy replacement answer to the paradox; but I end this chapter with six suggestions, building on my remarks so far. The first has to do with my earlier point about women, and the prevalence of less organized non-ritualized fighting at a level below that which poets and historians deigned to put in the foreground, instead placing undue stress on formal combat between groups and individuals. They did so to uphold an essentially male ideology, one in which, admittedly, male excellence is defined by ability to protect females. Graham Shipley has said something similar. He argued, rightly, that Greek societies, even Spartan, were not militaristic, so that we need a special explanation for the literary prominence of war. He concludes 'the selection of war as the paramount activity can be regarded as an attempt to direct energy towards maintaining a particular social structure, one in which citizen was dominated by aristocrat, non-citizen by citizen, female by male, and barbarian by Greek'.⁷⁰

The second has to do with Thucydides. It is no new claim to say that after Herodotus history-writing narrowed down so that war and fighting take up a higher percentage of the total. This should not be overdone; on the one hand there are ethnography and kinship mythology in Thucydides; and it is Thucydides not Herodotus who imitates Pindar on the departure of the Argonauts (above, p. 24). And on the other hand Oswyn Murray showed thirty years ago that Herodotus not Thucydides was the preferred model for Greek writers describing the cultural aftermath of Alexander's exotic conquests.⁷¹ But the point about Thucydidean narrowing stands, and I have argued elsewhere that even in the fourth century and Hellenistic period, not to mention the Roman imperial period, his influence stayed strong.⁷² That influence, rather than vague notions about disappearance of aristocratic values, may explain the end of epicnian (victory) poetry after Euripides' ode for the equestrian successes of Alcibiades at Olympia in 416 BC. After all, Philip II of Macedon and Arybbas king of Molossia won the chariot race at Olympia in the mid-fourth century (*Tod* no. 173 = *RO* no. 70); why was there no Pindar to praise them?

My third suggestion is that some kinds of ancient writing describe and reflect displaced rather than actual aggression, and are themselves a sort of substitute for aggression. It is a commonplace that Pindar and Bacchylides celebrate athletic victory in language resembling that of war.⁷³ In a sense this is evidence of the paramountcy of fighting: the stadium at Olympia was festooned with decorated suits of armour, something which should make us think twice before associating the 'Olympic movement' with peace. But another view is possible: Catherine Morgan has shown that competition

⁷⁰ Shipley (1993) 23.

⁷¹ Murray (1972).

⁷² Hornblower (1995).

⁷³ Bowra (1964) 183–4.

between individuals and communities for prestige at the great panhellenic sanctuaries was an alternative to rather than a manifestation or extension of actual fighting.⁷⁴ That makes it comparable to such other Greek phenomena as kinship diplomacy, arbitration, and federalism, all (as we have seen, p. 25 above) mechanisms for the avoidance of bloodshed. In which case the aggressive language of Pindar can also be seen as displacement, like the race in hoplite armour which was one of the events which Pindar celebrates (*Pythian* 9, for Telesicles of Cyrene).

My fourth suggestion is that delight in battle technicality reflects delight in technicality rather than delight in battle. A comparison from another walk of life is provided by the Aristotelian treatise on Athens, which has much unnecessary detail about mechanisms for jury-selection. The best explanation is that of P. J. Rhodes: the author was proud of and fascinated by the ingenuity of the methods used, wanted to write about it, and assumed his readers would enjoy it too.⁷⁵ So in the Peloponnesian War, Euripides produced two plays (*Children of Heracles*, *Phoenician Women*) containing military debates about tactics which are strictly unnecessary to the plot and hard to explain except by supposing that male, wartime Athenian audiences liked the exposition of a topical technical problem. Greek tragedy tends to avoid glaring anachronism, as Pat Easterling has shown;⁷⁶ but in the area of war her rule is close to being broken. So too Thucydides and his imitators were writing for readers who may not have liked fighting but liked hearing or reading about it at length and in detail because they liked good professional exposition of any sort. So too the treatise *On Siege-craft* by Aeneas the Tactician, written in about the 350s BC, surely catered for more than a narrowly military readership: it has wide entertainment appeal, particularly as an anthology of historical stratagems. Such collections, like those of Polyaenus, raise important questions about readership and audience. I suggest that the taste catered for by Aeneas is not a thirst for blood-curdling stories (there's little of this and the treatise is anyway as much political and financial as military) but that, like some later 'how-to-build-a-catapult' treatises, it attests general enthusiasm for ingenuity. There were comparable collections of financial 'stratagems' like the Hellenistic treatise *On Economics* attributed to Aristotle. Here we enter the intriguing world of such literary sub-genres as 'pinacography' (compiling of lists) and 'paradoxography' (collections of marvels).

'Mainstream' historiography found space for plenty of this sort of thing: there are some odd tales preserved in Polybius Book 12, which is about historical method. It includes some sharp military criticism of Callisthenes, but this does not prove the militarism of Greek historiography because

⁷⁴ Morgan (1990); for the classical period Hornblower (1992).

⁷⁵ Rhodes (1981) 697. ⁷⁶ Easterling (1985).

Polybius also criticizes Timaeus, the historian of the West, for including or omitting some very non-military marvels: he is reproved for not mentioning Libyan ostriches (12.3.5–6). Polybius' criticisms of Callisthenes' account of Alexander's battle at Issus are an essay not so much in the art of war as in the art of historiography.

My fifth and related suggestion concerns Roman writers in the sense of people who wrote in the Roman period. Some Greek literature has reached us direct. But much other ancient Greek writing, particularly historiography, is lost in the original but has been transmitted by 'secondary' writers of the Roman period. Some of these later figures wrote in Greek (Diodorus, Arrian, and Plutarch), some in Latin (thus much Polybius derives from Livy). If it is right that Romans liked fighting rather more than Greeks did, then Roman influence and taste may be partly responsible for the unbalanced amount of military detail in surviving secondary accounts. Greek writers of the Empire may from snobbery have disregarded Latin literary achievements like Virgil's *Aeneid* (cf. n. 45, above), but a Greek like Arrian, with Roman military experience at a senior level, can hardly have avoided being affected by the Roman military milieu. His immediate source, Ptolemy, was king of Egypt and another fighter, and this is admittedly one possible alternative explanation for all the fighting in Arrian, as is the fact that Callisthenes, Ptolemy's own source for the early years, presented Alexander as a heroic fighter. But if we did not have Arrian, we would know little more about Ptolemy the writer than that he was an authority on trees (*FGrH* 138 T2), an item we owe to Pliny the Elder (*HN* 1.12.13). So perhaps Ptolemy's account was more varied in the original. This might help to explain why the military Thucydides came back into fashion, and was much imitated, in the imperial Roman period.

My sixth and final suggestion stresses the vast amount of ancient literature which, despite continuing and important papyrus finds, is lost to us even in epitome or translation, including entire early epics. One was about Jason and the Argonauts, which might have redressed the bias against the sea in our sources. Again, we have seven plays of Sophocles but in fact he wrote a three-figure total; fragments of one of these, the revenge tragedy *Tereus*, indicate a play very unlike the surviving seven.⁷⁷ This does not prevent modern scholars writing confident seven-chapter books called 'Sophoclean tragedy'. Humility is called for in the face of such facts: our generalizations about ancient literature are based on a statistically small sample. If we had full texts of the Sophocles plays I mentioned above (p. 25) we would have a better perspective on Athenian interest in the West in the fifth century. As it is, Herodotus says Daedalus came from Crete with king Minos in

⁷⁷ Zacharia (2001).

pursuit and when Minos was killed his followers settled down to became Messapians in the hinterland of Sparta's colony Taras (7.170). This was a way of giving a Greek pedigree to the non-Greek neighbours of Athens' ally Artas king of Messapia (Thuc. 7.33.4) and is part of the charter for Athenian expansion in south Italy. All this passes Thucydides by, and Herodotus, to whom we owe our knowledge of it, does not bring out its implications.

The above six suggestions certainly do not exclude each other and are surely not the whole story. But they may go some way to explain parts of the paradox of my sub-title. My main solution to the paradox is however to accept it: in this area Greek literature may indeed be an unsafe and rhetorical guide to the reality; so perhaps Michael Howard was right after all to suspect us of not having 'reliable records'. But we can read behind, and between the lines of, the literary records, and we do have copious documentary (mainly inscriptional) evidence with which to supplement and even correct them.

CHAPTER 3

RECONSTRUCTING ANCIENT WARFARE

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Reconstruction of ancient warfare can be pursued in a variety of ways. There is a long tradition of close attention to particular engagements: the battle narratives of Herodotus or Caesar appear to permit analysis of what happened and why in particular engagements. This focus, once much more academically prevalent than now, has by no means lost its popular appeal, thanks in part to the historical appetite of competing television companies. Individual battles are also considered within the context of the campaign or war to which they belong, since the strategy and tactics of a successful general, an Alexander, Hannibal or Caesar, might suggest lessons to contemporary commanders. The military activities of the ancient world generated material evidence in the form of walls and specialist buildings as well as equipment. This evidence does not often contribute crucially to ‘battles and commanders’ studies, but rather invites questions about purpose and operation at both the detailed level of the particular item and the larger scale of strategic conception, structural organization or diplomatic framework. Military activities were also depicted in a variety of artistic media, from the grand monuments of public propaganda through the scenes on particular painted vases to graffiti, all of which require sensitive interpretation. There is an enduring interest in ‘what it was like for them’, which embraces physical aspects of wielding an ancient weapon or sitting on a rower’s bench, the personal experience of battle, and psychological questions of the place of warfare in the mental framework of the population. Close examination of ancient historical narratives, whose authors’ methods and attitudes need to be evaluated, is essential for all reconstructions of ancient warfare and the problems of this material will be central to this chapter.

Basic questions to be asked of any reconstruction are what is supported by reliable evidence, what depends on plausible inference from geography or relevant comparative material, and what is speculation based on assumptions that something must have happened along particular lines to produce a specific outcome. The inevitable shortcomings of military narratives constructed from the memories of participants were analysed by

Whatley:¹ individuals only see a small part of an engagement, they preserve distorted recollections even of their own contributions, and are unlikely to appreciate broader issues. Ancient battles were far less complex occasions than those of the First World War which Whatley used for comparative purposes, but even the best ancient historians found some hard to describe (Thuc. 7.44.1): the reality of battle was chaotic, and the truth of every aspect of an encounter might never be known since memories would focus on the outcome and significant incidents. Our difficulties are compounded by different presuppositions of what is required of a reconstruction: we expect maps or plans to illuminate campaign strategies, tactics, and the progress of an engagement, whereas the ancient world operated very largely without these aids. Ancient visual images of war celebrated victory through selections of vignettes, for example the depiction of Marathon on the Stoa Poikile at Athens (Paus. 1.15) or the Dacian campaigns on Trajan's column at Rome (fig. 3.1):² viewers would see specific incidents, such as the fight at the Persian ships or the end of Decebalus, and adopt the intended message about divinely assisted Athenian success or disciplined organization of imperial campaigns. The Stoa Poikile and Trajan's column were propaganda statements, as partisan as the paintings of action at Carthage in the Third Punic War which L. Hostilius Mancinus displayed at Rome to further his electoral chances in 146, to the annoyance of Scipio Aemilianus.³

Another complication is the limited viewpoints we have on any one incident. It was rare for Greeks or Romans to fight an opponent who had the same concern as classical culture to construct literary records of historical events: Persians, whether Achaemenid or Sasanid, did not, although Darius' Behistun inscription and the so-called *Res Gestae* of Shapur I demonstrate that there were alternative accounts to classical sources. Cunaxa in 401 was recorded by Ctesias, a Greek doctor in the service of king Artaxerxes, as well as Xenophon who accompanied the rebel Cyrus, but we can only reconstruct Ctesias' account at second or third hand; he may have been more interested in highlighting his services to the wounded Persian king than providing a clear account of the battle.⁴ Hannibal is an exception since he employed the Spartan Sosylus to record his achievements, and this account along with that of Silenus of Caleacte, another Greek in Hannibal's retinue, was used by Polybius.⁵ Internal conflicts in the Greek world or Roman civil wars might also have generated alternative written versions,

¹ Whatley (1964). ² Lepper and Frere (1988).

³ Plin. *HN* 35.23, with Astin (1967) 70, 99 for the events; Pliny (35.22) refers to other military paintings at Rome, probably equally publicist and contentious.

⁴ For discussion see Stevenson (1997) 84–93.

⁵ For brief discussion of Polybius' sources, with further references, see Walbank (1972) 77–84.

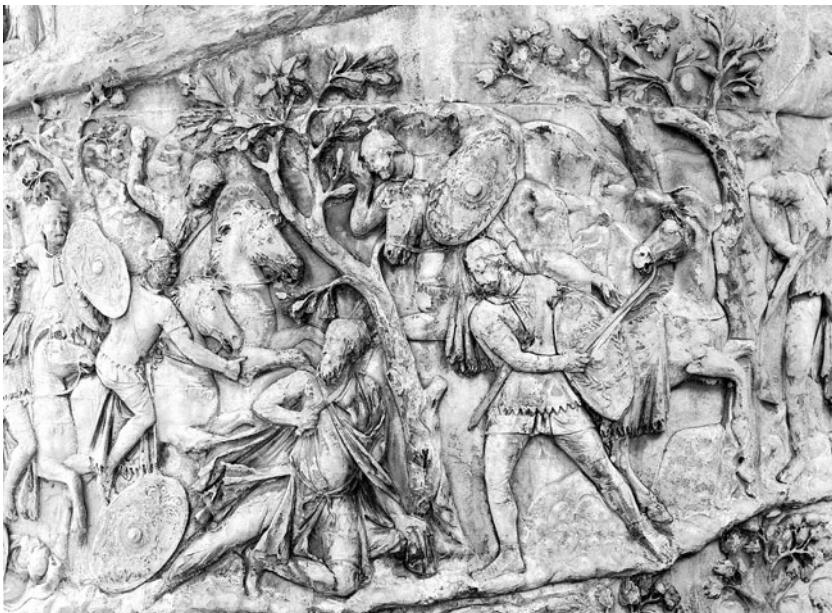


Figure 3.1 Death of Decebalus from Trajan's column in Rome.

but in many cases history was written by the victor while the vanquished chose not to recall their misfortune in detail.

Distinct accounts may, of course, create problems. For Callinicum (AD 530) Procopius, an advisor to Belisarius, produced a version which exonerated his commander who behaved valiantly throughout but was betrayed by allied Arabs (*Wars* 1.18). By contrast Malalas, a contemporary bureaucrat in Antioch who could have had access to official reports, does not mention Arab treachery and has Belisarius abandon the remnant of his army during the fighting to escape across the Euphrates (18.60, 463.4–465.3). Procopius' account long held the field, since he was a 'proper' classicizing historian as opposed to the chronicler Malalas, but then the balance swung with Procopius being challenged by Shahîd, the expert on Rome's Christian Arab allies whose writings consistently uphold the honesty of Arab behaviour. This verdict has then been adopted by those who wish to query the overriding authority of Procopius as historian for Justinian's reign.⁶ The scope for Procopius' bias is clear, but it is wrong to assume that Malalas was impartial

⁶ Shahîd (1995) 134–43; see the critical assessment by Whittow (1999). Shahîd's approach is supported by Cameron (1985) 125. Contrast Greatrex (1998) 200–7, who has questioned the tendency to accept Malalas without sensible historiographical caveats, but he might be accused of excessive deference to Procopius.

or the reports on which he relied an entirely fair account of events since military or court rivalries could have supervened. Our decisions on details of military actions may not be free from the influence of extraneous factors.

I. THE LITERARY STATUS OF ANCIENT HISTORIOGRAPHY

Our fullest and most regular information about ancient warfare is provided by the sequence of Greek and Latin historians whose accounts of significant public events were usually dominated by military action,⁷ but these are complex texts. A vital consideration in approaching this material is its literary status: historiography was regarded as a branch of oratory, and the structure and style of a narrative were as important for its reputation as factual accuracy.⁸ Ancient audiences did expect true accounts, and historians frequently asserted their commitment to truth, but it was much easier to assess a narrative's literary merits than its veracity: credibility might be enough to ensure acceptance. Practical experience was recognized as an essential qualification for historiography by some writers, inevitably those who possessed it such as Polybius who devoted a long digression (Book 12) to the faults of Timaeus, of which excessive bookishness was one. Polybius stipulated that men of experience should treat historiography more seriously than was the current custom (12.28.3–4); this clearly left Polybius as the ideal historian. By contrast Agathias explained that friends convinced him that there was not much difference between history and poetry (at which he was competent), since both aimed at decorous expression and apportionment of moral praise and blame (pref. 4–13). Livy stated that new historians would justify their narratives through superior literary skill just as much as fresh material (pref. 1.2). Cicero, when searching for a writer to record the vicissitudes of his career, stressed that a straight narrative was not particularly interesting: an author had to make the most of whatever dramatic incidents were available (*Fam.* 5.12.5).

A cynical review of what historiography might involve is provided by Lucian's essay *How to Write History*: armchair invention of Roman successes might satisfy audiences' desire for historical information on recent campaigns; hard fact was swamped by literary imitation, repeated digressions on minor details, and extravagant presentation of Roman victories. Composition might be reduced to a formulaic exercise. The consequences are illustrated by the account in Theophylact (*Hist.* 3.14) of the confrontation of Romans and Persians near Melitene in 576:

Then the Romans also formed up and raised their standards. Next the trumpets sounded forth, the dust was whirled aloft; the clamour poured forth and,

⁷ Tacitus is a rare exception; and cf. Gilliver, ch. 4 in Volume II.

⁸ Wiseman (1981) 389; Wheeldon (1989) 60.

inundating the place, surging with the din of whinnying, and eddying with the clashing of weapons, it naturally transformed everything to indistinctness . . . Accordingly, a most memorable battle between Romans and Parthians occurred, the Persian disposition was broken because their ranks were not organised in depth, the rearguard of the Babylonian armament was at a loss, and there was no counter-resistance; next when the opposing force pressed heavily, the barbarians faced destruction and veered away in flight.

The whole account, composed fifty years after the event, extends for about a page of text without casting much light on what happened: standard elements of a battle are introduced, with the Persians relying on arrows while the Romans preferred close combat, and the only clear aspects are the luxurious booty from the capture of the Persian royal tent and the Persian flight. Comparison with a near-contemporary Syriac account of this campaign (Joh. Eph. *Hist. eccl.* 6.8–9) suggests that there was probably no battle: the victory might have been invented by Roman writers to supplement information about the dispatch to Constantinople of spectacular booty, and the drowning of numerous Persians while fleeing across the Euphrates. Theophylact's verbose imprecision has been widely accepted as evidence for a major pitched battle.⁹

This is an extreme version of the problems caused by the literary character of ancient historiography, but at a lesser level the impact of the literary tradition may still distort our understanding. One example is the record of pre-battle speeches: with few exceptions speeches reported by ancient historians are their own invention, but a harangue was seen as sensible motivation for troops. Hansen, however, argued that the practice was a literary *topos*: this challenge is unconvincing, but it reflects the importance of always considering the possibility of literary distortion.¹⁰ Accounts of sieges are another suspect area: the influence of Thucydides' narrative of the siege of Plataea has been identified in much later writers such as Priscus and Procopius;¹¹ the recurrence in Diodorus of elements such as discharges of missiles, exchanged shouts, sorties, and men fighting in relays, has suggested that his siege narratives are a patchwork of literary motifs¹² – indeed Diodorus' battle narratives may be conditioned by stereotypes.¹³

⁹ Discussion in Whithy (1988) 262–6; for a defence of the ancient accounts of the battle, see Syvärne (2004) 443–4.

¹⁰ Hansen (1993); response in, e.g., Pritchett (2002); the fact that Xenophon (*Cyr.* 3.3.49–55), advised against the practice, and the Roman tactical writer Syrianus composed a work on speeches, suggests that speeches were delivered.

¹¹ Sensible discussion of Priscus in Blockley (1981) 54; for Procopius, see Averil Cameron (1985) 37–46. Thucydides' account of the Athenian plague was another stimulus to imitation (Lucian, *Hist. conscr.* 15), including in Procop. *Wars* 2.22–3.

¹² Hammond (1983b) ch. 1, esp. 13–16, 39–40, 47. Hammond attributes much of the invention to Diodorus' probable source, Clitarchus, but the consequences for the narrative are the same.

¹³ Welles (1963) 14; Vial (1977) xx–xxi.

A complication for this analysis is that literature influenced not only subsequent historiography but also historical participants. A standard element in preparation for war, especially for command, was the study of previous campaigns, either through narratives or collections of strategems which included extracts from literary accounts: thus Alexander would have informed his invasion of Persia through study of Herodotus and Xenophon, while Julian's similar project could exploit the Alexander historians as well as Xenophon; a brief account of the accomplishments of Alexander and Trajan was dedicated to the young Constantius II embarking on campaign against the Persians.¹⁴ Alexander the Great's devotion to Homer is well attested, and his actions were given an epic gloss by his court historian Callisthenes, but he also deliberately modelled his behaviour on Homeric heroes, especially his ancestor Achilles, so that the distinction between 'reality' and representation is bound to be complex.¹⁵ Common sense and/or subjective judgement are required to distinguish. Thus, the fact that Julian's deathbed resembled that of Socrates (Amm. Marc. 25.3.21–3) probably reflects the wounded emperor's deliberate imitation of his philosophical hero; by contrast a writer's susceptibility to literary influences should account for similarities between the battlefield deaths of Epaminondas at Mantinea in 362 BC and an anonymous hero after Solachon in 586 (Theophyl. Sim. *Hist.* 2.6.1–9). Alexander probably did resort to sulking in his tent like Achilles after the Hyphasis mutiny (Arr. *Anab.* 5.28.3); whether he also adapted Achilles' maltreatment of Hector's corpse to drag Betis, the gallant Persian commander at Gaza, to his death (Curt. 4.6.29) is debated, since the story might have been invented to discredit Alexander's changing personality.

Not all historians, however, set out to produce works of literary quality. There once existed detailed but not particularly appealing accounts of some campaigns; however, texts such as the continuation of Thucydides known as the *Hellenica Oxyrhynchia*,¹⁶ or scraps from a narrative of Alexander's Balkan campaigns only survive directly on papyrus fragments.¹⁷ Their failure to satisfy audiences' literary expectations helped to ensure their disappearance; they probably did not circulate widely in antiquity, and were not chosen for copying by medieval scribes, especially if more attractive narratives existed. Our best chance of substantial, if indirect, knowledge of their contents is if they were reused by a historical

¹⁴ The so-called *Itinerarium Alexandri* (since only the Alexander section survives); see Barnes (1985) 135; Lane Fox (1997).

¹⁵ Lane Fox (1973) 60–7, 112–15.

¹⁶ If the *Hellenica Oxyrhynchia* should be ascribed to Cratippus, the most plausible of several suggestions, then Cratippus' distaste for speeches in historiography (Dion. Hal. *Thuc.* 17) might have reduced the appeal of his work.

¹⁷ Bruce (1967); Clarysse and Schepens (1985). The arguments and reconstruction of Hammond (1987), cf. (1988b), are not cogent; see Whitby (2004) 42–6.

compiler. We can explain Polybius' observation that Ephorus' accounts of the naval battles at Cyprus and Cnidus were better than those of Leuctra and Mantinea (12.25f.1–4) since Ephorus used the *Hellenica Oxyrhynchia* for the former; although Ephorus does not survive, Diodorus used his account so that through his universal history we have a third-hand version of the *Hellenica Oxyrhynchia* in addition to the papyrus remains. Hieronymus of Cardia, secretary to Antigonus Monophthalmus and composer of an authoritative account of Alexander's successors, also survives only through the medium of Diodorus; again Hieronymus' attention to factual accuracy and detailed narration may have counted against him.¹⁸

Size also mattered. Polybius composed forty books of which only the first five books survive complete; there are substantial fragments from the remaining thirty-five, but much has been lost. Under a quarter of Livy's 145 books have come down to us, much the same is true of Cassius Dio's eighty books, and almost half of Ammianus is lost. Even the usefulness of some narratives may have helped to condemn them. In the tenth century the Eastern emperor Constantine Porphyrogenitus commissioned a massive compilation of extracts from ancient writers, of which the sections on diplomacy, plots, and moral sayings have survived. For historians such as Priscus, Malchus and Menander we have substantial fragments primarily concerned with diplomatic exchanges, which suggest that these writers would have preserved interesting accounts of military operations, perhaps of high quality. But once the Constantinian scribes had copied relevant information into the imperial collection there may have been less need to invest time and effort in recopying deteriorating manuscripts. Literary accounts of ancient warfare undoubtedly pose plenty of problems, but it is better to have the texts than not.

II. AUTHOR-PARTICIPANTS

One escape from the dominance of literary tradition might be sought in the works of authors with personal experience of warfare, especially if they were reporting actions of which they had personal knowledge. Ammianus Marcellinus, an imperial *protector* (junior staff officer), narrated a number of military events in which he participated, between the suppression of Silvanus' revolt in AD 354 (where the extant portion of his *Res Gestae* begins) and the death of Julian in 363. His account often conveys the conflicting emotions of direct participation, for example the swirl of a sudden cavalry skirmish and the crush of a mob seeking the safety of Amida (18.8.4–14), and the reader may be lured into accepting such pictures as an accurate

¹⁸ See Hornblower (1981).

presentation of events. But Ammianus only completed his account a generation later and his recollection may not always have been accurate: at least he forgot the orientation of Amida whose siege he witnessed (18.9.2). He was not privy to important imperial discussions: for example he categorized Julian's destruction of his supply boats on the Tigris near Ctesiphon as folly (24.7.4), an accusation he would not have made if he had appreciated the impossibility of dragging the ships upstream. He had strong biases, especially against Constantius II and for Julian and the general Ursicinus, and these influenced his reporting.¹⁹ He may also have had personal reasons for keeping silent about certain events, for example his escape from Amida as it fell to the Persians (19.8.5). Above all, this soldier-historian emerges as a skilled literary author, whose delight in spectacular tableaux and manipulation of material must ceaselessly be probed.²⁰

Other author-participants present similar problems. Thucydides could have said more about the circumstances and consequences of the Athenian loss of Amphipolis in 424 BC (4.102–8), when he was commanding the fleet responsible for the city's safety, a misfortune for which he was exiled.²¹ By contrast he brilliantly evokes the shifting emotions of the desperate Athenians watching the destruction of their fleet at Syracuse (7.71), an engagement which he would not personally have witnessed: the description is a literary *tour de force*.²² Xenophon's account of his involvement in Cyrus the Younger's bid for the Persian throne and the retreat of the Greek mercenaries across the Armenian highlands, for which he had been chosen as one of the generals, is analogous to Ammianus in first-hand colour, but readers must again beware the assumption that they are receiving the whole story. Xenophon had a case to argue about his actions, used the narrative to project ideas about panhellenism, wrote up his memories over a generation later, and could not, even with perfect recollection, have recorded all aspects of the expedition (e.g. *An.* 1.8.23 refers to Ctesias for Artaxerxes' wound at Cunaxa).²³ Caesar's accounts of his actions in Gaul and during the Civil War are comparable. Particularly with regard to the Gallic conquest he presented a narrative to influence a contemporary Roman audience which included prominent opponents whose enmity might be restrained if his achievements were received enthusiastically by the wider community. Potentially contentious actions might be made to appear justified by circumstances, the magnitude of a task overstated, errors by significant individuals such as

¹⁹ Matthews (1989) 35–41.

²⁰ Barnes (1998); see also many of the contributions to Drijvers and Hunt (1999).

²¹ Noted by Gomme (1945–81) III, 584–8.

²² Macleod (1983) ch. 13, 'Thucydides and tragedy' at 141–6.

²³ Cawkwell (1972) 16–23; cf. Dillery (1995) 109–14 for Xenophon's version of the battle of Pactolus.

Quintus Cicero treated with restraint (5.38–40), and the drama of action highlighted, especially Caesar's own participation.²⁴

Quite apart from personal or political distortions, authors with military experience may have shaped their narratives to demonstrate the operation of what they regarded as significant factors in warfare: historians were educators as well as reporters, and so had a duty to ensure that important lessons were learnt. Lendon has urged the need to investigate what he terms the 'grammar' of battle descriptions since experts had different conceptions of what matters in battle.²⁵ Xenophon observed fluctuations in morale, whereas Polybius was attentive to geographical and tactical issues which might affect the performance of Hellenistic phalanx or cavalry formations. Caesar combined these approaches, although morale was more important for him than tactics, and geographical factors are noticed less: disciplined Roman troops with a good general should take variations in conditions in their stride. The conflicting pull of such factors may confuse analyses, as for Caesar's account of his victory at Pharsalus (*B Civ.* 3.88–95); even a more straightforward description, such as the defeat of the Nervii at the Sambre (*B Gall.* 2.16–28), may be little more than an artistic series of incidents whose relationship is not specifically stated but whose overall impression conveys the desired message about how victory was secured.²⁶

The status or political and military experience of these authors does not guarantee the accuracy of the record. What might be termed the fallacy of military knowledge can be seen in extreme form in interpretations of accounts of Alexander's first victory, at the River Granicus in 334 BC. Arrian, writing over four centuries later, recorded that Alexander attacked diagonally across the river in the afternoon, after dismissing advice from Parmenio to wait and plan to outflank the Persians who were massed on the opposite bank; after a fierce cavalry skirmish, Alexander managed to force his way onto the eastern side of the river and thereafter his army overwhelmed the Persians (1.13–16). According to Diodorus (17.19–21), however, Alexander's actions paralleled Parmenio's advice, although his battle did include a fierce cavalry skirmish similar to Arrian's. On timing most scholars have sided with Arrian,²⁷ the 'better' historian who followed named sources including the 'military' Ptolemy, whereas Diodorus is a compiler, whose 'descriptions of Alexander's other battles are patently unreliable'.²⁸ Arrian's account presents topographical problems, which are not resolved by local investigation: examination of the river bed may explain why Alexander had

²⁴ See Welch and Powell (1998), especially the contributions of K. Welch, 'Caesar and his officers in the Gallic War commentaries' 85–110, and A. Goldsworthy, "'Instinctive genius': the depiction of Caesar the general' 193–219.

²⁵ Lendon (1999).

²⁶ Lendon (1999) 279–81 (Pharsalus); 317–20 (Nervii).

²⁷ E.g. Hammond (1980a).

²⁸ Brunt (1976) 450. For discussion see also Bosworth (1980–95) 1.114–16, who prefers Diodorus.

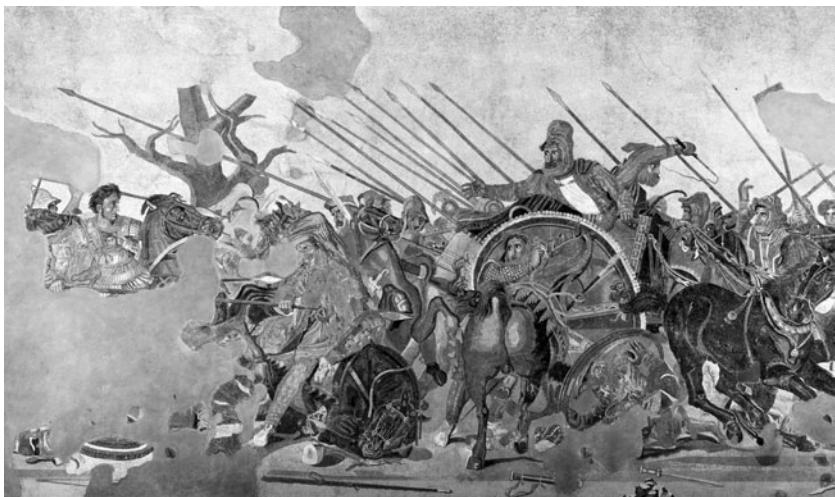


Figure 3.2 Mosaic depicting Alexander and Darius at the battle of Issus.

to cross the river at an angle, to move from one gently sloping gravelled approach to a comparable break in the steep banks on the other side²⁹ – contrary to the sources' explanation about the strength of the current (*Arr. Anab.* 1.14.7; *Plut. Alex.* 16.4) – but the precise locations of the Persian forces cannot be identified and it is unclear why they stationed their powerful cavalry along the river bank where it was impossible to generate the momentum of a charge. General Fuller cut through the problems by accepting Arrian as accurate and failing to recognize that there was a historiographical problem.³⁰ Brunt, in an uncharacteristic credulous mode, compounded the 'military fallacy' by concluding his review of the sources' tactical disagreement with an appeal to higher authority: 'General Fuller, a practised soldier, accepted A.[Arrian] without demur.'³¹

Alexander's determination to maximize his personal heroic glory, especially early in his career, may have distorted accounts of the Granicus beyond all expectations: the unreliability of Diodorus has to be balanced against the implausibility of Arrian. Confidence in the expertise of Alexander's source Ptolemy on warfare is undermined by consideration of Polybius' critique (12.17–22) of the account of Issus (fig. 3.2) by Callisthenes, Alexander's court historian. The relevant issue is not the specific faults which Polybius identified, since they largely involve exaggerated numbers and reveal some errors of his own – Polybius 'at his worst'.³² But Polybius provides

²⁹ Foss (1977). Hammond's detailed analysis (1980a) adds little.

³⁰ Fuller (1958) 147–54; for criticisms, see Badian (1977).

³¹ Brunt (1976) 450–1.

³² Walbank (1957–1979) II.364; also Bosworth (1988b) 5–6.

enough information to show that Arrian's account (2.6–11) was essentially the same as that being criticized: thus, far from being an independent and reliable authority, Ptolemy adopted the battle narrative of his encomiastic predecessor.³³

III. PRIORITIES AND ASSUMPTIONS

The dominance of literary convention affected even the earliest historians, Herodotus and Thucydides, since they were still subject to the influence of earlier traditions of narrative, especially the Homeric poems in the case of Herodotus: he was tackling an epic project of preserving great deeds from oblivion, and poetic accounts such as the 'New' Simonides had already given epic treatment to the Persian Wars. Thucydides in addition worked against the background of Herodotus and Athenian tragedy. Herodotus was attracted by the actions of individuals who could illustrate wider themes, and by intriguing stories. Thus he notes that Cleomenes defeated the Argives at Sepeia, a victory relevant to Greek opposition to Persia, in order to explain the divine punishment suffered by Cleomenes (6.75), for acts such as his treacherous murder of Argive fugitives after the battle (6.79). The only specific information about the battle is the way in which Cleomenes fooled the Argives into believing that the Spartans were about to eat breakfast (6.77–8); Argive casualties are reported much later (7.148.2).³⁴

Sparta's league of Peloponnesian allies, the backbone of Greek resistance to Xerxes, was a fact of life for Herodotus' audience, and he saw no need to explain its evolution: again he focused on interesting stories. The acquisition of the bones of Orestes explains how Sparta triumphed over neighbouring Tegea (1.67–8), which had previously humiliated her in the 'battle of the Chains' (1.66). We do not know precisely where or how this battle was fought, nor how Sparta subsequently secured the upper hand: modern scholars suggest, plausibly, that Sparta moved from a policy of conquest to diplomatic domination with Tegea as one of the first states to be secured for the Spartan network of alliances,³⁵ but Herodotus does not record this and instead refers to Spartan successes in battle. Herodotus also assumed that his audience understood what a hoplite battle entailed: thus he describes the unusual battle of the Champions, which pitted 300 Argives and Spartans against each other (1.82), but not the full-scale encounter which followed

³³ Detailed discussion in Bosworth (1980–95) 1.198–219; see Brunt (1983) 546 for Ptolemy's wider dependence on Callisthenes, and Bosworth (1996) 41–53 for Ptolemy's distorted record of his own actions.

³⁴ The campaign is reconstructed on the basis of sound geographical knowledge and inferences from Herodotus by Cartledge (1979) 128–9.

³⁵ Discussion in Cartledge (1979) 118–20.

and decided the issue in Sparta's favour. Herodotus shared this assumption with other ancient writers: for example Xenophon commented that the battle of Coronea was unlike any other battle (*Hell.* 4.3.16), but presupposed that his readers would know what he meant. As a result we lack specific information about the normal progress of a hoplite encounter, and scholars disagree about the role of the *othismos*, the 'shove'.³⁶ Latin historians are no better, and our understanding of the operation of Roman units depends on military handbooks rather than idealized or vague claims in historians (e.g. Livy 8.8).

Herodotus' primary concern was the triumph of the Greeks through half a dozen major engagements: colourful details are recorded, for example the medical attention which the Persians provided for a heroic Greek (7.181), but other issues remain obscure, for example the actual contribution of the 35,000 light-armed helots who accompanied the Spartans to Plataea.³⁷ The discrepancy between modern and Herodotean interests is particularly evident with regard to strategy: Herodotus says little about the principles behind Greek resistance to Xerxes. Modern scholars assume that the Greeks recognized the need for cooperation between land and sea, so that occupation of the defile of Thermopylae was coordinated with the fleet's station at Artemisium and the use of Salamis as a base assisted the defence of the Isthmus of Corinth.³⁸ This overall strategy seems so plausible that it is worrying to see signs in Herodotus that the Greeks were not always aware of it: the first proposal, to oppose the Persians at the Vale of Tempe (7.173), offered no opportunity for the Greek fleet to confront the Persians along the open coastline of Thessaly. Herodotus does not note a strategic link between Thermopylae and Artemisium, although he knew that the engagements were contemporary and that the Greek fleet withdrew after hearing of Leonidas' death. His reports of Greek discussions about withdrawing the fleet from Salamis do not contain any suggestion of strategic thought in the selection of the site: Salamis had in fact been chosen as the fleet's base to assist in the evacuation of Attica (8.40), and its advantages for an engagement are only noted at a later conference of the commanders (8.60). Modern reconstructions of Greek campaign strategy may be correct, but the Greeks' thinking, especially that of their Spartan leaders, may have been conditioned by cultural assumptions about the primacy of hoplite warfare: these would have encouraged them to concentrate on possible land barriers, Tempe, Thermopylae, and the Isthmus, whereas the conditions for successful naval warfare were recognized belatedly and only by some participants.³⁹

³⁶ Cawkwell (1989); Goldsworthy (1997). ³⁷ Hunt (1997) claims that they served in phalanx.

³⁸ Hignett (1963). ³⁹ Cf. Lazenby (1964).

Our ideas about strategic planning may help to articulate a facet of warfare which ancients did not highlight, even if they recognized it on occasions.⁴⁰ On the other hand there are dangers in imposing modern preconceptions on ancient evidence, as shown by explanations for Spartan behaviour in 490.⁴¹ According to Herodotus the Spartans could not respond to the Athenian plea for help at Marathon until after the full moon (6.106), a reason now regarded as flimsy by some. This can be associated with other occasions when the Spartans appear reluctant to commit themselves to action outside the Peloponnese (Hdt. 7.206: Thermopylae; 9.7: before Plataea), and with the Thucydidean dictum that they were slow to go to war unless compelled (1.118.2), to produce a theory that structural considerations determined Spartan behaviour: fear of the helots made Spartiates wary of external commitments.⁴² Religion may have concealed other motives, and Herodotus suggests as much before Plataea since the Spartans were both enjoying the celebration of the Hyacinthia and working hard to finish the wall at the Isthmus (9.7). However, the strength of Spartan commitment to correct religious practice is illustrated on the field of Plataea, where their contingent endured heavy fire from Persian archers while waiting for sacrifices to sanction an advance (9.60; 72). Modern scepticism on religious matters can seriously distort reconstructions of tactics and strategy.⁴³

If any ancient historian were to provide us with a reasonable basis for reconstructing an ancient war, Thucydides would be the prime candidate since he secured a reputation for accuracy and reliability, partly at least because of his own assertions about his methods (especially 1.22). However, even though Thucydides set himself high standards for research and reporting, this did not result in a comprehensive account of the Peloponnesian War: his narrative is sometimes paradigmatic, 'a highly stylised and selective treatment of key incidents and individuals'.⁴⁴ Recent excavations at Nemea have revealed evidence for fighting at the sacred site in the latter years of the Peloponnesian War which is unreported by any ancient source.⁴⁵ On religion Thucydides imposed his own rationality and disregarded a factor which influenced contemporary opinion; his treatment of oracles is in marked contrast to Herodotus.⁴⁶ Persia is a further issue of general relevance to the Peloponnesian War whose importance Thucydides may initially have underrated; in this case, though, there are signs that

⁴⁰ E.g. the advice of the tactical writer Celsus on how best to attack Persia by means of a rapid advance from the north, advice which Lydus (*Mag.* 3.33–4) implies was known to the emperor Constantine.

⁴¹ Note the important discussion by Parker (1989).

⁴² For a circumspect exposition of the theory, see Cartledge (1979) 132–3. ⁴³ See Parker (1989).

⁴⁴ Hornblower (1987) ch. 2; quotation from p. 43. ⁴⁵ Andrewes (1992) 488–9.

⁴⁶ Hornblower (1987) 81–3.

Thucydides realized his error so that adjustments might have been made if he had ever completed his work.⁴⁷

Thucydides, though, was exceptional among ancient writers in recognizing that wars cost money, especially naval expeditions, and he provided specific evidence on Athenian revenues and resources at the start of the war (2.13); his figures for imperial receipts (2.13.3) and the first tribute to the Delian League (1.96.2) have been questioned, but the available evidence does not demonstrate that Thucydides has provided exaggerated totals.⁴⁸ And yet Thucydides is guilty of a serious, and probably deliberate, financial omission which affects our assessment of the war's course and of the individuals involved. According to Thucydides, Pericles alone understood how to lead the Athenians and win the war, but after his death his careful strategy was subverted by the competitive ambitions and lesser talents of his successors (2.65). From Athenian inscriptions, however, it is clear that the Periclean strategy came close to bankrupting Athens in the early stages of the war and that energetic financial reorganization was necessary.⁴⁹ Cleon was certainly involved in this overhaul and was probably its architect, but Cleon was used by Thucydides as the archetype of the new breed of demagogic politician who destroyed the golden age of Periclean leadership; there may also have been personal reasons for the hostility, since Thucydides was active in Athenian public life when Cleon was at the height of his influence. Thucydides may also have denigrated Cleon's abilities as a commander, so his biases could distort his presentation of military events at a tactical as well as a strategic level.⁵⁰ Individuals profoundly influenced Thucydides' narrative, contrary to his protestations of objectivity.

Causation was important to Thucydides, and he presented a masterly analysis in Book 1, but this also served to defend his idol Pericles against accusations, reflected in Aristophanes, of responsibility for the discomforts and misfortunes of war (*Ach.* 496–555; *Pax.* 603–14). Thucydides chose to disregard key developments in the growth of Athenian power in the decade before the war, for example the foundation of Amphipolis or the decision to apply pressure to Megara, since these were initiatives which could be directly connected with Pericles;⁵¹ he also overstated the security of Pericles' domination of Athenian politics by ignoring challenges which nearly unseated him (*Plut. Per.* 31–2). Instead Thucydides baldly stated that Pericles was supreme and focused on the earlier stages of the Athenian rise. Pericles may also be relevant to Thucydides' disregard for religion, which was used to attack Pericles in the 430s, and perhaps also Persia which

⁴⁷ Hornblower (1987) 140. ⁴⁸ See Hornblower (1991–6) 1.145–6 and 253–4 for discussion.

⁴⁹ See Hornblower (1987) 167; (1991–6) 1.341–2.

⁵⁰ Woodhead (1960); denied by Cawkwell (1997) 67–8, but the detailed observations of Hornblower (1991–6) 11.435–49, reveal where weighted language and comments are slipped in.

⁵¹ Cf. Hornblower (1987) 174.

was not important in Pericles' strategic thinking. The modernity of many Thucydidean interests and presumptions, and the general quality of his narrative, may blind readers to difficulties; his very intelligence may be a problem, since he knew how to use his narrative to justify his views. By contrast Xenophon's defence of Spartan actions in the early fourth century can be dissected, at least in part, without reference to external information since he failed to write his narrative consistently to match his views.

Thucydides was capable of producing a clear military narrative of specific events, as in his account of operations in north-west Greece and the Gulf of Corinth in 429 (2.80–92).⁵² This combines analysis of Spartan strategy to increase their influence in the area with a description of relevant local conditions,⁵³ and then provides a detailed description of the tactics of Peloponnesian and Athenian fleets to highlight the importance of naval skill.⁵⁴ The brilliance of Phormio in handling his small Athenian squadron underlines points which Thucydides had made earlier about Athenian and Spartan strengths (1.18.2; cf. 4.12.3), and his overall contrast between cautious Spartans and energetic Athenians (8.96.5). It is not surprising that Thucydides provides our clearest account of a hoplite battle, the Athenian defeat by the Boeotians at Delium in 424, where the overall Athenian strategy for a coordinated attack on Boeotia (4.76–7), the preliminaries to the battle (4.89–95), the actual fighting (4.96), and the aftermath (4.97–101) are clearly described.

Thucydides, though, is not perfect. He deserves considerable credit for generally providing plausible numbers for the military forces,⁵⁵ but he sometimes declined to record numbers which he apparently knew, for example Ambraciots losses in 426 (3.113.6: too large to be credited) or Athenian light-armed casualties at Delium (4.101.2). His most problematic military numbers are for the Spartan contingent at Mantinea in 418, of whose reckoning he was in fact quite proud in the light of Spartan secrecy over such matters (5.68). The issue is controversial, but it is at least plausible that Thucydides omitted one whole level of organization in the Spartan army, in which case the Spartan numbers at the battle were almost double what he calculated.⁵⁶ The uncertainty is not significant for Mantinea itself, but affects our analysis of the decline in Spartan citizen manpower, an important issue for their armies in the early fourth century. Overall, though, such is Thucydides' reputation for accuracy that scholars are tempted to correct his text rather than admit error. Thus the figures which he gives (4.8.6) for

⁵² Cf. Keegan (1976) 68, for the superiority of Thucydides' style of narrative, even over Caesar's.

⁵³ For analysis of this see Hornblower (1987) 194–202.

⁵⁴ Cf. Hornblower (1991–6) 1.364 and Hornblower (1987) 158–9 for other examples of clear information on military details.

⁵⁵ Hornblower (1987) 202–4.

⁵⁶ Andrewes in Gomme et al. (1945–81) IV.111–17 argues for this; against Cawkwell (1983) 387ff.

the size of Sphacteria (15 stades) and of the channels at its northern (sufficient room for two or three triremes to sail in) and southern ends (eight or nine triremes) are incorrect. Emendations to the text have been suggested, but too many corrections are required here for any defence of Thucydides to be conclusive.⁵⁷ Thucydides is our best ancient military narrative, but even he presents a literary text informed by subjective analysis which must be treated with caution at all times.

IV. KNOWLEDGE AND MEMORY

The basic business of gathering information created problems for constructing a clear narrative, both of the chaos of battle and the wider dimensions of warfare; in addition to the 'Whatley' problem of the partial memory of any participants, personal interests of key informants and national agendas must be considered. When Herodotus began to collect information on the Persian Wars, at least a generation had elapsed from the latest event. Marathon illustrates the problems. Herodotus' account is compatible in all significant respects with Cornelius Nepos' biography of the Athenian general Miltiades, and the site of the battle is clear even if Herodotus appears to know nothing of local topography; archaeological investigation of the funeral mound on the Marathon plain confirms that the Athenian dead were cremated and buried there. Questions remain, however, about where the Persian cavalry were, and why the Athenians chose to attack when Spartan help, for which they had been waiting, was on its way. One approach is to step back from the ancient narratives and consider the overall geographical position, in particular the time required for the Persian fleet to sail from Marathon round Cape Sunium and up to Phalerum, an approach argued by Hodge.⁵⁸ Hodge corroborated an older hypothesis that the Persian cavalry had embarked before the land battle started: the Athenians had to attack at once since they feared treachery in the city.⁵⁹ Scholarly attention to the tactics of the actual engagement, while helpful in clarifying the details of what happened on the Marathon plain, may have ignored the conditions which gave rise to the battle.

The interests of available informants were undoubtedly relevant: although there were Ionian Greeks on the Persian side and a few hundred Plataeans assisting the Athenians, the story was controlled by the Athenians since the victory entered their national mythology, to be appropriately commemorated in the Stoa Poikile alongside Theseus' defeat of the Amazons (*Paus. 1.15.1–4*). The role of Miltiades may have been highlighted by his son Cimon, the most successful Athenian leader of the next generation, who

⁵⁷ For the problems and complexities, see Hornblower (1991–6) II.159–60.

⁵⁸ Hodge (1975). ⁵⁹ E.g. Burn (1962) 246–7.

also commissioned the Stoa Poikile. It was also not in Athenian interests to suggest that they had only beaten part of the Persian army and, even if accusations of Medism helped to fuel contemporary Athenian political disputes, the notion that treachery was a major danger in this bastion of Greek resistance was not something to be remembered in the longer run. Herodotus, in particular, may have been helped in this direction by the interests of some sources, since he preserved material connected with the Alcmeonids, one of the families strongly suspected of Medizing.⁶⁰

The naval engagement at Lade in 494 is another Herodotean battle obscured by the memory of his main informants. He had good contacts with the Samians,⁶¹ most of whose ships abandoned the battle and escaped the catastrophe: Herodotus noted Samian concern for indiscipline among the Ionians as well as their recognition of Persian superiority (6.13), but then skirted over the details of the engagement, ‘once the fight had begun, I cannot say for certain which of the Ionian contingents fought well and which fought ill; for the reports are confused, everybody blaming everybody else’ (6.14). With regard to Thermopylae, once one discounts his enormous numbers for Persian forces (a failing for which he was criticized in antiquity, but which he shared with most ancient writers), Herodotus provided quite a clear account of the stages of the confrontation which can be related to the local topography. On the other hand, while he acknowledged that other Greeks were present, the impression of his narrative is that it was virtually Spartans against Persians, partly because he naturally focused on the actions of Leonidas, the Greek leader. The exiled Spartan king Demaratus, who accompanied the Persian expedition, also ensured that Xerxes saw the contest as one between himself and the Spartans (7.209; 234): Demaratus, or a member of his family or entourage, was very probably an important source of information for Herodotus, which helps to explain why this quisling received such favourable treatment. It was to be the sacrifice of Leonidas and the Spartan 300 whose memory dominated the engagement.

Latin historians constructed an account of the successes of the Roman Republic whose distortions are very difficult to unravel, especially for the period before the Punic Wars when Polybius provides some control. Family traditions played their part, since much information about the earlier centuries of Roman history passed down within families, being recalled for example in the context of funeral celebrations (Polyb. 6.53–4). In the case of the Fabii the fact that Rome’s earliest historian was Fabius Pictor will have compounded the distortions. Politics also contributed. Events might be rewritten to elevate or blacken the ancestor of a prominent figure of later times, or to provide warning against later developments: different stories

⁶⁰ Hdt. 6.121–4 presents an uncompelling argument against Alcmeonid treachery.

⁶¹ Mitchell (1975).

grew up around the death of Sempronius Gracchus in 212 (Livy 25.16–17), perhaps because of the reputations of his descendants, the reforming tribunes, and stories about populist tyrants like Manlius emerged for similar reasons (6.11.1–20.16).⁶² For Latin writers Rome went to war for good reasons, secured victories when commanders behaved properly but was rewarded with defeat if leaders were irresponsible, populist, or offended the gods. Comparison between Polybius and Livy on the early years of the Hannibalic War illustrates the nature and extent of change. Polybius could describe battles and narrate campaigns with great clarity and was particularly interested in the complexities of causation,⁶³ whereas for Livy Hannibal was responsible for the conflict and his early victories were the result of poor leadership: before Lake Trasimene Flamininus ignored clear warnings against the Roman march (Livy 22.3.11–13; contrast Polyb. 3.83.5–7). Livy sometimes preferred to disregard Polybius in favour of more congenial material in the Latin tradition, or at least to include its exaggerated information: for Cynoscephalae, he preserved the inflated Macedonian casualty figures in Valerias Antias and Claudius Quadrigarius (33.10.7–10) as well as the more measured 8,000 of Polybius (18.27.6). Livy also might misunderstand Polybius' Greek, with alarming consequences: again at Cynoscephalae, Polybius recorded that the Macedonians lowered their sarissas to charge (18.24.9), but Livy thought they put them down and so invented an explanation for this surprising action, namely that the Macedonians found their long weapons an encumbrance and wanted to use their swords (33.9.12).

V. ALTERNATIVES TO LITERATURE

One leading expert on Greek warfare declared that we must ‘proceed cautiously before we jettison the battle accounts of ancient historians which run counter to our preconceptions’,⁶⁴ but the preceding consideration of the literary tradition indicates that there are various possible distortions in even the most authoritative accounts. Important supplementary sources of evidence such as inscriptions and artistic depictions have already been mentioned, but their limitations as well as insights need to be highlighted. Athenian inscriptions enable us to interrogate Thucydides’ presentation of Athenian finances (see above), and illustrate the parlous state of the Athenian navy in the fourth century: Xenophon (*Hell.* 6.2.11–14) and forensic oratory (Demosthenes 50) reveal problems in maintaining even a small fleet in the 370s and 360s, but the dockyard superintendent lists record the full extent of the equipment crisis.⁶⁵ Inscriptions are also important for understanding diplomacy, for example the propaganda campaigns among Greek

⁶² Oakley (1997–8) 1.476–93.

⁶⁴ Pritchett (1971–91) IV.53–4.

⁶³ Derow (1994) 73–90.

⁶⁵ Extract in Harding (1985) no. 47.



Figure 3.3 Column of Arcadius: the Goths expelled from Constantinople with divine assistance.

cities which accompanied the military competition of Hellenistic monarchs or the operation of Roman power on the eastern Mediterranean.⁶⁶ However, they rarely provide direct evidence for warfare: the Athenian inscription honouring Callias of Sphettus for his efforts on behalf of Athens in the 280s and 270s is a rare example, but needs to be read as a propagandist text relevant to Athenian preparations for the Chremonidean War. The Roman army is much better illustrated by epigraphy, and we have a reasonable dossier of evidence on such things as the disposition of legions, officers' career patterns, relations with emperor and civilians, and religious practices, especially for the period down to about AD 250. This material is most useful in revealing the background to the army's military activities, but less so about active warfare.

The propagandist nature of some artistic evidence has already been noted. It is important to see how emperor Arcadius and his ministers wished the people of Constantinople to remember the expulsion of Gaïnas and his Goths through divine assistance (fig. 3.3), but this is merely one representation of the action and we can only approach the sequence of events more closely by unpicking the various literary texts.⁶⁷ Less public items may be

⁶⁶ Burstein (1985) no. 55; Sherk (1984) no. 5.

⁶⁷ Full discussion in Cameron and Long (1993).



Figure 3.4 The southern watergate at Dara (early sixth century AD).

more neutral, but also less revealing.⁶⁸ Thus the Chigi vase, which is prominent in discussions of the date for the introduction of hoplite equipment and tactics, does not add to our knowledge of the nature of hoplite warfare with its depiction of men marching in time to music in orderly ranks, with overlapping shields.⁶⁹ There was no sufficiently detailed and clear depiction of a Greek trireme to resolve scholarly disputes about the operation of the tiers of rowers and guide efforts at reconstruction. Art often chose to depict the general rather than the specific, the encounter of two orderly hoplite units or the patriotic departure of the young warrior from home to defend his country, but not a particular engagement. Even when an identifiable battle or war may be represented, as for example in the Issus mosaic, what is shown may be a distillation of Alexander's triumphs rather than a single battle.⁷⁰ Similarly the rock relief at Naqsh-i Rustam represented Shapur triumphing over Gordian, Philip and Valerian,⁷¹ the collective result of Roman defeats over a period of fifteen years; the three emperors were never simultaneously humiliated in this way. Art found it no easier than literature to display the complexities of military reality, and so either generalized or selected symbolic highlights.

Archaeology might seem to offer a better escape from the dominance of literature, and in certain areas it has produced useful insights. Without archaeological recovery of artifacts the study of ancient weapons would be dependent upon literary descriptions and artistic representations; survival

⁶⁸ Cf. Gilliver, ch. 4 in Volume II, for a contrast between metropolitan monuments and better-informed provincial works.

⁶⁹ See discussion in Wheeler, ch. 7 in this volume.

⁷⁰ Cohen (1997).

⁷¹ Ghirshman (1962) 152, pl. 195.

of actual equipment gives a better idea of how material developed over time, even though there is still disagreement about how specific items, for example the Macedonian sarissa, might have been used.⁷² Analysis of fortifications may reveal aspects of the defence of a particular region, for example Attica in the fourth century, which do not receive comment in the surviving literary evidence,⁷³ or permit the construction of overarching hypotheses about defensive strategies, for example how Roman imperial planning evolved in the first four centuries AD.⁷⁴ On the other hand archaeological evidence is not neutral, and scholarly interpretations are likely to be contested.⁷⁵ A wide-ranging critique of Procopius' panegyrical account of Justinian's defensive constructions foundered because the material evidence was not presented fairly; although Procopius undoubtedly magnified Justinian's actions and allocated him credit which belonged to others, his information did have some basis in fact.⁷⁶ Our understanding of Roman attempts to conquer Scotland is largely informed by the physical remains of defensive walls, major bases such as Inchtuthil and Ardoch, and the numerous marching camps, since Tacitus' account of his father-in-law Agricola's actions only covers a small part of the struggle and had a strong personal interest. The material evidence points to the implementation of different strategies at different times, close supervision of the Highland Line in the late first century whereas in the early third century a widespread protectorate over southern Scotland and thorough ravaging and even deliberate depopulation of areas beyond may have been practised; but different interpretations are possible, however, and the chronology of sites can be disputed, especially where aerial survey has not been backed up by excavation.⁷⁷

There are limitations to what archaeology can provide. Naval battles cannot be elucidated by underwater archaeology, which has done much to improve other aspects of our understanding of ancient seafaring. The trireme, the main element of most battles, was a fragile craft but was unlikely to sink completely since it relied on its crew's weight as ballast: boats would be overwhelmed in storms, wrecked on shore, or incapacitated in battle, but they would not end up on the sea bed to be preserved in silt for modern discovery. *Olympias*, the modern reconstruction of a Greek trireme (fig. 3.5), was designed on the basis of a few and partial depictions of ancient ships, coupled with intelligent speculation.⁷⁸ The results of the investigation have enhanced our understanding of triremes, the prime importance of training, the factors affecting performance, and their susceptibility to poor weather, but the exercise might not have been initiated if there had

⁷² Markle (1978); *contra* Hammond (1980c). ⁷³ Ober (1985a). ⁷⁴ Luttwak (1976).

⁷⁵ E.g. the debate about the nature of Roman frontiers, with Isaac (1990) and Whittaker (1994), among others, challenging the fundamentals of the Luttwak hypothesis.

⁷⁶ Croke and Crow (1983); response by Whitby (1986a), (1986b), and (1987); see fig. 3.4.

⁷⁷ General survey in Richmond (1963) 41–60. ⁷⁸ Morrison and Coates (1986).

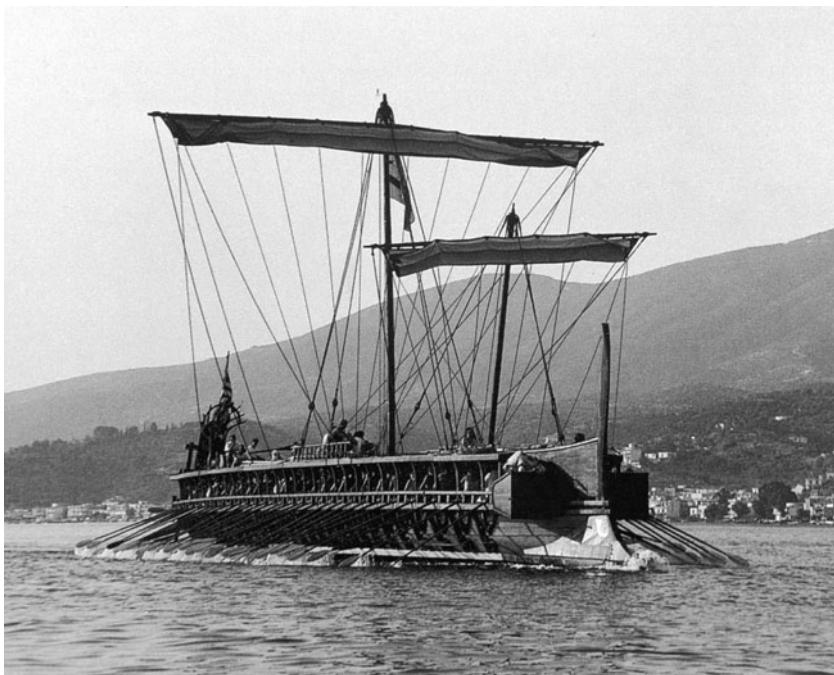


Figure 3.5 The replica trireme *Olympias*.

been sufficient archaeological evidence to establish the ship's appearance in the first place. Reconstructions have also been used to demonstrate the operation and effectiveness of ancient artillery, a process which has combined the information of ancient technical treatises, narratives of sieges and common sense.⁷⁹

Battlefield archaeology has been of minor help. Part of the problem is that many engagements cannot be placed with sufficient precision for detailed investigation to be undertaken: this applies to such major battles as Ipsus, Raphia, Magnesia, Mursa, Adrianople, whose general locations are known; some such as Mons Graupius float across a range of possible sites. At others, topographical change has affected the landscape to varying degrees: at Thermopylae the combination of centuries of silting and a rise in sea levels makes it impossible to dig down to fifth-century levels, at least without expensive pumping.⁸⁰ Granted that most battles occurred at points along major communication routes, it is not uncommon for more than one engagement to have been fought at a particular site in antiquity

⁷⁹ Marsden (1969), (1971).

⁸⁰ Pritchett (2002) 82–3, who quotes S. N. Marinatos who conducted excavations at the site in 1939.

(e.g. Chaeronea, Thermopylae, Mantinea) as well as more recently, with consequent complications for any investigation. Further, it is likely that many battlefields were quite effectively cleared: pillaging by the victors and subsequent scavenging by camp-followers and others in the vicinity removed most valuable or reusable items, corpses were usually collected for burial, not necessarily at or near the actual battlefield, and temporary constructions associated with an engagement, for example a palisade or ditch, might disappear quickly. The experience of the embassy on which Priscus served in 449, where they found outside Naissus that the whole area towards the river banks was covered with the bones of those killed in the fighting (Priscus fr. 11.1.54–5) was probably abnormal: there had not yet been the opportunity to bury the dead, or the people interested in doing so, though if one pressed Priscus' words it would seem that the bodies had been efficiently ransacked.

One exception, however, is the Varian disaster of AD 9 in the Teutoburger Forest.⁸¹ The site was not precisely known: the narratives in Cassius Dio (56.20–2) and Tacitus (*Ann.* 1.61–2) left open several possibilities, and even if the regular discovery of gold and silver coins pointed to a location near Osnabrück other places were still canvassed. A combination of survey and limited excavation confirmed a site on the Kalkreiser-Niedeweder depression, and clarified the progress of an engagement which was poorly known from the literary sources: the scatter of finds indicated where the main fighting occurred as the army struggled to continue its march until it became divided and units attempted to save themselves. The battlefield had been thoroughly plundered, so significant remains were only discovered in the burial pits dug by Germanicus' army in AD 15 and near the Germans' temporary turf walls, which had already begun to collapse during the battle as the desperate Romans attempted to escape. The bones showed signs of a period of exposure. The small finds reflected the diverse personnel of a large expeditionary force, not only fighting units but varied craftsmen, surveyors, clerks and medical personnel.

This site survived reasonably well since the battle was fought in a sparsely populated area on marginal land where the prevailing agricultural practice for most of the next two millennia consisted of dumping increasing quantities of organic material to improve the poor soil: ancient levels were preserved from interference, even if the conditions were not good for preserving organic remains. Another positive factor was that the fighting had some affinities with a siege, since the Germans used barricades to hem the Romans in. Sieges are slightly more likely than battles to produce archaeological evidence, since at least the location of the engagement can usually be identified. The evidence for many sieges was probably cleared quickly, since defenders

⁸¹ See Schlüter (1999) for a very useful summary of the various investigations.

would not want other attackers to exploit offensive works, whether the fortification was captured (e.g. Amida: captured by Persians in AD 502/3, Roman counter-siege 503/4) or resisted attack (Edessa in 544). But, where a site remained deserted after a successful siege, or only partially occupied, the remains might be considerable. At Old Paphos on Cyprus (498 BC) and Dura-Europus (c. AD 257) the remains of the Persian siege-works include ramps and tunnels, including at Dura the Roman counter-tunnels which contained the corpses of those killed in fierce fighting underground. At Masada (AD 70–3) the enormous scale of a Roman siege is revealed through the circumvallation with its associated forts and the siege mound up to the hilltop fortress.

The case of Julius Caesar's attack on Alesia in 52 BC demonstrates the potential of archaeology at an abandoned site as well as various complications.⁸² Caesar himself provided a detailed account, including the complex siege-works around the hilltop (*B Gall.* 7.68–89), but there are sufficient imprecisions in the text to permit different identifications of the location. Partly because the site was of great symbolic significance for Gallic national identity, there was fierce provincial rivalry to claim it between Alesia in Burgundy and Alaisa in Comté. Napoleon III patronized excavations at Alesia, and even visited the site on 19 June 1861 to tour the trenches and listen to a translation of Caesar's narrative on the summit; finance was available, but there was also strong imperial interest in results so that the integrity of the investigation might be challenged. Many found the results conclusive and a statue of Vercingetorix was erected as a memorial to a unified Gaul, but there was still sufficient argument between Burgundy and Comté to thwart a national bimillenary celebration in 1949. Subsequent archaeological work has confirmed beyond doubt that Napoleon's investigators were right, but also revealed how their reconstructions had been shaped by Caesar's descriptions (*B Gall.* 7.72–4), which in fact contained certain inaccuracies:⁸³ the location given by Caesar for some of the outer obstacles proved to be wrong, and, although the various items recorded by Caesar did exist, their disposition varied around the circumvallation. Caesar produced a homogenized description which embraced what might be found at certain points on the circumference but did not correspond precisely to any of the areas investigated. The constraints of memory, or perhaps the demands for literary clarity affected the written record, but the text then influenced the interpretation of the material remains for over a century.

Archaeological discoveries provide our main insight into the routine of military service, camp life with patrols, and the occasional skirmish which would be too minor to attract the notice of an ancient author. The writing

⁸² See Le Gall (1980); Reddē in Goudineau (1994). ⁸³ Reddē in Goudineau (1994) 255, 258–9.

tablets from Vindolanda, the archive of Abbinaeus, and the papyrus records of the camel corps at Nessana reveal the realities of the Roman army's presence in different provinces at different times, the economic importance and social connections of the army in terms of supplies, local patronage, ownership of property, delivery of justice, and maintenance of order (fig. 3.6).⁸⁴ Even on active campaign there was considerable tedium: the story of Socrates' protracted immobility at the siege of Potidaea is preserved to show his devotion to knowledge (Pl. *Symp.* 220), but the interest which his odd behaviour generated among fellow besiegers also points to the boredom of a protracted blockade. Camp life required its diversions, as the antics of young Athenians on garrison duty illustrate (Dem. 54.3–4): we know about them because the victim went to court and employed a famous speech-writer, but otherwise such behaviour would pass unrecorded. Even here there is no escape from literary texts.

Ancient evidence has to be supplemented wherever possible by other information. Sound geographical knowledge of the battlefield or the area of a campaign is an obvious prerequisite: Polybius' critique of Callisthenes shows its relevance was recognized by some writers in antiquity, but even the careful Thucydides made mistakes, and it appears that Herodotus, for all his enthusiasm for Greek triumphs, may not have visited Marathon. Modern reconstructions must rectify these deficiencies: without detailed local knowledge of relevant sites ancient descriptions of battle tactics will remain obscure, while the realities underlying brief mentions of marches or campaigns cannot be appreciated unless the ground traversed is familiar. Ancient writers occasionally recorded the problems of a march, but these tend to be exceptional cases such as the struggle of Alexander's army to cross the Pamirs in a winter storm (Curt. 7.3), his notorious crossing of the Gedrosian desert (Arr. *Anab.* 6.22–6), or the crossing of marshes (Hannibal: Polyb. 3.79; Caecina: Tac. *Ann.* 1.63–5). The armchair narrators of Lucian's pamphlet might misrepresent events without even realizing their error. An extreme example is provided by Theophylact's narratives of Roman campaigns in the Balkans during the AD 590s, where the energy of the defence conducted only emerges when the armies' moves are plotted on a map; Theophylact had been misled by a biased source.⁸⁵

Logistics is another crucial aspect of military activity which can be informed by modern calculations but is poorly recorded by ancient writers: many armies travelled with wagon trains, but numbers are rarely noted;⁸⁶

⁸⁴ Bowman (1994); Bell et al. (1962); Kraemer (1958). See also the discussion by Adams, ch. 6 in Volume II.

⁸⁵ Discussion in Whitby (1988) 92–109.

⁸⁶ An army of 15,000 has 520 wagons (Marc. Com. *sub anno* 499); Romans capture 2,000 Gothic wagons in AD 479 and do not need requisitioned transport (Malchus fr. 20.226–56).

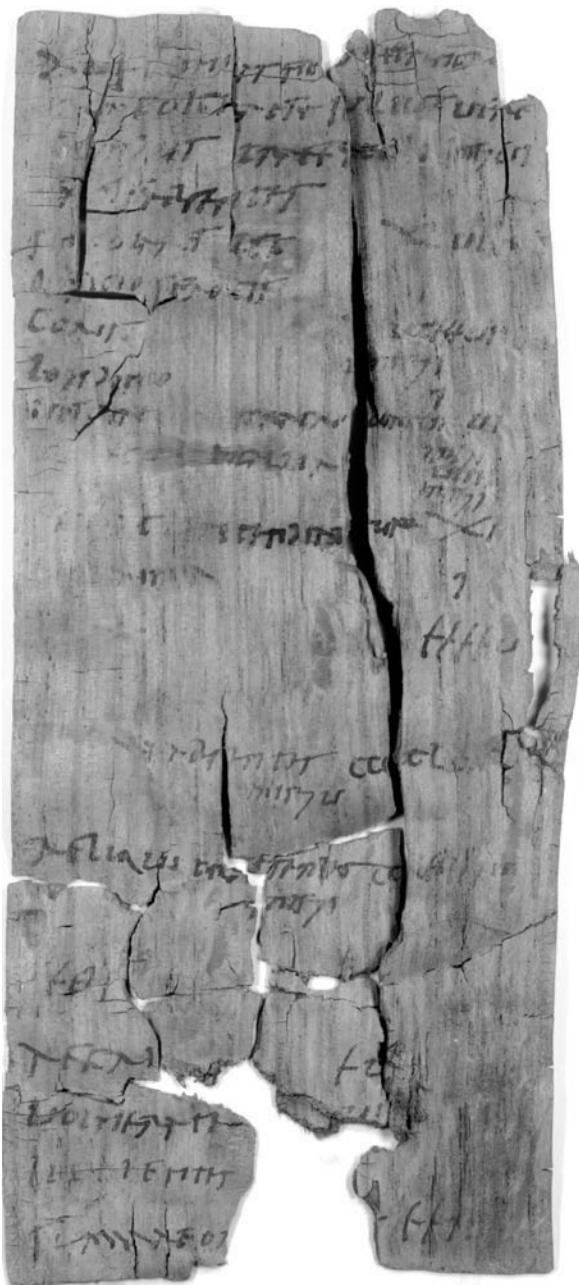


Figure 3.6 Cohort strength report on a writing tablet from Vindolanda
(c. AD 100, north Britain).

civilians regularly provided food for soldiers, but the massive preparations at Edessa in AD 504/5 are an isolated record (Ps.-Joshua *Stylites* 54, 77). Attention to supplies had always been essential, even in the much more localized warfare of classical Greece:⁸⁷ inadequate arrangements contributed to the Athenian disorganization at Aegospotami in 405 BC (Xen. *Hell.* 2.1.27; contrast 6.2.28–9). Scattered evidence can be assembled to produce synthetic accounts of how Roman Republican and imperial armies functioned,⁸⁸ but the only campaign for which we have reasonably sustained information is Alexander's conquest of Persia; even here the ancient evidence has to be supplemented by assumptions about the composition of the baggage-train, the nature and quantity of food consumed, and the availability of local produce.⁸⁹ Armies acted as economic magnets, for those keen to purchase Alexander's booty or to supply imperial forces at the exorbitant prices bemoaned in the preamble to Diocletian's Edict on Maximum Prices,⁹⁰ but this vital aspect of military life was not preserved by many authors, especially those with little experience of war.

Common sense and comparisons from more recent warfare are a further supplement for defective ancient evidence, although they need to be applied with caution. Numbers in ancient sources, especially for enemy armies, are often impossible and reductions have to be made, but at a debatable scale. Marathon is again relevant: in contrast to Hodge's application of geography, Holoka argued that it was physically impossible for the victorious Athenians to return to Athens on the day of the battle,⁹¹ so that the ancient evidence (Plut. *Arist.* 5.4) has to be discounted, the stories of treachery disregarded, and the problem of the missing Persian horses left unsolved. But Holoka's common sense is itself vulnerable: a march of 26 miles after a battle would be extremely arduous, but the Athenians' physical condition might not have been better the following day when limbs and wounds had stiffened. Study of early modern warfare may help in understanding the mechanics of combat before battlefields were dominated by gunpowder, but such comparisons can only be illustrative rather than conclusive: conditions may have been sufficiently different to weaken the parallel and there may be uncertainties in our knowledge even of the more recent events. A good example of the dangers of applying modern studies to ancient warfare is provided by Goldsworthy's work on Roman warfare.⁹² He accepted American combat experience in the Second World War which suggested that no more than a quarter of men in a unit were likely to participate actively in

⁸⁷ Statements of principle in Xen. *Cyr.* 1.6.9–12; Plut. *Mor.* 178a.

⁸⁸ Erdkamp (1998); Roth (1999).

⁸⁹ See Engels (1978); some of his assumptions, for example that the Macedonian training regime described at Frontin. *Str.* 4.1.6, was normal practice on campaign, are questionable.

⁹⁰ Discussion in Corcoran (1996) ch. 8; cf. Xen. *An.* 1.5.6.

⁹¹ Holoka (1997). ⁹² Goldsworthy (1996).

an engagement, and reconstructed Roman battles around the belief that there was a limited number of active champions in each unit. But the modern analyses are far from conclusive, and the comparison is flawed.⁹³ For Roman warfare the application by Luttwak of concepts from modern strategic planning has been more fruitful in provoking debate about the Roman conceptualization of war and the role of armies and frontiers in the maintenance of their Empire. Luttwak's modern ideas are not accepted wholesale by many, but they have influenced the terms of the scholarly debate.⁹⁴

VI. CONCLUSION

With reference to early Greek warfare, Cartledge referred to an unfortunate tendency to use, or abuse, every scrap of evidence,⁹⁵ and it is necessary to accept the limits to our ability to appreciate the varied nature of ancient warfare across a period of a millennium and a half involving many different societies and forms of combat. Literary evidence is regularly problematic: Herodotus chose warfare as the central theme for his *Histories* and his work was a monumental achievement, but bias, at both national and personal levels, a tendency to focus on personalities and their disputes but to ignore broader questions of strategy, and a lack of awareness of relevant geographical and logistical factors, distort the account which is presented to us, quite apart from his inevitable ignorance about certain aspects of the conflicts, or disregard for events which were not of central importance or which did not attract his attention in other ways. Commanders such as Julius Caesar may have understood the progress of a campaign and the nature of opposing strategies, but they might have decided that other matters were of greater interest to their audiences. Battle would have been confusing for participants such as Xenophon or Ammianus, probably impenetrable for those without the experience. The horror of the results will have been recognized, if only from gory descriptions of wounds in Homer, but the panic or desperation of the actual event, revealed in a graffito from the doomed city of Sirmium c. AD 580 (God smite the Avars and preserve Romania), will have passed by most people in the ancient world with the education to produce a historical narrative. Our reconstructions of ancient warfare must always be tentative and recognize the significant gaps in our understanding.

⁹³ See Wheeler (2001) 173.

⁹⁴ Luttwak (1976); Mann (1979); Isaac (1990); Whittaker (1994).

⁹⁵ Cartledge (2001) 154.

PART I

ARCHAIC AND CLASSICAL GREECE

CHAPTER 4

INTERNATIONAL RELATIONS

JONATHAN M. HALL

I. CONCEPTUALIZING INTERNATIONAL RELATIONS

It is perhaps to be regretted that we no longer possess the treatise that the fourth-century Athenian philosopher and statesman, Demetrius of Phalerum, is supposed to have penned on the subject of international relations. If he owed any intellectual debt in this regard to Aristotle (whose pupil Theophrastus had advised Demetrius during the ten years that he ruled Athens as a Macedonian puppet), it is likely that the *polis* constituted his primary level of analysis. Certainly, in general accounts of Greek history today the origins and nature of the *polis* are almost invariably discussed prior to the protocols that governed relations between states. International relations are conceived as the political outcomes of interaction between individual states, each already endowed with a specific identity, interests and agendas, and the external behaviour that is exhibited by such states is conditioned by the internal or domestic structures that pertain in each case. Thus, in Thucydides' scheme of things, the conservative and archaizing tendencies of the Spartan state predispose it to launch old-fashioned infantry raids on Attica in the early years of the Peloponnesian War, while the disastrous Athenian expedition to Sicily in 415 BC is the inevitable over-reach of a maritime imperialist ideology inextricably linked with the radical democracy.¹

Yet in some respects this 'atomistic' model of international relations (the metaphor sometimes used is of 'colliding billiard balls') is not entirely satisfactory.² First, it is clear that there was interaction among communities prior to the emergence of the *polis* – a process that was undoubtedly long and gradual but in terms of proto-urban nucleation, consolidation of territory and the formation of a 'closed' political community was already under way by c. 750. It is difficult to believe that no mechanisms governed the reception of a Lacedaemonian guest and his son whose visit is mentioned in thirteenth-century Linear B tablets from the Mycenaean palace at Thebes,³ and the evidence of archaeology testifies to a continuing,

¹ Garst (2000). ² Reus-Smit (2001) 210. ³ TH 212, 217, 218: Aravantinos et al. (1995).

if attenuated, traffic in goods and personnel across and beyond the Aegean throughout the 'Dark Ages' of the eleventh, tenth and ninth centuries BC which must have required at least a basic regulatory framework for its operation. Furthermore, there were areas of Greece such as Achaea which did not witness the emergence of a *polis* structure of governance until the fifth century – long after the earliest attested records of interstate transactions.⁴ Thucydides' account of early Greece might initially lead one to assume that settled communities preceded intercommunication (e.g., 1.3.4), but in fact he notes that new *poleis* (i.e. those we can identify as the principal city-states of the archaic period) were situated in different locations from their predecessors *after* the introduction of maritime communications (1.7.1).

Second, the 'atomistic' model fails to account adequately for the fact that actors with very different internal structures – be they a democratic *polis* such as Athens, a looser, more federal organization such as the *ethnos* of the Thessalians, or an autocrat such as Dionysius I of Syracuse or Philip II of Macedon – may sometimes pursue markedly parallel external policies by practically identical means.⁵ Third, an exclusive focus on the state as the primary unit of analysis disregards the multiple personal relationships that spilled across state boundaries. Élites maintained extensive networks of contacts with Greek and non-Greek peers through intermarriage and guest-friendship (*xenia*): the ruling Basilid family of Ephesus regularly took wives from the Mermnad dynasty of Lydia in the seventh and sixth centuries and Lydian rulers contracted bonds of *xenia* with the leading families of Miletus, Athens, Sparta and the Aegean islands.⁶ Skilled professionals moved freely from city to city seeking employment: Herodotus (3.131–7) describes the travels of the doctor Democedes of Croton, hired as public physician in both Aegina and Athens as well as by Polycrates of Samos and eventually Darius himself, and craftsmen from the Ionian cities of Asia Minor are attested in sixth-century documents from Babylon and Susa.⁷ Nor were Greeks averse to serving in the armies of foreign potentates, as indicated by the signatures of predominantly East Greek mercenaries carved into the statue of Rameses II at Abu Simbel in Nubia in the first decade of the sixth century (ML 7).

It is, then, perhaps preferable to conceptualize international relations in terms of a dynamic interplay between (1) the identity, characteristics, interests and objectives of actors (be they states or individuals), (2) the actual process of interaction itself and (3) external structural determinants.⁸ Such determinants might be material in nature (demographic and economic

⁴ Morgan and Hall (1996). ⁵ Cf. Burchill (2001) 86, 89–90.

⁶ Nicolaus of Damascus *FGrH* 90 F63; Ael. *VH* 3.26; Hdt. 1.22.4, 27.5, 69.3, 6.125. See generally Baslez (1984); Herman (1987); Konstan (1997); and Mitchell (1997).

⁷ Balcer (1983) 260–2. ⁸ Cf. Reus-Smit (2001).

factors were both involved in the foundation of new overseas settlements during the second half of the eighth century BC, creating new contexts for interactions),⁹ but they could also be ‘ideational’ – that is to say, conforming to shared norms, expectations and values. The values that immediately come to mind are those connected with religion and certainly many of the protocols for interstate relations were, as we shall see, endowed with religious legitimacy – at least originally.¹⁰ Yet the Greeks subscribed to a far broader set of expectations about appropriate behaviour for which religious strictures were as often the explanation as they were the cause.

Already in the *Odyssey* there is a developed concept of what constitutes correct, or ‘civilized’, behaviour. The Phaeacians ‘who care not for the bow or quiver, but for sails and oars and the balanced ships in which they take pride in crossing the grey sea’ (6.270–2) inhabit a city endowed with a double harbour, private berths, a meeting place (*agora*) and a temple to Poseidon. It is a familiar world, diametrically opposed to that of their former neighbours, the Cyclopes, who ‘have no deliberative assemblies or laws, but inhabit the peaks of the tall mountains in hollow caves, each one of them legislating over his own children and wife without taking account of others . . . [They] have no red-cheeked ships, nor shipwrights to build decked boats which would allow them to visit the various cities of men as do other peoples who cross the sea in ships’ (9.112–15, 125–9). It is sometimes suggested that the distinction drawn between the Phaeacians and the Cyclopes reflects an early conception of what it means to be Greek,¹¹ but in truth ethnic considerations are not paramount in the Homeric epics. The paradigm that is being established here concerns the correct and appropriate behaviour to be adopted in *all* social transactions, be they with Greeks or non-Greeks: Paris did not abuse Menelaus’ hospitality and steal his wife *because* he was a Trojan.

What is striking about the Homeric descriptions of the Phaeacians and the Cyclopes is the strict correlation between normative behaviour and social intercourse: the Cyclopes are ignorant of the rules of civilized humanity *because* they have no interaction with the various cities of men. Thus the interests and identities of the parties involved could actually be shaped and defined through the very process of interaction. Furthermore, the external structural determinants which facilitated and constrained interstate relations were simultaneously reproduced and gradually transformed by means of that same interaction. These two observations allow us to comprehend not only why similar protocols governed the relationships between individuals, individuals and states and states of varying constitutions over a long period of time but also why new geopolitical circumstances in the

⁹ Tandy (1997) 19–83. ¹⁰ Adcock and Mosley (1975) 11.

¹¹ Buxton (1994) 80, 155; *contra* Hall (2002) 117–18.

classical period – especially the emergence of hegemonic alliances – were accompanied by new ideas concerning the nature of international relations.

II. THE AGONISTIC AGE

For an earlier generation of scholars war was for the ancient Greeks an omnipresent and almost permanent fact of life, punctuated only sporadically by short-lived peace-treaties and truces. Eric Havelock, for example, declared war to be ‘a way of life in classical culture’ and Yvon Garlan estimated that in the fifth century Athens was engaged in hostilities on average two out of every three years.¹² That assessment has been revised in recent years: we know of few conflicts in which Athens was involved prior to the end of the sixth century and even in the course of the twenty-seven years of the Peloponnesian War there were only five major infantry battles.¹³ Yet, it cannot be denied that images of war and the warrior loom large in the visual arts and literature of archaic and classical Greece – war is the primary theme in the works of all the great historians – and it may be that calculations of formal states of hostility and concrete engagements underestimate the cultural significance that war possessed for the Greeks.¹⁴ Rather than choosing between the polar alternatives of war and peace as the default condition of Greek society, it is perhaps preferable to view war as the most extreme and bloody manifestation of what Jacob Burckhardt termed the ‘agonistic spirit’ – a temperament that, for him, supremely characterized the archaic period of Greek history (c. 700–479).¹⁵ This attitude is best summed up in Hippolochus’ injunction to Glaucus ‘to be the best and to prevail over all others’ (*Hom. Il.* 6.208); it is repeated some three centuries later when Xenophon’s Socrates describes Critobulus as having decided ‘that the virtue of man consists in being victorious over friends in works of kindness and over enemies in inflicting ills’ (*Mem.* 2.6.35).

The agonistic spirit is sometimes viewed as arising from the rules of reciprocity – the obligation ‘to help one’s friends and harm one’s enemies’ – and certainly it is undeniable that reciprocity constituted an important social logic for the Greeks, but the *simple* repayment of a debt or act of aggression constituted the bare minimum. Instead, the agonistic condition demanded that one of the partners to the transaction emerge as the clear victor, making it a zero-sum game. The notion pervades every level of Greek thought, from the battle of emotions within the Platonic soul to the ‘natural’ opposition Aristotle posits between men and women and between slave and free. Even within the *polis*, there is a constant state of tension

¹² Havelock (1972); Garlan (1975) 15; cf. Finley (1983) 60.

¹³ See chs. 2, 6 and 9 in the present volume. ¹⁴ Hölkenskamp (1997) 484–5.

¹⁵ Burckhardt (1998) 160, 168.

between the rulers and the ruled (the innovation of democracy was that rotation of office permitted citizens to perform both roles), and far from being considered a threat to stability this delicately balanced tension was believed to be the dynamic motor of the *polis* – the Greek term for civil war (*stasis*) properly carries more the notion of a stalemate than an upheaval. In fact, neutrality was regarded with suspicion, be it within the citizen body (Solon is said to have made it a crime, punishable by exile, to adopt a neutral position during a civil war)¹⁶ or in conflicts between states. In 433 the Corcyreans, desperate for an alliance with the Athenians in the face of Corinthian aggression, are forced to concede that their earlier policy of neutrality was ill-conceived. Conversely, the Corinthians maintain that it had been deliberately designed to allow the Corcyreans *carte blanche* to commit wrongs without any scrutiny by allies. Later, at the debate at Camarina, the Syracusan statesman Hermocrates argues that a stance of neutrality is unfair because inaction may in fact result in the victory of one party over the other.¹⁷

It is hardly surprising that an agonistic code that had originally emerged in the context of competitive conflict between individuals should, in the course of the archaic period, come to be applied to relations between states. This is, after all, the very period in which formerly élite honours and obligations were communalized, with the kudos secured through victory in the great athletic contests now redounding to the credit of the victor's *polis* and the martial prowess originally invested in early Iron Age chieftains coming to be distributed among citizen hoplite armies. The fact that there are few documented instances of Greek cities being destroyed in the archaic period, together with the curiously ritualized (at least to modern thinking) nature of infantry warfare at the time, would appear to indicate that it was the prestige, rather than the survival, of the citizen community that was at stake.¹⁸

The obligation to maintain (if not to enhance) one's prestige by avenging a wrong is assigned an important role in ancient explanations for the causes of wars. Herodotus (7.5) claims that Xerxes' campaign against Greece in 480–479 was launched to avenge the defeat the Persians had suffered on the battlefield of Marathon a decade earlier and Thucydides (1.96.1) notes that the Athenians established the Delian League in 478 on the pretext 'of avenging the losses they had suffered by ravaging the territory of the

¹⁶ [Arist.] *Ath. Pol.* 8.5; cf. Thuc. 2.40.2, where Pericles notes that the citizen who refuses to participate in public affairs is of no use to the *polis*.

¹⁷ Thuc. 1.32.4, 37.2–5, 6.80.1–2. Concept of neutrality: Nenci (1981a); Bauslaugh (1991).

¹⁸ Raaffaub (1997) 56; see also ch. 7 in the present volume, p. 237. For destructions of cities in the archaic period, Karavites (1982) 33–5 and for the ritual nature of hoplite combat, Connor (1988). See, however, Krentz (2002), and ch. 6 in the present volume, who argues that hoplite combat was not 'ritualized' until after the Persian Wars, and van Wees (2003), who argues that wars of conquest were not uncommon in the archaic period.

King' – a motive that would be resuscitated more than a century later by both Philip II and Alexander the Great. Overseas campaigns such as these were, of course, the exception in the archaic period: most wars almost certainly concerned disputes over frontiers and concessions to borderlands, which probably explains why the technical term used to indicate the violation of an accord (*parabainein*) literally means to cross a border.¹⁹ Herodotus (1.82) documents a dispute between Sparta and Argos in the mid-sixth century over the interjacent territory of Thyrea and a little earlier in the century, according to Plutarch (*Sol.* 8.1), Athens conducted a war against neighbouring Megara for possession of the offshore island of Salamis.

Yet while competition over scarce agricultural and pastoral resources should not be underestimated in what was, for many citizens, little more than a subsistence economy, it is nevertheless difficult to believe that considerations of honour and prestige were any more absent from such confrontations than they are in land disputes in Greece today. Interesting in this respect are the traditions concerning the Messenian War, by which Sparta gained control of the south-west Peloponnese towards the end of the eighth century. According to Pausanias (4.4–5), the Messenians attributed the cause of the war to the Spartans' rapacious desire for territory, but a Laconian version maintained that the invasion was, in part, vengeance for an earlier rape of Spartan virgins and the assassination of the Spartan king Teleclus at the border sanctuary of Artemis Limnatis.

III. THE MECHANICS OF DIPLOMACY

War itself, then, may not have been a universal or permanent feature of everyday life in the archaic period but the nature of the agonistic condition is such that every other state must necessarily be regarded, at best, as a potent rival and, at worst, as a potential enemy. Within this conflictual climate a neighbour's city was, by definition, alien territory. Herodotus (9.11.2) notes that the Spartans made no distinction between other Greek populations and non-Greek 'barbarian' peoples, calling all outsiders *xenoi* (strangers). Since the term 'barbarian' only began to take on specifically ethnic characteristics in the period after the Persian Wars,²⁰ it is highly likely that the Spartans were retaining a convention that was once more universal, and Giuseppe Nenci notes that in Aesop's fables, which are thought to date back to the archaic period and are precisely concerned with the correct comportment towards others, the animal protagonists never confront other partners of the same species.²¹ The figure of the *xenos* is a fundamentally ambiguous one.²² On the one hand he was thought to enjoy the protection

¹⁹ Nenci (1981b) 58. ²⁰ Hall (2002) 111–12, 172–89.

²¹ Nenci (1981b) 68–9. ²² Ehrenberg (1960) 103.

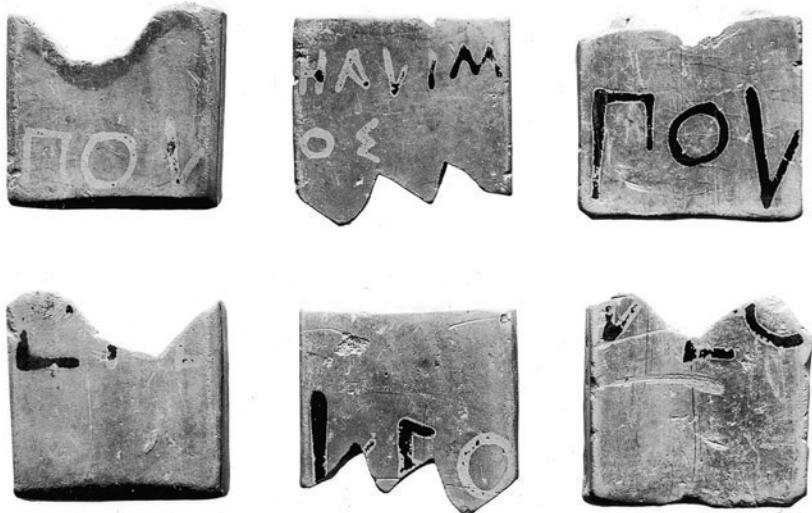


Figure 4.1 Terracotta *symbola* from Athens. Each *symbolon* was irregularly cut in half so that the matching halves could serve as tokens of recognition, for example between representatives of two parties bound by *xenia*.

of the gods and especially Zeus Xenios – a reflection probably of the fact that anyone might sooner or later find himself a *xenos* in a foreign city. On the other, as an outsider he was often the object of suspicion, as Nausicaa warns Odysseus in the *Odyssey* (6.272–88), and *xenoi* were sometimes refused admission to certain sanctuaries as testified by inscribed lintels, dating from the late fifth and early fourth centuries, from the sacred island of Delos.²³

To facilitate interaction and assuage the natural suspicions that the arrival of *xenoi* might arouse, Greek cities appointed *proxenoi* – citizens of other states who undertook to welcome and protect visitors from the state making the appointment. The earliest example known to us is a certain Menecrates, a resident of Oeanthea in Ozolian Locris, who was appointed *proxenos* by the island-state of Corcyra, and whose death at sea towards the end of the seventh century prompted the *demos* of the Corcyreans, together with Menecrates' brother Praximenes, to erect a gravestone in his memory just outside the *polis* of Corcyra (ML 4). The institution of *proxenia* represents the attempt of the *polis* to take control of the potentially disruptive bonds of *xenia* that individual members of the élite had previously forged with their peers in other cities, though in practice since a *proxenos* might be expected to

²³ ID 68; cf. *IG* XII.5 225; cf. Hdt. 5.72.3. See Butz (1996).

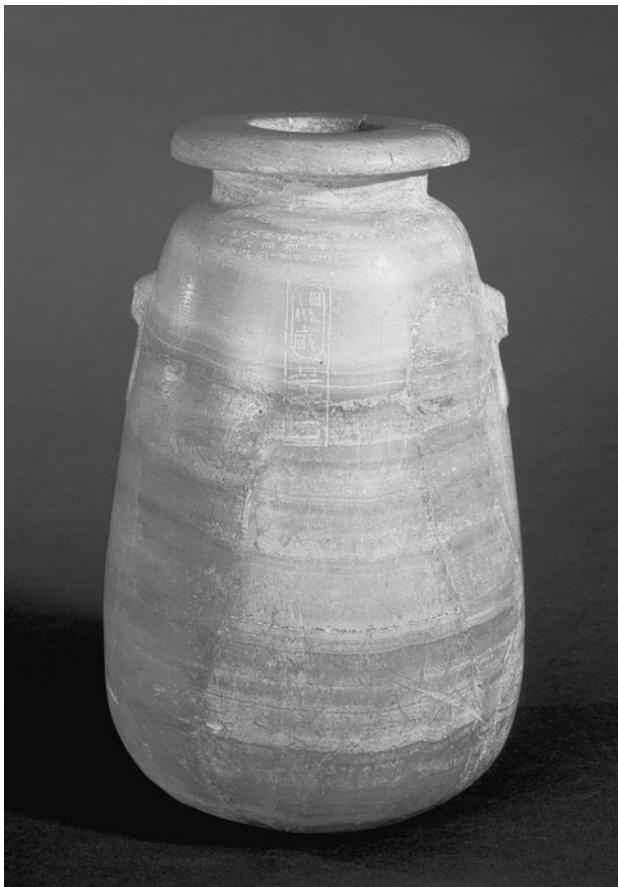


Figure 4.2 Alabaster vase given as a token of recognition by the Persian king Xerxes, whose name is inscribed on it in four languages: Old Persian, Elamite, Akkadian and Egyptian.

provide material as well as moral support it was generally wealthier citizens who were chosen for the position and, like the institution of *xenia*, the office was often hereditary.²⁴ Thus a decree, resolved by the Athenian council and assembly in 408/7, honoured Oeniades of Sciathos for his benefits to the Athenian people and voted that he should be appointed *proxenos* along with his descendants (ML 90), while according to Thucydides (5.43.2), Alcibiades believed he had a right to be the *proxenos* of Sparta – a position that he would presumably have inherited had his grandfather not given it

²⁴ For *xenia* and *proxenia*, see Herman (1987).



Figure 4.3 Grave monument for Pythagoras of Selymbria, a *proxenos* buried with public honours in the Cerameicus cemetery at Athens, c. 460–450 BC.

up. Alcibiades clearly regarded the office of *proxenos* as a prestigious one (and by the Hellenistic period it had become a largely tokenistic, honorific award), but the suspicion that might surround the *xenos* could also attach itself to the person who chose to protect him. The appropriately named Xenias of Elis, *proxenos* of Sparta and the personal *xenos* of the Spartan king Agis, was expelled from his home state in 400 on the charge of having promoted an oligarchic revolution.²⁵

From an early date, many of the visitors who arrived in other states were engaged in commercial activities, and treaties known as *symbolai* were drawn up in order to facilitate the dealings, and define the right to legal recourse, of an individual in an alien state. In either the 460s or 450s the Athenians

²⁵ Paus. 3.8.4; cf. Xen. *Hell.* 3.2.27.

concluded an agreement with the commercial city of Phaselis in Asia Minor in which it was decided that legal disputes arising between Athenians and Phaselites should be tried in the court of the Polemarch at Athens – a court that specialized in cases involving *xenoi* (ML 31). Another inscription, dating to c. 450 and found at Chaleion (modern Galaxidhi), regulates dealings with nearby Oeanthea. The treaty decrees that Oeanthean *xenoi* and their property are to be immune from summary seizure in Chaleion and vice versa – the penalty for infraction being a fine of four drachmas; residency in the other state for more than a month renders the *xenos* liable to local jurisdiction rather than the legal procedures of his home state; and in legal cases brought by a *xenos* where the opinion of the jurors is divided, the plaintiff may choose his own jurors from among the citizens of his host state (exclusive of the *proxenos* or the plaintiff's personal host). Interestingly, it is also decreed that the *proxenos* who is derelict in his duties towards *xenoi* may be fined twice the normal amount (*IG* ix.1 333).

Different procedures had to be adopted with regard to relations between states (as opposed to relations between states and individuals). Within what was essentially an anarchic system where every other city might be regarded with suspicion, a neutral mechanism, transcending and external to the machinations of individual states, was required. In the field of commercial transactions, the introduction of coinage served to facilitate exchange on the basis of widespread agreements as to the mode of its employment while simultaneously offering expression to individual civic identities through the specific weight-standards and insignia adopted by various cities. In the case of foreign relations, diplomatic protocols served a similar function, and it is probably not by accident that the Greeks seem to have adopted the concept of both coinage and diplomacy from the Lydians, heirs to the highly developed diplomatic conventions of the Hittites.²⁶

The important point about Greek diplomatic procedures as they emerged in the archaic period is that they were placed under the tutelage of the gods and infractions – at least originally – were considered to be violations of divine laws. Treaties, whether concerning peace, friendship or alliances, were called either *spondai* (libations) or *horkoi* (oaths) after the ritual acts and solemn declarations before the gods which guaranteed them. Shortly after the middle of the sixth century the Sybarites and their allies concluded a treaty with the Serdaioi in which they established ‘faithful friendship without guile for all time’; as guarantors of the oath, they name – alongside the city of Poseidonia – Zeus, Apollo and the other gods (interestingly addressed with the epithet *proxenoi*; ML 10). The significance of oaths in sealing treaties appears clearly in the events that marked the outbreak of the Peloponnesian War in the spring of 431. The Thebans claimed that they

²⁶ Nenci (1981b) 62–4, 68.

had agreed to lift their siege of Plataea in return for the delivery of Theban prisoners held captive in the city; by killing the prisoners, the Plataeans had violated their sacred oath. The Plataeans, for their part, maintained that the delivery of the prisoners had been contingent upon further negotiations and denied that they had sworn any oath (Thuc. 2.5.5–6). The episode demonstrates the traditional authority and constraining force that oaths sworn to the gods were believed to exercise, but it also – as we shall see shortly – betrays a new, more cavalier attitude towards sacred authority that was to become more widespread towards the end of the fifth century.

The official intermediary between states was the herald (*keryx*), instantly recognizable by his staff and considered to be under the inviolable protection of Zeus and Hermes. Herodotus (7.133–6) documents the anxiety that seized hold of the Spartans after their murder of Persian heralds sent by Darius to demand earth and water (the traditional signs of submission). Plagued by ill omens at sacrifices, they eventually decided to send two high-ranking citizens to Susa to attone for the crime with their lives, but Xerxes tells them that even though they had ‘confounded the conventions of all men by murdering the heralds, he himself would not do that for which he censured them’. The historicity of the episode is not as relevant as the idea that it conveys – namely, that there were recognized and accepted diplomatic protocols that were as valid in dealings with non-Greeks as in those with other Greek states. Thus in 367, when the Trichoneians of Aetolia arrested Athenian heralds who had been dispatched to announce the commencement of the Eleusinian mysteries, the Athenians protested that such conduct was ‘contrary to the common laws of the Greeks’ (Tod 137).

The office of herald was often hereditary. The point behind this may have been that the families who supplied heralds were generally old élite families with supposed roots in the heroic age (at Sparta the Taltybioi claimed descent from Agamemnon’s herald). In the sense that they pre-dated the civic institutions of the *polis* and, like all élites, entertained bonds of friendship and intermarriage with high-status families in other cities, they stood partly outside the *polis* to which they nominally belonged. The semblance of neutrality was further maintained by restricting the functions that heralds could perform. Forbidden from playing an active part in negotiations, their role was rather to deliver requests (for example, permission to recover the dead and wounded after a battle) and declarations. In some cases the mere dispatch of a herald – or, as in 431, the refusal to admit a herald to the Athenian assembly – could signal the commencement of hostilities.²⁷

²⁷ Thuc. 2.12. See generally Adcock and Mosley (1975) 152–4.

Negotiations were instead conducted by ambassadors. The Greek term (*presbeis*) originally meant 'elders' and in the city of Chalcis ambassadors apparently had to be at least fifty years of age.²⁸ Unlike heralds, ambassadors were expected to further the interests of the state they represented and in Athens they were directly elected by the citizen-assembly (Demosthenes called for a capital charge against Aeschines on the grounds that, though unelected, he had accompanied an embassy to Philip II: Dem. 19.126, 131). Composed of anywhere between three and ten men, embassies were unpaid but received a *per diem* allowance – Aristophanes (*Ach.* 65–7) calculates this at two drachmas but this is probably an exaggeration – and as if to reinforce their primary loyalty to the state they were forbidden from accepting bribes or gifts on pain of death (Dem. 19.7–8). It seems that ambassadors did not enjoy the same inviolability as heralds: the terms of the armistice between Athens and Sparta in 423 provided for safe passage 'for a herald, embassy and followers who are involved in the cessation of the war and legal cases, whether going to or coming from the Peloponnese by land or sea', but this may simply mean that embassies with a specific interest in ending the war would be granted inviolability if accompanied by a herald (Thuc. 4.118.6). In the summer of 430, at any rate, the Athenians seem to have regarded the seizure in Thrace and summary execution of ambassadors from Sparta, Corinth, Argos and Tegea as legitimate retaliation for Spartan assassinations of Athenian and allied traders (Thuc. 2.67). Similarly, in 379, following the Spartan general Sphodrias' assault on the Attic countryside, the Athenians arrested and detained a delegation of Spartan ambassadors in the city, only releasing them when it became clear that Sphodrias' actions had not been authorized by the Spartan state.²⁹

Since international relations in the archaic period were conceived as a zero-sum game in which the gains of one party could only be secured at the expense of the other, arbitration of disputes was from fairly early on referred to third parties. There are some exceptions: a third-century inscription from Priene refers to an earlier land dispute with Samos which was adjudicated by Bias of Priene, though later tradition counted Bias among the seven sages of the ancient world and his supposed Theban descent may have served to dissociate him somewhat from a party-line (*Inscr.Prien.* 500.11–24). Similarly, the sixteen women from Elis supposedly chosen to adjudicate a dispute between Elis and Pisa in the early sixth century may have been regarded as neutral parties in the sense that they were not citizens (Paus. 5.16.5). Normally, however, the arbitrator was an individual or group of individuals from a city uninvolved in the dispute: tradition held that the early sixth-century Corinthian tyrant Periander had adjudicated a conflict

²⁸ Heraclid. Pont. fr. 3 Muller.

²⁹ Xen. *Hell.* 5.4.22–3. See generally Adcock and Mosley (1975) 154–60.

between Athens and Mytilene for possession of Sigeum near the mouth of the Hellespont, while Themistocles is said to have arbitrated a disagreement that arose between Corinth and Corcyra.³⁰ Sometimes arbitrators appear to have been chosen on the grounds of ethnic affiliation: Pausanias (4.5.2) claims that the Messenians wanted to submit their differences with Sparta to the arbitration of either the Athenian council of the Areopagus (as a neutral third party) or else to the Argives ‘on the grounds that they were [Dorian] kinsmen of both parties’, and Plutarch (*Mor.* 298a–b) maintains that the Ionian cities of Chalcis and Andros referred their dispute over Acanthus to the Ionian cities of Erythrae, Samos and Paros. Similarly, colonies might ask their mother-city to settle a dispute, and the intervention c. 450 of Argos in settling affairs between the Cretan city of Cnossus and its smaller neighbour, Tylissus, may have been justified on the grounds that Argos was believed to have founded several cities on Crete.³¹ Finally, religious organizations were considered particularly effective arbitrators: in 433, Corcyrean envoys offered to take their dispute with the Corinthians, if not to a number of mutually agreed cities in the Peloponnese, then to the oracle at Delphi and indeed a number of arbitration cases were referred to either the Pythian oracle or to the league of states that administered it.³² It is to ‘supracivic’ organizations such as these that we now turn.

IV. SUPRACIVIC ORGANIZATIONS

It is commonly stated that interstate relations in the Greek world were simultaneously shaped by both centrifugal and centripetal forces as cities oscillated between the virtues and risks of competitive values and cooperative values. In light of our discussion so far, it would seem that the desire for cooperation may have been somewhat overstated. A state of hostilities was normally (though not always) declared formally by heralds and in many cases it was justified as a response to the violation of a peace-treaty, but since peace-treaties themselves had to be declared and sworn to as a result of a particular set of circumstances, it would be just as mistaken to assume that peace was the ‘default condition’. By the same token, it took a special effort on the part of states to conclude bilateral treaties of friendship (*philia*) with one another and prior to the fourth century such treaties were usually concluded for limited periods – the agreement between Sybaris and the Serdaioi (see above) is rather exceptional in this respect.³³ Amity and harmony were not, then, the defining characteristics of international relations in the archaic Greek world. Cooperation between states could, of course, serve vital imperatives such as security and protection, but – just as

³⁰ Hdt. 5.95.2; Plut. *Them.* 24.1. ³¹ ML 42. See Graham (1983) 239–44.

³² For interstate arbitration, see generally Piccirilli (1973). ³³ Ehrenberg (1960) 105.

importantly – the competitive ethos could not function in monadic situations; it required a broader forum not only to provide peer-competitors but also to communicate one's achievements as publicly as possible. This requirement was met by the establishment of supracivic leagues and amphictyonies which provided a common arena for states to construct and express their individual identities.

Some of the earliest leagues seem to have emerged on the coast of Asia Minor. Twelve Ionian cities (Colophon, Miletus, Myus, Priene, Ephesus, Lebedos, Teos, Clazomenae, Phocaea, Samos, Chios and Erythrae) founded a league known as the Panionion, centred on the sanctuary of Poseidon Heliconius on the Mycale peninsula: excavations in the sanctuary suggest that the league was certainly in operation by c. 600 and perhaps rather earlier.³⁴ To the north, the Aeolian cities of north-west Asia Minor seem to have established their own 'dodecapolis', while to the south the Dorian cities of Lindus, Ialysus, Cameirus, Cos, Cnidus and Halicarnassus constituted a 'hexapolis' based on the sanctuary of Apollo Triopius near Cnidus; archaeological confirmation for the existence of the Dorian hexapolis is contested, but it is reasonable to suppose that it arose at about the same time as the Panionion.³⁵

Adcock and Mosley maintain that 'ethnic considerations as such did not act as a major factor in Greek diplomacy',³⁶ and there are some grounds for supposing that the establishment of these leagues was not so much the fulfilment of a pre-existing ethnic sentiment as it was the very constitutive moment in the formation of the ethnic affiliations of the historical period, forged in mutual opposition in a specific environment and under specific conditions.³⁷ In fact, Herodotus (1.143–4) makes precisely the point that not all Ionians were admitted to the Panionion just as neighbouring Dorian cities were excluded from the Dorian hexapolis. What is worth noting is that the sanctuaries that served as a focus for the leagues seem to have been outside the control of any one constituent city, thus providing a neutral arena for the competitive expression of member-states' identities. Furthermore, the meagre information we possess for these confederations actually speaks more of conflict than of cooperation. Herodotus (1.144.2) notes that Halicarnassus was expelled from the hexapolis for an infraction committed by one of its citizens who had competed in games at the sanctuary of Apollo Triopius, and similar disagreements and punitive expulsions may well lie behind his statement that all the Ionian cities celebrated the festival of the Apaturia 'save for the Ephesians and the Colophonians . . . because of some allegation of murder' (1.147.2). None of the members of the Panionion,

³⁴ Hdt. 1.142. For the archaeology of the Panionion: Kleiner et al. (1967).

³⁵ Hdt. 1.144, 149. See generally Forrest (2000) 281–3; Hall (2002) 67–8, 83–4.

³⁶ Adcock and Mosley (1975) 146. ³⁷ Ulf (1996); Hall (2002) 67–73.

save for Chios, came to the aid of Miletus during the twelve years that the city suffered invasions at the hands of the early sixth-century Lydian kings Sadyattes and his son Alyattes, and it is perhaps pertinent that the later attempts of both Bias of Priene and Thales of Miletus to persuade the Ionians to unite and to transform the Panionion into a single political authority were spectacularly unsuccessful.³⁸

Sanctuaries also served as the focal point for other non-ethnic, regionally based leagues. In modern scholarship they are frequently described as ‘amphictyonies’ – a term which Androtion (*FGrH* 324 F58) interpreted as meaning ‘those who dwell around’ though the etymology is not, in fact, so straightforward.³⁹ The prototypical amphictyony was that which administered Apollo’s oracular sanctuary at Delphi. The league had originally been based at the sanctuary of Demeter at Anthela near Thermopylae and included local *ethnê* such as the Malians, the Phthiotid Achaeans and the East Locrians. Before the end of the seventh century other states in central Greece (notably, Thessaly, Boeotia and Phocis) as well as Athens, Eretria and Sparta had joined the amphictyony, which now extended its control over the sanctuary at Delphi as well.⁴⁰ Administrative cooperation did not necessarily entail a climate free of hostility. As far as we can gather from the testimony of Aeschines (who was an amphictyonic official), members swore an oath not to destroy the *polis* of fellow members, nor starve it out nor cut off its water supply.⁴¹ A moment’s thought makes it clear that the oath regulated, rather than prevented, conflict.

We hear of other regionally based leagues at Onchestus and Coronea in Boeotia, Samicum in Triphylia, Asine in the Argolid and on the islands of Delos and Calaureia (modern Poros), though since an amphictyony is not explicitly attested on Delos prior to the fourth century and Strabo (9.2.33) is the first author to mention an amphictyony at Onchestus, it is possible that such organizations were modelled on their more famous Delphic predecessor.⁴² Likewise, there is no independent testimony prior to an inscription of the Hellenistic period for the amphictyony that Strabo (8.6.14) says administered the sanctuary of Poseidon on Calaureia, though it is often assumed that the league was already in existence in the archaic period.⁴³ Strabo says that the original members were the cities of Hermione, Epidaurus, Aegina, Athens, Prasiae, Nauplia and Boeotian Orchomenus, but that eventually Argos began to make contributions on behalf of Nauplia and Sparta on behalf of Prasiae. Again, though, while the sanctuary of

³⁸ Hdt. 1.18, 170. See Roebuck (1955) 29. ³⁹ Hall (2002) 148–51.

⁴⁰ For the members of the amphictyony: Aeschin. 2.115–16; Androtion *FGrH* 324 F58 and Theopomp. *FGrH* 115 F63. See generally Hall (2002) 134–54.

⁴¹ Aeschin. 2.115–16, 3.109–10; cf. Tod no. 204.

⁴² Ehrenberg (1960) 109; see generally Tausend (1992). Delian amphictyony: *IG* XII.5 113.

⁴³ Kelly (1966); Forrest (2000) 284; contra Hall (1995) 584–5. The inscription is *IG* IV. 842.

Poseidon itself appears to have been neutral territory protected by divine sanctions – Aristotle (fr. 597 Rose) even asserts that the island of Calaureia had originally been called Eirene (the Greek word for ‘peace’) – relations were not necessarily amicable between constituent members. It was because of Athens’ bruising war with Aegina that Themistocles in 483 proposed to employ the proceeds from new mining concessions to fund a fleet of 200 triremes and in 419 Argos felt no qualms about invading the territory of Epidaurus.⁴⁴

The primary purpose of such confederations was to administer a neutral space for competitive interaction, free from the control of any single state, in which states could forge and define their identities, interests and achievements.⁴⁵ We know from an inscription, dated to 380/79, that one of the duties of the Delphic amphictyony was to maintain the roads and bridges that conveyed pilgrims to Apollo’s sanctuary (*IG II² 1126.40–4*). The position that sanctuaries typically occupied at the nodal conjunction of transregional road networks stands in marked contrast to the situation in urban centres where roads generally connected the conurbation with its territory – indeed, to facilitate communication across boundaries was to invite hostile threats.⁴⁶ This required, however, certain measures for the protection of sanctuaries and those who frequented them. The sanctuary of Poseidon on Calaureia was noted as a place of *asylia* – offering the same sort of inviolability that heralds enjoyed – and this seems to have been a feature shared by many sanctuaries in the Greek world.⁴⁷ Furthermore, most of the major religious festivals were marked by a sacred period (*hieromenia*), initiated by the announcement of the impending festival by sacred envoys (*theoroi*). The *hieromenia* (which lasted fifty-five days in the case of the Eleusinian mysteries and may even have been as long as a year for the Pythian games at Delphi)⁴⁸ did not demand a cessation of all hostilities, but it initiated an armistice (*ekecheiria*) in the region hosting the festival and offered safe passage to competitors and spectators wishing to attend. The solemnity with which these religious obligations were originally endowed is demonstrated by the measures Greek states would later take to circumvent them. In 420 BC the Spartans were excluded from the Olympic games on the grounds that they had failed to pay a fine levied when they had violated the *ekecheiria* by invading the territory of Lepreum in Elis. Their protestation that they had been unaware of the *ekecheiria* because the *hieromenia* had not, at that point, been declared at Sparta may have been legitimate, though the Argives showed no scruples when, in the following year, they postponed the *hieromenia* of the Carneia festival by continually repeating

⁴⁴ Hdt. 7.144.1; Thuc. 5.54–5. ⁴⁵ Forrest (2000) 284. ⁴⁶ Lewis (1996) 30–1.

⁴⁷ Sinn (1993). ⁴⁸ Rougemont (1973).

the fourth from last day of the previous month, thus allowing them to prolong their invasion of Epidaurus (Thuc. 5.49, 54).

Within the orbit of such inter-regional sanctuaries, the most obvious agonistic act was the athletic contest itself, where victory enhanced the prestige not only of the individual athlete but also of the state to which he belonged. States also, however, engaged in the competitive display of dedicatory monuments, including the characteristic treasury-houses that line the Sacred Way at Delphi or jostle with one another on the terrace west (but originally north) of the stadium at Olympia and, though it sometimes puzzles modern sensibilities, they funded and erected material records of their most bloody contests with one another. The temple of Zeus at Olympia, constructed between 472 and 457, was said to have been funded from the spoils that Elis took after capturing the neighbouring community of Pisa, while on the pediment above the entrance the Spartans suspended a gold shield depicting the gorgon Medusa in order to commemorate their victory over the Athenians and their allies at the battle of Tanagra in 457 BC (Paus. 5.10.2–4). Just in front of the temple stood the winged Nike by Paeonius of Mende, paid for and dedicated from spoils that the Messenians and the Naupactians won from the Spartans during the Peloponnesian War (ML 74).

To recapitulate, international relations in the archaic and early classical periods were conducted within a context characterized by competition, not to say conflict, and other states were regarded with suspicion as potential or actual rivals. Communal organizations, far from fostering a sentiment of cooperative harmony, actually served to facilitate and promote this competitive ethos by providing a neutral space and a universally applied regulatory framework for the expression of civic or state consciousness. When communication and interaction between states was required, the Greeks appealed to a series of consensually agreed protocols, placed under the tutelage of the gods and believed to conform to basic codes of ‘civilized’ human behaviour. All this was to change in the course of the fifth century.

V. THE RISE OF HEGEMONIC ALLIANCES

From time to time a state had to seek the help of an ally in order to assert its primacy. The word *symmachos* (literally ‘a co-fighter’) is first attested in the work of the poet Archilochus (fr. 108 West) and probably arose initially within the orbit of the connections that early archaic élites forged with one another, indicating an *ad hoc* arrangement between individuals or groups of individuals designed to address a specific military need. Thucydides’ assertion that, in earlier times, ‘weaker cities did not unite under the hegemony of greater cities, nor did they launch common expeditions on the basis of equal participation, but each state waged war against its

'nearest neighbour' (1.15.2) is not contradicted by the admittedly sparse evidence that we possess. Even the exception that he makes for the so-called 'Lelantine War' between Eretria and Chalcis 'in which the rest of the Greek world participated in alliance with one or other of the two sides' (1.15.3) is of doubtful historical value.⁴⁹ Eventually the term *symmachoi* was extended to define other communities that agreed to lend military assistance according to oaths sworn to the gods and the duration of such alliances became more open-ended to cope with potential needs in the future. Thus, a bronze tablet dating to c. 500 and found in excavations at Olympia describes an alliance concluded for 100 years between Elis and Heraea (a city in western Arcadia), in which both cities agree that 'if the need arises, be it word or deed, they shall stand by each other in all things but especially with regard to war; but if they do not stand by one another, the offender is to pay a talent of silver to Olympian Zeus to be used in his cult'.⁵⁰

Thucydides appears to make a distinction between a *symmachia* (an offensive and defensive alliance) and an *epimachia* (a purely defensive alliance). In 433 the Athenians decided 'not to enter into a *symmachia* with the Corcyreans to have the same friends and enemies (for if the Corcyreans asked them to sail against Corinth they would violate their treaty with the Peloponnesians), but they made an *epimachia* to help one another in the event that somebody attacked Corcyra or Athens or their respective allies' (Thuc. 1.44.1). Similarly, both before and after the Peace of Nicias in 421, the Corinthians declined to join the *symmachia* 'to wage war and conduct peace together with Elis, Argos and Mantinea', declaring that 'they were happy with the previous *epimachia*, to come to the aid of one another but to march out against nobody' (Thuc. 5.48.2). To judge, however, from the decree that established the Second Athenian Confederacy in 378 the term *symmachia* could also designate a purely defensive alliance.⁵¹

The alliance between Elis and Heraea assumes a fundamental equality between the two parties, but not all alliances were conceived in terms of a parity between partners. From around the middle of the sixth century Sparta began contracting a series of bilateral alliances with Peloponnesian states such as Tegea, Elis, Sicyon and Corinth; by the middle of the fifth century Aegina, Megara and most of the cities in Boeotia, Phocis and East Locris had been added to the list. The unequal nature of such alliances is betrayed by a fifth-century inscription which records an alliance between Sparta and an Aetolian community named the Erxadieis, commanding them 'to follow wheresoever the Lacedaemonians lead by land and sea and to have the same

⁴⁹ Burn (1929) and Forrest (1957), (2000) 286 believe in the fundamental historicity of the war and of the alliances to which Thucydides alludes. Parker (1997) accepts the historicity of the war but is more cautious about the alliances. Tausend (1987) believes the tradition to be exaggerated and mythologized while Fehling (1979) regards it as utter fiction.

⁵⁰ ML 17. See generally Baltrusch (1994). ⁵¹ Tod 123. See Adcock and Mosley (1975) 189–91.

friends and enemies as they'.⁵² These alliances were probably modelled on slightly earlier agreements that bound the 'perioecic' or surrounding towns of Laconia to follow the lead of Sparta in times of war and it is highly likely that a similar regional hegemony was already being exercised during the archaic period by the Thessalians over their neighbours. Similarly, in the second half of the fifth century the *polis* of Thebes had begun to assume such a position of dominance over her Boeotian neighbours that by the time of the King's Peace of 386 she attempted to swear the oath on behalf of all the Boeotians (*Xen. Hell.* 5.1.32).

By the fifth century the system of bilateral and unequal alliances that the Spartans had contracted was organized on a more formal basis to constitute what modern scholars call the 'Peloponnesian League', though the term that the ancients used was 'the Lacedaemonians and their allies'. The catalyst for this formalization may have been an incident that Herodotus (5.74–5) describes as having taken place in 506, when the Corinthians abandoned midway an expedition led by king Cleomenes against Athens on the grounds that it was unjust. From then on it was decided that future expeditions should be ratified by a meeting of the league and that each ally should have an equal vote, with a majority vote considered binding on all allies 'unless there was some hindrance to do with gods and heroes' – indeed in 504 a proposal brought before the league to launch another invasion of Attica was voted down after renewed Corinthian opposition.⁵³ It is, however, important to note that Sparta's hegemony was maintained by the fact that members of the Peloponnesian League entered into individual alliances with Sparta and not one another, that only Sparta could call and chair congresses of the league, that proposals put before the league congress had already been ratified by the Spartan assembly and that expedition commanders were always Spartans.⁵⁴

The Peloponnesian League established a model for the other principal alliances of the fifth and fourth centuries. Both the Delian League, set up in 478 under the leadership of Athens to prosecute the war against Persia, and the Second Athenian Confederacy, formed exactly a century later to safeguard the freedom and independence of Greek cities from Spartan aggression, were 'bicameral': the Athenian assembly (which normally discussed matters first) possessed an authority equal to that of the *synedrion* (council) in which all the other allies had one vote.⁵⁵ While meetings of the Delian League initially took place on the island of Delos (the league treasury was transferred to Athens in 454), the *synedrion* of the Second Athenian Confederacy met at Athens right from the outset. In other

⁵² *SEG* xxvi 461; cf. *Xen. Hell.* 2.2.20, 5.3.26.

⁵³ For the 'constitution' of the league: *Thuc.* 1.141.6, 5.30.1. Events of 504: *Hdt.* 5.90–3.

⁵⁴ De Ste Croix (1972) 101–24. ⁵⁵ [Arist.] *Ath. Pol.* 23.5. See de Ste Croix (1972) 298–307.

respects, however, the original charter of the Second Athenian Confederacy was designed to avoid some of the abuses of its predecessor. Thus, whereas in the Delian League Athens and her allies seem to have sworn to have the same friends and enemies as one another, the fourth-century confederacy was intended to be more defensive in nature. Nor does it seem to have been considered quite as permanently binding as its forerunner: in 478 Athens' allies signalled their adherence to the alliance by casting iron ingots into the sea and swearing to abide by the terms of the oath until the iron should resurface, and it was the permanence of this oath that allowed Athens to feel justified in retaliating brutally against cities that tried to secede from the alliance. Finally, unlike the assessments that were made by Aristides for the Delian League, the allies of the Second Athenian Confederacy were not initially required to pay any tribute (*phoros*), though 'voluntary contributions' eventually became more or less obligatory.⁵⁶

After his defeat of a Greek army headed by Athens and Thebes at Chaeronea in 338, Philip II 'invited' the Greek cities to Corinth in order to enroll in a *symmachia* with him (only the Spartans refused the invitation). The League of Corinth, known to contemporaries as 'Philip and the Hellenes', was set up along the same 'bicameral' lines as the earlier leagues of the fifth and fourth centuries: Philip (and later his son Alexander) served as *hegemon* with authority equal to the *synedrion* in which the various Greek cities were enrolled. Some semblance of decision making was ceded to the *synedrion* – it was, for example, entrusted in 335 with the decision to raze the city of Thebes to the ground and to enslave its citizenry – but ultimately, just as with its predecessors, the council of the allies generally conformed to the wishes of the *hegemon*. Unlike the Delian League, however, members of the League of Corinth contributed councillors on the basis of proportional representation. Thus, while Athens succeeded in obtaining majority decisions by coercing weaker allies, Philip concentrated on securing the loyalty of only the more populous and powerful states.⁵⁷

VI. A NEW WORLD ORDER

It is sometimes assumed that one of the essential defining characteristics of the *polis* was its autonomy – that is, its ability to conduct its own affairs free from external interference or dictates. In truth, while the ideal of autonomy is fully compatible with the social logic of the agonistic condition in the archaic period there had always been *poleis* that found themselves dependent upon more powerful neighbours. It is, however, undeniable that the advent of hegemonic leagues encroached on the autonomy of Greek cities more

⁵⁶ Diod. Sic. 15.28.3–4; Tod 123.

⁵⁷ See generally Adcock and Mosley (1975) 243–6.

than ever before and it is perhaps revealing that appeals to the principle of autonomy became more vocal and more insistent in the course of the fourth century – the very period in which the majority of *poleis* were not, in fact, independent.⁵⁸ Autonomy ‘for all *poleis*, both large and small’ was, for example, guaranteed under the terms of the King’s Peace. In reality, the autonomy clause was a cynical ploy on the part of Sparta, intended to dismantle Thebes’ hegemony over the Boeotian cities, but the formula remained central to the subsequent ‘common peaces’ concluded between the Greek cities and was enshrined in the charters that established both the Second Athenian Confederacy and the League of Corinth.⁵⁹

While the contexts and procedures of international relations continued to be much the same as they had been in earlier centuries, the new geopolitical circumstances occasioned by the ascendancy of a few powerful states profoundly altered the material structures that governed and were reproduced through such interactions: the increasing tendency to employ mercenaries alongside citizen-soldiers and to conduct longer, more continuous campaigns with more professional élite corps are among the most obvious examples.⁶⁰ At the same time, a different set of ideational structures informed action from the fifth century onwards. In particular, there are three interconnected areas in which the normative values of the later classical period appear to be in stark contrast to those that prevailed in the archaic period.

First, the agonistic spirit in international relations (if not in other areas of Greek life) was now an anachronism. With the new asymmetric relations of power created by the rise of hegemonic alliances, the imperative to secure honour among peers and the satisfaction gained by achieving this became increasingly redundant. Prior to the outbreak of the Peloponnesian War, Thucydides (1.75.3) has the Athenians tell the Spartans that it was fear, honour and self-interest that impelled them to acquire their empire, but by the time of the Melian Dialogue in 416 considerations of honour appear to hold little weight alongside the dictates of self-interest (5.90.1), and Athens shows herself increasingly more concerned with survival than with winning or even maintaining prestige. With the conduct of affairs now dictated by hegemonic powers rather than by transcendent codes of behaviour, some of the neutral mechanisms that had formerly facilitated dealings between states were suspended. At some point – probably soon after the transfer of the league treasury in 454 – Athens decreed that the arbitration of disputes between her allies should henceforth be decided by Athenian courts rather than by third parties while, in the economic sphere, a law was passed

⁵⁸ Hansen (1995a). ⁵⁹ For the common peaces: Ryder (1965).

⁶⁰ See ch. 5 in the present volume.

banning independent silver coinages, closing local mints and requiring all allied cities to employ only Athenian coins, weights and measures.⁶¹

Second, the consensually agreed values – including religious sanctions – that had hitherto guaranteed the conduct of international relations were no longer as potent as they had once been. We have already had occasion to note some of the devices that states adopted to circumvent oaths and armistices. In his description of the plague of 430, Thucydides (2.47.4) describes how the Athenians became disenchanted with prayers and oracular consultations: ‘since this was all of no avail, they ended up turning their backs on such practices, defeated by their sufferings’. Similarly, in his account of the civil war that broke out on Corcyra in 427 he notes that solidarity among the revolutionaries was guaranteed not by any divine law but by the common illegal enterprise in which all were engaged and that oaths (*horkoi*) sworn for a temporary advantage, were swiftly broken (3.82.6–7).

It is probably unhelpful to suppose that people were ‘less religious’ in the later classical period, not least because ancient Greek religion was principally a matter of practice rather than of faith, and religious practices certainly continued unabated for many centuries. The Athenian general Nicias, whose fear of ill omens delayed the Athenian evacuation from Sicily in 413, was clearly no less religious than his archaic predecessors while the charge of atheism was evidently compelling enough to persuade a majority of jurors to convict Socrates in 399. What had come under challenge was not religion per se but all the established conventions that regulated one’s social existence, and Thucydides (e.g. 2.53.4, 3.84.3) is careful to stress that neglect of the gods was accompanied by an abandonment of normative practices and common societal standards. For Thucydides, the blame lay with the protracted war itself but it is worth noting that many of Athens’ educated statesmen had received their education at the hands of sophists who were precisely concerned with demonstrating that all *nomoi* (‘laws’, ‘standards’, ‘norms’) were arbitrary conventions invented to mask the true rule of nature (*physis*).⁶² The Athenians justify their hegemonic aspirations to the Melians on the grounds that ‘it is under the compulsion of nature that one rules over whatever one can’ (Thuc. 5.105.2).

Finally, whereas a climate of conflict and suspicion had prevailed in international relations in the archaic period, the decline in the salience of the agonistic mentality also had repercussions for the attitudes states held towards one another. It is striking that references to *philia* – a bond between partners that had required a special effort to secure in earlier centuries – become ever more frequent in inscriptions from the fourth century onwards. In fact, many cities went further and commemorated their dealings with other states not only in terms of friendship but also

⁶¹ Plut. *Per.* 25; ML 45.

⁶² See generally Heinemann (1945).

with reference to supposed ties of kinship (*syngeneia*).⁶³ The practice of such ‘kinship diplomacy’ is already attested for the fifth century – Herodotus (5.80.1) notes that Thebes sought an alliance with Aegina on the grounds that the eponymous heroines Thebe and Aegina were daughters of the river-god Asopus – but it is from the fourth century onwards that the phenomenon becomes increasingly common.

We should not, of course, be duped by the apparent sincerity of such transactions. The fact that friendship had to be proclaimed so frequently with so many different parties could not fail to devalue the currency of the concept and the genealogical routes by which cities established relationships with one another were sometimes so tortuous that their credibility can hardly have been seriously entertained by the signatories to the treaty. In the late third century, for example, the Lycian city of Xanthus invoked its kinship with the small town of Cytenium in Doris by claiming that Coronis, the daughter of the eponymous Dorus, had been seduced by Apollo, whose mother, Leto, was acknowledged as the founder of Xanthus.⁶⁴ The practice does, however, herald a new conception of international relations that was to characterize the Hellenistic period – one which operated more along the lines of interpersonal relationships than according to the impersonal protocols of normative expectations. The form that such transactions took was practically the same as before but the meaning-content with which they were invested was now very different.

⁶³ See Curty (1995); Jones (1999). ⁶⁴ See Bousquet (1988).

CHAPTER 5

MILITARY FORCES

PETER HUNT

I. INTRODUCTION

In a passage extolling the virtues of order the fourth-century historian and former general Xenophon waxes eloquent on the beauty of a well-organized army.

An orderly army elates its watching supporters, but strikes gloom into its enemies. I mean, who – if he is on the same side – could fail to be delighted at the sight of massed hoplites marching in formation, or to admire cavalry riding in ranks? And who – if he is on the other side – could fail to be terrified at the sight of hoplites, cavalry, peltasts, archers, slingers all arranged and following their commanders in a disciplined way?¹

As we can see from Xenophon's list, hoplites were the most conspicuous and usually the most important Greek troops, followed by the four other major types of land troops in descending order of status: cavalry, peltasts (light-armed spearmen), archers and slingers.² Most scholars argue that the basic trend in military forces from the early archaic period through the classical period was the establishment and then the decline of hoplite primacy.³ According to this model, hoplite supremacy was established in the early seventh century. All cities that wanted to win land battles had to man large hoplite armies and fight it out on the small agricultural plains of Greece. Light-armed troops and cavalry were of minimal significance. The late fifth and the fourth centuries saw the dominance of hoplites challenged as their vulnerabilities and the advantages of mixed armies became obvious. It is for this reason that Victor Hanson entitled a chapter on fourth-century warfare, 'Hoplites as dinosaurs'.⁴

This view, although correct in the main, has been challenged on two fronts. First, it may be that the hand-to-hand fighting method of the classical hoplite developed slowly and that hoplites coordinated with other

¹ Xen. *Oec.* 8.6, trans. Tredennick and Waterfield (1990). Xenophon goes on to describe the importance of order on warships.

² In a similar description in Xen. *An.* 5.6.15, the cavalry comes last, perhaps as the arm in which the Ten Thousand were weakest.

³ E.g. Ober (1994); Garlan (1994); Hanson (1999b) 219–349. ⁴ Hanson (1999b) 321–49.

types of forces throughout the archaic period:⁵ a throwing spear – recognizable by the throwing straps which added spin for a truer throw – appears in addition to the classical thrusting spear on vase-paintings up to the late seventh century; the seventh-century poet Tyrtaeus describes light-armed troops interspersed with the hoplites; Attic vase-paintings in the late sixth century depict archers among hoplites. Then, almost as soon as we have detailed descriptions of wars between Greek city-states, that is, in Thucydides' account of the Peloponnesian War (431–404), we hear of the defeat of unescorted hoplites in rough terrain. So the dominance of the hoplites may not have been as long or as complete as previously thought. Second, scholars have argued that the decline of hoplite warfare in the fourth century is overstated.⁶ Hoplites may have been vulnerable and slow on the rough terrain and passes that dominate the central Greek landscape, but agricultural states need to control the fertile plains and must fight set battles there. For this, no force was as good as the heavily armed Greek hoplite formation, the phalanx – certainly according to the many Near Eastern monarchs who hired Greek mercenary hoplites. So while the hoplites may not have been the only important soldiers during the archaic period, they were usually the most numerous and decisive force in battles of the fourth century, the period of their supposed demise.

This chapter considers the military capacities and costs of different military forces. These capacities and costs, however, involved considerations rather more complex than, for example, the limited ability of arrows to pierce hoplite armour. Armies operate, not only against other types of armies, but on a certain type of terrain: light-armed soldiers, who on the plains were easy prey for the hoplite phalanx, could turn the tables on rough ground. A military force can be used for, and is thus good or bad for, certain objectives, for example, disruption of trade, destruction of agriculture, control of territory or attacks on walled cities. Armed forces also involve different costs for the state that fields them. Such costs include obvious ones such as the price of the weaponry. The economic costs of an army also include the amount of time productive citizens need to spend on campaign, in training at a difficult weapon, or the wherewithal required to maintain either professional citizen units or mercenaries. For example, the hoplite was an untrained amateur fighting a decisive battle during a break in the agricultural schedule. He cost his society little. The professional soldiers of Sparta were paid for by the exploitation – and consequent rebelliousness – of a much larger population of serf-like helots.

⁵ Van Wees (2000a).

⁶ Holladay (1982). Anderson (1970) 111–64 presents a balanced picture of the role of hoplites and other arms in fourth-century warfare.

Capacities and costs were important determinants of the type of military force a city fielded. The competition of warfare ensured that some inefficiencies would not survive, or, at least, that defeated states would have to consider improvements to match those of their enemies.⁷ Many Greeks citizens and leaders clearly thought long and hard about all the effects of waging war in this way or that: Athens in particular was innovative in deliberately acquiring as mercenaries or training its own archers, peltasts and cavalry; even the creation of its great navy was a matter of policy.⁸ Calculations of military advantage and dynamism notwithstanding, inertia and tradition were strong: states usually planned to fight the way they had fought. The hoplite farmer did not reconsider the relative weaknesses and strengths of his weapons and armour before going out again to fight the hoplites of a neighbouring city. So the model of advantages and costs will help organize and inform our treatment of Greek military forces, but will not always re-create the thinking, if any, behind their mobilization.

One preliminary issue requires treatment: a description of the advantages and costs of military forces only holds true at a given point in time and for a given type of state. But this chapter covers the period from the lifting of the Dark Age (*c.* 750) to the end of the classical period (338).⁹ It covers a Greece composed of hundreds of independent states. Many of these city-states had similar social and political structures and fielded similar forces; significant departures from the mainstream make a single description of ‘Greek’ military forces impossible. The lengthy and fragmented treatment seemingly required by this temporal and geographic extent is somewhat obviated by the paucity of evidence for many times and states.

Our evidence before the fifth century is scanty, difficult to interpret, or both. But when our early sources – Homer, scraps of archaic poetry, vase-paintings and stories passed down the generations – give way in the fifth century to contemporary and detailed histories, speeches on issues of war and peace and public records inscribed on stone, we can say more about military forces and say it with more certainty. Without neglecting the earlier development of military forces, our treatment concentrates on the classical period rather than on the poorly known and thus inevitably controversial forces of the archaic period.

Our evidence for the classical period, although relatively copious, is still marred by a geographic bias. We know the most by far about Athens. The famous Spartan army, the subject of a first-hand account by Xenophon,

⁷ Schmookler (1995) treats the general issue of selection of social traits through warfare. See Runciman (1998b) on ‘selectionism’ and (1990) and (1998a) for attempts to apply it to ancient Greece.

⁸ Whether this navy was created *ex nihilo* or by the rapid expansion of a core of fifty ships is disputed: see ch. 7, pp. 223–5, and ch. 8, pp. 252–6, in this volume.

⁹ For the innovations of Philip II in the Macedonian army, see ch. 11 in this volume.

is also relatively well known. These two states can give us some idea of Greek warfare, especially given the tendency of efficient military practices to spread and given that both Athens and Sparta possessed a military prestige and weight that ensured imitation. Nevertheless, each was atypical. Athens was an exceptionally large Greek state, a sea-power and a democracy. The military practices of oligarchic Corinth, little Megara, the Aegean islands, and land-locked Thebes need not resemble Athens in detail. Spartans were raised to be professional, full-time soldiers and were supported by the helots. They were categorically different from any other force until the advent of Philip's professional Macedonian army in the fourth century.

Another class of Greek states did not fit the mould of the city-states at all. Some large, often northern, Greek states were less urban. Most of their people lived in villages rather than in walled cities. Their society was almost feudal in its domination by landed aristocrats. The mass of the people tended to be dependent peasants rather than the independent farmers who made up the typical hoplite army. These states did not always field the same types of troops as the southern and central Greek cities. Thessaly, Thrace and Macedonia, for example, could field large cavalries from their nobles and useful light-armed troops, sometimes mercenaries, from their peasants. Until the mid-fourth century, these states did not usually field substantial armies of hoplites, elsewhere the archetypal Greek soldier.¹⁰

All these regional differences in military forces are important, insofar as the military of Argos, for example, can ever be known.¹¹ Nevertheless, I will make a virtue of necessity and focus on Athens – with some comparisons with Sparta. Athens fielded all the different types of soldiers as well as a large navy. Although scholars rightly decry an excessive Athenocentric and classical focus, in a brief, general treatment of Greek military forces, such a focus is a necessity.

II. TYPES OF MILITARY FORCES

I. Hoplites

The elements of hoplite equipment, the panoply (from *panoplos*), begin to appear in the second half of the eighth century (fig. 5.1).¹² After a relatively speedy introduction and equally quick spread of the panoply – if not close formation fighting – within a generation, hoplite weaponry and armour

¹⁰ Macedon: Hammond et al. (1972–88) II.405–49. Thessaly: Westlake (1969) 104–12. Thrace: Best (1969); Archibald (1998) 197–209. See Hanson (2000a) on the geography of hoplite warfare.

¹¹ Tomlinson (1972) 175–86 has only eleven pages on the Argive military in the archaic, classical, and Hellenistic period.

¹² See Hanson (1989/2000b) 55–88 for the panoply in practice; see Snodgrass (1999) 48–77, 136–8 for an archaeological approach to the introduction of the hoplite panoply with particular attention to regional variations.



Figure 5.1 Earliest-known hoplite panoply, from Argos. Late eighth century.

underwent only slow and relatively minor alteration from 700 to 350. It was not until the Macedonian phalanx of Philip II in the second half of the fourth century that another type of infantry equalled the hoplite in close combat.

The hoplite's large and heavy circular shield, the *hoplon* or more commonly the *aspis*, was a Greek invention, a metre in diameter and weighing perhaps 16 pounds.¹³ It was made primarily of wood and in some cases had a thin metal outer shell. Its crucial feature was the double grip. A hoplite's upper forearm fitted within a metal armband in the middle of the shield and his hand held another grip near the edge. This double grip reduced the leverage on the shoulder and made it possible to carry a shield heavier and more protective than the ox-hide shields of the Dark Ages. The weight and forearm attachment reduced the mobility of the shield so hoplites were relatively vulnerable on the sides and rear if their formation broke up. The shield was concave, so hoplites could rest the upper rim on their shoulder and hold the shield out at an angle in front of them as they stood sideways to their opponents (fig. 5.2).¹⁴ When walking forward into battle, the shield mainly protected each hoplite's left side; armies tended to edge to the right as each man tried to get close to the shield of his right-hand neighbour (Thuc. 5.71).

The most expensive piece of equipment was the 30–40 pound bronze breastplate that protected most of the hoplite's torso, back as well as front. The upper arms were uncovered for the sake of mobility. Early models had an outward curve at the hips which allowed the legs to move freely and may have deflected downward blows. Later this curve was eliminated and, for a period, hinged strips of leather or metal hung down to protect the groin and still allow mobility. A heavy, perhaps 5 pound, bronze helmet protected the head, but early, heavy versions, such as the famous 'Corinthian helmet', restricted the wearer's vision and hearing. Greaves protected the shins. Some examples are found of armour for the upper arms and thighs, but these pieces seem never to have been common.

Although a hoplite's body armour was not as complete as that of a fully armed medieval knight, it was only the second line of defence after the substantial shield. A fully armed hoplite would have been well protected from missile weapons and from sword and spear thrusts. We hear of people wounded through their armour or helmets, but just as often of spears breaking. For an average, classical Greek man of about 5 foot 6 inches, the armour had the disadvantage of being heavy, perhaps weighing 50 or 60 pounds, including the shield. It was also very hot and uncomfortable in

¹³ Hoplites were probably named after their equipment, arms or armour, *hopla*, rather than because they carried a shield, *hoplon*, since the use of *hoplon* for shield, rather than equipment in general, is first attested considerably later than the word *hoplite*. See Lazenby and Whitehead (1996).

¹⁴ I follow here the convincing account of van Wees (2000a) 126–31.



Figure 5.2(a)–(c) Hoplite armour and the sideways-on stance adopted by hoplites in combat represented by a statuette from Dodona, c. 500 BC, now in Berlin. Instead of the circular hoplite shield of wood, this statuette has the lighter, oblong, scalloped ‘Boeotian’ shield, apparently made of wicker or leather. Such shields are represented in art as having a central armband, like the hoplite shield, but a handle at the bottom rather than the right-hand edge of the shield, which was therefore carried with arm outstretched rather than bent at a ninety-degree angle.



Figure 5.3 Two slave attendants assisting four hoplites as they arm themselves, on an Attic cup of c. 480 BC. All four hoplites wear a one-piece corslet of thick linen or leather, rather than a bronze cuirass: such corselets were folded around the torso and over the shoulders and fixed with straps. The men wear a short, hitched-up tunic underneath and a short cloak (*chlamys*) on top. On the far left, a hoplite and attendant are taking down a shield for use: while in storage, shields were put in a cloth bag and hung on a peg in the wall of the dining room.

the Greek summer. Soldiers delayed putting on their armour and picking up their shields until absolutely necessary and were regularly assisted with their equipment by a slave attendant (fig. 5.3).¹⁵

The primary weapon of the classical hoplite was an 8-foot-long thrusting spear. This spear had a pointed blade on one end and a spike, more substantial, on the other end for driving down through the armour of prone enemies. The spike would also serve as a back-up point, if the blade broke. Although hoplites also carried a short slashing-sword, this sword was used only as a last resort. Spears could be used in an underarm position to go under the shield into an opponent's groin, a painful and eventually fatal wound, or into his thighs, an injury often depicted in vase-paintings. Most vases show hoplites using their spears in an overhand position. In this case, they would attempt to hit the unprotected neck of their enemies above the shield, or the opponent's face, depending on the type of helmet worn.

The originally heavy and cumbersome, hot and uncomfortable hoplite armour tended to get lighter over time, so that by the late fifth and fourth centuries hoplites were not as fully protected – especially from missile weapons – but more mobile than those of 200 years earlier (fig. 5.4).¹⁶

¹⁵ Hanson (1989=2000b) 56–7. See Hunt (1998) 166–8 and Cook (1990) 81 n. 45 on slave assistants.

¹⁶ Anderson (1970) 40–1; Hanson (1989=2000b) 57–8. In contrast, Jarva (1995) 63, 111–17, 143–4, 157 argues that, in the archaic period, not all members of the phalanx had a full set of metal defensive armour. In particular, non-metal breastplates were common early.



Figure 5.4 A light form of hoplite equipment common in the classical period – a normal circular shield with central armband and peripheral handle, but no other protection except a type of open helmet known as ‘felt hat’ (*pilos*) and a type of loose tunic called ‘off-the-shoulder’ (*exomis*) – as represented on the grave monument of Lisas of Tegea, buried in Attica in the late fifth century BC. Lisas must have served in the Peloponnesian force at Decelea which ravaged Attica from 413 to 404 BC.

Another explanation for the decreased protection may lie in the expense of the full panoply, estimated to be 75–100 drachmas in the classical period.¹⁷ Cities wanting to field large armies may have welcomed soldiers too poor to afford the full set of protective armour.¹⁸ For whatever reason, the almost

¹⁷ See van Wees (2001a) 66 n. 22 for the price of the hoplite panoply during the archaic and classical period.

¹⁸ Van Wees (2001a) argues that *thetes* made up a significant portion of the largest Athenian hoplite armies in the Peloponnesian War.

complete protection of the heavy ‘Corinthian’ helmet gradually yielded to a metal or leather cap. The solid metal breastplate was replaced by lighter versions, sometimes just leather and felt. Greaves were discarded early on by many hoplites. Since hoplites generally provided their own equipment, individual variation predominated rather than a uniform set of armour and weapons. Only during the classical period do even the painted signs on shields become standard letters to identify the soldiers of a given city, rather than insignia based on individual whim or family tradition. Notwithstanding these variations over time and between different soldiers, the heavy shield and thrusting spear remained the *sine qua non* of the hoplite and assured his superiority at close-range fighting.

2. Cavalry

The early history of the use of horses in Greek warfare is complex and controversial. Mycenaean states, influenced by Near Eastern kingdoms, placed a high priority on two-horse chariots as mobile platforms either for archers or, occasionally, for throwing spears.¹⁹ After the fall of the Mycenaean states and the Dark Age, Homer presents a puzzling picture of chariot use: nobles drive around the battlefield, but dismount to fight on foot. Perhaps the existence of Mycenaean chariots was preserved in the oral poetic tradition, so Homer needed to incorporate them. Since late Dark Age and early archaic soldiers rode horses as transport to fights waged on foot, Homer may have assumed that chariots would have been used the same way.²⁰

Cavalry, that is men fighting from horseback, may have played a role in late Mycenaean armies, though most scholarship attributes the first significant cavalry to the Assyrians of the early ninth century BC. The history of cavalry in archaic Greece is complex and obscure in the extreme. The problem of scanty evidence is compounded by the difficulties in distinguishing cavalry from mounted hoplites, who would fight on foot, in archaic vase-paintings.²¹ In addition, geographical variety is likely: although a small force is probable, real doubts remain about the very existence of an Athenian cavalry in the archaic period;²² the Thessalians, famous horsemen in

¹⁹ Drews (1993) 104–34. Kroll (1977) collects epigraphic evidence for Athenian cavalry in the fourth century; Bugh (1988) concentrates on the Athenian cavalry as comprised of upper class Athenians serving under the democracy and the ‘uneasy relationship between aristocratic and democratic ideologies’; Spence (1993) argues that social and ideological factors limited the use of cavalry especially at Athens; Worley (1994) believes that cavalry played a more important role in Greek warfare than is usually acknowledged; Gaebel (2002) agrees and, more specifically, argues for a gradual increase in cavalry effectiveness through the classical period.

²⁰ Greenhalgh (1973) 7–62 followed by Worley (1994) 17–19; *contra* Van Wees (1994) 9–14.

²¹ So Greenhalgh (1973) 84–150 argues that real cavalry, as opposed to mounted hoplites, did not appear outside of Thessaly until the sixth century; Worley (1994) 21–3 emphasizes the existence of Dark Age cavalry and argues for the consistent use of true cavalry.

²² Bugh (1988) 3–38 (archaic Athens); Worley (1994) 21–58 (archaic Greece).



Figure 5.5 Charging cavalrymen with light round single-grip shields and javelins on an archaic terracotta plaque from Thasos.

the classical period, seem to have had cavalry from the eighth century on. Other states may have possessed cavalry and then abandoned it after the advent of the hoplite. Thus, Sparta's *hippeis*, 'horsemen', consisted of an élite infantry unit in the classical period.²³

Weaponry varied between types of cavalry and even within a single unit. In classical Athens it seems that some riders were armed with throwing javelins and some with thrusting-spears, and some with both (fig. 5.5). In both cases, a short slashing-sword provided a back-up for close combat – since a long sword would be hard to wield without stirrups. Special corps of horse-archers used bows and arrows: in 431 200 of these horse-archers complemented Athens' 1,000 regular cavalry.²⁴

Cavalry men could be well protected with armour. The extra weight of armour did not impinge as significantly on their horses' mobility as on a hoplite and the expense of armour was less onerous for the wealthy men who typically made up the cavalry. Shields were rarely if ever used, since one hand was needed to hold the reins. Although horse armour was rare, riders were often protected with breastplates, helmets, greaves and boots.²⁵ Although thigh-, arm-, and hand-armour existed, it does not seem to have been commonly used.

²³ Lazenby (1985) 10–12.

²⁴ This corps was composed of poorer citizens and not always considered to be part of the élite cavalry; it was probably subsidized to a greater extent by the state and disbanded in 403: Bugh (1988) 221–3. For *prodromoi*, mounted skirmishers or scouts, see Bugh (1998) 83–9.

²⁵ Literary evidence and arguments from probability suggest that horsemen wore armour more often than might be surmised from vase-paintings: Spence (1993) 64. Cavalry typically wore heavier body armour than infantry did: Xen. *An.* 3.4.47–9.

Greek cavalry faced several physical or technical limitations. To begin with, the horses of the classical period were at most 15 hands (60 inches) in height, scarcely larger than modern ponies.²⁶ Compared to later cavalries, Greek cavalry was not well equipped. Without horseshoes, laming on rough ground was a greater problem. Even more important, the stirrup had not been invented. Thus Greek cavalry men were, in general, less stable and, in particular, not able to charge and make use of the power of the horses' movement and weight with a couched lance. This last distinction, however, between Greek and later cavalries should not be exaggerated. Greek horsemen were able to fight effectively, though not decisively, against infantry using both missile and hand-held weapons; even with stirrups, armoured knights were unable consistently to break through closely massed and disciplined infantry.²⁷

Nevertheless, these limitations ensured that Greek warfare in the classical period was dominated by infantry and not cavalry. On rare occasions cavalry could defeat hoplites, but not until the armies of Philip and Alexander do we see a consistent use of cavalry to decide battles. So, in the classical period, cavalry served in a variety of other roles. They were often stationed on the wings of the phalanx, since their mobility could prevent outflanking. They were crucial as scouts on campaign. Horsemen were particularly lethal against hoplites who were out of formation. They could pick off stragglers, foragers or looters. Cavalry was perhaps most important in pursuing defeated enemies, especially those retreating in disorder.

3. Peltasts

Although the clash of hoplites usually decided set battles, other foot soldiers often played an important auxiliary role and sometimes a decisive one. In some circumstances – for example, in rough terrain – these troops could rout unescorted hoplites. The most important of these, archers, peltasts and slingers, used missile weapons. Since they wore less armour, they were more mobile than hoplites. These types of soldiers are described by Thucydides as 'prepared light-armed troops' to distinguish them from the masses of poorly and irregularly armed combatants that sometimes accompanied a hoplite army and helped in ravaging the enemy's countryside. We know little about these latter men, usually drawn from a city's poor. Many may merely have thrown stones.²⁸ Although a fist-sized stone thrown into the unprotected face of a fourth-century hoplite could knock him out, it seems in general

²⁶ Anderson (1961) 15, 153. In the mid-fourth century larger horses may have come to be used, especially in Macedonia.

²⁷ Spence (1993) 105–6. Gaebel (2002) 10–12, 29–31, 56–7 emphasizes the level of control and stability attainable even without stirrups.

²⁸ Xen. *An.* 5.2.12, 5.2.14; *Hell.* 2.4.33.

that such generic light-armed soldiers were of little weight in battle. On the other hand, peltasts, archers and slingers were often highly trained and important. Each has his own, albeit imperfectly known, history.²⁹

Spear-throwing specialists were often referred to as peltasts, since they carried the *peltē*, a crescent-shaped shield of Thracian origin that protected the arm and shoulder.³⁰ This shield was light and suited to parrying missiles. Spear-throwers were also called *akontistai*, after the two light throwing spears, *akontia*, which they carried. A throwing strap imparted spin and made for a smoother and thus more powerful and accurate throw. Peltasts are occasionally depicted in hand-to-hand combat and unlike other light-armed troops could sometimes hold a line against cavalry and, on rough ground, even against hoplites.³¹ They carried a short slashing-sword as a secondary weapon.

Peltasts excelled at quick sallies, ambushes, reconnaissance missions, occupation of strong points and protecting or attacking marching routes.³² They tended to be particularly deadly in rough terrain, where hoplites could neither maintain their formation nor catch the quicker peltasts. In actions requiring speed and whenever an army had to move through the hills rather than staying in the plains, peltasts were useful.

Peltast weapons resemble those described in Homer.³³ When the city-states had turned decisively to hoplites as the mainstay of their infantries, the peltast persisted in less developed kingdoms of Thrace. Already in the mid-sixth century, the Athenian tyrant Peisistratus had used Thracian mercenaries, probably peltasts.³⁴ The disastrous defeat of the Athenians at Drabescus was probably the work of the peltasts, the main type of soldier in that region.³⁵ In the fifth century Thracian peltasts were often hired as mercenaries and the Thracian remained the 'peltast *par excellence*' through the fourth century (fig. 5.6).³⁶ But, as the advantages of the relatively cheap peltast equipment became obvious, peltasts were recruited throughout the Greek world. Usually these soldiers were mercenaries, but some came from less developed allies or even from the poor of a city's own population.³⁷ In the late fifth and early fourth century the Athenian generals Demosthenes and Iphicrates commanded peltasts of varied origins with great success,

²⁹ Lippelt (1910) is the standard reference with detailed citations of the ancient evidence. Anderson (1970) 111–40 is a concise and readable treatment.

³⁰ Best (1969) provides the most complete treatment of peltasts. Since peltasts became the most common type of mercenary, Parke (1981) also treats them at length.

³¹ Ferrill (1985) 179. E.g. Diod. Sic. 15.32.5. ³² Best (1969) 19–20, 73, *passim*.

³³ Best (1969) 8–12. ³⁴ [Arist.] *Ath. Pol.* 15.2 with archaeological evidence cited in Best (1969) 5.

³⁵ Best (1969) 20 on Thuc. 1.100.3, 4.102.

³⁶ Best (1969) 119. Best (1969) 110–19 refutes the argument of Griffith (1968) 239 that after Iphicrates, Thracian peltasts were no longer used.

³⁷ Best (1969) 93–9 rejects the possibility that many of Iphicrates' peltasts would be Athenian citizens; *contra* Parke (1981) 49.



Figure 5.6 Peltast with characteristic crescent-shaped shield, carrying a spear underarm as if for thrusting rather than throwing, and wearing Thracian-style boots and a fox-fur cap, with a fur wrap around the waist. (Attic vase of c. 480 BC found in a grave in Boeotia).

including Iphicrates' decimation of a Spartan hoplite regiment near Corinth (390). From this period on peltasts played an important role in many Greek wars, usually serving in conjunction with hoplites, but occasionally alone.

4. Archers

Already in the late third millennium BC composite bows had been constructed out of horn, sinew and wood in Mesopotamia.³⁸ Linear B tablets indicate that the Mycenaean palaces too possessed these potent weapons in the late Bronze Age. During the Dark Age archery seems to have disappeared from mainland Greece.³⁹ Starting in the eighth century it spread again from Crete, which had never lost it. In Homer several heroes use the bow, but its reputation was mixed.⁴⁰ Indeed, Homer seems unsure about

³⁸ Gabriel and Metz (1991) 67. ³⁹ See Snodgrass (1964) 141–56 and (1999) 80–4.

⁴⁰ E.g. Hom. *Il.* 2.719, 8.266, 11.385, 13.713.

the construction of the composite bow.⁴¹ In the archaic period archers often seem to have been outsiders to the central world of the city-states. Scythian mercenary archers for example, are depicted on Attic vases of the late sixth century.⁴² Even in the classical period it was Crete that produced the most famous mercenary archers: 300 of these accompanied the Spartan-led army at the battle of Nemea, 394 (*Xen. Hell.* 4.2.16). But large numbers of local archers are also sometimes attested: Athens had 1,600 archers and 200 mounted archers at the outbreak of the Peloponnesian War (*Thuc.* 2.13.8).

In the Persian empire the bow was an aristocratic weapon, and not without reason. Composite bows, at least, required a delicate and lengthy process of curing and construction.⁴³ They could easily be destroyed by water.⁴⁴ So although they did not contain the large quantity of metal that made hoplite armour so expensive, bows were not cheap and they were not durable. Archers with composite bows could hit individuals at 60 metres and were effective against formations at over 150 metres. The range of simple and compound bows were significantly less. But, as the Persian Wars made abundantly clear, Persian bowmen were not very effective against a hoplite charge. Hoplites required at most a couple of minutes to get through the effective range of the arrows. In addition, a fully armed hoplite was mainly protected from arrows, except perhaps at point-blank range. Scholars have calculated that even without counting the protection provided by shields, only one arrow out of ten that landed in a hoplite formation would cause an injury.⁴⁵ And as soon as the hoplites reached the archers – as at Marathon and Plataea – the fight was pretty much decided.

Where archers could be protected from being overrun, they were highly effective even against hoplites: in areas of Asia Minor where hoplites regularly faced massed archers, we find representations of hoplites with shield curtains, designed to protect their legs from arrows.⁴⁶ Archers, however, had difficulty shooting from behind in support of hoplites engaged in close combat. Some pictures of Scythian archers in late archaic Athens show them interspersed with hoplites, but this scenario assumes a more open hoplite formation than most scholars accept for the classical period.⁴⁷ Bowmen could, however, attack armies on the move and harass stationary formations before battles.

Archers were naturally lethal against other light-armed troops who lacked protective armour.⁴⁸ As hoplite armour became lighter over time and

⁴¹ Snodgrass (1999) 39.

⁴² Snodgrass (1999) 83–4. Lissarrague (1990) 125–49, less convincingly, interprets these Scythians as products mainly of Athenian self-definition in opposition to the ‘other’.

⁴³ Snodgrass (1999) 83. ⁴⁴ Gabriel and Metz (1991) 68.

⁴⁵ Gabriel and Metz (1991) 72. ⁴⁶ Anderson (1970) 17.

⁴⁷ Greenhalgh (1973) 91–2. See ch. 7, pp. 205–9, on the density of hoplite formations.

⁴⁸ E.g. *Thuc.* 3.98.1.

elements were discarded, archery must have become more of a threat.⁴⁹ In open country, mounted archers could maintain their distance from the enemy infantry while continuing to shoot at them. Another important use of the bow was in sieges, either to clear the walls or to inflict injuries on the attackers.

Athenian triremes carried four bowmen. These could wreak havoc if they hit just a few of the entirely unarmoured crew. To protect against this, linen, felt or leather screens – of unknown effectiveness but likely to make it hotter and harder to breathe when rowing – were put up during combat.⁵⁰ Archers at sea were also probably useful for killing the crews of rammed, half-sunk triremes or for enforcing their surrender.⁵¹

5. *Slingers*

The sling is almost as old a weapon as the bow and arrow and the spear: pictures of slingers have been found in the Neolithic site of Çatal Hüyük.⁵² In the classical period slingers played a subordinate role in warfare and were of low social status.⁵³ Accordingly, our information about slingers is sketchy.

Slings were inexpensive weapons made from leather patches with strings of sinew or gut attached to opposite ends. After loading the patch and spinning it around, the slinger released one string and the missile flew off. Rounded stones or balls of baked clay could be used. Heavy stones, some the size of a fist, might do considerable damage, but lead bullets had a much greater range and penetration (Xen. *An.* 3.3.16). Judging from the inscriptions on bullets made of lead, their use began in the classical period. These bullets are of historical interest when inscribed with the names of cities such as Athens or commanders, such as Philip's generals, rather than the insults or jibes – 'ouch' or 'pay attention' are two – that often adorned them.⁵⁴

In contrast to archery which has a continuous history, slinging is a lost art. So modern experiments on the speed and force of slings may underestimate their power due to inferior slings and untrained slingers.⁵⁵ Ancient sources insist that slingers had an effective range of about 200 metres and could outdistance archers.⁵⁶ Lead sling bullets, usually between 30 and 40 grammes,⁵⁷ could penetrate the body and were hard to extract. Sling bullets

⁴⁹ E.g. Xen. *An.* 4.1.18. ⁵⁰ Jordan (1975) 208–9.

⁵¹ Shooting with a bow from a trireme would certainly be the easiest way to kill men in the water. Cf. Thuc. 1.50.1.

⁵² Ferrill (1985) 24.

⁵³ Pritchett (1971–91) v.1–67 collects and discusses the evidence for slingers in Greece and Rome.

⁵⁴ Pritchett (1971–91) v.45. ⁵⁵ Gabriel and Metz (1991) 59, 75.

⁵⁶ Pritchett (1971–91) v.56. ⁵⁷ Pritchett (1971–91) v.43.

were fast and hard to see, so they could not be dodged (Veg. *Mil.* 1.16). Hoplite armour could deflect all but the heaviest stones, so harassment by slingers would primarily make it impossible to move around without armour (Thuc. 2.81.8).

Slingers possessed many of the same virtues and drawbacks as archers: easily overrun on their own, they could be an invaluable complement to other forces. Slingers fought best on rough ground or against other light-armed troops or against cavalry with its unprotected horses (Thuc. 6.22). Slingers were not usually arrayed as closely as archers, since they needed room to swing their slings.⁵⁸ Slingers helped in the attack or defence of walled cities. They served on triremes to harass other ships. Despite its low status, the sling's usefulness was such that Plato includes training with the sling among the skills that children in the ideal state of the *Laws* should learn.⁵⁹

6. The navy

In the eighth century war galleys – such as the pentekontor, the fifty-oared ship common in the archaic period – acquired a second row of rowers above the first.⁶⁰ Although Phoenician ships with three rows of oars – and thus triremes of some sort – were depicted by 700,⁶¹ most scholars follow Thucydides and put the development of the Greek trireme in the mid-seventh century at Corinth.⁶² A recent full-scale reconstruction has established with far greater precision and certainty the design of the trireme.⁶³ Out of a total crew of 200 men, 170 were oarsmen arranged in three horizontal rows.⁶⁴ In contrast to Renaissance galleys, each rower pulled an oar by himself. Other crewmen included ten hoplite marines, four archers, a carpenter, a piper and a variety of officers and deck-hands.

In hindsight the trireme was unmistakably superior in battle to the other warships of the time, but its expense slowed its adoption.⁶⁵ Until about the mid-sixth century, the pentekontor was still more common.⁶⁶ In the early fourth century Dionysius of Syracuse built a powerful navy with larger ships, 'fours' and 'fives'.⁶⁷ These ships probably had more than one oarsman pulling on a single oar and thus had four or five rather than three rowers in each rowing unit. By the 330s Athens itself was building 'fours' and

⁵⁸ Cf. Ferrill (1985) 25. ⁵⁹ Pl. *Leg.* 794c, 834a.

⁶⁰ Casson (1994) 58. Wallinga (1993) 45–53 discusses the definition of *pentekontor*.

⁶¹ Morrison et al. (2000) 36.

⁶² E.g. Casson (1994) 60; Morrison et al. (2000) 38–40 on Thuc. 1.13. Cf. ch. 7 in this volume, p. 224.

⁶³ Morrison et al. (2000) 191–275.

⁶⁴ Wallinga (1993) 169–85 argues that triremes were not uncommonly undermanned.

⁶⁵ Morrison et al. (2000) 40–1. See Gabrielsen (1994) on the expense of a large navy and the Athenian system of trierarchies which contributed to paying for it.

⁶⁶ Casson (1994) 53. ⁶⁷ Casson (1994) 78.

'fives'.⁶⁸ These types of ships dominated Hellenistic warfare, but were less nimble than the triremes had been.

Land forces were ubiquitous. Navies were expensive and possessed by only a few rich cities. Even in these the navy did not enjoy the prestige often accorded to the hoplites or the cavalry. Navies were most effective in interfering with or protecting trade and so were mobilized by large islands or by other cities, such as Athens or Corinth to whom trade was important. Navies were also by far the most mobile military force; under oar, triremes could cover well over 100 miles in a day.⁶⁹ As such they tended to play a key role in the militaries of imperial or aspirant imperial states, which wanted to project power far from home.

These capabilities of navies in the classical period were limited by the specificity of trireme design. Unlike earlier warships, more versatile and with some cargo room,⁷⁰ triremes were made to be quick and agile and little else. They were particularly vulnerable in rough seas. They had very little cargo space. Triremes did not even carry much in the way of supplies for the crew. Navies typically went ashore each evening so the crews could sleep – and often for a mid-day meal. Food and water had to be procured almost every day. So, although they could raid an enemy's coast – as the Athenians did in the early Peloponnesian War⁷¹ – navies preferred to have friendly bases to spend the night. They could even be in danger from counter attack, if they tarried too long, camped on a hostile shore – or were forced in by bad weather. This dependence on land bases also made it expensive and difficult to conduct even a quite small blockade, but raids against shipping were possible and could be very disruptive.⁷² For, example, the Hellespont region was a bottleneck for the important grain trade from the Black Sea to Athens. Control of it was thus crucial and a focus of Athens' naval strategy throughout the classical period. The members of the *boulé*, the executive council of the Athenian assembly, could not receive their traditional crowns at the end of their tenure of office if they had not seen to the construction of a certain number of triremes.⁷³

7. The hierarchy of military forces

In Greece, as in many other cultures from the Neolithic to the present, military service brought prestige as well as rights within the society. The extent to which Greek city-states did, in fact, reward with political rights those who fought in their armies – as the theories of the 'hoplite revolution' and the 'naval democracy' hold – is treated in Chapter 9. Here, we consider

⁶⁸ Morrison (1987) 91–2; Morrison et al. (2000) 48.

⁶⁹ Morrison et al. (2000) 97, 103–5.

⁷⁰ Gabrielsen (1994) 25.

⁷¹ Thuc. 1.143.4, 2.25–6, 2.30–2.

⁷² Thuc. 4.26–27.1, cf. Thuc. 1.120.2; Dem. 5.25.

⁷³ Dem. 22.8.

a modification of the simple rewarding of soldiers. Instead of just rewarding any military service, complex societies often establish a hierarchy among their military forces: some ways of fighting mark the participants as brave and estimable, while others do not. The status of a type of military force depends more on the power of the people who serve in it than upon the difficulty of the skills involved, its demands on participants' courage or military effectiveness.

Herodotus reports that Persian boys are taught three things only, 'to ride, to use the bow, and to tell the truth' (Hdt. 1.136; trans. de Sélincourt 1996). This succinct formulation idealized the frankness of the Persian aristocrat and described his distinct way of fighting. The peasant levies which added mass to the Persian army gained little social power from their military participation. The horse, in particular, marked off the noble Persian in war and in peace – as in a large variety of societies throughout history. In contrast, the aristocratic and ambitious Mantitheus, on trial in Athens, assured the jury that he fought as a hoplite even though his wealth would have allowed him to join the cavalry (Lys. 13). Evidence from drama, poetry, funeral orations and public and private law cases indicates that Mantitheus knew what he was doing. The hoplite was the most valorized soldier in classical Athens.⁷⁴

This reversal, in which the military force associated with the élite, the cavalry, is relegated to the second place is a historical anomaly. It corresponds, though, to that great historical anomaly, the Athenian democracy. At Athens public discourse, and thus the relative prestige of the cavalry and hoplite, was in the sway of non-élite citizens – as was political power. The Athenian navy was much more important to Athenian power than its hoplites, but the motley origins of navy crews prevented the navy from upstaging the traditional primacy accorded to hoplites.

But whenever we talk about status or prestige we must add 'prestige with whom?' Imagine the long-haired, sometimes riotous, young aristocrats, the most conspicuous members of the Athenian cavalry, together at a private drinking party, a *symposium*. It is hard to imagine that they would so easily admit the superiority of the sturdy hoplite farmer to themselves, as they would on trial before a jury of their 'inferiors'. Rather they were likely to sing the praises of horsemanship, stress its difficulty, and, depending on the era, bemoan their under-appreciated military contributions.⁷⁵ On the other end of the social spectrum stand the crews of Athenian warships or the large numbers of people involved in shipbuilding. Only occasionally emphasized in our élite sources, but clear all the same, is the pride and high morale of the crews of the Athenian navy, the 'naval mob' of aristocratic

⁷⁴ Loraux (1986) 161–71; Hunt (1998) 190–4.

⁷⁵ Xen. *Cyr.* 4.3.4–23, albeit in a Persian context, suggests the line such talk could take.

contempt.⁷⁶ When Pericles' strategy mandated that no hoplite battle be fought and Athens would depend on its navy, one cannot help but imagine that naval crews – picture them talking over lunch during one of the great expeditions around the Peloponnese – would not easily grant their inferior moral worth or civic contribution.

The relative status of military forces varied geographically as well as between different classes. Thessalian nobles secure in their formidable reputation as the best cavalry in Greece are unlikely to have esteemed the peasant levies that composed their nugatory infantry. Mercenaries were manifestly effective troops – or they would have been out of work. But, they were by definition outsiders, so their professionalism and military contributions did not prevent Athenians from considering them impoverished, thieving, brutish, semi-barbarians. The types of forces in which mercenaries typically served suffered by association. Peltasts, archers and slingers were often mercenary outsiders and less esteemed as a result.⁷⁷

For example, despite the usefulness that made major city-states hire slingers, their status was low: Xenophon calls slingers the ‘most slavish’ of soldiers since no number of slingers alone could stand up against even a few hoplites.⁷⁸ Slingers were no more dependent on other forces than were hoplites or cavalry, but their status was low because they were often mercenaries from outside the world of the city-states and – given that slings were cheap to make – poor ones at that. Slings also lacked the Homeric cachet that may have counterbalanced some of the contempt for the peltast or archers.⁷⁹ Nor were there important military states that depended primarily on the sling, as horsemen and archers were among the most important troops of the Persians and Scythians. Yet even here prestige is in the eye of the beholder: the city of Aspendus, which was probably a source of these specialized troops, put a slinger on some of its coins to advertise its proudest export.⁸⁰

III. UNITS AND THEIR OFFICERS

The Athenian general Iphicrates once compared an army to a person.⁸¹ His analogy resembles the schema of Xenophon with which we started in that it included different types of soldiers: the light-armed troops are the hands, the cavalry the feet, the phalanx the heart and chest – but the navy is not

⁷⁶ Strauss (1996), (2000); Pritchard (1998). ⁷⁷ Xen. *Cyr.* 2.1.18 is revealing.

⁷⁸ Xen. *Cyr.* 7.4.15; Dem. 23.148.

⁷⁹ See Xen. *Hell.* 3.4.24, Thuc. 4.40.2 for attitudes towards peltasts and archers respectively.

⁸⁰ Pritchett (1971–91) v.37, 46–7.

⁸¹ Plut. *Pel.* 2.1. I use ‘officer’ in this section in the broad sense with no reference to the modern distinction between commissioned and non-commissioned officers. The roles of these different officers on campaign and in battle are covered in chs. 6 and 7 in this volume.

mentioned. He added, however, that the general was the army's head – and thus should not take unnecessary risks. This comparison reminds us that armies are *organized* bodies of armed men: they comprise distinct units, soldiers and officers.⁸² Nevertheless, a caveat is in order. Greek officers can be fitted into a chain of command and Greek units can be subdivided into smaller units, but this apparent organization and modernity conceals fundamental differences. In general, most Greek armies were less elaborately structured and rigorously controlled than modern ones. Even the generals were not always full-time professionals: political prominence played as large a role as military competence in their selection. More junior officers were often few in number and as much part-time amateurs as the soldiers they led. This low level of organization was sufficient for the rudimentary battle tactics of most of the classical period.

Top military commands were connected closely with a state's political structure. Major Spartan armies, accompanied by their numerous allies, were usually led by one of the two hereditary kings. Under the king were six *polemarchoi*, 'war-leaders', each in command of one of the six divisions of the Spartan army.⁸³ The polemarchs may well have been elected officers – they possessed authority independent of the king.⁸⁴ The famous Thessalian cavalry was the product of an almost feudal society and its original organization reflected this: a noble officer from each area commanded a unit composed of lesser local aristocrats and their retainers. In the fourth-century Boeotian League, the seven Boeotarchs both possessed the greatest political power in the state and commanded the army.⁸⁵

So, too, did the *strategoi*, the generals of classical Athens. Originally, a single *polemarchos* had commanded the Athenian army. In the late archaic period he was elected from the upper two Solonian property classes. Early in the fifth century overall command of the Athenian military, the land as well as naval forces, was transferred to ten *strategoi*. These were elected annually by the assembly and tended to include ambitious politicians. Originally one general came from each of the ten geographically based 'tribes' of the Athenian democracy, but later this requirement disappeared.⁸⁶ By the mid-fourth century, instead of an undifferentiated board of generals, some of the generals were granted special spheres of activity such as the defence

⁸² Pritchett (1971–91) II.4–132 contains a series of studies on matters pertinent to the command of Greek armies. Hamel (1998a) treats the Athenian *strategoi*.

⁸³ The units of the Spartan army present an obscure and difficult topic, due to call-ups involving different age classes, the incorporation of *perioikoi* and perhaps helots in Spartan units, discrepancies in unit sizes by a factor of two between Thucydides and Xenophon, and the likelihood of organizational change. The most important passages are Thuc. 5.68 and Xen. *Lac.* II.4–6: see ch. 6 in this volume, p. 157; Lazenby (1985) 5–20; Anderson (1970) 225–51.

⁸⁴ Lazenby (1985) 20–5.

⁸⁵ Buckler (1980b) 24–30.

⁸⁶ Fornara (1971) 19–27.

and protection of Attica.⁸⁷ Even after these reforms, most of the generals were assigned on an *ad hoc* basis to particular campaigns. Often several generals jointly commanded a single force, but no hierarchy was necessarily established and decisions were generally based on consensus or majority vote.⁸⁸

In the classical period the Athenian hoplite army was divided into ten units, *taxeis*, from the ten tribes. Each was commanded by a *taxiarchos* coming from that tribe, but elected annually by the whole assembly. The 1,000 horsemen of the Athenian cavalry's acme were commanded by two *hipparchoi*, also elected by the assembly. The phylarchs who commanded the ten tribal sub-divisions of the cavalry were also elected. In the navy, trierarchs, ship captains, usually answered directly to the general or generals in command of an expedition. The primary qualification for being a trierarch was wealth, since the trierarchy involved the costly responsibility for maintaining a ship for a year – the hull, equipment and the crew's base wages were supplied by the state. Almost any rich man could be a competent trierarch, because, in nautical matters, he could rely on the helmsman, who did not necessarily steer the ship, but was the senior professional officer on board.⁸⁹

So the Athenian navy depended on rich rather than military captains and, in both the Athenian infantry and the cavalry, the top two levels of command, the officers who took part in deliberations,⁹⁰ were officials elected annually by the citizens. In addition, most officers were basically amateurs. At Athens officers were paid only when on active duty, often a small portion of the year, and not upon appointment or election.⁹¹ Few pieces of evidence bear on the pay scale for officers: in his offer to the remaining mercenaries of the Ten Thousand, the Spartan commander Thibron offered to pay the *lochagoi* twice a soldier's pay and the generals four times (Xen. *An.* 7.6.1).

The Athenian cavalry trained regularly and contained minor officers in every file of ten men.⁹² In the navy, sub-groups such as the watch and the marines required their own officers. In the hoplite phalanx, however, the basic units were large and the chain of command simple. This reflects the amateur status of the soldiers and officers and the consequently simple tactics employed. In addition, small units rarely operated independently

⁸⁷ Hamel (1998a) 14–16, 84–6, rightly rejecting the view that one general of the ten was regularly given superior powers. See also Fornara (1971) 11–19.

⁸⁸ Hamel (1998a) 99.

⁸⁹ See Jordan (1975) 117–52 for the ship's officers, specialists, and their origins. Thuc. 7.62.1, 69.2 mention a general's consultation with helmsmen and exhortation of trierarchs.

⁹⁰ Thuc. 4.4.1, 7.60.2; cf. Xen. *Lac.* 13.4.

⁹¹ Larsen (1946). Generals may have been an exception to the democratic ethos in being unpaid as well as elected, but even they may have been given a salary when actually on campaign.

⁹² Worley (1994) 75.

and so lower-ranking officers were not expected, in most cases, to wield independent command.⁹³ Rather they were responsible primarily for getting the troops into line and fighting themselves to inspire the troops (Xen. *An.* 5.2.11). They also saw to it that the commander's orders were communicated and obeyed – though trumpet signals were also used – and kept their commanders informed about the army and its performance.⁹⁴

At Athens, both full mobilizations – up to 13,000 hoplites are attested on campaign – and partial ones could include all ten *taxeis*. So the *taxeis* cannot have been a standard size.⁹⁵ Each *taxis* was divided into *lochoi* of unknown size, each commanded by a *lochagos* selected by his *taxiarchos*. These smaller units tended to incorporate men from one area. Thus, the bonds of *polis* loyalty that held a hoplite army together were often confirmed by those between family, friends and neighbours.⁹⁶

The professional Spartan army was exceptional also in its articulated chain of command: Thucydides considered it worthy of note that the orders of the king were passed along by different levels of officers to the whole army, a *sine qua non* for any sort of army today.⁹⁷ The Spartan army was also distinguished by the fact that every front-rank fighter was an officer of some sort and certainly a Spartan rather than a soldier from the *perioikoi* or helots.⁹⁸ Indeed, at least two grades of officers stood below the *lochagoi*, while at Athens no officers below this level are attested.⁹⁹

One might expect that most Greek armies would grow more to resemble the more tightly organized Spartan rather than the Athenian army as they became more professional and better trained in the fourth century. We do know that Alexander's Macedonian infantry, also professional, contained as large a proportion of minor officers as had the Spartan army,¹⁰⁰ but we are ill-informed about earlier developments in the city-state armies.

The interrelated issues of military discipline and relations in general between men and officers provide our next topic. In the armies Homer depicts, officers were aristocrats who, as such, might hit common soldiers to enforce their wills – as Odysseus hit Thersites – but mainly had to admonish and exhort to get their men even to join the fight.¹⁰¹ With the

⁹³ Anderson (1970) 40, 67.

⁹⁴ See Hamel (1998a) 64–70 with criticism of Mitchell (1998) on the determination of official rewards for bravery. For difficulties of communication and control in battle, see ch. 7A in this volume.

⁹⁵ Anderson (1970) 97. ⁹⁶ Hanson (1989/2000b) 121–5.

⁹⁷ Thuc. 5.66.2–4. Anderson's (1970) 67–83 excellent chapter on 'the general and his officers' is largely confined to the Spartan army and thus not representative.

⁹⁸ Xen. *Lac.* 11.5. See Thuc. 5.66.2 on the permeation of the army with officers. See Hunt (1997) 135–7 on the front rank in the Spartan army.

⁹⁹ Thuc. 5.66.2; Anderson (1970) 97–8. I am more confident than Anderson that there were in fact no infantry officers below the *lochagoi* in Athens.

¹⁰⁰ See ch. 11, pp. 330–3, in this volume on the Macedonian army.

¹⁰¹ E.g. Hom. *Il.* 2.198–9, 265–77, 391–3; 4.240–50.

growth of the state and the establishment of officers as its representatives, they gained some measure of disciplinary power.¹⁰²

In the Athenian army of the classical period the relationship of officers and soldiers reflected the compromises between rich and poor citizens within the democracy. Athens had no officer class,¹⁰³ but generals were the most important elected officials and even the *taxischoi* probably came from the politically ambitious and thus from the wealthiest families.¹⁰⁴ Officers were not the social peers of the men they commanded – except in the cavalry. But, just as within the democracy a rich man could rarely afford to act the haughty aristocrat, so too were the powers of the officer curbed. Generals were sometimes condemned and often accused in lawsuits concerning their tenure of office. That the soldiers under a general were a sub-set of the citizens who not only had elected the general but who might well also judge him coloured their whole relationship.¹⁰⁵

Thus Athens rejected many of the distinctions that other armies throughout history have established between men and officers. No formal salutes were owed to officers. Nor were officers typically distinguished by a different uniform.¹⁰⁶ Officers did not enjoy different rations or living conditions.¹⁰⁷ Many anecdotes show cases of men suggesting tactics or talking back to officers in a way entirely alien to the strict and hierarchical modern army.¹⁰⁸

By the classical period Athenian generals on campaign could arrest, cashier or fine insubordinate soldiers – but they rarely did the latter.¹⁰⁹ Noteworthy is the lack of corporal punishment, excluded by the gravity of laying hands on a citizen as if he were a slave.¹¹⁰ Summary execution was out of the question.¹¹¹ The specifically military crimes for which a soldier could be tried were three.¹¹² *Astrateia* was the failure to show up for required service. *Lipotaxia*, leaving the ranks, was similar to our ‘desertion in the face of the enemy’. *Deilia*, cowardice, was more general. The existence of such laws and procedures gives the lie to exaggerated views of Athenian

¹⁰² See Pritchett (1971–91) II.232–45. ¹⁰³ Anderson (1970) 40.

¹⁰⁴ Hansen (1991) 272–4. ¹⁰⁵ Hamel (1998a) 62.

¹⁰⁶ See Anderson (1970) 39–40 *contra* Wheeler (1991) 140–1 on the sketchy and ambiguous evidence for officers’ uniforms.

¹⁰⁷ Alcibiades was criticized for the luxuriousness of his altering the decks of his trireme to allow him a more comfortable bed (Plut. *Alc.* 16.1). A modern admiral on his flagship would not need to alter anything to enjoy larger and better living quarters than the enlisted men.

¹⁰⁸ See Anderson (1970) 40, 47, 91, 99 and Pritchett (1971–91) II.243–5 for the relatively egalitarian relations of men and generals.

¹⁰⁹ [Arist.] *Ath. Pol.* 61.2. See also Dem. 50.51.

¹¹⁰ Dem. 22.55, 24.167.

¹¹¹ The execution – perhaps after a trial before the soldiers, the legal jury in such cases – mentioned in Lys. 13.65 [67] and the threat in Xen. *Hell.* 1.1.15 do not prove a general’s right to summary execution.

¹¹² Lipsius (1908) 452. Hamel (1998b) is an accessible, recent treatment.

patriotism. But, given that every army employs such laws, their existence does not imply an urgent problem or decline in moral fibre.¹¹³

Social pressure too kept citizen-soldiers at their posts and fighting. For example, Athenians were prohibited by law from claiming that somebody had thrown away his shield. Athenian men could bring each other to court for *lipotaxia*, but were barred from idly slandering each other about such an important matter. Community control was imposed directly through trials for military misconduct rather than indirectly through punishments by officers. These trials were martial in that soldiers were tried by their fellow soldiers in a court presided over by generals.¹¹⁴ But the votes of the common soldiers would always prevail and the act of presiding over an Athenian court was strictly procedural, so generals were not at all in the position of a modern judge.

Our information about discipline in other Greek armies is uneven. Many city-states with strong notions of citizen rights, and especially democracies, are likely to have resembled the Athenians in their military discipline. In conspicuous contrast, Spartan leaders often inflicted corporal punishment, a practice particularly unpopular when Spartans were commanding armies of allies from other city-states unused to this sort of treatment.¹¹⁵ The exhortations of generals rarely included threats about punishments for cowardice – other than its supposedly greater risks – and notably it is a Spartan leader who provides an exception (Thuc. 2.87.9).

IV. TRAINING

Soldiers can vary not only in their armament and organization, but in their training and the class of people from which they are recruited.¹¹⁶ The training and practice Greek soldiers received could vary from almost none for an archaic hoplite, to the two years required of every young citizen male in late fourth-century Athens, to a few months per year for a good oarsman, to full-time service for many years for mercenaries and the members of élite, professional citizen units. Greek military forces could comprise metics (resident foreigners), slaves or helots, and mercenaries. Although I will treat them sequentially, these two topics, the training required and the type of person recruited, are closely related. The availability of a given type of recruit can determine the possible training and thus the types of military forces that can be mobilized and at what cost. The need for a certain type

¹¹³ Burckhardt (1996) 23.

¹¹⁴ Lys. 15.1–4 and 14.7 with Hamel (1998a) 63 and Pritchett (1971–91) II.234.

¹¹⁵ Hornblower (2000). E.g. Plut. *Arist.* 23.2; Thuc. 8.84.2; Xen. *Hell.* 3.1.9, 6.2.18–19.

¹¹⁶ For methods of mobilization, see ch. 6 in this volume, pp. 148–51. I use ‘men’ for Greek soldiers advisedly. See Ehrenreich (1997) 97–131 on women in warfare in general and Schaps (1982) on women in Greek warfare.

of force, and thus the requirement of more or less training, can determine the class of men a state turns to for its military.

There are few skills so natural or simple that they are not improved by training.¹¹⁷ The Macedonian soldiers of Alexander the Great gained significant strategic advantages because of the simple fact that they could walk further and faster than other armies. Training, even extensive training, is always advantageous. Professional soldiers, such as Alexander's soldiers with their trained ability to walk, had plenty of time to practise whatever other skills were militarily most effective. The armies of most Greek city-states, on the other hand, consisted of part-time soldiers. The amount of training required to be able to use a weapon at all, to use it well or completely to master it vary greatly from weapon to weapon. For most states, the amount of training that a type of soldier needed was a key consideration in whether to attempt to train citizens, to forgo the advantages of having such soldiers, or to hire mercenaries with the requisite skill. The amount of training required to make a competent soldier of a given type also varies as the skills required are more or less close to the activities that a culture practises anyway. Aristocrats, whose culture emphasized the sporting enjoyment and prestige of horseback riding could become cavalrymen much more easily than men unfamiliar with horses. Athletic training and competition was thought to make men better soldiers – and was often praised and encouraged for just this reason.¹¹⁸ In addition, certain military skills seem to have been native to certain areas. For a Rhodian boy, for example, learning to throw lead bullets with a sling was probably just part of growing up a Rhodian.¹¹⁹

Greeks often affected to believe that hoplite warfare did not demand any particular skill other than bravery and general fitness and was 'as natural as for a bull to use its horns' (Xen. *Cyr.* 2.3.9–11). In the archaic period, when busy farmers took a couple of weeks during the break in their agricultural schedule to invade or ward off their neighbours, they had neither the time nor inclination for serious training. Even then, the professional and formidable Spartans did not fit this ideal of amateur warfare.¹²⁰

Increased military competition between cities in the classical period led to more slippage from the ideal of the hoplite amateur. In the late fifth and fourth century, the *hoplomachoi*, teachers of hoplite fighting, found paying pupils despite the reactionary scorn and derision reflected in some sources.¹²¹ The élite units of the classical period also trained full-time to fight as hoplites. In the fourth century the entire Theban army under Epaminondas – like some Spartan-led armies earlier in the century – impressed its

¹¹⁷ Pritchett (1971–91) II.208–31 collects the evidence for military training.

¹¹⁸ Some athletic contests, such as the race carrying a hoplite shield and javelin-throwing from horseback, directly involved military skills and came close to specifically military training.

¹¹⁹ Xen. *An.* 3.3.17–20; cf. Diod. Sic. 15.85.4–5. ¹²⁰ Cf. Arist. *Pol.* 8.133b9–29.

¹²¹ Wheeler (1982) and (1983) on teachers of *hoplomachia*.



Figure 5.7 Hoplite performing a pyrrhic dance to the music of a double pipe, on an Attic cup of c. 480 BC.

allies with its drilling and exercises.¹²² Later Athens formalized the *ephebeia*, a two-year period of military training in hoplite and light-armed fighting and garrison duty eventually required of all eighteen-to nineteen-year-old citizens.¹²³ Nevertheless, hoplites remained the least professional class of soldiers. Regular citizens were satisfactory hoplites, so this was the last type of military service that city-states delegated to mercenaries.

To fight effectively on horseback required expertise at mounting quickly, riding in formation, wielding the sword or spear and throwing the javelin from horseback – and all without stirrups. All these skills were much easier to acquire for riders. Northern states, such as Macedonia, Thessaly and even Boeotia, possessed large aristocracies with strong horseback-riding traditions. Indeed, Thessaly and Macedonia rarely mobilized substantial

¹²² Plut. *Mor.* 788a; cf. Xen. *Hell.* 3.4.16.

¹²³ Burckhardt (1996) 26–74 has a thorough and reasonable discussion with bibliography of the many controversies surrounding this institution.

hoplite armies, but were able to recruit nobles, and sometimes also their retainers, for cavalry service. In contrast, some states, especially in the Peloponnese, which lacked a strong tradition of aristocratic horsemanship did without cavalry in the classical period. They used the cavalry of allies or hired mercenaries. For example, the Spartans, 'contrary to their usual practice', had to raise an emergency cavalry force to deal with helot unrest in the Peloponnesian War (Thuc. 4.55.2).

At Athens the acquisition of a formidable cavalry was the result of deliberate policy. Although Athenian aristocrats manifestly liked racing horses, the countryside did not support a large enough class of rural nobility to field a large cavalry. To mobilize a greater number of horsemen than the wealthy could otherwise provide, Athens provided a loan for the purchase of a horse, an allowance for the horse's maintenance and reimbursed the value of horses lost in combat. Although not a full subsidy, this aid enabled Athens to field a formidable cavalry of one thousand. At Athens cavalry training was checked at public reviews before the *boulē* in the Lyceum, Academy and Hippodrome. These involved throwing the javelin, riding in formation, and, at the popular *anthippasis*, sham fights, charges and retreats (fig. 5.8).¹²⁴ So, although the Athenian cavalry were amateurs rather than professional soldiers and probably shared in other normal occupations of the Athenian rich, the state subsidized their horses and in return they were required to train far more than hoplites.

As we saw, different types of light-armed soldiers were associated with particular areas on the periphery of the world of the city-states. These areas had traditions of a particular type of weapon use. They probably also practised extensive agriculture without the year-round labour demand that characterized the intensive farming of the advanced city-states.¹²⁵

Thracian peltasts were famous and probably superior specialists at their way of fighting. Nevertheless, throwing and dodging javelins was perhaps not that difficult a skill for athletic young men to acquire – we hear of javelin practice already in late fifth-century Athens and the Athenian general Thrasylus armed 5,000 of his rowers as peltasts during the Peloponnesian War.¹²⁶ The fact that so many peltasts were mercenaries may suggest a type of force for whom training paid particular dividends. Or peltast equipment may have been the best that many of the poor who became mercenaries could afford.¹²⁷

Despite the disdain of the hoplite class for archers, shooting the bow was a difficult skill to acquire.¹²⁸ As the story of Odysseus' bow makes clear, it required great strength even to string a bow. Indeed, modern archers

¹²⁴ Xen. *Eg. mag.* 1.13, 18, 3.2–14.

¹²⁵ Hanson (1999b) 89–176.

¹²⁶ Antiph. 2; Xen. *Hell.* 1.2.1.

¹²⁷ See McKechnie (1989) and (1994) *contra* Whitehead (1991) on whether employers usually equipped mercenary troops.

¹²⁸ Gabriel and Metz (1991) 67–8 for the difficulties of using the composite bow.



Figure 5.8 Cavalrymen competing in target practice, on a fourth-century BC Attic crater. The target consists of a suspended shield, below which lie broken javelins; the winner of the competition is about to be crowned by winged 'victories'.

lose accuracy and power after ten maximum pulls. In some armies the strongest recruits were selected to learn to shoot the bow. So, for most cities and through most of Greek history, developing a native archer corps would have required significant investments of full-time manpower; most cities tended to recruit mercenaries from areas with traditions of archery rather than trying to train and equip their own archers. Athens, again an innovative anomaly, adopted a weapon popular on the fringes of the Greek world and had its own archer corps from early in the fifth century.¹²⁹

Due to the training required, slingers were often mercenaries from areas that specialized in the skill such as Rhodes and Acarnania. Sling bullets with 'Athens' inscribed on them have been found near Olynthus, probably from an action in 421, so perhaps Athens trained its own slingers.¹³⁰ Nevertheless, the Athenians hired 700 Rhodian slingers for the Sicilian expedition (*Thuc.* 6.43).

Many sources agree that actual experience and hard training gave a navy a significant edge.¹³¹ On a trireme, the officers – other than the trierarch – and

¹²⁹ Hdt. 9.22.1, 60.3; *Thuc.* 2.13.8. ¹³⁰ Pritchett (1971–91) v.55 n. 102.

¹³¹ E.g. Hdt. 6.11–12; *Thuc.* 1.142.7–9, 2.85.2, 89.7, 7.7.4, 12.5, 14.1. The Athenian fleet at the battle of Arginusae, many of whose rowers can have had only a month to train, was exceptional in defeating a more experienced and approximately equal fleet in the open sea.

specialists were manifestly professionals. Rowing, the job of the vast majority of a trireme's crew, also required skill and fitness. Conscientious trierarchs sought out the best and most experienced rowers and paid them extra. Rudimentary rowing skill was perhaps widespread in island, imperial or commercial cities: the fifth-century oligarchic pamphlet of Pseudo-Xenophon claims that Athenians are suited for the navy because they have learned to row and steer on sea voyages for other purposes ([Xen.] *Ath. Pol.* 1.19–20). Neophyte rowers, if in good physical shape to begin with, could learn to row during a couple of weeks in early season cruising to a battle zone with a mostly more experienced crew – many of whom were in their fifth or tenth season of rowing. Given the requirements for training and practice, naval service was already dominated by professionals in the fifth century. Thucydides has Pericles claim that naval skill is not a hobby, but, indeed, leaves no time for other hobbies (Thuc. 1.142.9). Even at Athens the pool of rowers contained a significant fraction of mercenaries, many of them from the Ionian islands. So in a pre-Peloponnesian War speech, Pericles was not able to deny that the Spartan alliance could man a navy by hiring mercenary rowers.¹³²

The overall tendency, especially in the late classical period, was for training to become more and more important to Greek military forces. Citizen amateurs received more training, even at hoplite fighting. The growing importance of a trireme-based navy and other types of soldiers with more technical and specialized skills also increased the need for training. In the fourth century especially this tendency encouraged the use of mercenaries and state support of specialized units of professional soldiers – especially by Athens, wealthy and large. But before we turn to these professional soldiers, let us consider the standard sources of manpower.

V. MANPOWER

I. *Citizens*

The most obvious source of manpower for a city's army was its own population.¹³³ Citizens were numerous and available. By the fifth century at the latest, Greek states were powerful enough to draft their citizens in whatever numbers they and their economy could afford. Citizen-soldiers generally fought bravely in front of the friends, neighbours and family members in their units and for cities they felt were their own. In the classical period, however, civil wars and conflicts based on class resentment were common.

¹³² Thuc. 1.143.1–2. He assuages Athenian anxiety by claiming that Athens itself had more and better naval officers and specialists than the rest of Greece put together. See above p. 129 for the origins of the officers on Athenian triremes.

¹³³ See ch. 8 in this volume, pp. 257–8, 265–6, for military pay, and ch. 9, pp. 273–9, 296–8, for the relationship of military service and political rights.

So the loyalty of citizen-soldiers to their current government was not a sure thing: when given arms, the poor of Mytilene forced the city to surrender; the rich men of the cavalry betrayed Olynthus to Philip II. Suspicions of the poor and a belief that those with a stake in society make the best soldiers induced many Greek city-states to turn first to their more affluent citizens for military manpower: trierarchs, cavalrymen and hoplites, rich enough to own the panoply, were forced to serve.¹³⁴ Only later, and perhaps occasionally, were *thetes*, the poorer half or two-thirds of the citizens, drafted for military service.

Furthermore, as we have seen, a universal cost of citizen-armies was the financial loss involved in taking people away from their livelihoods for training or for going on campaign. This loss became a much more important factor as the fighting season grew longer with the advent of naval warfare and then the general escalation of warfare in the classical period.

The use of citizen-soldiers also varied depending on the type of military force: the hoplites were the citizen-army par excellence. The small amount of training required and the short fighting season in the archaic period originally favoured this exclusivity. Over the centuries fighting as a hoplite had become the most prestigious type of military service. This prestige probably contributed to a reluctance to entrust it to foreigners (Xen. *Vect.* 2.2–5). Other services were less closely linked to citizenship and, requiring special training, were often handed over to mercenaries.¹³⁵

In addition to considerations of training, another factor induced states to go beyond their own citizens for soldiers. In the classical period competing cities were often financially able, at least for limited periods, to arm and supply a greater number of soldiers and sailors than their citizen bodies contained. To meet these contingencies, cities would mobilize their metic population, use their slaves as soldiers, and hire mercenaries.

2. Metics and slaves

Athens, with the great commercial centre of the Piraeus, attracted a large number of metics, especially during the fifth-century empire. Although not citizens, metics were registered for taxation and liable to being called up as hoplites. At the beginning of the Peloponnesian War metics made up a large proportion of the Athenian hoplite forces – 3,000 out of a full

¹³⁴ See ch. 6 in this volume, pp. 148–50, for the draft. Van Wees (2001a) argues that volunteers from the *thetes* made up a large proportion of the largest Athenian hoplite forces.

¹³⁵ Cavalry service had some aristocratic éclat, even at Athens, and the Thessalians, for example, would be loath to hire foreign cavalry.

mobilization of 16,000.¹³⁶ Despite some grumbling about hoplite purity, they were still being drafted into the hoplites in the mid-fourth century (Xen. *Vect.* 2.3). But the recruitment of metics was first of all limited by their fluctuating numbers. After the end of the Peloponnesian War (404), or of the Social War (355), far fewer metics are likely to have been living in a bankrupt Athens. Although other large commercial cities had substantial metic populations, few other city-states possessed such a pool of manpower.

Slave populations were a potentially large and obvious source of available manpower.¹³⁷ Most developed Greek city-states possessed enough slaves to make up a tempting source of military recruits. Other states contained indigenous, serf-like classes, most conspicuously the helots subject to Sparta. Given the prestige and claims to rights often arising from military service – even in the navy – states may perhaps have been hesitant to employ slaves – generally non-Greeks viewed with contempt – in their military forces. I have recently argued that the pressure of military advantage usually overwhelmed these objections, but that the slaves in the military did not present a congenial topic for ancient authors and that their role tended to be under-reported as a result.¹³⁸ The mobilization of slaves fell into three categories.

First, slaves could be armed as infantry. To entrust weapons to slaves, often a discontented and restless group, was dangerous, so such slaves were often given or promised freedom. The risks involved, the economic loss, and the fact that slaves could only be freed once ensured that such recruitment was employed only in rare emergencies.¹³⁹

Second, controversy surrounds the use of slaves as navy rowers. Slaves are attested in the navies of Corinth, Corcyra, Chios, Syracuse and Athens, the five largest navies of the classical period. Some scholars believe that this was a standard practice.¹⁴⁰ Others argue that many of these cases are reported only because they are exceptional.¹⁴¹ Mobilizing slaves as rowers in the navy did not require giving them weapons, so they posed less of a threat than slaves in the infantry. In a naval battle a ship's crew survived or perished together, so slaves would have ample motivation for rowing hard and well. Slaves were always a sub-set of the rowers along with metics and citizens; the ship's complement also included armed citizen marines, said by Aristotle to 'control the crew'.¹⁴² Incentives as well as compulsion

¹³⁶ Thuc. 2.31.2. See French (1993) for discussion with bibliography on the problem of Athenian manpower resources at the start of the Peloponnesian War.

¹³⁷ Sargent (1927); Garlan (1972); Welwei (1974) present the conventional view.

¹³⁸ Hunt (1998). ¹³⁹ E.g. Paus. 1.32.3, 7.15.7, 10.20.2.

¹⁴⁰ Hunt (1998) 83–101. Graham (1992), (1998) focuses on the Athenian navy and the inscription *IG* 13.1032, on which see also Laing (1965).

¹⁴¹ Casson (1966); Amit (1965) 33; Morrison et al. (2000) 117–18. ¹⁴² Arist. *Pol.* 1327b8–11.

motivated slave rowers. As in the case of the slave and free workers on the Erechtheum, slaves were paid the same amount as free rowers and were probably allowed to save some portion of their wages for their own uses, including the eventual purchase of freedom.

Third, the helots of Sparta were both notoriously rebellious and recruited as infantry far more often than Greek chattel slaves.¹⁴³ This phenomenon may be puzzling, but it is undeniable: Herodotus claims that seven helots accompanied each Spartan at the battle of Plataea in the Persian Wars, 479;¹⁴⁴ Thucydides reports several occasions when the Spartans and helots ‘mobilized in full’ for a campaign in the Peloponnese; helots, either promised their freedom or already freed, called *neodamodeis*, played a key strategic role for Sparta by undertaking lengthy and distant campaigns. Some combination or variety of factors probably allowed the use of helot soldiers. The promise of freedom from helotage or smaller and thus unattested incentives may have motivated some Helots. Villages and families under Spartan control must have served as hostages for the good behaviour of Helots on campaign. Some helots may have wanted to prove their bravery, and thus their own and their people’s worth. Helot soldiers compensated for the small numbers of full Spartans and for their unwillingness to leave the Peloponnese in large numbers. Thus they contributed greatly to the power of a Spartan state that many of them manifestly hated.

The use of metics and slaves in warfare are cases where the advantages of a practice overwhelmed the ideology which connected military service with rights, if not rule, in a state. These two groups provided warm bodies to fill the ranks and could, of course, be trained just as citizens could.

3. Mercenaries

Mercenaries too could increase the numbers of a city’s forces, for example the navy. They often had the additional advantage of being professional soldiers, able to serve year-round and of possessing specialized military skills that the citizens of a city lacked. Although the role of mercenaries became increasingly important in the fifth and fourth centuries BC, the history of their use involved several phases. We shall first sketch a brief history of the types of mercenary use, and then consider the reasons why cities wanted mercenaries, the motives of the men who became mercenaries and their military value.

In the early archaic period, Greek mercenaries already served in the armies of Saite Egypt. Later, the Persian empire and its occasionally rebellious satraps hired Greek hoplites in large numbers to make up their weakness in

¹⁴³ Chambers (1977–8); Talbert (1989); Ducat (1990); Cartledge (1991); Hunt (1998) 53–82, 170–5.

¹⁴⁴ Hunt (1997).

heavy infantry.¹⁴⁵ In the classical period, non-Greek monarchs occasionally hired famous and successful Greek generals to command their armies. The general's ability to train an army was probably as important as his strategic or tactical talents. In some cases, a large portion of a city-state's army along with its leaders was hired *en masse* by the Persian king. Despite periods of foreign service, the theory that the Athenian generals who sometimes led these mercenary armies in the fourth century were like *condottieri* without any particular loyalty to their city-states has fallen into deserved disfavour.¹⁴⁶

In Greece the use of mercenaries for internal purposes was also continuous from the early archaic through to the classical period. Some of the seventh-century tyrants, and, more definitely, those of the sixth century and later, used mercenaries to bolster their power. Such troops did not possess any other ties or power within the city and, beholden only to the tyrant who paid their salaries, were often more loyal to him than the citizens. Mercenaries also played a role in the class-based strife between democrats and oligarchs in the classical period.

The employment of mercenaries by city-states in their mutual wars began in the archaic period, but increased dramatically in the fifth and fourth centuries. In the Peloponnesian War both sides used mercenaries to field fleets larger than their citizens and slaves could man. Most professional rowers came from cities belonging to the respective alliances of Sparta and Athens, but the importance of competitive wages makes it clear that many were willing to work for the highest bidder.¹⁴⁷ On land the antagonists made good their deficiencies in peltasts, archers and slingers by hiring mercenaries. These uses of mercenary soldiers continued and grew in the fourth century with the addition of mercenary cavalry.¹⁴⁸ Indeed, by the end of the fourth century, the term *stratiotēs*, previously a neutral term for soldier, meant mercenary and it was the citizen-soldier who needed to be indicated with a modifier.¹⁴⁹

Hoplites remained citizen-amateurs the longest. Hired hoplites were occasionally used in the Peloponnesian War on long expeditions impractical for an amateur soldier with a farm or business to look after. By the mid-fourth century mercenary hoplite forces occasionally matched the citizen-levies in size and importance. Moralizing in the speeches of Demosthenes and Isocrates can leave the impression that a loss of moral fibre led fourth-century Athenians to pay for mercenaries rather than fighting

¹⁴⁵ See Parke (1981); cf. Garlan (1975) 93–8, for a socio-economic views of mercenary use, and Lavelle (1997), for a more critical view of the evidence for early archaic mercenaries.

¹⁴⁶ Pritchett (1971–91) II.59–116; Kallet (1983). Athens did sometimes send out generals without sufficient money to pay their mercenaries, in which case the generals did resort to brigandage and extortion irrelevant or contrary to Athenian policies and purposes (Pritchett (1971–91) II.85).

¹⁴⁷ Xen. *Hell.* 1.5.4–7, 10, 15, 20, 1.6.3, 16.

¹⁴⁸ Xen. *Hell.* 3.4.15; Dem. 4.21; cf. Xen. *Eg. mag.* 9.3–4.

¹⁴⁹ Parke (1981) 21.

in person. This view is exaggerated and tendentious. When Athens' safety or immediate interests were directly threatened, the citizens went out on campaign, even against the professional troops of Philip.¹⁵⁰ The economy of fourth-century Athens, however, could not afford to have thousands of citizens going on extended campaigns as had the powerful and wealthy fifth-century empire. So when it came to a standing force to operate on the borders of Macedonia, even Demosthenes admits the necessity of hiring a large proportion of mercenary troops (*Dem.* 4.21).

Such use of mercenaries was not without costs and risks.¹⁵¹ Mercenaries were no more expensive than citizen armies, but they were not free and were often maintained throughout the year as citizen-levies were not – Isocrates claims that Athens had recently wasted 1,000 talents on mercenaries (7.9). Athenian attempts to have a war pay for itself by sending out just a general with mercenaries, and then expecting the general to pay the mercenaries out of the profits of war, were rarely successful.¹⁵² Such parsimony often forced the general and his army to go after soft and rich targets rather than the enemy, or to extort their pay from Athens' allies.

For smaller cities the risks of mercenary armies were even greater. In contrast to non-Greek practice, when a city-state hired mercenaries, it generally appointed its own commanders to lead them.¹⁵³ Nevertheless, mercenaries could desert or change sides in a way inconceivable for a citizen-army. Since mercenaries could even take over the city that employed them, Aeneas Tacticus, in his book on surviving sieges, suggests elaborate precautions and advises that states never hire mercenaries in numbers greater than their own citizens.¹⁵⁴ Despite these caveats, mercenary use could bring considerable advantages to a small city in a crisis situation by dramatically enlarging its armed forces and supplementing citizen-amateurs with skilled professionals.

Why did men become mercenaries? Mercenary service was a dangerous career, with little job security and poor pay. Isocrates claims repeatedly that poverty and civil strife provided desperate men eager to earn their money as professional soldiers.¹⁵⁵ One can well imagine that mainly poor men, including political exiles, would be willing to become mercenaries – who were stereotyped accordingly.¹⁵⁶ But many mercenaries came from specific areas on the outskirts of the city-state world. These areas were often marked by endemic poverty, rural isolation and a weak state. Poor young men from

¹⁵⁰ Pritchett (1971–91) II.104–5; see Burckhardt (1996) 76–153 for Athens' use of mercenaries and citizen-soldiers as well as the continued prestige of military service in fourth-century Athens.

¹⁵¹ See Durey (2000). ¹⁵² E.g. *Dem.* 4.43–6.

¹⁵³ Parke (1981) 73. But foreign, hired trierarchs served in the fourth century and Demosthenes complains that a non-Athenian is commanding the Athenian cavalry at home (4.27).

¹⁵⁴ Aen. Tact. 12.2–13.4; cf. *Dem.* 23.139. ¹⁵⁵ E.g. *Isoc.* 5.120–3, 7.82–3, 8.44–7.

¹⁵⁶ E.g. *Isoc.* 4.146; Pl. *Leg.* 630b.

Arcadia, for example, like those from Switzerland in the late medieval and early modern period, followed a traditional career path by leaving home to become mercenaries.¹⁵⁷ They were proud of the martial skills and bravery that made them sought-after mercenaries and allowed them to escape grinding rural poverty. General tendencies, however, do not explain all mercenary recruits: in Menander, some characters become mercenaries to escape personal problems; Xenophon joined the Ten Thousand to escape an uncomfortable political situation in Athens. The motivations of twentieth-century mercenaries reveal a similar complex of motives: marriage and financial problems, escape and the desire for adventure, and the possession of a saleable skill.¹⁵⁸

It is difficult to evaluate how well mercenaries fought. On the one hand, Xenophon, for example, emphasizes the fighting mettle of the Ten Thousand and includes a speech in his history in which the merits of the mercenary army of Jason of Pherae are elaborated.¹⁵⁹ But the relative experience of citizens and mercenaries would have varied considerably depending on the time period and type of military service. At the end of the Peloponnesian War most Athenian citizens were seasoned veterans. In the mid-fourth century, during which large-scale mobilization of the citizen population – especially of Athens' main land forces – was relatively rare, mercenaries would have possessed a considerable advantage in experience and technique. In such a fourth-century context, Aristotle explains the advantages of mercenaries, but also their ineluctable weak point:

Moreover, their experience makes them most capable in attack and defence, since they are capable users of their weapons, and have the weapons that are best for attack and defence. The result is that in fighting non-professionals they are like armed troops fighting unarmed, or like trained athletes fighting ordinary people; for in these contests also the best fighters are the strongest and physically fittest, not the bravest. However, professional soldiers turn out to be cowards when the danger overstrains them and they are inferior in numbers and equipment. For they are the first to run, whereas the citizen troops stand firm and get killed; this was what happened at the temple of Hermes. For the citizens find it shameful to run, and find death more choice-worthy than safety at this cost.

(Arist. *Eth. Nic.* 3.8.7–9; trans. Irwin 1985)

Discipline in mercenary armies may sometimes have stood in for patriotism and shame: stories about strict discipline tend to revolve around the commanders of mercenary units, who were under less restraint than officers commanding citizens.¹⁶⁰ Most famously, when criticized for killing a sentry

¹⁵⁷ Ducrey (1971).

¹⁵⁸ Burchett and Roebuck (1977) 52, 61; Hoare (1989) 12, 18, 47.

¹⁵⁹ Xen. *An.* 1.2.18, 5.6.15; *Hell.* 6.1.5–6.

¹⁶⁰ Pritchett (1971–91) II.237–8 *contra* Hamel (1998a) 62–3.

who was sleeping even as the enemy approached, Iphicrates quipped, 'I left him as I found him.'¹⁶¹

A more satisfactory solution to this dilemma of expertise versus motivation was the professional, state army. Sparta was the only Greek state in the classical period that through its exploitation of the helots could afford to maintain a substantial professional army. The closest that most city-states could come to a professional army of citizens was to pay to support an élite corps.

4. Elite units

Elite units may have existed already in the amateur armies of the archaic period;¹⁶² it was only in the late fifth and fourth centuries that several large city-states devoted funds to making a small fraction of their military forces professional.¹⁶³ Since we typically know only a few details about the history of each such unit – and these insecurely – it may well be that other cities created such forces which have left us no trace.

Most élite units were armed as hoplites, still the most important soldiers for winning the big battles. Although untrained farmers could make perfectly good hoplite armies, the example of Sparta showed that professionals could have an edge even in this ostensibly unskilled brand of combat. In fact, rivalry with Sparta contributed to the establishment of several of the élite units, such as the Sacred Band of Thebes and the Arcadian *eparitoi*.

Elite units are attested at Syracuse and Athens, but it is not clear whether they were professionals or just picked men in an amateur army.¹⁶⁴ The Sacred Band of Thebes was the most famous of the élite units. This band of 300 men – the number probably chosen to match the 300 Spartan élite, the *hippeis* – was made up of 150 pairs of lovers.¹⁶⁵ They were maintained and trained at public expense on the Cadmea. Originally established when Thebes revolted from Sparta in 379, they were reorganized by Pelopidas, who led them during their heyday. Before Pelopidas the Sacred Band had been used in the front line of the Theban phalanx.¹⁶⁶ This placement meant that every one of them was likely to engage in hand-to-hand fighting in

¹⁶¹ Frontin. *Str.* 3.12.2–3. The story is also told of Epaminondas, so it may be apocryphal, but cf. Xen. *An.* 2.6.9–10, 14–15; 5.8.8–25.

¹⁶² The Spartan élite infantry unit, the *hippeis*, may have derived its inappropriate name from the mounted hoplites of the archaic period. The Athenians possessed a group of 300 picked men at the battle of Plataea (Plut. *Arist.* 14).

¹⁶³ Pritchett (1971–91) II.221–5 collects the ancient references. *Ad hoc* units of picked men or ships crewed by selected rowers are attested, e.g. Polyaeus, *Strat.* 1.43.2; Thuc. 6.96.3. Their use was more a matter of battlefield strategy than a change in the nature of Greek military forces.

¹⁶⁴ Diod. Sic. 11.76.2; Aeschin. 2.169; Plut. *Phoc.* 13.2; see Tritle (1989).

¹⁶⁵ Plut. *Pel.* 18–19; Plut. *Mor.* 761b; Ath. 13.561f, 13.602a.

¹⁶⁶ There may have been also a Spartan inspiration for the use of different troops in the front rank, see Hunt (1997).

hoplite battles. This logical strategy for getting the most use out of their investment in a professional corps had the drawback of spreading the Sacred Band out. Pelopidas first stationed them all together. They could then be used at a decisive place in the battle line. At the battle of Leuctra the Sacred Band played such a decisive part in the victory that its commander Pelopidas acquired honours equal to those of Epaminondas the commander in chief.¹⁶⁷ At the battle of Chaeronea, 338, the Sacred Band fought almost to the last man in a famous stand against Philip II.

The organization and training of an élite unit could affect the political balance in a state. If the state did not provide armour and good pay, only the rich would be able to serve.¹⁶⁸ The Argive unit of 1,000, maintained by the state, was composed of wealthy young men. After it distinguished itself in battle, it joined with Argos' traditional enemies, the Spartans, and overthrew the democracy.¹⁶⁹ The Arcadian *eparitoi*, on the other hand, were paid out of the sacred treasures of Olympia. They seem to have been hostile to the aristocracy and to have aroused some resentment: when their pay was eliminated, 'quickly indeed those who were not able to belong to the *eparitoi* without pay began to disperse', while those who were able to serve without pay urged each other on and enrolled so that 'they would control the unit rather than be controlled by it' (*Xen. Hell.* 7.4.34).

VI. CONCLUSION

In 338 the Macedonian army of Philip II defeated a coalition of the most powerful Greek city-states, Athens, Thebes and Corinth, established Macedonian dominance over mainland Greece and put an end to hoplite dominance of land warfare. The army with which he won is treated in detail in Chapter 11. A brief description here will serve to sum up our treatment of military forces, since the Macedonian army in many ways represented the culmination of classical trends. The Macedonian army was powerful, not only because of the phalangite who replaced the hoplite as the mainstay of the infantry, but also because of the coordinated use of different types of military forces: cavalry of different types, peltasts, slingers and archers. The cavalry not the infantry usually decided battles by attacking a weak or disordered point in the enemy's line. A commander, who was often the monarch himself and certainly subject to no oversight by his men, imposed strict discipline and directed the often complex attacks of this variegated army. Wealth from mines and continued successful conquests allowed Philip to maintain his army on a full-time professional basis, so they campaigned or

¹⁶⁷ Plut. *Pel.* 23.4; Diod. Sic. 15.81.2. Anderson (1970) 216–19 gives a plausible reconstruction of their role.

¹⁶⁸ Pritchett (1971–91) 11.221.

¹⁶⁹ Thuc. 5.67.2, 81.2; Diod. Sic. 12.75.7, 79.6–7, 80.2–3.

trained hard year round.¹⁷⁰ Nevertheless, he supplemented his own men with mercenaries, especially for garrison duty and distant expeditions. He managed both to raise a superb cavalry from the quarrelsome nobles of greater Macedonia and to train the peasants to be excellent infantry. Even though the whole Macedonian army was professional, it still contained élite units of picked men for difficult assignments and to accompany the king in battle. Although Demosthenes claimed that Philip fought in an altogether new and formidable way (Dem. 9.47–52), many of the features of his army were symptomatic of the growing specialization and professionalization of armed forces in the fourth century.

¹⁷⁰ Dem. 8.11, 18.235.

CHAPTER 6

WAR

PETER KRENTZ

I. INTRODUCTION

Herodotus has the Persian commander Mardonius describe Greek warfare as follows:¹

Besides, from all I hear, the Greeks usually wage war in an extremely stupid fashion, because they are ignorant and incompetent. When they declare war on one another they seek out the best, most level piece of land, and that is where they go to fight. The upshot is that the victors leave the battlefield with massive losses, not to mention the losers, who are completely wiped out.

On this foundation, scholars have constructed an agonial model of Greek warfare, describing it as an annual competition among farmers, fierce and bloody but also limited and ritualized, aimed more at status than at the conquest of territory.² As Mardonius learned, however, he was mostly wrong. This chapter will set out a more nuanced view by following a campaign from start to finish, emphasizing the decisions made along the way by both sides.

Greeks normally invaded by land or by sea, but not both.³ Because ships moved large numbers of troops, however, the two kinds of campaign had much in common. Men who arrived on ships ravaged crops, looted property, fought battles and besieged cities, just as did soldiers who came on foot. Almost one-third of known archaic wars involved troops transported by ships.⁴ Ships could blockade ports, intercept enemy ships at sea and show the flag, but then as now, land troops had to go in to win territory.⁵ The introduction of a purpose-built warship, the trireme, made little difference,

¹ Hdt. 7.9b.1, trans. Waterfield (1998).

² E.g. Vernant (1968); Pritchett (1971–91); Connor (1988); Ober (1996b) and Hanson (1995), (2000a), (2000b). Krentz (1997), (2000), (2002) and van Wees (2003), (2004) challenge this view.

³ Combined operations most frequently occurred when local land troops joined a fleet from somewhere else, as in 428 when the Acarnanians joined Asopius' twelve Athenian triremes for an attack on Oeniadae (Thuc. 3.7.3–4).

⁴ See Scott (2000) for a list of archaic wars.

⁵ Pericles pointed out in 431 that the loyalty of Athens' allies depended on the Athenians' ability to campaign against them with soldiers (Thuc. 1.143.5).

for trireme fleets could also carry troops. In 494 the Chian ships each had forty marines, and in 480 Xerxes' triremes each had thirty Persian infantry in addition to its native troops (Hdt. 6.15, 7.184.1–2). Athenian triremes carried no fewer than ten marines (*epibatai*), armed as hoplites, but could have many more soldiers. An Attic inscription from the early Peloponnesian War records an expedition of thirty triremes, each with five volunteer marines, forty hoplites, ten archers and ten (?) peltasts (*IG* 1³ 60.9–18). Fleets mentioned in Thucydides often averaged more than thirty soldiers per ship (see Table 6.1), and in fact most of the land battles in the Peloponnesian War were fought against invaders who came by sea (see Table 6.2). This chapter will therefore treat land and sea campaigns in parallel rather than separately.

II. THE CALL TO ARMS (OR OARS)

When a Greek city decided to send out troops by land, it might mobilize all its forces for an expedition *panstratiai*, 'with the whole army', or *pandemei*, 'with the whole people'. Or it might call for a limited number of volunteers, as the Corinthians did when they sent volunteers and mercenaries to Potidaea in 432 (Thuc. 1.60). Sparta and Athens, however, normally drafted their soldiers.

At Sparta the ephors announced which *morai* (divisions) and which age classes should go: before the battle of Leuctra, for instance, the ephors summoned the men 'up to thirty-five years from the age of manhood' (that is, ages twenty to fifty-four inclusive) from four of the six divisions. After the Spartans lost the battle, the other two divisions marched out as well, and all men up to forty years from the age of manhood (Xen. *Hell.* 6.1.1, 4.17). A similar announcement summoned the cavalry and the various workmen who accompanied the army.

Probably between 386 and 366 the Athenians began a similar system of conscription by age-group.⁶ During the fifth century, the generals used deme registers to create lists (*katalogoi*), one for each tribe, of the hoplites drafted for each expedition. The *taxisarchoi* (elected commanders of the ten tribes) assisted in this process. Generals were supposed to spread the burden of military service equitably, but complaints about the fairness of the system surface in Aristophanes and Lysias, and probably explain the switch to the more indiscriminate draft by age-group.

Other cities presumably operated similarly, though we have little evidence. Syracuse had a register of citizens by tribe – it fell into Athenian hands on one occasion (Plut. *Nic.* 14.5) – and inscriptions show that Argos, Corinth, Heraclea Pontica, Mantinea, Tegea and Thespiae also had a tribal military organization.

⁶ See Christ (2001), with references to earlier studies.

Table 6.1 *Soldiers on ships in Thucydides*⁷

Reference	Date	Fleet	No. of ships	No. of soldiers	Soldiers/ ship
1.29	435	Corinthian	75	2,000 hoplites	27
1.57.6	433	Athenian	30	1,000 hoplites	33
1.61.1	432	Athenian	40	2,000 hoplites	50
2.23.2	431	Athenian	100	1,000 hoplites, 400 archers	14
2.33.1	431/0	Corinthian	40	1,500 hoplites	38
2.56.1-2	430	Athenian	100 (plus horse transports?)	4,000 hoplites, 300 cavalry	40 or 48
2.66	430	Peloponnesian	100	1,000 hoplites	10
2.80.2-4	429	Peloponnesian	'a few'	1,000 hoplites	
3.18.3-4	428	Athenian		1,000 hoplites	
3.75.1	427	Athenian	12	500 hoplites	42
3.91.1	426	Athenian	60	2,000 hoplites	33
3.91.1,	426	Athenian	30	300 marines	10
95.2					
3.102.4	426	Athenian	30	1,000 hoplites	33
3.107.1	426/5	Athenian	20	200 hoplites, 60 archers	13
4.42.1	425	Athenian	80	2,000 hoplites	25
4.53.1,	424	Athenian	60	2,000 hoplites plus allied troops, including 2,000 Milesian hoplites	>66
54.1					
4.129.2-4	423	Athenian	50	1,000 hoplites, 600 archers, 100 Thracians and some peltasts	34
5.2.1	422	Athenian	30	1,200 hoplites, 300 cavalry, and a 'larger force' of allies	>80
5.84.1	416	Athenian	38	1,200 hoplites, 300 archers, 20 mounted archers, and about 1,500 allied hoplites	79
6.31, 43	415	Athenian	134 (at least 40 transports)	5,100 hoplites, 480 archers, 700 slingers, 120 light-armed	45
7.33.4-5, 35.1, 42.1	413	Athenian	73	Almost 5,000 hoplites, at least 750 javelin-throwers, plus slingers and archers	>79
8.25	412	Athenian	48 (some transports)	3,500 hoplites	73

The enlisted men received simple orders, such as 'bring X days' rations and report to Y on such-and-such a day'. The Spartans, whose allies agreed

⁷ The calculations of soldiers per ship assume that Thucydides' figures include the marines, as at 6.43. Alternatively, his figures elsewhere are extra troops above and beyond the normal ten marines and four archers per ship, and we should add fourteen to each average.

The soldiers were not necessarily divided equally among the triremes. In several cases we hear of 'troop transports' (*stratiotides* or *hoplitagogoi*) in a fleet, and they might have been used on other occasions when they are not specifically mentioned. Troop transports apparently differed structurally from 'fast' triremes (Morrison and Williams 1968: 247). Coates (1993) calculates that by girdling (doubling the planking at the waterline to increase stability), *Olympias* could safely carry 230 men. To accommodate 70 or 80 hoplites, troop transports must either have had a quite different design, or fewer than 170 rowers.

to follow them on land and sea, issued instructions to their allies about these matters. In 431, for instance, the allies received word to come with two-thirds of their forces and appropriate provisions to the Isthmus by a specified day (Thuc. 2.10.1–2), after which they invaded Attica.

Less is known about the manning of fleets than about the raising of land troops. The Athenians assigned officers to individual ships by lot, while their trierarchs, ship captains appointed by the generals, recruited the crews from volunteers (citizens and foreigners) and slaves.⁸ Except for emergencies, the draft was not used for rowers until the mid-fourth century – a fundamental difference between army and navy. Slaves also rowed in the other large navies of classical Greece, including those of Chios, Corcyra, Corinth and Syracuse. In fact, of 1,000 Corcyraean prisoners captured after the battle of Sybota, 800 were slaves. Peloponnesian crews typically contained 50–80% slaves, with a somewhat lower proportion rowing in Athenian ships, perhaps 20–40% as on the naval catalogue *IG I³ 1032*. The *Paralus*, one of the Athenian state triremes, had a crew of ‘all free Athenians’, a point Thucydides thought worth mentioning (8.73.5).⁹

Like soldiers, sailors were told to report at a certain place and time. Athenian triremes then met at ‘the mole’ in Piraeus prior to departure as a fleet [Dem. 50.6]. Like allied armies, allied fleets had designated meeting points, such as Corcyra for the Sicilian Expedition in 415 (Thuc. 6.30.1).

III. SUPPLIES

On campaign Greeks took their armour and weapons, provisions, camping supplies, tools, and medical supplies. Soldiers did not carry all, or even most, of these things themselves. Greek expeditionary forces included large numbers of porters, pack animals, carts and wagons.

The full set of armour and weapons, collectively called the *hopla*, of a heavy-armed infantryman or hoplite included a shield, helmet, shinguards, breastplate, shoulder-guards, thigh-guards, plus one or two spears and a sword.¹⁰ All together, the panoply might weigh 30 kg or more. But because men provided their own equipment, variety ruled. Most hoplites did without the thigh- and shoulder-guards and probably made do with a lighter leather or linen corselet rather than a bronze breastplate. Helmets tended to get lighter over time. A more realistic estimate for what most

⁸ Rosivach (1985) 56–7 n. 3.

⁹ See ch. 5 in this volume, pp. 139–40. Hunt (1998) 83–101 reviews the evidence for slave rowers and argues against earlier scholars who maintained that slaves did not row in the Athenian navy.

¹⁰ On hoplite equipment, see ch. 5 in this volume, pp. 111–17; Snodgrass (1964); Anderson (1970) 13–42; Jarva (1995); Hanson (2000b) 55–88. Lissarrague (1990) shows that other troops wore some pieces of ‘hoplite’ equipment. The fact that the two-handled shield was the distinguishing mark of the ‘hoplite’ explains Diodorus Siculus’ otherwise odd statement (see Lazenby and Whitehead 1996) that hoplites got their name from their shield (*aspis*, 15.44.3).

hoplites wore into battle would be about 20 kg. A poorer man, who fought with only a helmet and shield for protection, might have carried only 12 kg, or even less if instead of a bronze-faced shield of solid wood he carried one made of wicker and leather. An archaic army, to judge by the *Iliad* and artistic representations, had no clear distinction between 'heavy-' and 'light-armed' men: archers, slingers and stone-throwers might all wear one or more pieces of 'hoplite' armour.

Troops typically brought along rations for a limited number of days: one, three, five, seven and thirty are all attested, with three being the most common.¹¹ An ancient soldier on campaign, smaller than his modern counterpart, needed little more than 3,000 calories per day. The standard daily ration of one Attic *choinix* of barley or (less often) wheat, weighing about 0.84 kg, would have provided about 2,800 calories. On the first few days out, men got the remainder from onions (soldiers' backpacks were said to reek of onions), cheese, salted meat or fish, and perhaps figs. J. Roth has recently put the total daily ration of the Roman soldier at 1–1.3 kg, an estimate that seems reasonable for the Greek soldier too.¹² Greeks normally drank water mixed with wine, so they probably carried some wine, though they could hope to seize more from their enemies. In 373 BC Mnasippus' men looted so much wine on Corcyra that, it was said, they drank only that with a fine bouquet (*Xen. Hell.* 6.2.6).

Camping supplies included extra clothing, blankets, tents and utensils for cooking and eating. Blankets were fastened to the shield for carrying, though Xenophon recommended leaving them behind and taking extra clothing instead. Tents might have been optional; on summer campaigns men could plan to sleep out dry under the stars. When tents were used we have no evidence about their size or weight. (Eight-man Roman leather tents have been estimated to weigh 40 kg.) For cooking, men needed stone hand-mills, which might weigh 30 kg, or lighter, wooden mortars and pestles, and pots or griddles or grills. Citing Homer, Plato recommended that soldiers roasted meat instead of carrying pots and pans (*Resp.* 404c), but though men might have brought along spits for roasting captured animals, Greeks lived on meat only in emergencies. For drinking, they carried cups; the Spartan cup called a *kothôn* was admired because it was easy to carry in a backpack and its incurving rim caught impurities in water (*Critias*, DK 88 F 34).

Xenophon recommends rasps for smoothing spear shafts, files for sharpening weapons, carpenter's tools, shovels, mattocks, axes, sickles – plus plenty of extra straps, for 'when straps break everything stops, unless you have extras' (*Cyr.* 6.2.32). In Sparta, where workers were drafted to accompany the army, the workers would have brought their tools with them, and

¹¹ Pritchett (1971–91) 1.30–51.

¹² Roth (1999) 7–67; see ch. 12 in this volume.

'tools that an army requires in common' were collected, presumably supervised by the officers in charge of the baggage train (Xen. *Lac.* 11.2, 13.4). Other Greek cities probably operated much more haphazardly, but farmers would have known what tools were needed to make field fortifications, build campfires and cook food, and ravage (or harvest) enemy crops and trees.

Xenophon also recommends medical supplies needed by sick people, which he says are not heavy (*Cyr.* 6.2.32). In his recommendations for cities preparing for a siege, Philon of Byzantium may give a hint about what an expeditionary force would have: 'There need to be very accomplished doctors in the town, who are experienced in the treatment of wounds and in the extraction of arrows, possessing the necessary drugs and instruments, and the city must provide cerate, honey, dressings, and bandages' (5.96.15–19). Xenophon says that the Spartans brought doctors on their campaigns (*Lac.* 13.7), but it is not clear that other armies regularly did so. At one point during their retreat, Cyrus' Greek mercenaries appointed eight doctors, apparently from their own ranks (Xen. *An.* 3.4.30).

The typical hoplite had a porter, usually a slave. The Greek terms for these men reflect their jobs: shield-bearer (*hupaspistēs*), baggage-carrier (*skeuophoros*), attendant (*akolouthos*), or servant (*huperetēs*). Hoplites did not normally carry their shields when marching, but took them from the porters only when fighting was imminent. If they had to fight while marching, they would not normally carry their food too (Thuc. 7.75.5).

Men could carry at most some 45 kg each. The animals Xenophon called 'co-workers (*sunergoi*) in war' (*Mem.* 4.3.10) are usually termed only 'under-the-yokes' (*hupozugoi*). N. G. L. Hammond argued that the term should be taken literally to refer to oxen, mules, or donkeys pulling two-wheeled carts or four-wheeled wagons.¹³ Such carts might have a capacity of 500 kg, and wagons of 650 kg. They would require a road (in his *Anabasis* Xenophon paints an amusing picture of Persian nobles helping to get a wagon out of the mud, 1.5.7), but recent studies have documented more and more roads with wheel-ruts, having a standard gauge of 1.40 m (see below). Wagons carried grain, water, wine, armour and weapons, tools, siege machinery, stones, prisoners, wounded men and corpses.

Xenophon, however, speaks of wagons carrying some things and *hupozugoi* others (*Lac.* 11.2), so *hupozugos* can be a generic term for pack animal. Romans preferred mules, but donkeys appear more commonly in Greek sources. Either mules or donkeys could use paths rather than roads and could move farther in a day than oxen, so they might actually have been

¹³ Hammond (1983a).

more efficient.¹⁴ A team of two oxen pulling 650 kg would eat 36 kg of fodder each day, while to move the same load five mules would eat 40 kg and 6.5 donkeys would eat 42 kg. (Precise comparisons are difficult because all these animals can obtain much of their nutrition from pasturage; donkeys can even graze on thorns and thistles.) The pack animals might go twice as far as the wagon. Estimates for oxen range from 15 to 32 km per day, compared to 40–80 km per day for mules (with longer forced marches possible), and probably less for the weaker donkeys. Aeneas Tacticus still liked wagons, however: ‘to those who have it a plentiful supply of vehicles is a great asset, for the swift conveyance of soldiers who are fresh to the place where they are needed. Also the wagons could serve as impromptu barricades to protect camps, and as a means of taking soldiers who have been wounded or otherwise disabled back to town’ (16.15).

Merchants might go with an army, hoping to sell food and other supplies, and later purchase plunder cheaply. The Spartan king Agesilaus earned Xenophon’s praise for his humanitarianism when he rescued children abandoned by traders, presumably after the traders bought a family of captives (*Ages.* 1.21). According to Diodorus Siculus, the crowd of merchants following Agesilaus’ army in Asia equalled his soldiers in number (14.79.2). The typical Greek force did not travel light.

Limited storage space on oared warships – triremes less than 6 m wide and more than 36 m long carried 200 men or more – meant that ships were outfitted carefully. The marines (*epibatai*) and archers brought their own equipment. Fourth-century Athenian naval inventories detail the ships’ gear received by the trierarchs from their predecessors. The trierarchs were responsible for maintaining and returning both the ‘wooden gear’ (oars, steering oars, masts and ladders) and the ‘hanging gear’ (sails, cables, ropes, screens and anchors). One inventory lists a set of bronze and iron cooking equipment: six water-buckets, six kraters (for mixing wine and water), six pitchers, six large cooking pots, six axes, six spades, and six *obeleia* (perhaps grills).¹⁵

Sailors ate what soldiers did: barley, olives, onions and cheese, washed down with wine and water. In 427 the Mytilenians in Athens provided wine and barley-cakes kneaded with oil and wine to stimulate the oarcrew sent to overtake a trireme that had started for Mytilene the day before (Thuc. 3.49.3). We never hear of rowers asked to bring more than three days’ rations, as the Corinthians did in 433 (Thuc. 1.48.1). What storage space there was must have held water-skins. During the sea trials of *Olympias* rowers drank a litre of water per hour. Ancient rowers could have consumed some water

¹⁴ Roth (1999) 61–7, 202–12 estimates that a donkey will carry 100 kg and eat 6.5 kg of fodder per day, a mule will carry 135 kg and eat 8.0 kg per day, and an ox will eat 18 kg per day.

¹⁵ *IG II²*. 1631.404–9, with Casson (1995a).

during breaks on shore, but if a fleet wanted to make good time it must have carried plenty of water.

Naval commanders tried to stop at a port, or at least a beach near a market, where sailors could spend their meal allowance. For expeditions to hostile territory, however, merchant ships had to follow along. The Athenian expedition to Sicily in 415, the best-equipped force Athens ever sent out, included thirty merchant ships (*holkades*) that also brought grain-workers, stonemasons, carpenters and tools for raising fortifications (Thuc. 6.44.1). The typical round ship carried 3,000 *medimnoi* of grain, enough to feed the crews of twenty-four triremes for a month. The Athenian expeditions that ravaged the Peloponnesian coast during the Archidamian War would have required supporting merchant ships; in 431, for example, 100 triremes were away for up to 120 days, and the next summer 150 triremes spent perhaps forty days around the Peloponnese. When Thucydides says the Spartans began the war by executing all Athenian and allied traders they caught around the Peloponnese (2.67.4), he probably refers not to random traders, but to the merchants enabling the Athenian fleet to operate. Generals must have paid much more attention to merchants than the extant sources do. The occasional hint peeks through. When Eteonicus wanted to get his fleet away from Mytilene before the Athenians arrived, he not only ordered his men to eat and row the triremes to Chios, he also ordered the merchants to load silently and sail to Chios (Xen. *Hell.* 1.6.37).

In his *Acharnians* Aristophanes vividly describes what the scene leading up to a fleet's departure would have been like:¹⁶

the city would have been full of the hubbub of soldiers, noisy crowds surrounding ship's captains, pay being handed out, Pallas emblems being gilded, the Colonnade groaning, rations being measured out, leathers and oarloops and people buying jars, garlic and olives and onions in nets, crowns and anchovies and flute-girls and black eyes; and the dockyard full of the planning of oar-spars, the hammering of dowel-pins, the boring of oarports, full of flutes and boatswains, of warbling and piping.

IV. THE TIMING OF CAMPAIGNS

At most times of the year invaders could damage some crop significantly, since grains, vines and fruit-trees were harvested in different seasons.¹⁷ In early spring invaders could interfere with the planting of chickpeas and summer crops, and the grafting of olives and vines, though they had to cut the green grain with sickles. In late May or June when the grain was ripe but unharvested, they could burn it (or cut it and eat it). In July they could

¹⁶ Ar. *Ach.* 546–55, trans. Sommerstein (1980). ¹⁷ Hanson (1998) 32–40.

interfere with the last of the grain crop, or with the threshing. Figs, almonds and chickpeas matured in August; grapes, pears and apples in September, and in October and November farmers normally planted legumes, barley and wheat. Olives were gathered and then pruned beginning in November. At any time of year invaders could cut down fruit trees. Young trees could be trampled and cut, and if not watered might not survive the summer.

Not surprisingly, therefore, invasions are attested throughout the year. The best times were in the spring or early summer – when the enemies' food supplies were at their lowest and they were most susceptible to a threat to the grain harvest – and in the autumn, when invaders could damage grapes and olives and prevent the sowing of the next year's grain crop. During the early years of the Peloponnesian War the Athenians invaded Megara twice annually with all their forces, in the spring and the autumn (Thuc. 4.66.1). The weather was less cooperative in July and August when it was uncomfortably hot, and in winter, from November to February, when it was colder and wetter. The preferred sailing season for major naval expeditions ran from late May to mid-September; they were all but ruled out during the stormy season from the end of October until early March. Experienced troops, however, saw it all. During the battle of Syracuse, early in the winter of 415/14, thunder, lightning and heavy rain alarmed the inexperienced Syracusans, while the Athenians realized it was normal for that time of year (Thuc. 6.70.1). Thucydides' account of the Archidamian War includes quite a bit of winter activity both on land and sea, and there is no reason to think these winter operations were something new.

The Greeks observed a truce, an *ekecheiria* (literally a 'hands-off'), for certain important festivals, including the Eleusinian Mysteries and the pan-hellenic festivals at Olympia, Delphi, Isthmia and Nemea. An inscription informs us that the *ekecheiria* for both the greater and lesser mysteries was to last fifty-five days (*IG* 3² 6B, 17–27, 36–47). The Olympic truce probably started about 1 July, a month before the games began, and ended about 15 August, ten days after the festival ended. These truces protected pilgrims and contestants going to and from the festivals, as well as the state sponsoring the festival. They did not prohibit all warfare. During the Isthmian truce, for example, the Spartans could sail to Chios to support its revolt from Athens, but the Corinthians could not, since they were presiding over the festival (Thuc. 8.9.1). The Dorians would not fight during the month-long festival of Apollo, the Carnea, a prohibition that kept most Spartans from the battle of Thermopylae (Hdt. 7.206). The Argives, at least on occasion, were less scrupulous. For their invasion of Epidaurus in 419, they stopped the calendar before the Carnea until the invasion ended (Thuc. 5.54).

The major festivals tended to fall in the period between the grain and the grape harvest, not the best time to invade anyway. A more specific

consideration may have been what time of the month was most favourable. Before departing, the Athenians waited for the first quarter of the month and the Spartans for the full moon, a custom that caused the Spartans to miss the battle of Marathon.¹⁸

V. DEPARTURE

When the men, their porters, their pack animals, and their equipment arrived at the appointed place, they were divided into groups. The Athenians formed ten tribal regiments or *taxeis*, each commanded by an elected *taxisarchēs*. The *taxeis* were subdivided into *lochoi*, each commanded by a *lochagos*. We know of five other *poleis* that had tribal divisions, and the Argive, Boeotian, Corinthian, Megarian and Spartan armies also had *lochoi*,¹⁹ but with the exception of one passage mentioning ‘fives’ at Phlius (Xen. *Hell.* 7.2.6), we hear of other divisions only at Sparta. For Sparta the evidence is notoriously difficult, partly because Spartans were secretive, but probably also because they reorganized their army, possibly more than once.²⁰ Thucydides describes seven Spartan *lochoi*, each divided into four *pentekostues*, each divided into four *enomotiai*, each of about thirty-two men (5.68.3). He may be using *lochos* loosely, for the Brasideans and the six contingents Xenophon later calls *mora*. Xenophon says each *mora* has one *polemarchos*, four *lochagoi*, eight *pentekonteres*, and sixteen *enomotarchoi* (*Lac.* 11.4). At Leuctra the *enomotiai* were formed three abreast and not more than twelve deep, giving about thirty-six men each. Here each *lochos* has about 576 men. Elsewhere it normally has several hundred, though Cyrus’ mercenaries were organized in *lochoi* of 100 men (Xen. *An.* 3.4.21, 4.8.15) and Xenophon has *lochoi* of twenty-four in his *Cyropaedia* (6.3.21).

Lochoi do not act independently, so their function may have been to enable troops to form quickly into ranks. Spartan *lochoi* are the exception. They could be detached for garrison duty, and Agis tried to move two *lochoi* independently on the battlefield of Mantinea (Thuc. 5.71–2). Though this particular attempt failed, almost disastrously, the Spartan commander thought it worth trying, and the fact that the officers who refused to move were later banished for cowardice suggests they could have carried out his orders. In most Greek armies, however, soldiers were amateurs rather than professionals, and there is no evidence that a *lochos* remained together as a unit from one year to the next.

On the morning he left home, vase-paintings suggest, a warrior would pour a libation and presumably say a prayer. A few vases show departing

¹⁸ Pritchett (1971–91) I.119; Hdt. 6.106.3. The Spartan custom perhaps applied only to the Carnea.

¹⁹ See in this volume ch. 2, pp. 28–30, and ch. 5, pp. 127–30. On *lochoi*, see also Lee (2004).

²⁰ Lazenby (1985).



Figure 6.1 A hoplite on the point of departure for war consults the omens by inspecting the liver of a sacrificial animal (hepatoscopy) brought to him by a slave attendant, on an Attic amphora of c. 490–480 BC. A companion in Scythian dress, a woman with a libation bowl, and a dog react emotionally to the result.

hoplites examining the entrails of sacrificed animals (fig. 6.1).²¹ Xenophon advises cavalry commanders that ‘The first duty is to sacrifice to the gods and pray them to grant you the thoughts, words and deeds likely to render your command most pleasing to the gods and to bring yourself, your friends and your city the fullest measure of affection and glory and advantage’ (*Eq. mag.* 1.1). A pious soldier, of whatever rank, would take the appropriate actions towards the gods before the campaign began.

The Spartans also held sacrifices for the whole army. Xenophon describes the king sacrificing at home to Zeus *Agetor* ('the Leader') and the gods associated with him, the Dioscuri and Athena. If the indications from the sacrifice appeared favourable to the expedition, the *pyrphoros* ('fire-carrier') took fire from the altar and led the way to the border. There the king sacrificed again to Zeus and Athena. When the sacrifice indicated their approval, he crossed the border. (On several occasions when these

²¹ Lissarrague (1989) 48 illustrates six examples of departure scenes with a hepatoscopy. On religion in Greek warfare, see especially Pritchett (1971–91) III and Jacquemin (2000).

border sacrifices (*diabateria*) proved unfavourable, the Spartans cancelled the expeditions: Thuc. 5.54.2, 55.3, 116.1.) The fire from these sacrifices was never put out, and was used to start the fire for the king's morning sacrifices while on campaign. The Spartans brought along sheep and goats for these daily sacrifices. Xenophon comments that if you could watch these rituals, you would think everyone else to be improvisers in military affairs, and only the Spartans to be artisans (*technitai*) in war (*Lac.* 13.2–5).

A seer (*mantis*) – the man Pindar called ‘the army’s eye’ (*OI.* 6.19) – examined the entrails of sacrificed animals to determine the future, that is, whether the results would be good if they marched, or fought, or plundered. Xenophon thought a general should learn enough of this interpretive art so that his seer could not mislead him, or so that he could act as his own seer (*Cyr.* 1.6.2). Greeks valued seers highly, as the placement of the seer Agias on the victory monument for Aegospotami, next to the commander Lysander illustrates (Paus. 10.9.7). They might come from anywhere, but Eleans seem to have specialized in this line. The Spartans even granted citizenship to Tisamenus of Elis and his brother, so eager were they to secure his services (Hdt. 9.33–5).

Even unasked, the gods might send an omen. The flight of a bird, an eclipse, thunder and lightning, even a sneeze might be a sign. Earthquakes stopped more than one Spartan campaign, as they were believed to show divine anger against impious behaviour.²² In 388 Agesipolis continued his campaign against Argos after an earthquake during his first supper in Argive territory, saying that an earthquake *before* he invaded would have discouraged him, but now it urged him on. He withdrew after lightning killed several of his men in camp, and a sacrificial victim had a malformed liver (Xen. *Hell.* 4.7.4–7).

We have only one detailed description of the departure of a fleet, but it is a memorable one. Thucydides describes the Athenians' departure for Sicily in 415 as follows:²³

The ships being now manned, and everything put on board with which they meant to sail, the *salpinx*²⁴ commanded silence, and the prayers customary before putting out to sea were offered, not in each ship by itself, but by all together to the voice of a herald; and bowls of wine were mixed through all the armament, and libations made by the soldiers and their officers in gold and silver goblets. They were joined in their prayers by the crowds on shore, by the citizens and all others who wished them well. The paean [an apotropaic hymn] sung and the libations finished, they put out to sea.

²² Thuc. 3.89, 6.95; Xen. *Hell.* 3.2.24; for the explanation, see Diod. Sic. 15.48.4.

²³ Thuc. 6.32.1–2, trans. Crawley (1910), slightly modified.

²⁴ On the *salpinx*, a reed instrument used to give military orders, see Krentz (1991).

VI. MARCHING AND ROWING

Xenophon, an experienced commander, stresses the importance of good order on the march. 'A disordered army is a complete mess, very easy to defeat for enemies and inglorious to see and utterly useless for friends – donkey, hoplite, porter, light-armed, horseman, wagon, all together. How can they march when they get in each other's way, one walking while another runs, one running while another is stopped, wagon interfering with horseman, donkey with wagon, porter with hoplite?' (*Oec.* 8.4). In a disorganized cavalry force men get in each other's way as they do when leaving a theatre (*Eq. mag.* 2.7).

What marching order, then, did Greeks use? They customarily let the part of the army take the lead that was best suited to the ground, whether hoplites, peltasts or cavalry. For a night march they arranged the forces in order from slowest to fastest, that is, hoplites first, then peltasts, then cavalry (Xen. *An.* 7.3.37–41). In the *Cyropaedia*, Xenophon's model commander, Cyrus, puts his cavalry first, then the wagons and pack animals, then the hoplites. When the road narrows, the pack animals go between the hoplites, who march on either side. The divisions march with their baggage next to them; the baggage commanders have orders to stay with their divisions. The division commander's porter carries a standard (a flag?) for the baggage carriers to follow, and the hoplites keep an eye on their own property (6.3.2–4).

The usual response to trouble was to march with the hoplites in a square, with the light-armed men and the pack animals inside. The first commander known to have used the square is Brasidas in 423 BC (Thuc. 4.125.2–3). The Athenians retreated from Syracuse in 413 in a similar formation (Thuc. 7.78.2), Agesilaus used the square when marching through Thessaly in 394 (Xen. *Hell.* 4.3.4; *Ages.* 2.2), and Timotheus did something similar as he passed Olynthus in 364 (Polyaenus, *Strat.* 3.10.7). Agesilaus divided his cavalry between front and back. Brasidas, who had no horsemen, put 300 picked troops to guard his rear. In Asia the Ten Thousand discovered the square's limitations: when the road narrowed the hoplites were squeezed out of formation, and when it widened again they were scattered and had difficulty regaining their formation (Xen. *An.* 3.4.19–23). The generals solved the problem by forming special *lochoi* of 100 men, each with a hierarchy of officers (*lochagoi*, *pentekonteres* and *enomotarchoi*, as in the Spartan army) who could keep their *lochos* together as it dropped back or moved ahead to fill the line.

Xenophon praises Agesilaus for marching in formation, moving as quietly as a modest virgin, whenever he knew the enemy could fight if they chose (*Ages.* 6.7). We should read this praise in contrast to the scene Xenophon describes immediately before the battle of Cunaxa, when Cyrus

was marching carelessly, riding on a chariot himself with only a few troops in order in front of him, while the greater part of his army proceeded in disorder, with much of the soldiers' fighting equipment being carried on wagons and pack animals (*An.* 1.7.19–20). Porters, at least, normally stayed with the hoplites until just before a battle began, ready to hand over the shields at the last moment.

Xenophon describes Spartan marching manoeuvres that other military instructors found difficult (*Lac.* 11.8–9). When marching in column, each *enomotia* follows the one in front of it. To widen his front into a battle formation, the commander has each contingent's leader (*enomotarchos*) advance to the front by the shield (that is, the left) side of the preceding *enomotia*. If the enemy appears in the rear, each file counter-marches, so the best men are always facing the enemy. This manoeuvre would put the commander on the left wing. If he wanted to be on the right, Xenophon says the Spartans could wheel the left flank and march in column to the right, until the commander reached his preferred position. These manoeuvres do not sound particularly difficult, but other Greek soldiers probably did have trouble with them. For instance, when Cleon tried to withdraw his men in front of Amphipolis in 422, Brasidas could tell by the movement of the Athenians' spears and heads that they were disorganized (*Thuc.* 5.10.5).

'To discover the enemy as far off as possible', Xenophon says (*Eq. mag.* 4.5), 'is useful both for attack and defence.' Cyrus always sends scouting patrols ahead and look-outs up to heights with a good view (*Xen. Cyr.* 6.3.2). Xenophon advises cavalry commanders to send attendants in front to find the best roads, and he says that in dangerous territory prudent commanders will send scouting patrols too (*Eg. Mag.* 4.4–5). Then he adds that although nearly everyone knows these precautions, few take them. Spartan practice was to send the Sciritae (a light-armed contingent?) and some horsemen ahead of the army (*Xen. Lac.* 13.6). Even the Spartans were surprised at Mantinea in 418 when they saw the enemy in battle formation a short distance away and had little time to prepare for battle themselves. But this case may be an exception: Thucydides says the Spartans were more dismayed than they could remember ever being (5.66.2).²⁵

How fast an army could march depended on the condition of the roads (or lack thereof) and the size and composition of the army and its baggage train. Roads may have been better than scholars usually assume. Y. A. Pikoulas' recent studies of roads in the Peloponnese have documented road networks in Greece, and he has hypothesized that construction techniques for wheel-roads spread from Mesopotamia to Persia to Ionia and reached

²⁵ Pritchett (1971–91) 1.127–33 argues that Greeks did not use scouts before the fourth century, but Russell (1999) 11–22 rightly replies that reconnaissance failures do not mean there was no reconnaissance.

the Cyclades, Attica and Laconia as early as the ninth or eighth centuries.²⁶ Dating wheel-ruts is an uncertain business, but it seems plausible that one ingredient in Spartan military success was an efficient road system.

Not surprisingly, the Spartans made the fastest reliably attested march: in 490 BC, 2,000 Spartans (plus porters?) hiked from Sparta to Attica, some 1,200 *stadia*, in three days, which works out at an impressive – indeed, unparalleled – average of about 70 km per day (Hdt. 6.120.1; Isoc. 4.87). In 415 the Syracusans made what Thucydides calls a ‘long march’ – about 50 km – from the River Symaethus back to Syracuse in one day, eager to defend the city against the Athenians (6.66). Demosthenes thought the Macedonians could march 700 *stadia* from Chaeronea to Athens in three days, about 41 km per day (18.195, 230).

These marches are exceptional. When Aristagoras of Miletus told Cleomenes that Susa was a three months’ journey from the sea, an estimate Herodotus approved (5.52–4), he was imagining 26 km progress every day for three months – out of the question for an army with a full baggage train. The figures in Xenophon’s *Anabasis* indicate that on his way to Cunaxa, Cyrus managed about 30 km per day, but because he rested slightly more days than he marched, his overall average was about half that. Greek campaigns involved much shorter distances, but we should still take 26 km per day as a reasonable maximum.

Ships moved much faster, perhaps achieving an average speed of 7–8 knots (nautical miles per hour).²⁷ Xenophon says that the journey from Byzantium to Heraclea was ‘a long day’s voyage for a trireme under oar’ (*An.* 6.4.2), a total of about 129 nautical miles or 236 km. The trip from Piraeus to Mytilene, some 184 nautical miles or 340 km, took one trireme, not hurrying, at least two full days; a second, rowed throughout the night to catch the first, made the journey in one day less (Thuc. 3.49). Fleets of course moved more slowly than individual ships. The only detailed account we have describes Mindarus reaching the Hellespont from Chios in two days. His 73 ships managed 65 nautical miles (120 km) the first day, and 124 nautical miles (229 km) the second, starting before dawn and arriving before midnight (Thuc. 8.101).

For a voyage, ships could have used their sails. But commanders could have trained inexperienced crews by having them row, as Iphicrates did on his way to Corcyra (*Xen. Hell.* 6.2.27–30). Xenophon’s description of

²⁶ Pikoulas (1995), (1999); Pritchett (1980).

²⁷ See Morrison et al. (2000) 94–106 for a succinct discussion of naval movements. In sea trials, the ‘floating hypothesis’ named *Olympias* has not yet achieved as much as 6 knots for a single hour, much less an average of 7 or 8 knots over an entire day. To my mind, there is much to be said for the criticisms of the Morrison–Coates hypothesis raised by Tilley (1992), (2000), (2004) and Jordan (2000), and the alternative possibility that triremes had two levels of rowers with three rowers in each cross-section, rather than three levels of rowers.

Iphicrates' journey also brings out how crews went ashore for meals and to spend the night, even in enemy territory. Other passages confirm that going ashore was regular practice. For example, Apollodorus stressed the hardship his crew had to endure when stormy weather and hostile troops prevented a landing, so that he had to spend the night at anchor in the open sea, without food and without sleep ([Dem.] 50.22).

Scouting detachments of ships appear by 480, when the Greeks sent three ships to Sciathus to watch out for Xerxes (Hdt. 7.179). When the Athenians sailed to Syracuse in 415, they sent ten ships ahead to see if the Syracusans had launched a fleet (Thuc. 6.50.4).

VII. CAMPS

When stopping for the night, Greek soldiers made a camp. Aristotle mentions a general's choice of campsite as an example of deliberation (*Eth. Eud.* 1227a), and Xenophon confirms that in the case of the Spartans the king determined the site of the camp (*Lac.* 13.10). A good site offered security, wood, pasturage and water.

Polybius commented that Greeks in contrast to Romans thought primarily of security from the natural strength of the position (6.42). Greeks liked to camp on hills which offered visibility and were difficult to attack, as the Plataean campaign in the Persian Wars illustrates (Hdt. 9.19–51). Positions beneath mountains were particularly vulnerable. In 370 Agesilaus had to extricate his army after he camped in the valley behind Mantinea in a spot surrounded by nearby mountains, and in 365 the Eleans, camped on rather level ground, were dislodged and defeated by the Arcadians, who seized the mountains above (Xen. *Hell.* 6.5.17, 7.4.13). Even the lower slopes of a mountain could be dangerous. When Agesilaus camped on an Acarnanian mountainside in 389, peltasts forced him to move by slinging and throwing stones from above (Xen. *Hell.* 4.6.7).

The camp needed a good supply of wood for campfires, shelters and stockades. With so many pack animals, fodder was an obvious concern. Philip II, who earned a reputation for reducing his baggage train, had to worry about food for the animals. Once he found a good spot for a camp, but learned there was no pasturage for the pack animals. 'What a life', he said, 'if we have to suit the donkeys' convenience' (Frontin. *Str.* 4.1.6; Plut. *Mor.* 178a). Xenophon persuaded the Ten Thousand to burn their tents and wagons, so that 'the draught animals won't be our generals' (Xen. *An.* 3.2.27). The animals needed a lot of water, too, especially in the summer: donkeys and mules drink 20 litres per day, oxen 30 litres. Armies often stopped by rivers.

Greek soldiers also liked camping in sanctuaries, which offered good practical advantages for military camps, since they were prepared to house

large numbers of visitors.²⁸ In addition to the inner precinct with the altar and temple set off by a low wall or a terrace, sanctuaries typically included a large outer precinct with trees and water. Of ninety-five fountains found by archaeologists in Greece, fully thirty-six were in sanctuaries, and sanctuaries often had many other installations for water as well: pools, pipes, channels, basins, springs, baths, cisterns, drains and wells.²⁹ Larger sanctuaries had amenities such as stoas, dining rooms and guest houses for visitors, and any sanctuary could at least provide shady areas for soldiers to erect temporary wooden shelters or tents. A sanctuary might even have shops, and archaeologists have found metal-working facilities at more than a dozen. In addition to votives, the workshops at Bassae, Kalapodi, Kommos and Philia produced weapons.³⁰ It would be hard to imagine a kind of place better suited to the practical needs of an army.

Polyaenus tells a story that illustrates the best and the worst possible campsites (2.30.3). Clearchus of Heraclea, who wanted to strengthen his position as dictator of Heraclea by eliminating many of the citizens, led his entire army out to besiege Astacus during the heat of the summer. He had the citizens camp in a marshy, windless spot full of standing water, while he and his mercenaries occupied high, shaded ground with running water. He then stretched out the siege until the citizen-troops died, and returned home blaming a plague for their deaths. Even for an overnight stop, high ground with trees and running water would have been preferable to a low-lying marsh full of stagnant water.

Greek camps, unlike Roman, did not follow a rigid pattern. According to Xenophon, the traditional Spartan camp was circular, 'since the corners of a square are useless' (presumably referring to the fact that a circle encloses the most possible space with the least perimeter to guard), except where it took advantage of a hill, wall or river for protection (Xen. *Lac.* 12.1). Scholars have disagreed about how commonly Greeks fortified their camps. The idea was certainly familiar, both through contact with Asia and through Homer. The Persians, who continued Assyrian traditions in this regard, dug ditches around their camps (Xen. *Cyr.* 3.3.26), and a late source says they filled sacks with the sand they dug out and piled the sand-bags up as a wall (Veg. *Mil.* 3.10). During their invasion of Greece, where they encountered very different soil, the Persians fortified their camp in Theban territory with a wooden stockade, complete with towers, 10 *stadia* wide, even though they had to cut down the trees of their allies to build it (Hdt. 9.15, 65, 70). The Greeks in the *Iliad* protected themselves with a ditch in front of a stockade with high two-leaved gates, towers and battlements.

In classical times a wooden barrier (*charax*) was more common than a ditch. Polybius comments that the Greeks of his day did not like digging

²⁸ Sinn (1993). ²⁹ Cole (1988). ³⁰ Risberg (1997).

ditches (6.42), an understandable feeling given the rocky soil in Greece. The *charax* might consist of thorny brushwood on top of a low field wall, or a stockade on top of the stones and dirt thrown up from a ditch, or simply a barrier of felled trees. Xenophon says that the Thebans regularly used this last method (*Hell.* 6.5.30). Perhaps the Spartans, who left their city unwalled, did not fortify their camps. On the other hand, Spartan camps must have had some boundary to be described as circular. Xenophon attests that the Spartans built a ditch and stockade in 392 (*Hell.* 4.4.9). Probably most generals did not bother to fortify their marching camps on friendly ground, but did in hostile territory, especially when they intended to stay in one place for an extended period. The Athenian Iphicrates dug a ditch and erected a stockade even in friendly territory. When asked what he was afraid of, he replied that a good general should never have to say 'I didn't think that . . .' (Plut. *Mor.* 187a; Polyaenus, *Strat.* 3.9.17).

Polybius comments that because the Greeks adapted their camps to the terrain, they had no fixed interior arrangements. Classical Greeks knew the idea of 'everything in its place': Xenophon's *Cyropaedia* describes the legendary Persian king's camp arrangements, which included the king's tent facing east, his guards quartered a certain distance away, then the bakers on the right, the cooks on the left, the horses on the right, the pack animals on the left (8.5.3). Cyrus has the men of each *taxis* not only sleep together, but sleep in the same tent (Xenophon imagines tents that will hold 100 men!), and even in the same position relative to one another, as precisely as when they were marching single file. They also eat together, to build strong personal friendships (*Cyr.* 2.1.25–8). How far this theory reflects Greek practice is unclear. The word *lochos*, from the Homeric verb *legô*, meaning 'to put to bed', probably means 'men who sleep in a group'. The mercenaries in Xenophon's *Anabasis* march, sleep and forage in regular groups (5.8.5, 7.3.15). An anecdote in Polyaenus suggests that both the Spartans and the Thebans normally slept and ate in the same units in which they fought (*Strat.* 2.3.11), but an anecdote in Plato's *Symposium* has Alcibiades and Socrates, who came from different Athenian tribes, eating together during the Potidaean campaign (219e).

Soldiers slept on the ground, on beds of reeds if available, by their armour and weapons. Iphicrates tricked the enemy by having two soldiers use a single bed, if he wanted the enemy to think he had fewer men than he did, or having each soldier make two beds, if he wanted the enemy to fear his large numbers. Then he moved to another site so the enemy could observe the beds (Polyaenus, *Strat.* 3.9.19). Troops often erected tents (*skenai*).³¹

³¹ Anderson (1970) 62 suggests that *skenai* were often wooden lean-tos or huts, on the grounds that if *skenai* were tents the Athenians would have taken down and stored the *skenai* burned by the Syracusans at Catana in 415 (6.75.2). But the Athenians may have intended to return to Catana that winter (see Thuc. 6.72.1), and elsewhere *skenai* are undoubtedly tents made of leather (Xen. *An.* 1.5.10, 3.2.27).

Men ate twice a day, once at mid-day and once in the evening. An army on the march, such as Cyrus' Ten Thousand, would normally hike until they made camp and took the mid-day meal. On the day of the battle of Cunaxa, for example, 'at the time of the full market', some time before 'mid-day', Cyrus' forces had almost reached the spot where he intended to camp, where they would have had their *ariston*, the first meal of the day (Xen. *An.* 1.8.1, 8.8, 10.19). Preparing and cooking their barley *maza* would have taken perhaps two hours if the grain had to be ground. Some scholars have maintained that hot *maza* was a sort of porridge; others think it was baked in the coals, or pan-fried on a clay griddle into a flatbread.³² The Spartans had cooks (Hdt. 6.60), who made their infamous black broth, but in other armies soldiers, or their attendants, cooked for themselves. Arrangements were quite casual. In 366, when Chares surprised the Sicyonians building a fort at Thyamia just before sunset, he found 'some bathing, some cooking, some kneading, and some making their beds' (Xen. *Hell.* 7.2.22).

Camps did not have regular latrines, for Xenophon says Spartans 'going off for necessary purposes were not allowed to go farther from the others or their weapons than was necessary to avoid giving offence' (*Lac.* 12.4). The rule aimed at safety. When the troops sent out by the Thirty in 403 were just waking up and each was going 'where he needed to go' away from his weapons, Thrasybulus launched a successful surprise attack (Xen. *Hell.* 2.4.6).

We know little about soldiers' entertainment in camp. The Spartans were required to exercise before breakfast and again before dinner. In between, there were 'amusements and recreations' (Xen. *Lac.* 12.5–6). After dinner individual Spartans sang songs of Tyrtaeus, and the singer judged best received a prize of meat (Philoch. *FGrH* 328 F216). Before going to bed, they all sang in praise of the gods from whom they had obtained good omens in a sacrifice (Xen. *Lac.* 12.7). Life in camp was not necessarily exciting. Some Ionians at Potidaea brought their bedding outside so they could see how long Socrates would stand still, lost in thought. They must have become quite bored, since he did not move until dawn (Pl. *Symp.* 220c).

Good military practice required posting sentries.³³ In the *Iliad* seven Greek commanders, each with 100 men with spears, take their positions between the ditch and the stockade where they kindle fires and eat supper (9.80–8). Checking on them later, Nestor and the other kings find them wide awake, sitting by their weapons, as restless as sheepdogs who hear a wild animal (10.180–9). The Trojans have similar sentries and watchfires, but their allies are more careless and leave the job to the Trojans (10.418–22).

³² Braun (1995) 28–30 suggests that *maza* was made from roasted barley, kneaded with water, milk or oil and eaten raw. Braun tried it and pronounced it 'tasty', though it became mouldy in his refrigerator after two days. Greeks preferred a hot meal in the evening; see Xen. *Hell.* 4.5.3–4.

³³ Russell (1999) 24–37 has a good discussion.

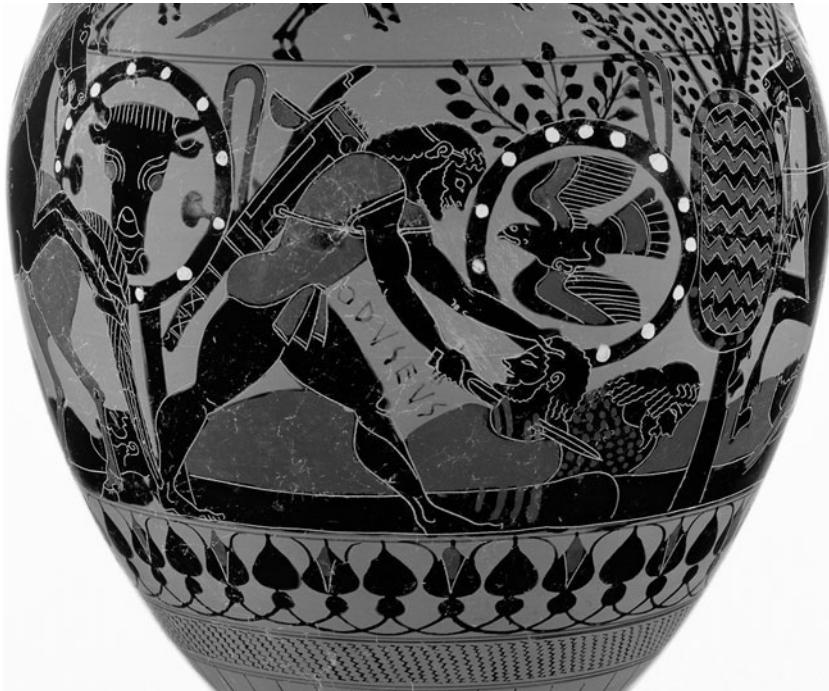


Figure 6.2 Night raid on an enemy camp: Odysseus massacres a group of sleeping Thracians whose shields and swords are suspended from trees or shrubs, on a Chalcidian amphora of c. 540 BC.

Even the Thracians, who are camped separately, have no sentries. Odysseus and Diomedes, on a night raid, kill thirteen of them and steal Rhesus' horses (fig. 6.2). Later Greeks absorbed the lesson well, and sentries were as normal a part of camp life as they were of a city under siege. Greeks divided the night into four watches, which Aeneas Tacticus recommends be timed by a water-clock, reset every ten days by adding or removing wax in order to change the clock's capacity as nights grow longer or shorter (18.21). According to one story, the Spartan king Agesipolis used dogs to patrol the outside of the camp (Polyaenus, *Strat.* 2.25). Xenophon says that the Spartans posted day-time sentries as well, facing *in* to keep an eye on what was going on inside the camp, while cavalry watched the enemy from high places outside (*Lac.* 12.2).

When the march reached enemy territory the first order of business was to make camp. One incident might give the false impression that the Greeks like the Romans had an *evocatio* ceremony that invited the enemy's gods to desert. In 429 Archidamus prayed to the gods and heroes of Plataea, claiming not to be the aggressor and asking them to punish the Plataeans,

who rejected fair Spartan proposals (*Thuc.* 2.74.2). He made this prayer, however, only after the Plataeans had come out and objected to the invasion. When Archidamus first invaded, he made camp and was about to ravage the land when the Plataean representatives arrived (2.71.1). His prayer was not a normal part of a Spartan campaign.

VIII. DEFENDERS' OPTIONS

While the invaders were gathering and marching their men, pack animals and supplies, their enemies had important decisions to make. Small raiding parties might catch an enemy by surprise, and for that reason they were common in wars between neighbours. In the winter of 419/18, for example, the Argives and Epidaurians fought by raids and ambushes, with no battles (*Thuc.* 5.56.4); in 382 the Olynthians, defeated by the Spartans in battle, raided the territory of Sparta's local allies, taking loot and killing people (*Xen. Hell.* 5.2.43). Major invasions, however, were hard to conceal. Usually attackers could only hope to catch their opponents off-guard by a cavalry attack or a naval assault. Almost always the defenders knew the attack was coming; the Thebans achieved a rare success in 373 when they caught the Plataeans out in their fields and compelled them to leave their city for ever (*Diod. Sic.* 15.46.4–6). Defenders had a number of options, and must have weighed many different variables in deciding what to do.

Modern scholars, including the influential A. W. Gomme,³⁴ have commented on the 'paradox' that in such a mountainous country as Greece not a single state developed a light-armed force to block the passes. The 'paradox' is usually explained by the supposed agonal character of Greek warfare, maintained by farmers who did not want to lose their social status or political power. But all the passes in Greece south of Thessaly can be turned by alternate routes, and even if all the passes were held, most Greek *poleis* were close to the sea, and hoplites might arrive by ship. Boeotia in the 370s is an excellent test case. In 376 the Thebans and Athenians did successfully hold the passes of Mt Cithaeron against Cleombrotus' Peloponnesian army (*Xen. Hell.* 5.4.59). But in 379 Cleombrotus got through by switching routes when he found his way blocked (5.4.14). In 378 and 377 Agesilaus or his friends occupied Cithaeron before the Thebans got there (5.4.36–7, 47). After his failure in 376, Cleombrotus went to Phocis by sea in 375, and in 371 he invaded Boeotia from Phocis by a difficult route when the Thebans were guarding an easier one (6.1.1, 4.1–4).

J. Ober has argued that fourth-century Athens built a line of forts and towers as part of a comprehensive strategy to avoid a repetition of the

³⁴ Gomme et al. (1945–81) 1.10–15; for a rebuttal, see Holladay (1982) 98–9.

destructive invasions in the Peloponnesian War.³⁵ Apart from the difficulty of dating the constructions, however, some of them seem more likely to have been Boeotian than Athenian. Archidamus' failed assault on Oenoe at the start of the Peloponnesian War shows that a fort could not stop an invader, but could serve as an effective refuge for Athenians in the area (Thuc. 2.18–19). Neither troops nor fortifications could keep determined invaders out.

A scene in Euripides' *Phoenician Women* portrays defenders' options vividly (710–53). Hearing of the Argives' invasion, the Theban commander, Eteocles, first wants to lead his men out to fight. Creon persuades him that the Thebans are too badly outnumbered; 'winning is entirely a matter of good planning', and Eteocles should try every possibility rather than take a chance on a single battle. Eteocles then suggests an ambush by night, or a surprise attack at mealtime, or a cavalry charge. Creon objects to all of these suggestions; they are too risky, or will not produce a decisive result. Eteocles finally gives in to Creon's advice and decides to defend the city walls.

Eteocles never considers two more desperate possibilities. If the defenders judged the city unlikely to hold out, they could run or capitulate. When the Mede came, the Byzantines, Chalcedonians, Naxians, Phocians and even the Athenians abandoned their cities. Though the odds were never so overwhelming when Greek invaded Greek, we know that Greeks took to the hills on other occasions too: for instance, the Phocians disappeared into the folds of Mt Parnassus before their famous night-time trick when they convinced the Thessalians they were seeing ghosts (Hdt. 8.27). Alternatively, the defenders might reach an agreement with the invaders. The Thasians and the Thebans submitted to the Persian fleet and army, respectively. The Eleans, after suffering a minor invasion one year, a major one the next, capitulated to the Spartans in the third year and agreed to let their neighbours be independent (Xen. *Hell.* 3.2.30). After Brasidas threatened to destroy their grapes, the Acanthians opted to believe his sweet talk about liberation from the Athenians and went over to his side (Thuc. 4.84–8).

If they had enough soldiers or ships to match the invaders, defenders usually chose to fight, hoping to protect their crops, their livestock and their movable property. But battles were relatively rare. In the twenty-seven years of the Peloponnesian War, Thucydides and Xenophon report forty-seven battles in the Greek world (see Table 6.2). They mention 101 separate poliorcetic incidents (assaults on or sieges of cities),³⁶ plus numerous other invasions limited to ravaging. There is no reason to think battles had ever been more common. It is a modern myth that the typical Greek hoplite

³⁵ Ober (1985a); for rebuttals, see Camp (1991); Munn (1993) 18–25; Cooper (2000).

³⁶ Rusch (1997).

Table 6.2 *Land battles in the Peloponnesian War*

Reference	Date	Place	Invader	Defender
Thucydides				
2.25.3	431	Pheia	Athenians	Eleans
2.26.2	431	Alope	Athenians	Locrians
2.69.2	430/29	Lycia	Athenians	Lycians
2.79	429	Spartolus	Athenians	Chalcidians
2.81–2	429	Stratus	Chaonians	Stratians
3.5.2	428	Mytilene	Athenians	Mytilenians
3.7.4	428	Nericus	Athenians	Leucadians
3.18.2	428	Antissa	Methymnians	Antissans
3.90.2	426	Sicily	Syracusans	Athenians
3.91.3–5	426	Mylae	Athenians	Messanians
3.91.3–5	426	Tanagra	Athenians	<i>Tanagrans and Thebans</i>
3.97–8	426	Aegitium	<i>Athenians and allies</i>	<i>Aetolians</i>
3.99	426	Locris	Athenians	Locrians
3.103.3	426/5	Locris	Athenians	Locrians
3.107–8	426/5	Olpae	Athenians	<i>Peloponnesians and Ambraciots</i>
3.115.6	426/5	Locris	Athenians	Locrians
4.25.7–9	425	Naxos	<i>Mesanians</i>	<i>Naxians</i>
4.25.10–II	425	Messana	<i>Leontinians and Athenians</i>	<i>Mesanians</i>
4.42–4	425	Solygeia	Athenians	Corinthians
4.54.2	424	Cythera	Athenians	Cytherans
4.56.1	424	Cotyrtia	Athenians	Spartan garrison
4.72	424	Nisaea	<i>Athenian cavalry</i>	<i>Boeotian cavalry</i>
4.75.1	424	Antandrus	Athenians and allies	Mytilenians
4.91–101.2	424	Delium	Athenians	Boeotians
4.101.3–4	424	Sicyon	Athenians	Sicyonians
4.124	423	Lyncestis	Peloponnesians	Macedonians
4.134	423/2	Laodoeum	Mantineans	Tegeans
5.7–II	422	Amphipolis	Athenians	Brasidas and allies
5.51	420/19	Heracleia	Aenianians and allies	Heracleots
5.66–76	418	Mantinea	Spartans and allies	Mantineans and allies
6.66–71	415/14	Syracuse	Athenians and allies	Syracusans and allies
6.97	414	Epipolae	Athenians	Syracusans
6.101	414	Syracuse	Athenians	Syracusans
7.5.1–3	414	Epipolae	Athenians	Syracusans
7.6	414	Epipolae	Athenians	Syracusans
7.50.2	413	Euesperitae	Peloponnesians	Libyans
8.24.1	412	Panormus	Athenians	Spartans and Milesians
8.24.3	412	Cardamyle	Athenians	Chians
8.24.3	412	Phanae	Athenians	Chians
8.24.3	412	Leuconium	Athenians	Chians
8.25	412	Miletus	Athenians and allies	Milesians and allies
Xenophon, <i>Hellenica</i>				
1.2.2–3	409	Pygela	Athenians	Milesians
1.2.7–9	409	Ephesus	Athenians	Ephesians and allies
1.2.16	409/8	Abydus	Athenians	Pharnabazus' cavalry
1.2.18	409/8	Heraclea	Oetaeans	Heracleots and Achaeans
1.3.5–6	408	Calcedon	Athenians	Spartans and Calcedonians
1.4.22	407	Gaurium	Athenians	Andrians and Laconians

Key: **Bold type** = invaders came by land

Normal type = invaders came by sea

Italic type = invaders came by land and sea

walked out of town every summer, or even every other summer, and fought in a pitched battle.

Polyaenus tells a revealing story about Cleandridas, who had one and a half times as many men as did the enemy Lucanians (*Strat.* 2.10.4). He deepened his formation for fear that if the enemy realized the size of his army they would not fight. Once they were committed to battle he extended his line and won a great victory. The story suggests that Greeks would not fight when outnumbered by a ratio greater than 3:2, and when we have reliable figures they do typically fall somewhere between a 3:2 and a 1:1 ratio. Most land battles in the Peloponnesian War were fought against seaborne infantry because defenders felt they had a chance against the smaller number of invaders, typically no more than a few thousand (see Table 6.1).

Refusing to fight a far greater opponent was perfectly acceptable according to Homeric ethics, and it was the norm in classical Greece. As the Athenians told the Melians, manliness and shame were at stake only in an evenly matched contest (*Thuc.* 5.101). When the Athenians invaded Megara twice every year with all their forces, they no more expected the Megarians to fight than the Athenians themselves fought when the Spartans invaded with two-thirds of the Peloponnesian League's forces. In the fourth century Aeneas Tacticus recommends that defenders do not respond to an invasion immediately (16.5–8). Instead, he suggests, let the enemy devastate your land. Wait until they become reckless and perhaps even drunk and disobedient. Wait until they disperse to loot, and then counterattack.

Naval battles were even more rare than battles on land. The first known naval battle of Greeks versus Greeks occurred in the seventh century (*Thuc.* 1.13.4), and state fleets of purpose-built warships really became common only in the fifth century.³⁷ Even then, Athens' dominance at sea meant naval battles were uncommon until the Sicilian expedition. The Athenians' failure in Sicily, coupled with Persian money, encouraged their opponents to fight repeatedly at sea.

IX. LOOTING AND RAVAGING

Unless the enemy came out to fight immediately, invaders promptly began to 'cut and burn' the land and 'carry and drive' whatever loot they could get their hands on. As A. Bernand says, 'La guerre est un continual brigandage.'³⁸ Men would look for grain, wine, farm equipment, animals, people – whatever they could eat, or use, or sell. They stripped houses and farm buildings of bronze and iron implements and wood trim; during the Decelean War the Thebans even carted off the Athenians' roof tiles. Xenophon

³⁷ See ch. 8 in this volume; and Wallinga (1993) 16–17; de Souza (1998); Scott (2000).

³⁸ Bernand (1999) 341. For a comprehensive study of booty: Pritchett (1971–91) v.68–541.

calls the allied invasion of Elis in 401 a ‘provisioning (*episitismos*) for the Peloponnese’ (*Hell.* 3.2.26).

Unless they were surprised, defenders would try to get their portable belongings out of the way – to a walled city, a rural fort or sanctuary, hidden storage facilities in the hills, or friendly territory. But evacuation efforts were always incomplete. Thucydides tells us that at the beginning of the Peloponnesian War the Athenians brought their children, wives, household furnishings and even their woodwork into Athens, while they sent their sheep and cattle to adjacent islands (2.14.1). Later, however, he says that the common people were deprived of the little they possessed, and the rich lost fine properties with their furnishings (2.65.2).

What could not profitably be looted might be destroyed. In his valuable study of ravaging during Greek warfare, V. D. Hanson has shown that systematic crop devastation was difficult.³⁹ Permanent agricultural damage was rare. Temporary losses, however, could be crippling for a peasant farmer. While it is difficult to kill a mature olive or fig tree without digging out the roots, it is not difficult to destroy the year’s crop. The threat to trees was sometimes expressed in clever one-liners. ‘Don’t be insolent,’ Stesichorus told the Locrians, ‘so your cicadas don’t sing from the ground’ (*Arist. Rh.* 1395a, 1412a). When Alexander of Pherae offered cattle at a low price to his new Athenian allies, Epaminondas of Thebes commented ‘We’ll supply them free wood to cook their meat, for we’ll cut down everything in their land if they make trouble’ (*Plut. Mor.* 193e17). Greek armies could cut a lot of trees in a hurry: In 428 Archidamus’ men cut enough fruit trees to erect a stockade around the entire city of Plataea in a single day; on another memorable day, the Athenians built a stockade around their fleet at Syracuse (Thuc. 2.75.1, 6.66.2). One story said that after invading Boeotia, the Spartan king Agesilaus moved his camp two or three times a day so that his troops would have to cut down many trees for their own use (Polyaenus, *Strat.* 2.1.21).

In a few days or weeks – the longest invasion of Attica in the Peloponnesian War lasted forty days – invaders could not cut literally all the grain of a large *polis*, given that the cereal harvest stretches over a long period. It is amusing to read that under Agesilaus’ leadership the Spartans ravaged ‘all’ the Argives’ land in 391, only to hear that in the following year Agesipolis, like a competitor in the pentathlon, learned from the soldiers how far Agis had gone and tried to ravage more land than Agis had (*Xen. Hell.* 4.4.19, 4.7.5). The Argive invasion of Epidaurus in 419, which Thucydides estimates ravaged a third of Epidaurian land (5.55.4), may have been more typical.

³⁹ Hanson (1998).

It is a mistake to think that hoplites always marched in a tight formation, with their slave attendants glued to their sides, so that only the light-armed troops ravaged enemy land. Thucydides explains that Archidamus kept his troops in formation during the first invasion of the Peloponnesian War because the usual practice was to spread out, once it became clear the enemy would not fight – indeed Thucydides says Archidamus reasoned that if the Athenians did not fight at first, the invaders could ravage the plain more fearlessly in the future (2.20.4). When the Selinuntines invaded Segesta in 410 they first deployed in battle formation and ravaged the land, but then, since they were far superior to their enemies, they scattered over the countryside (Diod. Sic. 13.44.3). The greater the number of soldiers, the more likely they were to scatter, as Xenophon remarks in his advice to cavalry commanders (*Eq. mag.* 7.9). Even in formation, hoplites could cut grain. Because they walked across real plains, not parade grounds – real plains full of field walls, scattered buildings, ditches and trees – they must have marched in a formation loose enough to let them work, and most hoplites were well acquainted with a sickle and an axe.

Slaves and rowers also participated in looting and ravaging. For ideological reasons the extant sources downplay slaves' role in Greek warfare,⁴⁰ but on one occasion, at least, we do hear of attendants (*akolouthoi*) scattering for plunder: in 395, near Sardis, the Persian cavalry's attack on the dispersed attendants gave Agesilaus an opportunity he seized to defeat the Persians with his united forces (Xen. *Hell.* 3.4.22). Nor is it credible that rowers sat quietly beside their ships during naval ravaging expeditions. If neither hoplites nor rowers participated in looting and ravaging, who did, when Pericles ravaged Laconia in 431 with 100 triremes carrying 1,000 hoplites and 400 archers (Thuc. 2.23.2, 25.1–2)? Only the archers?

Invaders could therefore do real damage to the annual harvest. They could also damage the agricultural infrastructure: vine stakes and trellises, beehives, wine-treading floors, threshing-floors, olive presses, irrigation channels, houses, and outbuildings (barns, stables, storage bins) were scattered around the Greek landscape. The labour force, if not evacuated, was vulnerable too: slaves might be liberated or captured, draught animals roasted or led away. The loss of oxen was triply costly: they worked, they provided food, and they supplied manure (a character in Aristophanes (*Ach.* 1022–6), complaining that the Boeotians have taken his oxen, stresses the loss of his fertilizer).

We should therefore give full weight to the many references to farmers' fears. It is not surprising that, as Aeneas Tacticus notes (7.1), 'An enemy in the vicinity at harvest time will probably mean that much of the population will remain in the countryside nearby, fearful for their crops.' They had a lot

⁴⁰ Hunt (1998).

to lose. In the third century Athens included preserving the harvest among the reasons for honoring generals.⁴¹ When defenders did choose to fight for what Aeneas Tacticus calls ‘the fundamentals – shrines and fatherland and parents and children and so on’, a victory meant ‘safety, intimidated opponents, and the unlikelihood of attack in the future’ (Preface 2).

X. BATTLES AND THEIR AFTERMATH

Chapter 7 will discuss combat; this description of military campaigns will resume when the fighting stopped. By the middle of the fifth century unwritten rules governed the end of battles. The victors claimed victory by erecting a simple trophy (*tropaion*) at the place where the enemy turned to flee (*tropaion* derives from the same root as *trepein*, ‘to turn’) (fig. 6.3).⁴² The trophy consisted of captured armour and weapons hung on a post or tree stump. After the battle of Coronea in 394 Agesilaus had his men deploy in line of battle, erect a trophy and put on garlands, while the pipers played (Xen. *Hell.* 4.3.21). Presumably they sang a paean; the Phliasians loudly sang a paean, ‘as was natural’, when they erected a trophy in 366 (Xen. *Hell.* 7.2.15). On one occasion Xenophon mentions a sacrifice in connection with the erection of a trophy (*An.* 4.6.27), and we should probably imagine a sacrifice as a regular part of the ceremony, left unmentioned because it was so common.

The losers admitted defeat by formally requesting a truce to bury their dead. In the *Iliad* requests for a burial truce do not imply an admission of defeat. But by the time of the Peloponnesian War the request conceded the victory. Victors normally granted the truce, after stripping the enemy corpses – it was noteworthy when, after the battle of Peiraeus in 403, the democratic rebels did not take the tunics from the oligarchs’ corpses (Xen. *Hell.* 2.4.19). In rare cases the winners refused to allow the retrieval of the enemy dead, claiming the enemy had committed sacrilege. After the battle of Delium in 424 the Thebans did not permit the Athenians to bury their dead until they had recovered the sanctuary of Apollo that the Athenians had fortified, seventeen days after the battle (Thuc. 4.97.2–101.1). Similarly in 355 the Locrians refused to permit the burial of Phocian dead, since the Phocians had seized and fortified Delphi (Diod. Sic. 16.25.2).

Some evidence suggests that Greeks mutilated their enemies’ corpses.⁴³ Tyrtaeus’ reference to a dead man holding his genitals might refer to a macabre joke (fr. 10.21–5 West). The story that in the Second Messenian War the Spartans tied sticks inscribed with their names to their left hands

⁴¹ *SEG* xxviii 60.23–7; *IG* II².682.35–6 and 1299.66–7.

⁴² Pritchett (1971–91) II.246–75; Krentz (2002) points out that trophies do not appear in either literature or vase-painting before the 450s BC.

⁴³ Tritle (1997), (2000); see also Lendon (2000).

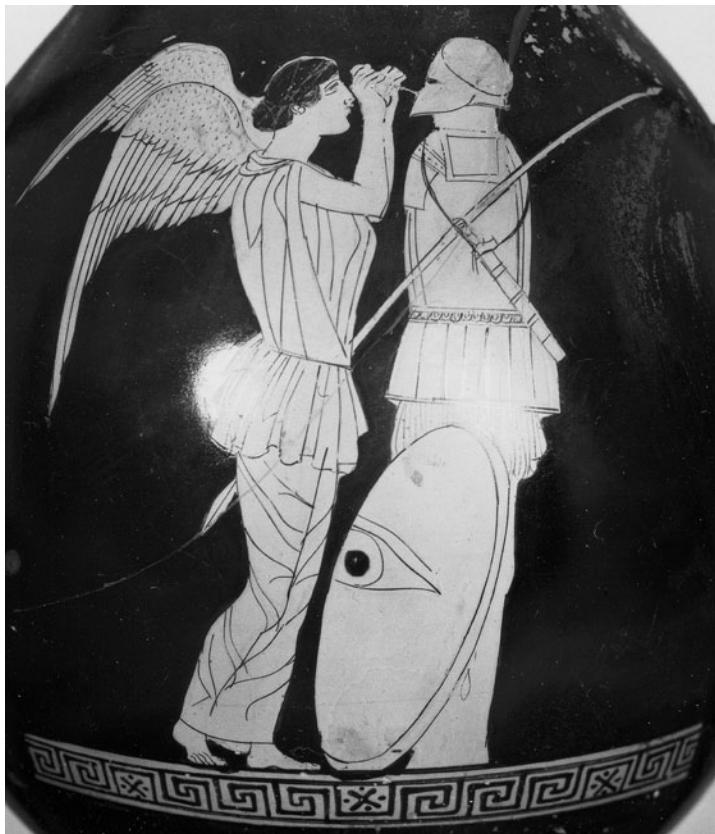


Figure 6.3 One of the earliest representations of a *tropaion*, on an Attic vase of c. 450 BC. A winged goddess of victory is shown attaching a full set of hoplite arms and armour to a stripped tree trunk.

suggests that they expected horrible treatment if they fell (Diod. Sic. 8.27.2; Polyaeus, *Strat.* 1.17). In the *Iliad* mutilation occurs not infrequently. The gods disapprove. Nevertheless, the psychologist J. Shay has shown that Homer accurately portrays a warrior's intense emotional reaction to the death of a close friend, and under stress later Greeks may also have done what they knew the gods did not approve.⁴⁴

Even if they were not mutilated, identifying nude, disfigured bodies must sometimes have been difficult.⁴⁵ Friends and relatives must have looked through the corpses and reported to their officers, who had lists of

⁴⁴ Shay (1994).

⁴⁵ Vaughn (1991). On the burial of Greek war dead, see Pritchett (1971–91) IV.94–259.

names. After their victory at Solygea in 425, the Athenians saw Corinthian reinforcements coming before they had retrieved all of their dead, and hurriedly withdrew to the nearby islands, from which they had to send a herald requesting a truce to recover the two missing bodies (Thuc. 4.44.4–6). Symbolically this request turned the victory into a defeat, as Plutarch points out (*Nic.* 6.5). But the Greeks expected their generals to recover corpses. As Onasander wrote (*Strat.* 36.1–2), a general should make sure his dead are buried, both to show reverence to the dead and to demonstrate to the living that they will receive similar consideration when they die.

Weather conditions in Greece precluded taking the bodies home for burial for all but the closest campaigns. The Athenians cremated their dead. In the Persian Wars they buried the remains at Marathon (Thuc. 2.34.5) and Plataea (Hdt. 9.85.2). Later they normally brought the ashes, bones and teeth home for burial; starting probably in the 460s they held the annual funeral ceremony described by Thucydides (2.34). The Spartans preferred to bury their dead by inhumation, on the field of battle or in the territory of an ally close by, as after the battle of Mantinea in 418 when they brought the bodies to Tegea (Thuc. 5.74.2). Only a king, such as Agesipolis who died on campaign in the Chalcidice (Xen. *Hell.* 5.3.19), or Agesilaus, who died on his way home from Egypt (Diod. Sic. 15.93.4), was carried home, packed in honey, for a royal burial. The evidence for what other Greeks did is rather scattered. The Plataeans who fought at Marathon were buried, like the Athenians, on the spot, together with the slaves (Paus. 1.32.3); if S. Marinatos has correctly identified a mound at Marathon with the remains of ten adult males and one boy as the Plataeans' tomb, they were inhumed.⁴⁶ All the Greeks who fought at Plataea were buried there – Herodotus says cities that did not fight, embarrassed at their absence, erected (empty) tombs there later (Hdt. 9.85). The Argives who died at Tanagra in 457 were buried at Athens, as we know from their casualty list (*IG I³* 1149). The 254 skeletons found under the lion at Chaeronea are probably the remains of the Theban Sacred Band from the 338 battle against the Macedonians; two were cremated, the rest inhumed.

Naval battles also resulted in trophies. In fact, the earliest literary reference to a battlefield trophy is to the naval battle of Leucimne in 434 (Thuc. 1.30.1), and no fewer than sixteen of the eighty-eight references to trophies in Thucydides and Xenophon follow victories at sea. Naval trophies were erected on nearby shores, but not necessarily at the nearest spot. In one instance, a victorious Peloponnesian fleet sailed more than 80 km to erect a trophy in enemy territory, evidently to make a statement (Thuc. 8.42.5).

Winners in naval battles normally returned the enemy dead from captured ships, and permitted the losers to recover what corpses they could

⁴⁶ Petrakos (1995) summarizes the evidence for and against the conclusion of Marinatos (1970).

from the water. Retrieving bodies at sea, however, must be done within a few hours, before the corpses sink. Bacterial action produces enough gas to bring the bodies back to the surface within a few days, but by then they might scatter widely. After the naval battle of Arginusae in 406 the Athenian generals did not turn immediately to rescuing the men and recovering the dead. When a storm came up, most were lost, and corpses littered the coasts of Cyme and Phocaea. Despite the storm, the Athenians held the generals responsible and executed the six who returned to Athens.⁴⁷

XI. EPITEICHISMOS AND SIEGES

If the aggressors lost, the invasion was over. But if they won, the battle might not terminate the campaign any more than Greek victories in the Trojan plain decided that legendary conflict. If the defenders had good fortifications, either around one town or in scattered forts, they could move inside the walls just as the Trojans did in the *Iliad* (21.606–11):

all this time the rest of the Trojans fled in a body
gladly into the town, and the city was filled with their swarming.
They dared no longer outside the wall and outside the city
to wait for each other and find out which one had got away
and who had died in the battle, so hastily were they streaming
into the city, each man as his knees and feet could rescue him. (trans. Lattimore)

These lines would describe what happened after a number of classical Greek battles. In 468, for example, the Argives, Cleoneans and Tegeans defeated the Mycenaeans, but had to besiege the city.⁴⁸ In 389 the Athenians beat the Methymnaeans and shut them inside their walls.⁴⁹ Aeneas Tacticus advises special care in guarding the walls if the army is demoralized after a defeat in battle (26.7). Men on top of the city walls would normally deter the pursuers from coming too close, and the defeated soldiers would get through the gates, which were then quickly shut behind them. There were exceptions: Charidemus once captured Ilion when a horse fell in the gateway, preventing the gate from closing (*Plut. Sert.* 1.3).

Whether most archaic Greek cities had circuit walls is a bedevilling question. P. Ducrey and J. Camp have suggested that a wall could be considered a defining characteristic of a *polis*.⁵⁰ Relatively few archaic walls have been found. There is no trace of one at Athens, for example, though both Herodotus and Thucydides attest a pre-Persian city wall there. Constructed of mudbrick on a stone socle, such walls might have turned back into mud, and lost their stones to later, wider circuits. Certainly most cities had ‘great

⁴⁷ Xen. *Hell.* 1.6.34–7.35; Diod. Sic. 13.100–2. ⁴⁸ Diod. Sic. 11.65.2–5; Paus. 5.23.3, 7.25.5–6.

⁴⁹ Xen. *Hell.* 4.8.28–9; Diod. Sic. 14.94.4. ⁵⁰ Ducrey (1995); Camp (2000).

circuit' walls by the classical period, for they are the norm in Thucydides. Even without a wall, a town would not be easy to capture. When the Thebans invaded Laconia after the battle of Leuctra, the Spartans successfully defended their unwalled city by blocking the entrances and alleyways with baskets of earth and stones taken from demolished houses, fences and walls, and putting bronze tripods in the middle of the streets (*Aen. Tact.* 2.2). Wagons could also block streets while women and slaves dropped roof tiles down on enemy heads (*Aen. Tact.* 2.5–6), roof tiles that might weigh up to 30 kg.⁵¹ (In this ignominious way king Pyrrhus of Epirus later died in Argos.) It is understandable why Agis stopped short of the unwalled city of Elis in 401 (*Xen. Hell.* 3.2.26–7).

Even if they won a battle, therefore, invaders might face the choice of ravaging more thoroughly, assaulting the city directly, or beginning a siege. Most often they preferred the first, least dangerous option. The defenders could then use cavalry, if they had it, to restrict the ravaging, as the Athenians did during the Peloponnesian War, or as the Thessalians did when the Athenians tried to restore Orestes to Pharsalus in 454. Without fighting a battle, the Thessalian cavalry prevented the Athenians from controlling anything beyond the immediate vicinity of their camp (*Thuc.* 1.111.1). Light-armed troops could help too: in 378 Phoebidas' peltasts frightened the Theban mule-drivers into throwing away the produce they had plundered from Thespiae (*Xen. Hell.* 5.4.42).

A single ravaging expedition seldom made defenders capitulate. In the half century after 417/16, the little *polis* of Phlius was invaded no fewer than nine times, usually by its powerful neighbour Argos. The only invasion that produced a capitulation was that of Agesilaus in 381, which led to a siege and, a year and eight months later, a surrender (*Xen. Hell.* 5.3.10–18). Repeated invasions might suffice. In 400 the Eleans came to terms rather than undergo a third invasion (*Xen. Hell.* 3.2.30), and in 431 the Peloponnesians thought (wrongly, as it turned out) the Athenians might hold out for one, two, or at most three years before submitting (*Thuc.* 7.28.3).

A strategy to ravage more effectively was *epiteichismos*, the fortification of a permanent post on enemy land. In his speech to the Athenians before the outbreak of the Peloponnesian War, Pericles tells the Athenians not to fear a Spartan fort in Attica, for while it might harm Athenian land and provide a refuge for deserters, it could not stop the Athenians from sailing to the Peloponnese and fortifying spots there for the same purpose (*Thuc.* 1.142.2–4). In fact the Athenians tried *epiteichismos* first, with the fortification of Pylos in 425. The fort survived a combined land and sea assault by the Spartans, and served as a refuge for escaped helots until

⁵¹ Barry (1996).

409.⁵² The Spartan fortification of Decelea in 413 proved a great success. Even when the Peloponnesians were not present in force to ravage Attica, the garrison looted the countryside. Thucydides laments that more than 20,000 slaves deserted, most of them skilled workers; that all the sheep and draught animals were lost; that some of the horses were lamed by daily rides to raid Decelea and to guard the country, while others were wounded by the enemy; that provisions had to be imported by sea from Euboea, rather than by the overland route from Oropus past Decelea; and that the Athenians were worn out by keeping constant guard on their walls (Thuc. 7.27.4–28.2).

Military historians have wondered why the Spartans waited so long to fortify Decelea. According to Thucydides, it actually took an Athenian in exile, Alcibiades, to make the suggestion (6.91.6–7). The overall history of *epiteichismos*, however, shows that it worked only in certain circumstances. The Athenians had some success at Pylos and later at Methana (Thuc. 4.45.2) and a spot on the coast opposite Cythera (Thuc. 7.26). But the Boeotians recaptured Delium seventeen days after the Athenians finished fortifying it (Thuc. 4.101.1), and the Argives and Athenians recaptured Orneae ‘not long’ after the Peloponnesians fortified it (Thuc. 6.7.2). Delphinium, a position near Chios town fortified by the Athenians in 412/11, did better, lasting until 406 before the Peloponnesians took it (Xen. *Hell.* 1.5.16). In 389 the Athenians built a fort on Aegina, but they had to evacuate their troops five months after Teleutias drove their fleet away (Xen. *Hell.* 5.1.1–5). In 366 the Phliasians and Athenians captured the fort the Sicyonians were building at Thyamia (Xen. *Hell.* 7.2.20), and in 365 even a relief expedition led by king Agesilaus could not prevent the Arcadians from recapturing Cromnus, which the Spartans had fortified (Xen. *Hell.* 7.4.20–5, 27). The forts that survived had naval support. Decelea is therefore the great exception, and the puzzle is rather why the Athenians did not take Demosthenes’ advice to assault it (7.47.4).

To capture a city, attackers either had to assault the wall or mount a full-scale siege – unless a traitor could be found to open the gates. Pausanias comments that ‘the most impious of all crimes, the betrayal for private gain of fatherland and fellow-citizens . . . has never been absent from Greece since the birth of time’ (7.10.1). Famous examples include the betrayal of Eretria to the Persians in 490 (Hdt. 6.101), the betrayal of Plataea to the Thebans in 431 (Thuc. 2.2–5), and the betrayal of Byzantium to the Athenians in 409 (Xen. *Hell.* 1.3.14–22). But most revealing is the amount of space Aeneas devotees in his treatise *How to Survive under Siege* to preventing internal plots, including numerous examples of successful and unsuccessful traitors. Of the forty chapters in his work, he devotes no fewer than three to the locking of the city gates, including a dozen tricks involving the bolts.

⁵² Thuc. 4.3–5, 8–23, 26–39; Xen. *Hell.* 1.2.18.

In the Archidamian War attempts to storm a city failed twice as often as they succeeded.⁵³ Attackers preferred odds greater than 3:1, but numerical superiority did not guarantee success. Surprise attacks, by contrast, succeeded three times as often as they failed – but of course the more frequently surprise was tried, the harder it was to achieve. Results in the rest of the Peloponnesian War followed a similar pattern. Compared to other ancient armies, Greek forces were small, and democracies were reluctant to sacrifice citizen troops in assaults against fortified sites. The states most successful at assaults in our period – the Carthaginians, Syracusans and Macedonians in the fourth century – were not democracies, and the first two used thousands of mercenaries.

The Peloponnesians at Plataea tried one final idea before committing to a siege: burning the town down. They managed to light a fire ‘larger than anyone had ever seen made by human hands’, but instead of the wind they hoped for, a rainstorm helped put the fire out (*Thuc.* 2.77). In 424 the Boeotians had greater success with fire against the Athenian fortification of Delium. They hollowed out a wooden beam, covered it with lead, and used a bellows to blow through it past a cauldron filled with burning coals, sulphur and pitch. They succeeded in setting fire to the wall, which was made mostly of vines and wood at the point they attacked, and captured the fort (*Thuc.* 4.100). A stone or mudbrick wall would not burn, but attackers could try to burn gates and wooden parapets. Aeneas Tacticus advises defenders to cover wooden walls and towers with protective felt or hide screens, smear the wood with bird-lime to make it impossible to ignite, and use vinegar to extinguish any fires that do start (33–4).

Chapter 7 discusses sieges, but some comments here will put them into a broader perspective. The only practical way to keep supplies from getting into a besieged city was to build a wall around the entire place. The Athenians built the first attested Greek circumvallation wall at Samos in 440 (see Table 6.3). If the invading force was strong enough, defenders could slow down but not stop the construction. In 414, the Syracusans were able to build counter-walls across the line of the Athenian wall, but Syracuse had a much larger population than the other cities on the list.

Once the wall was built, the defenders were in real trouble. They could make sorties (attested at Melos and Phlius) or perhaps even escape (as at Plataea). Reinforcements might get into the town (as at Mytilene). But if the besiegers were willing to wait, the defenders could do little but cut their rations. A city could typically hope to survive eight months or so on the previous year’s harvest. Xenophon comments that Phlius, which surrendered after twenty months, lasted twice as long as expected.

Although they almost always worked, these circumvallation sieges were hugely expensive. The Athenians spent 1,200 talents on the siege of Samos

⁵³ Rusch (1997), a good analytical study. For a general work on siege warfare, see Kern (1999).

Table 6.3 *Circumvallation sieges*

Reference	Date	Besieged	Besiegers	Result
Thucydides				
1.116–17	441–440	Samos	Athenians	Surrender after nine months
1.61.4–65, 2.70	432–winter 430/29	Potidaea	Athenians	Surrender after more than two years
2.71, 75–8	429–427	Plataea	Peloponnesians	Surrender after more than two years
3.18.3–5, 27–8	428–427	Mytilene	Athenians	Surrender after about eight (?) months
4.69	424	Nisaea	Athenians	Immediate surrender
4.131, 133.4, 5.32.1	423–421	Scione	Athenians	Surrender after about two years
5.75.5–6, 80.3	418	Epidaurus	Athenians and allies	Siege abandoned after a few months when the Argives made a treaty with Sparta
5.84–116	416	Melos	Athenians and allies	Surrender the following winter
6.98–7.	414–413	Syracuse	Athenians and allies	Circumvallation wall never completed, Athenians defeated
Xenophon, <i>Hellenica</i>				
1.3.14–22	409	Byzantium	Athenians	City captured through treachery
3.2.11	398	Atarneus	Peloponnesians	Surrender after eight months
5.2.4–6	385	Mantinea	Spartans	Surrender after river was rerouted to undermine the city walls
5.3.10–18, 21–5	381–379	Phleius	Spartans	Surrender after year and eight months

in 440 (*IG* 1³ 363), and 2,000 talents on Potidaea (Thuc. 2.70.2). If similar sieges did not take place earlier, the reason was lack of money, as Thucydides saw. He argues that insufficient financial resources hampered the siege of Troy, because the Greeks had to turn to farming and piracy to support themselves, making the Trojans a match for the Greeks who remained at Troy (1.11). This fundamental insight applies to archaic warfare as a whole, during which the longest siege we hear of (discounting the unreliable fourth-century story of the First Sacred War) is the forty days the Spartans spent besieging Samos c. 523 (Hdt. 3.47, 54–6). The growth of the Athenian empire marks a significant change in Greek siege warfare.

XII. AFTER THE FIGHTING

Greeks followed the rule articulated by Xenophon: ‘it is a custom established for all time among all people that when a city is captured in war, the persons

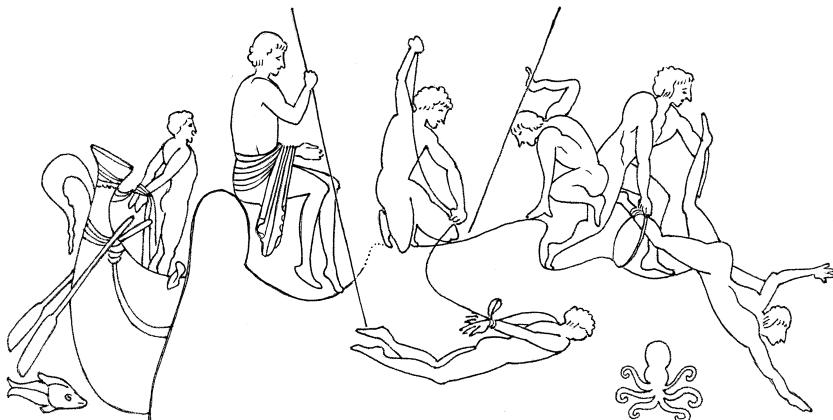


Figure 6.4 Torture or execution by drowning of men who may be either victims of pirates or prisoners of war after a naval battle, on an Attic vase of c. 490–480 bc.

and the property of the inhabitants belong to the captors. It will be no injustice for you to keep what you have, but if you let them keep anything, it will be only out of generosity that you do not take it away' (*Cyr.* 7.5.73). The agonal model of warfare holds that after battles prisoners were treated less ruthlessly, ransomed rather than killed or sold (figs. 6.4 and 6.5). But ransoming, which occurred throughout antiquity, was done for profit, not humanitarian reasons, and by individuals rather than states.⁵⁴ There is little reason to think it was more common in the archaic period than at other times. For instance, the sixth-century Phocaeans, thinking that they would be killed and their women and children enslaved if they lost a battle to the Thessalians, prepared to burn their families and their property if they lost.⁵⁵

P. Ducrey's analysis of the evidence suggests that one-fifth to one-quarter of prisoners were killed, and roughly one-third enslaved (see Table 6.4). Besieged Greeks had a clear incentive to negotiate, even though the terms might turn them into refugees. The Spartans let the Messenians leave Mt Ithome on the condition that they leave the Peloponnese and never come back (*Thuc.* 1.103.1). The Athenians let the Potidaeans leave with one garment for the men, two for the women, and a small sum of money (*Thuc.* 2.70.3). The Spartans let the Samians leave with only one garment each (*Xen. Hell.* 2.3.6). The Messenians were resettled at Naupactus, but the fate of the Potidaean and Samian families can only be imagined.

⁵⁴ Pritchett (1971–91) v.245–312. Rosivach (1999), pointing to [Dem.] 53.6–11 and Antiph. 5.20, suggests optimistically that prisoners were sold to middlemen who held them for ransom.

⁵⁵ Paus. 10.1.6; Plut. *Mor.* 244; Polyaeus *Strat.* 8.65.

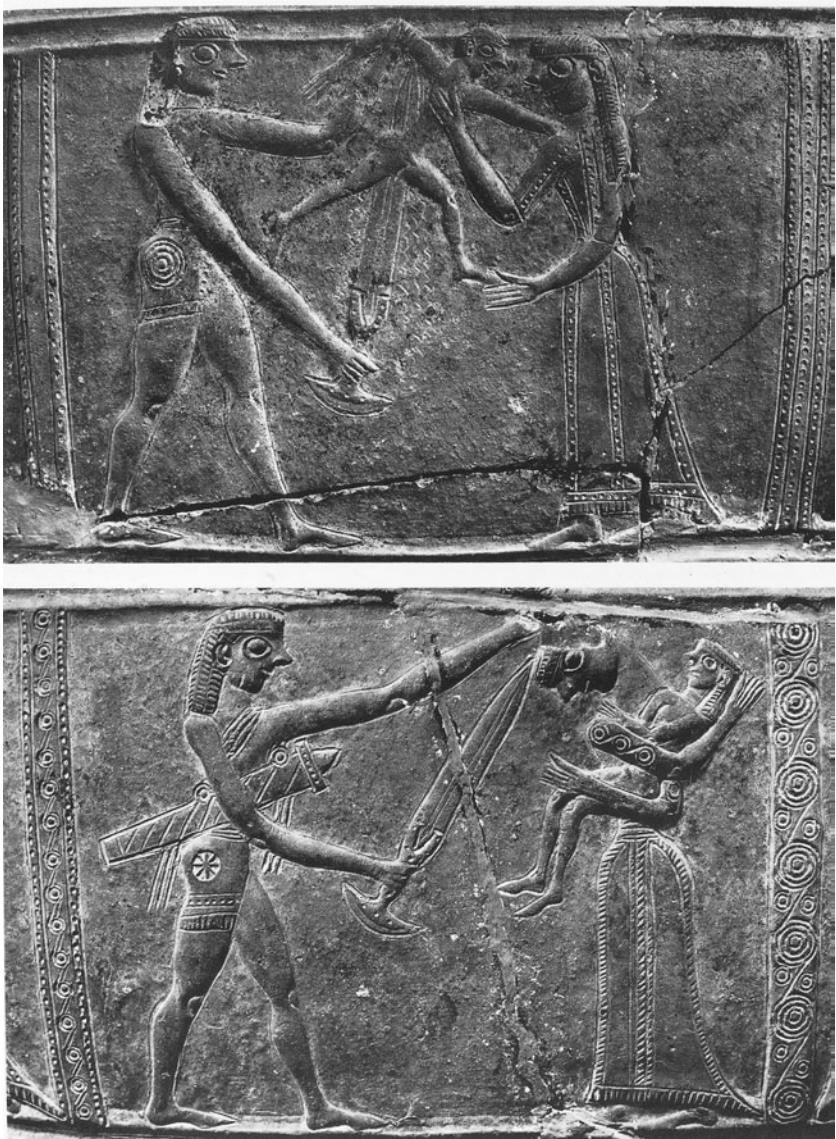


Figure 6.5 The sack of a city: soldiers killing women and children in scenes from the sack of Troy, on a large storage jar from Mykonos, c. 670 BC.

Table 6.4 *Fate of prisoners, sixth to second centuries BC⁵⁶*

Battles (land and sea)		Captured cities	
120 cases		100 cases	
Killed	24 (20%)	Killed	25 (25%)
Enslaved	28 (24%)	Enslaved	34 (34%)
Undetermined	68 (56%)	Surrendered	41 (41%)

Following a custom going back to Homer, Greeks believed that booty ought to be collected and then redistributed fairly. The *dekatê*, the offering of a tenth owed to the gods, and *aristeiai*, the awards for valour, were taken from the common store before any further distributions.⁵⁷ Allies sometimes decided in advance how they would divide booty among the different contingents. If there was no prior agreement, the division might be made on the basis of the number of soldiers (as Diod. Sic. 11.33 says happened after the battle of Plataea in 479), or on the basis of performance (as Hdt. 8.121–2 indicates happened after the battle of Salamis).

The Spartans, who had official ‘booty-sellers’ (*laphuropolai*) to whom they turned over loot to be sold (Xen. *Lac.* 13.11), normally sold their plunder on the spot, even if they were in enemy territory. Agesilaus had the prisoners and property captured at the Heraeum in Perachora sold the very next day (Xen. *Hell.* 4.5.8). The Athenians often brought their male prisoners home, where the assembly determined their disposal, and the Syracusans too apparently preferred to conduct sales at home (fig. 6.6).

It is hard to know how much plunder, or profit from its sale, went to individual soldiers. Generals sometimes sent large sums of money home, and sometimes paid soldiers their regular pay out of the booty. At times, however, soldiers stole loot and even prisoners (who must have been hard to hide), and generals sometimes allowed their men to leave camp and seek private plunder.⁵⁸

XIII. RETURN

A defeated invader’s return home might be entirely helter-skelter, as when the Athenians scattered after the battle of Delium. If the pursuit stopped and the defeated army regrouped enough to ask permission to bury its dead – which normally happened – the victors let them go.

⁵⁶ Translated from Ducrey (1999) xv. Pritchett (1971–91) v.218–19, 226–34 lists 65 massacres and 173 enslavements, including Roman episodes.

⁵⁷ See Pritchett (1971–91) 1.93–100 on the *dekatê* and 11.276–90 on the *aristeia*.

⁵⁸ Stolen prisoners, Thuc. 7.85; Plut. *Tim.* 29.1; private plundering, Xen. *An.* 6.6.2; *Hell.* 1.2.4–5.



Figure 6.6 Prisoners of war, with hands tied behind their backs and kept on leads, led away by two hoplites, with a pair of spears each, and an archer, on a late sixth-century BC Athenian vase.

Transporting the wounded must have caused some difficulties. J.-N. Corvisier has done a suggestive study of wounds mentioned in Plutarch's *Lives*.⁵⁹ Of the 141 usable cases, ranging from the fifth to the first centuries, 45 per cent died directly or indirectly from their wounds, while 55 per cent survived. Of twelve cases mentioned by historians, half survived. Of eight cases mentioned in the Hippocratic Corpus, only one survived – but of course only those wounded badly enough to consult a physician would appear here. There are difficulties in following this evidence blindly – the 'heroic wound' seems as much a literary *topos* as the 'heroic death'⁶⁰ – but it suggests that many soldiers survived wounds and went home nursing some hurt.

The most common wounds were to the leg. Of these 75 per cent survived, but would have had trouble walking home. They might have ridden on

⁵⁹ Corvisier (1994), summarized in Corvisier (1999) 60–5.

⁶⁰ Salazar (2000).

wagons. Like other equipment, wagons were privately owned, so wealthier soldiers had a better chance of getting a ride. If wagons were not available, pack animals could help. In desperate situations, the wounded were left behind. During the Athenian retreat from Syracuse in 413, the wounded and sick men wailed and begged their friends and relatives not to abandon them (Thuc. 7.75).

After a victory, the return march, encumbered with whatever prisoners and property had not been sold, must have proceeded more slowly than the departure. The *euangelia*, the sacrifices for good news (Isoc. 7.10 has an example), probably preceded the army's arrival. Xenophon's mercenaries sacrificed *seteria*, sacrifices for reaching safety, when they first reached friendly territory on their way back from Cunaxa (*An.* 3.2.9, 4.8.25). A sacrifice to celebrate the army's safe return would seem likely, but is attested only at the end of the Athenian civil war in 403, when Thrasybulus and the men from Piraeus went up to the Acropolis under arms and sacrificed to Athena (Xen. *Hell.* 2.4.39).

If Greeks had purification ceremonies to mark the end of campaigns and the re-entry of combatants into peaceful life, like the Roman *lustratio*, they have left little trace in the surviving evidence. Plutarch, a Boeotian who wrote during Roman times, says that the Boeotians held a public purification in which the army passed between the two halves of a dog sacrificed for the occasion (*Mor.* 290d). The statue seen by Pausanias with a dog cut in half next to Thrasybulus, an Elean seer active in the third century BC, may allude to a similar ceremony (6.2.4). But classical evidence is lacking. Perhaps Greek campaigns simply ended with a general dismissal and a rush to get back pay.

CHAPTER 7

BATTLE

EVERETT L. WHEELER AND BARRY STRAUSS

A. LAND BATTLES

Everett L. Wheeler

I. INTRODUCTION: DEFINING THE BATTLEFIELD OF DEBATE

From a traditional perspective Greek warfare suffered two ‘revolutions’: first, in the seventh century the emergence of heavy infantry in a dense formation (phalanx) coincided with the birth of the *polis* and demarcated the archaic period from the Dark Age warfare of Homeric epic, featuring fluid battles of a few heroes. A stringent unwritten code of warrior ethics and limited warfare came to govern operations within an in-group of major Greek *poleis*, and the expansion of the warrior function to all citizens capable of equipping themselves democratized warfare without abandoning completely the aristocratic ethos of Homeric heroes.

The seeds of a second ‘revolution’ sprouted in the early fifth century. Conflicts with ‘outsiders’ (the Persian Wars, 490, 480–479) vindicated Greek belief in heavy infantry’s superiority to mobile combat with the bow, cavalry and light infantry, but awakened both the concept of strategy, when faced with opponents not recognizing the Greek rules of the game, and the realization of the limited defensive resources of individual *poleis vis-à-vis* wealthier, numerically superior ‘outside’ powers. A horizon, accented by the length and horrors of the Peloponnesian War (431–404), had been crossed. Gazing over this divide, fourth-century and later writers (e.g. Isocrates, Demosthenes, Ephorus and Polybius) could romanticize ‘the good old days’ of the archaic period as a time of civilized warfare by an accepted code of behaviour.

Expansion of war’s political goals had tactical ramifications. Frequency of conflicts replaced seasonal, occasional clashes. Professionalism, spurred by the increased scale, occurrence and duration of conflicts, rendered operations more technical. Diversity of terrain favoured a new emphasis on cavalry and light infantry. Coordination of different types of armed contingents made battles more complex than head-on collisions of phalanxes. Generals became battle and campaign managers, not simply leaders of a

charge. Cerebral capacity – even trickery – counted, when winning involved outgeneralling as well as outfighting the enemy. Mercenaries with professional skills, often recruited from non-Greeks, supplemented or replaced citizen levies. For mainland Greece Philip II of Macedon harvested the fruits of this strategic and tactical revolution, which, with modifications to the armament and deployment of the phalanx, forged the model for subsequent Hellenistic armies.¹

The traditional view of Greek warfare before Philip II's reforms invites revision, but recent trends in military historiography are not helpful. The current idea of 'revolutions' in warfare, the legacy of Michael Roberts' assessment of European practice AD 1550–1650,² identifies major changes. Endless debate about revising Roberts' views, however, has only muddied the waters: the definition of 'revolution' is no longer clear. History studies change and few societal phenomena are more developmental than war. What degree of change constitutes a 'revolution'? This debate among early modernists suggests caution about applying the 'revolution' model to antiquity. Further, the search for dramatic change can ignore continuities over time and more subtle incremental changes (differences of degree rather than innovation). Recounting archaic and classical Greek terrestrial combat from the perspective of development and continuities may be more enlightening than emphasizing 'revolutions'.³

Assessment of Greek land warfare must also reckon with currently popular 'face-of-battle' studies. Viewed positively, the 'face-of-battle' approach has revived attention to the role of morale in battle and the details of small unit combat. On the negative side, this approach assumes the applicability to antiquity of post-Second World War theories of unit cohesion, and its proponents often exceed the limits of the ancient evidence in their enthusiasm to re-live as well as to reconstruct battles. This chapter's assessment of archaic and classical Greek land combat will not assume the correctness of the 'face-of-battle' approach.⁴

Some traditional generalizations about archaic and classical warfare derive from privileging the practices of the major mainland powers as reported in Athenocentric literary sources. But the Greek world as a whole hardly experienced uniform, simultaneous military development. The heavy infantry phalanx, around which the traditional view of Greek tactics revolves, did not develop in Thessaly and Thrace, famous for cavalry and light infantry respectively, nor in Macedonia before the early fourth

¹ Changes in Greek warfare: Wheeler (1991) 156 nn. 19–20 and this volume, chs. 5, 6, 11, 12.

² Roberts (1956).

³ Critique of the Peloponnesian War as a military revolution: Lonis (1979) 17–21, 283–94, 318.

⁴ For a detailed critique of the 'face-of-battle' phenomenon, see Wheeler (2001) esp. 169–74, the summary of a more extensive discussion of this topic in historiography and military theory now in preparation.

century BC. The extent to which Greeks of Asia Minor and the Aegean islands, although users of hoplite equipment, employed the phalanx can only be surmised. In rugged north-west Greece the Aetolians and Acarnanians had little use for the heavy infantry phalanx. In contrast, mountainous Arcadia exported mercenaries of heavy infantry. A phalanx may denote the existence of a *polis*, but the converse may not be true.⁵

The diversity of development becomes most glaring in Sicily, often the 'cutting edge' of Greek intellectual as well as military affairs. Here, long before Dionysius I (405–367) developed a true war machine, Gelon of Syracuse (480) boasted the first major Greek army of combined arms, a possible precursor of Philip II's army. Against the Persians he offered the mainland Greeks 20,000 heavy infantry, 2,000 cavalry, 2,000 archers, 2,000 slingers, and 2,000 *hamippoi* (light infantry in close coordination with cavalry).⁶ But no tradition took root. Seventy-five years later a democratic Syracuse would hardly know how to fight in a phalanx, although its cavalry was still to be feared.⁷

Generalizations beset the traditional view of Greek combat in another way. Open pitched battle, devoid of trickery or manoeuvre and decided by the head-on clash of rival phalanxes, is taken as not only an idealistic norm but a portrayal of Greek military reality, before the rules of the game were bent and broken in the Peloponnesian War. But not all areas practised phalanx combat, and the Peloponnesian War scarcely initiated the concept of stratagem in Greek warfare.⁸ In the Western tradition Homer introduced the twin models of an unwritten warrior code in Achilles and Odysseus, who epitomized the contrast of brawn versus brains in military conduct: chivalrous, face-to-face confrontation, open battle, and use of force (Achilles ethos), as opposed to trickery, deceit, indirect means, and avoidance of pitched battle except in circumstances where the use of force is advantageous (Odysseus ethos). Tension between these rival approaches is a universal phenomenon not solely Western or Greek. Debate over the respective virtues of bravery and trickery raged in antiquity, especially as trickery, less subject to uncertainty and chance than open battle, offered a more economic and easier avenue to victory, although advocates of open battle supported their views with moral posturing about honesty and fairness.⁹

Acknowledging a role for stratagems, however, does not discredit the conventions governing set-piece battles of major mainland *poleis*, where a

⁵ For regional and other variations in Greek warfare, see also Hanson (2000a).

⁶ Hdt. 7.158.4; cf. Ephorus, *FGrH* 70 F186; Timaeus, *FGrH* 566 F94 (= Polyb. 12.26b). *Hamippoi* = Herodotus' *hippodromoi psiloi*; thus Spence (1993) 30; Herodotus' term is unusual. For Dionysius I and siege warfare, see below, pp. 241–2.

⁷ Thuc. 6.17.5, 68.2, 69.1, 98.3; 7.3.3.

⁸ Cf. Lonis (1980) on the Peloponnesian War as a non-factor in Greek attitudes toward keeping oaths, and Wheeler (1984) on sophistic interpretation of oaths in truces and treaties.

⁹ See Wheeler (1988d) xiii–xiv, 92–110, and *passim*; Wheeler (1990) 122–5.

system of limited warfare essentially eliminated the need for strategic planning, generally restricted the violence to a single bloody clash, and guaranteed the continued political survival of both belligerents.¹⁰ War, whether in a context of limited or unlimited strategic aims, rarely is conducted without rules (often unwritten) governing intensity (escalation versus reciprocity) and ferocity (humanitarian concerns), although asymmetrical conflicts between different cultures, different tactical systems or very unequal powers may bend or ignore the rules at times and increase the level of trickery in operations.¹¹ ‘Brains’ can compensate for a lack of numbers, means or technology, but rules and maintenance of *bona fides* remain essential, if peace is to be re-established between belligerents. War is an affair of honour, particularly between generals who consider themselves to be comrades-in-arms and observe a transnational aristocratic ethos of ‘gentlemanly’ conduct.

Restriction of war to a formal duel of armies at a definite time and well-defined site with circumscribed tactical and strategic goals reduced war to a bloody sport – war as *agôn*.¹² Application of athletic metaphors to war has been common in the West. The Greek system in fact resembles some types of intra-cultural pre-state warfare, which included a ritualistic display in a designated, demarcated site; some casualties might occur, although the real blood-letting came in ambushes and raids, generally in inter-cultural warfare.¹³

After the Persian and Peloponnesian wars exploded strategic restrictions, war as *agôn* remained an ideal. Generals and historians frequently asserted that open force was better than dishonest trickery. A cynical view that belligerents *always* resort to any means to win ignores the extent to which unwritten rules and codes of honour have affected military operations throughout history. Alexander the Great’s refusal to launch a surprise nocturnal attack on Darius III’s Persian army at Gaugamela (331 BC) epitomizes the Achilles ethos,¹⁴ and Hellenistic and Roman armies continued to observe unwritten warrior codes.¹⁵

A system of limited warfare prevailed among major *poleis* as an *ideal*, but the origin of such ‘rules’ and their frequency of observance are another matter.¹⁶ The conventions of international relations, the so-called

¹⁰ Hanson (2000a) argues for the historicity of such battle conventions 700–450 BC in both theory and practice, although with much special pleading.

¹¹ Cf. Wheeler (1988a) 8–9.

¹² An attempt to distinguish Greek war as *agôn* from Johan Huizinga’s concept of ‘play’ (Huizinga 1950) is not convincing: Krischner (1988) 7–22; cf. on *agôn* Gröschel (1989) 20–4.

¹³ A view (Hunt 1998: 6–11; van Wees (2004) 232–40) that Greeks waged pre-state warfare till the Persian Wars of the early fifth century seems too extreme.

¹⁴ Plut. *Alex.* 31.10–14; *Arr. Anab.* 3.10.2; *Curt.* 4.13.3–9; Lucian, *Dial. mort.* 12.3, 25.6.

¹⁵ On Hellenistic rules, see Brisson (1969a) 40–5, and chs. 12–13 in this volume.

¹⁶ Krentz (2002) argues that such agonal conventions developed only after the Persian Wars.

'laws of the Greeks' (e.g. the sacrosanctity of heralds and religious sites, observation of oaths, treaties and truces, etc.), had religious roots: the gods guaranteed oaths and protected worshippers. Nascent panhellenism was an additional factor. Greeks also distinguished two types of war (*polemos*): a conflict 'by the rules', agon warfare, and 'war without herald' or 'without truce' (*polemos akeryktoς* or *aspondos*), in which the regular rules did not apply, giving free rein to trickery and ferocity.¹⁷ Both the Phocian–Thessalian and the Athenian–Aeginetan wars of the early fifth century belong to this unlimited category of war featuring small-scale raids, ambushes and atrocities.

If the concept of *polemos akeryktoς* resolves somewhat the conflict between an ideal of agonistic warfare and trickery, the frequency of observance of agonistic rules remains. No detailed account of a Greek battle exists before Herodotus' of Marathon (490), a Greek–barbarian clash not subject to agonal rules and steeped in Athenian propaganda. No detailed account of a Greek versus Greek battle appears in a contemporary source until Thucydides on Delium (424), a contest during the Peloponnesian War when 'the rules' largely lacked observance. Only in the first Athenian battle at Syracuse (415) does Thucydides (6.69.2) present pre-battle etiquette: a skirmish with missile weapons, sacrifice, infantry charge. Battles in Hellenistic and Roman sources offer the danger of seeing archaic and classical events through the lenses of fourth-century panhellenic propaganda and Hellenistic military practices. Nor does a thesis tying rules of hoplite battle to agricultural concerns and innovative farmers present more than a hypothesis.¹⁸ The infrequency of large wars between major *poleis* while the phalanx was developing on the mainland and the apparent absence of major battles in the archaic period can discount the possibility that enough battles occurred to establish rules of conduct among forces that were (except for the Spartans) essentially minuteman militias.

Indeed, based on literary sources, the agonal aspect of battle could be dismissed as a fourth-century panhellenic fantasy, if not for Herodotus (7.9b.1–2). Mardonius relates to Xerxes I how the Greek art of war is absolutely silly: they fight for trivial reasons and limit battle to a level playing field, where the victors take casualties and the losers are annihilated.¹⁹ Herodotus puts in Mardonius' mouth – the scene cannot be historical – how hard-core imperialist Persians viewed the Greeks' strategically limited and tactically ritualistic conduct of war. The passage is a satirical

¹⁷ See Myres (1943); Ilari (1980) 103–4. Cf. Xen. *An.* 3.2.8, 3.5: a *polemos akeryktoς* with the Persians after Tissaphernes' murder of the Greek generals.

¹⁸ Hanson (1995) 222–3, 238, 242, 248, 255, 293, 298; (1999e) 64–8, 161.

¹⁹ See above, p. 147, and Krentz (1997) 60; cf. Krentz (2002) 36–9, tying Mardonius' speech to his view that the concept of war as *agōn* began in the fifth century. *Contra* Hanson (1995) 293.

critique,²⁰ but apart from Mardonius' exaggeration about casualties, which emphasized the satire, his comments accurately portray the characteristics of battle under agonal rules: a sharp, single clash of forces on a plain in a contest without manoeuvres or larger strategic aims.

A handful of passages have defined perceptions of archaic and classical battle. Besides Mardonius' comments, and excluding Xenophon and *Tactica*, the interpretation of the mechanics of a phalanx largely depend on Thucydides' account of Mantinea (418) and Polybius' well-known comparison of phalanx and legion.²¹ As often, Polybius has a subtly concealed agenda of Roman propaganda behind his analysis – in this case, a comparison slanted to vaunt Roman tactical superiority and to discourage further Greek resistance to Rome.²² Thucydides' views will be discussed below. For overviews, Demosthenes and Polybius are the most frequently cited (see also ch. 13 in this volume, pp. 447–8). Demosthenes (341), cloaking himself in the Achilles ethos, asserts that Philip II revolutionized warfare, and glorifies the 'good old days' of open warfare with citizen armies, conflicts restricted to spring and summer and without bribery (9.47–52). Demosthenes' views of contemporary warfare demand less caution than his idealized portrait of the past. Polybius (13.3.2–8) sings the same tune about 'the ancients' in contrast to the miserable present. He condemns secrecy, surprise attacks and trickery in war, while upholding the Romans as paragons of virtue. But again, Polybius' prejudices drain historical value from his complaints, part of a series of outbursts against Philip V of Macedon.²³ Nor does a supposed archaic treaty banning missile weapons validate Polybius' archaic chivalry. This tale, the historian Ephorus' invention, belongs to panhellenic glorification of archaic Greece as a golden age.²⁴ The historicity of agonal warfare, however, does not depend exclusively on the evidence of Herodotus, as the nature of the phalanx and its limited potential suggest circumscribed rules.

The ferment of scholarly opinions on Greek land combat reflects not only 'new' versus 'traditional' approaches, but also the limited evidence, especially for the archaic period. For some a phalanx can be found in Homer and the introduction of hoplite armour did not 'revolutionize' warfare. From this perspective tactics and the warrior mentality remain basically unchanged until the emergence of Hellenistic warfare under Philip II.

²⁰ Cf. Aristagoras' ridicule of Persian warfare, in an attempt (*c.* 499) to solicit Spartan support for the Ionian revolt (Hdt. 5.49.3–4), and Cyrus the Great's perverse understanding of activities in a Greek *agora* (Hdt. 1.153.1–2); note also Grundy (1948) 251.

²¹ Thuc. 5.70–71.1; Polyb. 18.28–32. Cf. Wheeler (2004) 327, 331–2, 336–9.

²² Wheeler (1992); a fuller version for publication is in preparation.

²³ Livy 42.47.4–9; Wheeler (1987) 161–2 with n. 25, and (1988c) 167–8.

²⁴ Polyb. 13.3.2–4; Strabo 10.1.12 with Wheeler (1987).

Others challenge the nature of the classical phalanx and argue for individual fighters in an open formation; hence the pushing (*orthismos*) of the collective mass is a myth. Much remains unknown and probably unknowable on present evidence. Uncertainties about individual battles (e.g. Marathon, Leuctra) produce at least one article annually. Nor can *all* details of either hoplite battle or the phalanx's mechanics be recovered. The caveats of this introduction provide a framework for examining the development and continuities of archaic and classical land combat.

II. DEVELOPMENT OF THE PHALANX

What is a phalanx? Modern usage transfers a Hellenistic and Roman meaning to the archaic and classical periods: the closely ordered, deep Macedonian heavy infantry formation was called a phalanx as was a densely packed body of German or Gallic infantry. The classical Greek phalanx consisted of heavy infantry called hoplites, a term not attested until the late sixth and early fifth centuries,²⁵ although hoplite armour began to appear c. 725. Thucydides did not use 'phalanx' as a technical term for a battle formation, preferring *taxis* or *parataxis* (also a term for a set-piece battle). The relatively late emergence of 'phalanx' and 'hoplite' as technical terms betrays the developmental character of phalanx battle.

Definition of 'phalanx' requires distinguishing the term's two meanings. First, phalanx denotes a unit of any type of troops regardless of the formation's shape.²⁶ Mimnermus (*fl.* 630), writing when the term could hardly be metaphorical, mentions dense phalanxes of Lydian cavalry.²⁷ Second, phalanx denotes a battle line, in contrast to a marching column (*keras*).²⁸ Ambiguity between the word's two senses obscures its meaning, and the word in archaic and classical sources does not specify a deep deployment. But if 'phalanx' is to be meaningful in a discussion of tactical development, its definition as a deep heavy infantry formation, usually in a square or rectangular shape, must be privileged, as this meaning accounts for its transfer to the Macedonian formation of heavy infantry, and we know that a classical battle line was many ranks deep.

Greeks, however, did not invent mass infantry combat, and linear formations (i.e. formations with greater front than depth) are rarely in the pre-gunpowder era so thin as a single rank. Yet not all linear formations of heavy infantry constitute a phalanx, which derives its character from the cohesion of the mass. In general, linear formations exploit the individual combatant's fighting skills – one of Polybius' points in contrasting

²⁵ Pind. *Isthm.* 2.32; *IG* v.1 1120; Snodgrass (1964) 204.

²⁶ Asclep. *Tact.* 1.4; Syrianus (Anon.), *Peri Strat.* 15.1 (Dennis [1985] 46–7).

²⁷ Fr. 14 West = Stob. *Flor.* 7.12. ²⁸ LSJ s.v. 1.3.

the legion with the phalanx – or the effects of a particular weapon (e.g., the musket in seventeenth- and eighteenth-century European armies), as opposed to the group action of the phalanx. No hard rule can be established for how much depth distinguishes a linear from a phalanx formation. After all, the probable depth of a legionary maniple in Polybius' day was six – only two less than the most frequent depth of a classical Greek phalanx at eight. Topography of the battlefield or the 'herd instinct' of combatants' bunching together for mutual support can produce a phalangical appearance even in a linear army. Similarly, an attack in column (i.e. a formation with greater depth than front) uses the phalangical principles of weight and mass.

But did Greeks invent the phalanx? A definite command structure and the use of column and line formations characterize state (as opposed to pre-state) warfare, so the phalanx need not be a Greek peculiarity.²⁹ A lack of detailed information for Bronze and Iron Age Near Eastern infantry deployments precludes proving either that the phalanx developed independently or that it imitated Near Eastern practice. The real issues concerning the creation of the phalanx are the transition from pre-state warfare in the Dark Age to the phalanx of the *polis* and the question why the Greeks developed heavy infantry as they did.

Traditionally, discussion of Greek warfare begins with Homer's *Iliad*, taken as the earliest literary evidence, combining distant memories of the Mycenaeans, Dark Age conditions and traces of the emerging *polis* 750–700. The duelling heroes of epic contrast nicely with the group warfare of the phalanx, symbolic of the new *polis*. But recent intense scrutiny of *militaria* in Homer raises doubts of the *Iliad*'s relevance for Greek tactical development. A seventh-century date for the *Iliad*'s extant text enjoys growing scholarly support; some put both the *Iliad* and the *Odyssey* in the sixth century.³⁰ A lower date, however, removes the *Iliad*'s distinction as the *earliest* literary attestation of Greek warfare and privileges less contaminated evidence from seventh-century lyric poets and archaeological material (fig. 7.1). A lower date further signifies that the editor/poet of the *Iliad*, if aware of the phalanx in some form, ignored it.³¹ Little about Homer's significance for Greek tactical development lacks controversy.³²

The *Iliad* recounts four days of battle in the war's tenth year, but each day's battle differs. The poet describes mass combat between larger groups, small unit engagements, and individual confrontations.³³ War chariots

²⁹ Cf. Ferrill (1985) 144 and Pritchett (1971–91) iv.7–11.

³⁰ See Stanley (1993) 283–93; Hellmann (2000) 180; Larson (2000) 219–22.

³¹ Hellmann (2000) 172–84.

³² Udwin (1999) and Hellmann (2000) represent reactions to excessive historicization of Homeric warfare and argue for a return to understanding the epic as literature.

³³ Hellmann (2000) 132–52.

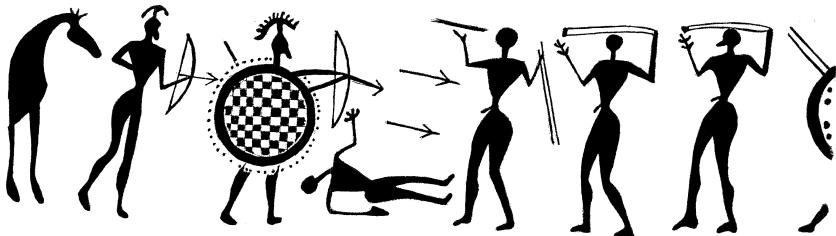


Figure 7.1 Mixed troops in combat over a fallen soldier, on a Geometric vase from Paros, c. 700 BC. Two helmeted archers, one with shield and spear as well as bow and arrow, face a javelin-thrower and two slingers. The rest of the scene features several horses and men armed with round shields and pairs of spears.

in Homeric battle, if historical, still await a convincing interpretation.³⁴ Homer uses the term ‘phalanx’ – only in the *Iliad* and usually in the plural – for both small and large warrior groups. Attempts to see organized ranks and files in Homeric phalanxes are elusive,³⁵ even if the supposed occurrences of the phalangical formation do not depend on the poet’s use of ‘phalanx’.³⁶ In the *Iliad* Achaean war bands under individual chieftains besiege a city with similar war bands as allies. Units of fifty men each and attack groups of five units have occasional prominence, but Nestor’s advice, which might anticipate later conditions or represent a later insertion, to organize by tribes and phratries (Hom. *Il.* 2.362) is not developed.³⁷ Organization of the armies like the battles is fluid and vague.

If some scenes suggest masses in close order (a phalanx?),³⁸ closer scrutiny yields that the groups are small, the topography (e.g. action among the Achaean ships) compelled more compact bunching, or a group defends a wounded or slain comrade.³⁹ A conscious effort to form a large cohesive mass of definite units is elusive. Ajax’s exhortations to stand fast in the defence of the ships (Hom. *Il.* 15.561–4) and later for defence of Patroclus’ body (17.357–9) assert safety in numbers, not forming a phalanx, and recall late Bronze Age Egyptian texts, where a phalanx does not come into question.⁴⁰ Even references to forces shield to shield and helmet to helmet reveal nothing about the formation’s depth and could indicate only disordered lines of warriors.⁴¹ If the traditional view of Homeric warfare as a series of duels between heroes can now be abandoned as a function of the poet’s

³⁴ Cartledge (1996) 690.

³⁵ Leimbach (1980); Wheeler (1991) 128; Singor (1991) 20–4; van Wees (1986) 292–6, (1994) 3, (1997) 686.

³⁶ Singor (1991) 21–7; van Wees (1994) 3, 15 n. 8; Hellmann (2000) 104–19.

³⁷ Singor (1991) 35–7; van Wees (1997) 669, 671.

³⁸ Hom. *Il.* 4.526–49, 8.60–5, 11.67–72, 13.125–34, 800–1, 16.212–17.

³⁹ Snodgrass (1993) 52–6; cf. van Wees (1997) 683, 685; Hellmann (2000) 110–11.

⁴⁰ Shaw (1996) 248; cf. van Wees (1996) 18. ⁴¹ Hom. *Il.* 13.125–34, 16.212–17.

emphasis rather than as an accurate picture of the material presented, the scholarly pendulum's swing to the other extreme, mass battle, including non-noble participants, yields unjustified conclusions about the rise of the *polis* and the phalanx.⁴²

Unless we reduce Homeric warfare to pure fiction – and neither the gods' role in determining outcomes nor the statistic that only 18 of 300 engagements in the *Iliad* exceed a single blow should be ignored – the apposite parallel is German war bands of the Roman and early medieval periods.⁴³ Combat in the *Iliad* indicates warfare in transition from pre-state to state warfare, as attempts to marshal the masses, organize definite attack units, and maintain combat contact demonstrate.

The uncertainties of historicizing combat scenes in an epic of disputed date lead the search for Greek tactical origins to the material evidence for armour and fragments of lyric poets. But did changes in armour produce a revolution immediately leading to the phalanx? How mobile and capable of individual combat was the new style of heavy infantryman? Do archaic vase paintings accurately depict contemporary warfare, or do they represent archaism and heroicizing epic scenes?

Beginning c. 725, changes in armour can be detected, which eventually created the classical heavily armoured hoplite, a term derived from his total set of equipment (*hopla*).⁴⁴ A helmet, spear, sword and double-grip shield (*aspis*) became standard, but only the spear and shield were essential; other equipment was at the individual's discretion. Lightening the hoplite's defensive armour became the trend.⁴⁵

As individuals furnished their own panoplies before the fourth century and not everyone would have had a full set, arguments that all hoplites carried about 30 kg (70 lbs) of armour and weapons (including the shield) cannot be sustained, nor can weight of armour, implying the warrior's immobility, explain the phalanx. By the early fifth century hoplites without greaves and cuirasses carried only about 12 kg (25 lbs) of equipment⁴⁶ – no doubt to increase manoeuvrability and stamina. Some armour (e.g. arm guards, greaves) were ceremonial or displayed wealth and social distinction.⁴⁷

⁴² E.g. Morris (1987) 196–201; similarly, Raafflaub (1997) 50–1.

⁴³ Fiction: Hellmann (2000) 197; German war bands: Wheeler (1991) 128 with nn. 34, 38; Singor (1991) 45–6.

⁴⁴ Lazenby and Whitehead (1996).

⁴⁵ Many items of armour were little used or fashionable only briefly. The bronze cuirasses, relatively rare among finds in comparison to helmets, greaves, and shields, yielded to the leather or linen corset, introduced c. 550 and predominant by the time of the Persian Wars. See Jarva (1995) 28, 126; Anderson (1970) 20–3.

⁴⁶ A weight of 30 kg is based on modern reconstructions of equipment: Hanson (1989=2000b) 56, (1991a) 78 nn. 1–2, (1995) 230, 244; contra Jarva (1995) 133–5, exploiting the unpublished findings of Blythe (1977).

⁴⁷ Snodgrass (1967) 93; Delbrück (1975) 265; cf. Jarva (1995) 125, 142–3.

The introduction of the double-grip round shield, wooden with a bronze rim and about three feet in diameter – the most significant change in equipment – does not signify immediate creation of the phalanx. Hoplites could fight one-on-one with adequate frontal protection from the *aspis*, especially when warriors stood perpendicular to the shield's projection from their left arms.⁴⁸ This sideways stance (often seen in vase-paintings) provided maximum leverage in use of the thrusting-spear, but the shield provided less protection for sword play, which required a frontal stance. Moreover, the shield's weight did not inhibit mobility. Hoplites could run: the race in hoplite armour became an Olympic event in 520 (Paus. 5.8.10). The *aspis* at 7 kg (*c.* 15 lbs) is lighter than the projected weight (10 kg/22 lbs) of the Roman Republican *scutum* found at Kast el-Harit in Egypt – and the *scutum* was a single-grip shield.⁴⁹ Certainly no one argues the immobility of Roman legionaries because of a heavy shield. Hoplites fought individually in the last phase of battle after the enemy's phalanx had disintegrated.

Perhaps more importantly, invention of the double-grip *aspis* *c.* 700 cannot be tied to a pre-existing formation of massed infantry needing a better shield.⁵⁰ The new double-grip shield, in widespread use by *c.* 650, demonstrates only desire for a larger, sturdier shield – perhaps a sign of increased hand-to-hand combat – but neither the *aspis* nor other armour produced a revolution. In vase-paintings the shield and cuirass remained alternative equipment until the late seventh century. At Sparta dedications of lead figurines in hoplite equipment at the sanctuary of Artemis Orthia retain the single grip shield as late as 620–580. Likewise votive terracotta shields with the single hand-grip from the Athenian Agora predominate until *c.* 675.⁵¹

The seventh century also presents a transition in offensive weapons. The prominence of swords in Geometric art might explain the desire for a stouter shield, but the seventh century introduced an age of the spear. After *c.* 625 a single thrusting-spear became the norm in Greek art. Preference for the thrusting-spear suggests declining combat skills and a closer formation of combatants.⁵² Such developments were not uniform throughout the Greek world and the extent of experimentation can only be surmised.

But whence the phalanx? A vase-painting and a Spartan poet's fragments offer some clues. On the Chigi vase (*c.* 640), the most coherent visual

⁴⁸ Van Wees (2000a) 127–30; cf. Greenhalgh (1973) 72–3.

⁴⁹ Bishop and Coulston (1993) 58–9. Other estimates put the Republican *scutum* at 9.65 kg and the imperial at 6.1 kg: see Junkelmann (1994) 176, 178; note also Goldsworthy (1996) 211.

⁵⁰ Contra Hanson (1991a) 63–84; cf. Latacz (1977) 237–8, who argued earlier that the phalanx antedates the hoplite shield.

⁵¹ Snodgrass (1964) 67, 83; Lorimer (1947) 91–3.

⁵² Van Wees (2000a) 148–9; Greenhalgh (1973) 73.

combat scene, two rows of hoplites, spears raised in the ‘overhand grip’, prepare to clash, while additional rows of warriors on both sides rush up from the rear (fig. 7.2).⁵³ Organized linear tactics seem evident, although the line lacks depth and how the reinforcements will insert themselves into the battle is uncertain. But depiction of the phalanx in seventh-century Greek or any classical art cannot be proved. Artists apparently had little desire to represent it.⁵⁴

Tyrtaeus, the Spartan poet of the Second Messenian War, offers the best view of combat in a literary source – at least as it appeared after 650 in the western Peloponnese. Heavy infantry (*panoplois*) with a thrusting-spear or sword are distinguished from the unarmoured (*gymnetes*), stonethrowers and javelin men but not archers. The *gymnetes* launch their missiles beside or behind the *panoplois*’s shields; at other times they rush forward to skirmish. Tyrtaeus’ exhortations to the *panoplois*, however, urge standing firm in the line for close combat rather than running away. Mutual support between men in line (forming a hedge with their hollow shields) occurs in one fragment.⁵⁵ Shield-to-shield combat with the enemy is anticipated, but Tyrtaeus gives no hint of depth.⁵⁶

Combat in Tyrtaeus and on the Chigi vase depict linear tactics before creation of a deep phalanx.⁵⁷ Denials of a distinction between combat in Homer and Tyrtaeus enjoy some popularity,⁵⁸ but Tyrtaeus reflects a slightly later development: his Spartans are to find glory in death for the *polis*, a concept still shadowy in Homer. Flight at the warrior’s own discretion, permissible to the Homeric hero, is shameful in Tyrtaeus (fr. 11.14). The benefit of the group now takes precedence. Elsewhere in the Aegean world, however, a more fluid, open style of warfare probably persisted in the seventh century. Despite throwing away their shields in retreat, neither Archilochus nor Alcaeus offer proof of phalanx service.⁵⁹

Creation of depth to the line probably belongs to the sixth century: Greek armies in the Persian Wars are already customarily deep. Details are absent in the poverty of literary sources, although the growing numbers participating in war, especially small farmers, and the character of border wars (Thuc. 1.15.2) provide a context for massed infantry in close formation combined with limited strategic goals and a marginalization of light infantry and cavalry.

⁵³ For recent detailed analysis of the Chigi vase and seventh-century battle scenes on vases see van Wees (2000a) 136–49. Cf. Salmon (1977) 84–101; Hurwitt (2002).

⁵⁴ Bazant (1983) 206. ⁵⁵ Fr. 19 West = *P Berol.* 11675 fr. A col. ii.

⁵⁶ Wheeler (1991) 129–31 with n. 49.

⁵⁷ Cf. Trundle (2001), who argues that the ‘hoplite revolution’ at Sparta belongs to the early sixth century.

⁵⁸ Latacz (1977) 233–8; van Wees (1994) 141–2, (2000a) 149–52.

⁵⁹ Schwertfeger (1982) 262–4, 273–80.

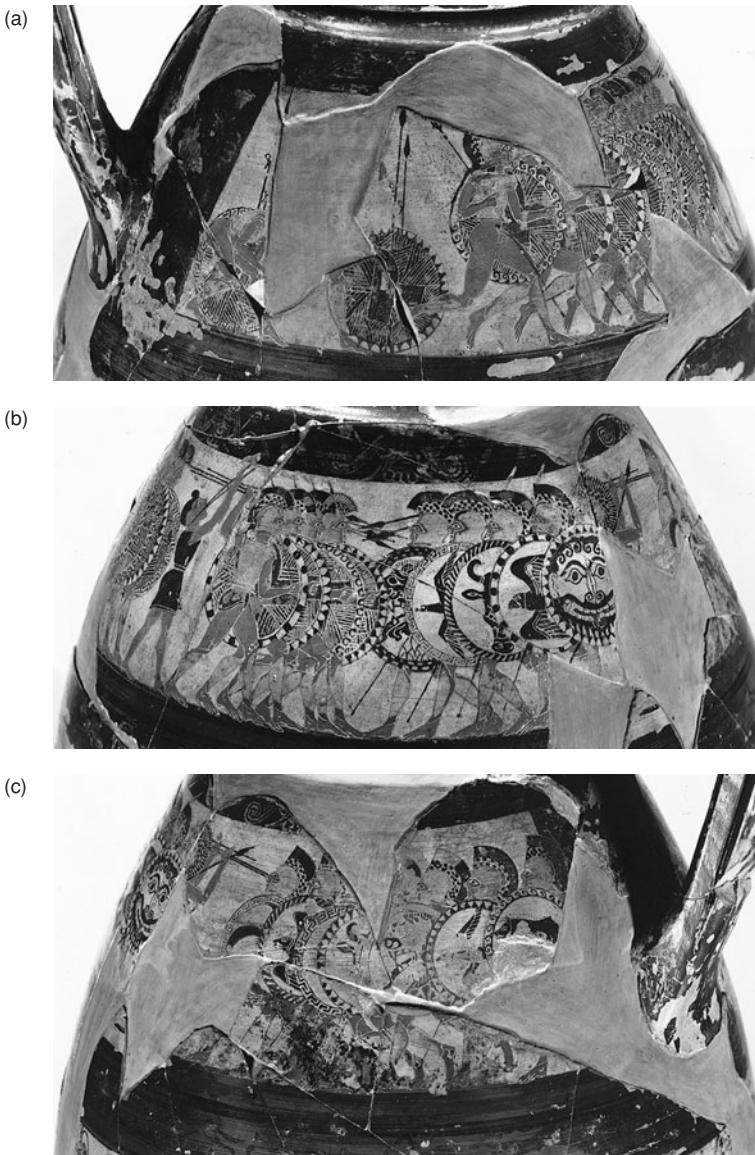


Figure 7.2(a)–(c) Early hoplites in action, on the Chigi vase from Corinth, c. 640 bc. In the centre two groups stand face to face with raised spears, while each man holds a second, larger spear (faded) upright in his left hand. Behind them, larger groups of men are running forward, with spears held upright on the left, but lowered on the right. On the far left, two men are arming themselves; they each have a pair of spears of unequal size, with throwing-loops attached to the shaft.

Mounted warriors and archers beside hoplites in vase-paintings do not contradict this view. As now agreed, some hoplites rode to the battlefield where they fought on foot. True cavalry in mainland Greece belonged to the great plains of Boeotia and especially Thessaly, where the vast plains controlled by aristocratic houses hardly favoured the development of hoplites. For mainland *poleis* cavalry became a military necessity only from the late fifth century on.

Light infantry (archers, slingers, javelin men) between the late seventh and early fifth centuries also became marginal, as the mainland phalanx developed. A significant role for Spartan light infantry between Tyrtaeus' day and the fifth century seems elusive. For Athens, Thucydides' assertion (4.93.1) that as late as 424 the Athenians never maintained regular light infantry clashes with the frequency of peltasts and archers in Attic vase-paintings besides occasional references to light infantry in operations (fig. 7.3).⁶⁰ The combination of hoplites, archers and horsemen on late archaic vases reflects colonial warfare in the northern Aegean, as Greeks expanded into the Chalcidice, Thrace and the Black Sea. Colonial warfare with barbarians did not follow the agonistic concept of set-piece heavy infantry clashes.

Organization, cohesion and discipline (not technology) distinguish asymmetrical clashes between state and pre-state peoples (cf. Thuc. 4.126). In colonial conflicts small-group or even individual combats must have been common. In the final stage of phalanx battle when the opponent's formation had disintegrated, hoplites fought individually. Hoplites also participated in raids, amphibious operations and sieges, besides naval service as marines – situations outside a phalanx. The hoplite was a more flexible fighter than often supposed, a flexibility increased by a long-term trend of lightening or disposing of the individual's body armour. The notion of hoplites helpless outside the phalanx is a myth.

In sum, the phalanx did not appear everywhere in the Greek world and certainly not simultaneously even on the mainland; it was hardly an inevitable phenomenon.⁶¹ Hoplite equipment, not synonymous with the phalanx, did not instigate suddenly a tactical 'revolution'. The evolution from fluid engagements of individuals and small bands to masses in line to a closely ordered mass in depth operating as a unit progressed over the course of the seventh and sixth centuries. Precise details are lost. Perhaps only among Sicilian tyrants (e.g. Gelon) did forces of 'all arms' develop in any degree comparable to Persian armies. On the mainland, however, after initial imperialistic urges were largely spent, the agonistic system and the phalanx marginalized cavalry and light infantry in conflicts of limited

⁶⁰ Van Wees (1995a) 163, although I do not find his attempt to argue away Thuc. 4.93.1 convincing.

⁶¹ Snodgrass (1993) 59; cf. Hanson (1999e) 67: Greeks had no alternative to the phalanx.

(a)

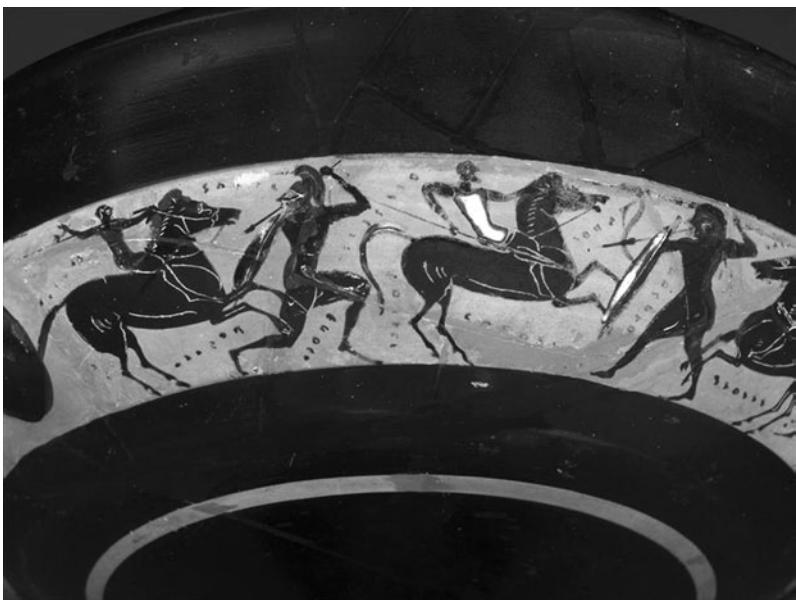


(b)



Figure 7.3(a)–(d) Mixed troops in combat, on an early sixth-century BC Attic cup in the Louvre. The hoplites are facing and/or supported by various types of cavalry, most equipped only with javelins, but including one horseman with a helmet and shield, one with a thrusting spear, and one with bow and arrow.

(c)



(d)

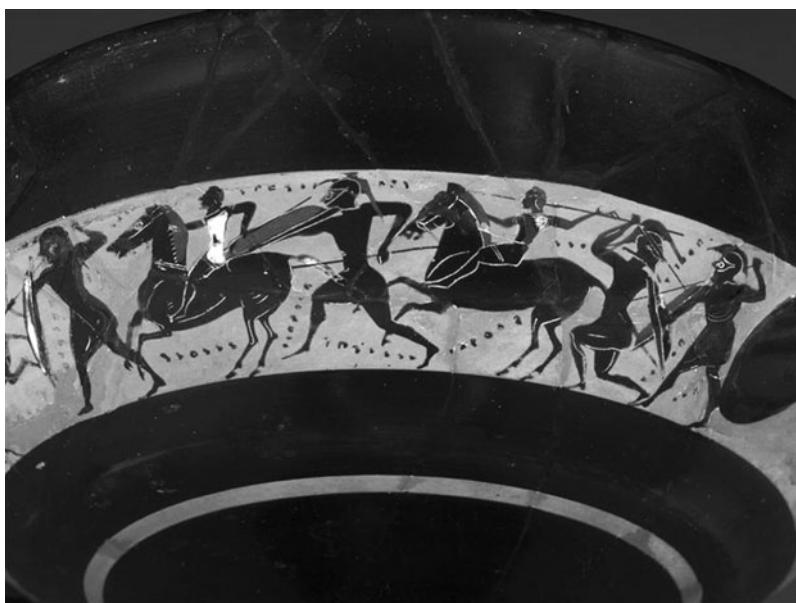


Figure 7.3 (cont.)

aims within a closed system of *poleis*. The Persian Wars and fifth-century Athenian imperialism would call the agonal system into question and begin teaching the art of generalship.

III. THE MECHANICS OF HOPLITE BATTLES

When the clouds obscuring Greek tactics of the fifth century finally break with Thucydides' narrative of the Peloponnesian War, a new military world seems revealed, although one evolving throughout the fifth century. Like the so-called 'hoplite revolution' leading to the phalanx, the 'military revolution' initiated by the Peloponnesian War was incremental, not dramatic and sudden, and in many ways more strategic than tactical. Nevertheless, the seeds of Philip II of Macedon's all-arms army were sown in the Peloponnesian War. But before addressing changes, the nature of combat between rival phalanxes should be addressed. A model of phalanx battle is highly problematic, as no single battle satisfies all the criteria and the most reliable sources, Thucydides and Xenophon, belong to a period of change in strategic aims and tactics. Here a mosaic of combat – however imperfect – will be composed.

First, the geographical paradox of the phalanx: mountainous Greece developed a heavy infantry formation as its national tactical characteristic despite the relative scarcity of level, unbroken terrain suitable for it. Geography explains why Epaminondas called the plains of Boeotia the 'dance floor of Ares'.⁶² A well-defined level playing field for combat suggests the prevalence of agonal rules for set-piece battles, as do a general lack of scouting and tactical reconnaissance before the fourth century and the non-exploitation of terrain for surprise attacks when large armies were involved on both sides. After all, a phalanx of non-professionals on short-term service was hardly suitable for quick strikes and surprise operations.⁶³

Mardonius (Hdt. 7.9b.1) demonstrates the lack of Greek strategic insight in choosing a battlefield. Indeed the laws of gravity and the phalanx's bulk dictated avoidance of attacks uphill and the disadvantage of meeting a downhill charge. Yet a level field devoid of natural obstacles was rare on the mainland. Trees, rivulets, ditches and other obstacles disrupted the phalanx's continuity of files, as Aristotle (*Pol.* 1303b2) and Polybius (18.31.5) emphasize. Polybius, however, exaggerates the differences between legion and phalanx: Romans also preferred a level battlefield and Nemea, the largest Greek versus Greek battle of the fourth century, occurred on overgrown terrain.⁶⁴

⁶² Plut. *Marc.* 21.2 and *Mor.* 193c ('dance floor of war'); cf. Pind. *Pyth.* 2.1: 'precinct of Ares plunged deep in war'; note also Wheeler (1999).

⁶³ Pritchett (1971–91) I.127–33, II.147–78, III.87–9.

⁶⁴ On terrain and exaggerations about the effects of natural obstacles on the phalanx, see Pritchett (1971–91) IV.76–85, although he does not distinguish classical from Hellenistic examples.

'Battle by mutual consent' (*machê ex homologou*), a Polybian term, describes the agonal clash of rival phalanxes. The contest might begin immediately upon encountering the opposing force, or the two armies might face-off for several days. In any event, one side 'offered' battle to the other by deploying and awaiting the other's preparation. Declining the 'offer' or retreating meant a loss of honour besides sowing disenchantment with the commander in the rank and file. The tacit offer of battle no doubt evolved from an older practice, an explicit verbal challenge to battle 'by appointment' at a specified place and time. Indeed the whole process probably owes its conceptual and procedural roots to pre-state duels of champions or small groups (*monomachiai*) to decide conflicts, such as the Menelaus–Paris duel in the *Iliad*, where Homer describes firm rules for a duel to decide the Trojan War:⁶⁵ an oath, a sacrifice and representatives of both sides marking off the 'lists'.⁶⁶ A duel of champions in a circumscribed arena bespeaks a heritage of pre-state warfare, and *monomachiai* are often associated with settlement of border disputes.⁶⁷ The rules of agonal battle may well have evolved from those for *monomachiai*.

If an 'offer' was accepted, deployment occurred without the opponent's interference. Each party rendered its phalanx of equal length to prevent outflanking. At this point, if not earlier, a general harangued his army to boost morale and kindle passion for the fight.⁶⁸ Finding 'liquid courage' in wine or alcohol before battle, attested essentially only for Spartan officers before Leuctra (371), did not characterize classical Greek battles: wine consumption with meals was ubiquitous in Mediterranean cultures and the single source for the anecdote is the pro-Spartan Xenophon, eager to excuse a Spartan defeat.⁶⁹

In Hellenistic practice a battle often opened with skirmishing of light infantry with missile weapons in the no man's land (*metaichmion*) between the two armies. The duration and purpose of this preliminary clash, which did not probe the enemy's heavy infantry, is unclear. For the classical period the pre-battle skirmish of light infantry is attested only once, by Thucydides (6.69.2), on the only occasion for which he recounts the pattern of general's speech, skirmish, sacrifice and hoplite clash.⁷⁰ Was the light infantry skirmish not mentioned elsewhere because it was commonplace

⁶⁵ Hom. *Il.* 3.74–461; cf. 7.55–311 (Hector vs. Ajax).

⁶⁶ On the protocols of duels in epic see Udwin (1999) 107–8; cf. van Wees' scepticism about chivalry in Homeric *monomachiai*: (1996) 40, 74 n. 105.

⁶⁷ A list of *monomachiai* in Pritchett (1971–91) IV.15–21; cf. Wheeler (1982) 224 with n. 9; a catalogue of Greek border disputes in Hanson (2000a) 216–18.

⁶⁸ The historicity of generals' speeches need not be doubted: see the responses of Pritchett (1994b), (2002) and Clark (1995) 375–6 to Hansen (1993).

⁶⁹ Xen. *Hell.* 6.4.8; likewise Plut. *Dion* 30.5, where Dionysius II (a tyrant) gives wine to mercenaries attacking the Syracusans (357). Note Lazenby's scepticism (1991: 90) of Hanson's exaggerations of pre-battle drinking (1989=2000b: 126–31).

⁷⁰ Except for Thucydides, Pritchett (1971–91) IV.51–4 has only Hellenistic and Roman examples.

or because it was new in the late fifth century? A firm answer is elusive. For the Athenians, the absence of a regular citizens' corps of light infantry at Delium (Thuc. 4.93.1) does not preclude use of allies and mercenaries as light infantry, and we do not know whether the Athenian archers at Plataea (Hdt. 9.60.3) but earlier absent at Marathon were citizens.⁷¹ The ritualistic character of pre-battle skirmishing, and Thucydides' failure to note it as an innovation, may betray its traditional nature.

But battle could not begin without a sacrifice. Usually even before deployment a sacrifice (*hiera*) to ascertain the gods' will occurred in an army's camp. Negative signs justified declining battle. Indeed both sides could fight with a belief in the gods' favour (cf. Diod. Sic. 15.85.1 for Mantinea, 362). A second sacrifice (*sphagia*) – propitiatory rather than for divination – occurred in the *metaichmion* just before the signal to advance. Athenians and Spartans addressed this sacrifice to Artemis Agrotera.⁷² The propitiatory pre-battle sacrifice, absent in Homer, surely has archaic roots and disappeared in the Hellenistic period. Connection of the sacrifice with Artemis Agrotera, however, suggests its association with border wars and marginal territory rather than prime farmland.⁷³ The sacrifice ended pre-battle rituals.⁷⁴

A trumpet sounded 'the charge' and the advance began. The king or general might also signal the attack by singing the paean, a hymn to avert evils (Ath. 781d), before the trumpet call. Then the whole army joined in the chant before raising the war-cry as they reached combat range.⁷⁵ Spartans preferred a hymn to Castor (Plut. *Lyc.* 22.2–3) to the paean.

Reconstruction of a phalanx's advance defies modelling. Spartan practice differed from that of other *poleis* and the drill of professionals (mercenaries) in Xenophon's *Anabasis* need not completely coincide with what citizen levies did. The width of the *metaichmion* could determine the rate of advance: breaking into a run too soon exhausted an army before engagement. Thucydides (5.70) contrasted at Mantinea (418) the orderly slow Spartan advance in step to the sound of the pipe (*aulos*) – a means to ensure the close integrity of the phalanx's ranks and files – with the norm that units (*taxeis*) of large armies lost their tactical cohesion in the attack. In allied armies (e.g. Mantinea, 418; Nemea, 394) each *polis'* contingent operated as a separate unit and the battle line of an allied army did not form a continuous mass; gaps of indeterminable width (but no doubt small)

⁷¹ Some epigraphical evidence suggests Athenian use of peltasts by c. 430, if not earlier. See Pritchett (1971–91) IV.58 n. 173.

⁷² On pre-battle sacrifices see Pritchett (1971–91) I.108–15, III.78–90; Jameson (1991) 197–27; Parker (2000) 299–314.

⁷³ Jameson (1991) 210.

⁷⁴ On magic and pre-battle rituals see Eur. *Phoen.* 1377; Pritchett (1971–91) III.88 n. 158.

⁷⁵ On the paean see Pritchett (1971–91) I.105–8.

separated the units of each *polis*. Coordination of all parts of the line was not possible. Some sections might rush ahead of others like the Tegeates at Plataea while Pausanias was still sacrificing for the Spartans, or Herippidas' early dash from Agesilaus' phalanx at Coronea (Xen. *Hell.* 4.3.17). Well-trained units initially advanced with their spears resting on their right shoulders and awaited a trumpet signal to lower the spears for a charge in the 'underhand' grip (the thumb closest to the spearhead) at waist level. At some point the hoplites would switch their spears to an 'overhand' grip (spear head closest to the little finger) and held beside or above the head.⁷⁶ How and when this occurred and how many ranks (1–3 only?) changed to the overhand grip are unclear. Hoplites could not charge long distances with upraised spears, nor does a change of grip after contact with the enemy seem feasible.⁷⁷

Various aspects of the charge and the initial stage of combat have aroused controversy – even about the phalanx as a closed formation and Thucydides' accuracy (esp. 5.71.1) on how a phalanx advanced. Addressing these issues requires dissection of the phalanx's anatomy. The cumbersome phalanx, chiefly designed for forward movement, changed fronts awkwardly; its flanks and rear were vulnerable, if unprotected. The phalanx, however, concealed the limited combat skills of its members within its mass, and was thus a convenient formation for militias on short-term service. In other contexts the phalanx's bulk became a defence against cavalry, as it absorbed or deterred mounted charges, if its men had the nerve to maintain their position and formation. Further, in Hellenistic and Roman Imperial use by professionals the phalanx provided a central tactical base or defensive bulwark (*probolē*), which stalemated assault on its front, while other units of an army launched offensive strikes.

The phalanx's effectiveness depends on cohesion of its files, and its nature assumes an opponent of heavy infantry, likewise lacking speed and mobility.⁷⁸ Polybius' assertion (18.31.2) of the phalanx's suitability for only one sort of battle in a singular type of battlefield imposes anachronistically a concept of idealized agonial warfare on Hellenistic armies. His point is valid for a much earlier period, as the lack of attention to cavalry and light infantry among major mainland *poleis* before the later fifth century confirms.

For Aristotle (*Pol.* 1297b19–20) the *hoplitikon* (i.e. the phalanx) was useless without organization (*syntaxis*). He implies that the key to the phalanx's character lies not in numbers, nor in its depth, but in the ordered coordination of the group. *Syntaxis* has both horizontal and vertical dimensions: continuity of files, whereby the formation's front presented a closely ordered

⁷⁶ Xen. *An.* 6.5.25; Lazenby (1991) 90; cf. Hanson (1989=2000b) 136–51.

⁷⁷ Cf. Hanson (1989=2000b) 84, 163–5; Anderson (1991) 31–2; Lazenby (1991) 92–3; van Wees (2000a) 138.

⁷⁸ Cf. Ferrill (1985) 144; Grundy (1948) 267.

rank of shields and thrusting-spears, and depth, which (in theory at least) rendered the formation difficult to penetrate and added weight to the formation's momentum. The sources repeatedly emphasize the importance of continuity of front – not only the militarily astute Thucydides but also Sophocles, once an Athenian general.⁷⁹ The shield (*aspis*) is particularly singled out: unlike the helmet or cuirass, the loss of a shield brought shame, for the safety of the whole line depended on the shield.⁸⁰ In Athenian law *rhapsaspia* (throwing away the shield), equated with *lipotaxia* (abandoning one's place in the phalanx), could be prosecuted.⁸¹ Men who did not keep formation, but ran forward from their place in line were *ataktoi* (in disorder: Xen. *An.* 5.4.21).

Most literally, *syntaxis* denotes a combination of units (*taxeis*). A classical phalanx was not an indivisible mass. Sub-divisions are known at both Sparta (e.g. *morai*, *lochoi*) and Athens (*taxeis*, *lochoi*).⁸² Officers (*protostatēs*) led the files. Blank files (an officer in the first rank but standing beside his unit without a file behind him) did not occur. These sub-divisions could function (although rarely) as independent units, as Agis II's attempt to realign Spartan deployment at Mantinea (418) demonstrates (Thuc. 5.71.3–72.1). The *lochos* seems the most common tactical sub-unit of a phalanx, although the Spartans also occasionally used the *mora* independently. An Athenian tribal *taxis* could also act independently (Thuc. 6.98.4).

Depth, the vertical dimension, is more problematic. The favoured depth for a classical phalanx was eight, although figures, such as four, ten, twelve, sixteen, or even (for Thebans) twenty-five and fifty, are known.⁸³ Obviously depth adds momentum in attack and in defence renders the line more impenetrable. The front ranks receive psychological support from the rear ranks, whose mass checks any hesitation to engage and deters desertion. Depth also ensures immediate replacements for front-rankers killed or wounded (Arr. *Tact.* 12.4). Not least, depth, imposing in itself, exerts psychological pressure on an opponent.

Unclear, however, is the preference for eight deep, when, given the length of the Greek thrusting-spear (*dory*) at about eight feet, only ranks 1–2 (or possibly 1–3) actually fought. Eighteenth-century debates over the relative virtues of column and line formations produced a theory that eight deep produced the maximum effect of shock when the attacking line collided with the defenders; formations beyond eight yielded diminishing returns,

⁷⁹ Thuc. 5.71.1; Soph. *Ant.* 668–74; cf. Eur. *HF* 190–2.

⁸⁰ Plut. *Mor.* 220a, 241f; cf. Eur. *HF* 190.

⁸¹ See Schwertfeger (1982) 264–6; cf. the fourth-century ephebic oath: Tod 11.204.

⁸² Sparta: Xen. *Lac.* 11.4; cf. Thuc. 5.68.2–3; Athens: Hdt. 6.111.1 with Lazenby (1993) 62–3; variations in size of *lochoi*: Xen. *Cyr.* 2.3.2, 4.4; *An.* 3.4.21. Cf. ch. 5 in this volume, pp. 127–30.

⁸³ See Pritchett (1971–91) 1.134–43, who refutes Cawkwell's (1989: 380) inconclusive argument for a basic depth of four.

with depths beyond sixteen producing no additional shock at all. Although Ardant du Picq misunderstood this theory as actual *experiments*,⁸⁴ the theory merits at least *prima facie* credence, if the principle of shock (a physical collision of attackers with defenders) is conceded.

Paradoxically, given the phalanx's emphasis on lateral continuity of files, that is, the horizontal dimension of ranks (*zuga*), the file (*stichos*) served as the organizational building block of the phalanx. All file-leaders (*protostatai*) were considered officers, and commanders of larger sub-units of the phalanx (e.g. *enomotarchēs*, *lochagos*) supervised combinations of files.⁸⁵ Ranks *qua* ranks lacked officers. Each file was self-sufficient with a *protostatēs* at its head and a 'tail-officer' (*ouragōs*) in the rear to maintain the file's straightness and prevent desertion.⁸⁶ Further, the phalanx's depth could vary both within a *polis'* phalanx and between allied contingents. At Leuctra (371) Spartan depth was not uniformly twelve and at Mantinea (418) Spartans were generally eight deep but at the discretion of the *lochagoi*.⁸⁷ Allies at Delium (424) did not follow Thebes' lead with a formation twenty-five deep.⁸⁸ Topography and the desire for equal frontage with the enemy could also affect depth. Even so, the reason for a preference for eight deep remains a mystery.

Yet the file was ordered not only by the *protostatēs* and the *ouragōs*, but also by assigned places. Sensibly these front and rear officers should be of superior quality and likewise the *epistatēs* behind the *protostatēs*.⁸⁹ At Sparta the *enomotia*, in theory one man from each of the forty age-groups and deployed in three or six files,⁹⁰ probably lined up according to age.⁹¹ For other armies details are lacking. Mantitheus claimed that he arranged to have himself placed in the first rank at Nemea (Lys. 16.15). Whether Athenians assigned *protostatēs* so cavalierly remains unknown and testimony in Athenian courts can rarely be trusted. But doubt that *poleis* (except Sparta) organized their phalanx files is too extreme.⁹² Onasander (10.2–3), whose *Strategikos* (despite its first-century AD date) constitutes a compendium of classical Greek military theory,⁹³ recommends drilling men to know their spots in formation, including their place in the files and who stands beside them (*parastatai*). Further, Syracusan defeats in their first battles with the

⁸⁴ Ardant du Picq (1987) 169.

⁸⁵ Xen. *Lac.* 11.5, 13.9; Thuc. 5.66.3–4. Cartledge's scepticism (1987: 204) of Thuc. 5.66.4 seems unjustified, as Thucydides is describing a chain of command.

⁸⁶ Xen. *Lac.* 11.5; Asclep. *Tact.* 3.6. Xenophon (*An.* 4.3.29; *Cyr.* 2.3.22; cf. *Cyr.* 6.3.25) proves that the *ouragōs* was not a Macedonian or Hellenistic invention.

⁸⁷ Xen. *Hell.* 6.4.12; Thuc. 5.68.3. ⁸⁸ Thuc. 4.93.4; Xen. *Hell.* 4.2.13.

⁸⁹ Asclep. *Tact.* 3.5–6; cf. Xen. *Mem.* 3.1.8. ⁹⁰ Anderson (1970) 392–3.

⁹¹ Lazenby (1991) 89.

⁹² Sir Lazenby (1991) 89, followed by Hornblower (1991–6) II.447 and Goldsworthy (1997) 9; cf. Hanson (1989=2000b) 100. Thuc. 5.10.5, a frequently cited (and misunderstood) passage, does not support this view.

⁹³ Ambaglio (1981).

Athenians (415) resulted from the failure of soldiers in a newly organized army to know their specific places in the phalanx.⁹⁴ Thucydides implies that the Athenian hoplites knew precisely how to deploy in their files. Indeed when deploying an army of hundreds, if not thousands, the individual soldiers (in order to avoid mass confusion) must have at least some idea of their supposed place in a formation, as any member of a marching band could attest. Sub-divisions of the phalanx and assignments to specific files, if not to definite slots within a file, solved this elementary organizational problem.

The emphasis of the sources (besides Thucydides) on the absolute necessity of a phalanx's continuity of front and the shield's significance justifies the idea of a phalanx as a closed formation stressing collective action of the unit despite the hoplite's capability for individual combat. Hellenistic tactical manuals attest that offensive action required rank and file intervals of three feet (*pyknosis*),⁹⁵ and we need not assume that Philip II's reform of the phalanx and Hellenistic practice altered the classical file interval.⁹⁶ Certainly the *aspis'* three-foot breadth offered full protection to hoplites in combat standing sideways with the left foot forward, but hoplites did not rush across the *metaichmion* already in the sideways stance. The advance required coverage of the hoplite's exposed right side as he ran forward.

Thucydides' observation (5.71.1) that phalanxes tended to defeat each other's right flank because hoplites constantly edged to the right to avoid exposure of their left sides, cannot mean individuals independently, gradually edging to the right during head-on advances of two armies. Such could only result in hoplites being nudged or tripped during the charge – and potential disaster for the order of ranks and files. Rather, the phalanx probably charged not straight ahead but with a slight veer to the right – almost in echelon – with the general's file on the extreme right taking the lead and each successive file angling to cover its right side from the hoplites of each file to the right.⁹⁷ Technical data from a militarily sophisticated source like Thucydides cannot be rejected out of hand. The direct head-on charge of a Macedonian phalanx with smaller shields and the sixteen-foot sarissa may indeed be Philip II's innovation.

Clearly the phalanx of the classical period required some practice in order to function. Hundreds or thousands of men running together as a unit, even if wearing only 12 kg (25 lbs) or so of equipment, required preliminary training. Otherwise the formation would lose its cohesion, as faster runners outstripped the slower, or men within the formation tripped

⁹⁴ Thuc. 6.69.1, 7.3.3; cf. Nep. *Iphicrates*, 2.2.

⁹⁵ Asclep. *Tact.* 4.1–3; Ael. *Tact.* 11.2–5; Arr. *Tact.* 11.1–4; cf. Polyb. 18.29.2, 7.

⁹⁶ Pritchett's attempt to discredit the Hellenistic *Tactica* (1971–91) 1.144–54, followed with some additional arguments by Krentz (1985a) 51–4, is invalid: see Wheeler (1979) 308–9.

⁹⁷ Woodhouse (1933) 77–8.

or caused others to trip during the charge. The three-foot interval between ranks avoided 'friendly fire' injuries to the rear-rankers from the butt spikes of the front ranks, as the spears swung to and fro in the underhand grip during the last stage of the advance.

In a battle by mutual consent both sides charged. As Caesar noted (*B Civ.* 3.92), when Pompey at Pharsalus (48) declined the customary *cursus* (a stratagem to exhaust Caesar's men and to exploit the disarray from the charge), the advance to battle increased the men's morale and fighting spirit. Morale was important. When the enemy approached, some parts of the phalanx or the whole force might lose its nerve and run away, as the Argives did at Mantinea (418) and Coronea (394). At the so-called 'tearless battle' (368) an Arcadian army disintegrated before contact with the Spartans.⁹⁸

Two phalanxes charging at each other could not smash together in a horrendous crash,⁹⁹ as few in the first two ranks, officers and the best fighters, would have survived. Agesilaus' head-on collision with the Thebans at Coronea evoked Xenophon's disapproval, and this literal crashing of the two armies may be one reason why Coronea was judged a unique battle.¹⁰⁰ The Spartans' slow, orderly advance in step to the tune of pipers indicates that intimidation through a display of discipline rather than physical shock governed their approach to battle (Thuc. 5.70). In all probability two armies, if at a run, slowed before contact.¹⁰¹ As the two phalanxes joined in combat, gaps opened between files or *taxeis* during the approach were plugged or, if such were irreparable, the rout of one section or another of the battle line was inevitable. If the opposing lines stabilized their fronts, individuals attempted to maintain their alignment in rank, since dashing forward endangered themselves and the formation's integrity as a whole.¹⁰²

At some point one side began pushing the other back. Considerable ink has been spilled debating whether this pushing (*othismos*) is literal or metaphorical.¹⁰³ Evidence from Homer and Tyrtaeus – neither of whom knew the deep phalanx – can be dismissed immediately and the analogy of phalanx battle with the game of rugby has been excessively emphasized. The ferocity of the 'killing zone', where opposing hoplites stood toe-to-toe,

⁹⁸ Lazenby (1991) with references; cf. Goldsworthy (1997) 17.

⁹⁹ Sic Hanson (1989=2000b) 152–9; cf. Pritchett (1971–91) IV.73.

¹⁰⁰ Xen. *Hell.* 4.3.16; *Ages.* 12.2; Plut. *Ages.* 18.2–3.

¹⁰¹ Lazenby (1991) 92. ¹⁰² Cf. Ardant du Picq (1987) 113–14.

¹⁰³ Fraser (1942) initiated the metaphorical view, which has been elaborated into a case for the phalanx as an open formation of individual combatants by Cawkwell (1978) 151–3, (1989); Krentz (1985b), (1994); Goldsworthy (1997); and van Wees (2000a) 127–31; the traditional view of literal pushing is represented by Woodhouse (1933) 79; Grundy (1948) 267–9; Cartledge (1977) 16; Holladay (1982); Anderson (1984); Pritchett (1971–91) IV.65–8, 71–3, 91–2; Hanson (1989=2000b) 172–5, (1995) 232–3, 262, 300; Lazenby (1991) 97; Luginbill (1994); Hutchinson (2000) 27, 169.

shield-to-shield, stabbing and struggling in a confined space, defies description. Many references to shoving are surely metaphorical for the tide of a battle's momentum swinging in one direction and forcing an enemy backwards. But metaphor less validly applies to the momentum of the Theban right's downhill charge at Delium, although the Athenian left advanced to meet them (Thuc. 4.96.2), or to Agesilaus' head-on collision at full speed at Coronea, where Xenophon explicitly notes 'they were pushing, fighting, killing, dying'.¹⁰⁴ At issue cannot be the advantage of depth and number, for a priori a deeper, more numerous body of physically stronger troops will bowl over a numerically smaller and thinner unit. But did the rear ranks of a phalanx physically shove the men in front of them in the files?

At the fictitious battle of Thymbrara, Xenophon's scenario for testing rival tactical theories,¹⁰⁵ Cyrus the Great's phalanx two ranks deep, armed with a single-hand-grip shield, opposed Croesus' Egyptians 100 deep and equipped with full-body shields suitable for pushing. As expected, the Egyptians locked shields and pushed back the Persians, although Cyrus had planned a fighting withdrawal to lure the Egyptians into a position for his attacks on their flanks and rear. Pushing by the rear Egyptian ranks, not explicitly stated, is certainly implied, and the pressure of the rear ranks – by their physical presence regardless of any shoving – on the front ranks to advance cannot be questioned. The contrast of 2 versus 100 deep is an exaggerated example of the futility of excessive depth, not an advocacy of two deep as the 'ideal formation'.¹⁰⁶

For cavalry the ancients already knew that depth did not increase the force of attack: horses cannot push each other,¹⁰⁷ although charging massed cavalry is terribly intimidating. But infantry could push each other. The eighteenth-century theorists, whose views Ardent du Picq canonized, also knew that a bayonet charge against a defender in place was a game of 'chicken': hand-to-hand combat rarely ensued, for either the defenders fled before the attackers reached them, or the attackers 'lost heart' before the blaze of musket fire. But hand-to-hand combat of infantry was a reality in antiquity, especially when forces charged each other. Depth compelled the front-rankers forward and prohibited flight. The very presence of men behind the front-rankers in a file pressured their advance. Polybius and the Hellenistic tacticians explicitly assert that ranks 6–16 of the Hellenistic

¹⁰⁴ See above, n. 100; cf. Amm. Marc. 16.12.37: pushing (?) by Alemanni against the Romans at Strasbourg.

¹⁰⁵ Anderson (1970) 165–6.

¹⁰⁶ Xen. *Cyr.* 6.3.21–3, 4.17, 7.1.33–4. Cf. van Wees (2000a) 131–2, who ignores the 'bait and trap' aspect of Cyrus' battle plan and speaks of the Persians 'successfully resisting' the Egyptians.

¹⁰⁷ Arr. *Tact.* 16.13; Ps.-Maurice, *Strat.* 2.6.5–11 Dennis (1981).

phalanx pressured those in front by the weight of their bodies.¹⁰⁸ Shoving the enemy or pushing comrades forward with the shield does not come into question for the smaller shields and long sarissas of the Hellenistic phalanx, but alleging the irrelevancy of this information because it is Hellenistic is excessive. Philip II's reforms seem unlikely to have altered all the phalanx's basic principles. Polybius' three-foot interval between ranks probably disappeared during battle. Indeed Arrian (*Tact.* 16.13), in the same passage denying pushing for cavalry, asserts its validity for infantry who pushed with their shoulders and sides. And Arrian, a Roman general, had practical experience with phalanxes: he planned to deploy his legions as a phalanx against the Alans in AD 135, the year before he wrote the *Tactica*.¹⁰⁹ Pushing by the rear-rankers of a Hellenistic phalanx should not be doubted.

For the classical phalanx in combat we can imagine a close bunching in the front ranks of both parties with a loss of clear intervals of files and ranks. During the intense, ferocious combat along the front line the rear ranks would have exerted constant pressure (not necessarily shoving) to move forward. If a battle stalemated without a breakthrough for either side, then the battle could evolve into a shoving match, although perhaps not at every part of the line and not simultaneously. Positing a dichotomy between fighting and pushing is erroneous.

But just as a hoplite battle should not be conceived as rugby game, two metaphorical references to pushing (*othismos, otheô*) may be significant evidence against the view that pushing is only a metaphor. In Aristophanes (*Vesp.* 1085) the veterans of Marathon equate fighting and pushing: 'we pushed them with the gods' help until evening'. The equation has no claim to accuracy about the tactical details of Marathon, nor does it support a view that a phalanx battle was primarily a shoving contest. Aristophanes' equation does, however, verify that an Athenian audience would recognize the role of *othismos* in hoplite battle. In the same vein, Herodotus (8.78) describes the Greek generals' debate just before Salamis as an *othismos* – a metaphor certainly, but metaphors contrive figurative usage from real practice. If defining hoplite battle as a shoving match is too extreme, denying *othismos* likewise goes too far.

Eventually one side tore a gap into the opponent's line or one party was bested in the test of wills. Either case produced a general collapse of the enemy's formation, for despite its depth the phalanx was fragile. Du Picq's theory that psychological pressure in the rear ranks of mass formations induces collapse cannot be supported by ancient Greek evidence.¹¹⁰ The

¹⁰⁸ Polyb. 18.30.4; Asclep. *Tact.* 5.2; Ael. *Tact.* 14.6; Arr. *Tact.* 12.3–4, 10.

¹⁰⁹ Cf. Wheeler (1978), (1979).

¹¹⁰ Ardant du Picq (1987) 79, 89, 114, 116, 169, 171, followed by Hanson (1989=2000b) 189–90.

battle now became a rout (*tropē*) and entered a new phase. Unit combat gave way to individual duels, where hoplites displayed their personal skills (Pl. *Lach.* 181a). Casualties, relatively even between the two armies in formation, now multiplied for the defeated. Sometimes the defeated trampled their own comrades in haste to escape (e.g. the Argives at Mantinea: Thuc. 5.72.4) and in the heat of battle ‘friendly fire’ casualties sometimes happened: Athenians killed each other after outflanking the Theban left at Delium (Thuc. 4.96.3).

In a ‘battle by mutual consent’ by agonal rules an extended pursuit of the defeated was irrelevant. Hoplites were ill-equipped for long pursuits anyway. Possession of the battlefield and stripping the armour from the enemy dead were what mattered, for total annihilation of the opponent or political gains did not belong to the battle’s strategic context. Spartans in particular – supposedly under the injunction of Lycurgus’ prescripts – would forego pursuit.¹¹¹ Under non-agonal rules circumstances differed.¹¹² The formal conclusion of battle came only when the defeated sent a herald requesting a truce for the return of their dead. Failure of the victors to recover all of their dead could mean losing credit for victory after they abandoned the battlefield. The Athenians defeated the Corinthians at Solygeia (425), but later had to retrieve two Athenian dead by herald, thus conceding defeat.¹¹³ Greeks took recovery and proper burial of battle dead very seriously (cf. Onasander 36.1). The failure of Athenian commanders to recover all their dead from the naval battle at Arginusae (406) resulted in the trial and execution of six generals.

The sources generally say only that a battle lasted ‘for a long time’. The late fourth-century AD Vegetius (*Mil.* 3.9) claims Roman battles lasted two or three hours, but of course when the stopwatch was started and stopped is anyone’s guess. How much time for deployment and pre-battle rituals, or how much of the rout was included cannot be calculated.¹¹⁴ A recent fascination with reconstructing battle mechanics in minute detail leads to fruitless speculation about unattested lulls in combat, when hoplites would take ‘a breather’, but it is difficult to imagine once hand-to-hand combat commenced how someone called for a ‘time-out’. Firmer ground appears with estimates of casualties: the victors lost about 5 per cent and the losers about 14 per cent with the discrepancy coming in the second phase of the battle, the rout. Further estimates assert that about 80 per cent of

¹¹¹ Possession of the field: Hdt. 1.82.5; Thuc. 4.44.1–4; Plut. *Nic.* 6.5–6; Diod. Sic. 15.87.2; Polyaeus, *Strat.* 2.32; Connor (1988) 15; Lycurgus; Plut. *Lyc.* 22.5, *Mor.* 228f; Polyaeus, *Strat.* 1.16.3; cf. Thuc. 1.70.5, 5.73.4.

¹¹² Krentz (2002) 30–1.

¹¹³ On the rules for recovery of the dead, see Pritchett (1971–91) IV.97–99, 190–2, 246–9. Nicias: Thuc. 4.44; Plut. *Nic.* 6.5–6.

¹¹⁴ See the collection of evidence at Pritchett (1971–91) IV.46–51.

the seriously wounded died on the day of battle, 30–5 per cent died after returning home, and probably half of the survivors incurred permanent disabilities.¹¹⁵ But these rather favourable statistics obscure the fact that some *poleis* suffered more drastic casualties than others. Boeotian Thespiae incurred such losses in the fifth and fourth centuries that it ceased to exist after Leuctra (371).¹¹⁶

What inspired the hoplites to do the actual dirty work of fighting? Patriotism, the justice of the cause (guaranteed by favourable sacrifices) and confidence in an army's leaders can be surmised, but the sources scarcely offer specific discussions of this topic. Disciples of the 'face-of-battle' school would qualify motivation from abstract factors like patriotism with a post-Second World War theory, which emphasizes fighting for the survival of the 'primary group' ('buddies') of the individual combatant's immediate environment – for antiquity the friends, relatives, neighbours and comrades of his *taxis*, in some cases a tribal unit.¹¹⁷ But application of this modern theory to Greek antiquity finds only limited support in the sources. Combat motivation for the hoplite was certainly no less complex than for modern soldiers. Some served from coercion, others for pay, still others for patriotism and hope of glory. The hoplite's 'buddies' cannot be excluded as a motive as well, but especially for short-term campaigns application of 'buddy theory' to ancient Greek armies seems too facile.

IV. THE EMERGENCE OF GENERALSHIP, 479–362 BC

By the last third of the fifth century itinerant instructors of military arts (*hoplomachoi*) made the rounds of Greek cities. They secured employment from the courts of Persian satraps to Sicilian Syracuse and prompted rebukes from Xenophon and Plato for charlatancy.¹¹⁸ Apparently the Athenian market for their services was lucrative: war in the fifth century – by its frequency coupled with the demands of empire – was becoming a technical skill (*technē*); professionalism was on the rise; military competency and definition of the 'good general' emerged as issues during the Peloponnesian War and in democratic procedures for the annual election of the ten *strategoi*, now leaders of the state.¹¹⁹ Military training at Athens (in contrast to Sparta: Thuc. 2.39.1–2), a private and family affair, no longer sufficed for the

¹¹⁵ Krentz (1985a); Brulé (1999); cf. Mälzer (1912).

¹¹⁶ Hanson (1999a) 208–15. On recovery and identification of the dead see Vaughn (1991); care of wounded: Jacob (1932); Hanson (1989=2000b) 210–18; Salazar (2000); Sternberg (1999); burials: Pritchett (1971–91) IV.94–259.

¹¹⁷ So e.g. Hanson (1989=2000b) 117–25; cf. van Wees (1996): a 'face-of-battle' view of the Homeric warrior's motivation.

¹¹⁸ See Wheeler (1983) 1–9.

¹¹⁹ Cf. Wheeler (1991) 137–8.

ambitious. Grumblings about the inferiority of Athenian infantry were also heard.¹²⁰

The *hoplomachoi* taught tactics (*taktika*), that is, weapons handling, individual and unit drill¹²¹ – the basics required of a hoplite or officer in a battle by agonial rules. But Xenophon protested against tactics as the totality of generalship (*strategika*), for a general must not only provide supplies, pay and medical care for his army, but also know how to use different types of troops, exploit changing circumstances, outwit an opponent and respond to the unexpected.¹²² The criteria for generalship had changed by the early fourth century. Criticisms of the *hoplomachoi* demonstrate that the concept of how to deploy a phalanx for a ‘battle by mutual consent’ was well established, but the notion of generalship in a wider sense was not.

A general’s expanded duties reflected the disappearing agonal context of large-scale set-piece battles. The use of rival citizen levies likewise eventually declined with the influx of mercenaries and professionals. Battles of course derive their significance from the strategic and political contexts in which they are fought. From the Persian conflicts on, war outgrew the limits of *polis* versus *polis* contests. Imperialism – both Persian against the Greeks and the Greek counter-offensive from 479, Athens’ pretext for empire – erased limits on strategic aims: campaigns for conquest or control and subjugation had real political consequences for the losers. Greek cities could now be annihilated by other Greeks. A single battle between major powers was no longer decisive. The ruthlessness of ‘heraldless’ or ‘truceless’ war predominated. Tactically, set-piece battles became relatively rare between 479 and 362, although little is known of their frequency before 479. Athens avoided them whenever possible in the Peloponnesian War, as did the various alliances combating first Spartan, then Theban hegemony from 395 to 362. Armies manoeuvred instead of choosing the first suitable plain and could be surprised like Cleon’s disastrous reconnaissance in force at Amphipolis (422). Often battles were by encounter rather than ‘by appointment’, as armies groped in the fog of rudimentary scouting and intelligence services.¹²³ Imperialistic aims brought armies further from their home *poleis* and through rugged terrain unsuitable for the typical phalanx clash. The hoplite, capable of individual combat under equal conditions, was still slow afoot and his thrusting-spear had a limited offensive range, in comparison to the missile weapons of light infantry and cavalry. Without proper protection of its flanks and rear, the phalanx’s relative invulnerability against more lightly armed forces in face-to-face confrontations disappeared, and rugged

¹²⁰ [Xen.] *Ath. Pol.* 2.1; Pl. *Leg.* 706b–c; Plut. *Them.* 4.3; on military training see Anderson (1970) 84–110; Pritchett (1971–91) 208–31; Wheeler (1982); cf. Rawlings (2000).

¹²¹ See Ael. *Tact.* 3.4 (= Aeneas Tacticus’ definition of tactics); cf. 3.1–3.

¹²² Xen. *Mem.* 1.6, *Cyr.* 1.6.9–42.

¹²³ Field reconnaissance: Pritchett (1971–91) 1.127–33, now qualified by Russell (1999) 10–19.

terrain, use of ambush, and opponents exploiting superior speed, mobility and range of fire could either demolish a phalanx outright or harass it to death.

Nevertheless, such ‘changes’ are not new with the Peloponnesian War. Light infantry, cavalry and mercenaries were employed before the Persian Wars. Greek tactics between 479 and 362 saw changes of degree and scale, not kind. The importance of cavalry and light infantry in Athenian operations around Potidaea (431–429) and the Chalcidice at the beginning of the war suggest that the Peloponnesian War did not introduce the increasing role of these arms, but rather that the non-agonal, colonial style of warfare practised before the fifth century, and no doubt prominent in the amphibious operations and expeditionary forces of Athens during the Pentekontaetia, became the norm. In short, the style of warfare on the periphery replaced that of the centre.

Yet the tactics of the phalanx also continued to evolve – more in the fourth than the fifth century. The formation required more flexibility. Just as the changed strategic circumstances of the fifth century called for campaign managers, so the coordination of cavalry, light infantry and hoplites on the battlefield, the ability to react to developments, or to plan an engagement solicited the skills of a battle manager – a slow process, as the general could not forsake his leadership role on the front line. But these developments should be addressed in more detail, beginning with the heavy infantry.

Between 479 and 431 some major hoplite clashes are on record for the mainland, especially the period 448–447 (e.g. Megara, Tanagra, Oenophyta, Coronea), although tactical details are lacking. In this period Athenian heavy infantry illustrates the growing diversity of the hoplite’s functions in seaborne operations, sieges, and as marines. The Spartan army, in contrast, represents perfection of the phalanx. Tradition recognized the Spartans as virtuosos of phalanx combat.¹²⁴ Their perfection of drill and organization, described by Thucydides and Xenophon,¹²⁵ and their reliance on intimidation through a slow orderly approach in step found no parallels in other Greek citizen-armies. The proverbial rigour of Spartan discipline and the militarized society of the ‘Lycurgan system’ facilitated tactical perfection, but also fostered the mirage of tactical superiority. Indeed the Spartan code of ‘death before dishonour’ (i.e. retreat or surrender) may be a myth no older than Leonidas at Thermopylae (480).¹²⁶ Discipline and order as psychological tools could prevail only so long. Athenians lost their awe of Spartan hoplites, which their light infantry mangled into surrender at Sphacteria (425), and again when Iphicrates exposed their vulnerability to well-trained

¹²⁴ Xen. *Lac.* 13.5; Plut. *Pel.* 23.3; cf. Hdt. 7.102–4, 209, 234.

¹²⁵ Thuc. 5.66.3–4, 68.2–3; Xen. *Lac.* 11, 13. ¹²⁶ Lazenby (1985) 83.

peltasts at Lechaeum (390),¹²⁷ Tegyra (375) and Leuctra (371) would render the *coup de grâce* to the reputation of the Spartan hoplite's invincibility (Plut. *Pel.* 18.5–6).

The fifth-century contrast of diverse Athenian hoplite functions and Spartan perfection of the phalanx yielded to a different set of political circumstances after the Athenian defeat in 404. Despite large hoplite contingents in allied forces at Nemea (394) and Mantinea (362), Athens emphasized light infantry, mercenaries, cavalry, and smaller-scale employment of hoplites in amphibious operations, as the new age of mercenary captains like Iphicrates, Chabrias and Timotheus emerged. In the first third of the fourth century the chief protagonists for political hegemony, Sparta and Thebes, competed with rival tactical systems. Labelling the contrast as manoeuvre versus depth is too facile, for both exploited basic characteristics of the phalanx but in different ways.

The custom of placing the best troops and the general on the right flank coincided with the phalanx's tendency to charge obliquely to the right, as Thucydides (5.71.1) noted at Mantinea (418). Consequently the rival right flanks of each army could emerge as victors in their respective sectors of the battlefield – a phenomenon already attested at Potidaea (431) and Laodicium (winter 423/2).¹²⁸ Rival right flanks also prevailed at Delium (424), before a surprise Theban cavalry attack routed the Athenian right. Often the attacker's right flank could get beyond the opponent's left and envelop it, as Agis did to the Athenians at Mantinea and the Athenians to the Thespians at Delium. Success on the right permitted pursuit and plunder of the routed wing or wheeling to the left to advance at a ninety-degree angle to the original battle line and to attack the flank (the hoplite's unshielded right side) and rear of the opponent's right wing. At Mantinea, Agis chose the latter course of action, which set a precedent in Spartan tactical thinking.

Twenty-four years later at Nemea (394) the Spartans abandoned the direct advance altogether. Rather, the polemarchs moved the Spartan phalanx off to the right in column and wheeled it to the left to attack the Athenians at a ninety-degree angle to the original front.¹²⁹ After routing the Athenians they advanced across the enemy's rear to catch the victorious enemy centre and right in the flank. As the initial move in column to the right was an immediate response to what was almost a surprise attack (Xen. *Hell.* 4.2.19), it surely reflected doctrine, not a spur-of-the-moment decision.

The allies opposing Sparta at Nemea also knew the 'lesson' of Mantinea. In pre-battle negotiations about the phalanx's depth the issue was not depth for pushing, but avoiding a deeper, shorter line that invited outflanking.

¹²⁷ Thuc. 4.34.1; Xen. *Hell.* 4.5.15–16. ¹²⁸ Thuc. 1.61.6, 4.134.1.

¹²⁹ Anderson (1970) 144–50, 398–9; cf. Lazenby (1985) 138–43; Hutchinson (2000) 258–9.

In fact the Thebans led the attack from the allied right by veering off to the right to encircle the Spartan allies on the left (Xen. *Hell.* 4.2.13, 18), but subsequently chose pursuit of the fleeing over wheeling left to move across the Spartan rear.

At Coronea both rights again prevailed but without outflanking. Both victorious wings subsequently reformed to charge each other from what had been the other's rear. A fearful head-on collision ensued, in which the Thebans succeeded in breaking through Agesilaus' phalanx or, if Plutarch is correct, the Spartans eventually opened ranks and yielded a passage to the Thebans.¹³⁰ Xenophon's criticism (*Hell.* 4.3.19) of Agesilaus' preference for a collision is an endorsement of Agis' manoeuvre at Mantinea, although what Plutarch describes is conceivable: Greek mercenaries opened their ranks to let the Persian scythed chariots through at Cunaxa (401), and at Tegyra (375) the Spartans opened ranks to let Pelopidas' Thebans escape; Pelopidas exploited the opportunity for Spartan slaughter.¹³¹ Again at Leuctra (371) – politically the most important battle of the early fourth century, but also an engagement of which the tactical details swirl in uncertainty – the Spartans preferred manoeuvre. Possibly the Spartans attempted behind a cavalry screen to repeat the Spartan manoeuvre at Nemea.¹³²

In any case, the days of head-on clashes of rival phalanxes were numbered. Traditionally generals could do little to influence the outcome of a battle after deployment, except to lead the charge and provide leadership by example. Nemea, it is said,¹³³ was the first Greek battle won by tactics, and clearly both the Spartans and the Thebans in that engagement had planned their movements in advance. But the Corinthian general Aristeus had planned his battle with the Athenians at Potidaea (431); Brasidas planned his surprise attack on Cleon at Amphipolis (422); and even if Agis at Mantinea (418) found his right fortuitously outflanking the Athenians, the decision to cross the enemy's rear to attack his victorious right indicates tactical thinking.¹³⁴ Certainly some aspects of battle management appeared long before Nemea. Yet equally significant, the Spartan preference for outflanking the enemy right both avoided the head-on collision (thus minimizing casualties in a period of decreasing numbers of Spartiates) and sacrificed willingly the left

¹³⁰ Xen. *Hell.* 4.3.19; *Ages.* 2.12; Plut. *Ages.* 18.4; cf. Frontin. *Str.* 2.6.6; Polyaeus, *Strat.* 2.1.19.

¹³¹ Cunaxa: Xen. *An.* 1.8.20; Tegyra: Plut. *Pel.* 17.4. Buckler (1995) 53 erroneously equates Xenophon's criticism of Agesilaus with the events at Cunaxa and Tegyra.

¹³² Anderson (1970) 210–11, 324 n. 61; Hutchinson (2000) 169–70; contra Cartledge (1987) 240; for other theories see Buckler (1980a) 84–6; Lazenby (1985) 158–9; cf. Hammond (1997b) 361 with n. 17, who accepts Diodorus (15.53.5) that the Spartans were in a crescent formation. But note Anderson (1970) 207–8 for why Diodorus is incredible.

¹³³ Lazenby (1993) 251.

¹³⁴ Thuc. 1.62.3 (Aristeus); 5.8–10 (Brasidas), 73.1–2 (Agis). Pagondas' dispatch of Theban cavalry to surprise the Athenians on his left may not have been planned, but rather illustrates a spontaneous stratagem: Thuc. 4.96.5; cf. Onasander 32.9–10.

flank to the enemy. This Spartan manoeuvre exploited their superior drill, organization and discipline and represented one means of breaking up the phalanx. Thebes developed another.

At Delium (424) – the earliest evidence – the Thebans were twenty-five deep, at Nemea somewhat deeper than the agreed-upon depth of sixteen, and at Leuctra at least fifty deep. Figures for depth are lacking for Coronea and Mantinea (362), although Epaminondas clearly constructed an extremely deep left similar to that at Leuctra (Xen. *Hell.* 7.5.22–3). The assumption (ancient as well as modern: Arr. *Tact.* 11.1–2) that Theban depth increased the attack's weight in pushing seems erroneous: as noted earlier, depths beyond sixteen yield no increase in 'the push'. At Delium the Thebans had the advantage of downhill momentum, and Xenophon's sparse account of Coronea permits no conclusions. At Nemea the Theban emphasis on mass contradicts their intention to outflank the Spartan left – the same battle plan that the Spartans (with superior tactical sophistication) executed against the allied left (Xen. *Hell.* 4.2.18). Width, not depth, was required to overlap a flank. If Xenophon's '100-deep Egyptians' at Thymbrara are meant to represent Thebans, then a Boeotian blind belief in numbers and mass similar to what the Greeks attributed to the Persians, or (to cite a modern example) Napoleon's reliance on bulky columns of attack in the later stages of his career, could be postulated.¹³⁵

Epaminondas does not clarify Theban doctrine: his massive left wing (of unknown depth) was hardly the decisive factor at Mantinea¹³⁶ and his intentions at Leuctra lie mired in the controversies about tactical details.¹³⁷ Epaminondas seems to have combined Theban mass with Spartan manoeuvre. Whereas the Spartans sacrificed their left to win on the right, Epaminondas made his left the preferred flank and spared his right altogether. Precedents for commanding from the left existed, but none were in contests of the magnitude of Leuctra or Mantinea.¹³⁸ Concentration on the left not only pitted the Theban best against the opponent's best, but also attacked the enemy's command structure, if the opposing general could be killed or wounded – a factor in deflating enemy morale.¹³⁹ For Epaminondas mass was not an end in itself.

¹³⁵ Xen. *Cyr.* 6.3.22–3, 4.17; Persian numbers: Hdt. 7.111.3; Sen. *Ben.* 6.31.11; Nep. *Milt.* 5.5; cf. Hdt. 1.136.1. At Thymbrara, Cyrus the Great, according to Xenophon (by no means an admirer of Thebes), premised his battle plan in part on the futility of the enemy's excessive depth: fewer would actually fight.

¹³⁶ Xen. *Hell.* 7.5.21–6.

¹³⁷ For various theories see Buckler (1980b) 63, (1985); Devine (1983); Lazenby (1985) 156; Hutchinson (2000) 171, 174 n. 9; Hammond (1997b) 355–61; Anderson (1970) 165–220, accepted by Pritchett (1994b) 71.

¹³⁸ Cf. Hanson (1988) 193–4.

¹³⁹ Xen. *Hell.* 6.4.12; Polyaeus, *Strat.* 2.3.15; Hutchinson (2000) 172–3.

Besides Spartan outflanking on the right and Theban massing on the left, a third method of breaking up the phalanx's continuity appears at the end of the fifth century. In attacking in rough terrain, especially uphill and against light infantry, a phalanx could hardly maintain its continuity. Xenophon's Ten Thousand used *orthioi lochoi* ('straight' or 'uphill' *lochoi*), units of 100 men each in column with large gaps between the *lochoi*.¹⁴⁰ The practice, inspired by Spartan doctrine for responding to sudden threats to a marching column (Xen. *Lac.* 11.10), surely anticipates the break-up of the legionary phalanx into maniples when the Romans faced the Samnites and other hill peoples.

Fragmentation of the phalanx also appears in maintaining a reserve of infantry or cavalry in the rear to relieve exhausted troops in the phalanx or to surprise the enemy's flank or rear (Onasander 22.1–3). At Solygea (424) a Corinthian *lochos* appeared suddenly on the Athenian right and routed it (Thuc. 4.43.4). Later the same year at Delium the Theban general Pagondas had two cavalry units circle a hill behind his line and hit the victorious Athenian right flank – the deciding move in the battle (Thuc. 4.96.5). Brasidas' surprise attack on Cleon and the Athenians at Amphipolis (422) had an initial charge on the Athenian centre from one direction and a second contingent attacking later from another (Thuc. 5.8–10). The Ten Thousand's attack on the satrap Pharnabazus in Bithynia (400) featured 600 men in three units of 200 each, each placed about 100 feet behind both flanks and the centre,¹⁴¹ and at Thymbrara a reserve of 2,000 infantry and cavalry became Cyrus' outflankers.¹⁴² Clearly by the 420s the concept of a reserve was well known and even appears in Euripides' *Phoenician Women* (1093–8) of 410 or 409. The timing for the insertion of reserves, however, often lay at the discretion of their officers rather than the commanding general.

Vegetius' view (3.17) that Spartans invented the concept of a reserve rehearses part of the Spartan mirage, as the examples from the 420s show Corinthians, Athenians and Thebans using reserves in 424 before Brasidas the Spartan in 422. But if Sosylus, the Spartan historian of Hannibal, is credible, the use of reserves dates already to the Ionian Revolt (499–494): Heraclides of Mylasa's reserves as 'ambushers' in a naval battle at (Carian?) Artemisium against the Persians.¹⁴³ As Heraclides had ambushed a Persian land force in 497 (Hdt. 5.121), any assumption of the priority of naval use of reserves demands caution; a terrestrial origin is more likely.

¹⁴⁰ Xen. *An.* 4.8.9–13; cf. 4.2.11, 3.17, 5.4.22; *Cyr.* 3.2.6; Anderson (1970) 108–10; cf. 396–7.

¹⁴¹ Xen. *An.* 6.5.9–11; cf. 3.4.21.

¹⁴² Xen. *Cyr.* 6.3.30–2, 7.1.25–6; Anderson (1970) 185–7; other examples: Thuc. 4.93.2, 6.67.1.

¹⁴³ Sosylus, *FGrH* 176 F1 (III); Taillardat (1968) 204 with n. 119.

Besides making the phalanx more flexible, various *poleis* developed élite units for special assignments or as a core around which to form their cadres of citizen levies in the phalanx. These élite units, often called 'the selected' (*epilektoi*) and numbering 300, received year-round training and state support. Temporary special units of 300 sometimes called *logades* appear already in the Persian Wars and earlier.¹⁴⁴ The earliest permanent unit may be the Six Hundred at Syracuse, formed in 461 and later trained by Diomilus of Andros (a probable *hoplomachos*) for service against the Athenian besiegers in 415–414.¹⁴⁵ The *epilektoi*, of which Thebes' Sacred Band became the most famous, reflected a need for at least some highly trained troops who could equal the tactical sophistication of the Spartans or respond to mercenaries and the trend toward professionalization.

Especially on the mainland this trend of professionalization particularly affected light infantry (archers, javelin men, slingers), already prominent in the sixth century as imported, hired specialists. Novel in the Peloponnesian War was not their character but their numbers. Heavy infantry in rough terrain and fighting mobile opponents with missile weapons demanded flank protection and the ability to strike back in kind. Hoplites without proper support from light infantry and cavalry could be roughly handled, as the Athenians learned at Spartolus (429) from the Chalcidians (Thuc. 2.79). In rugged, wooded Aetolia Demosthenes' hoplites, although supported by archers, were no match for javelin men (427: Thuc. 3.97–8). Demosthenes' Aetolian experience played some role in harassing Spartan hoplites, trapped in a crossfire of missile weapons, into surrender on Sphacteria (425: Thuc. 4.30–40). Whether Demosthenes was a revolutionary innovator can be debated,¹⁴⁶ for in the absence of military academies some 'lessons' had to be learned more than once.

Iphicrates' demolition with peltasts of an isolated Sparta *mora* of hoplites at Lechaeum is often cited as a defining moment of Greek warfare, although the peltasts prevailed only because Athenian hoplites provided a tactical base for hit-and-run tactics.¹⁴⁷ Light infantry often proved most effective when combined with hoplites, as in this case, and also, for example, in Demosthenes' ambush at Olpae, 426 (Thuc. 3.107–8).¹⁴⁸ Nevertheless, Iphicrates was remembered as the general par excellence of light infantry. If supposed

¹⁴⁴ Tritle (1989) 55–6; Lazenby (1985) 11, 54–6. Such units are found at Thebes (Sacred Band): Pritchett (1971–91) 11.221–2; cf. Leitao (2002); Sparta and Phlius: Cartledge (1987) 229; cf. Xen. *Hell.* 7.2.10, 12; Elis and Arcadian League: Pritchett (1971–91) 11.223; Hutchinson (2000) 100–1; Argos: Pritchett (1971–91) 11.221–2; Athens: Tritle (1989). See further ch. 5 in this volume, pp. 144–5.

¹⁴⁵ Pritchett (1971–91) 11.221; Wheeler (1983) 3–4. Further on *epilektoi*: Wheeler (1991) 156 n. 20.

¹⁴⁶ See Roisman's scepticism (1993) 27, 29, 40.

¹⁴⁷ Xen. *Hell.* 4.5.11–17; Best (1969) 89; Anderson (1970) 125; a detailed 'face-of-battle' analysis of the operation in Konecny (2001).

¹⁴⁸ Best's attempt (1969) 84–5 to find a significant role for peltasts at Coronea is unconvincing.

reforms of Iphicrates can be questioned,¹⁴⁹ his fame as a rusé general (the most stratagems – sixty-three – of any general in Polyaenus) and his emphasis on training and discipline represent the increasing specialization and professionalization of warfare.¹⁵⁰

The supposed new prominence of light infantry in the Peloponnesian War actually continued the tactics of the colonial periphery in the centre stage of mainland inter-*polis* warfare. If Thracian javelin men (peltasts) symbolized this development – in the Peloponnesian War demand for them as mercenaries skyrocketed – Greek use of Thracian equipment, and other types of light infantry (archers, slingers) should not be ignored. ‘Peltast’ became a general term for light infantry and was applied, for example, to the Acarnanian slingers (Thuc. 2.81.8).¹⁵¹ Likewise if the sources often ignore light infantry, their presence can often be assumed,¹⁵² although *poleis* preferred hiring specialists or obtaining them via alliance to establishing regular units of light infantry. Hoplites remained the dominant force on the battlefield, but the non-agonal nature of war exposed their vulnerability and light infantry became a regular component of Greek armies in the second half of the fifth century.¹⁵³

Likewise the emergence of cavalry, although (in contrast) mainland *poleis* in the fifth and fourth centuries generally preferred ‘home-grown’ to ‘imports’. From the plains of Boeotia to Thrace cavalry had long been an established arm, as it was in Sicily.¹⁵⁴ Cavalry used for shock can be dismissed for the period treated here. The Scythian cavalry wedge, adopted by the Thracians and later Philip II of Macedon,¹⁵⁵ probably had its origin in bursting through bands of light infantry. Its penetration of a hoplite phalanx is fanciful, although the truism that cavalry cannot break the serried ranks of heavy infantry assumes that the infantry will have the nerve to maintain its position against a cavalry charge.¹⁵⁶ Rather, cavalry chiefly served the same functions of light infantry: reconnaissance, harassment and in battle (defensively) protection of its heavy infantry’s flanks and rear or (offensively) a means to strike those of the enemy. In essence cavalry provided mounted units of javelin men or in some cases horse-archers.

The combination of cavalry and light infantry, natural in the fluid warfare of the Greek periphery, appears in the north Aegean theatre already at the

¹⁴⁹ See Diod. Sic. 15.44.2–4; Nep. *Iphicrates* 1.3–4; Best (1969) 102–10; Anderson (1970) 129–31; Pritchett (1974) 117–25; cf. Ferrill (1985) 160.

¹⁵⁰ Polyaenus, *Strat.* 3.9; his career is studied by Pritchett (1971–91) 11.62–72; Bianco (1997).

¹⁵¹ Best (1969) 5–6, 13, 44–7, 93–7, 101.

¹⁵² See Best (1969) 56–7, 67 n.149; van Wees (1995a) 162–3.

¹⁵³ Cf. Holladay (1982) 99–103; Best (1969) 75, 134, 139.

¹⁵⁴ Athenian fear of Syracusan cavalry: Thuc. 6.22, 37.1–2; additional references in Bauer (1891) 407.

¹⁵⁵ Asclep. *Tact.* 7.3; Ael. *Tact.* 18.3; Arr. *Tact.* 16.6–9.

¹⁵⁶ Discussion (not completely convincing) of cavalry shock and the wedge in Spence (1993) 27, 45, 105–9; cf. Hutchinson (2000) 102–3, 108–9.

start of the war – again, it is not an innovation of the Peloponnesian War.¹⁵⁷ Integrated units of light infantry, called *hamippoi*, charged alongside the cavalry or trailed behind them as ambushers.¹⁵⁸ They seem common to not only pre-state Thracians of the Balkans but also the later Germans of central Europe (Tac. *Germ.* 6.3). Gelon of Syracuse already had *hamippoi* in 480. Among mainland powers they are first attested in a Boeotian force in 419/18 (Thuc. 5.57.2). *Hamippoi* became a standard feature of Greek mainland armies in the first half of the fourth century.¹⁵⁹

The ‘new’ emphasis on cavalry, however, cannot be explained solely by the influence of the periphery on the centre. Clearly Greek *poleis* without cavalry in their regular armed forces began to feel a need for them by the late fifth and fourth centuries.¹⁶⁰ But the need was not exclusively tactical. Sparta’s first regular units of cavalry and archers (425) were created in response to the losses of Sphacteria and Cythera (Thuc. 4.55.2) and aimed at territorial defence. The various scenarios for cavalry and light infantry in Aeneas Tacticus and Xenophon’s *Cavalry Commander* pertain to a *polis*’ defence of its territory, not pitched battle. But tactically cavalry became a necessity in the absence of agonal rules and the increasing variation in terrain. Agesilaus (396) soon learned that he could not hope to achieve much in Asia Minor without strong cavalry.¹⁶¹ Even Xenophon, an avid proponent of cavalry, had not yet grasped the full potential of that arm, especially for pursuit.¹⁶² That aspect would await Alexander the Great.

Between 479 and 362 Greek warfare saw numerous changes – but incremental rather than dramatic or novel and, if progressive, slow to make themselves felt. Lessons had to be learned and relearned several times. The ‘military revolution’ of the period was in strategy more than tactics, as seen not least in the criticisms of what the *hoplomachoi* taught. Tactically the new strategic context of battle placed greater demands on the commander. Battles often were by encounter, the effects of terrain had to be considered, and proper use of one’s forces to exploit strengths or to take advantage of weaknesses came into play. Battles could now be – and often were – planned. Trickery, surprise and deceit became factors, and one side often no longer permitted the other to deploy before attacking. The cerebral demands of generalship required a new type of commander, although the traditional role of the general in physically leading his troops could not be ignored. The change from combat leader to battle manager emerged gradually.¹⁶³

¹⁵⁷ Thuc. 2.79; cf. 5.10.9–11. ¹⁵⁸ Xen. *Eq. mag.* 5.13, 8.19.

¹⁵⁹ Gelon: n. 6 above; a survey of *hamippoi* in Spence (1993) 58–9.

¹⁶⁰ The trend is clear in Spence (1993) 2–30.

¹⁶¹ Xen. *Hell.* 3.4.15. Rahe’s claim (1980) 79–96 for a ‘revolution’ seems overstated.

¹⁶² Cf. Hutchinson (2000) 181–3; Xen. *Cyr.* 4.2.24, 3.5–4.1.

¹⁶³ A study of this change in Wheeler (1991).

Tactically the proper coordination of heavy infantry, cavalry, light infantry and reserves required skill. The Spartan Gylippus (414) realized that he failed to make proper use of his cavalry and light infantry in his first battle against the Athenians at Syracuse; he corrected his error in the next engagement.¹⁶⁴ Agesilaus' coordination of arms against the Persians at the Pactolus River near Sardis (395) represents an advance on the learning curve of generalship, although the Persians lacked heavy infantry in the battle (Xen. *Hell.* 3.4.22–4), and the engagements of Pelopidas at Tegyra (375) and at Cynoscephalae (364) likewise represent valuable experiments in infantry/cavalry coordination.¹⁶⁵

Yet the battle of Mantinea (362), although indecisive, best illustrates what Greek tactics had become.¹⁶⁶ Epaminondas first deployed, but instead of joining battle he marched off to the left and gave the impression that he would encamp. As the Spartans and their allies relaxed their own readiness, Epaminondas strengthened his left wing with additional *lochoi*. Suddenly this immense Theban wedge charged forward against the enemy now out of formation and scattered. A wedge of cavalry and *hamippoi* likewise charged forward to cover the infantry wedge's right against a cavalry force six deep and unsupported by light infantry. A second force of cavalry and infantry on the Theban far right blocked the Athenians on the allied left from joining the main battle. Epaminondas planned the battle to combine surprise through stratagem, mass, attack from a single wing, and a coordinated use of cavalry and light infantry. But he died in the fighting and decisive victory slipped away. Classical Greek tactics had progressed as far as they could. Philip II of Macedon would 're-think' the phalanx.

B. NAVAL BATTLES AND SIEGES

Barry Strauss

Naval and siege warfare played central roles in classical Greece, but they were much simpler, inexpensive and less lethal before c. 500 BC. Siege warfare was little known in the Greek mainland before that time; naval warfare was more common but still relatively undeveloped. New developments in these two spheres tended to begin at the eastern and western fringes of the Greek world, as a result of contact with foreign peoples, and then to make their way dramatically to centre stage on the Greek mainland. Relatively backward Greeks were schooled in war with more technically

¹⁶⁴ Thuc. 7.5.2–3; cf. 7.6.3. ¹⁶⁵ Plut. *Pel.* 17.2–4, 32.2–7; cf. Buckler (1995).

¹⁶⁶ Xen. *Hell.* 7.5.21–6. Diodorus' account (15.82–7), totally unreliable, already drew criticism from Polybius (12.25f.4–5).

advanced neighbours and eventually outstripped them. It was a long, slow and bloody revolution.¹⁶⁷

I. NAVAL BATTLES

Oared warships or galleys were a common feature of Greek warfare from the Bronze Age onwards. Greece is a sea-girt peninsula, surrounded by roughly 1,500 islands. The lands into which Greek colonists expanded, Anatolia, the Black Sea, southern Italy and Sicily, and places further afield in the Mediterranean, tended also to furnish excellent launching grounds for navies. But ships are expensive to build, maintain and staff. So the story of the rise and fall of Greek navies is also the story of the rise and fall of concentrated political wealth in the Greek city-states.¹⁶⁸

The Greek warship evolved in many ways. The waterline ram, introduced perhaps in the eighth century, was the most important of several innovations in shipbuilding. Another very significant process was the evolution from the simple, long ships of Homer to the bireme, or two-level ship, which was also known, from its fifty oars, as a pentecanter, and finally to the three-level ship or trireme. The wealth generated by the creation of the Persian empire in the mid-sixth century seems to have played a key role in the original spread of the trireme. Persia's Greek subjects in the Aegean had triremes, as did its Phoenician subjects. Miletus, for example, had 200 triremes, furnished by Persia, which it used in a campaign around 500 against the Cycladic islands. Shortly afterwards, triremes figured prominently in the Ionian Greek Revolt against Persia (499–494): its climactic battle was the sea fight off Lade. The Greeks mustered 353 triremes against 600 Phoenician ships for Persia. The odds frightened the Persians, some of whose ships were perhaps not triremes or not well manned. The Greeks cracked first, however, and on the day of the battle, most turned tail: only the largest Greek contingent, 100 ships from Chios, stayed and fought – and fought well, although Persia won the battle and crushed the revolt.¹⁶⁹

Persia's invasion of Greece in 480 brought the trireme front and centre in the Aegean. Aware of what sea-power had accomplished at Lade, Athens' prescient leader Themistocles sponsored a plan in 483 to build a new Athenian fleet to meet a Persian invasion. A windfall of silver in the Athenian mines financed this new force of 200 triremes (fig. 7.4). Three years later, they reached their finest hour, providing the core of Greece's naval victory at Salamis in the autumn of 480. With its fleet crushed,

¹⁶⁷ Different interpretations of the extent of the transformation: ch. 6 in this volume; Hanson (1995).

¹⁶⁸ On the expense of Greek naval warfare, see ch. 8 in this volume and Kallet-Marx (1993).

¹⁶⁹ Persian influence: Wallinga (1993).



Figure 7.4 Rowers, tightly packed in three tiers, inside the replica trireme *Olympias*.

Persia's land army of invasion lost its mobility and the guarantor of its food supplies, which were carried on merchantmen. Persia was consequently forced to withdraw most of its land army from Greece. Greek infantrymen, spearheaded by Sparta, went on to defeat the rest of the Persian force at Plataea in 479. Around the same time the Greeks followed up their naval victory at Salamis by a seaborne victory over Persia at Mycale, on the Anatolian coast.¹⁷⁰

Far from disbanding its fleet, Athens went on to form a naval confederacy, known from its foundation on the island of Delos as the Delian League. The number of members grew from about 150 in 477 to about 250 in 431, at the height of the league. Athens provided the overwhelming

¹⁷⁰ Green (1996).

majority of the ships, while most other states contributed money to fund them. Athenian power inspired opposition, but Athens did not hesitate to put down revolts with naval expeditions and sieges, as in the important island-states of Naxos, Thasos, Samos and Lesbos. Afraid of the rise of Athenian power, the Spartan-led Peloponnesian League made war with the Athenian alliance, first in a conflict known today as the First Peloponnesian War (*c.* 460–445), and again in the great clash between the Athenian and Peloponnesian alliances known today as the Peloponnesian War (431–404). Eventually, a combination of cunning leadership at Sparta under Lysander and of factionalism at Athens, as well as of Athenian over-confidence, allowed Sparta to capture Athens' fleet in the Hellespont without a battle at Aegospotami in 405. After a six-month siege by Spartan army and navy, Athens surrendered, giving up its remaining ships, naval fortifications and empire (404).¹⁷¹

Athens rebuilt its naval power over the next several decades. During the 370s, while Thebes advanced on land, Athens regained its sea-power, forming what scholars call the Second Athenian Confederacy in 377. The confederacy never matched the size or power of Athens' fifth-century league, however, and by the 350s it had been gutted by the revolts of important allies.¹⁷² However, during this decade Athens' navy enjoyed a renaissance. Under the careful financial leadership of Eubulus, Athens rebuilt the size of its fleet to 300 triremes, matching its fifth-century acme. Under the same Eubulus new ship sheds and an arsenal were built in Piraeus. Until Macedon eclipsed it, thanks to the resources generated by Alexander's conquests, Athens was once again the chief naval power of the Aegean.¹⁷³

I. Training

Men worked the trireme; human physiology and psychology played crucial roles in sea battles. To be successful, a fleet needed good men as well as good ships, and a general (the Athenians made no distinction between a general, commanding land troops, and an admiral, commanding ships) who knew how to manage both. A capable general had to be part commander and part coach; he had to have a trainer's skill as well; and he had to know his equipment.

Rowing is hard work and the ancients knew it. Virgil, for example, described rowers striving in a race with the comment, 'thick breathing /

¹⁷¹ For the military history of the war, see Kagan (1969)–(1987); on the Sicilian expedition, see also Green (1974). On the last phase of the Peloponnesian War, the Iono-Decelean War, see Kagan (1987). For an overview of the war, see Strauss and Ober (1990) 45–74.

¹⁷² Barbieri (1955); Hamilton (1979); Strauss (1987). Second Athenian Confederacy: Cargill (1981).

¹⁷³ On the finances of the Athenian fleet, see Gabrielsen (1994), and ch. 8 in this volume.

shakes their limbs and parched mouths; sweat flows in streams everywhere' (*Aen* 5.199–200). Apollonius of Rhodes describes the effect of the rowers of the *Argo*: 'Here and there the dark brine gushed with foam / roaring terribly through the strength of the mighty men' (*Argon.* 1.540–4). But not all Greeks were Argonauts. In 494, for example, discipline broke down in the fleet of the Ionian Greeks in revolt against Persia, because the sailors could not stomach the hard work or the heat of the sun. Calling their training programme slavery, they refused to board ships or practise manoeuvres. The result was no surprise: on the day of battle, most of the ships fled. The Greeks were routed, although some of their triremes, remarkably, captured large numbers of enemy ships (Hdt. 6.12–15).

Herodotus, who preserves the account of this débâcle, lays the blame at the feet of the men, but it is worth speculating about a failure of leadership on the part of the general in charge of training, Dionysius of Phocaea. The trireme was no place for a martinet. Oarsmen were sensitive to and intolerant of mistreatment by their commander. A little encouragement went a long way on the trireme: a tactful boatswain could bring out the best in his oarsmen while a tactless one would end up being hated by them and hating them in turn (Xen. *Oec.* 21.3). Fail to pay him and an oarsman was liable to complain or desert (Thuc. 7.13.2, 8.84.2); threaten to beat his commander for speaking up about the need to pay the men, and an oarsman was likely to riot on his behalf (8.84.2–3).¹⁷⁴

Contrast Dionysius of Phocaea with the Athenian general Phormio, a master of naval warfare. In 429 he saw the discomfiture of his men before a battle with a numerically superior Peloponnesian fleet, outnumbering the Athenians by seventy-seven ships to twenty. Athenian crews broke into small groups and shared their worries about the odds against them. Phormio had already made a point of indoctrinating the men in the superiority of Athens at sea against all comers and now he called them together for a pep talk. He reminded them that 'a small, fast, well-handled squadron' will defeat 'a number of clumsily managed vessels' as long as it chooses its ground carefully and its men stay disciplined and attentive (Thuc. 2.88–9). As it turned out, Phormio could not choose his ground: he wanted to fight at sea but the Peloponnesians forced him into the narrows. Yet his remarkably well-trained crews won the day, even after losing nearly half their fleet – nine of twenty ships – in the first part of the battle. The reason was their professionalism. They did not lose their cool in adversity. Instead, one of the eleven surviving Athenian ships turned and unexpectedly rammed the leading Peloponnesian ship. The enemy crews fell apart. As Thucydides reports:

¹⁷⁴ See Strauss (1996).

An exploit so sudden and unexpected produced a panic among the Peloponnesians; and having fallen out of order in the excitement of victory, some of them dropped their oars and stopped their way in order to let the main body come up – an unsafe thing to do considering how near they were to the enemy's prows; while others ran aground in the shallows, in their ignorance of the localities.

(Thuc. 2.91.4, trans. Crawley rev. Strassler 1996)

The elated Athenians put the Peloponnesians to flight, took six enemy ships and recovered their own captured vessels.¹⁷⁵

Athens laid the groundwork for its victories by fostering a cadre of experienced naval personnel. Early in the fifth century, the rise of the Athenian navy encouraged country folk around Attica to move to Piraeus and make a living from the sea. Foreign immigrants followed suit. Under Pericles (active 460–429), the state sent out sixty ships each year on training exercises (Plut. *Per.* 11.4). Athenian captains bid for the services of the best rowers. Meanwhile, ordinary maritime activities trained Athenians in the skills for war, as a contemporary author attests:

It is inevitable that a man who goes on frequent voyages will take an oar, and learn nautical terminology, and the same is true of his servant. Experience of voyages and practice makes them good helmsmen, some learning in smaller boats, others in merchantmen, and others graduating to triremes; the majority are competent rowers as soon as they board their ships because of previous practice throughout their lives.

([Xen.] *Ath. Pol.* 1.19–20, trans. Moore 1983).

No wonder Thucydides remarked that Athens' great advantage at sea in the Peloponnesian War was its 'long experience' compared to Sparta's 'little practice' (Thuc. 2.85.2).¹⁷⁶

2. Operations other than battle

The ancient sources focus on set battles between triremes. These were, of course, the most dramatic form of naval warfare and so made good copy but they were also usually the most decisive naval engagements to states and the most dangerous to participants. They were not, however, the only form of war at sea. Triremes were also involved in *guerre de course*, amphibious operations, piracy and blockades.

As an example of the use of triremes in *guerre de course*, consider the case of six Peloponnesian ships (mostly Thurian) which in 412/11, during the Peloponnesian War, cruised around Cape Triopium in Cnidus and seized all merchant ships arriving from Egypt. When the Athenians found out, they sailed from Samos and captured the six ships. The crews, however,

¹⁷⁵ Kagan (1974) 107–15; Morrison et al. (2000) 69–78.

¹⁷⁶ Amit (1965).

escaped and continued the fight. After making it back to Cnidus, they helped the inhabitants fight off an assault on Cnidus town by the Athenian fleet, which had nearly succeeded because the town was unfortified (Thuc. 8.35.1–4).

This case also illustrates the considerable number of occasions on which trireme personnel fought on land. In principle, deck-soldiers were responsible for land operations. If heavy fighting was expected, then the number of deck-soldiers per ship could be increased. In some cases ships could be converted into troop carriers, that is, hoplites would man some or all of the oars and, when the ships landed, do the fighting. On one occasion, at Sphacteria in 425 BC, Athenian oarsmen were outfitted with light arms and armour to fight on land.¹⁷⁷

The use of triremes in piracy could be the upshot of defeat. For example, Dionysius of Phocaea, an escapee from the defeat at Lade in 494 BC, captured three enemy ships and sailed off to Phoenicia. There he sank cargo-ships and took much money and finally sailed to Sicily which he used as base for piracy. In Sicily he patriotically sank many Carthaginian and Etruscan ships but never Hellenes (Hdt. 6.17). He was following in the footsteps of Histiaeus of Miletus and eight Lesbian triremes in Byzantium, a base for seizing all ships bound for the Black Sea except those whose crews obeyed their orders (Hdt. 6.5). Histiaeus seized Ionian merchantmen outward bound from the Black Sea (6.26.1). After Histiaeus departed for Chios he left his business in the Hellespont in the hands of Bisaltes of Abydos, son of Apollophanes (6.26.1).

Triremes could not mount a blockade in the modern sense of the term. They were too light to stay at sea night and day, day after day, nor could they have patrolled a large area efficiently. What they could do, however, was to close off a narrow body of water, like Histiaeus and his Lesbian ships in the Bosphorus, or lie in wait off a well-travelled sea lane, like the Peloponnesians off Cape Tropium in Cnidus.

3. Battle

Once two hostile fleets caught sight of each other, battle might not follow immediately. One fleet might try to draw the other into a more favourable position for battle or wait to strike until complacency made the enemy drop its guard. Surprise is a force multiplier, and catching an enemy unawares was an enormous advantage. For example, both sides tried to employ force on the eve of the battle of Salamis in September 480 BC. The Persians, who were based on the mainland of Attica, sailed into the Salamis Straits at night,

¹⁷⁷ Thuc. 4.32.2. For troop carriers, see Morrison et al. (2000) 226–7; Gomme et al. (1945–81) iv.308–10. For the use of naval personnel on land, see ch. 6 in this volume.

hoping to surround the Greeks in their harbours on the island of Salamis and terrify them into surrender at daybreak. To this end, the Persians no doubt hugged the mainland shore and used the various techniques of muffling a trireme's noise; for example, keeping time by striking two stones together instead of playing the pipe. But the Greeks got wind of the enemy's plan – indeed, the Persians had been tricked by a messenger of Themistocles. At dawn the Greeks surprised the Persians by mustering for battle; the Greek rowers had spent the night on land while the Persian rowers suffered the disadvantage of having rowed, in teams, all night long. They also found themselves forced to fight in a narrow channel where they could not deploy their advantage in numbers; much better for them to have fought in the open sea.¹⁷⁸

Before a battle each fleet might practise manoeuvres. Before going into battle the crews would remove the ships' masts, to lighten the load. They would put up side screens made of canvas, hair or leather, which served as protection from spears and arrows for the top level of rowers, who were visible targets on an outrigger whose side was normally kept open for ventilation. Eventually the two fleets would engage. What followed next, especially in the Athenian way of war, was a function of speed and manoeuvrability. Athenian commanders aimed to evade the enemy's ram, then to effect a quick turn and ram him in his stern or amidships – where a trireme was at its most vulnerable – and then immediately to back away before the enemy could attack with archers or a boarding party of marines. Alternatively, the Athenians would have their crews row at the enemy and turn at just the proper angle to break his oars, having first shipped their own oars on the engaged side.¹⁷⁹

The ancient sources refer to, inter alia, the *diekplous*, *periplous*, and *anastrophē*, commonly translated respectively as 'breakthrough', 'encirclement' and 'turn', but those translations as well as the details of these various manoeuvres are much debated among scholars. Whether, for example, the 'breakthrough' was carried out by individual ships or by squadrons in line ahead, is a matter of controversy. A defensive manoeuvre consisted of forming a circle, bows outward, and then, at a signal, attacking the enemy. The well-trained Athenian fleet carried out this manoeuvre successfully against a larger and faster Persian navy at Artemisium in 480. Less than 300 Greek ships rammed and towed off thirty ships out of an enemy fleet of more than 600. By the same token, a poorly trained fleet might fall afoul of this defensive manoeuvre, as the Peloponnesians did in 429 (see below).¹⁸⁰

¹⁷⁸ On Salamis see Strauss (2004).

¹⁷⁹ Athenian way of war: Strauss (2000a).

¹⁸⁰ See Morrison et al. (2000) index, s.vv. 'breakthrough', 'encirclement'; Morrison and Coates (1996) 359–69; Lazenby (1988) with reply by Morrison (1991); Lazenby (1987); Whitehead (1987); Holladay (1988). Ram and then quickly back away: Phormio at Thuc. 2.89.8; Polyb. 16.3.4; Morrison and Coates (1996) 361, 363. On breaking the enemy's oars, see e.g. Conon at Mytilene in 406, Diod.

In order to carry out complex tactics Athenian ships had to be light, and their crews had to include as few extraneous men as possible. Athenian warships were stripped down: the hulls were light, the decks were slotted in the middle and lacked bulwarks along the sides. Athenian crews normally included only a small armed contingent – ten marines and four archers – unlike some crews that contained up to forty-four marines and archers. Athenian naval personnel had to train constantly, because practice was necessary to perfect the requisite techniques. Javelin men, for example, had to be able to throw from a sitting position, because standing would cause the ship to roll and upset the oars. The manoeuvre of backing off after ramming required coordination among helmsman, pulling-master and rowers.¹⁸¹

This meant that when it came to war at sea, Athenians had a competitive advantage at ramming and breaking oars; they were correspondingly at a disadvantage in boarding tactics. But given the naval technology of the classical period, especially of the fifth century, this was a good place to be. So long as the trireme was the ship of the line, Mediterranean warships were better suited as guided missiles than fighting platforms. Later, in the Hellenistic era, with the invention of heavier warships, boarding tactics could compete with ramming tactics. For classical Athenians, however, as long as they could avoid fighting in the narrows where the ramming tactic was difficult to deploy, they could dominate at sea. And if they had to fight in the narrows, even there they might find room to manoeuvre, so skilled were Athenian helmsmen.¹⁸²

The main alternative to the Athenian way of fighting at sea is found in the battle of Sybota. This engagement between the fleets of Corinth and Corcyra took place in the channel between Corcyra and the mainland in 433. A fleet of 150 Corinthian ships faced 120 Corcyreans, reinforced by ten Athenian ships; late in the day, a reinforcement of twenty Athenian ships joined the fray. It was the largest intra-Greek battle to that date, although it would soon be outstripped by battles of the Peloponnesian War. Ordered for political reasons to do everything they could to avoid combat, the Athenian ships largely played a deterrent role; a few did engage in ramming. Thucydides describes the action:

Both sides had a large number of hoplites on their decks, and a large number of archers and javelin throwers, the old imperfect armament still prevailing. The sea fight was an obstinate one, though not remarkable for its science; indeed it was

Sic. 13.78.1, and in general, Holladay (1988) 149–50; Morrison and Coates (1996) 368–9; *contra* Lazenby (1987) 169.

¹⁸¹ Ten marines: e.g. Thuc. 1.49.1–2, 50.1, 7.23.4; cf. Xen. *Hell.* 1.6.19, 2.1.22. Forty marines: Hdt. 6.15.1 (Chians at Lade), 7.184.1–2 (Persians at Salamis). Javelin men: Thuc. 7.67.2; Morrison et al. (2000) 161.

¹⁸² Guided missiles rather than fighting platforms: Morrison et al. (2000) 46. Hellenistic period: see Morrison and Coates (1996).

more like a battle by land. Whenever they charged each other, the multitude and crush of the triremes made it by no means easy to get loose; besides, their hopes of victory lay principally in the hoplites on the decks, who stood and fought in order, the ships remaining stationary. The maneuver of passing through the line was not tried: in short, strength and pluck had more share in the fight than science.

(Thuc. 1.49.1–3, trans. Crawley rev. Strassler 1996)

The result was a Corinthian victory, although the Athenians prevented them from following it up with an assault on Corcyra itself. The hard, confused fighting may have ignited unusual passion; at any rate, the Corinthians engaged in butchery before finally taking prisoners.¹⁸³

A set battle among triremes could involve a few ships or a thousand. A battle involving about a hundred ships was perhaps the most common scenario. The normal naval formation was a single line of ships. But when facing an enemy whose ships were faster and more manoeuvrable, it could be advantageous to arrange one's ships in a double line as a defence against an enemy breakthrough. One Heraclides of Mylasa, a refugee from Persian rule, used this tactic against Phoenician ships in the Persian fleet at a battle of Artemisium (whether this was the famous battle of Artemisium when Xerxes invaded Greece in 480 is unclear). The Athenians employed the tactic successfully against the Peloponnesians at the battle of Arginusae in 406.¹⁸⁴

Big fleets had to be divided into wings, in order to maintain communications. Signals were given by means of flags and pennants, or by sounding the trumpet or even by flashing a shield or sword; acknowledgment sometimes took the form of the men singing the paean. At Sybota, for example, the Athenians held the Corcyrean right wing, while the rest of the line was occupied by three Corcyrean squadrons, each commanded by a Corcyrean general. The Corinthians in turn placed their best ships on the left wing, to face the Athenians and what they presumed to be the best Corcyrean ships beside them; they put the relatively large contingents of their Megarian and Ambraciots allies on the right wing, while assigning their odd-lot allies to the centre.

Another common feature of trireme battle was the local nature of engagement. It was not unusual to win on one wing while losing on another. Sybota is again a good example. The Corcyreans routed the enemy's right wing, composed of Megarian and Ambraciots ships. They chased them back in disorder to the land and burned and plundered their camp. Meanwhile, however, the Corinthians crushed the Corcyrean right wing. Both sides claimed victory, symbolized by each setting up a trophy. Corinth, however,

¹⁸³ On Sybota, see Thuc. 1.45–55 and commentary ad loc. in Gomme et al. (1945–81) 1.177–99; and Hornblower (1991–6) 1.88–97; cf. Kagan (1969) 243–50.

¹⁸⁴ On Heraclides of Mylasa, see Sosylus of Lacedaemon, *FGrH* 176 F1.2.

had the numbers in its favour, having disabled seventy enemy ships while losing only thirty ships of its own; it took possession of more dead than did Corcyra, another sign of victory; and it took a thousand or more prisoners of war.

Battle sometimes depended on individual match-ups between ships and sometimes the face-off of lines devolved into a mêlée. This was the case at Salamis. Once the Athenians (possibly with the help of the Aeginetans) finished off the Phoenicians, the enemy's best ships, they turned on the rest of the Persian line, whose ships began to flee. Meanwhile, additional Persian triremes were still trying to make their way to the front, so the result was a murderous back-up. Greek captains like Ameinias of Athens, Polycritus of Aegina, Democritus and Diodorus of Corinth, and Phayllos of Croton, all picked off enemy ships. But the most famous Persian captain and her ship escaped. Artemisia of Halicarnassus was a close advisor to Xerxes and one of the few female commanders in all of history to take ships into battle. When she saw Ameinias' trireme bearing down on her ship, the wily Artemisia ordered her helmsman to ram one of her own ships, in order to trick Ameinias into thinking that hers was a Greek ship. It worked and Artemisia escaped.¹⁸⁵

Going into battle on a trireme may have been a primitive, even tribal experience. The deck-soldiers and other men on top were seated, in order to keep the boat stable. Below, the rowing-master and his assistant called out commands while 170 men worked theirs oars in silence. They worked in unison, all but rubbing shoulders with the men around them. It was hard work, filling the small and very cramped space of the boat with the smell of sweat and other bodily odours. The seat cushions on the modern reconstructed trireme *Olympias* were soaked and grimy after rowing, while Aristophanes makes fun of flatulent oarsmen (*Ran.* 1074).

Looking towards the bow from the stern down the line of rowers' empty platforms, a rower might have felt himself in an enclosed, separate, almost claustrophobic world. The movement of the men in unison – eighty-five on each side of the boat – might have come as close to the sense of a machine as the classical world could achieve.¹⁸⁶

A well-run trireme may have worked like clockwork but a sea-battle was not silent. The clamours, shouting and cheers of a naval engagement are too common to need to describe, said Isocrates (4.97). As the ships approached the enemy, there would have been a mix of exhilaration and terror. Lysias, for example, imagines the fear of the Athenian sailors on the eve of the climactic sea-battle against the Persians at Salamis in 480 BC (Lys. 2.35–9). As their ships approached the enemy fleet, trumpets would sound

¹⁸⁵ Hdt. 8.86–9; Aesch. *Pers.* 409–20; Plut. *Them.* 15.2; Diod. Sic. 11.18.6–19.3.

¹⁸⁶ Experience of trireme: see Rankov (1994).

and the men would sing the paean (e.g. Thuc. 2.91.2; Aesch. *Pers.* 392–5). At a moment of success in battle the command would go out for all the men to cheer (Thuc. 2.92.1).

When ships crashed into each other they made a huge din (Thuc. 6.70.6). Afterwards came the screams of the dying (Lys. 2.38). Well-trained crews knew the importance of keeping silent, both to preserve energy and to be able to hear orders from boatswains and captains (Thuc. 2.89.9). Even if boatswains shouted out orders (Thuc. 6.70.7) they could be drowned out by the shouting and swearing of unruly men in the heat of action (Thuc. 2.84.3). On the *Olympias* the rowing-master (or boatswain: *keleustēs*) could not be heard up and down the ship, even with all the rowers silent. On a trireme he must have had an assistant. Without having someone keeping time and counting out the strokes, the crew would not have been able to keep together.¹⁸⁷

It is difficult to imagine the experience of an individual rower in a battle commonly involving 10,000 men. There is a natural tendency in navies to focus on ships rather than individuals. The ancient literary sources are little help because they do not mention the name of a single individual rower. Several hundred such names do survive in a lengthy Athenian inscription, where we learn, for instance, of one Demochares of Thoricus, an Athenian citizen; of Telesippus of Piraeus, a metic (resident alien); of Assyrios the property of Alexippos, a slave; and of Simos of Thasos, a foreigner (*IG* 1³. 1032 = *IG* II². 1951). Yet we can only guess what combat meant to individuals like each of them.¹⁸⁸

For the ship as a whole the key to victory was tactics, and that depended in turn on the quality of the ships and the men. Because of its wealth and perhaps its prestige, Athens was able to attract the best rowers and to train them to work together. No other fleet could match the Athenian navy's technical skill: its ability to switch formation, to break through enemy lines, or to back water while still threatening to spring into attack. No other fleet was as fast as Athens' and that too was a function of Athenian wealth: wealth meant enough ships for rotation into regular maintenance, which required drying out vessels and otherwise providing for their upkeep ashore. Unless they were dried out, triremes quickly lost their speed.¹⁸⁹

Leadership and specialized personnel mattered immensely as well. Athenian captains and generals (Athens used no special word for admiral) at their best displayed creativity, flexibility and cunning. Athens likewise prided itself on the quality of its helmsmen, all of whom were citizens at the start of the Peloponnesian War in 431 (Thuc. 1.143.1); in some battles, steering

¹⁸⁷ See Morrison et al. (2000) 248–56.

¹⁸⁸ Inscription: Laing (1960). Various statuses of rowers in the Athenian fleet: Morrison et al. (2000) 107–18; Rosivach (1985); Graham (1992); Hunt (1998) 83–101.

¹⁸⁹ See Morrison et al. (2000) 150–2.

provided the margin of victory. At Cynossema in the Hellespont in 411, for an example, an Athenian fleet was outnumbered and forced to fight in the narrows, where the enemy's deck-soldiers had a chance of mauling the Athenians. Yet Athens' helmsmen managed not only to avoid Peloponnesian ramming but also Peloponnesian attempts to grapple with Athenian ships and fight deck-to-deck; instead, the Athenians turned the tables and rammed the enemy.¹⁹⁰

In the work of Thucydides, the great historian of Athens' struggle with Sparta (the Peloponnesian War, 431–404), the rowers come off as professional, disciplined and self-confident. They moved with a precision and flair that turned ordinary manoeuvres into showpieces. Even when outnumbered they rowed circles around the enemy – literally. For example, consider an engagement in 429 in the Gulf of Corinth. The Athenians were led by Phormio, perhaps the complete trireme commander.¹⁹¹

A Peloponnesian fleet of forty-seven ships outnumbered an Athenian fleet of only twenty ships, but the Athenian ships were faster and better-outfitted for sea-battle. The Peloponnesians tried to block the Athenians and then have their best ships break out and attack them. They underrated their opponent, however. Thucydides describes the battle as follows:

The Peloponnesians arranged their ships in as big a circle as they could – bows outward, sterns inward – without leaving the enemy space to row through. They also placed inside the circle the small craft that had accompanied them and the five fastest-rowing ships, so that, standing by a short distance away, they could row out if the enemy approached anywhere. The Athenians, arranged in single file, kept rowing around them in a circle and hemming them into a narrow space, rowing right next to them. Phormio had pre-arranged with his men, however, not to attack until he gave the signal. For he hoped that the enemy would not remain in order, as foot-soldiers would have on land, but that the ships would fall upon each other and the small craft add to the confusion; if, moreover, the breeze should blow up from the gulf, which he was awaiting as he rowed round and which usually came around dawn, they would lose their cool in no time at all. He thought that the initiative was his to take whenever he wished. As the breeze began to blow and the ships, already in a narrow space, were thrown into confusion both by the wind and the small craft, ship fell upon ship and they tried to push them apart with poles. The Peloponnesian rowers employed such cries and warnings and abuse of each other that they paid no heed to the commands or the time-keepers, and since they were inexperienced they were unable to keep the blades clear of the rough water, and so they rendered the ships less obedient to the captains. At that crucial moment Phormio gave the signal. The Athenians fell upon them; first they sank one of the commanders' ships and then they destroyed whichever of the others they came upon, and they brought it about that none of them, in their confusion, began to

¹⁹⁰ Athenian helmsmen citizens: Morrison (1984).

¹⁹¹ Rowers in Thucydides: Strauss (1996), (2000b). Phormio: Kagan (1974) 101–23.

fight, but they fled to Patras and Dyme in Achaea. The Athenians pursued them and, after capturing twelve ships and picking up most of the men who had been on them, they sailed off to Molykreon. They set up a trophy on Rhion, dedicated a ship to Poseidon, and returned to Naupactus.

(Thuc. 2.83.5–84.4, trans. Crawley rev. Strassler 1996)

This engagement was followed shortly afterwards by a second battle, already referred to above: this battle took place inside the Corinthian Gulf and it resulted in another stunning victory for an outnumbered Athenian fleet.

Casualties in a classical Greek naval battle were not necessarily high. Although the ancient historians consider an infantry battle without casualties extraordinary, they pass over without comment several naval engagements in which no one seems to have died. Yet battle deaths at sea there were indeed, and from a variety of causes. Some men died by ramming, but it was probably more common to die by a spear, sword, arrow or stone, at the hand of enemy marines or archers; some drowned in storms; some drowned because they were poor swimmers; some were killed by enemy hoplites waiting on the shore.¹⁹²

At sea as on land, the general was responsible for the retrieval and burial of the dead. Dead bodies in the hold of a ship would be relatively easy to recover, since the ultra-light trireme continued to float even when rammed. Recovering dead men from the sea proved more difficult. A corpse floats at first and then, as it loses the air from its lungs, it sinks, a process that takes one to three hours. Begin picking up the dead within a few hours of the battle, then, and it should be possible to find many of them still floating in the water, as the Corinthians found after the battle of Sybota in 433 (Thuc. 1.50.3) and the Persians at Salamis in 480 (Aesch. *Pers.* 419–21). Any enemy corpses recovered were supposed to be returned under truce. Yet it was not always possible to reach the dead in time, and sometimes the search was bedevilled by such factors as wind and current. Some corpses, therefore, went unrecovered, at least by their own men: it was common for corpses to wash ashore days after a battle. Greek religious customs required that the locals provide decent disposal of the remains. But first they would have taken anything of value: clothing, armour or jewellery (worn by Persian nobles). Booty belonged to the army as a whole, but some individuals tried to take something for themselves. In the Athenian fleet, the bodies of the dead would be cremated ashore. The ashes, bones and teeth would be brought home for burial, probably in the annual public funeral of the war dead. An empty coffin in the funeral procession to symbolize the missing was perhaps understood as referring mainly to those lost at sea (Thuc. 2.34.3).¹⁹³

¹⁹² On death and burial at sea, see Strauss (2000b).

¹⁹³ See Pritchett (1971–91) iv.

II. SIEGES

Siege warfare played a prominent role in the mythic landscape of Greek warfare, especially in Attic tragedy and comedy. Its actual importance, however, was much less before classical times.¹⁹⁴ Early Greece lacked the wealth needed to sustain sieges. As a result, walls were generally simple, and sometimes only enclosed the acropolis. Wars tended to consist of raids or set-piece battles between infantry armies. In Homer the Achaeans attempt to storm the walls of Troy and they eventually capture the city through a ruse but they do not lay siege to Troy. Whether or not this reflects Bronze Age reality, the absence of a siege certainly would have resonated with Homer's audience and its way of war. Defensive technology was somewhat more advanced in the Greek colonies of the eastern and western Mediterranean. Carthaginians, Lydians and Persians all had more resources to mount sieges and better technology than did the mainland Greeks, and Greek colonists and their descendants consequently built better walls than those in the homeland. Beginning in the sixth century BC, these walls included such features as two-storey towers, gate corridors and, at Samos, a harbour mole, a protective ditch in front of lower-lying walls, and an aqueduct tunnelling through a hill to bring water to the city in case of siege. Then and for the next two centuries, walls were generally made of mud brick on stone plinths.¹⁹⁵

1. Developments in classical siege warfare

As with so much in Greek history, the Persian Wars proved the turning point in siege warfare. When a Persian expeditionary force attacked Athens in 480, the Athenians, except for a few stragglers, abandoned their city rather than risk a siege. The Persians took the city against token resistance and burned its temples. After Greece's subsequent destruction of Persia's invading army and navy, the Athenians resolved to refortify their city. They moved quickly and worked cheaply, overcoming Spartan opposition by holding its diplomatic representatives hostage while Athenians threw up walls around both the city and the harbour town of Piraeus. Sparta itself remained famously unfortified, trusting in its army for defence, thereby remaining true to its methods of labour-intensive, money-shy warfare.

The creation in 477 of an Athenian-led naval alliance, however, and its transformation over the next few decades into the Athenian empire, allowed Athens to think big when it came to siege warfare: imperial tribute gave Athens the money to do so. In the 450s, the Athenians built Long

¹⁹⁴ For a well-illustrated introduction to Greek military architecture, see Adam (1982) 8–114.

¹⁹⁵ Winter (1971) 295–6, 299; Garlan (1974) 19–28; Lawrence (1979) 35–7, 41; Kern (1999) 89–93. On the Trojan War, see Strauss (2006).

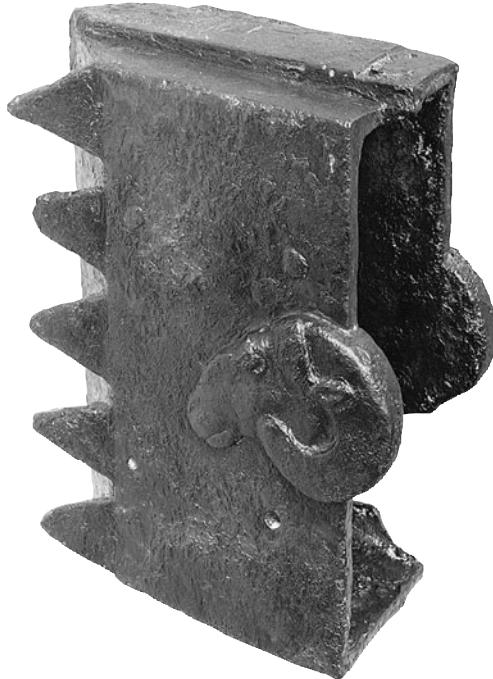


Figure 7.5 Bronze head of a battering ram, decorated with a ram's head motif, dedicated at Olympia, c. 450 BC.

Walls connecting Athens to Piraeus, a little more than three miles away, to create a circuit of walls of more than twenty-one miles. The Athens–Piraeus complex was able to withstand sieges by land while permitting a steady inflow of supplies by sea.¹⁹⁶

Meanwhile, Athens resorted to siege warfare abroad to maintain control of its alliance. The revolt of Naxos in 470, of Thasos in 465, of Samos in 440, and of Mytilene in 428 all provoked Athenian sieges. The siege of Thasos lasted three years. Samos took only nine months, but it was hotly contested. Ancient sources say that the Athenian besiegers used battering rams (fig. 7.5) and protective sheds, and that they crucified élite Samian prisoners after conquering the town. These points were contested even in antiquity, but it is tempting to think them genuine and evidence of borrowing from Persian siegework. More certain is the price paid by Athens in blood. Pericles, the Athenian general and statesman, is said in his funeral oration to have compared the siege to a year without spring.¹⁹⁷

¹⁹⁶ On the Athens–Piraeus walls, see Lawrence (1979) 419; Adam (1982) 201–3.

¹⁹⁷ Samos: Diod. Sic. 12.26; Plut. *Per.* 24–8; Winter (1971) 156–7, 307; Lawrence (1979) 41.

If there were improvements in Greek besieging techniques, the defence kept pace with them. Greek fortification walls tended to become longer, stronger and better protected by towers, gateways and sally ports for sorties by defenders. In general, the defender maintained the advantage, which tended to make sieges long and costly.¹⁹⁸

The Peloponnesian War proved a hothouse for siege warfare, with major sieges carried on by the combatants in nearly every part of the Greek world, from central Greece (Plataea 431–427) to northern Greece (Potidaea 432–430/29) to the Cyclades (Melos 416) to the Sporades (Mytilene 428–427) to Sicily (Syracuse 415–413) and finally to Athens itself (405–404). There were many smaller sieges as well. Perhaps the most important was the Spartan Brasidas' lightning strike on Amphipolis in 424. Within twenty-four hours he achieved the surrender of one of the most strategic positions in the Athenian empire, and without suffering a single casualty.¹⁹⁹

Although the help of traitors remained the main alternative to a long siege aimed at starving a city out, some innovative tactics did appear. At Plataea, for example, the Spartans built a large mound on which they attacked the city with battering rams and fire; perhaps the Athenians were the first to introduce this tactic of Near Eastern warfare to the Greek mainland. The Thebans used a flame thrower against the Athenians at Delium (424) and the Spartan Brasidas used a similar device at Torone in 423. None of these machines, however, succeeded in taking a city.²⁰⁰

Perhaps more leverage was applied by another expedient made use of in the war, that is, establishing a fortified position in the enemy's territory and using it for raids to damage economic infrastructure and foment desertion by slaves or serfs. Athens employed this device at Pylos, on the Messenian coast, from 425 to 409 and the Peloponnesians followed suit at Decelea, in the mountains of northern Attica, from 413 to 404. Although neither side inflicted a knock-out blow, they each gained considerable success from these measures. Athens, for instance, acquired hostages at Pylos that extracted a truce from Sparta and a halt to Spartan attacks on Athenian soil (see below). The Peloponnesians damaged the Athenian economy and hurt Athenian morale.²⁰¹

Defence also witnessed a great innovation in the Athenian response to the Peloponnesians' original strategy in the war of invading Attica each summer and ravaging Athenian farms. Rather than making the traditional reply of sending out their own army to fight, the Athenians, led

¹⁹⁸ Garlan (1974) 148–53; Lawrence (1979) 42, 419; Ducrey (1985) 166–8; Kern (1999) 95–6.

¹⁹⁹ Kern (1999) 97–134.

²⁰⁰ Garlan (1974) 125–47; Lawrence (1979) 37; Kern (1999) 97–134.

²⁰¹ On construction of forts in and ravaging of an enemy's territory, see Winter (1971) 302; Garlan (1974) 33–40; Hanson (2000b). On effect of Peloponnesian raids on Athenian economy, see Strauss (1987), Hanson (2000b) and ch. 6 in this volume.

by Pericles, stayed on the defensive behind their walls (at least on land: they did raid the Peloponnese by sea). Recognizing Athens' inability to match the Peloponnesian army, Pericles gathered the entire population within the walls of the Athens–Piraeus fortified complex, supplying them with seaborne provisions. This stymied the enemy's attempt to fight a battle on his terms, but it took a heavy material and psychological toll on the Athenian home front. What is more, the concentration of the population within the walls provided fertile breeding grounds for the epidemic that struck in 430 and which killed between one-fourth and one-third of the Athenian population, including Pericles himself. His successors moved to the strategic offensive.²⁰²

Siege warfare seems to have become more cruel during the Peloponnesian War. In Greek warfare the victor always had absolute rights over the fruits of victory, but he seems to have used them with newfound inhumanity. We have far more examples of the massacre of conquered populations (or at least of the adult males; women and children were usually enslaved) during the war than in the earlier period or, for that matter, than in the fourth century before the rise of Macedon. Caution is advisable because far more evidence survives from the Peloponnesian War than from the earlier period and no surviving history of the fourth century sheds a spotlight on that era equal to the light shed by Thucydides on the late fifth century. Yet Thucydides' own judgement, that the Peloponnesian War marked a brutalization of Greek warfare, commands attention. Euripides too, writing in the era of the war, condemned the massacre of civilians.²⁰³

Whenever foreign troops entered a city after a siege, whether they had an easy entry or a hard one, it was a dangerous moment for the inhabitants. When traitors opened the gates of Mende to Athenians in 423, the Athenians 'sacked it just as if they had taken it by storm, the generals even finding some difficulty in restraining them from also massacring the inhabitants' (Thuc. 4.130.6). When the Athenians stormed Torone in 422 they enslaved the women and children and sent the men to Athens; eventually they made it home in a prisoner exchange (Thuc. 5.3.4). It must have been a rude awakening after Torone's lenient treatment by Brasidas when traitors handed the town over to his men in winter 424/3 (Thuc. 4.114.3–5). Yet Torone's mistreatment did not compare to that awaiting other cities in the Peloponnesian War, to say nothing of the Sicilian cities that were bathed in blood by the wars between Carthage and Syracuse.²⁰⁴

Several massacres following sieges stand out from Thucydides' pages, among them, on the Spartan side, the execution in 427 of the 200 Plataeans

²⁰² Kagan (1974) 17–100; Garlan (1974) 44–65; Ober (1985b).

²⁰³ Ducrey (1999) 60–8; Lonis (1969) 31–40; Garlan (1975) 68–9; Panagopolou (1978) 219–23; Ober (1994) 18–19, 21–4; Kern (1999) 97–134.

²⁰⁴ Lonis (1969) 37–40; Caven (1990) 100–6; Kern (1999) 135–93.

and 25 Athenians who surrendered after a two-year siege while selling the Plataean women into slavery; the slaughter of the Athenian defenders of Lecythus in 424; and the killing of all the free adult males after the capture of Hysiae in 417. Athenians in 421 massacred the men of Scione after a two-year siege and sold the women and children into slavery; in 415 they did the same to the population of Melos, after a year's siege. The worst butchery of the war took place in the little central Greek town of Mycalessus in 413, when a party of Thracian mercenaries took the crumbling walls by assault and killed every man, woman and child they found (Thuc. 7.29–30).

Other cities were treated more leniently, particularly if they surrendered without a protracted resistance. Yet even so-called lenient treatment was usually draconian. When Potidaea surrendered to Athens in a state of starvation after a three-year siege in 429, the entire population was forced into exile; the men had to leave with only the clothes on their back, the women were allowed to take one change of clothing (Thuc. 2.70.3). In 427, after the six-month siege of Mytilene, Athens executed only the guiltiest parties, yet these amounted to over 1,000 men (Thuc. 3.50.1). When the Spartan Lysander captured Cedreæ in Caria in 405, he sold all the inhabitants into slavery (Xen. *Hell.* 2.1.15).

The approximate half century between the end of the Peloponnesian War (404) and the rise of Macedon under Philip (359–336) witnessed another revolutionary era in Greek siege warfare. Warfare in Sicily between Carthaginians and Greeks in the late fifth century and throughout the fourth century was the testing ground for new techniques. The Carthaginians brought with them, via their Phoenician cousins, a knowledge of Near Eastern siegecraft, including battering rams and siege towers, and they made extensive use of mercenaries as special attack troops. The Greeks, in turn, quickly learned from their enemy and made advances in artillery. The wars in Sicily were bloody, destructive and expensive. The new ways quickly made their way eastward to the Greek mainland.²⁰⁵

The biggest development in Greek siege warfare in the fourth century was the invention of artillery. Non-torsion arrow-shooters were invented by the engineers of Dionysius of Syracuse in the siege of Motya in 399. Within about a half century, the true torsion catapult had been invented as well. These new machines, when coupled with battering rams and siege towers, made it possible to knock down walls and capture cities in a matter of weeks rather than years. When supplemented by specialized troops like archers or firemen (to put out blazes in the equipment set by defenders), besieging armies could prove devastatingly effective.²⁰⁶

²⁰⁵ Garlan (1974) 156–69; Caven (1990); Kern (1999) 163–93. On fourth-century Greek warfare generally, see Anderson (1970).

²⁰⁶ Marsden (1969); Ober (1987).



Figure 7.6 Hoplites in full gear climbing a scaling ladder, while squatting archers aim covering fire at the defenders on the city wall. Nereid Monument, from Xanthus, c. 400 BC.

The new technology opened a revolution in fortress building. Engineers designed forts and city walls to be thicker, higher and more stable. Thirty-foot-tall towers featured shuttered windows from which small catapults could be shot. Perhaps most striking of all, the era of full-scale stone walls and towers was at hand. The new city of Messene in 369–368, built by Theban engineers, was the first Greek town whose walls were all of stone. Yet few walls could withstand the siegework ability developed by the Macedonians under Philip and Alexander (fig. 7.6).²⁰⁷

The fourth century also witnessed the building of massive fortresses and watch posts astride the mountain passes between Attica and Boeotia. Although scholars differ on the interpretation, dating and even the identity of these forts – were they Athenian or Boeotian? – perhaps the most convincing theory sees them as an Athenian system to offer stationary frontier defence to the countryside of Attica, perhaps in reaction to the devastation of Attica during the Peloponnesian War. They thus represent a new defensive mentality. Ironically, however, by the time they were tested in war with Macedon, advances in technology had rendered them obsolete.²⁰⁸

²⁰⁷ Winter (1971); Lawrence (1979); Garlan (1974) 183–226; Adam (1982) 171–5.

²⁰⁸ For illustrations, plans and a general discussion, see Adam (1982) 203–17; for the theory, Ober (1985b); for a contrary point of view, see Munn (1993); Cooper (2000).

2. *The experience of siege warfare*

Much of the evidence of ancient siege warfare comes from the archaeological remains of walls and forts. Several detailed literary accounts of siege warfare, however, have survived from fifth- and fourth-century Greece before the Macedonian era, and they are vivid. Thucydides provides detailed accounts of the siege of Syracuse by Athens (415–413) and of the debate on the treatment of prisoners after Athens' successful siege of Mytilene (428–427). But his masterpiece is the siege of Plataea by the Peloponnesians (431, 429–427) – or perhaps his account of the epidemic that struck the Athenian population under siege, hunkered down behind the walls of the Athens–Piraeus fortified complex, between 430 and 427. To learn about the sieges in the wars between Carthaginians and Greeks in fifth- and fourth-century Sicily, we depend mainly on Diodorus of Sicily, a Roman-era writer who borrowed from earlier Greek sources. Perhaps the most fascinating account of Greek siege warfare, and by far the most idiosyncratic, is the treatise on siegework, *How to Survive under Siege*, written perhaps in the 350s. The author of this work cannot be identified precisely, though he might have been the general Aeneas from the city of Stymphalos in Arcadia; he is known today only as Aeneas Tacticus, that is, Aeneas the Tactician.²⁰⁹

For the attacker, sieges were unpleasant and expensive and it is no wonder that they were avoided when possible. Before the artillery revolution of the fourth century, generally the only way to take a city was to starve it out, which would take months or years. The siege of Potidaea, to take an extreme case, lasted over two years and cost Athens 2,000 talents, which amounted to perhaps 25 per cent of Athens' financial reserves. As a result, Athens imposed special taxes both at home and in the empire (Thuc. 2.70.2, 3.17.4, 3.19.1).

The attackers usually built a wall of circumvallation around the besieged city, to prevent supplies or reinforcements from reaching it and to thwart break-outs. The Athenians, for example, built a circumvallation wall at Mytilene in 428; the Peloponnesians surrounded Plataea in 429 with a complex, double set of circumvallation walls built of clay bricks and complete with battlement, towers and moats. Infantrymen on siege duty were often drafted into the heavy labour of building walls. A determined and resourceful defender might thwart the completion of a circumvallation wall, as the Syracusans did to the Athenians during their failed siege of 415–413.²¹⁰

The besiegers often had to live out in the open, which meant heat in summer, rain from autumn to spring, and in the winter sometimes snow.

²⁰⁹ For an introduction to Aeneas Tacticus, as well as a translation and commentary, see Whitehead (1990); cf. Garlan (1974) 169–82.

²¹⁰ Garlan (1974) 106–24.

Plato's Alcibiades, for instance, who served at Potidaea in northern Greece, marvels at the endurance of his fellow Athenian soldier there – Socrates:

As for the hardships of winter – and the winters there are very severe – he performed prodigies; on one occasion in particular, when there was a tremendous frost, and everybody either remained indoors or, if they did go out, muffled themselves up in a quite unheard-of way, and tied and swathed their feet in felt and sheepskin, Socrates went out with nothing on but his ordinary clothes and without anything on his feet, and walked over the ice barefoot more easily than other people in their boots.

(Pl. *Symp.* 220a–b, trans. Hamilton 1967)

Besiegers had to feed themselves by raiding the countryside and by establishing markets to attract traders. They weren't always successful, however, and some besiegers suffered shortages of food or water. Alcibiades, again, referring to Potidaea, refers to times when supplies were abundant and other times when the soldiers were forced to go without food (Pl. *Symp.* 219e).

Disease was a possibility, as the Athenians discovered at Syracuse and at Potidaea and as the Carthaginians learned in Sicily. The Athenian army besieging Syracuse in summer 413 was rife with disease 'owing to its being the sickly season of the year, and to the marshy and unhealthy nature of the spot in which they were encamped' (Thuc. 7.47.2). At Potidaea in 430, an Athenian expedition lost 1,500 out of 4,000 hoplites in forty days, mainly because of the plague, the now-unidentifiable epidemic that ravaged Athens (Thuc. 2.58.3).²¹¹

Faced with these realities, besiegers tried to speed up the pace. The alternatives to digging in and sitting in front of a besieged city were treason, intimidation, trickery and assault. Before the artillery revolution assault was rare and rarely successful. Among the few examples, the Spartan Lysander took Lampsacus on the Hellespont in 405, while the Athenians under Cleon took Torone in 422, thanks largely to the city's under-strength garrison.²¹² Several Sicilian cities fell to assault in the wars between Carthage and Syracuse, but these campaigns involved siege engines, specialized troops or artillery.²¹³

Treason and intimidation were far more common ways to take a town. For example, traitors opened the gates of Torone to Sparta in 424 and the gates of Mende to Athens in 423, turned over the Cadmea or acropolis of Thebes to Sparta in 382, turned over the Athenian border fortress of Panactum to the Boeotians in 422, and let down nets from the walls of Chios around the mid-fourth century which were successfully scaled by an enemy (whose identity is no longer known to us).²¹⁴ The Persians at Marathon in 490 hoped to have the help of traitors in Athens. After the

²¹¹ Kern (1999) 116–18.

²¹² Xen. *Hell.* 2.1.19; Diod. Sic. 13.104.8; Thuc. 5.2.2–5.3.6.

²¹³ Garlan (1974) 125–47.

²¹⁴ Thuc. 4.130, 5.3.5; Xen. *Hell.* 5.2.25–36; Aen. Tact. 11.3–6.

Persian defeat the remainder of the Persian army rowed around Attica for the city, spurred on by a shield signal, flashed from the mountains by Athenian traitors. The news was that the city was largely undefended; unfortunately for the Persians, the Athenian army beat them back to town by land.²¹⁵

Brasidas, described by Thucydides as 'not being a bad speaker for a Spartan', was the master of intimidation (Thuc. 4.84.2). In 424 he talked the people of Acanthus, Stagirus, Amphipolis and other Athenian allies in north-eastern Greece into surrendering to Sparta. He offered favourable terms, appealed to panhellenic ideals, and threatened to ravage the territory of any city that resisted. He also had the advantage of shock and the relative distance of Athenian aid.

Finally, there is trickery. A familiar motif in the history of Greek warfare, common trickery – and not brute force or tactical sophistication – wins the day in Aeneas Tacticus' description of siege warfare in fourth-century Greece. Or, one should say, wins the night, because in Aeneas Tacticus' world, nighttime is often the moment of truth. One night c. 362–359, for example, Iphiades of Abydus captured the city of Parium by filling wagons with twigs and brambles and sending them, 'once the gates were already closed, up to the wall, as if they belonged to the Parians' (28.6). The wagons were left for the night but Iphiades waited for the right moment to set them on fire. Once the flames spread to the gates, the Parians rushed out to douse them – and Iphiades' troops took advantage of the distraction to scale the walls at another point and take the city.²¹⁶

So much for the besiegers. The greatest miseries of siege warfare, however, were generally reserved for the besieged. Greek literature is full of descriptions of the horrors of living under siege, a theme of poetry from Homer onward. There is little reason to think the bloody picture represents mere literary licence. The usual plan of the attacker was to starve a city out and when it succeeded, the results were not pretty. Besieged Athenians in 404, for example, thronged negotiators returning from Sparta, desperate for an agreement because of the masses of those who had died of starvation (Xen. *Hell.* 2.2.22). At Potidaea in 429 the starving defenders resorted to cannibalism (Thuc. 2.70.1). When enemy troops forced their way into a city, whether via assault or treason, the results were usually terrible for the defenders, as discussed in the preceding section.²¹⁷

Within the walls, the besieged had to pay nearly as much attention to fifth columns as they did to the enemy outside. There was always a traitor who might open the gates. For example, Aeneas Tacticus is full of references to plots, conspiracies, treason, class-warfare and *coups d'état*. The author urges

²¹⁵ Hdt. 6.115–16; see Losada (1970).

²¹⁶ On trickery, see Wheeler (1998); on Parium, see commentary in Whitehead (1990) 179–80.

²¹⁷ Greek literature: Kern (1999) 134–62 *passim*.

careful counter-measures, down to and including a ban on taking lanterns to bed, because they might be used to signal the enemy (10.25–6). He paints a picture of a besieged population that is frightened and wriggling under the thumb of a nervous and omni-present élite. In times of siege, as he advises, private meetings have to be banned, weddings and funerals monitored, parades patrolled by armed guards, private arms and armour registered, identity tokens issued, foreigners catalogued by innkeepers, ambassadors trailed, revolutionaries co-opted, stool pigeons encouraged by cash prizes. Sentries have to be rotated, gate-keepers looked over the shoulder, spies and deserters sniffed after by dogs. It all sounds disturbingly modern.²¹⁸

One of the few good things about life under siege was a slight relaxation of the usual restrictions on women's freedom. For example, when oligarchic traitors let a party of Theban soldiers into Plataea in 431, women played an active military role in the democratic counterattack by going up on the rooftops and throwing down stones and tiles onto the enemy. Slaves joined them in this activity (Thuc. 2.4.2; Aen. Tact. 2.6). Women, slaves and children did the same in the street fighting in the civil war in Corcyra in 428 BC and in the defence of Selinus in Sicily against Carthaginian attack in 411.²¹⁹

Another case comes from around 370 BC when the city of Sinope was attacked by the forces of Datamas, satrap of the province of Cappadocia. Short of men, the Sinopeans adopted the following ruse:

they disguised and equipped the most physically suitable of their women to make them look as much as possible like men, giving them jugs and similar bronze utensils in place of shields and helmets, and promenading them on the side of the wall where they were in fullest view of the enemy.

(Aen. Tact. 40.4, trans. Whitehead 1990)

While letting women play a masculine role, the men of Sinope none the less maintained gender policing by forbidding the women from throwing anything, since 'a woman is recognizable a long way off by the way she throws' (40.5). Whether the ruse worked is unclear. Datamas eventually conquered Sinope, but it took him two separate attempts, and it is not known on which one the Sinopeans employed their stratagem.²²⁰

One wonders what happened to the women of Sinope when the town fell. Greek women were far less likely to be massacred than men. They did, however, face enslavement. Rape, moreover, was always a possibility. The Greek historians do not discuss rape, but Homer and the tragedians

²¹⁸ On treason in Aeneas Tacticus, see Garlan (1974) 179–83; Whitehead (1990) 25–34.

²¹⁹ Thuc. 3.74.1; Diod. Sic. 13.56.

²²⁰ Plataea: Whitehead (1990) 103; Schaps (1982) 195–6. Sinope: Whitehead (1990) 205–6. Two centuries earlier, Peisistratus is said to have used Athenian women, disguised as captives, to lure the Megarian enemy into an ambush by dagger-wielding Athenian soldiers, Aen. Tact. 4.8–11.

do. Normally, one would prefer the historians as a guide to what actually happened, but they – especially Thucydides, our most important source on sieges – are often reticent about sex. In any case, unwanted sexual encounters were the common lot of the slave. The enslaved woman of Melos who ended up as Alcibiades' concubine was considered one of the lucky ones, since he actually brought up the child he had by her (Plut. *Alc.* 16.4).²²¹

²²¹ On rape and siege warfare, see Garlan (1975) 46–7; Kern (1999) 158–62.

CHAPTER 8

WARFARE AND THE STATE

VINCENT GABRIELSEN

I. INTRODUCTION: CONCEPTS AND APPROACH

‘States make war and war makes states.’ Charles Tilly’s dictum represents a view widely shared by political scientists, sociologists and anthropologists. ‘State’ and ‘war’ are not self-explanatory or uncomplicated concepts.¹ Max Weber’s immensely influential definition posited that the state encapsulated a human community, a definite territory and a monopoly of legitimate physical force (*Gewaltsamkeit*).² That force is usually understood to have two functions: an internal one, consisting of the enforcement of legal order by a police force; and an external one, consisting of the defence of the state’s territorial sovereignty by the army and navy. Guided largely by this thinking, several scholars classify ancient Greek communities, particularly the *polis*, as stateless societies: legal order was not ensured by a police force but through the custom of self-help practised by the community members themselves, and with rare exceptions there were no standing armies.³ In short, in most places legitimate violence had not yet become the monopoly of a central political authority.

Recently, however, Mogens Hansen has pointed out that Weber’s criterion of a monopoly of legitimate violence was not met even by major European states in the seventeenth and eighteenth centuries; while it was often posited as an ideal, this monopoly seems never to have been realized in full.⁴ Such a partial emancipation from Weberian influence is a great leap forward. The present chapter argues that the concept of state is perfectly compatible also with polities in which legitimate force exists within an *oligopolistic* rather than a monopolistic system.

In his seminal *War in the Ancient World: A Social History*, Yvon Garlan distinguishes between, on the one hand, war proper or a ‘true state of

¹ Tilly (1975b) 73–6, (1992) 20–8; cf. Hansen (2002) 39, ‘poleis make war and war makes poleis’. See Fried (1967) 204–5; Carneiro (1970) 734–6, (1994); Gellner (1983) 3; Gallie (1991) 31; Held (1995) 48; Pierson (1996) 7; Ferguson (1999) 417–18.

² Weber (1972) 822. Contrast the unselfconscious use of the terms ‘state’ and ‘war’ by e.g. Delbrück (1962); Pritchett (1971–91).

³ Berent (1996), (2000). On self-help: Lintott (1982); Fisher (1998); Hunter (1994).

⁴ Hansen (1998) 96, 118, 120, (2002) esp. 38–9. Cf. Mann (1986) 11.

war', as it had emerged through a process of legal formalization in the world of the classical Greek city-states, and on the other hand its precursor, a pre-juridical (or pre-state) phase of war characteristic of earlier, primitive communities. Concretely, the distinction is one between two forms of organized violence: (1) communally organized armed conflict, which in principle involved a polity's entire fighting population; and (2) privately organized predatory enterprises, smaller in scale, whose primary objective was the acquisition of material gain, that is brigandage and piracy. For Garlan the latter were 'anti-wars' lacking the validation of law and ultimate victory. The evolutionary scenario is explained as follows: 'before conflicts could emerge from their pre-legal framework the political structure of the communities . . . had to develop internally'.⁵ Resistance to that transformation is seen as a sure sign of cultural backwardness and atrophied statehood. A process of 'legal formalization' – the establishment of rules, conventions, battle protocols and, above all, the very concept of 'legitimate' warfare – is indeed a well-documented phenomenon.⁶ But fairly well-documented, too, are blatant manipulation of the concept of legitimacy and frequent transgression of these rules, not least by states which prided themselves on having long passed the threshold of primitiveness.⁷ Such distinct and chronic lapses into (to use Garlan's terminology) primitive, *pre-droit* conditions are enough to make the following remark by St Augustine applicable to the whole period treated here: 'For what are states but large bandit bands, and what are bandit bands but small states?' (*De civ. D.* 4.4).

In the classical period and beyond, the question of what did or did not constitute war, especially legitimate war, was itself a bone of contention *and* a frequently used weapon in the ideological fight among polities over the issue of who was civilized and central and who was primitive and peripheral. Certainly, as will become clear, there were profound changes, particularly from c. 500 onwards, in both the nature and scale of organized violence. In principle, the distinction drawn by Garlan and others between private raids and public military campaigns is valid. Yet no simple evolutionary scenario of 'war reaching its civilized, adulthood stage within the developed state' seems credible today. From the ranks of anthropologists, furthermore, dissenting voices now insist that 'the venerable distinction of "primitive" from "civilized" war obscures a fundamental similarity. War is war.'⁸ And so it is. In archaic and classical Greece (just as other regions in different periods) several violence-producing agencies, each generating its particular product in the form of raids and community-wide campaigns, existed side-by-side.

⁵ Garlan (1975) 77, with 23–4, 31, 37. ⁶ Ober (1996b); Hanson (1989).

⁷ See Krentz (2000). ⁸ Ferguson (1999) 429, cf. (1984a) 26.

II. THE PRODUCERS OF VIOLENCE AND THE PROFITS OF WAR

Thinkers of the classical period occasionally reminded their contemporaries that the appropriation of wealth in connection with armed conflict was a normal and perfectly justified act. Xenophon, for instance, held this to be a timeless and universally accepted convention: 'for it is a law established for all time (*nomos aidios*) among all men that, when a city is taken in war, the persons and the property of the inhabitants thereof belong to the captors'.⁹ Such seizures may be denounced as 'theft' (*harpagē*) but to the victors they constitute the legitimate acquisition of 'booty' (*leia*).¹⁰ The very concept of booty unites in itself the two most central ingredients of warfare: wealth and military power. 'In the ancient world power and wealth were not independent notions: each fed on the other . . . power was used to seize wealth . . . wealth was seized in order to enhance power.'¹¹ That was as true of Alexander's campaign of conquest, 'a booty raid on an epic scale', as it was of Homer's Trojan expedition, an epic raid that yielded booty on an immense scale.¹² For all the tactical and technical innovations of the centuries separating Homer and Alexander, one element remained remarkably constant throughout: war brought profits.¹³

Booty was both a *raison d'être* and an indispensable means of warfare; this, it will be argued in the following section, proved to be particularly true of the monopolistic type of state. Yet the fruits of war seldom feature among the causes of war.¹⁴ The reason appears to be that those who acquired booty were placed into two separate compartments. The private raider retained throughout a name directly associating him to his trade, 'booty-chaser' (Homeric: *leistér*; later: *leistēs*), but his public counterpart shook off this association completely: the terms for warrior, soldier, hoplite and so forth, and for the collectivity to which they belonged, the army (*strateia*, *strateuma*), all flagged the notion that communal interests superseded purely personal interests. An individual's contribution to the collective endeavour was defined as a cardinal duty – indeed, a hallmark of citizenship.¹⁵ A set of special terms (*xenos*, *epikouros*, *mishphoros*) singled out those who put their skills at the service of a community other than their own.

Thus the two kinds of violence producers were set apart. At one end stood the 'booty-chaser' (*leistēs*), often a socially prominent figure in command of the necessary material and human resources, represented by Homer's Odysseus (e.g. *Od.* 17.424–33) and his historical successor, the Phocaean Dionysius (Hdt. 6.17). At the other end stood the fighting potential of an entire community, mustered and fielded by the central political authority.

⁹ Xen. *Cyr.* 7.4.73; cf. 3.3.45, 4.2.26. ¹⁰ For the terminology, see Pritchett (1971–91) v.77–86.

¹¹ Garlan (1975) 183. ¹² Austin (1986) 454; cf. Nowag (1983); van Wees (1992) esp. 299–310.

¹³ Aymard (1957); Garlan (1977). Finley (1985) ch. 5, esp. 76–7.

¹⁴ On which see Momigliano (1966a). ¹⁵ Manville (1990); Raaflaub (1997).



Figure 8.1 Fighting around a beached warship, on a late eighth-century Attic vase. On the left two men fighting with swords, and trying to grab each other's hair; in the centre two spearmen attacking and an archer defending the ship; on the right a line of soldiers each armed with a so-called Dipylon shield (an early, single-grip, version of the Boeotian shield: see fig. 5.2), a pair of spears and a sword.

Its activation was *formally* justified by the need to preserve collective liberty and pride, demand respect from potential rivals and retaliate for rectifying an injustice committed against itself or against a valuable ally – the usual assortment of causes of war. None the less, the material proceeds of organized violence constituted just as strong and lasting a concern for this kind of producer of violence as they did for his private counterpart.

In the early Greek world, as elsewhere, however, neither these two agencies of violence nor their respective spheres of activity were yet completely separated.¹⁶ The borderline between them remained rather fluid for at least three reasons. First, because in most archaic communities – Sparta after the occupation of Messenia may have been a notable exception – private and public producers of violence enjoyed a symbiotic relationship which constitutes the defining characteristic of the oligopolistic type of state. Their political regimes possessed legal mechanisms capable of accommodating the private *opérateur* – if not because he himself was a prominent figure in their power-structure, then because the universal principle of mobilization and funding, a reliance on ‘those able to arm themselves’ (*hoi (ta) hopla parechomenoι*), rendered his personal abilities and resources indispensable when an all-out effort was called for. Second, because such all-out military enterprises invariably demanded that communal forces be placed under a single command structure, all early states tended to behave in a monopolistic fashion during short spells of ‘national’ hostilities, only to revert to their original status as soon as fighting or campaigning was over. And third, because in this area private action often had public repercussions. Owing to the time-honoured and pervasive custom of reprisals (*sylē, rhysia agein*), privately organized, small-scale predation was likely to instigate a full-blown clash between the armed forces of the communities of the perpetrator and the retaliating victim.¹⁷

¹⁶ See Raaflaub (1997) 51–3. On archaic Rome, see Rawlings (1999).

¹⁷ E.g. Nestor’s story in Hom. *Il.* 11.670–761. See Bravo (1980); Pritchett (1971–91) v.68–132.

When the complete separation of the two kinds of violence producer did occur, it had the historic effect of creating two diametrically opposed notions of state. It meant the fully fledged emergence of the monopolistic type, which gradually became a fierce ideological rival of its older counterpart, the oligopolistic state, because the latter continued to embrace an element which the former considered inimical to its very existence. The oligopolistic type of state, in sharp contrast to its counterpart, was inherently unable to enforce the observance of widely accepted conventions of warfare, an inability with often disastrous consequences for those who abided by such conventions. The private *opérateur*, showing little respect for those most basic protocols which limited armed conflict spatially, temporally and in terms of personnel, was wont to hit at random anyone, in any place and at any time. Hence the conceptual segregation of his *modus operandi* – the ‘raid’ – from ‘war’. For the monopolistic state, the raid was (and still is) demographically and economically destructive; besides, it strongly challenged the central political authority’s ability to meet its primary obligation of protecting those under its control.

Although this was fundamentally an ideological opposition, spokesmen for the monopolistic state tended to express it in cultural terms by situating their rival either in an uncivilized past or among the ‘primitive’ remnants of a civilized present. In the second half of the fifth century Thucydides gave the following account of the situation:

In earlier times both the Greeks and the barbarians who dwelled on the mainland near the sea, as well as those on the islands . . . turned to *leisteia*, under the lead of their most powerful men, whose motive was their private gain and the sustenance of their weaker followers, and falling upon cities which were unprotected by walls and indeed consisted of only scattered settlements, they plundered them and gained their livelihood from that source. At this time such a profession, so far from being regarded as disgraceful, was considered quite honorable. It is an attitude that can be illustrated even today by some of the inhabitants of the mainland, among whom success in the performance of this act [sc. *leisteia*] is regarded as something to be proud of . . . and even up to the present day much of Greece still follows the old way of life – among the Ozolian Locrians, for instance, and the Aetolians and the Acarnanians and the others who live on the mainland in that area.

(Thuc. 1.5.1–3; Loeb edn, adapted)

Thucydides also points to the circumstances that conditioned the emergence of the most pre-eminent classical Greek example of the monopolistic state and establishes the approximate date of this momentous event. Prior to the Persian wars, he explains:

there was no war by land from which any considerable accession of power resulted; all those wars that did occur were border wars between neighbours, and foreign

expeditions far from their own country for the conquest of others were not undertaken by the Greeks. For they had not yet been brought into union as subjects of the greatest states, nor, on the other hand, did they carry out common expeditions as equals; it was rather against one another that the neighbouring peoples severally made war.

(1.15.2; Loeb edn, adapted)

Here, as also in the analysis he offers in the archaeology-section of his work (esp. 1.11–17), Thucydides highlights two principal preconditions for large-scale power expansion, both of which have recently been rediscovered by historical sociologists and anthropologists: (1) current military technology and infrastructure must be able to meet the logistical challenges posed by such a project; and (2) a single polity must be able to mobilize and organize under its leadership a wide-ranging military potential.¹⁸ The one Greek state to succeed where all others had failed is of course classical Athens. What ensured that success was partly possession of two major violence-related institutions – sea-power and hegemony – and partly a determined effort to achieve a high degree of financial independence. These are the themes on which the rest of this chapter will focus.

III. WARFARE AND THE STATE: THE HISTORICAL EXAMPLE

However spectacular and costly a project, the enlargement by 480 of Athens' fleet to 200 war vessels of the most powerful type, the trireme, in itself was a mere precondition to power accretion. Absolutely essential for turning the new acquisition into an effective war machine with which to amass *and* to sustain power was the build-up of a naval organization. That was a vastly more demanding, complex and long-term project, since it involved a series of crucial, even daring, political decisions with profound and far-reaching consequences – political, economic and social. The distinctive organization which early fifth-century Athens chose to erect ushered her squarely into monopolistic statehood and made her the exemplar of such a polity in the classical Greek world – matched only later on by Macedon. Conversely, a lack or limited development of such an organization remained the principal structural weakness impeding a number of other *poleis*, notably Sparta. The main components of the Athenian naval organization from its inception in the early fifth century to 323/2 and the relationship of these components to the remaining, land-based, military apparatus therefore deserve close scrutiny.

¹⁸ Mann (1986) esp. 7–10; Reyna (1994) ('hegemonic domination' and the concept of 'war').

1. Centralization

One vital component of Athenian naval organization was a long process of centralization, already adumbrated in the Peisistratid step to bring war finance into the public sector,¹⁹ and set in motion by the decision that new accretions to the existing fleet – primarily the purchase of twenty ships from Corinth in 491 BC and the large-scale shipbuilding programme of 483/2²⁰ – should be entirely paid from public funds and thus become *Athenian* property.

By 478 that decision had brought about two major changes. One was of political import: the principal authorities of democratic Athens, that is the council and the assembly, had now assumed complete control over the existing naval resources and hence a monopoly over the exertion of armed violence at sea. Later, in 423, Athens tried formally to externalize that prerogative by trying to restrict the use of warships by her adversaries (*Thuc.* 4.118.5). How jealously that prerogative was thereafter guarded is indicated by the fits of political hysteria that swept Athens any time some of her citizens deployed public war vessels for unauthorized purposes (*Hell. Oxy.* A1, 1–27 Chambers), particularly for conducting private plundering raids ([Dem.] 51.13–14), or even when some citizen went off to operate as a privateer on a trireme he himself had purchased (*Isae.* 11.48). That monopoly almost instantly set the naval branch apart from the remaining military organization: for all other branches the general rule continued to apply that the citizen-infantryman, whether heavy- or light-armed, fought with his own equipment and the cavalryman (for yet some time) on his own mount.²¹

The other change had social consequences. Not only was the private *opérateur* deprived of his freedom to act of his own accord and to partake in communally organized exploits, but in addition his person was now viewed as an outlaw and his kind of violence as illegitimate. Henceforward, the independent aristocratic raider – the erstwhile main naval contributor within the ‘oligopolistic’ state – could only engage in his time-honoured pursuits as a civic outcast branded with the dishonourable label of a mere ‘booty-chaser’. Unless of course he chose, as most representatives of this class of people did, to let his personal energies, abilities and resources be harnessed to communal decisions and actions.

An illustration of that dramatic expansion of the public sphere at the expense of the private one is offered by the activities, under Peisistratid rule and under the democracy, of two members of a single aristocratic family. The principality which the elder Miltiades, son of Cypselus, carved out in

¹⁹ *Thuc.* 6.54.5: financing of warfare out of a 5 per cent tax, cf. Lewis (1990) 246.

²⁰ *Hdt.* 6.89, 7.144.1–2; *Thuc.* 1.14.1–2; [Arist.] *Ath. Pol.* 22.7.

²¹ Infantry: ML 14.8–12. Cavalry: Bugh (1988) 37.

the Thracian Chersonese c. 550 can hardly be called *Athenian* in any real sense; Miltiades, styling himself *oikistēs* and tyrant, commanded adequate local manpower and military resource, including ships, to lead independent military campaigns.²² However, by the time of his nephew, Miltiades, son of Cimon, who in 493 possessed five triremes,²³ things had begun to change. Shortly before 493, Miltiades conducted in private a raid against Lemnos, captured the island and then ‘handed it over to the Athenians’ – private conquest was thus turned into public property.²⁴ The next and decisive step is evidenced by the story about Miltiades’ expedition against Paros in 489, which is characterized by Herodotus (6.132–3) as a raid undertaken out of personal motives. This time Miltiades could deploy the force of seventy ships as well as the appropriate amount of funds and manpower only after the Athenian assembly had authorized the expedition, and only after Miltiades had assured his home authorities that his personal venture would enrich *all the Athenians* with an abundance of gold – publicly owned means were now to be used exclusively for hauling home publicly owned profits (Hdt. 6.132.1–2).

In stark contrast to this, polities adhering to oligopolistic statehood continued to allow the principle ‘war is a natural method of acquisition’ (Arist. *Pol.* 1256b23–6) to be operative for private individuals as well, except in special circumstances and always for the benefit of a particular group or community.²⁵ ‘Booty-chasing’ remained in Thucydides’ times a national habit in ‘many parts of Greece’ (cf. Thuc. 1.5.3, quoted p. 252). Some two centuries later it could still boast its resistance to reform; in 230, the Illyrian queen Teuta answered a Roman complaint about her peoples’ raids against Italian shipping with the words: ‘as far as private activities are concerned it [is] not customary for Illyrian rulers to preclude their subjects from increasing their fortunes at sea’.²⁶

In fifth-century democratic Athens the raid had been entirely deprived of becoming the sole prerogative of the state. As a result, the proceeds of armed violence, whether at sea or on land, were by law regarded as state property, a principle that was enforced rigorously throughout the fourth century.²⁷ Determined and creative individuals might of course still try, with greater or lesser success, to evade that rule. Thucydides (6.15.2) more than implies that Alcibiades warmly supported the expedition to Sicily in 415 because he intended to use his commandery as a means of private enrichment.²⁸ Again, in 355, two publicly appointed captains commanding

²² Hdt. 6.34–6, 37.1; Paus. 6.19.6 (dedication at Olympia); cf. Figueira (1991) 133–7, 260–2.

²³ Hdt. 6.41.1–2, with Lewis (1988) 298. ²⁴ Hdt. 1.136.2–3; cf. Figueira (1991) 138, 253–6.

²⁵ See e.g. the agreement of c. 450 between two Locrian communities: Tod 1 no. 34.

²⁶ Polyb. 2.8.8, with Davies (1984) 287.

²⁷ Pritchett (1971–91) v.398–438, esp. 416–25; Gabrielsen (2001a) 78–9.

²⁸ On generals profiting from war booty, see Davies (1981) 66–7.

an Athenian trireme looted, on the high seas, the cargo of a merchantman from Naucratis worth 57,000 drachmas; their profiteering venture, though, was spoiled when the assembly confirmed the legitimacy of the act but considered the loot to be state property (*Dem.* 24.11–14).

2. Finance

Another vital component of Athens' naval organization was a tightly controlled and efficient fiscal system which for the first time made it possible to transfer to the public sphere financial responsibility for the running of the entire machinery. To understand fully the character of this system one must appreciate the unprecedented pressure on resources, especially cash, which had to be met from the late 480s onwards, and consider the alternative modes of finance available.

First, the pressures. One set of these emanated from the amount and value of the materials needed for the building and maintenance of the ships. Above all, the procurement of high-quality ship-timber, a commodity whose monetary and strategic worth was fully recognized by those in power at the source of supply (e.g. *Hdt.* 5.23.2), required hard currency and adept diplomatic footwork. Evidence from the second part of the fifth century onwards attests to Athens' cultivation of political relations with a main supplier, Macedon,²⁹ and her use of imperial muscle to extract the materials she needed: 'If some city is rich in ship-timber', Pseudo-Xenophon (*Ath. Pol.* 2.11–12) wrote, 'where will it distribute it without the consent of the leading power at sea? And if some city is rich in iron, copper or flax, where will it distribute it without the consent of the leading sea-power? In all these things, however, I see the very materials of which also my [sc. Athens'] ships are built.' Very few places were as blessed with possession of both timber and revenue as were, for instance, Thasos and its mainland territories, Amphipolis or south Italy and Sicily³⁰ – and those which were fell prey, at one point or another, to a naval power coveting their riches.

Expenditure on a grand scale, furthermore, was a requisite for the development and upkeep of spacious harbours equipped with ship sheds, storage buildings and other facilities, all manned with an appropriate workforce and administrative personnel. The vast project that resulted in the transformation of Piraeus' three natural harbours, Zea, Munichia and Cantharus, into fortified naval bases proper – the headquarters of the Athenian fleet – had

²⁹ Contacts with Macedon: *IG* i³. 89, 117; *Andoc.* 2.11: for the fourth-century: *Tod* 11 no. 111; *Xen. Hell.* 6.1.11. *SEG* xxxvii.573 records Alexander's temporary prohibition, in 335 BC, to sell timber from Mt Dysoron, cf. Demosthenes' complaint (17.28) that timber was difficult to acquire. Cf. Meiggs (1982) 116–53; Borza (1987).

³⁰ Thasos: *Hdt.* 6.46–7; *Thuc.* 1.103.3. Amphipolis: *Thuc.* 1.98.1, 4.102.3–4, 108.1. Syracuse: *Thuc.* 6.90.3, 7.25.2; *Diod. Sic.* 14.41.1–6, cf. Meiggs (1982) 117, 119, 124.

been initiated by Themistocles already in 494 and represented a distinct contribution to the centralization process.³¹

Considerably greater were the pressures arising from operating the fleet. With a complement of 200 men on each trireme, the manpower requirements posed by 200 ships amounted to some 40,000 men; manning even half that force with citizen crews was a demographic impossibility for any single *polis*, Athens included. To the need for sheer muscle should be added the need for skill, since the combat effectiveness of this particular type of war vessel depended heavily upon the expertise of its ratings and oarsmen.³²

These factors rendered it necessary to supplement the pool of locally based manpower with often very large numbers of mercenary naval labour: what was said of Athens in 431 BC – that her navy relied on ‘purchased rather than home-grown’ manpower (Thuc. 1.121.3) – almost certainly applied also to the preceding period as it did throughout the fourth century. The large-scale employment of outsiders to crew fleets therefore spearheaded a pivotal military development: the increasing use of mercenary soldiers.³³

Probably, it was also within the naval sphere that the organization of an effective commissariat and the supply of pay (*misthos*) were for the first time defined as responsibilities predominantly, if not entirely, falling on the state,³⁴ a novelty that almost certainly affected directly the coinage-issuing policies of several *poleis* which possessed fleets.³⁵ Already between 525 and 500 Eretria saw the need to institutionalize, by law, the provision of *misthos* to oarsmen who were sent on distant campaigns, that is beyond Euboean waters.³⁶ With armies, on the other hand, private expenditure seems to have held a prominent place for a longer time. Even in the mid-fifth century, when the establishment of an army commissariat is in evidence,³⁷ the switch to public funding in this area was not complete, and it never really became so: our earliest surviving document securely attesting *misthos* for hoplite service, a decree of Lindos that may date as early as 440, distinguishes between soldiers paid from public funds and those paid by private individuals.³⁸ Again, part of the 200 talents spent on the campaign to Thermopylae in 352 (5,000 hoplites and 400 cavalry) was made up of

³¹ Thuc. 1.90–3; Ar. *Eg.* 815; Diod. Sic. 11.39–40; Plut. *Them.* 19. Cf. Frost (1980) 175–7; Kallet-Marx (1994).

³² Gabrielsen (1994) 121–3. ³³ Parke (1933); Marinovic (1988); Baker (1999).

³⁴ Main evidence: Pritchett (1971–91) 1.3–52. Cf. Gabrielsen (1994) 110–14; *contra* Eddy (1968) (i.e. naval pay was introduced after the Peace of Callias or even after 445).

³⁵ Pritchett (1971–91) 1.13–14, quoting Seltman (1955) 108–9.

³⁶ SEG XII.725, with Cairns (1991); *contra* Pritchett (1971–91) v.378 n. 541.

³⁷ Pritchett (1971–91) 1.30–41, esp. 32–3; Anderson (1970) 43–66; Hammond (1983a).

³⁸ IK 38 no. 251 (of 440–420), providing that those who set out from Lindos on an expedition either *damosiai* or *idiai* shall pay to the war god Enyalios one-sixtieth of their pay. I agree with Pritchett (1971–91) III.325–6 (cf. v.168 n. 228) that the contrast is not between citizens and mercenaries, but between at public and private expense. However, since *idiai* in the inscription is used of soldiers who received *misthos*, Pritchett’s view that ‘private’ refers to volunteers who paid their own expenses cannot

the money paid by the soldiers themselves from their own means (Dem. 19.84).

As fleets grew larger and more numerous, pay became a prominent factor in the attempts to attract swarms of men to perform hard and hazardous work. This was the means, for instance, to which the Corinthians resorted when in 434/3 they swept the Peloponnese and the rest of Greece to find rowing labour for their newly enlarged navy (Thuc. 1.31.1). Keeping such huge numbers of men adequately fed and paid constituted one of the most formidable financial challenges facing a naval state. Adequate pay meant wages at rates high enough to pre-empt mutiny or to induce crews to stay through often lengthy and distant campaigns. For post-480 Athens, of course, these challenges were of enormous proportions. Because of the high demand for skilled manpower, naval pay developed into a tactical device: the offer of higher rates was used to paralyse an enemy fleet by enticing its crews to defect to one's own side (e.g. Xen. *Hell.* 1.5.4). As a counter-measure part of the sailors' pay could be withheld until disembarkation (Thuc. 8.45.2), though that meant no relief at all for naval budgets, which in certain circumstances were further burdened by payments of extra bonuses to especially important teams of crewmen.³⁹

The cumulative impact of these pressures on naval budgets remains an elusive question, mainly because of the interplay of two factors. One is that we lack even the most basic of the relevant figures. For instance, even though a widely held view sets the cost of a trireme at one talent (6,000 dr.), our sources are practically silent on that matter.⁴⁰ Moreover, recurrent outlays on ship maintenance, a far from negligible item of expenditure, are virtually unretrievable. We are no better off with the operational costs, of which naval pay – at the rates of 3 obols or, perhaps more usually, 1 drachma per day – constituted only one part. The costs of naval operations usually reached exceedingly high and incalculable levels. 'War', an orator reportedly said, 'is not fed by fixed contributions'.⁴¹

The second factor rendering naval budgets quantitatively intractable was the constant need to deal with unforeseeable outlay instantly and on the spot. In 351, anticipating an escalation of Athens' conflict with Philip of Macedon, Demosthenes tried to introduce some improvements in this area by proposing a scheme that was intended to make the operational costs of a standing force amenable to budgetary planning. Yet even that scheme (which did not win support) had to make allowance for a fleet's resort to

be right: see Thuc. 8.100.3 and Lys. 16.14, to be contrasted with instances in which the soldiers, in part or wholly, served at their own expenses, e.g. Dem. 19.84.

³⁹ Thuc. 6.31.3. Cf. Gabrielsen (1994) 122–4.

⁴⁰ Gabrielsen (1994) 139–45 (hulls), 152–3 (equipment); *contra* Amit (1965) 16–18.

⁴¹ Plut. *Dem.* 17.4, quoting Theophrastus, who quoted Crobylus (= the orator Hegesippus of Sounion).

self-help and improvisation in order to find supplementary sources of funding (Dem. 4.16–29). Fleets of triremes afloat swallowed up huge amounts of money; in theory, their resource demands were infinite; a point made by a fourth-century orator when he described the triremes as ‘devouring’ (Lys. fr. 39 Thalheim). Due appreciation of the same phenomenon informed Thucydides’ decision to base his account of fifth-century Athenian naval power on four key concepts: naval preparedness (*paraskeuē*), expenditure (*dapanē*), revenue (*prosodos*) and surplus of money (*periousia chrematōn*).⁴² Essentially, none of this was new by 480. What did constitute a novelty, however, was the unparalleled scale on which funds were needed by a single state, Athens.

Next, the alternative modes of naval finance available. One consisted of regularizing and upgrading to state level the customary *ad hoc* ‘fund-raising’ expeditions, that is plundering raids and extortion. The assaults by a Samian force on wealthy Siphnos and by Themistocles on Aegean Medizers right after Salamis are just two examples (Hdt. 3.57–8, 8.111–12). Alternatively, one might lay hands on temple treasure: either by force, as Histiaeus of Miletus advised the commanders of the rebelling Ionian fleet to do if they wanted to prevail over the Persians at sea in 499;⁴³ or by contracting loans, as the Corinthians proposed that Sparta and her Peloponnesian League should do from Olympia and Delphi (Thuc. 1.121.3). A final means of raising money was to get a cash-rich foreign power, Greek or non-Greek, to assume the role of paymaster, as Sparta was compelled to do with Persia from 412 onwards.⁴⁴ The flaws of all these methods, chiefly their inadequacy in ensuring a sufficiently steady and substantial flow of money, are fairly obvious. Besides, loans had to be repaid,⁴⁵ forceful acquisition of sacred funds was likely to meet with general hostility,⁴⁶ and the services of a foreign paymaster had to be repaid dearly in political currency, that is the partial surrender by the recipient of his right to independent action – exit hegemony. Athens chose not to rely on any of these, but opted instead for a system that rerouted domestic, private wealth towards public utility. A new fiscal device took shape.

Its core was the old ethic that publicly oriented toil and largesse (*leitorugia*) deserve public acclaim, which was now applied to personal responsibility for captaining a warship (*trierarchia*).⁴⁷ To each state-owned trireme there was assigned a rich man, the trierarch, who from his private wealth

⁴² Kallet-Marx (1993) 1–20.

⁴³ Hdt. 5.36.2–4. On the proposal of the Mantineans in 363, the Arcadian Confederation stopped using the treasure of Zeus at Olympia for war purposes: Xen. *Hell.* 7.4.33–4.

⁴⁴ Pritchett (1971–91) 1.47–8 (principal evidence); David (1979–80); Lewis (1989) (discussion).

⁴⁵ Migeotte (1984).

⁴⁶ E.g. Thuc. 4.118.3, with Parker (1983) 170–5; Davies (2001b) 125.

⁴⁷ Gabrielsen (1994) 7, 19–39.

had to assist the public treasury; as we shall see below (p. 266), a comparable arrangement was introduced about mid-fifth century in the cavalry. This device bore the clear imprint of Athenian democratic law and ideology, in that it imposed a potentially onerous public obligation on a specific social class: wealthy citizens were legally required, for one year at a time, to captain a warship and at the same time to become financially responsible for both the ship itself and part of its running expenses. Thus the independent raider came to be supplanted by a state appointee whose primary, but not sole, qualification was the size of his purse. Virtually all other Greek naval states too had their ships captained by trierarchs.⁴⁸ What gave the Athenian institution its special style, however, was its being the work of a particular political regime.

Concentration on domestic, private wealth, then, offered itself as a solution to a major problem of war finance. But at the same time it created a new one: how to keep the volume and frequency of fiscal exactions at levels which, on the one hand, met on-going military demands and, on the other hand, did not overcharge or even exhaust the economic potential of the social stratum afflicted by these exactions. Maintaining a balance between these two concerns clashed directly with the pre-eminent 'national' objective of pursuing sea-power. At a later date, Thucydides made Pericles stress the limitless character of that objective by saying that mastery of the sea consists not only of Athens' 'present hold' (i.e. the empire) but 'any extension you [sc. the Athenians] may wish for, because of your current naval preparedness [*paraskeuē*]’ (2.62.2). So, additional, preferably non-domestic, mechanisms were needed to absorb the financial shocks of a constant increase of military activity.

3. Imperial revenue

The expansion of power and the acquisition of the wealth were made to feed each other by the creation of the Delian League, which from 478/7 onwards enriched the domestic fiscal system with a massive external branch. The proposition that the Delian League became yet another component of Athens' naval organization does not require a stand on the issue of when one can appropriately describe it as an 'empire'. This is not the place to rehearse the league's history; nor is it immediately relevant to decide whether the main motive for its formation was revenge against the barbarian, which Thucydides (1.96.1) calls 'a pretext', or pure and simple gain (*kerdos*),⁴⁹ which would make Athens' hegemonic league look like a

⁴⁸ E.g. Hdt. 6.14.2 (Samos); Thuc. 4.11.4 (Sparta).

⁴⁹ Thuc. 1.8.3, with Kallet-Marx (1993) 53–4. See also Sealey (1966) 253, *contra* Jackson (1969); Raflaub (1979).

grander and more sophisticated version of such *ad hoc* corporate bodies as 'those sailing away for booty' of Solonian times (*Dig.* 47.22.4). What matters here is the effect of three long-term trends: the gradual conversion of league funds to a purely Athenian resource; the increasing monetization of that resource, that is a priority of coin (*chremata*) over all else; and the piecemeal centralization, physical and administrative, of financial potential into a few easily supervised depositories. All three trends intersected and even coalesced at several points. They helped put hegemony and monopolistic statehood on a much firmer footing.

Foremost amongst the effects of the *resource-conversion* process stands the momentous expansion of Athens' own naval capacity. One part of this growth was secured by the confiscation of whole league fleets, either after the suppression of a revolt, or after the compulsory inclusion into the league of a new member. Suppliers of the first kind include Thasos in 465, Samos in 440, Mytilene in 427 and probably also Naxos in the early 460s. To those of the second kind belong perhaps Carystus, the first *polis* to be coerced into joining the league, and definitely Aegina, which with her entrance into the league in 457 surrendered the part of her navy that had not already fallen into Athenian hands. For each take-over of a fleet we can confidently assume a corresponding seizure from the *polis* concerned of its land-based naval infrastructure, ship sheds and all.⁵⁰

A presumably bigger number of ships was secured by captures. The considerable haul of Phoenician triremes after Eurymedon in the 460s,⁵¹ a league exploit that surely resulted in tangible Athenian gains,⁵² prefigured what was to become a habitual and appreciable source of supply of naval matériel.⁵³ The prize from a single naval victory alone, that over Aegina in 459, amounted to no less than seventy ships (*Thuc.* 1.105.2), a number of which are reported to have been brand-new (*Diod. Sic.* 11.78.4). We have neither the full list of confiscations and captures nor the number of vessels involved in each case. But what we do know so far is sufficient both to render it likely that, in aggregate, such gains more than counterbalanced running losses – including those suffered in Egypt in 454 (*Thuc.* 1.101.4), the most severe in the pre-413 record – and to explain the absence of trustworthy, contemporary evidence about large-scale shipbuilding programmes before the disaster in Sicily in 413.⁵⁴ The exact impact of these accretions on Athens' naval strength remains beyond calculation.

⁵⁰ *Thuc.* 1.101.3 (Thasos), 1.116.1, 117.3 (Samos), 3.50.2 (Mytilene), 1.98.1 (Naxos), 1.98.3; cf. *Hdt.* 8.66.2 (Carystus); *Thuc.* 1.108.4 (Aegina). See Meiggs (1972) 63 n. 2, 70; Hornblower (1991–6) 1.151 (on *Thuc.* 1.98.4), *contra* Schuller (1974) 104–7.

⁵¹ *Thuc.* 1.100.1: a total of 200 Phoenician triremes were seized and destroyed.

⁵² For a parallel: *Hdt.* 9.119–21 (siege of Sestos, 479), with Kallet-Marx (1993) 52–3.

⁵³ E.g. *IG* II². 1604–7; *Dem.* 20.77.

⁵⁴ Several such programmes have been postulated: Wade-Gery and Meritt (1957) 183, 187–8; Blackman (1969) 208, 211–12; Jordan (1975) 25–30.

Some figures do become available with Thucydides' enumeration of the resources possessed by Athens when at the peak of her power, but these figures seem to give two mutually inconsistent pictures. On the one hand, it is said that just prior to the war of 431 there were '300 seaworthy triremes' (Thuc. 2.13.8; cf. Ar. *Ach.* 545); and Thucydides mentions a resolution that '100 of the best triremes' be set aside every year for use in dire emergency only, specifically in the event that Attica was threatened by a seaborne invasion (Thuc. 2.24.2). Thus Athens appears to have had an *effective* force of only 200 triremes. But on the other hand, Thucydides also registers naval activity by a larger fleet in 428, when 250 triremes were simultaneously in commission (Thuc. 3.17.2); another contemporary author, moreover, refers to 400 trierarchs being appointed annually during the Archidamian War ([Xen.] *Ath. Pol.* 3.4). On this evidence, then, Athens' *effective* force numbered over 200 triremes, while her *total* came up to 400 triremes.

Modern scholarship has generally upheld the figure of 300 triremes and tried in various ways to explain away the 'problematic' figures.⁵⁵ Yet the size of fleets in commission, whether in 428 or any other year, is an unreliable guide to total naval strength, and Thucydides' '300 seaworthy triremes' (*triereis ploimous*) is simply a reference to those ships only that were currently fitted out for immediate deployment, as opposed to additional hulls that were not – but, if necessary, could be – fitted out for action.⁵⁶ Since the recently enhanced carrying capacity of the three naval bases at Piraeus (*c.* 434/3; *IG* I³. 52 = *ML* 58) still remained well below 372 ships, the total reached through a much later expansion (330 BC: *IG* II². 1627.398–405), Thucydides' figure of 300 plus ships probably strictly pertains to what the bases of Piraeus were capable of housing in about 431 – the residue being stationed at overseas bases.⁵⁷ Finally, there are no compelling reasons why we should doubt that the net number of Athenian trierarchs appointed every year was indeed 400. The view that imperial Athens had a *core fleet* of 400 ships thus fits with the main figures and can better accommodate

⁵⁵ One suggestion is that the resolution about the 100-ship reserve was not maintained: Hornblower (1991–6) 1.280; Andrewes in Gomme et al. (1945–81) v.6 (on Thuc. 8.1.2). If the Athenians used the reserve in 428 (Thuc. 3.15.1–2, 16.1), then they acted in accord with the pertinent decree, not contrary to it. Another idea is that the passage about 250 active ships is not authentic: see Gomme in Gomme et al. (1945–81) II.272–7; Hornblower (1991–6) 1.401; and Kallet-Marx (1993) 130–4, 150–1, for the earlier views; their own view is that the passage should retain its place but be read as relating to 430. It has also been argued that fifty new ships were built in winter 431/30 (Gomme in Gomme et al. (1945–81) II.276) and that only 300 of 400 trierarchs were actually appointed: Davies (1981) 16; Gabrielsen (1994) 74–5, 176–7.

⁵⁶ When used of warships, *ploimos* usually has a technical meaning, cf. Thuc. 1.29.3: the Corcyraeans 'fitted out their old ships with *hypozomata* in order to make them seaworthy (*ploimous*)'. At Thuc. 1.50.4, *ploimoi nees* are contrasted with those disabled in combat (Hornblower 1991–6: 1 ad loc.). On the *hypozomata*, see *IG* I³. 153.6–11, with Morrison et al. (2000) 169–71, 196–9, 220–1.

⁵⁷ A practice that continued in the fourth century, e.g. the use of Oeniadae as a naval base: Xen. *Hell.* 4.6.14, with Kolonas (1989–90) with pls. 9, 10, 14 and fig. 5.

the significant gains from confiscations and captures. Its implication that there were actually even more ships than there were *Athenian* trierarchs is not really an obstacle, if the ‘loan’ of a naval squadron to Samos in 405 is seen as typifying a particular way of favouring loyal allies (*IG* i³. 127 = ML 94.25–33). In 392/1, Andocides (3.38) said that it was a matter of imperial policy ‘that such *poleis* as possessed no triremes should be supplied with them by us’.

Even more important were the effects of the other two processes, *monetization* and *centralization*. The veritable *chremato-mania* which they unleashed⁵⁸ was solidly grounded in current military wisdom: ‘War is not a matter of weapons, but of money which gives weapons their usefulness.’⁵⁹ Some of the most conspicuous and familiar signposts of these two processes are: (1) the establishment of a league treasury, based on Delos and starting off with an annual total of 460 talents paid by non-ship-contributing league members;⁶⁰ (2) the removal in 454 of that treasury to Athens and the high-handed rerouting – either via the portion dedicated to Athena (*aparchē*) or otherwise – of its contents to Athenian treasuries; (3) the conversion of allied ship contributions to cash payments, through which ‘the Athenian fleet grew strong’ (Thuc. 1.99.3);⁶¹ (4) the blatant squeezing of allied financial potential,⁶² most clearly exemplified by the assessment of 425 (which boosted the number of tribute-paying cities to some 400 and the annual yield to slightly less than 1,500 (or, alternatively, 1,000) talents, as compared to 175 cities and 400 talents in 433/2;⁶³ and (5) the creation of an all-Athenian, tribute-managing bureaucracy (*Hellenotamiai*, assessors, collectors, auditors, etc.), placed under the supervision of the council.

Less conspicuous, but still contributing to the cash-stockpiling process, are the fines for late payment (*epiphorai*), the war indemnities, and also such innovative steps as the creation in the 420s of a new type of tribute-payer (Cythera and six Thracian cities) who were not also ‘allies’.⁶⁴ Financially inseparable from all of the above are the setting up of a fund from the 10-percent-tax, possibly levied on shipping passing through the Hellespont; the

⁵⁸ One that continued in the fourth century: Lewis (1954) 49; Davies (2001b) 126, referring to the material cited by Ferguson (1932) 85–95, III–27.

⁵⁹ Thuc. 1.83.2–3, trans. Hornblower (1991–6) 1.128. The use of money as a weapon is a theme that reappears in the King’s Peace of 387/6: king Artaxerxes promises to fight those who do not accept the peace ‘both by land and by sea, with ships and with money’: Xen. *Hell.* 5.1.30–1.

⁶⁰ Aristides’ assessment of 478/7: Thuc. 1.96.2.

⁶¹ See Hdt. 3.19: the Persians refrained from using force on the Phoenicians because their naval strength relied on them. On allied ship contributions, see Blackman (1969).

⁶² Cf. Ar. *Vesp.* 656–60. Imperial income other than tribute: Kallet-Marx (1993) 100–1, 141–9, 167, 176, 199; Hornblower (1991–6) II.97. Part of tribute spent locally: Unz (1985).

⁶³ Thudippus decree: *IG* i³. 71 (= ML 69); Kallet-Marx (1993) 270, rightly stresses the psychological and symbolic value of the 425 assessment, but cf. Hornblower (1991–6) II.95–6.

⁶⁴ Indemnities: e.g. Samos: Thuc. 1.117.3; Hornblower and Greenstock (1986) 125. Cythera: Thuc. 4.57.4. Thrace: Thuc. 5.18.5; Kallet-Marx (1993) 160, 181–2; Hornblower (1991–6) II.476.

concentration of almost all the sacred treasures of Attica on the Acropolis, accompanied with an order to use their funds for paying what was owed to the gods and to apply the residue to ‘the dockyards and the walls’;⁶⁵ and last but not least, the establishment, in 431, of the ‘iron reserve’ of 1,000 talents – which remained untouched until 412 (Thuc. 2.24.1, 8.15.1).

Monetization and centralization were thus made to work in tandem towards the amassing of revenue from which the Athenians were ‘feeding their navy’ (Thuc. 1.81.4) – primarily thanks to their command, for a remarkably long period of time, over an expansive external fiscal base. It was only natural, then, that the destruction of that base would become a principal strategic goal for Athens’ adversaries (Thuc. 1.81.4, 122.1, cf. 2.13.2). Yet, for as long as it lasted, imperial revenue helped also to attenuate an unsettling incongruity that resided in the double function of the Athenian propertied class as both a tax-paying entity and as a managerial elite who provided the skills required for running the empire; the lesser their burdens in the former area, the greater their enthusiasm to perform in the latter. In the long run, therefore, the non-domestic branch of the fiscal system contributed substantially to maintaining a balance between the financial demands of the ‘national’ objective of sea-power (*thalassokratia*) and the strain on domestic, private wealth.

4. War and state in Athens, 431–322

The balance was disrupted soon after 431, when warfare moved into a much higher gear, and even more so after 404, with the loss of the empire and the revenue derived from it. In response, naval organization and the entire system of war finance underwent a series of fundamental adjustments. Ironically, the cracks in the system become visible in one of the most signal expressions of Athenian self-confidence on record, Pericles’ stocktaking of Athens’ financial power just before the Great War (Thuc. 2.13.2–5). His listing of not only the annual tribute of 600 talents and the accumulated surplus of 6,000 talents but also the 500 talents of uncoined gold and silver on the Acropolis, unspecified but considerable amounts of money in other temples, and finally the gold plating on Athena’s statue, 40 talents of pure gold, is an implicit admission that the revenue from the empire might ultimately fail to support an escalated and sustained war effort. And so it proved.

First, there was a serious discrepancy between the annual amount of tribute payable by the allies and the sum actually reaching Athens. A handful of decrees, most of them from the early 420s, attest not only to widespread

⁶⁵ For both of these measures, see the first Callias Decree (*IG* 1³. 52 = *ML* 58), usually dated to 434/3, but Kallet-Marx (1989) argues for 431 BC.

defaulting in payment, but also to systematic administrative malfeasance. Problems in tribute collection, probably going back to the early 440s, seem to have persisted despite repeated attempts to impose tighter control over the process.⁶⁶ Such evidence discloses the unreliability of tribute as the chief source of imperial revenue,⁶⁷ not because there was an overall decline in the amount of allied obligations nor because outstanding payments were ultimately given up, but because one could not count on the year's revenue to be at hand precisely when it was needed: for massive, short-term war expenditure.

Second, from 431 onwards just that kind of expenditure became the norm even more than before. Hard figures are in short supply. Expenditure of slightly over 1,400 talents is registered for the ten-month siege of Samos in 440–439.⁶⁸ Payments probably adding up to 76 talents were made to the two squadrons of ten and twenty ships respectively sent to assist Corcyra in 433⁶⁹ – and each of these amounts relates only to what came from the treasury of Athena, so that further outlay cannot be excluded. A 'real' total is the 2,000 talents reported by Thucydides (2.70.2) to have been spent on the two-and-a-half years' siege of Potidaea, an enterprise which in conjunction with intense naval activity in 428 put a severe strain on Athens' financial resources (Thuc. 3.17.3–4). Heavy, mostly war-oriented borrowing from sacred treasuries in the years 433/2–423/2 (heaviest from 432/1 to 430/29 and totalling nearly 6,000 talents) indicates that imperial revenue, even if impressive on paper, was unable to follow the pace at which fleet operations swallowed up cash.⁷⁰

Third, land warfare added considerably to the overall pressures. Sheer manpower requirements constituted one major determinant. The turn-out of a full muster (*pandemei, panstratia*) for the first of a series of twice-yearly invasions of the Megarid in 431 produced 'the largest army of Athenians [and metics] that had ever assembled in one body', 13,000 men (Thuc. 2.31.1–2, with 4.66.1 and 2.13.6). Considerable, too, were the contingents of light-armed skirmishers. Such mass armies were by now being paid and provisioned predominantly from the public coffers.⁷¹ Other funds had to be earmarked for Athens' incipient employment of land-fighting mercenaries: 1,000 Thracians in 423; 'as many Thracians as possible' in 422; again, 1,300

⁶⁶ *IG* i³. 34 (= ML 46), of 447 BC (?) or the early 420s, see ML pp. 120–1; *IG* i³. 60, of c. 430 BC; *IG* i³. 68 (= ML 68), of 426 BC; *IG* i³. 71 (= ML 69), of 425 BC, lines 44–8.

⁶⁷ Kallet-Marx (1993) 190–4.

⁶⁸ *IG* i³. 363 (= ML 55); cf. Thuc. 1.116.1; Isoc. 15.111; Nep. *Timoth.* 1; Diod. Sic. 12.28. For the amount, see Fornara (1979).

⁶⁹ *IG* i³. 364 (= ML 61); cf. Thuc. 1.45, 50–1.

⁷⁰ *IG* i³. 369 (= ML 72; commentary 216–17). Cf. Kallet-Marx (1993) 194–8, (1989) 102–3: such borrowing was quite normal financial practice and constitutes no evidence that Athens' resources were depleted.

⁷¹ [Arist.] *Ath. Pol.* 27.2; Cf. Pritchett (1971–91) 1.7–14, 23–4, 30–52.

Thracians, each paid 1 drachma a day, in 413.⁷² Such instances presaged the transformation of extraneously recruited, light-armed combatants into a tactical asset in the fourth century (particularly, Iphicrates' peltasts)⁷³ and the heavy expense incurred thereby – 1,000 talents on mercenary pay during the Social War (357–355) alone (*Isoc.* 7.9).

Further demands issued from the Athenian cavalry. A higher degree of public financial concern with that branch is reflected in the *katastasis*, a state loan that enabled the newly enrolled cavalryman to purchase his mount, and which had to be repaid in full upon retirement from service; the *sitos*, a fodder grant received in coin, presumably throughout the year; and the daily *mishos* given to the cavalryman while in active service.⁷⁴ Regardless of whether all three arrangements originated with the reform of c. 445 that raised the number of horsemen from 300 to 1,200,⁷⁵ they certainly brought this branch, much more than before, into the purview (and so under the control) of the state.⁷⁶ In the fourth century public expenditure on the cavalry (presumably the cost of the fodder allowance only) amounted to 40 talents a year;⁷⁷ surely, the corresponding figure in the fifth century would have been at least of the same order.

A closer interaction between army, cavalry and navy turned most naval expeditions into amphibious affairs.⁷⁸ Warships especially constructed as troop and horse carriers (*stratiotides/hoplitagogoi* and *hippagogoi*) greatly enhanced the mobility of land forces by transporting them *en masse* to distant fields of operations.⁷⁹ Tactics thus made the land forces into yet another component of Athens' naval organization and expenditure. Thucydides registers the point at which their aggregate cost reached heights that rendered it mandatory to restructure the entire range of sources of revenue: 'For the siege of Mytilene' in 428/7, he writes, 'the Athenians needed funds over and above those provided by their regular sources' (3.19.1). From that moment on, down to 323/2, alternative forms of revenue, previously discarded or given low priority, came with shifting intensity and duration to play a new role: the foreign paymaster, allied contributions and the almost

⁷² Thuc. 4.129.2 (423 BC), 5.6.2 (422 BC), 7.27.1, 29.1 (413 BC).

⁷³ Best (1969); Pritchett (1971–91) II.117–25.

⁷⁴ *Katastasis*, evaluation, inspection: Lys. 16.6–7; [Arist.] *Ath. Pol.* 49.1, with Rhodes (1981) 565; Kroll (1977) esp. 97–9. *Sitos*: *IG* i³. 375 (= ML 84, 410/9 BC), 4, 8, 9, 11–12; Xen. *Eq. mag.* 1.19. *Mishos*: Tod 1 no. 72 (= *IG* i³. 83); Thuc. 5.47.6 (quadruple alliance of 420 BC), both of which term the 1 Aiginetan drachma for each cavalryman *sitos*; but cf. Lys. fr. 6 Budé: 1 dr. daily *mishos* at least until 403/2, when a reduction of pay from 1 dr. to 2 ob. was proposed for 1,000 *hippeis* and a raise from 2 to 8 ob. a day for 200 mounted archers (*hippotoxotai*). Demosthenes (4.28) calculated with 1 dr. per day. On all this, see Bugh (1988) 52–62, who assumes that the state provided horses for the *hippotoxotai* (135, 156–8).

⁷⁵ So Bugh (1988) 39–78, esp. 53, 60–1. ⁷⁶ Keil (1902) 142.

⁷⁷ Xen. *Eq. mag.* 1.19. Cf. Bugh (1988) 60. ⁷⁸ See Hanson (1991b) 369–75.

⁷⁹ *Stratiotides/hoplitagogoi*: Thuc. 6.31.3, 8.62.2; cf. *IG* i³. 60. *Hippagogoi*: Thuc. 2.56.2, 6.25.2, 31.3, 43; Ar. *Eq.* 595–610; *IG* II². 1627.24; cf. Morrison et al. (2000) 94, 157.

inseparable trio ‘plunder, extortion and sale of protection’ constituted one set; fiscal mechanisms at home made up another.

Inevitably, the stress on external sources persisted. Persian gold exercised a greater attraction for needy Sparta, but eventually Athens, too, was forced by post-404 financial exigency to get on the King’s payroll as a recipient of the aid given to the anti-Spartan coalition in 393–388 and of a special donation with which to rebuild the Long Walls at home.⁸⁰ Strictly, these instances must be distinguished from the few occasions on which Athens secured satrapal (not royal) cash through ‘leasing out’ commanders and their forces (e.g. Chares, who in 356 took service under Artabazus ‘in order to relieve the Athenian finances’ and who used the satrap’s generous pay to feed his men).⁸¹ On the whole, money from the King himself – a cash-rich but niggardly paymaster (*Hell. Oxy.* D16, 537–44 Chambers; Isoc. 4.142) – was received in unimpressive quantities and for short spells of time. Yet far more telling than what the Athenians actually got is what they *wished* to have: serious flirting with the idea of financing their warfare with Persian gold is attested already in the ‘optimistic’ years, 431 and 424,⁸² while the possibility of using that source continued to be aired as late as in 340.⁸³

Better exploited was the option of securing allied financial support that was legally and terminologically dissociated from the imperial tribute (*phoros*) system. Early specimens include the *ad hoc* contributions (some of over 50 talents) made by Sicilian allies probably in 427/6,⁸⁴ and the sixty talents of uncoined silver given by Segesta as a month’s pay for sixty Athenian ships in 415 (Thuc. 6.8). Then, with the formation of the Second Athenian League in 378/7, a larger and more permanent arrangement was formally established, one based on the consent of the membership to fund league expeditions through regular money contributions, for which the term *syntaxeis* (not *phoros*) was judiciously applied.⁸⁵

Our evidence about that arrangement is too patchy to yield a coherent picture: Aeschines (2.71) reports that Chabrias *annually* collected 60 talents from the islanders; Demosthenes (18.234) sets a single year’s total in the early 340s at 45 talents; individual assessments are only known for two cities, Oreos and Eretria, each of which paid 5 talents (Aeschin. 3.94, 100).⁸⁶ However, two things are reasonably clear. First, from 378/7 to 338/7 Athens did, indeed, avail herself again of an external fiscal base, though payers now

⁸⁰ Xen. *Hell.* 4.4.2, 4.8.8–10, 12; Diod. Sic. 14.84.5. For Conon and naval petty-officers (*hypereisai*), see *Hell. Oxy.* A1, 28–30 Chambers. In 388, Lysias (33.5) called the King ‘paymaster’ (*tamias*) of the Greeks and ‘possessor of many ships’.

⁸¹ Diod. Sic. 16.22.1–2; Dem. 4.24. Remaining examples: Pritchett (1971–91) 1.59–116.

⁸² Thuc. 2.7.1, 4.50.3; Ar. *Ach.* Cf. Lewis (1989) 230. ⁸³ Dem. 10.31; cf. Dem. 11.5–6; Isoc. 12.159.

⁸⁴ *IG* I³. 291. For the date, see Ampolo (1987). ⁸⁵ *IG* II². 43.23, cf. Theopomp. *FGrH* 115 F98.

⁸⁶ See generally Cargill (1981); Brun (1983) 74–142.

handed their contributions directly to Athenian commanders and only after two separate authorizations – one by the league council, the other by the Athenian assembly – had been issued to that effect.⁸⁷ Second, despite such differences, this new system inherited almost all the defects of the old one: recalcitrance among payers; use of force against contributors by Athenian commanders of underfunded expeditionary forces;⁸⁸ defection of allies, resulting in increased war expenditure and the diminution of the group of *syntaxeis*-payers (*Dem.* 18.234). On top of all of this, the Athenians refused to let their fleet commanders use the *syntaxeis*, which caused Demosthenes to exclaim: ‘For where else do you suppose that he [sc. a commander] looks for the maintenance of his troops, if he gets nothing from you and has no private fortune to furnish their pay? To the sky?’ (8.26, cf. 21). In the face of such failings, which are attested both when the public treasury suffered from abject poverty and when it experienced a relative recovery,⁸⁹ one other option gained considerably in appeal: the disreputable trio plunder, extortion and the sale of protection.

As financial expedients, plunder and extortion had been operative in the fifth century. In 428, to obtain additional funds for the siege of Mytilene (*Thuc.* 3.19.1; cf. p. 266), a squadron was sent on a ‘money-collecting’ mission, *argyrologia*, an innocent-sounding label for what in fact was a forceful exaction from allies of money other than tribute.⁹⁰ With a single known precedent in 430/29, that procedure was repeated in 425/4 and again in 424.⁹¹ Incidentally, the Spartans resorted to the same methods: in 413, *argyrologia* was used to finance their fleet, while in 399 booty fed their armies throughout the Peloponnese.⁹² Plunder made its own contribution to Athenian war expenditure in 415, when the expeditionary force to Sicily raided Hyccara in the north-west of the island and captured all its inhabitants, whom the admiral Nicias then sold for 120 talents (*Thuc.* 6.62.3–4). These occurrences, however, count for little in comparison with those from the period after 411, during which plunder and extortion became two of the financial props of naval campaigns. The relevant evidence is too copious to be cited in full here,⁹³ but documents the incontrovertible fact of a major hegemonic power ‘going raider’.

The heavy hand of Athenian fleet commanders was felt in 411 by Cyzicus, Halicarnassus and Meropsis in Cos, the latter plundered by Alcibiades in order to pay his fleet at Samos; by the Hellespontine area and Thasos

⁸⁷ *IG* II². 123 (= Tod II no. 156); [*Dem.*] 49.49; [*Dem.*] 50.53; *Plut. Phoc.* 7.1–2.

⁸⁸ On both of these: *Isoc.* 8.36, 29, 15.123; *IG* II². 111.12–14.

⁸⁹ Pritchett (1971–91) v.459–61, for the public treasury before and after 346.

⁹⁰ Kallet-Marx (1993) 136–8, 160–4, 200–1; cf. Meiggs (1972) 254; Hornblower (1991–6) II.94–5.

⁹¹ *Thuc.* 2.69.1, 4.50.1, 4.75.1; cf. Cleon’s connection with *argyrologia* in Ar. *Eq.* 1070–1.

⁹² *Thuc.* 8.3.1; *Xen. Hell.* 3.2.26. For contributions to the ‘Spartan War Fund’, see the document treated by Loomis (1992) esp. 75–6 (suggested date c. 427).

⁹³ Much of the material is in Pritchett (1971–91) v esp. 381, 385–7. Cf. de Ste Croix (1953) 50–1.

in 411/10; by Cyzicus again, Selymbria and Lydia in 410; by Bithynia, the Hellespontine cities and the Thracian Chersonese in 408, in which year Alcibiades, besides collecting 100 talents from Caria, also plundered Cos and Rhodes to maintain his troops.⁹⁴ Thrasybulus' and Ergocles' 'fund-raising' enterprises in 389–388 – that is, plunder in the Hellespont and extortion (*argyrologia*) in Pamphylia – typify almost every naval expedition in the fourth century.⁹⁵ The booty brought by Chabrias to Athens after the battle off Naxos consisted of 3,000 captives and more than 110 talents. Operating with seventy ships in 373–372, Iphicrates sold captives for 60 talents with which he fed his crews and exacted money from Cephallenia. Having received no money from Athens for his ten-months campaign against Samos in 366, Timotheus paid his men (8,000 light-armed troops and thirty triremes) from booty. In 360 Chares plundered Corcyra and in 353 Sestos. Exactly the same methods were used by Diopeithes during his operations in the north Aegean, 343–340.⁹⁶ Xenophon (*Eq. mag.* 7.7) recommended the use of cavalry as raiders (*leistai*). Predatory activity, or rather its product (*leia*), had become an essential part of the naval organization. Yet the label *leistēs* was invariably reserved for the enemy – for example, Alexander of Pherae, *leistēs* on land and at sea, or Philip of Macedon, 'the plunderer of the Greeks'.⁹⁷

A lucrative target of state-licensed predation was commercial traffic at sea. Whenever opportune, Athenian fleet commanders raised funds by seizing merchantmen (e.g. Dem. 2.28, 8.9, 28, 24.11–14; Aeschin. 2.71). This had two intimately connected consequences. First, it brought the state-sponsored predator into sharp competition with the private *opérateur*, whose activities Athens therefore endeavoured to curb by extending her avowed monopoly over armed violence at sea to the entire area under her hegemony: a resolution from shortly after 344, formally motivated by the wish to protect merchants against raiders, forbade all Athenian allies to receive 'booty-chasers' into their harbours. In 342/1 the Melians were fined 50 talents for having breached that ban ([Dem.] 58.53–6); at that time, Athens' protection monopoly in the Aegean was being seriously challenged by Philip of Macedon.⁹⁸

Second, the predatory activities of both the public and the private *opérateur* raised the demand for – and hence also the value of – protection as a commodity perennially on offer by a maritime power. According

⁹⁴ Thuc. 8.107.1, 108.2; Diod. Sic. 13.40.6, 42.2–3, 69.5; Xen. *Hell.* 1.1.8, 12, 20–2, 1.2.41, 1.3.3, 8, 1.4.8; Plut. *Alc.* 30.3, 35.4.

⁹⁵ Xen. *Hell.* 4.8.25–30; Lys. 28.2, 5ff. Pritchett (1971–91) 1.50–1, 11.101–2.

⁹⁶ Xen. *Hell.* 5.4.61, 6.2.33, 35–6, 38; Diod. Sic. 15.34.3–35.2, 47.7, 95.3, 16.34, 57.2–3; Isoc. 15.111; [Dem.] 12.3; Dem. 8.21–9, 20.77; Polyaenus, *Strat.* 3.9.55, 3.10.9.

⁹⁷ Xen. *Hell.* 6.4.35; Dem. 10.34; see de Souza (1999) 33–4, 36–9, 241.

⁹⁸ See [Dem.] 7.14–15; de Souza (1999) 38–9; Gabrielsen (2001b) 232.

to Demosthenes (8.24–5), Athenian generals routinely received payments (euphemistically called ‘benevolences’, *eunoiai*) from merchants and their cities in return for protection against pirates. In 340 Chares convoyed no less than 230 corn-ships of various nationalities from south Russia.⁹⁹ A key area for this kind of business was the Hellespont (e.g. Xen. *Hell.* 1.1.22, 36). Operating there with a fleet in 388, Diotimus collected a substantial sum from shippers and merchants, though he failed to observe the law and hand all of it to his home treasury; the sum he kept to himself allegedly amounted to 40 talents (*Lys.* 19.50). In the late 340s Diopeithes was exploiting the potential of organized violence to the limit by both seizing merchantmen (Dem. 8.9, 28) and receiving money to protect them (*ibid.* 24–5). On the whole, then, the ‘disreputable trio’ was gaining ground already in the fifth century, while in the next century it tended to outdo in profitability all other external sources of revenue. Yet, its inherent hazards and unpredictability still required the presence of a complementary system, which, at least in theory, would be a dependable safety mechanism by raising revenue from domestic wealth.

The relevant institutions were the irregularly levied war tax (*eisphora*) and the annually imposed trierarchies. They cannot be discussed in detail here,¹⁰⁰ but what does need to be noted is that the monetary exactions made through these institutions began to increase in size and frequency in the 420s (for the trierarchy, cf. [Xen.] *Ath. Pol* 1.13). Simultaneously with the *argyrologia* of 428/7 through which extra funds were to be raised for the Mytilene campaign, the Athenians levied for the first time an *eisphora* of 200 talents (Thuc. 3.19.1). Here, the expression ‘for the first time’ most likely means ‘the first time an amount as high as 200 talents was raised by means of the war-tax’, rather than ‘this was the first ever *eisphora*'.¹⁰¹ In the period to follow, Athens' propertied class was all the more often required to make its wealth available for war-expenditure through payment of *eisphorai* and performance of trierarchies.¹⁰²

Both systems underwent a series of reforms or simply adjustments that aimed at enhancing their efficiency, primarily by means of introducing better collection procedures and more rigorous controls against evasion. Just as with the allied contributions, the amounts paid in *eisphora* became part of a central fund, the Military Fund (*stratiotika*, instituted by 373), which in time of war was by law also to receive surplus money from the other public

⁹⁹ *Didymus Papyrus* (Theopomp. *FGrH* 115 F292, and Philoch. *FGrH* 328 Fr62). See, in addition, [Dem.] 50.17–21; Dem. 21.167; *IG* 1². 408, 1623.276–80, 1628.37–42.

¹⁰⁰ See further, on *eisphora*: de Ste Croix (1953); Thomsen (1964), (1977); Brun (1983) 3–73; on the trierarchy: Cawkwell (1984); Gabrielsen (1994) 173–217.

¹⁰¹ Griffith (1977), followed by Hornblower (1991–6) 1.404, *contra* Kallet-Marx (1993) 134–6, (1989); cf. *IG* 1³. 52 (= ML 58 B), lines 17, 19, a document usually dated to 434.

¹⁰² E.g. Ar. *Eq.* 924; *Lys.* 21.3. Cf. Brun (1983) 24–5.

treasuries.¹⁰³ From 378/7, the *proeisphora* (i.e. advance payment of the entire *eisphora*-levy by the 300 richest citizens, who then had to recoup their money from a larger group of taxpayers) was used to ensure the timely collection of the whole amount voted for a campaign;¹⁰⁴ from 347/6, an *eisphora* of 10 talents was imposed each year, though extra levies could be voted.¹⁰⁵ Furthermore, those liable to pay were arranged into groups, the symmories (one set for the *eisphora*, another for the trierarchy), chiefly for the purpose of affording better control over the payers themselves and the flow of their contributions. Finally, the *syntrierarchy* (i.e. permission for two or more men to share between them a single trierarchy) and the sub-division of symmory-members into groups of naval *synteleis* ('joint contributors'), were intended to spread the financial burdens and to distribute them more equitably. Public awards of honours promoted voluntarism. And constantly lurking in the background was the dreaded *antidosis*, the mechanism rendering it compulsory for members of the propertied class to uncover dodgers among their number.¹⁰⁶

All these measures contributed to a more effective mobilization of domestic wealth for war purposes. Almost certainly, those liable to these obligations, especially the onerous trierarchy, were forced to expand or intensify their economic operations in order to generate the surplus capital needed to meet them.¹⁰⁷ However, success was limited. None of the reforms of the trierarchy produced an entirely satisfactory system, primarily because the Athenians abstained from applying further coercion because they wished to preserve the goodwill of their naval financiers.¹⁰⁸ With the *eisphora*, the main problems were unwillingness to vote levies,¹⁰⁹ unwillingness to pay those that were voted¹¹⁰ and inadequacy of the amounts collected to finance campaigns ([Dem.] 50.8, 15). To this should be added the tendency after the Social War to starve the Military Fund for the benefit of the Theoric Fund.¹¹¹ Athenian democracy had indeed managed to transform the aristocratic warrior into an honourable taxpayer. Less honourably, however, he sometimes was apt to lament his pecuniary plight as a naval financier ([Dem.] 50.59–61), while at other times he had to flee over the rooftops not to be caught by over-zealous war tax-collectors (Dem. 22.50, 53).

¹⁰³ On the Military Fund, see e.g. Dem. 1.19. Instituted by 373; [Dem.] 49.12, 16. Its administration: [Arist.] *Ath. Pol.* 43.1, with Rhodes (1981) 513–16. *Eisphorai* going into the Fund: [Dem.] 50.8, 10. The law about surpluses: [Dem.] 59.4. Cf. Brun (1983) 170–6.

¹⁰⁴ [Dem.] 50.8–9, 42.25. ¹⁰⁵ IG II². 244.12–13 and 505.14–17; Din. 1.69. Cf. Brun (1983) 54–5.

¹⁰⁶ Gabrielsen (1994) 91–5. ¹⁰⁷ Osborne (1991), stressing an increase in agricultural production.

¹⁰⁸ Gabrielsen (1994) 182–213, esp. 212. ¹⁰⁹ Dem. 8.21–3, and Ex. 41.2.

¹¹⁰ Dem. 2.24, 27, 31, 3.20, 4.7, 22.42–5; Lys. 29.9. Puzzlingly, in the period 378/7–356/5, 14 talents were owed in arrears from levies totalling 300 talents, despite the existence of the *proeisphora*: Dem. 22.44–5.

¹¹¹ Dem. 1.19–20 with *hyp.* 4–5, 3.10–13, 31, 19.291; [Dem.] 59.4–6; Philoch. *FGrH* 328 F56a. Cf. Buchanan (1962); Cawkwell (1963); Hansen (1976).

Symptomatic of the deep-seated weaknesses of the existing fiscal devices is the increasing use of 'extra-fiscal' schemes for mobilizing private wealth, notably by means of canvassing voluntary contributions, *epidoseis*.¹¹²

In the end, of the several options available to achieve an adequate degree of financial independence, plunder and extortion proved indispensable: to ensure its survival the truly hegemonic state had to give high priority to the time-honoured craft of predatory acquisition. An ancient author twice explained the decision of Athenian commanders to conduct plundering raids with their wish 'to relieve the Athenian *demos* of the *eisphorai*' (Diod. Sic. 13.47.6–7, 64.4). After 338, however, the pursuit of financial independence began to lose its justification. Athens' status as a hegemonic power practically vanished with Chaeronea. Sea-power continued for a little longer, but it, too, evanesced in 323/2. By that time, another state, Macedon, was emerging as the quintessential monopolistic state. But the particular trajectory she followed is a different story.

¹¹² Migeotte (1992) 10–21 nos. 1–8; Gabrielsen (1994) 199–206.

CHAPTER 9

WAR AND SOCIETY

HANS VAN WEES

War was a holiday for the Spartans, a relief from the rigours of military training to which they dedicated their lives, according to Plutarch (*Lyc.* 22.1–2). The Spartan reputation for discipline, professionalism and even militarism was – and is – second to none in the ancient world. But if the Spartans stood out, it was more because military standards in the rest of Greece were remarkably low than because their dedication was extreme in comparison with, say, a modern soldier's. The other Greeks hardly engaged in any military training at all and showed *no* true dedication to warfare, as Xenophon was always keen to point out.¹ For all the accounts and images of war in art and literature, for all the temples littered with dedications of booty and victory monuments, the impact of war on Greek society was rather limited. The demands of war usually did not dictate the daily routine of citizens, or shape social and political structures, or dominate economic activity. On the contrary, in archaic and classical Greece it was the demands of social, political and economic life which shaped warfare.²

I. WAR AND THE LEISURE CLASS

A defining feature of Greek society was the distinction between those who could afford to live off the labour of others – ‘the rich’ (*plousioi*) or leisured classes – and those who had to earn a livelihood – ‘the poor’ (*penetēs*) or working classes. How best to spend one's leisure was a much-debated moral issue from the seventh century onwards, with poets and philosophers warning against idle displays of luxury and increasingly urging that a man's leisure should be spent actively participating in civic life, above all in politics and warfare. Conversely, it was commonly held that only men of leisure and wealth were able to play their political, military and other civic roles effectively: ‘a community which is to have a fine political system must enjoy

¹ Xen. *Lac.* 13.5; *Hell.* 6.1.5; *Mem.* 3.5.15, 21, 3.12.5; cf. Arist. *Pol.* 1338b25–39; Thuc. 2.39.1, 4.

² For the exaggerated prominence of war in our sources, see ch. 2 in this volume, and Shipley (1993). The following draws and builds on ideas developed in more detail in van Wees (2004).

leisure from the works of necessity'.³ It was therefore a widely accepted principle that only the leisured classes ought to hold political office and serve in the citizen militia, while the 'poor' confined themselves to manual labour. In an ideal world, there would be no poor citizens at all, but every free man would live a life of leisure, devoted to politics and warfare, while slaves laboured away on farms and in workshops.

One way or another, 'the community must be separated into classes, a warrior class and a farming class', said Aristotle, who believed that this had been a fundamental principle of social organization ever since the days of the legendary lawgivers Sesostris in Egypt and Minos in Crete, a thousand years ago (*Pol.* 1329a40–b39). Earlier Greek political thinkers had also adopted this principle, and if their schemes had a weakness, Aristotle felt, it was that they did not push the separation between cultivators and soldiers far enough: Hippodamus of Miletus in the early fifth century had left the farmers some citizen rights, which seemed unnecessary and unworkable (1267b31–4, 1268a16–b4), while Plato had allowed the farmers to own the land, which Aristotle thought would make them too hard to control, 'unmanageable and full of big ideas' (1264a33–6, b34–7). In his own view,

the cultivators should ideally – in a perfect world – be slaves who are neither all of the same origin nor of spirited character . . . Second best are barbarian 'neighbours' [*perioikoi*] who are similar in nature to the above.

(1330a26–9)

It was in the same spirit that Isocrates advocated a war of conquest against the Persian empire which would turn all Greeks into leisured owners of barbarian serfs (4.131; *Ep.* 3.5).

Sparta, Crete, Thessaly and at least a few colonial Greek cities such as Heraclea on the Black Sea came close to Aristotle's ideal insofar as their territories were indeed cultivated by native populations reduced to a serf-like status while their citizens devoted themselves to war, politics and leisure pursuits. In the cities of Thessaly, the two groups were even physically segregated: farmers and craftsmen were not allowed to enter the *agora* where citizens spent their leisure.⁴ The ideal of the warrior (fig. 9.1) living at the expense of his serfs was proclaimed with great pride and gusto in an archaic Cretan drinking song, known as the *Song of Hybias*:

I have great wealth: a spear, a sword, and the fine leather shield which protects one's skin. For with this I plough, with this I harvest, with this I trample the sweet

³ Arist. *Pol.* 1269a34–6. Leisure: e.g. Anastasiadis (2004); de Ste Croix (1981) 114–17; *contra* Wood (1988) 137–45. Warnings against luxury: e.g. Kurke (1992); Morris (1996).

⁴ Arist. *Pol.* 1331a31–b14; cf. 1269a37–b12, 1264a20–3 on serfs in Sparta, Thessaly and Crete. In Sparta citizens were not allowed to work as craftsmen: Xen. *Lac.* 7.1–2; Plut. *Ages.* 26.2; cf. Hodkinson (2000) 177–8.



Figure 9.1 Early fifth-century Laconian statuette which reflects the ideal of the leisure-class soldier: the elaborately dressed hair, which was regarded as typical of Spartan soldiers, and the large and carefully draped cloak, which greatly inhibited the wearer's freedom of movement, are both leisure-class status symbols. Note also the showy transverse crest.

wine from the vines, with this I am called master of the serfs. Those who dare not hold a spear, a sword, or the fine leather shield which protects one's skin, all cower at my knee and prostrate themselves, calling me 'Master' and 'Great King'.
(Skolian 909 Page)

In the archaic period there had been still other subject populations – the 'naked men' in Argos, '*katonakē*-wearers' in Sicyon, 'dusty-feet' in Epidaurus, the non-Greek *Kyllyrioi* in Syracuse, and others. Their origins and

status are obscure, but at least some of these, too, were almost certainly cultivators whose labour supported an élite of leisured citizen-soldiers.⁵

Even where soldier and farmer were not quite so radically separated, political rights and military obligations were often linked to a property qualification which might be set so high that it excluded all but the wealthiest landowners. The only property qualification for which we have a precise figure is that of an annual harvest of 200 *medimnoi* of barley – about 6,400 kg – which from the early sixth century onwards was the minimum needed in Athens to be eligible for political office and liable to service in the hoplite militia. It has usually been assumed that this minimum must have included farmers with about 4–6 ha (10–15 acres), just enough land to ensure that they remained economically independent and could afford to buy hoplite arms and armour.⁶ Yet a farm of that size could only have produced about 100 *medimnoi* of barley, half of the property requirement. An annual harvest of 200 *medimnoi*, at a conservative estimate, was enough to sustain fifteen people, and required some 10 ha (25 acres) of land, an estate worth about one talent (6,000 drachmas) at classical Athenian land prices.⁷ A property worth one talent just about put its owner in the leisure-class bracket, and this is precisely why the line was drawn here: the Athenians extended the right to hold office and the duty to serve in the militia only to the leisured élite, not to working farmers or craftsmen.⁸

The introduction of pay for both political office and military service in Athens in the 450s marked a radical break with tradition: it enabled men not wealthy enough to serve at their own expense to take an active part in civic life, and amounted to a formal acknowledgement that politics and war were no longer the exclusive domain of the leisure class. The old ideals did not disappear, however. A *coup d'état* in 411 not only abolished pay for office but eventually led to a short-lived regime which restricted political rights to those who ‘brought the greatest benefit to the city by means of their possessions and persons’ (Thuc. 8.65.3; cf. 97.1), that is, who served as hoplites or cavalry and made financial contributions. This group was envisaged as including only 5,000 men, although Athens at the time had at least twice as many citizens who owned hoplite equipment. Evidently, only the wealthiest hoplites were included – no more than 15 per cent of the total citizen population – and Athens in effect temporarily reverted to the leisure-class-dominated system which had existed before the 450s.⁹

⁵ See in detail van Wees (2003); Lotze (2000); Garlan (1988) 93–106.

⁶ Burford (1993) 67–72, 113–16; Hanson (1995) 188–9, (1996) 291–2; cf. Gallant (1991) 82–7.

⁷ Property classes: Foxhall (1997) 129–32; van Wees (2001a); cf. Raaflaub (1999) 138 with n. 49.

⁸ Leisure-class bracket: Davies (1981) 28–9; Ober (1989) 128–9. Note also that the next highest property class, the *hippeis*, i.e. those who could afford to own horses, the ultimate status symbol in classical Athens, had an annual income only 50 per cent higher than this.

⁹ Pay for service: see ch. 5 in this volume; pay for office: [Arist.] *Ath. Pol.* 27.3–4. Total number of hoplites in 411: Lys. 20.13 says that 9,000, rather than 5,000, actually turned up to enrol, and the

The praise lavished on this regime shows that the ideal of the leisured hoplite-citizen remained powerful.¹⁰

The democratic response to such attitudes was to make a leisured lifestyle as widely available as possible. Xenophon devoted a pamphlet, *Revenues*, to proposals for raising enough money from the labour of slaves and foreigners to 'create for every Athenian a suitable livelihood at public expense' and specifically enable citizens to engage in military training (1.1, 4.33, 6.1). It never quite came to that, but by the end of the fourth century Athens had come very close, thanks to the cumulative effect of extending public pay to mass political participation in jury courts and assemblies, organizing a large number of public festivals and subsidizing attendance at some of these, constructing *gymnasia* for public use, and finally providing a set of basic hoplite equipment and a two-year military training programme for every citizen, all at public expense.¹¹ It took Athens' exceptionally large revenues and constant financial reform to pay for all this, and such developments can hardly have been matched in many other Greek states. Elsewhere, the domination of the leisure classes in politics and war must have continued.

This is not to say that the 'poor', the working classes, were ever excluded from warfare. In 431, Athens had a total of 30,000 hoplites and cavalry, the majority of whom clearly must have come from outside the leisured classes, and thousands of whom were not citizens at all but resident foreigners without political rights (Thuc. 2.13.6–7). In 425, about 60 per cent of the Spartan hoplite army consisted, not of full citizens, but of *perioikoi*, men of outlying communities with much-reduced citizen rights (Thuc. 4.38.5). At the same time, the Spartans also employed as hoplites thousands of their serfs, whom they eventually made 'new citizens' (*neodamodeis*), but again with only limited political rights.¹² There is no reason to assume, as scholars often do, that the recruitment of hoplites of lower social status is a new phenomenon of the classical period, the result of a military or manpower crisis. Already at the battle of Marathon in 490, Athens fielded 9,000 hoplites, far too many to have been recruited from the highest property classes alone. Again, already at the battle of Thermopylae in 480, the famous 300 Spartans were accompanied by 700 hoplite *perioikoi*, while at Plataea a year later the numbers of Spartan citizens and *perioikoi* were evenly matched.¹³

numbers of hoplites and cavalry in 431 as given by Thucydides (2.13.6–7) suggest that there must have been some 12,500 left at this time: see van Wees (2004) 81, 241–3, with Hansen (1988) 20–8, for manpower losses and total population figures.

¹⁰ Thuc. 8.97.2; [Arist.] *Ath. Pol.* 33.2. Contrast the regime of the 3,000 in 404/3 BC, which is denounced as too restrictive: Xen. *Hell.* 2.3.10; [Arist.] *Ath. Pol.* 36.2.

¹¹ See Fisher (1998) for the extension of the leisure class to the lower classes in Athens, *contra* Pritchard (2003); for the training programme, see ch. 5 in this volume.

¹² See e.g. Thuc. 4.80.5; discussion in van Wees (2004) 45, 83–5.

¹³ Hoplites: 9,000 at Marathon: Paus. 10.20.2 (cf. 8,000 at Plataea: Hdt. 9.28.6). The presence of 700 *perioikoi* at Thermopylae is not mentioned by Herodotus (whose total numbers, however, do not

Earlier still, in Homer's *Iliad* we find a similar distinction between an élite of 'chiefs' (*basileis*) who dominate decision making in assembly and law court and are expected to fight in the front ranks, and a mass of 'men of the people' who are told in no uncertain terms: 'You are no warrior; you have no strength; you are of no account in war or counsel' (2.198–202). Yet these commoners are equipped, like their chiefs, with bronze armour, shields, spears and swords, and in action even the greatest warriors appeal for help to the masses, right down to 'you who are average and you who are rather bad' (12.265–72; cf. 12.409–12, 20.353–7). The occasions on which a single hero appears to decide the outcome of battle are balanced by occasions on which Homer attributes success to collective effort, and the 'worst' man in the Greek army is given a speech in which he alleges that all the hard fighting is in fact done, not by the great chiefs, but by himself and his fellow commoners.¹⁴

Clearly the classical situation in which a heavy-armed élite enjoying political privileges fought alongside large numbers of heavy-armed soldiers of lesser political and social status had very early antecedents. In military terms, the distinction between the two groups was that élite hoplites were under greater pressure to arm and train themselves and be available for service. In Homer this was apparently merely a matter of a stronger moral obligation. In Sparta all full citizens were obliged to arm and serve as hoplites, while *perioikoi* were required to provide only select troops.¹⁵ In Athens, those who met the property qualification of 200 *medimnoi* were legally obliged to provide themselves with hoplite arms and armour and to serve in expeditionary forces when called upon, while for the less wealthy it was at most a moral obligation to buy hoplite equipment if they could afford it and to turn out to fight for their country in cases of general mobilization.¹⁶ According to Aristotle, such arrangements were common: elsewhere, too, the politically enfranchised rich were liable to fines for not arming and training themselves, while the less well-off were 'allowed not to possess any equipment'; he added that high property qualifications need

add up without at least the extra 700 men: 7.202, 228), but is implied by Isoc. 4.90, 92, 6.99–100; Diod. Sic. 11.4.2, 5, who say that '1,000 Lacedaemonians' fought there. Plataea: Hdt. 9.10–11. Cf. Cartledge (1987) 37–43; Hodkinson (2000) 420–2; Mertens (2002) 288, 292–3, 295.

¹⁴ Hom. *Il.* 2.229–38 (see below, p. 297). In detail van Wees (1988), (1995a).

¹⁵ Herodotus calls the 5,000 *perioikoi* at Plataea 'picked troops' (9.11.3). The proportion of *perioikoi* in the Spartan army appears to have varied between 50 and 70 per cent, but the total population of *perioikoi* in their dozens of towns must have far outnumbered full Spartan citizens, so it seems clear that only a small proportion was called up for active service.

¹⁶ This follows from the fact that those who met this property qualification served because they were 'listed' by the generals and could be prosecuted for failing to serve as required. Since this legal obligation evidently did not apply to those who fell below the qualification, they must have served on a voluntary basis. See van Wees (2004) 55–7, 103–4, (2001a) 59–61; Christ (2001), (2004); and ch. 5 in this volume; *contra* Rosivach (2002a); Gabrielsen (2002a) 86–8, 92–8.

not reduce military manpower, because poorer men would still serve when required (*Pol.* 1297a29–35, b2–13).

In practice, then, the majority of hoplites in any given community were usually not leisured property owners, but working farmers and craftsmen. It was acknowledged that such people were potentially good soldiers: vigorous outdoor labour made farmers and shepherds fit and tough, inured to deprivation and danger, while the fact that their livelihoods depended on the countryside ensured that they were keen to fight any invading enemy.¹⁷ (Craftsmen, on the other hand, were regarded as ‘effeminate’ fighters because they worked indoors, usually sitting down and sometimes ‘in front of a fire’, and had little interest in defending the countryside.¹⁸) Plato felt the need to remind the upper classes that the working man, ‘wiry and sunburnt’, would prove a much more effective hoplite than the rich man who neglected his training and whose life of ease had made him fat, ‘breathless and clueless’ (*Resp.* 556c–d). Yet for Plato, as for so many others, the best soldiers and the citizens most deserving of political power remained, not tough working farmers, but leisured gentlemen who *did* train to keep fit for war.

The prevalence of this leisure-class ideal helps explain why training took the peculiar forms of athletic exercise, hunting and dancing, rather than weapons- or formation-drill. Given that most training was undertaken privately, it is perhaps not surprising that formation training is almost unheard of, but one might have expected that the techniques of fighting with shield, spear and sword would have been intensively practised. Weapons training (*hoplomachia*) was indeed available from travelling specialists, but it was rather unusual, and seen by some as a pointless luxury. The normal form of training consisted of a range of athletic exercises: running, wrestling, jumping and boxing, throwing the javelin and discus. Even Sparta’s regimented programme of training appears to have consisted primarily of athletics: each Spartan unit had its own running track in camp. These exercises all contributed to general strength, stamina and agility, but very little to the specific requirements of combat. The same is even more obviously true of dancing and even of hunting, which was much praised as good preparation for warfare, but at best – in big game hunting – only approximated some of the conditions of war, and usually – in the common pursuit of hare coursing, where hunters clubbed to death hares caught in nets – had next to nothing in common with war at all.¹⁹

¹⁷ Farmers: e.g. Xen. *Oec.* 4.2–3, 5.5, 7, 14, 16, 6.6–7. Shepherds: Arist. *Pol.* 1319a20–4. See further Hanson (1995) 221–71.

¹⁸ Xen. *Oec.* 4.2–3, 6.5–8. For craftsmen as hoplites: Plut. *Ages.* 26.4–5; *Mor.* 214a.

¹⁹ See ch. 5 in this volume, pp. 133–7. Athletics and war: Mann (2002); Golden (1998) 23–8; Pleket (1998); Poliakoff (1987) 93–103. Hunting and war: Barringer (2001) 10–14; Anderson (1985) 17–29.

The explanation for why there was so little training in specialist military skills is surely that physical exercise was seen primarily as a leisure pursuit, a fitting pastime for the upper classes, geared to the goal of general physical fitness rather than specific fitness for combat. And physical exercise was itself only part of a broader leisured lifestyle which also required a proficiency in playing musical instruments and performing a wide repertoire of songs. Archaic Sparta prided itself as much on its musical as on its martial excellence, and the more austere and militarized Sparta of the classical period was criticized by Plato and Aristotle for going too far in its dedication to war. Being a fit soldier was not seen as a goal in itself, but merely a part of the wider goal of achieving all-round physical fitness, which in turn was supposed to be only one part of the ultimate goal of living a fully rounded life of leisure. The demands of warfare thus remained subordinate to the social and cultural ideals of the Greek upper classes to a remarkable degree. Sparta and Crete may have come close to producing a class of dedicated soldiers, but the rest of Greece was dominated by élites of leisured gentlemen whose interest in warfare was great, yet never primary, and who took pride in remaining amateurs of war.²⁰

Working-class hoplites were of course by necessity amateur soldiers and where they formed a large part of the militia, as at Athens, amateur ideology took even more extreme forms. For a long time, training seems to have been left to private initiative in Athens to an even greater extent than anywhere else, and indeed it was a matter of pride for the Athenians that they could be said to rely on native courage rather than on training of any sort. A common man might even argue that, without training or experience, he would be the equal of any aristocrat in battle, because all men know *instinctively* how to handle weapons.²¹

The leisure-class ideal was, finally, not only an important influence on Greek attitudes to warfare, but also a structural cause of war. Where every self-respecting man aims to live off the labour of others and strives to avoid productive work as much as possible, the economic resources of a community will inevitably be put under great strain. Even Athens, with its exceptional natural advantages and resources, relied heavily on military means to lift its citizens out of ‘poverty’, that is, save them from the need to work for a living (*Xen. Vect.* 1.1). Plato identified as ‘the origin of war’ the ‘unlimited acquisition of wealth’ inspired by the need of human beings for ‘couches, tables and other furniture, and fine foods of course, and perfumes and incense, courtesans and cakes’ (*Resp.* 373a, d–e) – all paraphernalia of the *symposium* (fig. 9.2), the drinking party which epitomized the leisured

²⁰ For élite lifestyles, see e.g. Murray (1993) 201–19; Donlan (1980) 155–76.

²¹ Xen. *Cyr.* 2.3.9–11 and cf. n. 1 above, on lack of training. Also Anderson (1970) 84–110; Pritchett (1971–91) II.208–31; Rawlings (2000).



Figure 9.2 An early Greek symposium, on a Corinthian vase of c. 600 bc. The *symposium* was central to the social life of the Greek leisured classes; in some early scenes such as this, the walls of the dining room are covered with pieces of armour.

lifestyle of the upper classes. Plunder, conquest and imperialism were indeed the only realistic means of making the ideal life of leisure a reality for more than a narrow non-productive upper class.

II. WAR, COMPETITION AND PLEONEXIA

A second defining feature of Greek society was pervasive competitiveness. The highlight of many a religious festival was formal contests in sport, song and dance – all the main leisure-class pursuits. Some festivals even featured beauty contests. At all social levels people engaged in informal rivalry with their peers: ‘potter resents potter and carpenter resents carpenter; beggar envies beggar and singer envies singer’ (Hes. *Op.* 25–6). Even slaves might turn a chore such as doing the laundry into a competition (Hom. *Od.* 6.91–2). Alongside these forms of what Hesiod called ‘good strife’ and what modern scholars have labelled ‘agonal’, game-like, competition, Greek communities knew a great deal of ‘bad strife’. Rivalries for power, wealth and honour spilled over into active hostility, from punch-ups in the streets and feuding in the courts to the all-too-common civil wars and *coups d'état*. These different kinds of competition were two sides of the same coin, two

expressions of the ideal summed up in the famous Homeric motto: ‘always be the best and excel above others’.²²

Competition for wealth within a community aggravated the pressure on resources created by the leisure-class aspirations of its citizens. Archaic poets and classical philosophers constantly voiced their disapproval of greed, but for their contemporaries the proverb ‘a man is what he owns’ was a truism. Fierce and sometimes violent competition for wealth led the upper classes to exploit their poorer neighbours, labourers and debtors to the hilt. Demands for the redistribution of land and the cancellation of debt punctuated Greek history from the seventh century onwards and are clear evidence of the extreme and persistent greed of Greek élites.²³

Acquisitiveness at the expense of outsiders, including friends abroad, was positively celebrated. Homer’s Odysseus prided himself on never letting his emotions get in the way of an opportunity for profit in the course of his travels, and was always prepared to postpone his homecoming for the sake of gain. The Alcmeonid family similarly took pride in a forefather’s uninhibited exploitation of a foreign king’s offer of ‘as much gold as he could carry’:

He first stuffed around his shins as much gold as the boots would hold, then filled with gold the whole fold of his tunic, sprinkled gold dust over his hair, took some more in his mouth, and came out of the treasury. He was barely able to drag his boots and looked anything but human, with his mouth stuffed and everything bulging.²⁴

In the fourth century Athenians still cultivated friendships with wealthy and influential foreigners by doing them ‘favours’ with a view ‘to get back more’ (*Lys.* 19.23). Since even friendships with foreigners were exploited for gain, it is no surprise that the Greeks also resorted to violence against outsiders in their quest for wealth, both privately and publicly. Tens of thousands of men went abroad as mercenaries, raiders and settlers in the hope of finding themselves a livelihood or even making a fortune, while hundreds of small and great wars must have been fought with at least one eye on the chance of enriching the community and its citizens by seizing plunder, ransoming or enslaving captives, or occupying territory.

The importance of economic motives for war should not, however, be overestimated. Booty taken while ravaging the countryside might be a useful bonus, but was hardly ever a significant economic resource. Except

²² Hom. *Il.* 6.208, 11.784. See references in n. 20, above, and, for the idea of an ‘agonal’ culture, Burckhardt (1998) 160–213, with historiographical analysis of this notion in Ulf (2004).

²³ See van Wees (1999a) and (1999b) on exploitation in archaic Greece, and e.g. Asheri (1966); de Ste Croix (1981); Gehrke (1985) on economic exploitation as a cause of civil war in classical Greece.

²⁴ Hdt. 6.125. See van Wees (1992) 207–48 (on acquisitiveness in Homer); (2002a) 341–4 (on Alcmeon; *contra* Thomas 1989: 264–81; Kurke 1999: 142–6).

in the rare event that the enemy was completely taken by surprise, most of the countryside would have been evacuated already, and armies could count themselves lucky to find enough plunder left to sustain them for the duration of the campaign. The number of prisoners taken in battle would not often be so great as to raise large sums when they were sold or ransomed. A ransom of 200 drachmas was standard around 500; a century later, the rate had fallen to 100 drachmas, only marginally more than a prisoner was likely to fetch as a slave.²⁵ Moreover, since most warring communities were pretty evenly matched, one year's gains were as likely as not to be wiped out by next year's losses.

Greater economic gains were made when entire cities were sacked or held to ransom. Attackers were known to demand half of all the movable property of enemy cities as the price of peace in the Homeric world (*Il.* 18.509–13, 23.111–28) and down to the time of the Persian Wars, they regularly extorted sums of up to 100 talents, probably not much less than half of most cities' movable wealth.²⁶ Conquerors, by 'universal and eternal custom', had a right to seize all property and sell into slavery the entire population of a captured city.²⁷ The exercise of this right was inhibited by pragmatic and ethical restraints, including qualms about the morality of enslaving fellow Greeks,²⁸ but when the victors exploited their success to the full, the sack of a city could bring in hundreds of talents. A decade of spectacular successes brought the Spartans thousands of talents in booty.²⁹ The sacking of temples, with their wealth of precious dedications, could be more profitable still – Dionysius I of Syracuse once made 1,000 talents from plundering a single Etruscan temple, twice as much as he made from his sack of a nearby city³⁰ – but such acts of impiety were quite rare.

Predatory profits on this scale could only be made where the odds were clearly in favour of the attacker. Athens and Sparta in their heyday enjoyed a military superiority which enabled them in principle to make sustained profits from warfare, but few other states were in this position. In any case, revenues will usually have been much smaller than the sums cited above, which are on record because they were notable windfalls, and even more importantly the income from war was balanced by its cost: even the amounts realized from sacking major cities barely made up for

²⁵ On 200 dr.: Hdt. 6.79.1; cf. 5.77.3. 100 dr.: Androtion *FGrH* 324 F44; *SEG* xxxiii. 17; Diod. Sic. 14.102.2, 111.4; Arist. *Eth. Nic.* 1134b. See Ducrey (1968) 238–54; Pritchett (1971–91) v.245–97.

²⁶ Hdt. 3.58, 6.132 (100 talents), 8.29 (50 talents), 8.111–12 ('large sums'), 9.87.

²⁷ Xen. *Cyr.* 7.5.73; *Mem.* 4.2.15; cf. Arist. *Pol.* 1255a6–7.

²⁸ See Ducrey (1968); Garlan (1975) 68; Karavites (1982).

²⁹ Diod. Sic. 13.106.8 (1,500 talents); Xen. *Hell.* 4.3.21 with 3.4.24 (1,000 talents); Thuc. 6.62.4; Dem. 20.77 (120 talents each). The remaining evidence (see Pritchett 1971–91: 1.53–84, v.68–541) is of little use, unreliable, or both.

³⁰ Diod. Sic. 15.14.4; cf. 16.24.3–25.2 (Phocis seizes Delphic oracle) and 16.57.2.

the great expense of lengthy sieges. Booty, ransom and enslavement were generally a useful means of meeting the cost of warfare rather than a primary goal of war.

The only truly significant economic gains required long-term subjection of the enemy, which took a variety of forms. At one extreme stood the annexation of a city's entire territory and the reduction of its population to a serf-like status, working the land for the conquerors. The Spartans inflicted this fate on the entire region of Messenia in the seventh century, and several groups of Greek settlers abroad did the same to native populations in Sicily and on the coast of the Black Sea. It is generally thought that these were rare exceptions, but we have already seen that there were numerous other serf-like populations – in Thessaly, Crete, Argos, Sicyon, Epidaurus and perhaps other states – and most or all of these are quite likely to have been created by wars of conquest in the archaic period.³¹

A less abject form of subjection was suffered by the so-called *perioikoi*, 'neighbours', whose communities became subordinate settlements of a more powerful city, to which they paid tribute and sent troops on demand. Sparta had about eighty such communities; Elis and the main cities of Thessaly and Crete also had a sizeable number each. Classical Elis received one talent per year from subject Lepreon, and later treaties suggest that in Crete Praesus demanded 10 per cent of the main revenues of Stalae while Gortyn creamed off 10 per cent of the annual harvest of almost all crops grown in Caudus.³² How a community ended up in such a position varied: some gave in to intimidation, others accepted an offer of 'protection', but again most were probably reduced to *perioikoi* by outright conquest.³³

Around the middle of the sixth century Sparta appears to have stopped reducing its neighbours to the status of serfs or *perioikoi* and instead turned to a milder form of subjection: the imposition of treaties which made defeated enemies into subordinate allies who retained their autonomy and paid no tribute, but were obliged to send troops or ships as required by Sparta. Athens later also reduced defeated opponents to subject allies, but demanded a financial 'contribution' (*phoros*) rather than troops, and by 431 the annual revenue thus collected amounted to about 600 talents – the equivalent of sacking a large city every year.³⁴

In the classical age, when a conquering state annexed a territory along with its inhabitants – which did not often happen – the latter were not

³¹ See above, pp. 274–6, with n. 5.

³² Crete: Chaniotis (1996b) 160–8 and texts 6.4, 69. Elis: Thuc. 5.31.2–4. Compare Xen. *Hell.* 6.1.9, 19 (Thessaly). [Pl.] *Alc.* I 123a (Sparta); cf. Xen. *Lac.* 15.3. On *perioikoi*, see Larsen (1937) (general); Shipley (2002); Mertens (2002) (Sparta).

³³ Hdt. 4.148 (conquest); Thuc. 5.31.2 (Lepreon, 'protection'); cf. 2.25.3; Xen. *Hell.* 3.2.30 (Epeion, intimidation); Strabo 8.355.

³⁴ Thuc. 1.96.2, 2.13.3; Diod. Sic. 11.47.1–2; Plut. *Arist.* 24.

reduced to subordinate status but given equal citizen rights. The first known example is the expansion of Syracuse from 484 BC onwards, which led to the incorporation of the entire population of Camarina, half the population of Gela, and the upper classes of Megara Hyblaea, Naxos and Catana into the Syracusan citizen-body.³⁵ Soon after, Argos began swallowing up a series of neighbouring towns, including Mycenae, and extending citizen rights to those of their inhabitants who did not choose to go into exile.³⁶ In the early fourth century Olynthus similarly absorbed many cities in the northern Aegean by a mixture of persuasion, intimidation and force (*Xen. Hell.* 5.2.12–19).

A final form of expansion was to massacre the natives or drive them out of their territory, and occupy the vacated land. Over the centuries, many non-Greek populations must have suffered this fate when Greek settlers arrived to found one of their many ‘colonies’ (*apoikia*) around the Mediterranean and the Black Sea, or when a second wave of settlers arrived to reinforce these new cities. ‘The scum of all Greece flocked to Thasos’ to fight the Thracians for their gold mines,³⁷ while the Delphic oracle in a most un-oracular manner encouraged a massive land-grab in north Africa: ‘I say unto you: whoever comes to lovely Libya late, when the land has been divided up, he will regret it afterwards.’³⁸ In wars between Greek states, such behaviour was uncommon, but Athens did send out groups of hundreds or thousands of ‘allotment-holders’ (*klerouchoi*) to occupy the sites of a dozen or so conquered territories.³⁹

The search for land and resources, important as it was, does *not* explain all Greek wars. Border disputes, for instance, were ubiquitous and often interminable, but, although some border regions were of vital economic importance, whether for their farmland, pasture or other natural resources,⁴⁰ there is some truth in the ancient claim that Greek cities generally fought over ‘little bits of not particularly good land’ (*Hdt.* 5.49). Samos and Priene, for example, spent centuries waging an intermittent war over an area called ‘The Brambles’, which does not suggest rich natural resources.⁴¹ Sparta and Argos long contested the region of Cynouria, but the Spartans had so little

³⁵ *Hdt.* 7.156; *Thuc.* 6.4.2, 6.5.3; *Diod. Sic.* 11.49.1–2.

³⁶ *Paus.* 8.27.1; cf. *Strabo* 8.6.10–11. See further van Wees (2003) 41–5.

³⁷ *Archil. fr.* 102 West; fighting Thracians: T 4 (*Greek lambic Poetry*, ed. Gerber), frs. 92–8 (not for agricultural resources: frs. 21–2). Gold mines: *Hdt.* 6.46.3–47.2; *Thuc.* 1.100.2, 101.3.

³⁸ *Hdt.* 4.159. Compare the classical colonizations of Brea (ML 49 = Fornara 100); Thurii (*Diod. Sic.* 12.10f.); Amphipolis (*Thuc.* 4.102). On overseas settlement generally, see e.g. Graham (1964), (2001); Osborne (1998) and, for violent expulsion of natives, Rihll (1993).

³⁹ See e.g. Cargill (1995); Figueira (1991); Meiggs (1972) 260–2.

⁴⁰ Pasture: *Hell. Oxy.* 18.3. Other resources: see Ma (2000) 350.

⁴¹ *Arist. fr.* 576 Rose (= *Plut. Mor.* 296ab); Ager (1996) nos. 26, 74, 99, 160, 171 (*Inscr. Prien.* 37 and 41). Compare the conflict between Sparta and Messenia over the marshy land around the temple of Artemis of the Lake: *Tac. Ann.* 4.43; *IG v* 1.1431; see Ager (1996) nos. 50, 150, 159, and esp. p. 450.

need of it that they gave it away to their allies.⁴² In quite a few border conflicts the material value of the land seems to have mattered less than the opportunity to prove one's superiority in a trial of military strength with one's neighbours: the chief goal of war was status rather than wealth.⁴³

Not even wars which ended with the enemy being annihilated or driven out of town with nothing but the clothes on their backs were always fought for the sake of territory, as is clear from the fact that the victors did not always occupy the vacated land. The site of Sybaris was flooded to make it uninhabitable after the city was sacked in 510; the Spartans in 427 could think of nothing better to do with the conquered territory of Plataea than lease the land to farmers from Thebes and convert the ruins of the city into a temple of Hera with adjoining two-storey hotel.⁴⁴ Even Athens at its most expansionist regularly passed up opportunities to annex land: in a campaign which later became a byword for Athenian aggression, they sacked three cities, Mende, Torone and Scione, but later gave the first two back to their surviving inhabitants and gave the third away to the survivors of the Spartan sack of Plataea.⁴⁵

Why one city might destroy another, if not for its land or other resources, is shown, for example, by the behaviour of the Athenians in first expelling the Aeginetans from their original home, then, a few years later, sacking their new home in Thyrea, and finally transporting all captured Aeginetans to Athens to be executed in cold blood 'on account of the enmity which had always existed between them' (Thuc. 4.57.3–4). Deep-seated hatred, great anger and the desire for revenge are often cited in our evidence as causes of war. We should take such explanations seriously, because these were indeed the emotions stirred up by the other form of competition central to Greek society: the rivalry for honour.⁴⁶

A Greek's 'honour' (*timē*) was both his social status and the respect for his status shown by others.⁴⁷ Communities no less than individuals had a place in a ranking-order of honour and demanded the appropriate level of deference from others. It is said that the people of Aigion, a small town, were so proud at having captured a single small warship from an enemy that they immediately asked the Delphic oracle: 'Who are the greatest of

⁴² Thuc. 2.27.2; history of conflict: Hdt. 1.82; Thuc. 5.14.4, 41.2, 6.95.1; Paus. 7.11.1, 10.9.6. See e.g. Kelly (1970).

⁴³ On the symbolic value of disputed borderland, see Sartre (1979); Ma (2000) esp. 353.

⁴⁴ Sybaris: Strabo 6.1.13 (cf. the site of Cirrha: Aeschin. 3.109), Plataea: Thuc. 3.68.2–3; Sparta sacked many other cities for the sake of booty alone: Hysiae (5.83.2); Iasus (8.28.4); Cedreiae and Lampsacus (Xen. *Hell.* 2.1.15, 18–19); Caryae (Xen. *Hell.* 7.1.28).

⁴⁵ Thuc. 4.130, 5.3.4, 5.32.1; cf. Xen. *Hell.* 2.2.3. Athens also gave away Naupactus to Messenian refugees, c. 455: Thuc. 1.103.3.

⁴⁶ Anger and revenge are also cited as motivations for e.g. the annihilation of the Hestiaeans (Plut. *Per.* 23.4) and the destruction of Sybaris (Diod. Sic. 12.9.1–10.1; Strabo 6.1.3; Ath. 12.521d).

⁴⁷ On *timē*, see esp. Riedinger (1976); van Wees (1992) 69–77; Lendon (2000) 3–11.

the Greeks?' The oracle told them exactly which parts of Greece had the best land, the best horses, the best women, the second-best men and the very best men, and witheringly concluded: 'You, Aigians, are not third or fourth; you are not even twelfth.'⁴⁸ True or not, the story vividly illustrates the notion of a hierarchy of states, and the universal obsession with being recognized as number one.

International etiquette required that communities should 'stand their ground before equals, be well-behaved towards superiors, and treat inferiors with moderation' (Thuc. 5.111.4). Specifically, a state with 'colonies' abroad would expect to receive certain ritual privileges from these communities, and a state which claimed a position of 'leadership' (*hégemonia, archē*) over others would expect to have the privilege of providing supreme commanders and picking the most prestigious battle stations in any joint campaigns. The Spartans guarded their status as leaders so jealously that they chose to lose two major allies in the Persian Wars rather than share the leadership with them. The Athenians on this occasion were prepared to accept the superiority of Sparta, but did insist on getting at least the second most prestigious place in the line of battle. A century later, their sense of honour was so prickly that they were not even prepared to command the allied navy while Sparta led the allied army, because this would have given Athens authority only over low-status naval personnel, while Sparta was in charge of high-status infantry. One can see why Athenians said that they built up their leading position, first in self-defence, but '*then* for the sake of honour, and *later* for the sake of profit'.⁴⁹

Any hint of disrespect from another community, especially one seen as an equal or inferior, constituted a challenge to one's honour. Sparta's declarations of war on Elis, c. 400, and on Thebes in 395 were motivated by a string of insults which the Spartans felt they had suffered at the hands of these enemies over the preceding years, and indeed decades. These included the prevention and interruption of Spartan attempts to make grand public sacrifices, the banning of Spartans from the Olympic games, and challenging decisions made by Sparta as leader of military alliance.⁵⁰ All our sources agree that, whatever the official justification, it was these insults which really caused both wars, and we must accept that for the Greeks repeated acts of disrespect – especially widely witnessed snubs and challenges at international religious festivals or large gatherings of allies – were

⁴⁸ *Suda* and Photius, *s.v.* *Humeis*, *ô Megareis*; Strabo 10.1.13; *Anth. Pal.* 14.73. On ranking of states, see further Lendon (2000) 13–15, (2007).

⁴⁹ Thuc. 1.75.3. Ritual privileges from colonies: Thuc. 1.25–6, 38. Leadership in Persian Wars: Hdt. 7.148–9, 157–62, 9.26–7; later: Xen. *Hell.* 7.1.12–14.

⁵⁰ Elis: Xen. *Hell.* 3.2.21–2, 26; Thuc. 5.31, 43–50; Diod. Sic. 14.17.4–6; Paus. 3.8.3; cf. Lendon (2000) 1–2, 21; Roy (1998b). Thebes: Xen. *Hell.* 3.5.5 (and 7.1.34); *Hell. Oxy.* 13.1; Diod. Sic. 14.18.1; Paus. 3.9.3–10; Plut. *Ages.* 27; cf. Hornblower (2002) 210–26; Seager (1994) 97–119.

serious and valid reasons to go to war. Power and material resources were inevitably also at stake in the unending struggles for hegemony, whether local, regional or embracing all of Greece, but the Greeks themselves clearly saw these conflicts *primarily* as contests for 'honour'.

This habit of seeing international relations, not in terms of unavoidable clashes of interest between states, but in terms of deliberate and gratuitous attempts by rivals to inflict dishonour, encouraged escalation of violence. The Greeks called such unprovoked, humiliating aggression *hybris*, and generally lived up to the proverbial advice 'When treated with injustice, reach a settlement; when treated with *hybris*, take revenge' (Stob. 3.1.172).⁵¹ A cycle of revenge often meant that enmity persisted for many generations, or even centuries. Several of the main rivalries in classical Greece – between Athens and Aegina, Corinth and Corcyra, Thessaly and Phocis – were in oral tradition traced back to the very beginning of their existence as independent states.⁵² 'Friendly' or 'agonal' rivalry between communities was thus just as liable to take a violent turn as it was between individuals, and since in the international arena restraints were fewer, wars over matters of honour were a common occurrence.

The competition for honour and profit was widely recognized as the greatest cause of war, with honour and profit carrying equal weight.⁵³ Often, the two went hand-in-hand, but sometimes communities and individuals were forced to choose. The heroes of the *Iliad* and *Odyssey* repeatedly find themselves having to decide whether to satisfy honour by killing their enemies or to spare them for the sake of rich gifts in ransom and compensation. They always choose honour above profit, as one would expect in the ideal world of the epics.⁵⁴ In the real world, the choice was harder. In 427 the Athenians regarded the rebellion of Mytilene as an act of *hybris*, and thus as a matter of honour, but could not decide whether to insist on the demands of honour and massacre the entire male population (Thuc. 3.38.1, 39.4–6, 40.4–7) or to ignore the insult and to punish only those most responsible for the revolt, which was seen as the solution which would in the long term be most economically profitable (3.42.1, 44.1–4, 46.4, 47.5). Initially, the demands of honour prevailed, but when the assembly was reconvened considerations of profit won the day – if only by 'an almost equal show of hands' (3.49.1). What was never in doubt, however, was that the pursuit of honour was the more respectable motivation of the two. Belligerents would

⁵¹ E.g. Thuc. 1.68.2; Xen. *Hell.* 3.5.5, 24, 5.2.38. For the meaning of *hybris* (not to be confused with its modern sense of 'overreaching arrogance'), see Fisher (1992).

⁵² Athens and Aegina: Hdt. 5.81–9. Corinth and Corcyra: Hdt. 3.49; Thuc. 1.25.4. Thessaly and Phocis: Hdt. 7.176, 215, 8.29–30.

⁵³ Thuc. 1.75.3, 76.2 ('honour, fear and profit'); Pl. *Prt.* 354b ('security, rule over others and possessions'); Xen. *Hell.* 3.5.12 ('leadership, honour and possessions'); Dem. 15.17; Arist. *Pol.* 1266b38–9.

⁵⁴ Hom. *Il.* 6.45–65, 9.645–8, 18.498–501, 21.99–105, 22.111–28; Hom. *Od.* 22.54–64. See van Wees (1992) 131–5; Wilson (2002).

always claim to fight for honour while accusing their opponents of being driven by sheer greed, and the Greeks at large liked to flatter themselves that barbarians witnessing them in action would wonder ‘What manner of men are these, who contend not for money but for excellence?’⁵⁵

Modern scholars sometimes say that profit and honour were merely two aspects of the ultimate objective of war, power.⁵⁶ The Greek terms *hegemonia* and *archē* are commonly translated as ‘hegemony’ and ‘empire’, words which in modern languages evoke positions of power rather than the prestige and privileges of ‘leadership’. Power certainly was a recognized goal of war: ‘we believe that it is the way of the gods, and we know for certain that it is universally the way of human beings, by natural compulsion, to rule whatever one can’ (Thuc. 5.105.2; cf. 1.76.2). Yet for the Greeks power was merely a means to a further end, which was precisely to win prestige and wealth.⁵⁷ If we subordinate the latter to a supposed ultimate goal of power, we not only invert the Greek hierarchy of values but risk losing sight of the important structural tension between honour and profit as causes of war.

An even more remarkable difference between modern and ancient ideas is that we are inclined to seek the origins of conflict in absolute shortages of resources whereas the Greeks unanimously attributed wars and rivalries to an ambitious and greedy ‘desire for more’ (*pleonexia*). In other words, the central problem as the Greeks saw it was not that those who had little or no wealth or prestige would try to gain some by force, but that those who already had abundant wealth and prestige would resort to violence to win still more. As we saw, Plato found the cause of war not in a shortage of food, but in the need for the paraphernalia of a leisure-class lifestyle, without which a community would be no better than a city of pigs (*Resp.* 372d–373e; cf. *Phd.* 66c). Similarly Aristotle noted that ‘people commit the greatest acts of injustice for the sake of superiority, not for the sake of necessity’: the root of conflict was *pleonexia* ‘whether for property or honour or both’.⁵⁸ ‘Surfeit breeds *hybris*’, said archaic poets; ‘abundance inspires a desire for more through *hybris* and ambition’ and ‘god has ordained that people’s ambitions grow in direct proportion to their power’, elaborated others.⁵⁹ All three surviving classical historians took it for granted that a prosperous community would develop a sense of ambition (*phronema*) and a feeling of aggressive contempt towards others (*hybris*), two sentiments which together would inspire *pleonexia* and finally lead to war.⁶⁰

⁵⁵ Hdt. 8.26. Examples of honour versus greed in the justification of wars, see e.g. Paus. 4.4.1–5.5 (Messenia); Hdt. 6.137–40 (Lemnos).

⁵⁶ So Ma (2000) 353; Garlan (1975) 183; cf. Garlan (1989) 28–30.

⁵⁷ See esp. Xen. *Hiero* 7.1–3, and the texts cited above in n. 53.

⁵⁸ Arist. *Pol.* 1266b38–9, 1267a14; cf. Fisher (2000) 84–90 on honour; Balot (2001) on *pleonexia*.

⁵⁹ Solon fr. 6.3 West; Theognis 153; Thuc. 3.45.4; Xen. *Hell.* 5.2.18.

⁶⁰ So Hdt. 1.66 (on Sparta); 5.81 (Aegina); Thuc. 1.25.4, 38.6 (Corcyra); 3.39.4–5 (Mytilene); Xen. *Hel.* 5.2.16–18, 38 (Olynthus); 7.1.23–6, 32 (Arcadia).

These ancient Greek ideas about the causes for war make perfect sense in a pervasively competitive world. The more abundant a state's resources, the better its chances of defeating its rivals, and the greater the likelihood of it going to war. Moreover, the greater honour a state claimed for itself, the more deference it had to demand from others, and the less defiance it could tolerate. Hence Athens at the peak of its naval power felt obliged to wipe out the entire population of Melos because to let an island population maintain its neutrality might seem a 'sign of weakness' (Thuc. 5.95–7, 116.2–4), while Sparta, when it in turn reached the height of its power, felt the need to attack the remote city of Olynthus simply because it looked as if it might one day become a rival (Xen. *Hell.* 5.2.12–20). Campaigns like these vindicate the Greeks' own view that their wars were not struggles for survival, but ever-escalating rivalries: every success bred a desire and need for greater success.

This rivalry, then, was a constant factor, but the balance between honour and profit as the twin goals of competition appears to have undergone a shift over the centuries. Serf populations were probably still being created by Argos and Sicyon in the early sixth century, but the subjection of the Mariandynians by the Heracleans on the Black Sea, c. 550, is the last known instance of this process. Not coincidentally it is also around the middle of the sixth century that formal treaties of alliance are first recorded in the Greek world. Conversely, no instances of states being completely absorbed by their conquerors, with full citizen rights for the defeated, are known before the early fifth century. It looks, therefore, as if the Greeks gradually moved from highly hierarchical and economically exploitative forms of expansion to more egalitarian forms of imperialism which brought more honour than profit. There is an intriguing parallel with developments in social relations within Greek cities: in the sixth century legislation and political action to mitigate the worst excesses of social inequality and economic exploitation became widespread, and from the mid-sixth century onwards ideals of moderation and egalitarianism gained particular prominence.⁶¹ It was presumably this social change which brought about a transformation of attitudes to war and international relations.

III. WAR, SOCIETY AND POLITICS

For thirteen years Spartan boys and youths lived away from home under public supervision while they were educated in so-called 'herds' (*bouai*). Their adult social lives continued to be centrally regulated, as they were required to dine every night in one of the public messes (*phiditia*). These herds and messes were and are regarded as the secret of Sparta's military

⁶¹ See n. 23 above, and on the development of a 'middling' ideology, see Morris (1996).

success, and count among the most 'militaristic' institutions known to the ancient world. Yet it is far from clear how strongly geared towards warfare they really were. Our sources do not explain how mess-groups related to military units or how messes and herds trained for combat, but stress instead that the Spartan regime instilled general physical and mental qualities such as fitness, toughness, self-control and obedience. These qualities are highly desirable in war, but not in war alone, and they may well have been cultivated also for non-military purposes.

Each mess-group may have formed the core of a 'sworn band' (*enomotia*), Sparta's smallest military unit. Classical sworn bands consisted of about forty men, but 60–70 per cent of these were *perioikoi*, so that each band contained only twelve to sixteen full citizens, which fits well with the claim of one source that the messes consisted of fifteen men on average.⁶² Dining groups of this size were certainly not unique to Sparta: a classical Greek dining room typically held seven couches with two places each. Despite their peculiarities of organization and lifestyle, Sparta's social groups were thus fundamentally similar to those of other Greek states. They were integrated into military organization to an exceptional degree, but did not actually coincide with army units and were evidently not shaped by strictly military requirements.

The evidence of archaic Spartan poetry and vase-painting suggests that the system of public messes was introduced only after 550, that is, after Sparta established itself as the most powerful state in Greece. If so, Sparta's centralized social system will have been designed less to create an effective army than to create a tight-knit community capable of dominating vast numbers of serfs, *perioikoi* and subject allies. The cities of Crete, which also operated a system of public messes, faced a similar challenge in controlling their subject populations.⁶³

In Athens, and probably elsewhere in Greece, social and political structures very much dictated military organization, rather than vice versa. The Athenian army from 501 onwards was divided into ten regiments corresponding to the ten tribes into which citizens were organized for administrative purposes. Each regiment combined forces from three separate regions of Attica and in a general levy included some 1,000 men, making it an incoherent and unwieldy military unit. Clearly, the tribe was primarily a political institution, not designed with a view to efficiency in combat. At the lowest level of organization, informal social groups formed the basis of military organization: Athenian soldiers simply travelled, camped and

⁶² Plut. *Lyc.* 12.2 for size of messes; cf. Hodkinson (2000) 190–9, 216–18, 356–8; Singor (1999). For Sparta's military organization, see e.g. van Wees (2004) 243–9; Cartledge (1987) 427–31; Lazenby (1985); Anderson (1970) 225–51; on the *perioikoi*, see above p. 277, with n. 13.

⁶³ Introduction of messes and centralized education in Sparta: Hodkinson (1997) esp. 90–1, 97–8; Finley (1981) 24–40. Control: e.g. Powell (2002) 90–103. Crete: Link (1994); Willetts (1955).

fought in the company of relatives, friends and neighbours, without any attempt by central authority to forge them into regular units.⁶⁴

Before Sparta introduced its sworn bands and Athens its tribal regiments, armies were still more loosely organized. The epic world described by Homer knows only war bands consisting of a chieftain and his retainers (*therapontes*), including kinsmen, friends, dependants and anyone he could talk or intimidate into following him as a personal 'favour'. Hierarchy within and between these bands rests on how much respect (*timē*) any individual commands. Battle in the Homeric world is fought in loose formation: archers, spearmen and chariots mingle and move freely around the battlefield. This mixing of arms, and in particular the chariots riding among the foot soldiers rather than forming separate mounted units, has seemed unrealistic to many, but may be explained by the nature of military organization. Where the leader of a war band rides in a chariot and his followers are equipped with a great variety of arms, depending on personal preference and status, the different troop-types cannot be separated into distinct forces but must fight together in an open, fluid, mixed formation. In other words, Homeric social structure dictated military organization which in turn dictated the nature of battle.⁶⁵

In the course of the archaic period informal units were overlaid or replaced with more formal and centralized forms of organization, and many scholars see this as a result of developments in the nature of battle. It is more likely, however, that the impetus for changes in battle came from social and political developments. If, with the majority of scholars, one dates the emergence of the closed hoplite phalanx to the seventh century, it coincided with the first stages of state-formation in Greece. Alternatively, it has been argued that private retinues continued to be an integral part of most armies until the end of the sixth century, when Greek cities finally reached a sufficient level of state-formation to replace war bands with centralized armed forces, and a case can be made that the classical hoplite style of fighting in fact did not emerge until this time.⁶⁶

Historians have long argued that war had a formative influence on society and politics, and of course the experience of war *can* have a deep impact on people's lives, especially when men are cut off from their normal social ties and have their normal moral values suspended for long periods of time while they are exposed to extreme danger and deprivation. But not all warfare is like that, and it is equally possible for war to be a relatively routine experience which does not leave a great mark on those who fight, let alone on the wider community.

⁶⁴ See ch. 5 in this volume. For 'tribes' in war, see also ch. 2, pp. 28–30 (cf. Fornara 1971: 1–39; Hamel 1998a: 59–99); informal groups: Schmitz (2004); Whitehead (1986) 224–6; Osborne (1985) 82–3.

⁶⁵ War bands: van Wees (1986), (1995b), (1997). Combat: van Wees (1988), (1994), (2004), 153–65.

⁶⁶ See ch. 7 in this volume, pp. 192–223; further Frost (1984); van Wees (2004) 166–83, 232–40.

Most Greek warfare hovered at the less influential end of the spectrum. At one extreme, a select expeditionary force might get bogged down in siege operations lasting more than two years and taking a heavy toll, but at the other, more common, extreme, a general levy might take the field for only a few days or a week during the summer, and this was much more common. Soldiers in general levies banded together with those they knew at home, rather than being thrown into the company of strangers and forced to form new bonds with their comrades-at-arms. Travelling and camping outdoors were hardly arduous experiences at this time of year (certainly not for those who brought their own servants and pack animals) and many a campaign consisted largely of trashing evacuated farms. A short period away from home every few years, in familiar company, under agreeable conditions and with quite low levels of danger, was not a life-changing experience on a par with the First World War.⁶⁷

Nevertheless, even a limited shared experience of war might stimulate a sense of identity among certain social groups. The ability to fight as a hoplite, at any rate, was a vital part of being a man and a Greek. Courage in war was so central to masculinity that it was known simply as *andreia*, ‘manliness’, and dying in combat was referred to as ‘becoming a good man’. Conversely, exclusion from hoplite service was the equivalent of being ‘turned from a man into a woman’ (Pl. *Leg.* 944d–e). From Homer onwards, fighting at close range was rated above all other kinds of combat, and increasingly it was the *only* reputable kind of combat. Whereas Homeric heroes relied on missiles and hit-and-run tactics as well, and archaic soldiers were not ashamed to write poems about abandoning their shields as they ran for safety, the classical hoplite who did not stand his ground in hand-to-hand combat was liable to prosecution, not to mention endless mockery. This privileging of hoplite-style bravery as a male gender characteristic meant that those who fought differently – horsemen, light infantry, marines, rowers – came to be regarded as cowardly, effeminate and even un-Greek.⁶⁸

All hoplites thus had something important in common which non-hopliters lacked, and this inevitably turned them into a distinct social group. But it did not turn them into a homogenous social group. In the Spartan army, every hoplite wore a red tunic and a standard bronze panoply, including a shield with the simplest of emblems: the letter L for ‘Lacedaemon’. This picture of uniformity has created in modern minds the image of the hoplite army as a group of peers, men of the same social and economic background, whose similarity and solidarity were further reinforced by their

⁶⁷ See ch. 6 in this volume on the nature of campaigns.

⁶⁸ *Andreia*: see esp. Roisman (2003). Homer: van Wees (1996). Archaic poets: Archil. fr. 5 West; Alc. fr. 428a LP. Attitudes to light-armed, cavalry, etc.: Pritchard (1998).



Figure 9.3 An ornate piece of armour from Afrati in Crete, c. 650–600 bc. Such spectacular equipment set the wealthy hoplite apart from his fellow soldiers. This piece and similar items appear to have been captured in battle and hung up on the walls of a men's communal dining hall, with inscriptions naming those who took these spoils.

experience of fighting as identical cogs in their city's war-machine. But outside Sparta hoplite armies presented a very variegated appearance. The richest men wore ornate and precious body armour and helmets with multiple crests; they carried shields with personalized, sometimes idiosyncratic, devices, and rode to war on expensive horses accompanied by shield-bearers and other servants (fig. 9.3). The poorest wore nothing but a simple tunic and a plain helmet; they carried a plain shield, and walked, alone.⁶⁹ As they watched one another on campaign, hoplites will have noticed what they had in common, but they must have been reminded no less forcefully of the social and economic distances which separated them.

The common idea that hoplites saw themselves not just as a unified social group but specifically as a middle class is almost entirely a modern

⁶⁹ Sparta: esp. Xen. *Lac.* 11.3; Eup. fr. 394 KA. Equipment of the élite: e.g. Ar. *Ach.* 1074, 1103–11; *Pax* 1172–8; Xen. *Mem.* 3.10.9–14; *An.* 3.2.7, 3.4.46–9; see further van Wees (2004) 47–54, 57–8, 68–71.

invention.⁷⁰ Only once in ancient literature was heavy infantry linked to a 'middle group' (*meson*). Aristotle briefly argued in his *Politics* that the growth of hoplite forces had led to wider political participation (see below), and added that it was in particular the small size of the 'middle group' which had previously allowed oligarchic regimes to flourish (1297b16–28). Whether he meant that this middle class and the hoplite army coincided or that the middle class merely formed one important element of the hoplite army is not clear. Either way, the passage is almost meaningless, since Aristotle used the term 'middle', a central concept in his philosophy, very freely indeed. It could cover anyone not 'extremely rich' or 'extremely poor' (1295b2–4), even a person as eminent as a regent of Sparta, just because he was not actually a king (1296a20). What is more, elsewhere Aristotle pointedly did not identify hoplites with the 'middle': 'some are necessarily rich, some poor and some middling [*mesoi*], and the *rich* are hoplites while the poor do not have hoplite equipment' (1289b30–2); 'wherever the territory is suitable for hoplites, conditions are favourable for [a form of] oligarchy, for the hoplite force belongs more to the *rich* than to the poor' (1321a10–14). Finally he concedes that the 'middle group' rarely if ever became large enough to be significant (1295a23–6): this class was clearly more of a philosophical ideal than a social reality. Aristotle's vague and inconsistent attempt to apply a pet concept to a flawed historical scheme tells us nothing about the status or self-image of hoplites.⁷¹

The impact of naval warfare on the development of a lower-class identity – in cities like Athens which employed a substantial number of citizen rowers and sailors – is hard to gauge. On the one hand, with the exception of the captain, the citizens who served on a trireme were normally all working-class men, professional sailors and rowers. Even the hoplites who served as marines usually belonged to the lower classes.⁷² Close teamwork between more than a dozen sailors on deck and 170 oarsmen on the benches below was absolutely essential to the functioning of the trireme, and might well create a strong sense of solidarity.⁷³ On the other hand, the crews of classical Athenian warships were divided by an internal hierarchy. Citizen-rowers hogged the highest of the three tiers of benches, where ventilation and other working conditions were best, and they could expect bonuses on top of their regular pay. Non-citizens sat on the lower benches, with the slaves probably seated lowest in the hold, where the lack of air and stench of sweat were intolerable. Sailors ranked above rowers, and helmsmen in particular enjoyed considerable authority and recognition for their vital expertise. Marines not only shared the prestige of all hoplites but spent

⁷⁰ See esp. Hanson (1995); also e.g. Forrest (1966) 94–7; Andrewes (1956) 34–8; Nilsson (1929).

⁷¹ For a detailed critique of Aristotle's views on this point, see van Wees (2002b) 72–7.

⁷² See in this volume ch. 5, pp. 125–7, 138–40.

⁷³ See esp. Strauss (1996) 317–18.

most of their time idling on deck – reading, for example – and were temporarily elevated to the company and leisured lifestyle of their captains, who were appointed from among the very wealthiest families in Athens.⁷⁴

Tight cooperation on board a warship was thus structured in a hierarchical manner, and once again social distinctions might be reinforced rather than effaced in war. The lower classes were associated with the navy primarily by the élite, who scathingly spoke of working-class citizens as ‘the naval mob’ (*nautikos ochlos*) and ‘the yo-heave-hos’ (*to rhupappai*). Even comic plays, a popular genre, featured little more than back-handed compliments about rowers suffering blistered bottoms for their country, and completely failed to acknowledge that oarsmen ran real risks of drowning and of enslavement or execution by the enemy.⁷⁵ When the war at sea was not going well, comic poets were not slow to turn against the rowers and call them indisciplined, criminal scum (Ar. *Ran.* 1071–6). Whether the Athenian poor were able to derive any sense of identity from serving in a military role which met with such hostility and contempt – a role in which they were in any case outnumbered by foreigners and slaves – must remain doubtful. Perhaps the rare positive evaluations which we encounter, such as Aristophanes’ reference to ‘the top-bench oarsmen, saviours of the city’ (*Ach.* 162–3), reveal something of how citizen-rowers saw themselves. Perhaps the total absence of naval imagery in public and private monuments, dominated by the figure of the hoplite, is misleading and hides a lively, oral, counter-culture which does not survive.⁷⁶ Or perhaps rowing was for the Athenian working classes just a job, and one from which they derived little pride.

Ancient political thinkers, however, did believe that the experience of war might turn sections of the hoplite and naval forces into politically aware and active groups. Plato imagined that the working classes would begin to despise their rulers and to plot their overthrow if the rich betrayed a lack of physical or moral fitness anywhere in public, but above all in war: ‘as they walk down the street or attend some other gathering, during a religious festival or during a military campaign, when they are fellow crewmen or fellow soldiers, and indeed in the very midst of battle’ (*Resp.* 556c–d). Aristotle must have had something similar in mind when he argued that once upon a time most cities had been ruled by narrow élites but that wider political participation had begun when hoplite forces became larger, better organized and more effective in battle (*Pol.* 1297b16–24). He also thought that Athenian democracy emerged when the navy became Athens’ most important military force, so that the working classes who manned

⁷⁴ Hierarchy: van Wees (2004) 230–1; working conditions: Morrison et al. (2000) 237–8.

⁷⁵ Comedy: Ar. *Vesp.* 1118–19; *Eq.* 784–5, 1366–8.

⁷⁶ Strauss (1996) 320–2, (2000b), for lack of naval imagery and possibility of a lost counter-culture.

the ships 'began to have big ideas and took worthless leaders in political opposition to the decent people' (1274a13–15). He was not alone in his views, and one author was even prepared to play devil's advocate and argue that the naval role of 'the poor and common people' of Athens meant that these 'wretches and poor men' actually *deserved* greater power than 'the hoplites, the well-born and the worthy'.⁷⁷

Modern scholars have generally adopted this ancient perspective and concluded that service in the navy did indeed politicize Athens' poorest citizens in the classical period, while service in the heavy infantry forged small but independent working farmers into a self-aware and politically active middle class during the seventh century BC, if not earlier.⁷⁸ We must remember, however, that what our sources offer us are theories rather than historical facts. Moreover, these theories were based, not on historical research, but on a central Greek political ideal: the notion that those who held power ought to prove themselves worthy of it by displaying excellence in war. It followed logically from this ideal that a ruling élite which failed to demonstrate its military superiority ought to be overthrown by its subjects – like Plato's ineffective rich men, 'breathless and clueless' in hoplite combat. It also followed that any group which found itself playing a decisive military role ought to feel entitled to political dominance – like Aristotle's rowers with their 'big ideas'. But what *ought* to have happened according to political ideology is not necessarily what *did* happen.

There was never any agreement on who excelled or dominated in war. Already in Homer, we find an aristocrat shouting that all commoners are cowards, of no use in combat or council, while the 'worst' of the soldiers shouts back that it is precisely common men like himself who do all the fighting (*Iliad* 2.198–202, 229–38). Aristotle could claim that hoplites were the only defenders of their country who deserved political rights (*Pol.* 1297b1–2), at a time when the historical record shows that not only naval forces, but cavalry, light infantry and mercenaries were indispensable in warfare. After the battle of Salamis most credit for the victory was given, not to the lower-class sailors and oarsmen, but to the hoplite marines and to the rich ship captains who had paid the crews' wages.⁷⁹ Almost any group with political ambitions could and would claim a decisive military role for itself – but groups without such ambitions might not realize, or capitalize on, their own military importance.

Hence Plato imagined that, so long as the élite performed adequately in battle, working-class hoplites would happily fight alongside them without enjoying the same political rights. Only if the ruling class positively

⁷⁷ [Xen.] *Ath. Pol.* 1.2, 4; cf. Ar. *Ach.* 162–3; *Vesp.* 1117–21. For the hostile view, see Pl. *Leg.* 707c; Arist. *Pol.* 1304a22–4; Plut. *Them.* 19.4; *Arist.* 22.1.

⁷⁸ Hoplite middle class: above n. 66; navy and democracy: esp. Strauss (1996).

⁷⁹ See further van Wees (1995a); Ceccarelli (1993).

disgraced itself in action would the poor begin to rebel. Aristotle took the same line: he assumed that the poorer hoplites would be content to serve without laying claim to any political rights so long as they were decently treated and fed on campaign, and indeed that a city could develop a large fleet without giving citizen rights to any member of the 'naval mob' except a small number of hoplite marines (*Pol.* 1297b2–13, 1327a40–b11). History bears out these assumptions. As we saw, Athens fielded large numbers of working-class hoplites but granted the right to hold political office only to men who could live in leisure on their income – and until 457 even some of these were excluded from the highest offices ([Arist.] *Ath. Pol.* 7.3–8.1, 26.2). Half or more of the Spartan hoplite army consisted of *perioikoi* who never staked a claim to full citizen rights, and the same goes for the thousands of resident aliens in Athens who served as hoplites without even claiming the right to own land. Athenian warships were manned not only by poor citizens but by large numbers of resident aliens and slaves, while elsewhere slaves or serfs formed the bulk of naval manpower, but again their services inspired no movement to grant them citizen rights.⁸⁰

The experience of warfare thus did not in itself politicize social groups – but those who *were* politically active never failed to cite this experience in justification of their claims to power.

IV. CONCLUSION

Accused of treachery in 343 BC, Aeschines asserted his patriotism in court by reciting his record of military service, supported by eye-witness testimony, while calling his accuser a coward and deserter. Modern politicians whose devotion to their country is questioned tend to react in a similar way, although they might not follow Aeschines all the way and also roll out the military records of their brothers, brothers-in-law and 94-year-old fathers while calling their opponents sexual perverts (2.147–51, 167–70). The idea that risking one's life in war is the only true test of patriotism and manhood has a long history and remains very familiar to us. In ancient Greece, however, this idea was of exceptional significance: it served to justify an entire social and political order. The power of the ruling élite, or the political ambitions of their subjects, were legitimate only if a decisive role in war could be claimed in support. High status seemed deserved only when matched by military excellence. In classical Athens the possession of great wealth could only be justified by spending much of it on meeting the cost of war through voluntary donations, liturgies and taxes. The greater self-discipline and courage in war which the Greeks attributed to themselves

⁸⁰ Hoplites and political rights: see above, pp. 273–9; non-citizens in naval crews, see ch. 5 in this volume, pp. 138–40; *contra* e.g. Morrison et al. (2000) 117–18; Rosivach (1985).

were central to the notion that they were superior to, and ought to rule over, barbarians. The role of men in protecting women from enemy invasion – like sheepdogs protecting the flock from wolves (*Xen. Mem.* 2.7.7) – was equally central to the notion that men ought to rule over women.⁸¹

War was highly prominent in the literature and art of ancient Greece, then, because it played a vital ideological role, rather than because it was an ever-present and all-absorbing reality. Wars were common, and links between social and political structures on the one hand and military institutions on the other were close. Yet Greek societies cannot be said to have been shaped to a significant extent by the demands of warfare. Weapon and combat training took up no more than a fraction of the élite's ample leisure time, which was devoted to athletic exercise instead, even in Sparta. The social groups to which citizens belonged did not coincide with military units and were not designed to serve primarily military functions; at best they were incorporated into larger army units – either informally, as in Athens, or formally, as in Sparta. Political rights were allocated on the basis of property qualifications, not military roles.

We may gain some perspective on the place of war in the Greek world if we remember not only that there were always young men impatiently waiting for war to break out, hoping for a chance to prove themselves, but that such attitudes were denounced as deeply misguided by many others, who lamented the miseries of war, and who not only advocated but positively glorified peace.⁸² And we should remember not only Homer's heroes but also Hesiod's farmers. The heroes' lives are filled with fighting, raiding and waging war, and they represent the dangerous, conflict-ridden world in which the Greeks needed to believe if war was to justify their social and political order. In the lives of Hesiod's farmers, by contrast, warfare plays no role, and if they think about war at all, it is only as a disaster which the gods may send to punish an unjust community. In a straight competition, according to an apocryphal but significant ancient story, it was Hesiod who beat Homer, 'because it was right that the winner should be the one who encouraged agriculture and peace, not the one who kept going on about war and slaughter'.⁸³

⁸¹ See van Wees (1992) 138–57, (1998a) 44–6; Shipley (1993) 23. On justification of wealth in Athens, see Whitehead (1983).

⁸² Keen young men: Thuc. 2.8.1. Attitudes to war and peace: van Wees (2001b); Spiegel (1990); Arnould (1981); de Romilly (1968).

⁸³ *Certamen* 13 (Loeb trans.); cf. Hes. *Op.* 225–47, on war as punishment; van Wees (1992) on war in Homer.

PART II

THE HELLENISTIC WORLD AND THE
ROMAN REPUBLIC

CHAPTER 10

INTERNATIONAL RELATIONS

RICHARD BILLOWS

The Hellenistic age ushered in a new era in the international relations of the Greek world, in that it drew the relatively small-scale system of Greek city-states and *ethnē* into the much larger system of the Hellenistic monarchies; and in that the Hellenistic monarchies were dominated by royal families and élites drawn from the hitherto remote and backward region of Macedonia in northern Greece. For centuries, down to the middle of the fourth century BC, Macedonia had stood on the fringe of – some would say entirely outside – Greek civilization and its developments.¹ It seems legitimate to wonder therefore whether, in taking over the Greek world and expanding the horizons of Greek civilization to encompass the lands of the old Persian empire, the Macedonians brought to the practice of international relations any special ideas, policies, systems or formulas of their own, distinct from those of the city-state Greeks.

They did not. In unifying Macedonia and leading it to a position of dominance in the Greek world during the third quarter of the fourth century, king Philip II necessarily adapted his diplomacy and his practice of international relations – modes of negotiation, style of treaties, alliances, and other agreements – to the ideas and systems of the more advanced city-state Greeks. Even his role as a near-absolute monarch, able to conduct diplomacy and international relations more or less as he saw fit, was paralleled in the world of the Greek city-states by the great tyrants they from time to time produced, like Dionysius I of Syracuse, for instance. What the Macedonians introduced into Greek international relations that was new was, on the one hand, the existence of a small set of super-states – the Hellenistic empires – and how they related to each other; and on the other hand, the relation between the new super-states and the Greek city-states inside and outside these empires.

I. RELATIONS BETWEEN THE HELLENISTIC EMPIRES

The relationship existing between the three major Hellenistic empires – the Antigonid in Macedonia and the rest of Greece, the Seleucid in western

¹ Borza (1990) esp. 1–97; also Billows (1995a) 1–II.

Asia, the Ptolemaic in Egypt and adjacent territories – was one of uneasy peace interrupted at quite frequent intervals by outbreaks of warfare in certain disputed border regions. The Hellenistic monarchs held their lands by right of conquest, and overtly advertised that fact by deriving their right to rule from the principle of *doriktetos chora* – ‘spear-won land’. This created problems in their mutual relations in that during the complex wars of the succession to Alexander out of which the three empires emerged, the ebb and flow of military success left the heirs of the Successors with competing claims to various lands. The most notorious example of this was southern or *koilê* (‘hollow’) Syria and Palestine, bitterly fought over by the Seleucids and Ptolemies in a whole series of wars in the third and early second centuries, each dynasty claiming a right to the territory based on conquest by their dynastic founders Ptolemy I and Seleucus Nicator.²

The other major zones of conflict were western Asia Minor, where all three empires sought power and influence complicated by the rise of the Attalid kingdom after the mid-third century; and the islands of the Aegean, where Ptolemaic and Antigonid fleets fought for primacy over the ‘League of the Islanders’. But these intermittent conflicts aside, there existed a real and acknowledged balance of power, illustrated by various phenomena: frequent dynastic inter-marriage, ready acknowledgement of each other’s royal status and frequent ambassadorial exchanges, to name a few.³ One might also point to Polybius’ sense of the great unfairness of the two kings Philip V and Antiochus III allying to seize territory from the child-king Ptolemy V (Polyb. 15.20) as exemplifying the widespread sense in the Hellenistic world of a natural balance of power between the three kingdoms that ought not to be upset. It was natural for the Hellenistic kings to fight and jockey for power, but they should not go so far as to seek each other’s destruction. This notion of limited warfare was no doubt, like almost all Hellenistic ideas in international relations, a development from the views of fourth-century city-state Greeks: in this case the idea that Greek cities should not pursue enmity to the point of destruction (e.g. Pl. *Resp.* 470–1).

A sense of common Macedonian identity and heritage is likely also to have been a factor in the relations between the Hellenistic monarchs and their élite officers and officials. They all looked back to the same glorious age of Philip II, Alexander the Great and Alexander’s Successors, and justified their power and wealth as inheritances from those great two generations of Macedonians.⁴ At every level of the Hellenistic world, as we shall see, one is always aware of the great interconnectedness of that world, the *oikoumenê* as the Greeks referred to it, and this is certainly and

² On ‘spear-won land’: Mehl (1980–1); Billows (1995a) 24–33; on the formation of the Hellenistic kingdoms and resultant conflicts: Billows (1990); Grainger (1990); Braund (2003); Ager (2003).

³ Hellenistic Aegean: Buraselis (1982); ambassadorial exchanges: Olshausen (1974).

⁴ Billows (1995a) 33–44, (1995b).

inevitably true of the great kingdoms among themselves. The process of inter-marriage among the dynasties meant that by the middle Hellenistic era they could even to a certain degree pride themselves on, and justify their claims by reference to, the same royal and heroic *progonoi* (ancestors): thus we find Antiochus III in 219 citing Antigonus Monophthalmus – ancestor of the Antigonid dynasty – among his *progonoi* who had ruled over and so justified his claim to Syria/Palestine (Polyb. 5.67; also Polyb. 28.1 on Antiochus IV's same claim); for Antigonus' granddaughter Stratonice was Antiochus III's great-grandmother, making Antigonus himself Antiochus' great-great-great-grandfather! So, too, we find Seleucid rulers of the mid-to late second century using the Antigonid name Demetrius; and Ptolemy III invading the Seleucid realm in support of his sister and nephew – the wife and son of the Seleucid king Antiochus II – against that monarch's older sons by his first marriage. As ever in Greek affairs, interconnectedness was as much a cause of strife as a limiting factor on the consequences of strife.

II. RELATIONS BETWEEN EMPIRES AND CITIES

The relations between the Greek cities of the Hellenistic era and the empires founded by Alexander's Successors were founded on two brute facts: the Hellenistic kings needed the Greek cities as vital sources of manpower, nodes of administration and communications, centres of economic activity, and the like; the cities had not the power, by and large, to escape domination by one king or another, and simply had to find ways to accommodate themselves to that reality. The problem was to find a way to mitigate and disguise royal domination such that the kings could retain a sufficient level of goodwill from the Greek cities, and the cities could regard themselves as in important respects still autonomous political entities. The solution to this problem that was adopted was an adaptation of the city-states' system of honouring benefactors.

Greek city-states, which had no administrative bureaucracies worth mentioning and generally rather slender public financial resources, tended to rely on wealthy benefactors to both finance and carry out much public business; and by the late fourth century not a few such benefactors tended to be foreigners. Such benefactors were recognized and rewarded by the cities with an array of honours intended to publicize the honorand's good deeds and the city's gratitude. In the case of relations between cities and kings, the kings adopted the role of public benefactors, graciously granting the cities a limited degree of local autonomy, and an array of protections, privileges and immunities according to circumstances; in return the cities hailed the kings as their benefactors and voted them a variety of quasi-religious and other honours in gratitude. Under this relationship, royal

commands were phrased as polite requests, and were acceded to by the cities ostensibly out of a sense of proper gratitude to their benefactors. By thus respecting the principle of the Greek city-states' autonomy and treating them with courtesy and a certain forbearance, the kings permitted the cities to retain their self-respect as descendants of the independent city-states of archaic and classical times, and won a measure of genuine goodwill while retaining as much real control as they saw fit.⁵

This system of relations was not followed everywhere at all times of course. The greater a king's real control, the more forbearing he could afford to be. Much also depended on the personality of the king. Some kings, naturally, were more inclined towards outright domination, others more to observing the niceties. Antigonus Gonatas, for example, in his relations with city-states in southern Greece, did not trust in goodwill to maintain his influence and control: he installed partisan tyrants and placed garrisons in key cities, thus earning himself considerable ill-will but holding on to his key positions in southern Greece in the face of local disaffection fomented, or at least encouraged, by Ptolemaic intrigues.⁶

One can in general usefully distinguish the cities of Greece proper from those in Asia. The latter, more firmly within the spheres of Seleucid and Ptolemaic rulers – many of them in fact new foundations organized by royal founders – and also perhaps simply more used, from Achaemenid times already, to having to accommodate themselves to royal power, were by and large content with the limited local autonomy the kings granted them and the system of benefactions and honours outlined above. The former, the cities of southern Greece, had always behind them the memory of their glorious and successful resistance to the Persian invasions of 490 to 479, which made them resentful of outside domination. And since the Ptolemaic rulers, in their need for Greek manpower, competed with the Antigonids for influence in southern Greece, there was a perpetual source of potential funding for those southern Greeks seeking to disrupt or cast off Antigonid domination. One should not forget, either, the growth of the federal ideal, in the form of the Aetolian and Achaean Leagues that offered to those southern Greek cities willing to merge themselves into a larger federal identity, an alternative to submitting to Macedonian domination.⁷

III. RELATIONS BETWEEN GREEK CITIES

Early Greek communities tended to be rather isolated from each other, and regarded foreigners with a good deal of suspicion, treating other

⁵ Billows (1995a) 56–80, (2003) 211–13. ⁶ See Gabbert (1997) on Antigonus Gonatas.

⁷ Achaean League: Urban (1979); Aetolian League: Scholten (1999).

communities as real or potential enemies unless they had specific reasons not to, such as a current peace treaty, an alliance, an established tradition of friendly or cooperative interaction, or something of the sort.⁸ The frequency and respectability of raiding and piracy in Homeric times is an indication of this, continuing among some 'backward' peoples into classical and even Hellenistic times.⁹ At the same time, of course, there was a great deal of friendly and cooperative interaction between individuals and families of different communities, and even between different communities as a whole; and gradually the notion arose that peace ought to be the normal state of affairs within the Greek community of states. The fifth and fourth centuries saw the development of quite an array of mechanisms and modes of peaceful, cooperative, friendly interstate interaction, and a pronounced feature of international relations of the Hellenistic era is the further development of such mechanisms and modes, and of the interconnectedness of the Greek world through them.

The various forms of interstate relations in this period can usefully be grouped, for purposes of discussion, into three basic types: formal secular agreements; formal sacred agreements; and informal arrangements and policies of various sorts. These categories, it perhaps needs to be said, are loose and ignore a certain degree of overlap between secular and sacred, formal and informal, but will nevertheless serve, I believe, as a useful way of organizing the topic. The formal secular agreements in use between Greek states in the Hellenistic period were, in ascending order of intrusiveness: *symbolai*, interstate arbitration, treaties, isopolity agreements, sympolity agreements.

Symbolai were agreements made between states with respect to the issue of legal redress for citizens of the states in each other's court systems (fig. 10.1).¹⁰ The normal situation in the Greek world was that only citizens of a given state or community could sue and obtain legal redress in that state's courts. Foreigners might hope to gain some form of redress through the intervention of a local patron, but of course that approach was problematic. As interstate trade increased in the Greek world, and with it the incidence of Greeks visiting each other's communities, the absence of legal redress for various forms of malfeasance in business transactions became a problem, and *symbolai* agreements were adopted to address this. Such agreements essentially gave the citizens of the agreeing states access to each other's court systems under specified terms and conditions, thus to a degree equalizing the citizens of the two states for the purposes of transacting business with each other. The heyday of *symbolai* agreements lay in the sixth and fifth centuries, since by the late fourth century Greek states

⁸ See ch. 4, in this volume. ⁹ See ch. 8, in this volume.

¹⁰ See Goodwin (1880); Ziegler (1975); Cataldi (1983); Gauthier (1999).



Figure 10.1 Damaged right hand of bronze, from southern France, second century BC, inscribed ‘*symbolon* with the Velaunians’, and evidently designed to commemorate a formal treaty between a Greek and a native community.

had available to them more effective and comprehensive forms of agreement that could better accomplish the same ends among others, notably the isopolyty agreement, on which see below.

Like *symbolai*, interstate arbitrations had a venerable tradition in Greek international relations. In the Hellenistic era neutral arbitrations became the normal way for Greek cities to settle disputes with each other, and are very frequently attested in our literary and epigraphic sources.¹¹ Treaties and other formal agreements frequently specified an agreed-upon neutral community to arbitrate any disputes that might arise (Rhodes was a favourite); and if no pre-specified arbitrator existed, disputing cities would generally agree upon one readily enough. Naturally, there was something of a tendency for cities to refer their disputes to the kings for settlement, but the kings – no doubt reluctant both to take on the work involved, and to be put in the invidious position of deciding for one city and against another – often delegated the task to an appropriately neutral Greek city: so, for instance, Antigonus Monophthalmus arranged for Mytilene to arbitrate disputes between the peoples of Teos and Lebedos (*Syll.*³ 344, lines 27–30). In some cases, though, the kings could not avoid arbitrating: the infamous dispute between Samos and Priene was arbitrated successively by Alexander, Antigonus, Lysimachus, an Antiochus (probably Antiochus III), Philip V and the Rhodians before finally being settled by the Romans (*Inscr. Prien.* 37).

Treaties form the broadest of these categories: the term is really just a catch-all for any agreements besides the other categories here discussed, some of which (*symbolai*, isopolyty) are in effect treaties of a sort. Greek

¹¹ See Tod (1913); Ager (1996).

cities of the Hellenistic era engaged in a multitude of treaty relations.¹² At one end there is of course the full treaty of alliance for whatever purpose. More limited forms of treaty are also common: we find treaties between coastal Greek cities and traditional pirate communities on Crete binding the pirates to respect citizens of the contracting state and their property (e.g. SV III.482); agreements of partially shared citizenship (i.e. more limited than isopolarity: see e.g. SV III.554); agreements on financial matters like import and export taxes and tolls; trade agreements; treaties regarding cultic matters; and so on. Again, the Hellenistic *oikoumenê* was highly interconnected, and this interconnectedness found expression in part in the making of a very wide variety of interstate agreements.

Agreements of shared citizenship, or isopolarity, are a characteristic feature of inter-city-state relations in our period.¹³ Isopolarity agreements offered states and their citizens a way to share most fully in each other's judicial systems, political processes, religious and cultural life, without giving up their prized mutual autonomy. In theory, at least, a citizen of a state with an isopolarity agreement with another state, could move to that other state and enjoy all of the rights, privileges and duties of citizenship there, so long as he remained a resident. If and when he left, his 'citizenship' of that state lapsed, and he never of course gave up his home citizenship. For most Greek citizens, therefore, those who travelled rarely or not at all, isopolarity agreements offered only a potential shared citizenship that was never actualized; but for those who did travel between communities – traders most obviously, and people with other business to transact – isopolarity agreements must often have been a great convenience. Just as important, though, if not more important, must have been the sense of community such agreements fostered between city-states, however little or much their citizens actually took advantage of them.

Sympolity arrangements, occasionally also called *homopoliteiai*, are by far the most intrusive form of agreements between Greek city-states, involving as they did (at any rate in principle) the melding of the two or more states making the agreement into one state with one citizenship, and they are correspondingly rare. Such agreements are essentially of two types: equal and unequal. Equal sympolity agreements need not involve states of equal size or importance, but imply an equal result, in which the contracting states became full and equal partners in the shared citizenship. This might involve full synoecism – in which the inhabitants of the communities actually moved together to live in one newly constructed or enlarged city – or else an agreement on a political and administrative centre that would

¹² Schmitt (1969) III, for a representative collection.

¹³ A representative example is the agreement between Chios and Aetolia (Austin 52); in general see Gawantka (1975); Elwyn (1988).

not leave some parties feeling subordinated: a central cult sanctuary as in the case of Thermon in the Aetolian League, or rotating meeting sites at constituent cities of the sympolity, as in the Achaean League. The Aetolian and Achaean Leagues are indeed notable examples of the equal type of sympolity agreement involving multiple parties (above, n. 7). An example of such an agreement between just two cities is that between Stiris and Medeon in Phocis (*Syll.*³ 647) in which it was decided that the assembly and magistracies of the Stirians should be open to all and serve for all. Examples of unequal sympolities, whereby one city essentially absorbed, in a friendly and reasonably egalitarian way, one or more neighbouring communities, are for example the absorption of Calymnos by Cos around 205 (SV III.545) and the would-be incorporation of the nearby communities of Magnesia and Palaemagnesia by Smyrna around 240 (SV IV.492).

The most common type of formal sacred agreement in the Hellenistic age was that generally called *asylia*.¹⁴ The term *asylia*, the origin of the English word ‘asylum’ in its various meanings, has at its root the word *sylē*, meaning the right of seizure especially of ships or cargo, or booty (that which has been seized). *Asylia* means freedom from being seized or plundered: it referred among other things to the guarantee of personal safety that was supposed to adhere to those seeking refuge (asylum!) at an altar or in a temple; but in the present context of interstate agreements it referred to the safety, the freedom from being attacked and plundered, that Greek cult sanctuaries ought to have in view of their sacredness. In point of fact, the sacred inviolability of temples and sanctuaries was not always observed by Greeks in war; and in the course of the fourth century even the greatest and most sacred of the panhellenic sanctuaries had not proved securely inviolable – the Delphic oracle being plundered by Phocians in the course of the Third Sacred War (356–347), and Olympia by the Arcadian League in the 360s. Consequently, the Hellenistic age saw the development of a movement to secure the inviolability of key sanctuaries by persuading as many Greek states as possible – monarchs, dynasts, tribal communities and cities alike – individually to guarantee a given sanctuary’s *asylia*: sacred inviolability, generally including the right to grant asylum.

A number of instances of this are particularly well known thanks to epigraphic discoveries: a whole dossier of inscriptions attests to the successful efforts of the Magnesians (by the Maeander) to win panhellenic agreement to *asylia* for their sanctuary of the goddess Artemis Leucophryene (see *Syll.*³ 554–62); likewise inscriptions attest to efforts of the Smyrnaeans on behalf of their sanctuary of Aphrodite Stratonicis, strongly supported by king Seleucus II (SV III.492, lines 10–14). A special case is that of the city of Teos, which was accorded the status of ‘holy and inviolate’ in virtue of its

¹⁴ See Rigsby (1996); also Chaniotis (1996a).

role as the home base of the company of ‘Dionysiac artists’.¹⁵ This was a set of international acting troupes which travelled the Hellenistic world staging dramatic performances at local festivals. From the start Greek theatre had been in honour of and under the protection of Dionysus, and acting troupes were therefore thought of as under the protection of the god and so inviolate. This inviolability was now extended to the whole city they made their base, and over time numerous Greek cities aspired to the status of ‘holy and inviolate’ in view of their inviolate sanctuaries: Elis as the city in whose territory Olympia lay (*Polyb.* 4.73.5–74.2); Ephesus in view of the great temple of Artemis; and in the course of time even newer cities such as Seleucia-in-Pieria (*OGIS* 257).

Besides *asylia* agreements, the other main types of sacred international agreements were those concerning the panhellenic, or at any rate more than purely local, festivals. For the original great panhellenic festivals – the Olympic, Pythian, Nemean and Isthmian games – there had existed from early times the concept of a ‘sacred truce’: a cessation of hostilities among the warring Greek states for the duration of the festival and the avoidance of hostile interference with travellers on their way to attend such a festival. The idea of the sacred truce for these four great festivals – known in Hellenistic times as the ‘crowned’ festivals – was strengthened during the Hellenistic era by widespread agreements to expand the number of panhellenic festivals and to extend the concept of the sacred truce to other festivals. Among the old and new festivals that were widely accorded panhellenic status, for example, were the great Panathenaea held every fourth year at Athens, the Heraea at Argos, the festival of Artemis Leucophryene at Magnesia-on-the-Maeander; and (to name some notable newcomers) the festival of Soteria (lit. ‘Saviour Games’) established at Delphi by the Aetolians to commemorate the saving of Greece from the Gallic attack in 279, and the Ptolemaea established at Alexandria by (of course) the Ptolemies.

These kinds of international agreements on sacred matters emphasize yet again what I have called the ‘interconnectedness’ of the Hellenistic *oikoumenê*, the widespread sense that – frequent strife and warfare notwithstanding – the normal state of affairs between states ought to be peace and friendly cooperation. Various other phenomena of Hellenistic interstate relations that do not fit into any of the above categories further strengthen this point. One such is the attempts that were made to create collective forms of governance on certain important issues that would not interfere with city-state autonomy on most matters. An example is a decree of the Delphic Amphictyony from the late second century instructing all Greeks to use the Athenian *tetradrachma* as a standard unit of currency (*Syll.*³ 729). Though replete with measures for enforcement, this attempt

¹⁵ See the inscription published and analysed by Herrman (1965).

to create by fiat a universal currency was a fantasy, but a very interesting one in view of the mindset that produced it. Another such phenomenon is the establishment or renewal of various so-called leagues: collections of city-states banded together, usually around a religious centre, for various sacred and secular purposes, without seriously infringing upon the member-states' basic autonomy. Examples are revived forms of the old Ionian and Aeolic Leagues of the archaic period, centered on the Panionion on Cape Mycale and the temple of Athena at Ilion respectively; the Nesiotic League or 'League of the Islanders' founded by Antigonus Monophthalmus and perpetuated through the third and early second centuries successively under Ptolemaic and Rhodian patronage; and Antigonus Monophthalmus' brief creation of a 'Hellenic League' in 302, which was revived in a more lasting form by Antigonus Doson and Philip V in the closing decades of the third century.¹⁶ These leagues are of course to be distinguished from the federal states proper – the Aetolian and Achaean Leagues – though the success of those two organizations at attracting member-states in the third century is not irrelevant to the point here at issue.

Two other related phenomena have to do more with relations between states and individual foreign citizens, though interstate relations certainly hover to a greater or lesser extent in the background, and they in any case further illustrate the interconnectedness I have been discussing. The Hellenistic era saw a huge proliferation of so-called 'proxenies', grants of the status of official friend of the granting community. As *pro forma* as the status no doubt was in many cases, it created a network of links between Hellenistic cities and (often) hundreds of citizens of dozens of other communities.¹⁷ During the Hellenistic era too, Greek cities – finding their traditional internal judicial system inadequate to meet the case load of disputes and complaints that came before them – came increasingly to rely on inviting panels of respected citizens from neutral cities to act as impartial and expeditious arbitrators. This procedure seems to be an invention of the Hellenistic age, for the first known instance appears to be that of 311 when – at the suggestion of Antigonus Monophthalmus – a panel of Magnesians settled a backlog of courts cases at Cyme (*OGIS* 7); we possess numerous decrees honouring such panels of foreign judges for their work, and several thanking the community from which they came for sending them.¹⁸ The relationship here is therefore both between two cities, and between a city and individual foreign citizens, and it illustrates perhaps more clearly than anything else the degree to which friendly cooperation was considered to be the proper mode of interaction between Greek cities in the Hellenistic era.

¹⁶ On these various leagues, see e.g. Billows (1990) 217–25, 228–30.

¹⁷ See Marek (1984).

¹⁸ See Crowther (1995), (1998), (1999) for examples.

IV. EARLY ROME

Unwary readers of the first few books of Livy's monumental history of Rome or of Dionysius of Halicarnassus' *Roman Antiquities* may be led to believe that we are very well informed about the early history of Rome; and indeed some modern scholars are inclined to take a good deal of the 'history' of early Rome purveyed in these works more or less seriously. However, even the ancient Romans themselves were aware of how tenuous and often tendentious the traditions concerning the regal and early Republican periods were: Livy himself noted this fact at the start of his sixth book, indicating that it was only for the period after the Gallic sack of Rome (386) that reliable records survived (Livy 6.1); and about two generations before Livy, the historian Claudius Quadrigarius had already noted that few records of early Rome had survived the Gallic sack to form the basis for an account of early Rome, a period he therefore passed over in silence.¹⁹ Modern scholars would do well to heed these ancient warnings, with the added proviso that it is in fact doubtful whether any substantial written records were even produced at Rome before the third century. Consequently, no reliable political or military history of early Rome – earlier, that is, than the late fourth century – can be reconstructed, and hence no reliable account of Rome's early relations with foreign communities.

What can be offered is a broad outline of Rome's situation with respect to other states and communities with which it had contacts, and an account of early Rome's basic attitude, rules and institutions governing international relations as first-century Roman antiquarians reconstructed them based on what they knew – or thought they knew – of early Rome's so-called *ius fetiale* (fetial law). As the largest and northernmost of the Latin-speaking agrarian towns of the plain of Latium, Rome's international relations in the fifth and early fourth centuries were dominated by three issues: competition with the other Latin towns for primacy over the 'Latin League'; relations between the Latins and the older and more highly developed Etruscan cities to their north; and relations between the settled agriculturalists of the Latin plain and the restless (from the Latin perspective, predatory) pastoralists of the Apennine foothills to the east – the Volsci and Aequi who figure so prominently in Livy's account of fifth-century Rome.²⁰

From the second half of the sixth century on, Rome was the largest of the Latin communities by a substantial margin, and in spite of all distortion and outright invention in the standard (Romanocentric) accounts of Rome's relations with the Latin League, it is clear that the Romans sought

¹⁹ Plut. *Num.* 1.2, with analysis of Frier (1975) 92–3; in general on the fabrication of early Roman history Wiseman (1979) 3–53, is crucial.

²⁰ On fifth-century Rome see Drummond (1989); Cornell (1989c), (1995) esp. 293–326.

to dominate the other Latin towns from this time. The story of Rome's membership and domination of the Latin League culminated in the 340s in war between the Romans and the other Latins (and Campanians) as a result of which the Latins were incorporated into the Roman state. In the sixth century Rome may have been dominated by the Etruscans, as the tradition of the Etruscan origins of some of the kings of Rome (the Tarquinii) may suggest. In the fifth century, despite heavy Etruscan influence on many aspects of Roman religion and culture, relations between Rome and the Etruscan cities cannot be reconstructed except in the case of Veii, the city nearest Rome, which was hostile until it was destroyed by Rome in the early fourth century. In the late fourth and early third centuries Rome fought the other Etruscan cities several times, eventually subduing them and forcing them into a subordinate alliance. Much of Livy's account of the fifth century is dominated by repeated warfare between the Latin League, with Rome as purported leader, and the Volsci and Aequi. Although the details of this warfare are largely invented and certainly exaggerated, there seems no reason to doubt that a great deal of mutual raiding and fighting characterized relations between these peoples at this early time. Eventually, of course, the Volsci and Aequi were defeated and incorporated into the Roman state, like the Latins.²¹

When we turn to examine Rome's ideas and institutions regarding international relations, the influence of these perpetual local, mostly small-scale hostilities is palpable. Associated with the fetial procedures, which purportedly governed Rome's international relations, was a concept of *bellum iustum* (just war) that – as little as it often coincided with Roman actions – was to have a profound impact on moral ideas regarding warfare all the way into the modern period.²² According to this notion, a war was just – and so approved of by the gods – only if it was fought in self-defence, and the fetial procedures were designed with great elaboration to demonstrate that whenever Rome declared war she was doing so defensively. A college of priests called the *fetiales* had the responsibility of seeing to it that only just, defensive wars were fought. Whenever the Romans wished to go to war against another community, the causes of complaint against that community had to be declared to the *fetiales*. A committee of three *fetiales* would then be dispatched to the offending community to demand redress for the wrongs done and return of the goods and persons carried off, a process called *rerum repetitio* (lit. 'asking for things back'). Exact rules specified how the *fetiales* were to enter the potential enemy's territory, how and from whom they were to demand redress, how much time was to be allowed

²¹ A good account of all this is Cornell (1995) 293–326, 345–68.

²² On the Roman notion of *bellum iustum*, see e.g. Cascione (1992); Achard (1994); on the modern influence of the idea a good review is Klaasen (1978).

for a response and for redress to be made. If the process of seeking redress failed – the enemy refused to make reparations – one of the *fetiales*, who had been nominated *pater patratus* (fathered father) of the Roman people for these procedures, would have the responsibility to declare war by formally going to the border and hurling a spear into the enemy's territory.²³

The assumptions underlying these procedures are that Rome is the wronged party, and that war is only made against those who have wronged Rome and refused to set the wrongs right. The elaborate spoken formulas and precisely specified time periods required by the procedure are highly characteristic of Roman religion. In time the procedure was extended so that Rome might legitimately seek redress on behalf of allied communities with which Rome had an offensive and defensive alliance, and ultimately even 'friends' of the Roman people, with whom Rome had the friendly *officium* (duty, obligation) of mutual aid. The fetial law also envisaged the possibility that Romans might be the wrongdoers, and had a procedure intended to ensure that Rome would not fight attackers who had right on their side. In effect, any community with a complaint against Rome or Roman citizens could seek redress from Rome via the *fetiales*, and it was the responsibility of these priests to investigate the grounds for such demands and to ensure that, if they were well founded, appropriate redress was made including even the handing over of offending Romans to the wronged community for punishment. Of course if any community ignored the fetial procedure and simply attacked Rome to take revenge for wrongs done, by that act they placed themselves in the wrong in Roman eyes and – according to Roman notions – in the eyes of the gods. By following these procedures, therefore, it was from Rome's perspective impossible for Rome to fight anything but a just, defensive war.

The *fetiales*, as overseers of Rome's international relations also oversaw the making of treaties. The decision to make a treaty, and as to the precise terms, was taken by the Roman authorities, but it fell to the *fetiales* to formalize the treaty by giving it religious sanction. Again, one of the *fetiales* was nominated *pater patratus*, and he then swore an oath on behalf of the Roman people, recited the terms of the treaty, and, striking a sacrificial pig with a special flint, called on Jupiter to smite the Roman people as he was smiting the pig, if the Romans failed to fulfil and abide by the terms just recited by the priest. The representative of the other community was present for this oath and sacrifice, and committed his people to the treaty in his own way at the same time.

Our sources place the elaboration of this system of international relations in the early regal period of Roman history, replete with highly detailed and

²³ See e.g. Wiedemann (1986); Cappelletti (1997).

obviously fictional examples of the process in action.²⁴ One may certainly doubt whether the procedure, in all its elaboration, was ever in fact carried out in reality; but the ambience, the thought-patterns revealed in this fetial procedure – the visits of *fetiales* to hostile territory, the precise formulas of speech and behaviour, the exactly specified time periods involved, the whole concept of ‘asking back’ (or giving back, as the case might be) the things carried off – are those of the primitive community whose notion of international relations is limited to the process of raid and counter-raid, of aid given and received in the course of such raiding, with a set of immediately neighbouring communities. Precisely the ambience, in other words, of a sixth- and fifth-century Rome engaged in perpetual but small-scale hostilities against, or in alliance with, Latin towns to the south, Etruscan towns to the north, and hill tribes to the east.

Two traditions suggest that Rome’s international horizons may in fact have extended beyond these neighbouring communities at this time: on the one hand, there are traditions of embassies sent to Greece – Delphi and Athens – for advice on a handful of crucial occasions in the late sixth and fifth centuries; on the other, there is the treaty between Rome and Carthage traditionally dated to the first year of the Republic, supposedly 509 BC. The embassies purportedly sent to Greece in the late sixth and fifth centuries are almost certainly fictitious. Very few scholars are prepared to credit the stories of an embassy sent to Delphi by king Tarquin the Proud (Livy 1.56–57), of an embassy sent to Delphi during the war with Veii (Livy 5.15), or of an embassy sent to Athens at the time of the Decemvirate (traditional date 453) to copy the laws of Solon (Livy 3.32). The story of a golden mixing bowl dedicated to Apollo at Delphi by Furius Camillus at the conclusion of the Veientine War (Livy 5.25, 28; Plut. *Cam.* 8.3–8) may seem more credible in view of Appian’s statement (*Italica* 8.1) that the base was still standing, though the bowl itself had been melted down on the orders of the Phocian general Onomarchus during the Phocian despoiling of Delphi at the time of the Third Sacred War (356–347). However, a golden mixing bowl was dedicated by Rome at Delphi in honour of Marcellus’ victory in Gallia Cisalpina in 222 (Plut. *Marc.* 8.6), and it seems likely it was the base of this dedication that was still to be seen in Appian’s day – if Appian’s testimony is to be taken seriously. While there was contact between Romans and Greeks at a private level, public dealings between the Roman state and the Greek world are not in fact likely to have occurred earlier than the third century.²⁵

²⁴ Plut. *Num.* 12.3–7, attributes foundation of the *fetiales* to Numa; Livy 1.23 describes the fetial procedure under Tullus Hostilius; see also Livy 9.45.5–9, 10.12.1–3 for some later examples of the *fetiales* in action.

²⁵ This was demonstrated in a groundbreaking study by Holleaux (1935); see further the massive study of Gruen (1984).

Only the treaty with Carthage remains, then, to suggest that Rome's international relations in the sixth and fifth centuries extended beyond west central Italy. If it is true that Rome ratified a treaty with Carthage in 509, that is certainly remarkable; but it should be pointed out that the treaty stands as a completely isolated phenomenon for over a century and a half, that it is clearly Punic, not Roman or Latin in form, and that it was hence apparently made at the request of and according to the diplomatic forms and notions of the Carthaginians.²⁶ The text of the treaty was still extant, on a bronze tablet in the treasury of the aediles, in Polybius' day; and Polybius quotes its text and asserts that it dates from the first year of the Republic on the authority of unnamed Roman informants (Polyb. 3.22). In point of fact, however, it is far from certain that Polybius' dating of Rome's first treaty with Carthage should be accepted. Livy (7.27) and Diodorus of Sicily (16.69.1) both date Rome's first treaty with Carthage to 348, a far more plausible date for the inception of Romano-Carthaginian relations. Polybius' account of Rome's relations with Carthage was unfortunately heavily influenced by Roman self-glorifying and exculpatory propaganda – note his categorical rejection of the treaty mentioned by Philinus barring the Romans from Sicily and Carthaginians from Italy, for instance (Polyb. 3.26) – and his dating of the putative first treaty between Rome and Carthage seems to be a case in point.²⁷

It is really, therefore, in the second half of the fourth century, when Rome had recovered from the devastating shock of the Gallic sack, that Rome's international horizons began to expand beyond her immediate neighbours, at the same time that Rome was rising to dominance over all of peninsular Italy. For between the 340s and 270s the Romans engaged in a series of wars, nominally defensive but highly expansionist in effect, as a result of which they bound to themselves in a network of hegemonic alliances all the other peoples and cities of Italy south of the Po valley. All of these alliances were bilateral, between Rome and another community; and all were unequal, subordinating the partner to Rome, despite the long-held supposition that some of these *foedera* (treaties) were *aequa* (equal), a notion neatly exploded by Erich Gruen some years ago when he showed the distinction between *foedus aequum* and *foedus iniquum* to be a modern fabrication unsupported by the ancient evidence.²⁸ The effect of this network of bilateral treaties was to make Rome the clear master of Italy and to place the military manpower

²⁶ So Taeubler (1913) 254–76.

²⁷ Rome's treaties with Carthage have generated much scholarly controversy: Toynbee (1965) 1.519–55, is still a good review; cf. Palmer (1997). The text of the treaty quoted by Polybius contains no dating formula or mention of magistrates, and Polybius himself could not read the archaic Latin of the text, as he reveals. We therefore have only the word of Polybius' unnamed Roman informant(s) for the date and context of the first treaty.

²⁸ Gruen (1984) 14–15.

of Italy at Rome's service, an effect summed up in the so-called *formula togatorum*, the roster of the various Italian communities' military manpower resources and treaty obligations to Rome, according to which the Romans called up allied troops to serve in their various wars of the third and second centuries.²⁹

It is interesting to note that just around the beginning of this process (c. 353–351) the Romans concluded treaties with the Etruscan cities Caere and Tarquinii that in one important respect look Greek in form: they established peace and friendship between Rome and these two cities for a specified number of years – 100 in the case of Caere, and 40 for Tarquinii (Livy 7.20, 22). In the course of the next decades Rome came into lasting contact with the Greek cities of Italy, beginning with Neapolis in 328 and culminating with the conquest of Tarentum in 272. During this same period the beginning of the impact of Greek culture on the Romans can be seen in Roman naming habits, with prominent leaders adopting as *cognomina* (surnames) such Greek names or words as Philo (see Q. Publilius Philo, consul for the first time in 339), Sophus (see P. Sempronius Sophus, consul in 304), and Philippus (see Q. Marcius Philippus, consul in 281). It was, of course, Rome's war against that infamous Hellenistic *condottiere* king Pyrrhus of Epirus in 280 to 275 that finally brought Rome fully into the purview of Hellenistic international relations.

V. ROME AND THE HELLENISTIC WORLD

In embarking on the process of dominating the Hellenistic world, the Romans entered into relations with a culture older and far more sophisticated than their own, not least in regard to diplomacy and international relations. It was only natural therefore, as Erich Gruen showed in *The Hellenistic World and the Coming of Rome*, that in dealing with the Hellenistic powers the Romans should have adapted themselves to Hellenistic norms and institutions of international relations, just as when making their early treaties with Carthage they acceded to Punic forms.³⁰ Like the Macedonians before them, the Romans had little or nothing to teach the highly developed world of the Greek cities, but much to learn. The Romans' own forms of war and treaty making as formalized in ferial law were quite inadequate to the new situations Rome found herself confronted with, and so we see that from the first – as for instance with Rome's treaty with Aetolia of 211 – the Romans accepted Greek forms, norms and notions when dealing with the Hellenistic world, up to a point.³¹ For it must be

²⁹ See e.g. Brunt (1971) esp. 545–8. ³⁰ Gruen (1984) 13–200.

³¹ Note that, though the *fetiales* are mentioned in 200 when Rome declared war on Philip V of Macedonia (the so-called 'Second Macedonian War'), their role was simply to advise the consul P.

said that despite Rome's acceptance of Greek diplomatic forms, in the end the Romans always retained and insisted upon some form of their own notion of *bellum iustum*, and held on throughout to their ingrained sense of their own fundamental superiority in everything but civilized sophistication.

The first formal contacts between the Romans and the Greek world of which our sources speak are embassies reputedly sent to Rome by Alexander the Great and Demetrius the Besieger in the late fourth and early third centuries to protest about Roman and Etruscan piracy in Greek waters, and an embassy of Romans included by some but not all sources among the numerous embassies from all around the civilized world that visited Alexander in Babylon in the months before his untimely death.³² After Rome's surprising (to the Hellenistic world) and remarkable defeat of Pyrrhus' invasion of Italy, king Ptolemy II of Egypt sent ambassadors to Rome with congratulations, and the Romans sent an embassy to Alexandria in return, initiating friendly relations with Ptolemaic Egypt that were to endure for several centuries (Livy, *Per. 14*; Dio fr. 41; App. *Sicelica* 1). Through the middle decades of the third century, while Rome was preoccupied with her first great war against Carthage (264–241), Rome's diplomatic relations with the Greek world were sporadic at best, if not nonexistent. But after her victory in that great war, Rome began during the 230s to receive embassies from the Greek cities of south Italy complaining about Illyrian piracy in the Adriatic, and this issue led in 230 to Rome's first serious entanglement (as Polybius put it: 2.12) with the Hellenistic world.

Rome's two brief and victorious campaigns against the Illyrians in 230 and 220 led to the establishment of a variety of relationships between the Romans and a number of mainland Greek states, after which Rome never again stepped back entirely from the Hellenistic world. For in addition to creating a kind of protectorate over several semi- and non-Greek peoples on the east coast of the Adriatic – Atintanes, Parthini, Issa, Apollonia – the Romans also entered into friendly diplomatic relations with such Greek states as Corcyra, the Achaean League and Athens.³³ These friendly relations, characterized as *philia* by the Greeks and *amicitia* by the Romans, were quite informal and seemingly innocuous, but in fact were highly ominous for the Hellenistic world, for Roman *amicitia* was really not quite the same thing as Greek *philia*, and in any case the Romans had developed interstate *amicitia* into a very effective – be it extraordinarily

Sulpicius where to send the envoy declaring war, with no sign of the old complex fetial procedures (Livy 31.8.3).

³² Strabo 5.3.5 records the embassies concerning piracy from Alexander and Demetrius; Cleitarchus recorded a Roman embassy to Alexander in Babylon according to Plin. *HN* 3.57, and so did the otherwise little-known Aristus and Asclepiades (Arr. *Anab.* 7.15.5–6).

³³ A good review of all this is still Gruen (1984) 359–441.

hypocritical – tool of aggression under the guise of *bellum iustum*. To explain what I mean, I will first go into the Roman concept of *amicitia* and then examine two famous instances in which Rome used *amicitia* to justify declarations of war.

Amicitia, like the Greek term *philia*, is usually translated into English as ‘friendship’, but though that translation serves well enough for the Greek term, it is a misleading translation of the Roman term. To Romans, *amici* were not friends in the normal sense of that English word: to denote friends proper, the Romans used several other words – *familiares*, *necessarii*, *propinquui* – each of which in different ways indicated a relationship of genuine intimacy and closeness. The word *amicus* can better be translated ‘associate’: it denoted a relationship of mutual *officia* (duties, obligations) between approximate social equals; as opposed to the *patronus/cliens* relationship with its quite different *officia* that was the norm between non-equals.³⁴ In point of fact, Roman *amici* might not like each other at all: for example, Caesar and Cicero were *amici* during the 50s and 40s BC, though Cicero never really liked or trusted Caesar and came to loathe him. Moreover, though *amicitia* was a relationship between social equals, it was actually rarely an equal relationship: one *amicus* frequently owed gratitude to the other for help or benefits granted, and was thus in an inferior position in the balance of *officia* received and bestowed, as Cicero was to his *amici* Pompey and Caesar.³⁵

As transferred to the arena of international relations, *amicitia* was never an equal relationship. The Romans always viewed themselves, rightly or wrongly, as the superiors in the relationship, the ones to whom gratitude and its accompanying *officium* of deference were owed.³⁶ And they were quite ruthless, as well as hypocritical, in exploiting relations of *amicitia* to their advantage in pursuit of their international policies and objectives. A case in point is their manipulation of *amicitia* with the city of Saguntum in Spain to justify their second war against Carthage.

Spain was not an area in which Rome had had any interest prior to the 220s: so far as we know, no Roman had ever set foot in Spain in any official capacity before that decade, when the Romans became aware of growing Carthaginian power there. Southern Spain had been an area of Punic interest and activity for centuries, and when Sicily and Sardinia were lost to Carthage after their first Roman war, the Carthaginian leader Hamilcar sought to make good those losses by extending Carthage’s power and control in Spain. Aware of the successes of Hamilcar and his successor Hasdrubal, and perhaps concerned about Carthaginian power extending

³⁴ See Cic. *Off.* for the Roman notion of *officia*.

³⁵ See e.g. Spielvogel (1993) on Cicero’s political *amicitiae*.

³⁶ See Burton (2000) on *amicitia* in Roman international relations.

too close along the north Mediterranean coast to Italy, the Romans in 226 sent an embassy to Hasdrubal that negotiated the so-called Ebro treaty, by which the Carthaginians bound themselves not to extend their power north of that river.³⁷ Even if, as Polybius indicates (3.29), the treaty was just that one-sided in its terms, it nevertheless clearly implied that Spain south of the Ebro was Carthage's sphere of interest, particularly given that Romans had no history or relations there whatsoever.

Nevertheless, within a year or two, the Romans entered into relations of *amicitia* with Saguntum, a city well south of the Ebro and directly in the Carthaginian line of advance. When in due course the Carthaginians sought to bring Saguntum under their control, the Saguntines resisted and appealed to their *amici* the Romans for aid. The Romans, so far as we can tell, did nothing concrete while the young and energetic new Carthaginian leader Hannibal besieged Saguntum; but after the city's capture and destruction, Rome sent an embassy to Hannibal and then Carthage to express outrage and demand reparations and punishment of the Carthaginians responsible – note the echoes here of *rerum repetitio* procedure. When the Carthaginians refused to comply with these demands, the Romans self-righteously declared war in defence of their wronged *amici*, and prepared to invade Africa and the Carthaginian territories in Spain (Polyb. 3.6–33). We see here an egregious example of a very common Roman method of satisfying the letter of *bellum iustum* ideology while actually waging an aggressive war: they would make *amicitia* with a community with whom the power they wished to attack was likely to get into conflict, and then use that conflict and the relationship of *amicitia* as a justification for declaring war.

The same procedure can be seen operating in Rome's relations with the Hellenistic world, for example with regard to the so-called Second Macedonian War. At the height of the unsuccessful opening phase of Rome's second war against Carthage, after the Romans had been catastrophically defeated by Hannibal at the battle of Cannae in 216, king Philip V of Macedonia decided that Rome was going to lose the war and that it would be wise to be on good terms with the winner. He concluded an alliance with Hannibal and Carthage, declared war on Rome and invaded the Roman 'protectorate' in north Epirus and south Illyria. The Romans hastily made an alliance with Philip's enemies the Aetolians, but finding that Philip lacked the naval power to mount a serious threat to them, and preoccupied with fighting the Carthaginians, the Romans prosecuted war with Philip only very desultorily and in the end made a compromise peace with him in 205. After the victorious conclusion of the war with Carthage, however, in 201 the Romans turned their attention to Philip once more. Having made peace with him, the principle of *bellum iustum* would not allow

³⁷ See e.g. Eckstein (1984).

Rome simply to declare war and attack him. However, over the years the Romans had developed relations of *amicitia* with a number of Greek states, notably Athens, Rhodes and the Attalid kingdom. Rome sent a roving embassy to Greece to visit 'friendly' states and collect grievances against Philip, encouraging the states in question to send embassies to Rome to air their grievances and ask for Roman help. These grievances then gave the Romans all the justification they felt in need of to declare war on Philip, a war whose real and transparent motive was in fact revenge for Philip's treaty with Hannibal in 216.³⁸

We see, therefore, that though in outward form the Romans operated in terms of the Greek concept of *philia*, in fact they understood *philia* in terms of their own rather different notion of *amicitia*, and applied it in a very one-sided way at that. And that was typical of Rome's adoption or adaptation of Greek concepts of international relations. The Greek ideal of city-state autonomy was deeply ingrained by the Hellenistic era, for instance, and finding themselves – after their victory over Macedonia in 197 – in physical control of mainland Greece from Thessaly on south, the Romans – on the advice of their general Flamininus – found it convenient to espouse this concept.³⁹ But what did it actually mean when the Romans, at the Isthmian games of 196, announced to rapturous applause that they proposed to leave all Greek cities 'free, ungarrisoned, not subject to tribute, and using their own laws' (Polyb. 18.46.5; cf. Livy 33.32.5), and subsequently withdrew all their forces from mainland Greece? What the Romans meant by this was a topic of dispute among Greek politicians at the time: some, like the Achaean Philopoemen, thought it should be taken literally and that the Greeks, while showing the Romans proper gratitude, should behave as independent states; others, such as Philopoemen's Achaean rival Aristaenus, believed that regardless of words, the Romans expected fairly complete subservience from the Greeks, and that the only sensible policy for Greek states was therefore to consult Rome's wishes on every serious matter.⁴⁰

The correct view was made plain by the Romans in the aftermath of the so-called Third Macedonian War (172–169): all Greek states that had shown less than full and cheerful allegiance to Rome were disciplined by the deportation to Italy of politicians who showed any signs of independence and threats of harsher punishment to follow if sufficient subservience were not shown in future, with the horrific example of Epirus' devastation by Aemilius Paullus' army to clarify any doubts. Greece was left in the hands of wholeheartedly pro-Roman politicians like the Epirote Charops, the Aetolian Lyciscus, the Achaean Callicrates; politicians who interpreted Greek

³⁸ Derow (1979); Gruen (1984) 438–47; Meadows (1993); cf. Hoyos (1998).

³⁹ Briscoe (1972); Walsh (1988), (1996).

⁴⁰ Polyb. 24.11–13 for this dispute, and cf. Gruen (1984) 331–3.

autonomy to mean that with regard to local matters too insignificant to interest Rome, they might govern themselves, but on all other matters they must consult Rome's wishes and follow Rome's dictates. In other words, autonomy was important to the Greeks and the Romans were hence willing to pay lip service to it insofar as it did not impinge on Roman interests; when and where it did, Roman notions of the *gratia* owed to Rome by the recipients of Roman *beneficia*, which required nothing less than subservience, took precedence.⁴¹

The same kind of *interpretatio Romana* can be seen with respect to the typically Greek practice of interstate arbitration. Once they entered the Hellenistic world as a major power at the beginning of the second century, the Romans began very quickly to be appealed to by Greek disputants of all sorts, and the Roman Senate and magistrates were by and large quite willing to act as 'neutral' arbitrators. However, it is clear that they viewed this practice through the lens of their own idea of themselves as superiors granting favours to their inferiors. When, during the Third Macedonian War, the Romans seemed to be doing badly and the Rhodians hence took the very normal step, by Greek principles of diplomacy, of offering to arbitrate a fair end to the hostilities between Rome and Macedonia – an offer that by Greek notions in no wise undermined or detracted from the Rhodians' friendship with Rome – the Romans did not merely reject the offer, but subsequently threatened the Rhodians with war on this account and relented only after obliging the Rhodians to make abject and grovelling apologies.⁴² It was made clear that Rome did not play by the same rules as the Hellenistic states: friends of Rome must show unconditional support; Rome might arbitrate between other states, but would settle her own disputes in her own way, usually by force, and required no friendly or well-meaning interventions by others.

The fact that the Romans had no desire during the first half of the second century to assume the burden of direct governance of Hellenistic states and regions is irrelevant to the matter of Rome's attitude towards Hellenistic international relations. In point of fact, two episodes during this crucial half century well illustrate the basic mismatch between Roman and Hellenistic ideas, and the way in which in the end the Romans imposed their own wishes. In 191 the Roman consul M[†] Acilius Glabrio, making war on the Aetolians, entered into peace negotiations and persuaded them to perform what the Romans called a *deditio in fidem populi Romani* – literally 'handing themselves over to the faith of the Roman people' – a form of unconditional surrender in which the very helplessness of the surrendered party was supposed to require the victor to exercise moderation.

⁴¹ Full sources and discussion, and a contrasting interpretation, in Gruen (1984) 481–523.

⁴² See Gabrielsen (1993); also Gruen (1975).

The Aetolians, misunderstanding the nature of such a *deditio*, complied on the assumption that putting themselves into Roman ‘faith’ would be a good starting point for negotiating final peace terms, a handsome gesture of trust in Rome. When the consul then began to make peremptory demands, the Aetolian representatives protested in shock, and when the impatient Roman then put them in chains, they were even more shocked. Eventually, the misunderstanding was explained to Glabrio, and he released the Aetolians; negotiations thus failed and hostilities continued for several more years during which no pressure could induce the Aetolians to perform *deditio* once more: they demanded and got exactly defined peace terms, having no trust any longer in Roman ‘faith’ or moderation.⁴³

In 168, on the other hand, a Roman embassy of three senators led by C. Popillius Laenas was sent to intervene in the war between Antiochus IV of Syria and Ptolemy VI of Egypt. The successful Antiochus was in the act of besieging Ptolemy’s capital Alexandria when the Roman ambassadors arrived on the scene. In accordance with Hellenistic diplomatic protocol and his formal friendship with Rome, Antiochus advanced from his camp to meet the approaching ambassadors and hailed them with friendly greetings. He was stunned to be met, not with words of greeting in response, nor with diplomatic talk, but with a blunt demand that he remove his army from Ptolemy’s territories. When, once again in accordance with Hellenistic protocol, he requested some time to meet with his *phili* (friends: in this context officers and advisors) to consider his response, Popillius drew a circle around him in the sand with his staff and required that Antiochus agree to Rome’s demand before stepping out of that circle, or face war with Rome. Antiochus, who knew he could not hope to defeat the Romans in war, caved in, and only then did Popillius greet him as a king and friend of the Roman people.⁴⁴ Since Ptolemy VI was formally an *amicus* of the Roman people, this blunt, arrogant, warlike behaviour could be justified by the Romans and their just-war ideology as defence of a friend; but it was plain to all that it was in fact mere imposition of Roman will, not desiring one Hellenistic state to grow stronger at the expense of another. The real rules of Roman international relations were hereafter plain to all: Rome made demands and all others acceded to those demands or faced Roman military might.

⁴³ Eckstein (1995) on Glabrio and the Aetolians; on *deditio* generally Ziegler (1991); Sordi (1998a).

⁴⁴ Polyb. 29.27.1–10 is the main source; see also e.g. Livy 45.12.3–8; Diod. 31.2; App. Syr. 66.

CHAPTER 11

MILITARY FORCES

NICHOLAS SEKUNDA AND PHILIP DE SOUZA

A. LAND FORCES

Nicholas Sekunda

I. THE AGE OF PHILIP AND ALEXANDER

i. Military demography

In the classical Greek *poleis*, the exclusive nature of citizenship restricted the expansion of armies, while the lack of state finances limited the development of tactical diversity. Mass emancipation into the citizenry had taken place during the archaic period, but during the classical period citizenship became increasingly exclusive. The manpower losses suffered in many states (such as Athens) during the Peloponnesian War were never replaced.

Another factor reducing the size of hoplite forces was the decline in personal wealth evident during the fourth century. Fewer Greeks were able to provide themselves with hoplite weaponry, either for the service of their own state or for mercenary service abroad. In 401 the 10,000 'Cyrean' mercenaries consisted of 10,400 hoplites and only 2,500 peltasts: a proportion of four to one. By 374/3, when Iphicrates was appointed to command the Greek mercenaries assembled for the planned invasion of Egypt, it would seem that the majority of these 'Iphicrateans' were without hoplite equipment.

As the territory of the Macedonian state grew, Philip was able to expand its demographic and financial base. This led to an increase in the size and efficiency of the armed forces, which in turn led to further territorial expansion. It was this dynamic which generated Macedonian military imperialism.¹ This cycle of military imperialism ultimately necessitated the invasion of Asia. In 358 Philip's army numbered 10,000 infantry and 600 horsemen (Diod. Sic. 16.4.3). The expeditionary force Alexander took to Asia in 334 numbered 32,000 foot, including a Macedonian phalanx 12,000 strong, and 5,100 horse. He also left 12,000 foot and 1,500 horse behind in Europe under the command of Antipater.² Colonization of captured

¹ Ellis (1976), (1977).

² Diod. Sic. 17.3–5; Brunt (1976) lxix–lxxxii; Milns (1966).

territories, transfers of populations along Persian lines and the admixture of the Macedonian population all ensured the expansion of the army. Regular pay enabled troops to operate outside the campaigning season, and to become better trained than the armies of neighbouring states. In many ways, the Macedonian forces came to resemble a standing army.

The Roman recruiting base also began to expand dramatically. Following the defeat of, and treaty with, the Latins in 338, the towns of Lanuvium, Aricia, Nomentum, Pedum, Velitrae and Antium were all given Roman citizenship. *Civitas sine suffragio*, citizenship consisting of liability for taxation and military service but without voting rights, was given to the Campanian towns of Capua, Suessula, Cumae and later (in 332) Acerrae, and also to the Volscian towns of Fundi, Formiae and later (in 329) Primum. The Sabines received *civitas sine suffragio* in 290. Land was confiscated from other defeated enemy states and colonized by Roman citizens.³ In all, the land occupied by Roman citizens more than tripled from an original 1,500 sq. km. The size and population of the Roman commonwealth after the Latin Wars has been calculated by the Danish scholar Afzelius.⁴ He estimated the *ager romanus* would have had an area of 5,525 sq. km and a population of 347,300, while allied territories amounted to 2,980 sq. km with a population of 137,100. It was this expansion in military manpower, and in particular the expansion of Rome's alliance system in Campania, which allowed Rome to conquer Samnium, and then the whole Mediterranean world.

The expansion of the Macedonian and Roman manpower bases, which in turn enabled military and territorial expansion, was due to a willingness to extend citizenship and to incorporate allied contingents fully into their military structures. The exclusive nature of citizenship in the contemporary Greek and Italian city-state did not permit this. Similar attempts to transcend the politico-military limitations of the Greek city-state by breaking up the citizenry, mixing populations and colonization had been made previously by the Sicilian tyrants. In Greece Jason of Pherae had tried other methods to make Thessaly a unitary state with a large unified army to which significant allied contingents were added. None of these attempts had met with long-term success, but the successful methods developed by the Roman and Macedonian states did not originate *ab initio*. They represent the successful culmination of a process of politico-military experimentation running parallel in the Balkan and Italian peninsulas.

2. New types of troops

Diodorus (15.44), in a somewhat garbled passage, describes the way in which Iphicrates equipped his Greek mercenaries. Instead of hoplite shields,

³ Harris (1990) 502–3. ⁴ Afzelius (1942) 153.



Figure 11.1 This *oinochoe*, dated 410–400 BC, shows a Greek hoplite in combat with an Achaemenid *takabara* infantryman. Though roughly the same size as the hoplite shield, the *taka* was made of leather and other materials, had a different system of handles, and was distinguished by the crescent cut out of the upper edge of the shield as an aid to visibility. It was this Persian type of *peltē* which Iphicrates borrowed to equip his peltasts.

they carried *peltai* described by Diodorus as *symmetrouς*, which I would understand as meaning ‘of the same size’. Shields of this type were currently in use among Persian infantry (fig. 11.1). The essential difference between the hoplite shield and the *peltē* was neither the size nor the fabric, but rather the shape. The hoplite shield always had a distinctive offset rim, which the *peltē* lacked. This is confirmed by a fragment of Aristotle (498 Rose) which classifies a *peltē* as a shield without a rim. So these troops continued to be called peltasts after their principal defensive weapon, even though they were not javelin men of the traditional peltast type. Iphicrates also increased the length of the spears by half. The hoplite spear was about 8 feet long, so



Figure 11.2 Stone base showing an Athenian cavalryman riding down a Greek infantryman. The infantryman is not armed with a hoplite shield, but with a *pelté* of similar size, distinguished by the crescent cut out of the upper edge of the shield. The scene could commemorate an event which saw Athenian cavalry fight against the Arcadian *peltastikon*, perhaps during the Mantinean campaign of 362.

the spear of the 'Iphicratean peltast' was about 12. He also made the sword about twice as long. Presumably this means that he gave them Greek swords of the standard length, rather than the short swords of the Lacedaemonian type.

Henceforward, when 'peltasts' appear in literary passages or epigraphic documents, it is most likely that they are front-line 'Iphicratean' peltasts. They are, in effect, 'ersatz' hoplites. The peltasts mentioned in a decree of the Arcadian League from Elis are probably of this type, as may be the Mantinean *peltastikon* mentioned by Lucian and the force of 1,000 select Phocians 'called peltasts' raised by Philomelus in 355.⁵ Representations of this new kind of troop are unfortunately rare (fig. 11.2).⁶

⁵ Elis: *SEG* xxii 339; cf. *SEG* xxix 405; Mantinea: Lucian, *Dial. Mort.* 12(14).2; Phocians: Diod. Sic. 16.24.2; cf. 25.1.

⁶ Sekunda (1994a) nos. 204–6.

In 359 Philip II found himself with a large force of infantry, but without the resources to equip them as hoplites. It was at this point that Philip created the 'Macedonian phalanx'. They were equipped with helmets, *peltai*, greaves and sarissas.⁷ My interpretation is that he equipped his infantry as 'Iphicratean peltasts'. Few modern historians have given sufficient credit to the reforms of Iphicrates as being the inspiration for Philip's innovations.⁸ The sources describe the equipment and training programme introduced by Philip over the winter of 359–358. This was an emergency measure, not an evolutionary reform stretching over a number of years. As state finances improved, it seems that part of the Macedonian phalanx was given heavier equipment (see below).

Sarissa seems to be a Macedonian word applied to the spear in general.⁹ As was universally the case with pikes in sixteenth-century Europe, the Macedonian sarissa had a shaft of ash and a small iron head.¹⁰ Later, the sarissa was to reach enormous lengths.¹¹ Polyaenus (*Strat.* 2.29.2) mentions sarissas 24 feet (16 cubits) long, but those introduced to the Macedonian phalanx by Philip could have been about the same size as the 'Iphicratean' pike. Indeed, Aelian (*Tact.* 12) recommends that sarissas should be no shorter than 8 cubits (12 feet). The sarissa was designed exclusively as an infantry weapon. Cavalry under Alexander and the Successors used a cavalry spear called a *xyston*.¹² At the beginning of Alexander's reign some of the scout cavalry units are termed *sarissophoroi*.¹³ Like the mounted pikemen which appear fleetingly in seventeenth-century European armies, these units seem to represent an experiment. Perhaps they were equipped with infantry pikes to 'fix' the enemy cavalry and keep them at bay. They are last attested in 329 (*Arr. Anab.* 4.4.6).

The phalanx was augmented by mercenaries and allied contingents, not only Greek hoplites, but also specialized troops. We hear of Agrarian light infantry, trained to fight alongside the cavalry like *hamippoi*, and of Thracian scout cavalry (*prodromoi*). The Balkan peoples supplied missile troops. The Cretan archers in Philip and Alexander's army were probably mercenaries. It is possible that the 2,000 cavalry (Diod. Sic. 16.85.6) at whose head Alexander delivered the decisive charge at the battle of Chaeronea were Thessalian. The Companions may have only emerged as a significant force in the first years of Alexander's reign.

At first, the term 'Companion' seems to have been a court title. The Companion's characteristic long-sleeved purple tunic was a direct borrowing

⁷ Polyaenus, *Strat.* 4.2.10; Diod. Sic. 16.3.1–2; Frontin. *Str.* 4.1.6; Hammond (1980a).

⁸ But cf. Anderson (1970) 131, 306. ⁹ Cf. Noguera (1999).

¹⁰ Sekunda (2001b). The sarissa has generated a plethora of speculative articles which need to be read with great caution. In addition to the works listed in O'Brien (1992) 307–10, see Mixter (1992); Manti (1992), (1994); Devine (1996).

¹¹ Lumpkin (1975) 197; Mixter (1992).

¹² Plut. *Alex.* 16.11; *Arr. Anab.* 1.15.5–8, 16.1.

¹³ Brunt (1976) lxxx; Sekunda (1984) 20.

from the Persian King's 'Friends'. According to Anaximenes (*FGrH* 72 F4), a certain Alexander 'made the most renowned men accustomed to serving as cavalry and gave them the name of *hetairoi*'. Under Philip there were 600 Companions (Theopompus *FGrH* 115 F225).¹⁴ The number was later expanded by successive grants of estates of sufficient size to guarantee the wealth to raise horses. Alexander III is alleged to have alienated nearly all crown lands to the Companions prior to the Asian campaign (Plut. *Alex.* 15.3–4).

The prominent role played by Thessalians in early Macedonian military affairs can be paralleled with the reliance which Rome placed on Campanian allied horse. Campania was a major source of mercenary cavalry to all armies of the western Mediterranean. Campanian cavalry are first recorded fighting for the Athenians in Sicily in 414, and were a constant feature of Sicilian warfare during the Hellenistic period.¹⁵ In the fourth century, the Campanian cities became particularly important for the cavalry they supplied to Rome. In 340, 1,600 Campanian *equites* were granted Roman citizenship as a reward for their loyalty to Rome, and the Capuans were forced to provide each cavalryman with 450 *denarii* to pay for the upkeep of their horses (Livy 8.11.16). Later on, Capua could mobilize 4,000 cavalry and 30,000 infantry (Livy 23.5.5): 'such a high ratio of cavalry was rarely achieved by Greek armies and never by Roman ones'.¹⁶

3. Alexander's army

The literature dealing with all aspects of the military conquests of Alexander is vast and growing constantly. Articles dealing with questions such as the evolution of individual regiments, for example the Argyraspides, abound. Some aspects of Alexander's military arrangements, such as his logistics, have been studied in detail.¹⁷ The organization of the army is reasonably clear, especially at the outset of the Persian expedition, although the restructuring of the army later in Alexander's reign is still poorly understood.¹⁸

The building block of the Macedonian infantry was the file, called a *dekas* – clearly once of ten men. Later, the *dekas* expanded to sixteen, in line with standard Greek practice. Each *dekas* was commanded by a *dekadarchos* in the front rank. It split into two half-files, the second half-file being

¹⁴ Cf. Develin (1985). ¹⁵ Frederiksen (1968) 12–13; Nicolet (1962) 515–16.

¹⁶ Frederiksen (1968) 7.

¹⁷ The bibliography of works dealing with Alexandrine military matters given in O'Brien (1992) 307–10 is extremely useful. In general I have avoided duplicating this bibliography except for additional titles and works referred to directly. On the *argyraspides*, see Lock (1977); Anson (1981); Hammond (1984a); Foulon (1996a), (1996b). On logistics, see Engels (1978) but cf. the criticisms of Devine (1979); Cawkwell (1980); Hammond (1980b); Foxhall and Forbes (1982) 80. The problem is dealt with at further length in Hammond (1983a).

¹⁸ Brunt (1983) 483–90.

commanded by a *dimoirites* ‘double-pay man’ standing in the ninth rank. The rear of each half-file was brought up by two *dekastateroi* ‘ten-stater-men’ in the eighth and sixteenth ranks. The infantry *lochos* (company) of 512 men comprised thirty-two files and occupied a frontage of thirty-two paces. In open order it advanced in double files (thirty-two deep) occupying two paces each, whilst in normal order it advanced in files of sixteen each occupying a frontage of a pace. In close order, the rear half-file inserted itself between the front half-files, and each man was squeezed into a frontage of a cubit. The Macedonian infantry comprised the Hypaspists (*hypaspistai*) and Foot Companions (*pezetairoi*). The 9,000 Foot Companions were organized on a territorial basis into six *taxeis*, each of three *lochoi*. Some *taxeis* were termed *asthetairoi*, though the significance of this term is uncertain.¹⁹ The 3,000 Hypaspists were divided into three *chiliarchiai* (units of a thousand men), each of two *lochoi*.²⁰

Macedonian cavalry was organized into the *ilē* (squadron) of 200 men divided into four *tetrarchiai*. My calculations are based on the statement that the eight squadrons of the Companion cavalry numbered 1,800 (Diod. Sic. 17.17.4), and allow for a double-strength Royal Squadron, numbering 400 like the Antigonid court cavalry mentioned in Polybius (4.67.6). Arrian (*Anab.* 1.18.1.) mentions a unit of 200 Companions. The *tetrarchia* is mentioned at Arrian, *Anabasis* 3.18.5. Burn assumed it to be ‘evidently more than one squadron’, whereas I took it to be a quarter of a squadron, as does Hatzopoulos.²¹ The *ilē* would have to be divided into smaller sub-units to manoeuvre effectively. A variable number of *ilai* were grouped into *hipparchiai* (brigades). In the later part of the reign the Companion cavalry was also grouped into hipparchies, although the details of this reorganization are unclear.

Each fifty-man *tetrarchia* was arrayed in wedge formation, borrowed by Philip from the Thracians and Scythians (Arr. *Tact.* 16.6), presumably after facing it in battle (fig. 11.3). Earlier Thessalians had used a rhomboid formation, which Jason of Pherae had devised (Arr. *Tact.* 16.3). The essence of cavalry tactics is the ability to manoeuvre: to change the axis of attack quickly without disrupting the formation, in order to deliver a rapid and decisive attack to whatever weak point the enemy line develops in battle. The fluid, non-linear cavalry formations so typical of steppe peoples from the Scythians onwards were perfectly suited to the role cavalry played in Alexander’s battle plan. The linear formations adopted by earlier Greek cavalry only allowed the cavalry to advance and wheel with difficulty. The adoption of the wedge formation by the *tetrarchia* brought cavalry to the fore as the striking force of Alexander’s army.

¹⁹ Noguera Borel (1997). ²⁰ Milns (1976); Sekunda (1984).

²¹ Brunt (1976) 285 n. 6; Sekunda (1984) 14; Hatzopoulos (2001) 38.

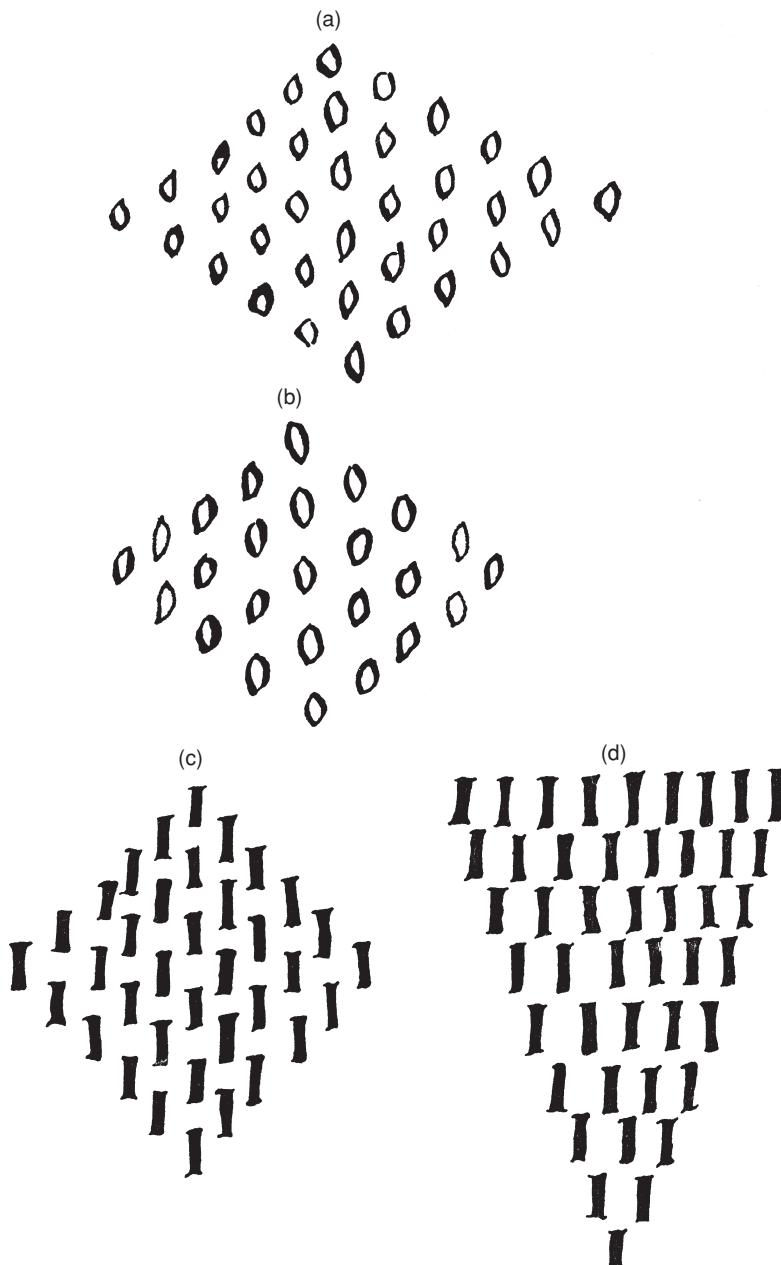


Figure 11.3 Diagrams of the rhomboid and wedge cavalry formations copied from ancient tactical manuscripts. (a)–(c) show rhomboid formations drawn up by file but not by rank, while (d) shows a wedge drawn up by rank but not by file.

In a series of army reforms introduced in Sittacene, Mesopotamia, soon after the battle of Gaugamela, Alexander divided his cavalry *ilai* into two *lochoi* (Arr. *Anab.* 3.16.11). Later in the reign, we hear of provisions being distributed by *ilê* and ‘hundred’ (*hekastostys*): an alternative title for the cavalry *lochos* and so confirming the strength of the *ilê* as 200 (Arr. *Anab.* 6.27.6, 7.24.4). The organization of the infantry was also standardized, the chiliarchy of two *lochoi* becoming the unit for both the phalanx and Hypaspists.²²

Towards the end of his reign Alexander attempted an interesting experiment with his infantry, creating a ‘mixed’ phalanx of Macedonian pikemen and Persian missile troops (Arr. *Anab.* 7.23.3–4). Macedonians occupied the first three and the rear rank of each *dekas*, while the twelve ranks between were filled out with Persians armed with bows or javelins. The Persians numbered ‘about’ 20,000, so there would have been ‘about’ 6,500 Macedonians. This would have been sufficient to form a phalanx of ‘about’ fifty-three ‘mixed’ *lochoi*. Xenophon described a similar ‘mixed’ infantry formation in his *Cyropaedia* (6.3.23), with troops equipped with cuirasses in the first ranks, then javelin men, and finally archers in the rear. Intriguingly, the Persians in both Xenophon’s and Alexander’s ‘mixed’ phalanx include javelin men, not a traditional Persian speciality. It may be that Xenophon was describing a fourth-century Persian experiment, which was also known and implemented by Alexander. But just as likely, Alexander took his inspiration from reading Xenophon.

In contrast to the structures of the army, we still lack a reasonable picture of how the various branches of the army were equipped. Without this, it is difficult to be sure how Alexander’s combined-arms tactics worked in detail. It is clear that the army created by Philip in 359/8 was quite different from the force inherited by Alexander. As resources increased, part at least of the phalanx appears to have been issued with heavier equipment. The Alexander Sarcophagus shows Macedonian infantry armed with hoplite shields and cuirasses, and it is clear from the literary sources that different battalions of the phalanx were armed with different types of armour. The Hypaspists seem to have been more lightly equipped than the main body of the phalanx, and acted as a mobile link between it and the main striking force of cavalry operating on the right flank.²³

II. THE SUCCESSOR ERA

i. Military demography

The degree to which casualties, recruitment and settlement abroad depleted the Macedonian demographic base and its future potential is

²² Curt. 5.2.3; Daniel (1992); Hatzopoulos (1996) 443–60.

²³ Sekunda (1984).

disputed.²⁴ Macedon remained the only Hellenistic kingdom with an already existing manpower base. Military and physical training was carried out in *gymnasia*, and the phalanx continued to be mobilized by territorial division and by age-class in time of war. Military obligation existed up to the age of fifty-five.²⁵

The other Successor kingdoms had no recruiting base for the Greco-Macedonian phalanx, and these had to be created. Papyrological evidence from Ptolemaic Egypt elucidates the system of colonization. As discussed in Chapter 14 in this volume, colonists (*kleruchoi*) of Macedonian, Greek and other nationalities were settled in the Arsinoite nome near the Delta.²⁶ In return for the land grant, the cleruch was liable for service in time of war. His heir was liable to physical and military training in the *gymnasia* which the Ptolemies founded throughout Egypt, and took on the liability for military service when he inherited the *kleros*.²⁷ Land grants began in the reign of Ptolemy I Soter, and were especially common during the reign of Ptolemy II Philadelphus. Part of the defeated army of Perdiccas may have been settled on *kleroi* as early as 321, as the 8,000 prisoners taken at the battle of Gaza in 312 certainly were.²⁸ The system worked well for a generation, for the cleruchic army took part in the invasion of Syria during the First Syrian War of 274–271. During the major mobilization of 219 prior to the Fourth Syrian War, the Ptolemaic generals Agathocles and Sosibius found it necessary to reorganize the army completely, though they were still able to constitute forces of 700 ‘Household’ cavalry, an infantry *agema* (an élite ‘vanguard’ regiment) numbering 3,000, perhaps 2,000 peltasts, a phalanx perhaps numbering as much as 25,000, plus 4,000 descendants of Thracians and Gauls from among the *kleruchoi* (Polyb. 5.64–5).

The situation in the Seleucid kingdom is less well understood. Seleucus had ended up with the élite cavalry regiments of Alexander’s army: two Iranian regiments, the *agema* and Nisaean, together with the Companions, as well as the Argyraspides or ‘silver-shields’. These units retained their regimental identities down to the second century. The phalanx seems to have been recruited from a class of ‘Macedonian’ citizens. These are presumably descendants of Macedonian troops settled in colonies in Asia.²⁹ It has been argued that the Argyraspides was a permanently embodied regiment through which the young men passed for training. They were then placed in a reserve which formed the main body of the phalanx in time of war.³⁰ It has also been argued that a system of ‘military settlements’, called *katoikiai*, existed, as in Egypt, in which the citizen-soldiers were settled in return for

²⁴ Brunt (1976) 526–32; Bosworth (1986); Hammond (1989b).

²⁵ Gauthier and Hatzopoulos (1993); Hatzopoulos (2001) 34.

²⁶ Lévéque (1968) 265–6. ²⁷ Launey (1949–50) II.836–74; Crawford (1971) 55–85.

²⁸ Diod. Sic. 19.85.4; Bevan (1927) 40; Griffith (1935) 116; Bagnall (1984).

²⁹ Listed in Cohen (1995); Billows (1995a) 179–82. ³⁰ Bar-Kochva (1976) 59–62.

an obligation to perform military service, but the surviving evidence does not support this view.³¹

The systems implemented by the various Hellenistic kingdoms to create pools of settler-citizen-soldiers were limited by the extent of crown land available for alienation. New land ceased to become available through conquest, and it became increasingly difficult to expand the system beyond its existing territorial and numerical limits. In Egypt extensive engineering work was carried out during the reigns of Philadelphus and Euergetes I to reclaim land in the Fayyum for cleruchic settlements. This was part of a general effort to increase crown land, but such efforts could hardly guarantee a dynamic increase in the settler-citizen-soldier demographic base. During the third century the manpower resources available to the Hellenistic monarchies stabilized, and in the case of Egypt at least, decreased.

The only other path open to the Hellenistic monarchs was to recruit troops from among their native populations. The Seleucid army at Magnesia was truly multi-national. We have no evidence, however, that the Seleucids ever admitted orientals into the phalanx: they fought in other units. The Ptolemies made use of Egyptian troops from the beginning, and prior to the battle of Raphia they were trained as phalangites. Increasing use was made of native troops throughout the second and first centuries. This was an experiment with dangerous consequences. According to Polybius (5.107.1–3), the victory at Raphia was immediately followed by the first of a series of Egyptian revolts, which he attributes directly to the arming of the Egyptians for the battle.³²

The smaller states of the Greek world continued to give military training to their young men. The men of military age were generally called *neaniskoi*, which replaced the classical *neotas*, though *neoi* was also used and *neaniskoi* could be used for other classes of young males.³³ In the political convulsions of the late third and early second centuries, the *neoi* were particularly susceptible to politicization. We find the *neoi* standing against the rest of the citizen-body in a number of states. Even the smaller independent city-states of Anatolia continued to give military training to their citizens, and supplied auxiliary contingents to the armies of the Hellenistic kingdoms and Rome.³⁴ Military affairs were placed in the hands of a college of *strategoi* or *polemarchoi*.³⁵ So the battle line of an allied army might consist of numerous contingents all equipped quite differently.

In contrast, the population base of Rome continued to expand. By 264, the *ager romanus* had quintupled to 26,805 sq. km, supporting a population of around 900,000.³⁶ Polybius estimated that in 225 the total number of

³¹ Launey (1949) 336; Cohen (1978); Griffith (1935) 153–61. The Anatolian *katoikiae* have been most recently discussed in Schuler (1998) 33–41. See also Cohen (1995); Briant (1978) 86.

³² Griffith (1935) 112–13. ³³ Sacco (1979); cf. Roesch (1982) 323–46.

³⁴ Ma (2000) 357; Sion-Jenkins (2001) 33. ³⁵ Baker (2001) 65. ³⁶ Afzelius (1942) 192.

Romans and allies able to bear arms was 700,000 foot and 70,000 horse. De Sanctis, followed by Brunt, has calculated that at the period of her maximum effort during the Second Punic War in 212 the Romans were able to field around 80,000 citizens in twenty-five legions. Statistics gathered by Afzelius (with Brunt's corrections) demonstrate that, from 200 down to 168, Rome rarely had a force of less than 100,000 men mobilized, and normally fielded eight legions. Where statistics are known over the same period, there were over 6,500 Italian allies per legion. The allies generally furnished separate contingents as well as units serving with the legions.³⁷ Each year the allied communities supplied the consuls with a list of their *iuniores*, regularly updated. The total requirement for allied numbers was divided equally between the allies, so all communities were obliged to levy the same percentage of their *iuniores*.³⁸

The disparity between the manpower reserves available to Rome and to any Hellenistic monarch had profound influence on the way in which the opponents made war. Roman commanders could risk defeat in battle since a second army could always be levied in place of the first. The total size and relative dynamism of the manpower reserve of the heavy infantry main force was particularly important, for this element suffered disproportionately heavy casualties in defeat. In major campaigns the Hellenistic monarchs mobilized a large proportion of their 'citizen' manpower pool to field as large a phalanx as possible, the phalanx now being the principal force on the battlefield. If a major defeat was suffered, the manpower base was crippled for a whole generation. Hence, the pitched battle was an all-or-nothing affair, and this could sometimes induce an air of over-caution in command.

2. *The Hellenistic phalanx*

Both the empire and the army of Alexander were divided up among his Successors, so all Hellenistic armies tended to have similar systems of organization. Hellenistic infantry retained the file of sixteen men, which, despite its number, retained the traditional title of a 'ten' (*dekas*) commanded by a decurion bearing some title such as *dekadarchēs*. Thirty-two files formed a pike-block of 512 men, termed a *lochos* as in the early days of Alexander's reign, or a *speira* in the Antigonid army.³⁹ A unit of this size was commanded by a *pentakosiarchos* in the Ptolemaic army. In the winter of 331/30 Alexander had reorganized the infantry into *chiliarchiai* with an establishment strength of 1,024 men commanded by a *chiliarchos*.⁴⁰ The rank of *chiliarchos* survived in the Ptolemaic and Antigonid armies. One term which changes

³⁷ Baronowski (1993). ³⁸ Baronowski (1984) 248–52.

³⁹ Le Bohec (1993) 300–1; Hatzopoulos (2001) 76–80.

⁴⁰ Hatzopoulos (1996) 443–60.

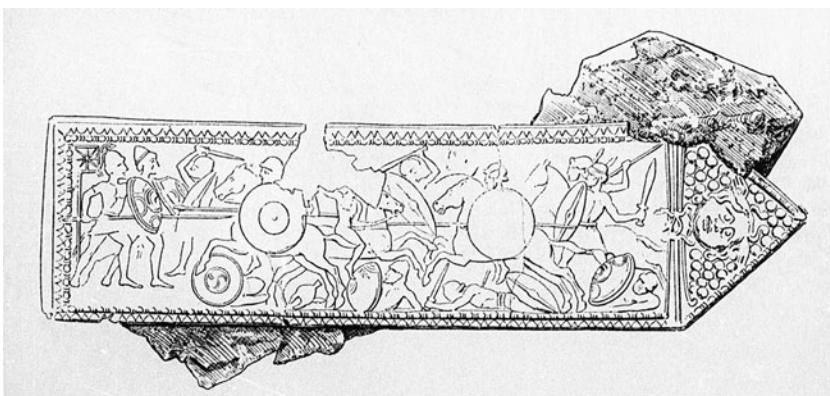


Figure 11.4 A bronze strip, 24 cm long and found at Pergamum, shows infantry equipped with the larger type of Macedonian shield, long spears, helmets and cuirasses fighting an enemy force consisting of infantry of *thureophoros* type and cavalry with helmets and large round shields. The enemy could be Galatians. It is possible that a standard is being shown at the extreme left of the scene. If so this would be a unique indication that Macedonian infantry formations used standards before the reforms of the 160s BC.

in meaning is *lochos*. It regularly continued to be used for the infantry company or battalion during the third and second centuries. During the second century it changes its meaning and is henceforth used of the file. This is how it is used in the *Tactica*, which start to be written in the early first century.

Modern literature dealing with the equipment of the Hellenistic phalanx is complex in the extreme, and opinions differ wildly. What follows is a personal view. Most historians believe that the Macedonian phalanx was equipped with small shields for two reasons. The first is an assumption that the sarissa could not be held at the same time as a large shield. The second is a statement by Asclepiodotus (5.1) that the best shield which can be used by the phalanx is 'the Macedonian bronze shield of eight palms' width and not too concave'. The majority of representations show Macedonian shields measuring about 80 cm across, deeply concave, but without the rim of the hoplite shield (fig. 11.4).⁴¹ So there were at least two sizes of Macedonian shields.⁴² This conclusion has been confirmed by three recent finds of bronze shields in Macedon, with diameters of 74, 73.6 and 66 cm.⁴³ Asclepiodotus is describing the smaller type of Macedonian shield, an example of which (with a diameter of 65–7 cm) was discovered at Pergamum.⁴⁴ So the Hellenistic phalanx included two types of troops carrying different types of shields. Both types of shield could be decorated with 'Macedonian'

⁴¹ Anderson (1976). ⁴² Though cf. Markle (1999) who would have more.

⁴³ Pandermalis (2000) xxi. ⁴⁴ Hammond (1996); Sekunda (1994a) 193 no. 219.



Figure 11.5 This representation of a Macedonian heavy infantryman shown on the Monument of Aemilius Paullus in Delphi may show the inside of the larger type of Macedonian shield. The handle arrangements are similar to those of a hoplite shield, in which case it is difficult to imagine how the sarissa was held with both hands.

embossed designs, and the central field was often surrounded with the name of the king.

The larger shields were carried by heavily armoured infantrymen, still called hoplites, wearing helmets, cuirasses and greaves. The inside of a shield of this type is shown on the Aemilius Paullus monument from Delphi (fig. 11.5).⁴⁵ It seemingly shows the shield being held by one loop handle attached to the edge of the bowl inside the shield. Presumably the forearm was first passed through another loop handle, which is not shown in the sculpture. In 228 Cleomenes III of Sparta was able to form a phalanx of 4,000 hoplites, holding a sarissa in both hands and carrying their shields (*aspides*) by an *ochanê* (strap) rather than the hoplite shield's *porpax* (Plut. *Cleom.* 11.2). This is presumably the same handle arrangement as that shown on the Aemilius Paullus monument. Experimental archaeology has shown that it is possible to use shields of this type in conjunction with a 5.8 m long sarissa carried underarm.⁴⁶

Regiments were frequently given a title relating to the colour of their shields. Hatzopoulos (2001: 75) suggested that the main body of the Antigonid phalanx consisted of two regiments: the Chalcaspides 'Bronze-shields' and the Leucaspides 'White-shields', each with a maximum strength of 12,000 men. A member of the Leucaspides regiment is possibly shown in one of the Agios Athanasios friezes, and a regiment of Tarentine Leucaspides is mentioned at the battle of Asculum in 279.⁴⁷ Cleomenes created a second

⁴⁵ Kähler (1965) taf. 10. ⁴⁶ Connolly (2000a) 112.

⁴⁷ Tsibidou-Avloniti (2002) pl. 23 B; Dion. Hal. 20.1.2–4.

Lacedaemonian phalanx by arming 2,000 freed Helots ‘in Macedonian fashion as a counter to the Leucaspides’ (Plut. *Cleom.* 23.1). The Seleucid army contained the famous Argyraspides inherited from the army of Alexander the Great. These were presumably troops armed with the larger type of shield. A Seleucid regiment of Chalcaspides also features in the Daphnae parade in 166. The text of Polybius describing the parade is defective, and the text has been restored by Kaibel to make reference to a further Seleucid regiment of Chrysaspides ‘Gold-shields’, but the supporting evidence for this is flimsy.⁴⁸ The Pontic army also included a regiment of Chalcaspides, who are described as advancing into battle with sarissas and locked shields (Plut. *Sull.* 16.7).

The smaller type of shield, called a *peltē*, was carried by other regiments of the phalanx called peltasts or *peltophoroi*. These inherited the equipment of the ‘Iphicratean peltast’. Asclepiodotus (*Tact.* 1.2) defines peltasts as lying between ‘hoplites’ (with their shields of the largest type, cuirasses, greaves and long spears of Macedonian type), and missile troops, because their *peltai* were smaller and lighter, and their spears were much shorter. Hatzopoulos identifies a warrior shown on a grave-stele from Idomene carrying a small shield as well as a helmet and cuirass as a peltast.⁴⁹ So peltasts may have also been equipped with cuirasses and helmets. Nepos (II.1–2) records that Iphicrates gave his peltasts linen cuirasses. Sometimes, however, the peltasts operated without body armour (fig. II.6). They should not be confused with the other regiments of the phalanx (as Foulon 1996a, 1996b does). Hatzopoulos has suggested that the Antigonid army fielded 5,000 peltasts of whom 2,000 comprised the *agema*.⁵⁰ The Ptolemaic army at Raphia included 2,000 peltasts commanded by Socrates the Boeotian (*Polyb.* 5.65.2). Hiero of Syracuse sent 1,000 peltasts to help the Romans against Hannibal (*Polyb.* 3.75.7). The Seleucid army had at least 10,000 peltasts during the Bactrian campaign of Antiochus the Great in 208. Livy (37.40.14) mentions 4,000 peltasts, or *caetrati*, at Magnesia: Pisidians, Pamphylians and Lycians. Philetaerus of Pergamum gave 600 bronze *peltai* to Cyme, fifty for each tribe, and the Cymaeans wrote the name Philetaerus on them.⁵¹

3. *Thureophoroi*

In the early third century, a third type of infantryman appears, the *thureophorus*, named after the oval *thureos* shield.⁵² *Thureos* means ‘door’, and is presumably a nickname given to the shield on account of its size. It was oval in shape, but its name has often resulted in it being mis-translated

⁴⁸ Sekunda (1994b) 14–15.

⁴⁹ Hatzopoulos (2001) 71.

⁵⁰ Hatzopoulos (2001) 66–9.

⁵¹ Manganaro (2000).

⁵² Domaradzki (1977).

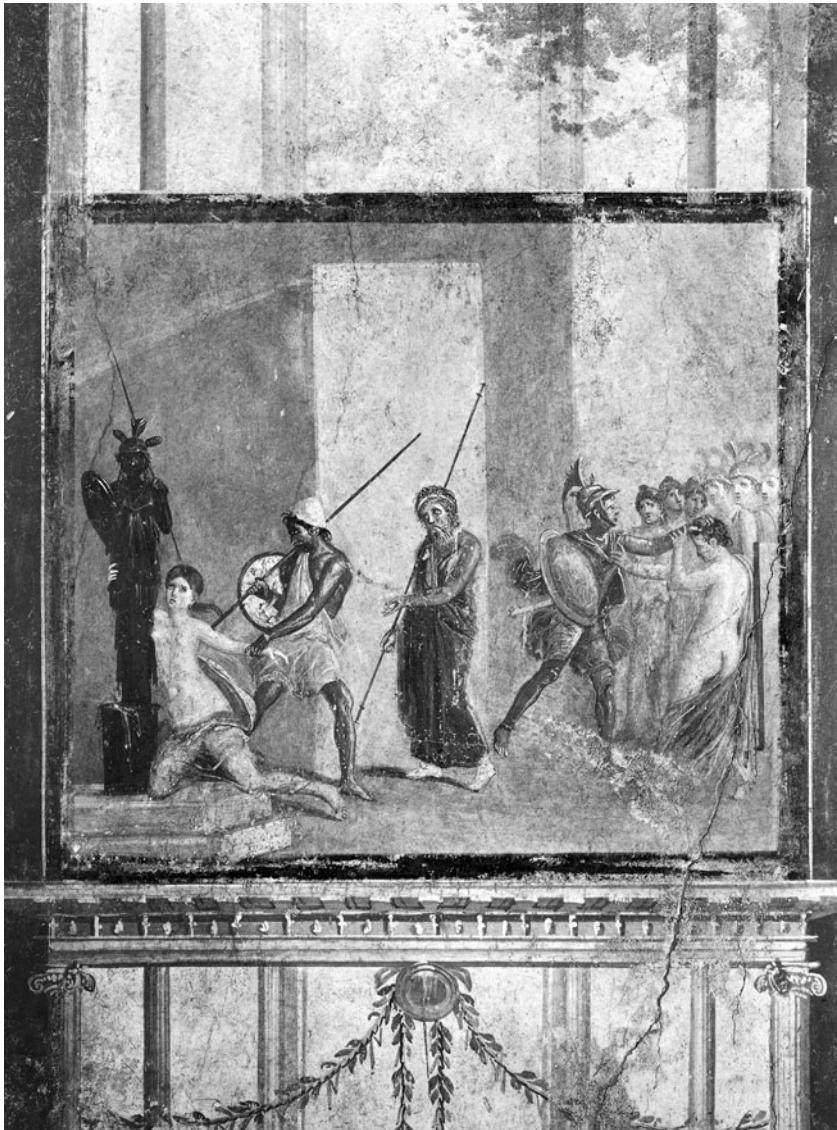


Figure 11.6 Pompeian copy of a Hellenistic painting showing the fall of Troy, possibly by Theoros of Samos, who is known to have painted the portrait of king Demetrios and the Trojan War in a cycle of paintings (Plin. *HN* 35.135). The figure on the left may show the young Antigonus Gonatas in the guise of Menelaus. The figure of Ajax on the right is equipped as a Hellenistic peltast, this time without a cuirass. His physiognomy could likewise be based on a figure of the Antigonid court. House of the Menander, Pompeii I 10, 4, exedra 23.

as 'oblong shield'. Couissin (1932: 77), then Maule and Smith suggested the *thureos* was first employed in Hellenistic armies after the Italian campaigns of Pyrrhus, borrowed from the *scutum* of his Oscan allies and Roman enemies.⁵³ Alternatively, the Galatian invasions of 281 onwards may have brought the new type of shield into Hellenistic armies.⁵⁴ Gauls and Galatians were renowned for their charge with sword and *thureos*, though they also used missile weapons.⁵⁵

The *thureophoros* was better suited to the tactical needs of many smaller Greek armies than was the less mobile phalangite.⁵⁶ The chief function of these armies was defence of border areas. The *thureophoros* could move more rapidly over more varied terrain than the phalangite. The size of the *thureos* used by Greek armies was noticeably smaller than its Celtic or Roman counterparts, and the *thureoi* of Achaean League troops were too narrow to fully protect the body (Plut. *Phil.* 9.1). This can be explained by the need to increase mobility. The *thureophoroi* could fight both at a distance with their javelins, and at close quarters relying on their *thureoi*, although close-up they were at a disadvantage when facing more heavily armed troops (Plut. *Phil.* 9.1). So the *neaniskoi* of many Greek states would be trained as *thureophoroi*. In a number of Greek states, the *thureomachia*, combat with swords and *thureoi*, was introduced into the range of athletic competitions. It is depicted on a number of Hellenistic terracottas (fig. 11.7).⁵⁷ Many other terracottas show Greek *neaniskoi*, not Galatians as is sometimes supposed, holding *thureoi*. The *thureos* is also attested at Carthage.⁵⁸ *Thureoi* may have been used by native Carthaginian troops, as well as by Celtic and Iberian mercenaries. The *thureos* was adopted by both the Achaean and Boeotian Leagues, presumably during the 270s.

Boeotian funerary monuments of the second quarter of the third century show *thureoi* and Boeotian helmets (fig. 11.8).⁵⁹ Later in the third century the Boeotian infantry were re-equipped as *peltophoroi* at an uncertain date.⁶⁰ Feyel suggested 245, connecting the reform with the defeat inflicted by the Aetolians at Chaeronea (Plut. *Arat.* 16.1).⁶¹ The Boeotian *neaniskoi* were trained to use a bow and javelin as well as in the manoeuvres of heavy infantry.⁶² This was the case in other Hellenistic armies, the Athenian ([Arist.] *Ath. Pol.* 42.3) and Macedonian (Gauthier and Hatzopoulos 1993: 20) for example. The army was under the overall command of the college of Boeotarchs.⁶³ The cities of the league were divided into seven military districts. Apart from its infantry contingent, each district had to supply four

⁵³ Maule and Smith (1959) 6. ⁵⁴ Eg. Santosuoso (1997) 149; Ma (2000) 354.

⁵⁵ Zhmodikov (2000) 73. ⁵⁶ Ma (2000) 357.

⁵⁷ Hausmann (1983) tav. lii, 6–7. ⁵⁸ Maule and Smith (1959) 52 n. 144.

⁵⁹ Fraser-Rönne (1957) pls. 1.1, 2.4; von Bothmer (1961) no. 109.

⁶⁰ Roesch (1982) 352–4. ⁶¹ Feyel (1942) 194.

⁶² Roesch (1982) 307–54. ⁶³ Knoepfler (2000).



Figure 11.7 Terracotta group in Berlin showing two ephebes, from a Greek city of Asia Minor, competing in the *thureomachia*. The terracotta was supposedly found at Pergamum. Representations of Greek *thureophoroi* have often been wrongly identified as Galatians.



Figure 11.8 Tombstone of Eubolos from Tanagra c. 275–250 bc. The two *thureoi* and the Boeotian helmet shown in the pediment reflect the contemporary equipment of the infantry of the Boeotian League as *thureophoroi*.

squadrons of cavalry, each commanded by an *ilarchos*, under the command of a *hipparch*.⁶⁴

Achaean infantry also abandoned the *thureos* and adopted Macedonian equipment, but in stages.⁶⁵ Prior to the battle of Sellasia in 222 Megalopolis

⁶⁴ Roesch (1979); Corsten (1999) 43–7. ⁶⁵ Anderson (1967).

received a gift of 1,000 bronze shields from Antigonus Doson. They fielded a contingent of *epilektoi*, 'picked troops', armed as *chalkaspides* for the army of the Achaean League.⁶⁶ The contingents of the other Achaean League cities were equipped as *thureophoroi* until 207 when Philopoemen equipped at least part of them with shields, sarissas, helmets, breastplates and greaves.⁶⁷ Later, we hear of Achaean *peltophoroi* (*caetrati*) at the battle of Magnesia in 190 (Livy 37.39.9). The following year, Ptolemy V sent a gift of 6,000 bronze peltast panoplies to the Achaean League, enabling them to extend their force of *peltophoroi* (Polyb. 22.9.3). Achaean peltasts are again mentioned in 182 (Polyb. 23.16.10). In 209 Philopoemen reformed the league cavalry. From the description in Polybius (10.23.4) we learn that the league cavalry was divided into *hipparchiae* and *ilai*, as in Boeotia, and that the *ilé* was further divided into *oulamoi*. The cavalry file is here already called a *lochos*, and a double file a *dilochia*.

4. Mercenaries

The 'citizen-phalanx' was the key element in Hellenistic military systems, forming the core of most Hellenistic armies. The view that Hellenistic armies were mainly composed of mercenaries is now seen as misleading.⁶⁸ Nevertheless, peacetime Hellenistic standing armies were indeed composed of mercenaries, often dispersed in garrisons. There seems to be no difference in meaning between *xenoi*, *mistophoroi* or other related terms used to describe mercenaries.⁶⁹ The remuneration of such mercenaries took two forms. Pay was given in cash (*opsonion*, *misthos*), while rations (*sitos*, *metrema*) could be paid in kind, or partly or wholly in cash.⁷⁰

Hellenistic armies relied on mercenaries to supply specialist units to supplement the main force, such as light infantry (*euzonoi*). Cretan archers, able to fight at close quarters thanks to their bronze *peltai*, as well as at a distance with their bow, were highly valued.⁷¹ Hellenistic armies sought to enlist contingents of Cretans and formed units of troops 'equipped in the Cretan manner' to supplement them, such as that fielded by Antiochus III at Magnesia.⁷² Units of mercenary light infantry were especially suited for plundering since the main body had to stay in close order while on the march to confront any counterattack.⁷³ In 219 some of the Cretan mercenaries serving in the Antigonid army were captured, having left the ranks in search of plunder (Polyb. 4.68.3). Mercenaries might hand over all the booty they had taken in return for regular pay.⁷⁴

⁶⁶ Polyb. 2.65.3, 4.69.4–5, 5.91.6–8. ⁶⁷ Plut. *Phil.* 9.2; cf. Polyaenus, *Strat.* 6.4.3; Paus. 8.50.1.

⁶⁸ Griffith (1935) *passim*; Lévéque (1968) 262. ⁶⁹ Foulon (1995). ⁷⁰ Garlan (1984) 355.

⁷¹ Sekunda (2001) 20–1. ⁷² Livy 37.40.13; App. *Syr.* 32.

⁷³ Krasilnikoff (1992) 27–8. ⁷⁴ Krasilnikoff (1992) 30.

Mercenaries were recruited in two ways. The first was by direct individual recruitment. Such units formed the standing mercenary regiments manning garrisons during peace and providing specialist units in time of war. We hear of regiments of Cretan archers maintained by the various kings, which would be composed of Cretans recruited from any number of different states of the island. The strength of these units could be 'topped up' by recruitment on the 'open market', and also by recruiting drives undertaken on the island with the permission of as many states as could be persuaded to give it. 'Retained' mercenary units such as these 'belonged' solely to the monarch, who was responsible for their pay, equipment, training etc.

A force of mercenaries might otherwise be recruited by virtue of a treaty of alliance (*symmachia*) with a specific city or nation.⁷⁵ These treaties contained clauses outlining the circumstances under which the king could ask the second party to send a military contingent, and detailing the service conditions, including pay, which would be in force during the period of service. The agreement could be concluded immediately on the eve of war, or took the form of a standing treaty. Treaties of the latter type have been preserved in Cretan inscriptions. The formation raised, generally termed a 'symmachic contingent', was properly an allied contingent, under the command of the king to whom it had been 'leased'. It has been suggested that Hellenistic policy was often aimed at controlling territory which could supply contingents of mercenaries, or, more often, guaranteeing access to a recruitment area of valuable mercenaries.⁷⁶

The Carthaginians relied heavily on mercenaries. Polybius (6.52.4) believed the Roman army was superior to the Carthaginian because Rome fielded armies of citizens while Carthage employed foreign mercenaries. The most famous mercenaries employed by the Carthaginians were the Numidian horsemen. Equipped with light leather shields (Sall. *Iug.* 94.1), they would sometimes fight from two horses, to prolong the stamina of their mounts (Livy 23.29.5). However, in its earlier wars with the Greeks, Carthage relied also on its own citizen forces. Plutarch (*Tim.* 27–9) notes that at the battle of the River Crimisus in 341, the 10,000 Carthaginian hoplites were equipped with iron cuirasses, bronze helmets and large white shields, and were drawn up as a phalanx in 400 files each twenty-five deep. The élite unit of the army was the Sacred Band, numbering 2,500 (Diod. Sic. 16.80.4). This suggests the infantry was organized in units of 500 men.⁷⁷

5. Cavalry

The strike force of Hellenistic armies continued to be élite heavy cavalrymen. Hellenistic cavalry continued to be organized into *ilai* and

⁷⁵ Griffith (1935) 257–9. ⁷⁶ Adcock (1957) 72.

⁷⁷ Polybius (10.12.2) describes how later, during the siege of New Carthage in 210, the garrison commander Mago divided his *syntagma* of 1,000 men into two.

hipparchies. There is evidence that the *ilē* was further divided into *lochoi*, or troops, and then into decurries (*dekaniai*) commanded by a *dekanikoi*. The Ptolemies maintained a cleruch regiment of 'Household' or 'Macedonian' cavalry, while the Antigonids also formed a 'Household' cavalry regiment.⁷⁸ Elite cavalrymen, shown in equestrian statues and grave stelai, wore saffron cloaks with crimson or purple borders like Alexander's Companions, and helmets and cuirasses but not greaves.⁷⁹ Greek cavalry wore boots to prevent their legs chafing on the horse's rough hair. Before the development of advanced saddles and stirrups, horsemen gripped and controlled the horse with the lower legs.

According to Asclepiodotus (1.3) and the other writers of *Tactica*, cavalry of this type was called either *doratophoroi* 'spear-bearing' or *xystophoroi* 'lance-bearing': the *xyston* being the 'whittled down' cavalry spear (*xuô* meaning 'to whittle'), fitted with both head and butt, as used by Alexander's Companions and their Hellenistic successors (*Anth. Pal.* 6.131). Fourth-century Greek cavalry had not used shields. After the first quarter of the third century, we find Greek heavy cavalry using round cavalry shields of Celtic type, with a boss in the centre and sometimes with a spine running from top to bottom. As with the *thureos* we do not know if these shields were adopted from the Galatians after their invasion, or if they were introduced to the Greek mainland by Pyrrhus after his experiences in the Italian expeditions.⁸⁰

The cataphract is a latecomer to the Hellenistic battle line. Cavalry of this type, where both horse and rider were covered as completely as possible in armour, developed first among the Iranian peoples. Antiochus III seems to have been the first Hellenistic monarch to employ cataphracts. They would be a significant military development later on, as horses of increasing strength were bred to carry the heavy burden.⁸¹

Philip and Alexander had also used lighter cavalry, especially contingents supplied by their Thracian allies, for scouting and flank defence during battle. This type of cavalry, usually unarmoured, was called *prodromoi* or 'scouts', in historical texts as late as the second century. Their principal weapon was the cavalry spear, and it is not clear whether they also fell under the category of either *doratophoroi* or *xystophoroi*. Many regiments of mercenary cavalry mentioned in the literary sources were probably light, unarmoured cavalry of this type.

Asclepiodotus (1.3) mentions a branch of cavalry, also engaging the enemy, as being termed *thureophoroi* from the long shields they carried to defend horse and rider alike. They should be considered as belonging to the light cavalry branch. There is some late Hellenistic representational evidence for unarmoured cavalry equipped with *thureoi*. One suspects the

⁷⁸ Polyb. 4.67.6; cf. Hatzopoulos (2001) 33–8. ⁷⁹ Siedentopf (1968).

⁸⁰ Lévéque (1968) 268. ⁸¹ Tarn (1930) 76ff.



Figure 11.9 Roman copy, made in the Severan period, of a late Hellenistic statue of a non-oriental, possibly Greek, horse-archer. The statue illustrates the diversity of late Hellenistic cavalry.

mounted *thureophoroi*, in fact mounted troops with infantry shields, may have sometimes fought dismounted, like dragoons in the early modern period. Such troops would have been ideal to garrison the rebellious provinces of the Seleucid empire.

Most mounted missile troops in Hellenistic armies, such as horse-archers, were supplied by native contingents. Nevertheless it is possible that Greeks served as horse-archers (fig. 11.9).⁸² A special type of mounted javelin man was the so-called ‘Tarentine’. He threw his javelins from afar, sometimes dismounting to do so, and, despite being frequently equipped with a shield for protection, he generally did not close with the enemy.⁸³ At first, cavalry of this type was trained exclusively in the city of Tarentum, but many Hellenistic states maintained units trained in these tactics, which are also termed ‘Tarentines’, so the term becomes a pseudo-ethnic.

⁸² Cf. Sekunda (1994b) 73 and pl. 8a, with as source Schweitzer (1936) 173 Abb. 9.

⁸³ Arr. *Tact.* 4.5–6; Sekunda (1994a) no. 196.

The army with which Alexander crossed into Asia numbered 32,000 foot and 5,100 horse, a proportion of six to one. This is a remarkably high proportion for any period in history. Alexander's army can in all respects be regarded as a cavalry-based army. Despite the intention of Hellenistic states to maintain large forces of effective cavalry, and to keep them at the centre of the battle plan, no state could find the resources to maintain such a high proportion of cavalry.⁸⁴ In part this was due to the overall rise in the size of armies. At Raphia the Ptolemaic army numbered 50,000 infantry and 5,000 cavalry, while the Seleucid army numbered 62,000 infantry and 6,000 cavalry.⁸⁵ So, rather than constituting the firm base from which the cavalry-based battle plan could be developed, the phalanx had now become the main arm deciding the battle.⁸⁶ Occasionally we find Hellenistic armies with higher proportions of cavalry. The precise numbers of the Seleucid army at Magnesia are not known, but the cavalry proportion was very high. The army Hannibal took to Italy had a cavalry ratio of one to four.⁸⁷ In general, though, we are back down to the proportions of one to ten which were normal for the city-states of classical Greece.

Not only did Hellenistic cavalry decline in number during the third century, it also declined in quality, especially in its tactical handling. During the third century knowledge of the rhomboid and wedge was effectively lost, and cavalry are found drawn up in the linear formations typical of the classical period. Polybius (12.18.3) demonstrates this when he enters into a critical discussion of Callisthenes' account of the battle of Issus. He assumes that a cavalry squadron (*ile*) should be drawn up in a rectangular block no more than eight ranks deep, and that there should be an empty space equal to the frontage of the squadron between each of them to allow them to wheel or about-face. The standard tactical formation and sub-unit in which Hellenistic cavalry was now drawn up was once again the *oulamos* of classical Greece. We have already seen that the cavalry of the Achaean League was organized into *oulamoi*. Philostephanus, general of Ptolemy IX Soter II (Lathyrus) and the last Greek military writer before Poseidonius Rhodius started the tradition of the *Tactica*, recommended that cavalry be drawn up in *oulamoi* fifty strong in a square: that is five deep and ten wide (Plut. *Lyc.* 23.1).

6. Exotic troop types

Little attempt was made to standardize Hellenistic troop types. On the contrary, the Hellenistic states reacted to contact with non-Greek military systems by incorporating yet further weapons and troop types of foreign inspiration within their lines of battle, and by devising further

⁸⁴ Santosuosso (1997) 203. ⁸⁵ Griffith (1935) 118, 143.

⁸⁶ Adcock (1957) 26. ⁸⁷ Santosuosso (1997) 170.

formations of their own. The equipment and tactical role of some of these troop types, such as the 'cuirassed' infantry (*thorakitai*) of the Seleucid and Achaean armies, remain obscure.⁸⁸ Others can be explained only thanks to the surviving archaeological evidence.

The scythed chariot was probably an Achaemenid invention and as such seems to have been adopted exclusively by the Seleucids. Somewhat after our period, such chariots were fielded by the armies of Mithridates of Pontus.⁸⁹ Scythed chariots are mentioned in the Seleucid army from the very beginning in the armies of Seleucus I (Plut. *Demetr.* 48.2) down to 163 in the army of Antiochus V which attacked Judaea (2 *Macc.* 13.2). The war-chariot was introduced to the Panathenaic games in the second century, possibly under the influence of Antiochus IV. An inscription lists king Eumenes as victor for 170/69, and others for the years 166/5 and 162/1.⁹⁰ Chariots were also used by the Carthaginians. They are first mentioned at the battle of the Crimisus River in 341. Like Seleucid chariots they were quadrigas and were drawn up in front of the main line (Plut. *Tim.* 25.1, 27.2).

Elephants were employed by those Hellenistic armies able to procure them.⁹¹ At first, the elephant was ridden by a mahout and one or two warriors. Later on, elephants were fitted with towers which offered protection to the crew, and the elephants themselves were increasingly armoured. The Carthaginians adopted war elephants in place of their outdated chariots, probably after suffering at the hands of Pyrrhus' beasts. Elephants became perhaps the most distinctive feature of battles in this era, and their impact will be explored further in Chapter 13 below.

III. THE CONFRONTATION WITH ROME

As already discussed, Rome enjoyed a key strategic advantage over the Hellenistic states, thanks to its much greater reserves of available manpower. This advantage was complemented at the tactical level by important contrasts between the respective military systems of the opposed powers. Although often viewed (following Polybius) in the narrow terms of the contrast between legion and phalanx, this was actually a much broader contrast between the armies as a whole.

The principal difference between the Macedonian and Roman army systems lay in their relative complexity. Macedonian battle-tactics evolved according to what new troop types became available as new forces of mercenary or allied troops, each with their own distinctive national equipment and tactics, were incorporated into the army. Consequently, Hellenistic

⁸⁸ Walbank (1957–79) II.239; Foulon (1995) 217 n. 43.

⁸⁹ Nefedkin (2001) 281–310.

⁹⁰ *Hesp.* 60 (1991) 188–9.

⁹¹ Adcock (1957) 53–6; Scullard (1974) *passim*.

armies were a complex amalgam of elements with highly differing combat characteristics. The commander had to devise a discrete plan for each battle, and then coordinate all the separate tactical elements at his disposal to achieve his aim. This called for a degree of staff work and tactical flair that would have tasked the best command elements of any army.

Philip, Alexander and later Hannibal can be regarded as military commanders of genius, capable of guaranteeing the command and control of such a heterogeneous military force. Furthermore, they had the support of a cadre of subordinate commanders schooled by constant service to appreciate the intent of the commander, and who developed an instinct for reacting to emergencies in such a way as to achieve the commander's ultimate aim.⁹² However, less experienced and capable leaders were much less able to provide the sophisticated planning and execution which the increasingly complex Hellenistic combined arms forces needed if they were to achieve the synergistic effects desired.

In contrast, the Roman legions were more uniform structures as far as command and control was concerned. The procedures were the same in whatever legion one found oneself a commander. Success was much more dependent on clearly understood battle drills rather than quality of command. The Roman battle plan was contained within the three manipular lines of the legion itself, and in the light infantry and cavalry attached to each. The commander did not need to draw up a fresh plan for each battle. Roman command and control was kept simple. Furthermore, whatever the quality of Roman generalship, the whole system was kept in motion by the cadre of centurions 'of a peculiar virtue for war'.⁹³ The qualities of the Roman soldiery had been formed by almost constant war, and by a system of punishment and discipline designed to nurture anger in battle.⁹⁴

I. Polybius on the legion

The description of the Roman legion in Polybius Book 6 is fundamental to our knowledge of the Roman Republican army. Book 6 was written about 160, but its military chapters are possibly based on earlier *commentarii* of military tribunes. The account of legionary equipment given in Chapter 23 is probably based on Polybius' own observation rather than a written source.⁹⁵ There are two drawbacks to Polybius' account. First, problems exist in understanding precisely what he says. Second, he conveys an impression that Roman arrangements were fixed and never varied. In fact, and notwithstanding my remarks above, commanders exercised considerable initiative in adapting armament to the prevailing tactical situation.

⁹² Adcock (1957) 91.

⁹³ Adcock (1940) 5, 101–11.

⁹⁴ Santosuosso (1997) 151, 156–8.

Polybius describes the *scutum* as having a palm's thickness (10 cm) at the rim. He probably had in mind the total distance the rim curved back from the middle of the shield.⁹⁶ More difficult to explain is why he describes the rim as having iron edging on its upper and lower parts, to protect the shield from blows from above, and from damage when resting on the ground. There is no indication of this in any representation of the Roman shield.⁹⁷ Legionaries also carry a sword, Polybius continues, hanging at the right thigh and called a Spanish sword.⁹⁸ In addition they had a bronze helmet and a single greave. No representation of a legionary so equipped has survived, and greaves seem to have been abandoned early in the second century or at the beginning of the first.⁹⁹

Two types of armour are mentioned by Polybius – the mail cuirass worn by members of the first Servian class, and the heart-protector (*kardio-phylax* or *pectoralis*) worn by the rest. As the different types of maniple were selected on the basis of age, not wealth, this implies that the type of armour worn in any maniple was not uniform. Most scholars agree that the mail cuirass was of Celtic origin, while heart-protectors of various shapes and sizes are a common Italian military fashion, going back to Villanovan times.¹⁰⁰ Polybius describes the heart-protector as made of bronze and a span (about 23 cm) square. No square heart-protectors have survived, although pairs of square breast- and back-plates have. These are earlier in date, and may be the ancestor of the square heart-protector. It has been suggested that circular plates c. 25 cm in diameter from Numantia may be heart-protectors.¹⁰¹ Early representations of legionaries show them in tunics without even the heart-protector. So practice may not have been as uniform as Polybius would have us believe. The Aemilius Paullus monument shows Roman infantry, possibly allied, wearing muscle cuirasses as well as mail cuirasses.

Polybius states that the *hastati* and *principes* carried two *pila*, while the *triarii* carried a fighting spear (*hasta*). The *pilum* was the principal weapon of the legionary, and eventually all three lines of maniples used it.¹⁰² Polybius describes the *pila* used by the legionaries as being of two types: stout and fine. He describes both types as having an iron shank, secured to the wooden shaft by rivets, below the iron rod leading to the head. Archaeological examples of the lighter version are usually socketed, and modern experiments have established that the effective range of the *pilum* was about 25 m.¹⁰³

Light infantry, first termed *rorarii* and then *velites*, supported the maniples of the legion. Lucilius (7.290 *rorarius veles*) suggests the two words were interchangeable, one gradually superseding the other during the third

⁹⁵ Rawson (1971) 13–15, 19.

⁹⁶ Treloar (1971).

⁹⁷ Eichberg (1987).

⁹⁸ Quesada Sanz (1997).

⁹⁹ Sekunda (1996) 9; Feugère (1993) 92.

¹⁰⁰ Saulnier (1980) 31.

¹⁰¹ Bishop and Coulston (1993) 59.

¹⁰² Zhmodikov (2000).

¹⁰³ Bishop and Coulston (1993) 50; Connolly (2000b) 45.

and second centuries.¹⁰⁴ Polybius (6.21.7) says that the *velites* were chosen out of the youngest and poorest of the levy, not the swiftest. It may be that in the second century the *velites* were selected from the youngest, whereas earlier they had been selected from the lowest *classes*.¹⁰⁵ Polybius (6.22) describes the equipment of the *velites*. They carry a sword, a round shield (*parma*) three feet in diameter, and a helmet often covered with a wolf skin or something similar. The *hasta velitaris* had a wooden shaft a finger thick and 2 cubits long. The head was a span long, beaten out and hammered to a fine point, which bent on impact, rendering it useless to the enemy. Livy (24.34.5) confirms this last detail. Lucilius (7.290) states that five javelins were carried. The *hasta velitaris* had an effective range of 40 m and a maximum of over 50 m.¹⁰⁶ The *parma* and Spanish sword enabled the *velites* to fight at close quarters if necessary, transferring their remaining javelins to the left hand and drawing their swords (Livy 38.21.12; cf. 31.35.3).

Many modern authorities, following Valerius Maximus 2.3.3, maintain that the *velites* were first employed during the siege of Capua in 211.¹⁰⁷ This statement is wrong on two counts. First, the *velites* existed earlier. Livy (21.55.11) mentions *velites* fighting Carthaginian elephants at the battle of the Trebia in 218, where they aimed their javelins (*veruta*) at the soft skin under the elephant's tail. According to Ogilvie the *verutum* was a short throwing spear, somewhat smaller than the *hasta velitaris*.¹⁰⁸ In reality, our sources do not make clear distinctions between the *hasta velitaris*, the *gaesum* and the *verutum*.¹⁰⁹ Second, the troops at the siege of Capua were not *velites*. In his passage dealing with these events, Livy (26.4) discusses an improvisation made due to the inspiration of the centurion Quintus Navius. Young men were picked out of all the legions who, because of their strength or lightness of build, were the swiftest: not the youngest or poorest as in Polybius. They were equipped with round shields (*parmae*) smaller than those used by the cavalry, seven javelins (*iacula*), each 4 feet long with iron heads such as those on the *hasta velitaris*. These javelins were longer than the five (not seven) 3-foot *hasta velitaris* given to the *velites*. According to Frontinus (*Strat.* 4.7.29) they were also given swords. They rode into battle, Livy continues, on the cruppers of the cavalry's horses, and on a signal leapt to the ground and threw their javelins (*iacula*) at the enemy. The *hamppoi* of the Greek classical world probably inspired the whole experiment.¹¹⁰ Livy concludes with the enigmatic statement (26.4.9) that henceforth it was made the practice to have the *velites* in the legions. It is difficult to believe that this was not the practice before. Perhaps Livy himself misunderstood the significance of events at Capua.

¹⁰⁴ Oakley (1997–8) II.471.

¹⁰⁵ Cf. Rathbone (1993) 147.

¹⁰⁶ Connolly (2000b) 45.

¹⁰⁷ E.g. Ogilvie (1965) 169.

¹⁰⁸ Ogilvie (1965) 170.

¹⁰⁹ Oakley (1997–8) II.468.

¹¹⁰ Sekunda (1986) 53–8; Sekunda (1994), 184.



Figure 11.10 The original type of light leather cavalry shield used by the Romans, described by Polybius as being in the shape of a *popanum*, a round, bossed cake used in temple sacrifices, is shown on this silver denarius of Augustus, struck in Lyons c. 2 BC. The evidence of this and other coins suggests that this shield continued in use alongside the heavier Greek-style shields.



Figure 11.11 This Roman denarius, struck by C. Servilius to commemorate a military exploit of one of his ancestors, shows the heavier type of Roman cavalry shield, which Polybius says was borrowed from the Greeks. It has a metal rim, spine and *umbo*. His enemy, perhaps a Gaul, carries a similar shield. This may have been, in fact, the ultimate source for both the Greek and Roman cavalry shield.

According to Polybius (3.107.10–11), the legion normally numbered 4,000 foot and 200 horse, rising to 5,000 foot and 300 horse in times of exceptional danger. This conflicts with his account of legionary cavalry (6.25.1–2) which has the legionary cavalry divided into ten squadrons, each squadron commanded by three *decuriones*, giving a total normal strength of 300 horsemen.

2. Roman cavalry

Roman cavalry adopted heavier equipment some time during the third century. In an enigmatic passage, Polybius (6.25.3–11) states that ‘in the old days’ Roman cavalry had fought without cuirasses, which enabled them to mount and dismount with ease, but which exposed them to danger in combat. Dismounting to fight as infantry remained a tactic specific to Roman cavalry even after heavier equipment had been adopted.¹¹¹ Also, Polybius continues, they had used light, easily broken spears fitted only with a head and no butt, and light leather shields the shape of a *popanum*, a round, bossed cake used in temple sacrifices, but later on they adopted Greek cavalry equipment (fig. 11.10).

Opinion as to when this change in equipment took place varies. The most recent study by McCall puts the change during the middle years of the Second Punic War, around 211, following the defeat at Cannae and the defection of Capua.¹¹² Second-century representations of Roman cavalry, such as the Aemilius Paullus monument, show Roman cavalry with mail cuirasses and shields with *umbo* and *spina* (fig. 11.11). However, the *popanum* shield was never completely displaced.¹¹³ Rather than being divided into a multitude of different cavalry types using different equipment and tactics, the cavalry fielded by the Romans and their

¹¹¹ McCall (2002) 63–9.

¹¹² McCall (2002) 42.

¹¹³ Sekunda (1996) 19–20, 38.

Italian allies seems to have been uniformly equipped. It was able to operate as heavy cavalry of the line, but also to carry out scouting and other tasks.

As we have seen, it was also in 211, during the siege of Capua, that experiments began in cavalry and light infantry cooperation. Henceforward, combined arms formations of cavalry and *velites* are a recurring feature of Roman warfare. According to Isidore of Seville (*Etymologiarum* 9.3.43), the *velites* received their name from the practice of sitting on the back of the horse and 'flying' (*volitando*). This is false etymology, but it displays the close cooperation of *velites* and cavalry. The disastrous opening years of the Second Punic War forced serious thought about tactical doctrine. Henceforward, Rome strove to incorporate the diverse troop types available through its system of alliances, from Numidian cavalry to elephants, into a more flexible combined arms force. 'The success of Rome's cavalry late in the Second Punic War in part must have been due to the addition of Numidian auxiliary cavalry.'¹¹⁴

The last references to Roman citizen cavalry come in the 90s. The lack of citizen manpower to staff the legions during the Social War (90–88) brought it to an end.¹¹⁵ Perhaps the availability of superior Numidian and Spanish cavalry was a further factor. Henceforward the *ordo equester* became a purely social institution. The process by which the 1,200 *equi publici* also became honorific is not understood. Rome rarely, if ever, fielded more than the four consular legions down to the Second Punic War, so the 1,200 *equites equo publico* would be sufficient to provide their cavalry. An equestrian census, that is a minimum property qualification for service in the cavalry, probably existed as early as the beginning of the third century.¹¹⁶ Clearly the *equites equo publico* would have been insufficient in number to staff the vastly expanded numbers of legions fielded during the Second Punic War.

Livy (24.18.6) states that, following the disaster at Cannae in 216, the censors took back the horses of those in receipt of the *equo publico*, as they were judged to have abandoned the state. It is unclear whether this is to be understood literally, or rather that the censors took back the *aes equestre*, and the *equites* continued to serve as cavalry on their own horses. Livy adds that those punished by the censors were sent to serve on foot in Sicily. This is contradicted by a later passage (27.11.14) where Livy notes that the *equites* from the army defeated at Cannae were still serving in the legions in Sicily in 209. As well as depriving them of the *equus publicus*, the censors had also decreed that their years spent in service in the cavalry *equo publico* should not count, and they should all serve a further ten years on their own horses (*equis privatis*).¹¹⁷

¹¹⁴ McCall (2002) 98. ¹¹⁵ McCall (2002) 100–6; cf. Nicolet (1966). ¹¹⁶ McCall (2002) 5.

¹¹⁷ Cavalry normally served ten years in the Roman army, infantry sixteen (Polyb. 19.5).

These are the last references to a definite connection between possession of an *equus publicus* and service in the cavalry. In future, the cavalryman was obliged to provide his own horse and was compensated if it was lost in combat. This system seems to have been in operation from at least the second quarter of the third century, for Cato's grandfather was reimbursed for five horses he had lost in combat.¹¹⁸ Cavalrymen with public and private horses served alongside one another. The twelve centuries of *equites equo publico* lost all military significance with the demise of Roman citizen cavalry, but survived as 'fossils' in the *comitia centuriata* alongside the six centuries which had previously been 'demilitarized'.

3. Military reform in Hellenistic states

The defeats of Philip V at Cynoscephalae in 197 and Antiochus III at Magnesia in 190 forced both kingdoms to military reform. A major concern was their citizen military manpower. Prior to Cynoscephalae, Philip V had fought almost non-stop for two decades. After the defeat, he put his efforts into trying to expand the population and the finances of the kingdom. Some of the methods employed by Philip II were used again. The population was encouraged to increase by natural methods, and Thracians were settled in Macedon. The result was a dramatic expansion in the strength of the army (Livy 39.24.4; cf. 42.11.6).

Antiochus III died in 187. There is no evidence indicating that his successor Seleucus IV implemented a deliberate policy aimed at expanding military manpower. Nevertheless, we notice a rise in the strength of the Seleucid phalanx from 16,000 at Magnesia to over 25,000 at the Parade of Daphne.¹¹⁹ The reign of Seleucus IV (187–175) was an unusual period of peace in the turbulent history of the Seleucid kingdom, and Seleucus acquired the reputation of being over-cautious, weak and inactive. It is difficult to decide whether this reputation was deserved.

Neither king thought it necessary to reform the tactics and equipment of their infantry: presumably both still believed in the superiority of the phalanx. This changed after the defeat at Pydna. During the 160s there is evidence for infantry reform along Roman lines in both the Seleucid and Ptolemaic armies. Infantry equipped in the Roman fashion appear at the Daphne Parade in 166. In Egypt, the maniple and ranks consistent with the reorganization of the Ptolemaic army along Roman lines first appear at about the same time (fig. 11.12).¹²⁰ The extent and significance of these changes is difficult to assess.

¹¹⁸ McCall (2002) 2.

¹¹⁹ Griffith (1935) 146.

¹²⁰ Sekunda (2001b).



Figure 11.12 Grave-stele of Salamas son of Moles from Adada from the 'Soldiers Tomb' in Sidon, now in Istanbul. The deceased was probably a member of the Ptolemaic garrison stationed in Sidon in 150 and 147–145 BC. The mail cuirass worn by this figure is part of the evidence pointing to the at least partial 'Romanization' of Ptolemaic infantry equipment.

The adoption of Roman weapons by Hannibal's African infantry before Cannae anticipated this process, but it is uncertain whether he also adopted Roman tactics.¹²¹ Appian (*Hann.* 22) describes Hannibal's Libyan infantry at Cannae as drawn up in *speirai*. Bell (1965: 406) noted that this term is 'Polybius' word for maniples', but it is also used of the phalanx battalion. It does not follow that Appian's source implied Hannibal's Carthaginian infantry were drawn up in manipular formation. At the same battle, Polybius (3.114.4) has the Spanish and Gallic infantry also drawn up in *speirai*, and these troops were surely not in manipular formation.

¹²¹ Polyb. 3.87.3, 114.1, 18.28.9; Livy 22.46.4; Zhmodikov (2000) 74.

In the first century, the adoption of Roman equipment and tactics increased. During the First Mithridatic War, the Pontic army fielded a mixed force, including both Chalcaspides and troops armed in the Roman manner.¹²² When Mithridates raised a new army to replace the one defeated in Greece in 86, he reputedly raised a force of 120,000 men armed with Roman-style equipment and trained in Roman tactics (*Plut. Luc.* 7.4). A Pontic legion is later found in Roman service fighting Pharnaces the son of Mithridates (*Caes. B Alex.* 39–40). At the battle of Tigranocerta in 69, 150,000 Armenian heavy infantry were drawn up partly in Roman cohorts and partly as a Greek phalanx (*Plut. Luc.* 26.6). By the Roman civil wars, the heavy infantry of most states was organized into legions and cohorts. Such was the case with the army Juba fielded against Caesar, and with the legions equipped and trained along Roman lines by Deiotarus of Galatia.¹²³ During the civil wars the territories of the Greek East also supplied considerable numbers of specialist light infantry, archers and slingers, and cavalry as allied contingents.

4. Changes in Roman military organization and tactics

The first certain reference to a legionary cohort comes in 210 against the Carthaginians (*Livy* 25.39.1). The ten cohorts of the legion were each formed from a maniple of *hastati*, *principes* and *triarii*. From at least this date onwards, both maniple and cohort were available as administrative and combat formations. In the first century, the cohort becomes universal, though the maniple continued to exist well into the imperial period.¹²⁴ Difficulties in supplying Roman armies in Spain required the sub-division of the legion as an operational unit; hence, according to Bell (1965), the gradual emergence of the cohort as the principal sub-unit employed on operations. Bell argued that this change was accompanied by a shift in tactics away from the arrangement of maniples separated by gaps of equal size towards three continuous lines without gaps. The reasons for the change are, however, still obscure.

The last certain reference to *velites* comes in Sallust's description (*Iug.* 46.7) of the army commanded by Metellus against Jugurtha in 109, though Bell has argued that the reference in Frontinus (*Str.* 2.3.17) to *velites* fighting at the battle of Orchomenus in 86 should stand.¹²⁵ Bell attributes their disappearance to Lucullus, against a background of greater availability of allied missile troops including archers and slingers, which were generally more effective in the changed conditions of warfare. However, it is equally plausible that Marius' definitive removal of the property qualification for

¹²² Frontin. *Str.* 2.3.17; Plut. *Sull.* 16.7.

¹²³ *Caes. B Afr.* 48, 55, 59; *Caes. B Alex.* 34; *Cic. Att.* 6.1.14.

¹²⁴ Speidel (1992) 10. ¹²⁵ Bell (1965) 421–2.

legionary service simply eliminated the recruiting base for the *velites*. The larger context of recruiting problems faced by Roman armies in the later second century represents a significant change from the days of massive Roman manpower reserves, and the extent and causes of this shift will be discussed further in Chapter 14 below and in Volume II, Chapter 5.

B. NAVAL FORCES

Philip de Souza

I. THE DEVELOPMENT OF POLYREMES

As discussed in Chapter 5 above, the standard warship of the classical period was the *trierēs*, a Greek word usually rendered as trireme or ‘three’, so called because the oarsmen along the side of the ship were seated at three levels, one above the other. In the fourth and early third centuries, warships were developed which our sources call ‘fours’, ‘fives’, ‘sixes’, ‘sevens’, ‘eights’, ‘nines’, etc. It is clear from practical considerations that these ship types, often referred to as polyremes, did not simply involve the addition of more and more levels of oarsmen, each rowing from a position that was slightly higher above the waterline. Indeed, it seems that three such levels of oarsmen was the maximum that could be effectively deployed. The higher rating numbers applied to these polyremes indicate instead the number of files of oarsmen seated, or sometimes standing, along each side of a ship.

In a ‘four’ it is likely that there were oars at only two levels, but each one was pulled by two men. In a ‘five’ there were oars either at two levels, pulled by three and two men each, or three levels, with two oarsmen pulling at the two higher levels and one at the lowest. A ‘six’ would have had three levels and two oarsmen at each, with the addition of an extra oarsman at the lowest level increasing the rating to a ‘seven’. As the numbers of men pulling each individual oar rose, the oars would have to be lengthened and the overall width of the ship would have to be gradually increased, as would the ship’s height above the waterline, although with the use of oarboxes and outriggers these dimensions did not need to rise by much for each additional oarsman.¹²⁶ The highest rating that ever seems to have been used in battle were ‘tens’. Larger ships, such as a ‘thirteen’ and a ‘sixteen’ were used by some of the Hellenistic monarchs for state visits and diplomatic missions, presumably because they were impressive to behold. Eventually a ‘twenty’ and a ‘thirty’ were built for Ptolemy II Philadelphus, and finally a ‘forty’ was built for Ptolemy IV Philopator, but these ships

¹²⁶ For attempts to reconstruct such ships see Morrison and Coates (1996) chs. 6–7. Morrison argues that ‘tens’ and larger ships would have been rowed at only two levels.

were most likely double-hulled and certainly could not have been used in battle.¹²⁷

Diodorus Siculus says that Dionysius I of Syracuse began building ‘fours’ and ‘fives’ in 399, and that his shipwrights were the first to design and build the latter (Diod. Sic. 14.41.3, 42.2, 44.7). Dionysius II of Syracuse (367–44) is credited with the building of the first ‘sixes’ (Ael. VH 6.12). Thus, the original impetus for the development of the polyremes would seem to have come from the naval ambitions of the Syracusan rulers. Their rivalries with Carthage provide a political context for the decision to build larger warships. The ‘four’ may originally have been a Carthaginian creation (Plin. HN 7.207), so it is not impossible that an early ‘five’ might also have been developed there, independently of the Syracusans. The Phoenician city of Sidon had ‘fives’ in its fleet by 351 (Diod. Sic. 16.44.6). Gradually the use of these new ship types spread across the Mediterranean. In 330 the Athenians had eighteen fours, as well as 492 triremes, according to their naval inventories (*IG* II².1627.275–8). By 324 the inventories show that the Athenians had forty-three fours and seven fives (*IG* II².1629.808–11).

The increase in ratings from six to ten occurred quite quickly towards the end of the fourth century, apparently at the instigation of Antigonus I Monophthalmus. For a brief period, the building of larger ships became something of an obsession. By 315/14, Antigonus had some 240 warships at his disposal in Phoenicia. Of these, 210 were designated by the Greek word *kataphraktos* (covered in), meaning they had a fighting deck for marines and catapults above the highest level of oarsmen, and might also have heavy screens along the sides to protect the oarsmen in an outrigger. Antigonus’ cataphracts comprised ninety-seven triremes, ninety ‘fours’, ten ‘fives’, three ‘nines’ and ten ‘tens’ (Diod. Sic. 19.62). The fleet with which his son Demetrius I Poliorcetes defeated the forces of Ptolemy I Soter at Salamis on Cyprus in 306 contained sixty-eight ‘threes’, thirty ‘fours’, thirty-five ‘fives’, ten ‘sixes’ and seven ‘sevens’.¹²⁸ In 301, Demetrius, who could now use the excellent timber resources of Cyprus for his ships, also had ‘elevens’ and a ‘thirteen’, and by 288 he had even added a ‘fifteen’ and ‘sixteen’, which latter was still able to sail 150 years later. The ‘sixteen’ was probably never suitable for naval battle and it was not used by Demetrius’ descendant Philip V of Macedon at the battle of Chios in 201, but it was retained by him after his defeat by the Romans in 197. The terms of his treaty with Rome specifically debarred him from keeping any cataphracts other than the sixteen (Polyb. 18.44.6). Livy says of this flagship that it was ‘of an almost unmanageable size’ (33.30.5). Over thirty years later, it was used by the victorious general

¹²⁷ See Casson (1971) 107–16, 137–40.

¹²⁸ Diod. Sic. 20.49–50; Polyaenus, *Strat.* 4.7.7.

Lucius Aemilius Paullus to head the triumphal procession of the spoils from the newly conquered Macedonian kingdom up the River Tiber to Rome (Livy 45.35). Most warships were not so long-lasting, however, and needed to be replaced after about twenty-five to thirty years.

Several explanations can be offered for the development of these large warships. One is that having some or all of the oars rowed by more than one individual meant that the techniques and skills of all the individual oarsmen need not have been very well developed, as long as one man on each oar could lead the others. In this sense it may be argued that the polyremes were developed to utilize masses of untrained, or at least inexperienced, oarsmen who might provide muscle power without needing to have the experience that would make them expensive to hire.¹²⁹ A counter-argument is that naval commanders often went to great lengths to ensure that their oarsmen did get good training. For example, in 261 the Romans trained the oarsmen for their new fleet on both land and sea (Polyb. 1.21). Indeed, it could be argued that rowing with more than one person at an oar demands more, not less skill and practice to be effective, as it requires coordination between the men on each oar, in addition to that between the groups of oarsmen in each vertical unit of two or three oars along the side of the ship.¹³⁰ It should also be noted that polyremes seem to have been inferior in speed not only to triremes, which continued to feature in the navies of the period, but even to smaller ships, so the application of increased muscle power to the oars was not intended to make the warships faster.

Probably the most important advantage that the polyremes had over smaller, lower-rated ships was their increased carrying capacity. They were broader in the beam and could accommodate larger numbers of marines on their fighting decks. This was particularly the case for the bigger vessels, such as 'tens', which were probably rowed at two levels only, and could perhaps accommodate up to 200 marines.¹³¹ This led to a greater reliance on grappling and boarding enemy ships than was the case in the classical period. It has even been suggested that the Romans developed a type of 'five' with single banks of oars, each rowed by five men, so that they could be built very broad across the beam and accommodate a very large complement of marines, up to 120 at the battle of Ecnomus in 256.¹³² Against this view

¹²⁹ Casson (1971) 104–5.

¹³⁰ On the problems of coordinating the vertical units of oarsmen see Coates, Platis and Shaw (1990).

¹³¹ The basic problem was that the third (highest) level of oarsmen needed to be offset and positioned only half as high above the second as the second was above the first so that their oars were not rowed at an impossibly steep angle. The use of the outrigger facilitated this, but it would have been very difficult to build outriggers of sufficient size to accommodate three or more men to an oar. See the reconstruction diagrams in Morrison and Coates (1996) 294–310.

¹³² See Casson (1971) 104–5.

is the fact that Polybius (1.20.15) explicitly says that the Romans copied a Carthaginian design of the 'five', in which case there would have been no great difference between their ships and those in the Roman fleet.

A further advantage that the larger ships offered was that their decks were higher above the waterline, offering not only greater space for marines and catapults, but also better elevation for the launching and throwing of missiles by hand or from catapults. As the beam of the ship increased so its steadiness in relatively calm water would be improved, making it an ideal missile platform. Also, a higher deck would make the ships more difficult for opposing marines to attack from smaller ships. Towers were constructed on the fighting decks of some ships to enable the marines to shoot arrows and hurl javelins from a still greater elevation. It also seems that these large, broad ships were significantly heavier and sturdier of build than their classical predecessors, since they were not built for speed. This will have made them more resistant to damage when rammed.

As noted above, the ships rated higher than 'ten' seem not to have been used for ship-to-ship combat, so an additional explanation must be sought for their design. The use of ships as fighting platforms to attack city and harbour defences, for example by Demetrius I Poliorcetes against Rhodes in 305 (Diod. Sic. 20.85–8), suggests that the very large polyremes may have been designed with this function in mind. Demetrius' fleet of 500 ships was likely to have been deployed against the coastal cities of Asia Minor, had he not been ousted from Macedon by Pyrrhus in 287. In this respect, the largest polyremes are analogous to the very large siege towers built for Demetrius' attacks on Salamis and Rhodes in 306 and 305 respectively (see ch. 13 in this volume).

By no means all the ships used in the naval warfare of this period were triremes or polyremes. The Rhodian navy contained a substantial number of vessels of a type known as *tribēmiolai*, which means something like 'three and a half'. This ship was probably a variation of the trireme, or 'three'. The Rhodian *tribēmiolai* seem to have had a crew of 144, as compared to an Athenian trireme which had 200. It seems that about 120 of the crew were oarsmen, compared to the 170 used on the trireme. It is most likely that the reduction was effected by having fewer men on the lowest level, enabling the ships to be narrower towards the bows and stern than a trireme, thus compensating for the loss of oar power with a sleeker shape. As they also carried fewer marines and sailors, they would have been significantly cheaper to operate.¹³³ *Trihēmiolai* are also found in the fleets of Athens, Pergamum and Ptolemaic Egypt. Another commonly used type was the *lembos*, a word which describes a variety of small galleys, rowed by fifty or

¹³³ See Morrison and Coates (1996) 319–21; Rice (1991) 29–32.

fewer men. They were often cataphracts, but sometimes lacked a fighting deck and a ram. They were especially cheap to build and could be used for fast raids, as dispatch and reconnaissance craft and as transports for small groups of soldiers.¹³⁴

II. SHIPBUILDING AND TIMBER SUPPLIES¹³⁵

Although Macedonia had some of the best sources of shipbuilding timber in the eastern Mediterranean, neither Philip II nor Alexander embarked upon major programmes of warship construction. Philip was probably content to make use of the modest naval forces of some of the coastal cities that came under his control early in his reign, particularly Amphipolis and Pagasae. Thus, in the late 350s, when Demosthenes urged the Athenians to create an élite squadron of warships to support their land forces against Philip, he seemed to think that a mere ten ships would be sufficient (*Dem.* 4.34).¹³⁶ Similarly, Alexander utilized the ships of his Greek allies for naval support in the early stages of his campaign against the Persian empire, although he disbanded this fleet rather than risk its loyalty and competence in a major confrontation with the Phoenician and Cypriot ships of Darius III. In 333 Alexander had to order a new fleet because the Persian navy was able to operate unimpeded in areas where his military forces were not strong enough. This fleet had to be provided by the Corinthian League, mostly using the same ships, but at considerable cost. The admirals Amphoterus and Hegelochus were provided with 500 talents to refit the ships and hire the crews (*Curt.* 3.1.19–20).

Alexander did build some ships in India, from the abundant pine, fir and cedar that his men found in the mountains. The ships were light galleys, the largest of which were powered by thirty oars and would not have had rams; Arrian (*Anab.* 5.85) records that they were cut into sections for transportation overland between rivers. Alexander used them to transport his army across the River Hydaspes and then down the Indus to the sea. His friend Nearchus used these vessels and other local ships to sail back to Babylon and explore the coastline. At his death, Alexander seems to have been planning a series of expeditions against Arabia, Carthage and the western Mediterranean for which he planned to build a fleet of ‘over 1,000 warships larger than triremes’ (*Diod. Sic.* 18.4.5). These naval plans were to some extent realized by his successors. The various Macedonian generals who fought over all or part of Alexander’s empire were gifted

¹³⁴ On the *lembos* see Casson (1971) 125–7; Morrison and Coates (1996) 263–5, 316–17.

¹³⁵ For a detailed survey of timber supplies and their exploitation by the naval powers in this period see Meiggs (1982) 132–47.

¹³⁶ See Hammond et al. (1972–88) II.310–12.

with vast ambitions, enormous funds and manpower resources, plus access to the timber supplies of Cilicia, Syria, Phoenicia, Cyprus and Macedonia. Hence they were able to build substantial fleets of increasingly large ships. Antigonus Monophthalmus established three shipbuilding yards in Phoenicia, one in Cilicia and another on Rhodes to create the ships for his contest with Ptolemy I Soter. These facilities produced an impressive number of ships in the period 314–302, so many that Antigonus had nearly 400 warships, plus at least 100 transports.¹³⁷

The most grandiose shipbuilding scheme of all was that of Antigonus' son, Demetrius I Poliorcetes, who began preparations for an invasion of Asia in 288, gathering a large army and supervising a building programme of 500 ships at yards in Pella, Chalcis, Corinth and Athens. This included the construction of huge warships, the like of which had never before been seen, and which were said to be remarkably swift and manoeuvrable for their size. Unfortunately, his fleet was never put to the test. Demetrius' rivals combined against him and Pyrrhus took his place as king of Macedon (*Plut. Demetr.* 43–4).¹³⁸

III. NAVAL MANPOWER

i. The Hellenistic states

The standard warships of the Hellenistic period needed crews of c. 150–300, or more in the case of the larger polyremes. Although there is some evidence of a general problem in obtaining naval manpower in the second half of the fourth century, neither Alexander, nor his Macedonian commanders, nor the Successors experienced much difficulty in operating large fleets of warships. In 323/2 Antipater had 110 triremes available, and a further 130 ships, mostly 'fours' and 'fives', were operating in the Hellespont. At the same time, there were several Greek naval forces at large, the biggest of which was the Athenian fleet of 170, presumably made up of triremes and 'fours'. The Athenians even planned to build a fleet of 200 'fours' (*Diod. Sic.* 18.10.1–3). Cleitus united the Macedonian forces and, after initial victories over the other Greeks, defeated the survivors along with the Athenian fleet in the Maliac Gulf.¹³⁹ This defeat marked the effective end of Athens as a major naval power.

¹³⁷ See Billows (1990) 357–60 for details of Antigonus' fleets.

¹³⁸ The strains that Demetrius' naval and military preparations put on the Macedonians and Greeks contributed to his unpopularity and aided the swift usurpation of the Macedonian crown by Pyrrhus; see Hammond et al. (1972–88) III.226–9.

¹³⁹ The sources for these naval actions are very poor; see Hammond et al. (1972–88) III.107–15. Morrison (1987) interprets Diodorus' use of *paraskeuē* at 18.10.2 to mean that these ships were not intended for immediate service, but rather were to be prepared for later use. For an alternative interpretation see Hammond et al. (1972–88) III.108 and 122.

The rulers of the Hellenistic kingdoms which emerged out of Alexander's empire drew upon several pools of manpower for their fleets, which often numbered between 150 and 200 ships.¹⁴⁰ The Antigonid kings of Macedon seem to have recruited their oarsmen principally from the population of Macedonia, the cities of mainland Greece, the western coast of Asia Minor and the Aegean islands. The Ptolemaic kings could call upon the population of Egypt, supplemented by their overseas possessions. They also recruited from Asia Minor and the Aegean islands, as well as some of the states of the Greek mainland. The Seleucid kings' principal sources of manpower were the maritime populations of Syria, Phoenicia and Cilicia, supplemented by the Greeks and non-Greeks of Asia Minor and the islands. The Attalids could take men from their own relatively small kingdom, but seem to have relied heavily upon allies, notably Rhodes and Byzantium, as well as the Aegean islands. It is clear that there would have been competition among these monarchs and their allies for the best naval manpower, such as the coastal populations of Cilicia, Syria and Phoenicia. Experienced sailors, helmsmen and captains were the most eagerly sought after, but good oarsmen would also have been in demand during major conflicts. The ability to pay the crews was probably the most decisive factor in the establishment and maintenance of substantial fleets, hence the fund-raising activities of Dicaearchus the Aetolian on behalf of Philip V of Macedon in 205.¹⁴¹

Smaller political entities like the Achaean and the Aetolian Leagues, or the island of Rhodes, did not attempt to operate large fleets. In 191–190 the Rhodians played a significant part in the naval conflict between Rome and her allies and Antiochus III, but the largest Rhodian fleet assembled consisted of only thirty-two 'fours' and four triremes (Livy 37.22–3). The Rhodians had a good supply of experienced sailors, marines and naval officers, as well as well-trained oarsmen. It is likely that naval service was required of all young men with full or partial Rhodian citizenship, but even these reserves had to be supplemented by foreign oarsmen and sailors.¹⁴²

2. Rome

Roman naval tactics in the third century were not very sophisticated, and their commanders generally relied upon superior resources. They won their naval encounters because they had more ships, or if the fleets were roughly equal in size, then the Romans deployed more marines. In spite of the huge

¹⁴⁰ E.g. Billows (1990) 357–60, a detailed analysis of the naval forces of Antigonus I Monophthalmus and his son Demetrius. For an attempt at a general survey see Morrison and Coates (1996) chs. 1–3, but note the comments in de Souza (2001).

¹⁴¹ See de Souza (1999) 81–3. In 219 Philip V had trained his own soldiers and mercenaries as oarsmen for his fleet of *lemboi* (*Polyb.* 5.1–2).

¹⁴² On the crews of Rhodian ships see Gabrielsen (1997) 35–6, 94–7, 125–7; Rice (1991), 30–6.

costs involved in both building and crewing their fleets of warships, the Romans managed to put into action sufficient naval forces to gain the upper hand in both the Punic Wars, as well as the parallel contest with Philip of Macedon, known as the First Macedonian War (215–205). Thereafter, they continued to operate fleets of varying sizes in both the eastern and western Mediterranean. The huge fleets with which Rome challenged and ultimately overcame the naval power of Carthage during the First Punic War required the greatest numbers of oarsmen, as Polybius repeatedly emphasizes (Polyb. 1.26, 37, 49, 63–4). The naval effort in the Second Punic War was not as great as it had been in the First, but nevertheless there were often well over 100 Roman warships on active service.¹⁴³

The standard warships in these Roman fleets were ‘fives’, crewed by 300 oarsmen and sailors per ship. Many of the personnel for these crews must have come from the *socii navales* (naval allies), mainly Greek coastal cities of southern Italy and Sicily, which had long-established traditions of seafaring and some experience of operating rowed warships. By the terms of their treaties of alliance with Rome, some of these cities were obliged to provide a few smaller ships, probably triremes, complete with crews (e.g. Livy 26.39), but they would also have been a good source of recruits for the sailors and oarsmen needed for the larger ships, the ‘fours’ and ‘fives’. Significantly, Polybius (2.24) does not include Rome’s allies among the Greeks of southern Italy in his list of those who were obliged to provide soldiers to Rome in 225. From this it may be deduced that most of the Greek cities were classified as *socii navales*, and regularly furnished large numbers of naval personnel. Most of the population of Sicily would also have been available for recruitment into Rome’s navies by the start of the Second Punic War. The Romans conscripted crews from other Italian allies, like the Samnites, although in the First Punic War some of these oarsmen proved to be less than perfect.¹⁴⁴ It is clear, however, that the manpower provided by these naval allies was not sufficient to crew all the warships that Rome deployed in both Punic wars. Tens of thousands of Roman citizens, freedmen and occasionally even slaves were also required.

The citizens of Rome’s maritime colonies (*coloniae maritimae*), which included Ostia, Antium and Tarracina, were another major source of crews.¹⁴⁵ In addition, there were the ordinary Roman citizens of the lowest property class, known as the *proletarii*. Polybius (6.19.3) says that those citizens rated below 400 *asses* served in the navy rather than the infantry, which suggests that they rowed ships, rather than fighting as marines.¹⁴⁶ A

¹⁴³ E.g. Brunt (1971) 65–6 estimates that over 54,000 men were required to man the 160 or so Roman warships operating in 215.

¹⁴⁴ Zonar. 8.11; Oros. 4.7.12.

¹⁴⁵ For a list of the colonies liable for naval service in 191 see Livy 36.2–3.

¹⁴⁶ Thiel (1954) 73–8 and (1946) 12, argues that the *proletarii* were normally enlisted as marines.

final category of Roman citizens serving in the fleets is freedmen, who were only drafted into the legions in extreme emergencies but seem to have been used regularly as oarsmen. The proportions of naval personnel drawn from these groups of citizens and non-citizens are impossible to calculate, but in this context it is worth considering a story told by much later sources about the sister of Publius Claudius Pulcher, the consul of 249 who lost the battle of Drepana. In 246 Claudia is said to have expressed the wish that her brother were still alive to lose another fleet and thus clear away more of the populace who were impeding her progress through the streets of Rome.¹⁴⁷ This colourful anecdote implies that the lowest classes of Roman citizens furnished many of the tens of thousands of oarsmen who rowed the ships.

Pulcher's disastrous experience in 249 can also be taken as an example of the potential disadvantages of emergency recruitments of oarsmen. The Romans urgently needed to replace naval personnel who had been lost in the fighting and conflagrations around the siege-works at Lilybaeum. Accordingly, 10,000 new oarsmen were found and sent to Pulcher in Sicily (Polyb. 1.49.1–2). It was only with the addition of these men that he felt able to take to sea and challenge the Carthaginian fleet. But these hastily assembled reinforcement crews were inexperienced and poorly trained, especially in comparison with their Carthaginian opponents. It is likely that this relative inferiority was a significant factor in the ensuing Roman naval defeat at Drepana. The sharp drop in the attested census figures for the Roman citizen population from 297,797 in 252/1 to 241,712 in 247/6 may be a result of the extremely heavy losses of this period. However, there does not seem to have been a similar drop from the figure of 264/5 (292,234) to that of 252/1, in spite of what should be severe losses in 255 and 254.¹⁴⁸

There is no direct evidence that the Romans used slaves to man any of their warships during the First Punic War.¹⁴⁹ At critical points in the Second Punic War, however, they did turn to slaves to provide crews, requisitioning them, along with pay and rations, from the slave establishments of the richer citizens. The first occasion was in 214, when the wealth qualification for military service seems to have been lowered in order to increase the pool of eligible citizens. This would have made it more difficult than usual to find oarsmen for the fleet (Livy 24.11). The second occasion was in 210, shortly after the fall of Capua. At this point in the war, many of the south Italian and Sicilian *socii navales* who usually provided naval personnel were still alienated from Rome, further increasing the strain on the resources

¹⁴⁷ Suet. *Tib.* 2.3; Gell. *NA* 10.6.

¹⁴⁸ On all of this see Brunt (1971) 26–33 and 666–70; Goldsworthy (2000a) 122.

¹⁴⁹ Contra Thiel (1954) 73–4.

of the Republic. On this occasion, the demand for wealthy citizens to furnish both men and pay apparently met with widespread opposition. Livy (26.35–6) makes it the setting for a patriotic speech by one of the consuls, Marcus Valerius Laevinus, urging the senators to set an example to others by lending their private wealth to the state to provide pay for these crews. It is open to debate whether the contributions of the aristocracy and the richer citizens would have made as great a difference as Livy suggests, but the whole episode does demonstrate the difficulty faced by the Romans in maintaining such large naval forces along with their armies in Italy, Sicily and Spain.¹⁵⁰

The final source of oarsmen was prisoners of war. In 209, for example, Publius Cornelius Scipio assigned captive non-citizens and slaves from New Carthage to his fleet, some of whom seem to have been used to man ships captured in the harbour, while the rest increased the crews on the Romans' own ships, which is an indication that they were severely undermanned at this point.¹⁵¹ Such undermanning was not a serious problem as long as there was little risk of encountering an enemy fleet, and Brunt has even suggested that Roman fleets departing from Ostia were often undermanned on the expectation that they would be able to acquire sufficient oarsmen in the regions where they were to operate.¹⁵²

3. Carthage

It is very difficult to establish the sources of Carthaginian naval manpower, partly because so little is known about the subjects of the Carthaginian empire, which included Phoenician colonies like Utica and Hadrumetum as well as most of north Africa as far east as Cyrenaica. Carthage had established many settlements on the western coast of Sicily, as well as Sardinia and the Lipari Islands, where there was a Carthaginian naval base by 264 at the latest (Diod. Sic. 22.13.7). The loss of Sicily and Sardinia as a result of the First Punic War was to some extent compensated for by gains in Spain. The inhabitants of the Carthaginian maritime colonies may have provided the bulk of Carthaginian naval manpower in the First Punic War, but a definitive statement is not possible. Given that during this war the Carthaginians were able to send out fleets of similar size and composition to those of the Romans, it would seem likely that their manpower resources were roughly comparable.¹⁵³ Carthage's marines were probably taken from her regular mercenary infantry. For example, the Carthaginian commander Hanno took on the best of the mercenaries serving in Sicily for the decisive naval engagement off the Aegates islands in 241 (Polyb. 1.60.3).

¹⁵⁰ See Lazenby (1978) 100–1, 169–70, 291 n. 21; Brunt (1971) 417–22.

¹⁵¹ Livy 26.47.1–2; Polyb. 10.17.

¹⁵² Brunt (1971) 669.

¹⁵³ See Lazenby (1996) 21–9.

Unlike their Roman counterparts, Carthaginian citizens seem by now to have been exempt from military service abroad, hence the greater reliance on mercenaries; this may also have been the case with naval service, but Diodorus seems to imply that the fleet defeated off the Aegates islands was largely manned by Carthaginians:

In this battle the Carthaginians lost 117 ships, 20 of them with all the men on board (the Romans lost 80 ships, 30 of them completely, while 50 were partially destroyed), while the number of Carthaginians taken prisoner was, according to the account of Philinus, 6,000, but according to certain others, 4,040. The rest of the ships, aided by a favouring wind, fled to Carthage.

(Diod. Sic. 24.11.2 tr. F. R. Walton, Loeb)

During the Second Punic War the Carthaginian naval effort was not as extensive as that of Rome, but it was still far from negligible. In 212 and 211, for example, Bomilcar took fleets of ninety and sixty-five warships across from Africa to Syracuse. Like the Romans, however, the Carthaginians must have found the second lengthy war a tremendous strain on their manpower resources. In 204, Hasdrubal, in anticipation of a Roman invasion of Africa, purchased 5,000 slaves as rowers for the Carthaginian fleet, but this was presumably an exceptional measure. As with most aspects of ancient Carthage, lack of reliable evidence imposes very severe limits on our understanding.

CHAPTER 12

WAR

JONATHAN P. ROTH

I. INTRODUCTION

In the first half of the fourth century a number of factors coincided to foster revolutionary change in military practice. These included a move to a new and bolder type of strategy, innovations in equipment and tactics, the increasing use of mercenaries, a heightened sense of military professionalism, improvement in methods of fortification, experimentation in innovative weapons (such as torsion artillery) and the development of military training manuals. Some of these innovations were developed within Greece: for example, a general lightening of equipment, the deepening of phalanxes, and the use of combined arms. Others were borrowed, as the Greeks came into contact with various other styles of fighting: the pelta or crescent shield was borrowed from the Thracians and the long spear for light infantry (apparently) brought back from Egypt by Iphicrates. The expanding boundaries of the *oikoumenê* in the latter fourth and third centuries both spread Greek innovations to other peoples – such as the Romans – and brought the Greeks new military techniques and practices. Contact with the Celts promoted increased use of the sword and, possibly, a new type of saddle. The Parthians contributed armoured cavalry and the Indians battle elephants.¹

The role of the Carthaginians in the military developments of the fourth century has generally been undervalued. During a century-long struggle over control of Sicily, the Phoenicians of north Africa certainly influenced Greek development of siege equipment and quite possibly the use of relays in attacks on city walls. Punic armies were remarkably large for the period, ranging up to 70,000 men, with the sort of combined force – heavy and light infantry and cavalry – that is associated with later Hellenistic warfare. Their forces were moved by sea and supported by a complex logistical infrastructure.

¹ Older works such as Kromayer and Veith (1928); Tarn (1930); Adcock (1940), (1957); Anderson (1970); Keppie (1984); Ducey (1985); and Watson (1987) are still useful. Newer works on Hellenistic and Roman Republican warfare include Sage (1996); Ashley (1998); Connolly (1998); and Goldsworthy (2000b).

A remarkable number of innovative military figures arose in Greece in the fourth century: Iphicrates and Chabrias of Athens, Epaminondas, Pelopidas and Pammenes of Thebes, Agesilaus of Sparta and Bolis of Crete, to name only a few. It was, however, Philip II of Macedon who drew many of the new elements of fourth-century warfare together, creating a formidable military machine. The Macedonian king fashioned a true combined arms force, streamlined the logistics of his army, and fashioned an up-to-date siege train. Philip also seems to have brought military engineers into his court specifically to develop a new type of torsion artillery. This use of technicians not only to maintain, but also to improve, military technology is practically unprecedented and is an example of the period's spirit of innovation and invention. Perhaps most significantly, Philip wrought a new form of political organization, the Greek monarchy, able to direct this new military machine with a single will. It was Philip's army that Alexander the Great, his son and heir, used so effectively in his conquest of western Asia.

II. STRATEGY

There is some semantic overlap between the English term 'strategy' and the Greek *strategia*, but the latter term generally referred more to the clever use of stratagems or tricks than to the employment of military resources on a large scale. Much of the technical Greek military writing of the period was devoted to the collection of such stratagems.² Nevertheless, it is clear that in the fourth century the Greek understanding of strategy in the modern sense grew more sophisticated. There was a general trend toward professionalization, or in Greek terms, in viewing warfare as a special skill (*technē*). The military reforms of Philip II and others, the rising importance of military engineering and complex logistics, and finally the appearance of military handbooks, all contributed to a culture of professional command. Xenophon, a professional soldier for much of his life, wrote a handbook on cavalry, and his *Anabasis* and *Hellenica*, with their detailed descriptions of battles and military operations, were intended, at least in part, to explain strategy to a rising generation of military men.³

The portrayal of Hellenistic military leaders in our sources was certainly influenced by literary conventions.⁴ Nevertheless, it is possible to come to some conclusions about the various aspects of command in this period. Hellenistic monarchs routinely had a number of armies operating in the field simultaneously. While coordination between such disparate forces was difficult, due to communication problems, one sometimes finds armies

² Wheeler (1988d). ³ Anderson (1970); Hanson (1988); Beston (2000). ⁴ Beston (2000).

being brought together at crucial moments, or one such force reinforcing another. An example is the fighting between Cassander's general Lyciscus and the Epirotes in 312. Just after Lyciscus' army was defeated, another army under Deinas arrived fortuitously, and the Epirotes were beaten. Cassander, hearing of the first defeat but not the second victory, moved into the region with more forces, showing the willingness, and ability, to feed troops gradually into a combat zone as necessary.⁵ The need to keep garrisons in various parts of an empire naturally created an *ad hoc* strategic reserve. When Ptolemy I annihilated Demetrius' army at Gaza in 312, the latter was able to raise another one by stripping occupation forces from various provinces (Diod. Sic. 19.80.5). There is no recorded case, however, of forces being left concentrated in the rear of an area of operations solely to serve as a strategic reserve.

The increasing complexity of campaigns led to more sophisticated strategic thinking. As noted in Chapter 6, Greek hoplite warfare had generally focused on marching directly to the enemy and either engaging him in open battle or besieging his city. In contrast, Xenophon wrote: 'Wise generalship consists of attacking where the enemy is weakest, even if the point is in some way distant' (*Eq. mag.* 4.14.14). By the second century, Polybius noted, the straightforward classical Greek strategy of seeking out the enemy and fighting him was considered 'bad generalship' (13.3). Commanders were exhibiting a level of strategic thinking completely absent in previous centuries. This period saw the introduction of what modern military writers would term the 'indirect approach', that is, the object of a war, campaign or battle is to affect something or someone remote from the area of operations. Planning this, much less carrying it out, requires a high level of abstract strategic thinking and an appreciation of the realities of the situation. An early use of this strategy is the Theban campaign to free the helots after the battle of Leuctra (371) – the object being to cripple the Spartan army in the long term by striking at its economic base (Xen. *Hell.* 6.5.28). Another instance is Alexander's destruction of the Persian fleet by capturing its ports along the eastern Mediterranean coast with his army.⁶ Antigonus I displayed remarkable skill – as well as boldness – in his strategic thinking. A good example is his manoeuvring of Cassander out of Greece in 313. He sent a small force under his nephew Ptolemaeus to Greece by ship and then feinted toward Macedonia from Asia Minor. Cassander was forced to march north to defend his home base and Ptolemaeus took central Greece. Antigonus did not actually invade Macedonia, not wishing to risk defeat, but he gained his objective none the less (Diod. Sic. 19.77.5–6). One finds the same grasp of strategic principle in the wars of later Antigonid kings, for example Antigonus Doson's campaign against Sparta, that ended at

⁵ Diod. Sic. 19.88.1–89.1.

⁶ Diod. Sic. 17.22ff.; Curt. 3.26ff.; Plut. *Alex.* 18ff.; Arr. *Anab.* 1.83ff.

Sellasia (Polyb. 2.65.1–69.11), and Philip V's actions in the Social War (Polyb. 4.22.1).

As noted above, a number of important military figures of the fourth century, such as Iphicrates, Epaminondas and Philip II, had been responsible for important strategic and tactical innovations. It was Alexander the Great, however, who became the model for the Hellenistic (and Roman) generals of succeeding generations. His willingness to take strategic risks was an important element in his success – indeed, the invasion of the Persian empire was an enormous gamble. Risk-taking remained a central feature of Hellenistic strategy, and in this the model of Alexander was very important.⁷ A good case in point is the reaction of Agathocles, the tyrant of Syracuse, to his defeat by the Carthaginians at the battle of Himera River in 310. The Carthaginians took control of all of Sicily, except Syracuse, but Agathocles, in a completely unexpected move, invaded northern Africa. He gambled that Carthage would withdraw its army in order to defend itself, and, in a move reminiscent of Cortés in Mexico, burned his ships upon his arrival. While Agathocles was driven from Africa in disarray, his indirect approach succeeded in forcing the Carthaginians to give up the siege of Syracuse and return home (Diod. Sic. 20.2.3).

Of course, Hellenistic strategic decisions were generally based on military circumstances and the desire to defeat the enemy and secure victory.⁸ There were, however, other factors in the military decision making of Hellenistic monarchs. Profit, whether short- or long-term, has always been a motivation for war. In the Hellenistic period, however, with the constant need for funds to support expensive standing armies, both with pay and supplies, it took on enormous importance (see ch. 14 in this volume).⁹ Roman Republican generals (with *imperium*) had the authority to allocate booty to their soldiers, the state, the gods and, significantly, to themselves. The possibilities of profit certainly influenced their military decisions at times.

Given the personal nature of both military and political command in the Hellenistic world, such profit–loss calculations at times drove strategic decision making. When Antigonus was planning an invasion of Egypt in 312, for example, he first attacked the Nabataeans in Arabia. This had no strategic purpose, but Antigonus expected to garner an immense fortune and money was certainly the sole motivation for this attack (Diod. Sic. 19.94.1ff.). Indeed, war was a major source of income for Hellenistic monarchs. Ptolemy IV took 40,000 silver talents' worth of booty in the Third Syrian War (246–245), much of which came from the sale of captives (Jerome, *Comm. Dan.* 11.6–9). This represented more than twice the annual revenue of Egypt, about 15,000 talents of silver. One should not make the mistake, however, of assuming that all strategic decisions were

⁷ Billows (1990); Beston (2000).

⁸ Garlan (1973); Gabbert (1983).

⁹ Austin (1986).

based on rational analysis of profit and loss. Emotions run high in war, and Hellenistic monarchs, as well as Roman generals, were high-spirited men, with large and sometimes fragile egos as well as elevated senses of honour and personal dignity. Military and strategic decisions were at times made in anger or despair.

Despite the monarchical command structure of Alexander and his successors, strategic decisions were restrained, and sometimes controlled, by the armies themselves.¹⁰ Alexander called Macedonian army assemblies frequently, for example after the death of Darius in 330, and in 326, when the soldiers' wishes forced the end of the Indian campaign.¹¹ In the confusion after Alexander's death, one finds Macedonian armies sometimes electing commanders and even making policy decisions. In some cases armies, unhappy with a general, might murder him, as happened to the unfortunate Perdiccas in 320 (*Diod. Sic.* 18.40.2–4). Antigonus I was able to convince the army of Eumenes to surrender itself – and its general – in exchange for the army's baggage, which he had captured (*Diod. Sic.* 19.43.8–9). After the Hellenistic monarchies stabilized in the late fourth century, the power of army assemblies faded. Nevertheless, kings still had to make strategic decisions with the need to maintain the loyalty of their professional armies in mind. Another restraint on Hellenistic generalship was that too much ability on the part of sub-commanders could be seen as dangerous to the ruler, and rewarded with death. Such was the fate of Nicanor, the overly successful admiral of Cassander (*Diod. Sic.* 18.75.1).

Since ancient republican systems were designed to prevent any individual from gaining too much political power, they often put institutionalized barriers on the sort of strategic risk-taking that was the characteristic of Hellenistic kings. In addition, republican generals were elected as much for political as military reasons. Polybius criticizes the Aetolian League commanders for their incompetence, although one should note that most Achaean League commanders were hardly any better (*Polyb.* 11.8.1–3). Carthage and Rome are interesting exceptions, as both created empires with republican governments. By the fourth century Carthage was the strongest state in the western Mediterranean. Unfortunately, we know virtually nothing about how Carthaginian generals were chosen, but it seems that, in contrast to other ancient republics, commanders seem to have held long-term commands. This certainly increased their experience, and allowed them to create a workable command structure, especially important since the Carthaginian army was made up of such disparate ethnic and linguistic elements. It is remarkable that virtually all the main commanders we know of during the Second Punic War came from a single family: the Barcids. Hannibal, the most famous of this family, was one of the most

¹⁰ Carney (1996). ¹¹ Anson (1991).

capable military leaders of any age. It is not known if other Carthaginian generals belonged to such military families, but it is not unlikely. This would have fostered the sort of informal military training of commanders which was necessary in ancient societies with no concept of formal military academies.

The Romans, of course, organized a remarkably successful imperial Republic.¹² Over the course of the third and second centuries they became the rulers, directly or indirectly, of virtually the entire Mediterranean region. There were many factors involved in this achievement, one of which was the extraordinarily bellicose nature of Roman society.¹³ The Roman concept of strategy and strategic decision making was, however, crucial. The dual consulship, which made in effect two equally empowered commanders in chief was more of a theoretical than a real problem, as normally the consuls operated independently. When necessary, the dictatorship also existed to establish a temporary unitary command. Unquestionably, there was always a political component to the election of Roman military commanders, and the rivalry of clans and individuals played a role. Nevertheless, the Roman electorate often matched the skill and character of a commander to the task at hand, choosing a bold or meticulous individual, for example, depending on the circumstances.

One of the advantages of the Roman politico-military system was the creation of a pool of experienced potential generals.¹⁴ Roman aristocrats were expected to serve in the army for long periods and from an early age. In addition, young nobles certainly heard a great deal about military theory and practice from older relatives and family friends who had served as consular or praetorian commanders. Formal dinners and drinking parties played an important role by bringing older and younger aristocrats together. These get-togethers constituted a sort of military training analogous to, and perhaps in some ways superior to, that in contemporary military academies. Experience, of course, does not always translate into skill, and there were incompetent Roman commanders.¹⁵ On the whole, though, the quality of Roman generals was high. Occasionally, a truly outstanding commander took control of the mid-Republican army. Fabius Rullianus, a brilliant and underrated commander, defeated the Etruscans and Samnites at the decisive battle at Sentinum (295).¹⁶ This victory was Rome's most important in its rise to domination of Italy. Scipio Africanus was a remarkable strategist, though capable of mistakes – for example, after the battle of Baecula (208) he allowed Hasdrubal to escape from Spain and invade Italy.¹⁷ However, the capture of New Carthage, which involved a bold strategic move, as well

¹² Oakley (1993); Rosenstein (1999); Sabin (2000); Zhmodikov (2000); Goldsworthy (2000a).

¹³ Harris (1979). ¹⁴ Eckstein (1987); Rosenstein (1990). ¹⁵ Samuels (1990).

¹⁶ Livy 10.27–30; Polyb. 2.19.6–7. ¹⁷ Polyb. 10.39.9; Livy 27.19.1.

as tactical skill and risk-taking, is one of the greatest military achievements of the period.

In contrast to Hellenistic kings, Roman generals were not expected to lead their armies from the front or fight personally, a custom that extended their lives and value to the state. Roman generals did tend to be aggressive strategically, a function of a system that rewarded military success both socially and economically. Roman victory, however, often had less to do with dramatic strokes than a sort of stubborn resilience. For example, while the Romans never developed any masterful admirals during their key struggle with Carthage over control of the sea during the First Punic War, they won by replacing every fleet destroyed by storm or enemy action. They were willing to outspend the enemy in a long-term arms race.

The ordered nature of Roman warfare, with its measured marches and daily camps, tended to discourage tactical initiative (or rashness) on the part of commanders. On the other hand, it gave guidance to the unskilled, and made administration easier, leaving time for the commander to focus on strategic decisions. In addition, because of their reliance on regularity, Roman generalship could be shared among the various aristocratic clans with less fear that an incompetent commander would automatically lose a war. The relatively small size and regular nature of the Roman forces also reduced the stress on a commander's capabilities. Occasionally, this meant that opportunities for swift decisive action were squandered, but in the long run the system worked well.

While the political parameters of war were usually firmly set by the Senate, the Romans did give the general in the field a great deal of autonomy in terms of military action. The system of *imperium* (absolute authority) within a *provincia* (area of operations) put the commander firmly in control and prevented the sort of political interference that had plagued the Greek city-states. There were exceptions to this rule: for example, the Senate ordered the consuls to come to a decisive battle with Hannibal, and the disaster at Cannae was the result (Polyb. 3.108.1–2). Ultimately, though, it was the collective authority and prestige of the Senate that kept the Roman command system working. While the Romans did not have a 'general staff' per se, the Senate, made up of former, present and future generals, functioned as a sort of collective military and strategic command. The aristocracy, both through the Senate and more informally as a class, also provided a collective for the discussion not only of foreign affairs, but military policy as well. Polybius has Aemilius Paullus complain about 'armchair generals' in Rome, criticizing the army's actions in Macedonia.¹⁸ While this sort of discussion may have been annoying to generals, many of the individuals involved in such debate would have had significant military

¹⁸ Polyb. 19.1.1 (cf. Livy 44.22.8; Plut. *Aem.* 11).

experience and have been leaders in the Senate. This meant that Rome had an effective, if unofficial, method of scrutinizing and improving its military. Despite their commitment to system, the Romans were not set in their ways. They learned from their defeats and were perfectly willing to borrow from their enemies.¹⁹

Hellenistic commanders generally tried to avoid unnecessary fighting.²⁰ This was partly due to the great expense of raising armies and the difficulty of replacing troops, as well as a new appreciation of war as a tool of a wider political strategy, rather than an end in itself. Realizing that the ends of warfare were more important than its means, various methods were undertaken to gain strategic advantage without resorting to battle. During the fourth and third centuries, there was an increasing sense that battles should be fought only if there was a good chance of destroying an enemy army without too much risk to one's own. A more sophisticated sense of warfare, which focused on policy and profit, rather than revenge, also meant an inclination to minimize the damage to enemy property, if not lives. Polybius wrote that war should not destroy the fruits of victory (13.4.8). A battle was seen not as an end in itself, but rather as a means to an end. If the same result could be achieved without fighting, so much the better. For example, in 305, Antigonus tried to negotiate with Rhodes, to win it over from Ptolemy's side to his own. Failing in this, and before taking military action, he tried to institute an economic blockade, sending ships to seize Rhodian vessels on their way to Egypt. These 'sanctions' were unsuccessful, as the Rhodian fleet was powerful enough to protect its transports. Only when non-military means were exhausted did Antigonus send an invasion fleet to the island (Diod. Sic. 20.81.2–3).

As war became more political, politics became an increasing part of war. Since the rise of democracy in the late sixth century, Greek city-states had been increasingly divided by factional fighting. Invaders found that there were often elements in the city that would prefer to live under a foreigner than their domestic rivals. This attitude made treachery an important element of warfare, both in order to take besieged cities and to change the course of a battle or a war. Despite his sophisticated, and expensive, siege train, nearly every city Philip II took was through treachery. In fact, Philip's use of treason to capture cities became proverbial (Hor. *Carm.* 3.16.13–14). A large part of Aeneas Tacticus' fourth-century manual on sieges has to do with preventing politically motivated treachery, an indication of how common it was.²¹ Livy explicitly notes that during the Punic Wars many Roman positions in Sicily were taken by treachery (24.36.1), and the Romans also

¹⁹ Goldsworthy (2000b); Zhmodikov (2000); Sabin (1996).

²⁰ Sinclair (1966); Hamilton (1999).

²¹ Aen. Tact. 1, 2, 5, 10, 11, 14, 17, 18, 22, cf. Frontin. *Str.* 3.16, 'How to Meet the Menace of Treason and Desertion'.

used traitors to capture enemy cities.²² Treachery and political machinations played a role beyond sieges as well. Especially in the complicated political situation in the few decades after Alexander's death, it was very difficult to rely on the automatic loyalty of one's troops. Negotiating the desertion of key parts of the enemy's force could therefore increase the chances of victory and the risk of defeat. At times, such defections made battle unnecessary. Outnumbered two to one by Eumenes in 319, Antigonus was able to get the enemy cavalry commander, Apollonides, to desert in mid-battle.²³ Polyperchon convinced the entire army of Eurydice to defect before any battle was fought (Diod. Sic. 19.10.2–3).

Factional fighting between democratic and aristocratic elements sometimes led to treachery. The Carthaginians, for example, took advantage of it during their fourth-century invasion of Sicily.²⁴ Even after the monarchy became the normal political system in the Greek world, the factional hostility between democratic and aristocratic forces did not stop: in their attempt to undermine the power of Cassander, a coalition under Polyperchon offered democratic governments to the Greek cities.²⁵ Democracy gradually faded away under the increasing influence of both the Hellenistic monarchies and Rome, but factional fighting certainly continued. Livy noted the role of aristocratic and popular parties in the betrayal of cities during Hannibal's invasion of Italy.²⁶ Although the expression 'divide and conquer' is a modern one, the Romans practised the method expertly. They often used internal disputes among their enemies to gain military and political advantage. Factionalism also existed outside the world of the city-state, and was exploited by both Hellenistic and Roman commanders. For example, Ptolemies and Seleucids exploited factionalism among the Jews to gain control over Palestine.²⁷ We happen to have Jewish sources describing this sort of struggle, but such factions doubtless existed in most, if not all, of the small cities and states of the Mediterranean region. Factional rivalry was not, of course, the only motivation for treason. Military commanders might offer a bribe to induce enemies to defect or to betray their side in other ways.²⁸

In addition to the use of treachery, commanders employed other methods to achieve victory without fighting. When Alexander besieged the Rock of Aornus in Bactria, he deliberately left the enemy an escape route, so that he could take the place without fighting.²⁹ During Agathocles' second African campaign, in 307, the Carthaginians refused to leave their fortified camp, hoping that the Greeks would run out of supplies, and thus they could win

²² Livy 24.47.4–11, 34.3–7, 27.5.17–18. ²³ Diod. Sic. 18.40.5–8; Plut. *Eum.* 9.2.

²⁴ Diod. Sic. 19.43–7, 103; cf. Livy 24.2.8–9.

²⁵ Diod. Sic. 18.69.3–4; Nep. 19.3.2, Plut. *Phoc.* 33.1–5.

²⁶ E.g. Livy 23.2.1–8, 16.2–3, 30.9; 25.8.1–11.20. ²⁷ Joseph. *AJ* 12.9–10, 246–7; *Macc.* 2.3.4ff.

²⁸ Diod. Sic. 13.88.5, 7. ²⁹ Diod. Sic. 17.85; Curt. 8.2.1–3; Arr. *Anab.* 4.24.8–9.

the war without a battle (Diod. Sic. 20.64.3). Of course, the best-known use of strategic battle avoidance is that of Fabius Maximus in the Second Punic War after whom ‘Fabian tactics’ are named.³⁰ This method – staying close enough to the enemy to hinder his operations, but far enough away to avoid fighting – was practised already in Hellenistic times. Cassander succeeded against Antipater in Greece in 316 and 317 largely by avoiding combat.³¹ When Agathocles returned to Sicily from Africa in 307, he was opposed by a larger force under Deinocrates. Diodorus Siculus describes how Agathocles ‘steadily followed on [Deinocrates’] heels; having secured victory without a struggle’ (20.57.2–3). Fabius’ success with this strategy was made possible by the strong points – colonies and garrisons – which the Romans had placed strategically around Italy. There were simply too many of them for Hannibal to take and hold.

The fact that soldiers and officers in the Roman army were also citizens, who could vote, discouraged unnecessary risk-taking among Roman commanders. A reputation for not considering the lives of one’s troops could jeopardize a commander’s political career. The need for popular support and the conventions for granting triumphs might also have had something to do with the tendency of the Romans to try to annihilate, rather than simply defeat, their enemies, as this certainly was the more popular type of victory. The oligarchic nature of the Roman state is often emphasized, but it is worth noting that the lives of junior officers, from wealthy and important families, needed to be considered by a politically savvy general. After the mid-second century, there are indications of some reluctance on the part of the Romans to get involved in overseas wars. Increasingly, the Senate used its prestige, and a pretence at impartiality, to try and solve political problems without recourse to military action. This approach was not always effective, however, and the Romans certainly did serious fighting in this period. Prestige was often more important than strategic thinking, and this, and greed, often led to a lack of fair dealing with subjects, clients and others. The persistent Spanish wars of the second century were due in no small part to Roman bad faith and poor policy. There were times in which a disinclination to fight ultimately led to more warfare, not less.

While it is difficult to quantify (as it can be a function of the survival of sources), the frequency and intensity of warfare in the Mediterranean region appears to have increased during the fourth century. The Greek city-states were involved in a struggle for hegemony and the development of federal leagues did not ameliorate the fighting. Indeed, the constitution of the Aetolian League, also written in the fourth century, assumed that the state would normally be at war (*IG IX².1*). Even before its conquest by

³⁰ Frontin. *Str.* 1.3.3; Livy 22.12.2ff.; Polyb. 3.89.2–90.6; Erdkamp (1992).

³¹ Adams (1984) 87–8.

Alexander, the Persian monarchy was increasingly involved in civil wars and rebellions, which often involved Greek forces on one or both sides. The Hellenistic monarchies were incessantly at war, particularly in their first hundred years of existence. Carthage expanded aggressively, in Africa, Sicily and ultimately Spain. The Roman Republic was involved in at least one military campaign, if not several, during almost every year of the period in question.

Not only did the frequency of warfare increase, but its scale did as well. Between the fourth and second centuries the Hellenistic monarchies carried out military campaigns over a wider area than any previous state in the west. Alexander the Great fought his way from Greece to India. The Hellenistic kings also operated on a vast scale. Antigonus I fought frequently on two or even three fronts, and demonstrated the use of interior lines to gain an advantage over superior numbers. Between 319 and 317 his armies fought as far west as Greece and as far east as Iran. Like Alexander, the Seleucid monarch Antiochus III fought from the Mediterranean coast to north-west India. By the third century Rome was campaigning throughout the western Mediterranean, and in the second century in its eastern part as well. The Hellenistic states, Carthage and Rome all frequently fought wars on two, or even three fronts simultaneously.

Greek armies in the fourth century, while increasingly complex in make-up, were still about the same size as classical ones: around 20,000–30,000 troops tended to be the upper limit. Fourth-century Roman military forces also remained relatively small – a consular army usually had only some 10,000 men in it down to 311, when it was doubled in size. Around the same time, the Carthaginians were probably fielding significantly larger armies, reflecting a logistical infrastructure more sophisticated than that possessed by the Greeks or Romans of the time. In 345, if our sources are to be trusted, the Carthaginians transported an army of over 50,000 men by ship from Africa to Sicily (*Diod. Sic.* 16.67.1–2), and in 339, they sent an even larger force, 70,000 infantry, cavalry and chariots, backed by a naval force of 1,000 transport ships and 200 warships.³² Clearly, they were running a supply line back to Africa, as well as relying on local resources. These large armies, however, were not always successful against the smaller, more efficient, contemporary Greek forces. The force of 70,000 Carthaginians, for example, was defeated by a Greek army of 20,000 under Timoleon at the battle of the River Crimisus (*Diod. Sic.* 16.79.1).

The rise of Macedonia did not, at first, result in a significant increase in army size. Although Philip II had the financial resources and military manpower to build up a much larger force, his army almost always remained

³² *Diod. Sic.* 16.77.4. The size of the Carthaginian armies mentioned in *Diod. Sic.* 11.20.2 and 3.54.5, numbering in the hundreds of thousands, is clearly exaggerated.

under 40,000 men. The army that Alexander took with him into Asia had only around 35,000 combatants.³³ Over the course of his campaign the size of Alexander's force steadily increased. By the time he had reached India his army probably contained over 100,000 soldiers.³⁴ Antipater brought an army of almost 50,000 men to suppress the Greek revolt of 331, although the rebels were able to field only 20,000 infantry and 2,000 cavalry. In the decades after Alexander's death, the size of Hellenistic armies increased. While Hellenistic armies of 30,000 were typical, Antigonus I had a force of 60,000 infantry, 10,000 cavalry and thirty elephants in 319 (Diod. Sic. 18.50.3). In 306 he invaded Egypt with a force of almost 90,000 men. In addition, Antigonus' fleet, which followed the army along the coast, had 150 warships, with crews of at least 30,000 men, as well as 100 transports, representing thousands more (Diod. Sic. 20.73.2).

At the end of the fourth and into the third century, armies of 60, 70 or even 80,000 men (excluding non-combatants) were not unusual. At Ipsus (301), for example, there were a combined 155,000 men on the field, and at Raphia (217), both sides together totalled some 140,000 combatants (Polyb. 5.79.1–13; Plut. *Dem.* 28). Some individual armies, such as that of Antiochus III during his expedition to the east (212–205), may have reached 100,000 in size.³⁵ Not all armies, of course, were this large – smaller armies also operated routinely. The armies of Macedonia, fighting in Greece, generally hovered around 25,000 to 35,000. At the land battle of Salamis (Cyprus) in 307, which preceded the more famous naval engagement of the same name, there were less than 30,000 soldiers, total, on the battlefield (Diod. Sic. 20.47.1–4). As the fortunes of the Hellenistic kingdoms declined in the second century, there was less money available for the enormous armies that had characterized the third.

During the same period the rise of Roman power over Italy was giving it access to enormous manpower. Despite the fact that the total numbers in their military forces could, and did, exceed hundreds of thousands of men in a year, the individual armies of the Romans never approached the enormous ones that the Hellenistic monarchs had led, except for the disastrous campaign of Cannae in 216.³⁶ The Romans had learned the lesson of 'smaller is better'. While a small force could be overwhelmed by a significantly larger one, in general an army of around 30,000 men was sufficient for most tasks and easier to maintain in the field.

All states in this period made frequent use of military alliances, often merging armies into multi-state forces. In the twenty years after Alexander's death his Successors made and broke alliances at a dizzying rate. Alliance had always been part of war, but an important change in this period was

³³ Diod. Sic. 17.17.3; Justin, *Apol.* 11.6.2; Plut. *Alex.* 15.2; *De Alex. fort.* 1.3.327d; Frontin. *Str.* 4.2.4.

³⁴ Engels (1978) 150. ³⁵ Bar-Kochva (1976) 10. ³⁶ Brunt (1971); Rosenstein (2004).

the switch from the use of the traditional alliance, a long-term relationship based on real or notional kinship, to short-term partnerships based solely on immediate strategic advantage. Hellenistic states would regularly form coalitions against a common enemy. There were two such coalitions formed against Antigonus I, eventually leading to his demise. The idea of kinship as a legitimate foundation for alliance did not disappear entirely. One sees an interesting example in the rather unlikely claim of the Jews to an ethnic relationship with the Spartans, which they made in the second century in a bid to garner aid against the Seleucids (*Joseph. AJ* 13.166–70).

The Romans used strategic alliances very effectively as early as the fourth century, for example during the Samnite Wars. Indeed, Roman military success was in large part based on their skilful use of alliance. First in Italy, and later as they expanded into the Mediterranean, the Romans broke up possible enemy coalitions through targeted alliances and military action. Alliances were also made to provide staging points, to obtain supplies and to supplement Roman forces, especially in ancillary arms such as light infantry and cavalry. The Carthaginian strategy in the Second Punic War appears to have been to break up the Roman system of alliance, which would have crippled them without the necessity of actually attacking Rome. When this failed, Carthage attempted to create a counter-alliance, made up of states in Sicily and the Balkans (including Macedonia) in order to contain Roman expansion.

Alliances, of course, were not always a matter of voluntary action. Throughout the period, a major objective of war was to force weaker states into ‘alliance’ with (that is to say dependence on) more powerful ones. In other cases, a single strong individual or state created a league or alliance, which drew manpower, ships, supplies and money from a group of states or cities, with but a single commander. The treaties that Rome made with its ‘allies’ stipulated exactly what military support it expected. Even agreements made between equals sometimes specifically set out what was to be provided. For example, a treaty between the Romans and the Carthaginians, signed in 279, stipulated that Carthage would furnish the transport ships for any joint operation to be taken against Pyrrhus of Epirus (*Polyb. 3.25.4*).

III. LOGISTICS

The Carthaginians seem to have been the first to combine the sophisticated organization of Near Eastern logistics, the technology of sea-travel and the advantages of the more sophisticated monetized economy pioneered by the Greeks. By the middle of the fourth century, one finds the Carthaginians moving and supplying armies of 50,000 to 70,000 men by sea. Large Punic fleets made up of hundreds of transports, guarded by warships, travelled

between north Africa and Sicily during their struggle to take control of that island. Unfortunately, we are not informed about any of the basics of Carthaginian supply, such as how food was transported with the army, or in what form it was issued to the troops.³⁷

Beginning with the Peloponnesian War and continuing into the fourth century, one sees Greek logistics improving significantly.³⁸ During this period, the Persian monarchs poured substantial amounts of money into Greece in order to influence the course of both political and military events to their advantage. This allowed the Greeks to purchase and move supplies on a much larger scale than had been possible during the classical period. Although the relatively small scale of Greek warfare, as long as it was confined more or less to the Aegean region, meant that logistics developed more slowly than other aspects of warfare, the fourth century saw an increasing awareness of the importance of supply in war. For example, during his Samian campaign of 366, Timotheus forced the merchants following his army to sell in bulk. This meant that food would be purchased by unit commanders and distributed, rather than bought by individual soldiers for their own use.

Philip II's military reforms included a number of logistical innovations. Most importantly, he had military servants carry portable mills on pack animals, for grinding grain into flour (*Frontin. Str. 4.1.6*). Unground grain takes much longer to spoil than flour, which makes storage easier. Philip's method became the norm for both Hellenistic and Roman armies. Rather than soldiers purchasing their own food, or having cooks accompany the army, Hellenistic and Roman soldiers – or their servants – ground the grain supplied to them. This was then baked into bread, the main staple, supplemented by meat, wine, oil and vegetables. When necessary 'hard tack' was prepared, when the soldiers had to make a forced march or when cooking fires were undesirable. Such pre-cooked provisions, which could be carried by the soldiers, were also used when baggage trains had to be kept to a minimum. This was the case in desert campaigns, such as during Demetrius' foray into Nabataea in 312 (*Diod. Sic. 19.96.4*).

We have little direct evidence for the logistics of Alexander's invasion of the Persian empire.³⁹ He generally seems to have relied on local resources, requisitioned from surrendered provinces, cities and tribes. At times Alexander set up sophisticated supply systems, particularly when his army was stationary for long periods, such as at the siege of Tyre (332). Usually, however, he was moving too rapidly to make much use of supply lines. At times, his logistical planning seems to have been haphazard, as indicated by his disastrous march across the Gedrosian desert in 325, during which he lost much of his army to hunger and thirst.

³⁷ Shean (1996). ³⁸ Engels (1978); Hammond (1983a). ³⁹ Engels (1978); Seibert (1986).

Hellenistic armies, generally larger than classical Greek forces, consequently needed more provisions. The higher proportion of cavalry, at least in the earlier periods, added more logistical strain, as a cavalryman and horse require much more in the way of supply than an infantryman. In addition, a characteristic element of Hellenistic warfare was the widespread use of elephants. One finds them being used all over the Mediterranean world: in Spain, Gaul, Italy, Greece and north Africa, as well as in western Asia. Their tactical advantages and disadvantages have been much debated by military historians, but there is no question that they represented a drain on an army's supply system. Hellenistic armies generally relied on supply lines rather than living off the land. Armies had grown too big to live off local resources, campaigns were conducted in larger theatres of operations, and the proliferation of sieges necessitated a more sophisticated supply system. The increased use of camels as pack animals improved overland supply lines, at least when armies were operating in western Asia.

The scale and complexity of supply in the Hellenistic period are illustrated by Antigonus I's invasion of Egypt in 306. Diodorus Siculus, relying on an eye-witness, Hieronymus of Cardia, gives an unusually vivid description of the logistics of the operation. Antigonus I moved an enormous army, almost 90,000 men, across the Sinai desert, with an accompanying force of 100 transports and 150 warships sailing along the coast. Antigonus used camels with Arab drivers to carry 130,000 *medimnoi* of grain plus an unstated, but certainly substantial, amount of fodder. In addition, each soldier carried ten days of prepared rations, probably in the form of hard tack. Heavy equipment, such as torsion artillery and siege engines, was moved in wagons. Antigonus set out in late October, to take advantage of the cooler weather – his march across the Sinai took about eight days. The amount of grain carried by the army was sufficient for the desert march, and the provisions brought by the fleet were intended to replenish its stores in case it was held up at the Nile. Indeed, Ptolemaic resistance kept Antigonus' army stuck in the eastern desert. The fleet, though, was not able to play its intended role: a winter storm destroyed part of the fleet and drove another part of it back to Palestine. The remainder was unable to use the Nile ports, which were occupied by the enemy, and so had to ride at sea, which ancient ships were not designed to do. The sailors almost died of thirst and had to be supplied by the army – an ironic role-reversal. The stores the army brought with it gave out, and shortages of both food and fodder forced Antigonus to retreat back to Syria (Diod. Sic. 20.73.3–74.5).

The rising importance of siege warfare in the Hellenistic period placed new demands on those supplying armies.⁴⁰ For example, torsion artillery required the use of special ropes, and while animal sinew was used, the

⁴⁰ Garlan (1984).

best material was women's hair. By the third century, enormous amounts of it were being collected and shipped around the Mediterranean. In one instance, Rhodes transported 680 kg of hair for military purposes. On campaign, armies generally brought only the non-wooden parts of artillery and other siege equipment along with them. Sufficient wood was usually available on the site of a siege to build the catapults, towers and other necessary items. The number of missiles expended in battle could be substantial: during a single night during the siege of Rhodes in 305, the defenders fired 2,300 missiles from their torsion artillery (Diod. Sic. 20.97.2). Although this might not be a typical rate of fire, it shows that the number of missiles that needed to be stored or transported might reach the tens of thousands. For the defence of cities or forts, of course, entire pieces of artillery, and their ammunition, had to be manufactured and stored. The numbers could be quite large – by 149, Carthage possessed some 2,000 artillery pieces (Polyb. 36.6.1–7).

Roman Republican armies also employed sophisticated logistics.⁴¹ They often moved provisions over a considerable distance, using magazines and supply depots. During the Third Macedonian War the Romans operated a supply line overland from Ambracia on the Gulf of Actium across the Balkan peninsula to Larissa in Thessaly, a distance of some 100 km over mountainous terrain (Livy 42.48.9–10, 55.5). The conquest of Cisalpine Gaul (northern Italy) was made more difficult by the need for overland supply (Livy 21.48.8–10). The use of supply bases, such as that at Clastidium, played an important role. By the end of the third century, the Romans had begun constructing a sophisticated network of roads throughout Italy (fig. 12.1). The Romans almost certainly invented the modern road, using built-in drainage to prevent roadways washing away due to flooding. This was a major advance, and as the Roman Republic expanded, so did their road system. The Romans used their road network to facilitate the movement of troops, but more importantly supply trains. By the end of the second century the Romans were using quite sophisticated overland logistics. They were able, for example, to conduct a forty-day siege in the midst of the Sahara desert, that of Thala in Numidia in 108 (Sall. *Iug.* 75.1ff.).

By the end of the fourth century most large Mediterranean states had developed the capability to move and supply quite large forces overseas. The transportation of armies by sea had become completely routine. An example is Antigonus I's invasion of Rhodes in which more than 40,000 men were transported to the island in 170 transports and 100 warships (Diod. Sic. 20.82.4). The warships were not only escorts, but also could tow the transports bringing men and horses, if necessary. Moving large amounts of staple goods by ship had also become normal, and so armies could be

⁴¹ Garnsey, Gallant and Rathbone (1984); Erdkamp (1995), (1998); Roth (1999).



Figure 12.1 A section of the Via Appia, leading from Rome to Campania and Brundisium, the first paved road in Italy, constructed in 312 BC, which was instrumental in helping Rome maintain and extend its conquests.

supplied relatively easily, although at great expense. Seaborne transport was, however, vulnerable to destruction, primarily by storms. Although there were a few cases of warships attacking and destroying convoys, it was in fact rare. While the relatively slow speed of warships made it difficult

to maintain blockades, or raid enemy shipping, the fear of such action may have been greater than the reality. Another problem facing ancient commanders was the need to coordinate between supply ships and land forces. In 198, for example, Flamininus had to send scouts to discover where his supply ships had landed (Livy 32.15.5–7). The Roman army in Macedonia in 169 almost ran out of supplies because the supply ships had been sent to the wrong port (Livy 44.7.10–12).

Ships were not only the bearers of supplies, but were great consumers of them as well. It was very expensive to build and maintain fleets. In addition, piloting and steering ships under ancient conditions called for high levels of skill, and finding sufficient numbers of experienced captains and skilled oarsmen was a great challenge. Crews needed extensive training to row effectively. The use of slaves and criminals to row is a phenomenon of the early modern period: free men manned ancient warships, and they demanded, and usually received, high wages. In addition to crews, ships needed hides, rope, pitch and above all, timber, the latter a product in short supply in the Mediterranean. Controlling one or more regions with large forests was absolutely necessary to any naval power. The Ptolemaic kingdom's determination to retain control of Syria, and particularly the Lebanon, had much to do with the need for timber to supply its fleets. The Romans benefited by the presence of such forests in Italy, and this was an important factor in their wresting control of the western Mediterranean from the Carthaginians.

As overseas supply grew more sophisticated, certain places, key to supplying armies, gained in strategic importance. The island of Cyprus was one of these, as its position made it vital to the support of operations in the entire eastern Mediterranean. Cyprus was a major element in the strategic planning of Alexander the Great, Antigonus I and all the early Ptolemies. Whenever possible, fortified cities or towns were used as strategic bases, as they not only had pre-existing storage facilities (particularly granaries), but also walls to protect them. Strategic bases were sometimes built and fortified from scratch. As an example, in 309 Lysimachus founded the city of Lysimachea to serve as a base for his operations in the Balkans (Diod. Sic. 20.29.1). Smaller depots were also established: in 215 Fabius Maximus set up the Claudian Camp near Suessula as a base for Roman operations in Campania. By 212 it had become so important that a praetor was assigned to administer it (Livy 23.48.1–2, 25.3.2). Second-century Spain did not have sufficient inland cities to serve as operational bases, so Aemilius Lepidus had to build and fortify an operational base when he besieged Pallantia in 136 (App. *Hisp.* 13, 81).

Even when armies relied on supply lines to bring up food for the soldiers, they still had to forage locally for fodder, wood and water. Foraging parties are mentioned frequently in the sources. Soldiers were normally used to

forage, although at times military slaves were present to do at least some of the work. As in all periods, such foraging parties were vulnerable to attack, and battles sometimes began as skirmishes between hostile foragers roaming around the countryside. At times, armies operated in regions in which supply lines were impossible or forces were too large to live off local resources. In such cases we read of serious supply shortages. For example, when Antigonus I and Eumenes were fighting in the arid regions of southern Iran in 317, their strategic movements – and battles – were often determined by a need to supply their armies. At one point, although their armies were camped directly in front of one another, the two generals found it impossible to fight, as they needed to forage constantly in order to feed the troops (Diod. Sic. 19.25.2).

The Hellenistic monarchies had access to substantial resources for the support of armies. When Antigonus I besieged Tyre in 315, for example, he ordered his Syrian governors to provide him with 450,000 *medimnoi* (16,800 metric tons) of wheat, enough to supply his army for a year. In addition, he requisitioned enormous amounts of timber – 8,000 men and 1,000 animals were employed just to move it (Diod. Sic. 19.58.2). The economies of the Hellenistic monarchies were highly monetized by ancient standards. Thus, they could rely on networks of private merchants to supply armies, either in addition to, or instead of, the traditional state bureaucracy. Armies also used requisition, called in Greek *angaria*, a term and institution borrowed from the Persians. Cavalry horses and baggage animals were often obtained in this way – when Agathocles invaded Africa in 310, he brought along cavalry gear and trained riders, but no horses, which he requisitioned from locals on his arrival (Diod. Sic. 20.3.4).

At times, Hellenistic armies had supply problems, either through lack of resources or poor planning. When Alexander entered regions with limited cultivation, for example, he routinely broke his army into smaller units. Ophellas, the Ptolemaic governor of Cyrene, who invaded Carthaginian Africa in 309, planned to have his army of 10,000 men, accompanied by an equal number of non-combatants, survive on hard tack, due to the lack of water to make bread. He did not, however, bring sufficient quantities, and his army almost starved (Diod. Sic. 20.41.1, 42.1).

During Rome's conquest of central Italy in the fourth century, its logistical system was fairly simple: most campaigns, such as the repeated Samnite Wars, were fought close to Roman territory. After conquering the mid-peninsula, the Romans used the food supplies of Campania and Samnium for fighting in northern and southern Italy. As they began their conquest of the Mediterranean, the Romans were still having difficulty with overseas supply. During the First Punic War, Hiero I supplied the Romans during their invasion of Sicily in 263, but half of Regulus' army had to be withdrawn during the winter to ease the supply burden (Polyb. 1.16–17). The

Romans' logistical capabilities, however, improved over the course of the century. Convoys transporting provisions to armies grew in size: by 249 the Romans were using 800 transports, guarded by 120 warships to bring supplies to the army besieging Lilybaeum (*Polyb.* 1.52.8).

There is reason to think that, until the Second Punic War, Roman logistical administration remained fairly rudimentary. By the end of the third century, though, the Romans were regularly moving provisions from Etruria, Sardinia and Sicily to armies operating not only in Italy, but also in Spain, Macedonia and Africa. Large Roman fleets carried more than just supplies, they also transported troops and other equipment. When, in 204, Scipio Africanus invaded Africa, 16,000 infantry and 1,600 cavalry travelled in 400 transports convoyed by 52 warships (*App. Pun.* 3, 13). By the second century the Romans had succeeded in spreading the logistical support of their armies over an even wider area: for the Third Macedonian War (172–167), the Romans obtained food supplies for the army from strategic bases in Italy, Thessaly, Sardinia, Sicily, Numidia and probably Egypt.⁴² The Roman armies used enormous amounts of supply in this period: after the Second Macedonian War (200–196) the government sold off 1,000,000 *modii* (6,700 metric tons) of *surplus* grain (*Livy* 33.42.8).

The Carthaginians showed great logistical capability in the overseas supply of their Sicilian campaigns in the first part of the fourth century. It is ironic, therefore, that in the Carthaginian campaign about which we are best informed – Hannibal's invasion of Italy – there is little evidence for Punic overseas supply. For whatever reason, Hannibal seems to have relied exclusively on resources within the peninsula, using depots and land-based supply lines.⁴³ Evidence of the continued sophistication of Carthaginian logistics is provided by the list of the supplies captured by the Romans in New Carthage, the Carthaginian strategic base in Spain. When Scipio took the city in 209, he found 400,000 *modii* of wheat and 270,000 of barley, 476 artillery pieces, 18,300 Roman pounds of silver coin and bullion, as well as sixty-three cargo vessels loaded with grain, weapons, bronze, iron, linen, timber and esparto, a local product for making rope (*Livy* 26.47.5–10).

The logistics of coalition or allied forces could be complicated. When seven Macedonian satraps formed a coalition with Eumenes of Cardia, each undertook to supply his own forces (*Diod. Sic.* 19.15.6). Thus, there were supply lines running from each one's territory to the area of operations – a complex and unsatisfactory arrangement. Alternatively, allied states might provide logistical support without directly getting involved in the fighting. Ptolemy, Cassander and Lysander all sent provisions to the besieged city of Rhodes in 305, although only Ptolemy sent any troops (*Diod. Sic.* 20.88.9, 96.1–3). The best solution was to have a single command

⁴² *Livy* 42.27.8, 29.7–8; *App. Mac.* 19.

⁴³ Shean (1996).

to which all supplies were sent, and which then distributed food to all forces, including allies. For example, in his campaign against Olympias in 317, Cassander demanded ships, missiles and torsion artillery from allied forces (Diod. Sic. 19.36.1). This was the way in which the Roman military normally operated. Allies (*socii*) were financially responsible for supplying the troops the Romans required of them by treaty. The actual money and provisions, however, were given over to the Romans, who administered their distribution.⁴⁴

Logistics often played an important role in strategic decision making. For example, when Ptolemy decided to meet Antigonus' invasion at the Egyptian border, rather than in Syria, it was to take advantage of shorter supply lines (Diod. Sic. 20.73.1ff.) The movement of large amounts of staple goods around the Mediterranean, both for military purposes and as part of regular trade, had become commonplace, and so the control of food supply gained a strategic importance. Athens was already importing most of its grain supply in the classical period. As a result, the Dardanelles, controlling access to the wheat fields of southern Russia, early became a key element of Athenian strategic thinking. In the fourth century Philip II tried to exploit this potential weakness by capturing the ports of Perinthus and Byzantium, but could not. Failing to capture Athens by seizing the Dardanelles, Philip then took control of the Dardanelles by taking Athens. This shows a very sophisticated level of thinking about supply. During the Hellenistic period cutting supply lines became an increasingly important strategy: Antigonus I used it effectively during his campaign against Lysimachus in 302. Cutting off a mountain pass over which provisions were transported, Antigonus forced his enemy to retreat (Diod. Sic. 10.108.5–7). The Romans were also skilled at the use of logistics as a weapon: an example is Fabius Maximus putting pressure on Hannibal's supplies during the Italian campaign. Scipio's lightning strike on New Carthage took out a key element in the Carthaginian logistical infrastructure (Livy 26.47.5–10).

IV. CAMPAIGN MECHANICS

The increased use of mercenary and professional troops by the Greeks in the fourth century meant that armies did not necessarily have to disperse after the campaigning season, as was the case with citizen forces made up primarily of farmers. Alexander fought in the winter when he found it necessary or convenient. The battle of Issus, for example, took place in November 333. During his relentless pursuit of Bessus into Bactria (329/8), Alexander did not go into winter quarters at all. He crossed the Hindu Kush mountains in the early months of 328, a remarkable achievement.

⁴⁴ Roth (1999).

In Sogdiana (328/7), Alexander went into ‘winter quarters’ in autumn, in order to rest his men for fighting during the winter months. He knew that the snow would drive the hill tribes out of their mountains into the valleys, where the Greeks could find and defeat them.

Alexander’s Successors sometimes followed his example. Craterus in Greece fought during the winter of 322/321 in the Lamian War (Diod. Sic. 18.25.1), and Antigonus undertook a forced march against Eumenes of Cardia in late December 317 (Diod. Sic. 19.37.3). Antigonus I invaded Egypt at the beginning of November 306, although bad weather hampered his naval contingent, which led to the invasion’s failure (Diod. Sic. 20.73.3). In general, however, commanders in the Hellenistic era did not take up winter fighting on a regular basis. Wars continued to be fought mainly during the period of May to October: indeed, mercenary companies still generally signed on for a nine- or ten-month ‘military year’. This was partly due to tradition, but there were also logistical and practical constraints to fighting in the winter. Fodder was not available for the animals and the supply of stored grain was low in the months before the spring harvest.

Traditional Roman society was strictly organized around a ritual calendar, and going to war was a part of it. Armies would begin fighting at the beginning of spring (*primum ver*). The consuls served as the military commanders of the army for a single year, and when they came into office, one of their first jobs was to raise an army. In 222, the beginning of the consular year was moved to 15 March, which meant that wars would begin in April or May. In 153, 1 January became the date consuls took office so that Roman armies could take the field earlier in the year, particularly when fighting overseas. By the fourth century Roman Republican soldiers were receiving pay, unlike Greek hoplites, so that they could campaign beyond the normal end of the campaigning season in October.⁴⁵

Long sieges were, however, rare in Roman warfare until the First Punic War, and there was little need to keep armies in the field over the winter. As a result, the Roman army, like Hellenistic ones, generally did not campaign during the winter months. If a war had not ended by this time, the army would retire into winter quarters (*hiberna*) until the spring. After the institution of overseas provinces in the third century, armies were more frequently left in garrisons over the winter, and their commanders were ‘prorogued’ (i.e. consuls were made into proconsuls and praetors into propraetors). Under the pressures of frequent wars, the Romans more commonly continued fighting after the onset of winter. For example, during the siege of Carthage, Scipio took the city of Nepheris ‘at the beginning of winter’ (App. *Pun.* 18, 120). Gaius Flaminius fought several battles in Hither Spain during the winter of 193 (Livy 35.7.7).

⁴⁵ Rosenstein (2004).

Beginning in the fourth century, more conscious attention began to be paid to such matters as deception and surprise, and these subjects became an important part of military handbooks. There were some remarkable examples of the use of deception. For example, when Eumenes of Cardia had to gather scattered forces to oppose Antigonus' surprise winter march in 317, he had a small force build a fortified camp on a hill using camp fires and empty tents to simulate a much larger army (Diod. Sic. 19.37.4). This worked, and Antigonus delayed his advance long enough for Eumenes to gather his forces. In the third century Hannibal became one of antiquity's most accomplished practitioners of stratagem. Indeed, the success of his famous march on Italy in 218 relied on convincing the Romans for as long as possible that he intended to stay in Spain. Hannibal also used deception on the tactical level. In 212 he captured the city of Tarentum through stealth, and in a famous incident once fooled a Roman army by tying torches to the horns of oxen (Polyb. 3.93.1).

Although the military literature of the period stresses the need to get information about the enemy, reconnaissance seems to have been fairly rudimentary in practice.⁴⁶ Xenophon discusses the use of scouts, but one usually finds a remarkable lack of the most basic type of scouting and field intelligence among Hellenistic and Roman Republican armies. To some extent, this was because the enormous amounts of dust kicked up by an army on the move announced its presence for miles around. Nevertheless, the lack of scouting could lead to surprises. Before the battle of Issus, for example, Alexander the Great passed by Darius' army completely unaware of its existence – although to be fair, there was a mountain range between the forces (Diod. Sic. 17.32.2). Subsequently, Alexander's army was easily ambushed at the Susian Rocks in 331, where apparently he had done no scouting whatsoever (Diod. Sic. 17.68.2).

There were inherent limits to an army's ability to detect enemy movements. It seems that, unless they were very fortunate, even good scouts could spot the enemy only about a day's march away. Some Hellenistic generals, however, such as Eumenes of Cardia and Antigonus I, did use scouts effectively both strategically and tactically. The Romans, despite their penchant for careful security on the march, were generally ineffective in scouting until late Republican times. At Cynoscephalae in 197 they marched past the enemy force entirely unawares.⁴⁷ Livy (35.4) refers to the sending out of scouts while on the march as an unusual event, and thus Roman armies were vulnerable to ambush: notable examples are the Caudine Forks (321) and Trasimene (217).

⁴⁶ Engels (1986); Austin and Rankov (1995); Zlattner (1997); Russell (1999).

⁴⁷ Polyb. 18.20.4; Livy 33.6.

In addition, Hellenistic commanders seem to have had little inclination to gather up-to-date intelligence on the route over which an army was to move. Antigonus had one of the better intelligence systems among the Hellenistic monarchs, but when he moved his army through the Taurus mountains in 314, he was surprised by the large amount of snow present in the passes. This took a heavy toll of his soldiers and forced him to retreat to Cilicia (Diod. Sic. 19.69.1–2). The Romans seem to have been somewhat more proactive in gathering geographical information. When Aemilius Paullus took over the army in Macedonia in 168, he sent legates to investigate the army's logistical situation, including its overland and seaborne supply lines (Livy 44.18.2–4). To some extent, military commanders must have relied on the growing body of geographical literature for strategic intelligence – indeed this might have been one of the motivations for such writing. Nevertheless, strategic intelligence was not gathered in any systematic way either by Hellenistic states or the Romans.

As has been the case throughout military history, much intelligence seems to have been obtained opportunistically from locals or from deserters. Disaffected individuals frequently would come forward with vital information. This aided Alexander's victory at Gaugamela (331). One of Antigonus I's generals, his nephew Ptolemaeus, learned from deserters of a plan by Cassander's general Eupolemus to ambush him. This intelligence allowed him to plan and carry out a successful night attack on Eupolemus' camp, capturing him (Diod. Sic. 19.68.5–7). The Romans learned of the weakness of a Carthaginian camp in Spain through Celtiberian deserters, which facilitated a surprise attack in 207 (Livy 28.1.6–7). Naturally, commanders tried to confuse their enemies by sending disinformation via false defectors. Torture was used to try to ferret out such false defectors, but this was not always successful. The most serious defect of intelligence gathering in this period was the lack of any sort of systematic analysis. The commander himself virtually always personally decided the truth or falsity of information, whatever its source. Occasionally, he might seek advice from his military advisors or council, but this was never done methodically. Professional intelligence analysis is a completely modern phenomenon.

From the beginning of the fourth century armies contained significantly higher numbers of light infantry and cavalry than classical ones had fielded. Even the heavy infantry often wore lighter armour: a linen corselet generally replaced the earlier plate bronze breastplate, and greaves were abandoned altogether. The shield was also reduced considerably in size. These changes made it easier for armies to move rapidly. Under combat conditions, a Hellenistic army usually covered about 24 km (15 miles) a day, although, as seen below, faster movement was possible. Overall, mobility became more important than individual protection. While the more frequent use of artillery and other siege equipment would have increased the size of

the army's train, these slow-moving elements could be left behind when speed was of the essence. Unless it was considered necessary, armies did not normally fortify their camps, which saved time on the march. Philip II's reforms of the mid-fourth-century Macedonian army were intended, in part, to speed up his army's movement rate. The king eliminated wheeled transport, reduced the number of non-combatants (to one servant for each cavalryman and for each ten infantrymen), and had soldiers carry their own rations. For the first time, one hears of armies carrying out practice marches – Philip II trained his army to achieve a rate of approximately 50 km (32 miles) a day, under arms and carrying their own provisions, though this rate of march could not have been kept up on campaign.⁴⁸

Rapid marches became a staple feature of Hellenistic warfare. These were carried out to obtain strategic or tactical advantage, but also to move quickly through terrain with limited resources, such as deserts. Alexander's relief force sent to Maracanda (Samarcand) marched 215 km (135 miles) in 72 consecutive hours, a rate of 72 km (45 miles) a day. In 319 Antigonus I marched 2,500 stades (440 km or 275 miles), in seven days and nights, an average of 64 km (almost 40 miles) a day. At the end of this march Antigonus attacked and defeated the forces of Alcetas, who was caught by surprise by his rapid approach. This feat is made more remarkable by the fact that Antigonus brought not only his infantry and cavalry, but his elephants as well (Diod. Sic. 18.44.1–5). In June of 217, on his way to Raphia, Ptolemy IV led his army on a remarkable 180 km, five-day forced march through the scorching Sinai desert, averaging 36 km a day (Polyb. 5.80.1).

Forced marches, however, could be costly. When Demetrius made a six-day, 660 km march from Coele-Syria into Cilicia, he lost most of his horses from exhaustion (Diod. Sic. 19.80.2). Although Hellenistic military leaders understood the importance of march security, it was often thwarted by the lack of discipline shown by their armies, particularly in the early period. An example is the nine-day forced march Antigonus I made around 316, in order to surprise the army of Eumenes of Cardia. The march was undertaken in the depth of winter, and Antigonus' troops, against orders, lit campfires, which gave away their approach to the enemy (Diod. Sic. 19.37.5).

A Roman Republican army generally moved more slowly than a Hellenistic one, trading speed for security. Their custom of building fortified camps each day may have begun as early as the fourth century, although its origin is obscure. It tended to slow their rate of movement. Nevertheless, Roman armies could move rapidly when necessary. Forced marches are known, particularly during the Second Punic War: Scipio Africanus marched swiftly from northern Spain to New Carthage, completely surprising the Carthaginian garrison in 209 (Polyb. 10.6.4). In another case,

⁴⁸ Diod. Sic. 16.3.1; Polyaenus, *Srat.* 4.2.10; Frontin. *Str.* 4.1.6.

the Romans slipped an army of 6,000 away from Hannibal in southern Italy and forced marched it north to help defeat Hasdrubal at the battle of the Metaurus (207). The distance covered in six days was about 420 km, a march rate of some 70 km (44 miles) a day (*Livy* 27.44ff.).

Another change in this period is the more common use of night marches. These were normally done to ensure secrecy and to achieve surprise. In other cases, operations in very hot climates made night marching desirable, for example during Antigonus I's operations in southern Iran in June and July of 317 (*Diod. Sic.* 19.18.1). Some night marches were quite rapid, such as the one that Perdiccas made to the Nile in his campaign against Ptolemy in 321 (*Diod. Sic.* 18.33.5–6) or that of Demetrius against Cilles in 312 (*Diod. Sic.* 19.93.2). Night attacks also become more common, particularly in assaulting an enemy camp by surprise. Such attacks were usually timed to occur at the second or third watch, in the hours after midnight and just before dawn. Both Hellenistic and Roman armies made night assaults on city walls, as at Rhodes in 305 (*Diod. Sic.* 20.97.4ff.), and Arpi in 213 (*Livy* 24.46.4). While rare, one does occasionally find fleets operating at night: Nicanor, Antigonus I's admiral, launched a night attack against Polyperchon's fleet under Cleitus in 318 (*Diod. Sic.* 18.72.2–5).

In the fourth century some Greek city-states, such as Athens, invested heavily in frontier defences, although there is little evidence that they had much effect.⁴⁹ Hellenistic states could better afford to build and garrison extensive forts, and in some areas, such as the border between Egypt and Palestine, they became strategically important. In the fourth and third centuries fortified positions and sieges become increasingly important elements of war. As discussed in Chapter 13, the development of torsion artillery inspired new approaches to defensive walls. While both offence and defence were enhanced, in general attackers gained the advantage and cities were less secure. Some campaigns developed into a series of sieges, such as Cassander's in Greece and Ptolemy I's in Cyrenaica. Sieges were very expensive, however, and their use was decided not only by military considerations, but financial ones as well. During the wars of the Successors (322–301) most sieges were successful, despite the well-known failure of Demetrius I at Rhodes. To some extent this was the result of technical advances such as torsion artillery, but at least as important were the financial resources available to Hellenistic monarchs, and their willingness to spend them on war.

By the second century, however, there was an increasing reluctance among Hellenistic commanders to undertake sieges. This was partly due to lack of funds, but perhaps may also be explained by the decreasing number of military engineers available. The stories about Archimedes inventing a

⁴⁹ Ober (1985a); Harding (1998).

number of extraordinary machines to defend Syracuse against the Romans may be apocryphal. Nevertheless, Livy says he directed the placement of torsion artillery effectively along the city's walls, which is perfectly plausible (24.34.3). The main emphasis during sieges continued to be breaking down, undermining or storming the walls. Traditionally, most cities surrendered as soon as their walls were breached. One finds, however, some cases in which resistance continued and intense street fighting took place within the city (Plut. *Pyrrh.* 34.2; Livy 29.18.6). This occurred famously at Argos in 272, where a tile thrown from a rooftop killed Pyrrhus of Epirus during street fighting. The new techniques, however, were not universally applied, and besiegers still tried to simply starve out defenders, as at Lamia in 322.

The Romans did not invent any new elements of military engineering, but they readily borrowed from the Greeks. The so-called Servian Wall of the city of Rome shows the use of the most modern fortification techniques in the fourth century. However, Roman adoption of certain siege techniques seems to have been somewhat tardy – there is no reference to them using a battering ram before the Second Punic War. The Romans continued to make siege warfare a key element in their strategy during the second century, when its importance in the Greek world was on the wane. However, it was only in the late Republic that the Roman army perfected its siegework.

Already in the classical period the Greeks had used strategically placed fortifications to put pressure on the enemy – a practice they called *epiteichismos*.⁵⁰ This was practised during the Peloponnesian War and then increasingly in the fourth century. It was the Romans, however, who brought this method to a refined art, although they lacked a specific term for it. The development of military colonies, and roads to connect them, was a key element in Roman control over Italy. The effectiveness of this strategic approach was borne out during the Second Punic War. The practice was extended overseas in a limited way, particularly in Spain. Aquileia was founded as a colony in 181 to control the route to the Balkans, and the Romans used their ally, Massilia, in a similar role to the west. Despite the increasing sophistication of siege warfare, open battles continued to be important, as evidenced by such key encounters as Raphia (217) and Zama (202).

V. THE HUMAN COST

Battle casualties are discussed in Chapter 13, but both military and civilian deaths often occurred off the battlefield.⁵¹ For example, one traditional

⁵⁰ Lawrence (1979); Ober (1985a).

⁵¹ Krentz (1985a); Hammond (1989a); Ziolkowski (1990); Salazar (2000); Rosenstein (2004).

means of taking cities, by starvation, had the potential of bringing enormous death rates in the besieged cities. Of course, a large percentage of these would have been civilian deaths. There was a chance of malnutrition not only for the besieged, but unless logistical arrangements were good, for the besieger as well. The improved means of assaulting cities adopted in the Hellenistic period also meant that there were higher casualty rates during the course of sieges: from missiles, sorties and storming parties.

Navies were particularly vulnerable to catastrophic loss of manpower in storms. While our sources usually focus on the number of ships lost in such storms, it must be remembered that these forces often included tens of thousands of sailors. The increasing use of naval power in the fourth and third centuries led to increased casualties. During both the First and Second Punic Wars, for example, large fleets on both sides were lost. In 255, a fleet of some 350 ships was hit by a storm off the coast of Sicily and only eighty ships survived (*Polyb.* 1.37.2). The casualties must have numbered in the tens of thousands.

Of course, not all casualties involve immediate death. Many soldiers would have been wounded, and the availability and quality of medical care had a large impact on survival.⁵² Hellenistic military doctors could successfully treat a number of battle wounds, though they had no way of stopping massive bleeding, as the Romans later did. The practice of encouraging infection, which was erroneously thought to be a natural part of the healing process, doubtless led to many deaths. In any case, while there is evidence of Alexander bringing physicians along with his army, these were probably only for the treatment of high officers. There is no evidence of a regular medical service among the Hellenistic monarchies. The Romans were later to develop the most advanced military medical practices of pre-modern times, but during the middle Republic, medicine in general, and military medicine in particular, were quite primitive. The Romans did, however, take their wounded with them after battle, although it is questionable whether this practice raised or lowered death rates.

While ancient historians often conscientiously (if not necessarily accurately) record battle losses, they almost always ignore the losses suffered from exposure, accident, desertion and disease. It is important to note that some of the epidemic diseases that caused enormous losses in early modern armies – such as bubonic plague, cholera and syphilis – were not present in the Mediterranean world in Hellenistic and Roman Republican times. However, other diseases were certainly present, such as typhus, malaria and dysentery. It is striking, given the increasing frequency of sieges, in which armies remained stationary for long periods, that death from epidemic diseases is rarely mentioned. The constant diminution of military strength

⁵² Gabriel and Metz (1992).

from disease, combat and accidental injury, fatigue and desertion, was a constant factor in early modern warfare. There is very little direct evidence for it, or its rate, in ancient times, but it must have occurred.

In general, during the period covered in this chapter, one sees an increase in commonly accepted conventions of war. Of course, such conventions about the treatment of non-combatants and prisoners continued to be culturally bound: as late as the end of the fourth century, we hear of Carthaginians sacrificing prisoners of war to their gods (Diod. Sic. 20.65.1). Nevertheless, rules of warfare did develop in the Hellenistic period and spread around the Mediterranean world. By the fourth century, the Greek idea of Hellene versus barbarian was well established and affected military attitudes, and the massacre of women and children was considered 'barbarian' in both our and their senses of the word. This is why Alexander's massacre of some 6,000 Thebans so shocked contemporary public opinion.

The sort of atrocities that characterized earlier Greek warfare were mostly absent from Hellenistic practice. Polybius notes that, for a century after Alexander's death, no Greek city was destroyed by war (18.3.4–8). By the Hellenistic period, the relatively humane treatment of Greek prisoners had become standard: for example, before the siege of Rhodes in 305, both sides agreed on a price to be paid for the ransom of captives – 1,000 drachmas for a free man, and 500 drachmas for a slave. Mercenaries, however, were an exception to this rule (Diod. Sic. 20.84.6). Such individuals were sometimes recruited into the victorious army after being defeated in battle. When this was not possible or convenient, mercenary forces might be massacred, either out of vengeance or because leaving them at liberty would be dangerous.

Despite the existence of such rules and conventions, Greeks were still capable of enormous cruelty to Greeks. When Argos revolted against Cassander and Apollonides in 314, one of the latter's generals burned 500 Argives alive (Diod. Sic. 19.63.2). The army of Peithon massacred Greeks who had rebelled against Macedonian rule in Iran, despite the fact that they had surrendered with the promise of being spared. Indeed, the massacre of enemy prisoners was common during civil wars, and routine in the case of rebellions. When Agathocles and Deinocrates were fighting over control of Syracuse, the former massacred 4,000 to 7,000 prisoners (Diodorus Siculus' sources vary as to the number) captured at the battle of Torgium in 305 (Diod. Sic. 20.89.5).

In the case of non-Greeks, even less restraint was shown. The fighting between Greeks and Carthaginians in Sicily in the fourth century was characterized by extraordinary brutality. After his capture of Tyre, Alexander crucified all the men of military age, and sold the women and children into slavery.⁵³ At Sangala in his Indian campaign, he killed wounded captives

⁵³ Diod. Sic. 17.46.3; Curt. 4.4.17.

and massacred a large portion of the population. Such slaughter served the purpose of terrorizing the enemy, although this could be counter-productive if it encouraged more desperate resistance. Indeed, when he saw his brutal actions in India were not working, Alexander changed to a more benign policy of taking hostages, which encouraged negotiated surrenders.

Polybius expressed horror at the cruelty of the Romans in war.⁵⁴ His attitude is striking given his general sympathy toward their state. Roman policy in Greece itself tended to be ameliorated by phil-Hellenism among a number of Roman aristocratic clans. The Romans seem to have felt that the Greeks were in a separate category from other enemies of Rome and were to be treated differently. It is clear, however, that the Romans were still capable of great cruelty and ruthlessness, even against Greeks. The Romans understood the psychological effect of brutality, and used it effectively in war. They mutilated the corpses of dead enemy soldiers, and even animals, a practice graphically described by Polybius. After the Carthaginian general (and Hannibal's brother), Hasdrubal, was killed at the battle of the Metaurus in 207, the Roman commander had his head hurled into Hannibal's camp, in an attempt to demoralize the enemy.⁵⁵ Prisoners of war were sometimes enslaved, and either sold, or, in the case of the Ptolemies and Rome, consigned to work in mines.

The looting of captured cities was routine, and rapes, beatings and killings were certainly a normal feature of war.⁵⁶ At times, a general might try to control the soldiers' violence: Marcellus ordered that free Syracusans not be killed during plundering. That such orders were very effective might be doubted. The Romans did, however, instil a high level of discipline into their armies, and this may have extended even to such circumstances. Conventionally, a city that surrendered to a besieger was spared the pillaging that routinely came if it had been stormed. This rule seems to have been generally followed by Greeks and Romans during this period. Livy says that when Aemilius Regillus' soldiers wished to sack the town of Phocaea after it had surrendered in 190, he said that 'cities were sacked after capture, not after surrender' (37.32). In the second century Romans were still capable of great cruelty (note for example the total destruction of Carthage and Corinth), but clemency (*clementia*) was becoming an increasingly important military virtue. Of course, such rules and conventions were not universally followed: when the Numidian city of Capsa surrendered, Marius had the men slaughtered and the rest of the population sold into slavery. Sallust, however, notes that this was 'against the law of war' (Sall. *Iug.* 91.7).

The fourth century was a watershed in the military history of the Western world. The combination of the Greek mode of war with the resources and

⁵⁴ Polyb. 10.15.4ff; cf. Gilliver (1996).

⁵⁵ Livy 27.51; Frontin. *Str.* 2.9.2; Volkmann (1961); Ziolkowski (1993).

⁵⁶ Ziolkowski (1993).

sophisticated organization of Near Eastern and north African societies led to a military revolution. New methods of fighting, as well as supplying and organizing armies, dramatically increased the military capability of states. This new methodology spread to the Romans, who continued and extended the reforms. Warfare reached a high level of sophistication, both on the tactical and the strategic level. While the Roman army certainly had its own path, there is no doubt that the highly professional Hellenistic armies were very influential in Roman military developments of the late Republican and imperial periods.

CHAPTER 13

BATTLE

PHILIP SABIN AND PHILIP DE SOUZA

A. LAND BATTLES

Philip Sabin

I. INTRODUCTION

The great land battles of the Hellenistic and mid-Republican era are perhaps the most striking single aspect of warfare at that time. In the largest, 100,000 or more troops clashed in climactic contests which in just a few hours transformed one army from a fearsome military force into a shattered mixture of corpses, captives and panic-stricken fugitives. These battles might not in themselves be ‘decisive’ if the losing side had both the resources and the commitment to raise further forces to continue the fight. However, they did profoundly affect the course of conflicts, and spelt doom for any antagonist without the means to recover from defeat.

Historians both ancient and modern have felt the dramatic power of these set-piece contests, and have accorded them special attention in their works. In the ancient world, the ‘battle piece’ was a staple ingredient of historical writing, and incorporated various more or less formulaic elements – a description of the composition and deployment of the opposing armies, a recitation of (impossibly long and high-flown) speeches by the opposing generals, a comparatively brief account of the fighting itself, focusing on anecdotal aspects such as the heroic conduct or death of a commander or the contribution of ‘exotic’ weapons like elephants or chariots, and finally a tailpiece detailing the respective losses and the aftermath of the engagement.

These ‘battle pieces’ are highly variable in length, quality and reliability. Unlike Xenophon and Caesar, our surviving sources for this era were not present themselves at the battles they describe, and were often writing hundreds of years later. Hence we are at the mercy not only of their varying historical standards and degree of military understanding, but also of the limitations of their own sources. Some writers, such as Polybius and Arrian, were themselves experienced commanders and hence had an eye for military absurdities, but others were armchair historians capable of egregious errors (as when Livy mis-translated Polybius’ account of the Macedonian phalanx

levelling their pikes at Cynoscephalae, and wrote instead that they discarded the pikes completely and relied on their swords).¹

Diodorus is a good example of a writer whose reliability varies greatly depending on the quality of his sources. For the early Successor era, when he followed Hieronymus, his battle accounts are detailed and persuasive, but at other times his claims are more dubious. The trouble is that some ancient writers, faced with inadequate sources on a battle, were not above sheer invention for dramatic effect. Where we have multiple surviving sources, the result is often long-running and inconclusive academic debate over which of the claims to believe (as seen in the continuing controversy over the relative credibility of the differing accounts given by Diodorus, Arrian and Plutarch of Alexander's victory at the Granicus).² Where we have only one surviving source, such debates are perforce limited, but we must always remember that reliability comes through corroboration, not simply through lack of contradiction. Delbrück quoted the whole of Appian's long and widely ignored description of the battle of Cannae, as a very salutary reminder that 'if, by chance, this were the only one that had come down to us, it would be absolutely impossible to gain from it an account having even the faintest resemblance to the truth'.³

Modern writers have sought to supplement the rather thin and unreliable ancient accounts in various ways. The most prominent such addition has been topographical, with scholars visiting the actual battle sites and attempting to pinpoint the exact ground on which the fighting took place. For more recent battles like Towton and Naseby, such studies have been very fruitful, since battlefield archaeology can reveal actual remnants such as grave pits and cartridge cases which give hard additional evidence about the engagement.⁴ However, for the much more distant battles of the classical era, topographical study is far less conclusive. Over the intervening two millennia, identifiable remains even of the opposing camps have disappeared, and features such as rivers and shorelines have shifted in uncertain ways. Hence, disagreement about exactly where battles like Issus or Cannae were fought remains so pervasive that independent deductions about factors such as the width of the battle lines or the obstructions posed by watercourses are problematic at best.⁵

The other major input which modern scholars have made is to attempt to draw lessons from more recent military experience, regarding such matters as combat psychology and the problems of deploying and manoeuvring massed formations of horse and foot (as was still common until a century ago). This is obviously a perilous endeavour, since it risks neglecting

¹ Livy 33.8; cf. Polyb. 18.24. ² Badian (1977); Bosworth (1980–95) 1.114–27.

³ Delbrück (1990) 328–31. ⁴ Fiorato et al. (2000); Foard (1995).

⁵ Hammond (1989a) 95–101; Devine (1985c); Daly (2002) 32–5.

significant changes in the nature of warfare. Some recent scholars tend as a consequence to distrust any attempt to extrapolate backwards from more modern experience, and see the ancient evidence as the only really credible source of insight.⁶ However, the physical and psychological constraints on men in battle have not changed fundamentally across the millennia, and as long as care is taken to identify and exclude the more evanescent impact of changing military technology, recent experience can indeed give some insights to supplement the picture we get from the ancient writers themselves.

Modern scholarship on ancient battles has been characterized for generations by this mixture of textual analysis, topographical study and comparison with more recent experience, as seen in classic works by writers such as Ardant du Picq, Dodge, Delbrück, Kromayer and Veith.⁷ Scholars of the Hellenistic and mid-Republican eras have tended to focus most on straightforward historical analysis of individual engagements. The general surveys of entire wars and campaigns in books by authors like Hammond, Bosworth, Lazenby and Goldsworthy contain brief but often insightful treatments of each successive clash, while Lendon, Santosuosso and Montagu concentrate more on the battles themselves.⁸ Scholars such as Hammond, Pritchett and Devine have written numerous articles focusing in more detail on individual battles, often based on personal surveys of the supposed battle sites.⁹ There have even been one or two entire monographs devoted to better documented engagements like Gaugamela and Cannae – Daly's recent work on the latter is a particularly detailed study which casts significant light on battle mechanics in general.¹⁰ Books on particular armies or troop types also contain some useful discussions of battles in this era, with the more general works by Head and Connolly providing interesting though ill-referenced treatments.¹¹

What has not happened much in recent years is scholarly study of the generic 'face of battle' in the Hellenistic and/or mid-Republican eras, as distinct from specific study of individual engagements. Keegan's seminal work *The Face of Battle* (1976) did encourage ancient historians such as Hanson and Goldsworthy to ask similar questions about the classical era, and to seek to build up from diverse literary and archaeological sources a 'generic' image of battle, going well beyond the relatively little we know of

⁶ Cf. Wheeler (2001).

⁷ Ardant du Picq (1987); Dodge (1993); Delbrück (1990); Kromayer and Veith (1903–31) esp. III.

⁸ Hammond (1989a); Bosworth (1988a); Billows (1990); Garoufalios (1979); Lazenby (1978), (1996); Goldsworthy (2000a); Montagu (2000), (2006); Santosuosso (1997); Lendon (2005).

⁹ Hammond (1938), (1980a), (1984b), (1988a), (1992); Devine (1984), (1985a), (1985b), (1985c), (1986), (1987), (1988); Samuels (1990); Pritchett (1965), (1969).

¹⁰ Marsden (1964); Daly (2002).

¹¹ Bar-Kochva (1976); Scullard (1974); McCall (2002); Head (1982); Connolly (1981).

any individual contest.¹² However, such studies have tended to focus either on the hoplite era or on the late Republican and early imperial periods, where the combination of eye-witness accounts and relative continuity in troop types and tactics makes this kind of generic approach rather easier to follow. Apart from my own new book, only a few recent chapters and articles have tried to apply similar methodologies to the intervening period, with its wider variety of tactical characteristics.¹³

In this chapter, I will pursue exactly such a generic approach to the battles of the Hellenistic and mid-Republican era, not treating them individually or successively as most modern scholars have done, but seeking to analyse them thematically in order to highlight differences and similarities and to cast light on battle as an overall phenomenon. This more thematic approach is in line with that adopted by several ancient authors. Polybius' short sections on generalship (9.12–16) and on the respective strengths and weaknesses of legion and phalanx (18.28–32) are the only ones which survive from the period itself, but there is quite a lot of later material, either in the form of collections of stratagems (Frontinus and Polyaenus), or in the form of tactical and organizational treatises (Aelian, Arrian, Asclepiodotus and Onasander), all of which hark back very much to Hellenistic precedent. These writings neatly complement the battle accounts themselves, and help us to build an overall picture of battle dynamics.

The biggest difference between the engagements of this era and the preceding hoplite period is that the battles were larger and more complex, involving wide-ranging manoeuvres by combined arms forces rather than just the traditional frontal clash of hoplite phalanxes. Because of this greater size and complexity, the battles need to be analysed on two distinct levels. I will first address the grand tactical level, examining the ‘general’s battle’ of deployment, command and manoeuvre at the level of the army as a whole. I will then narrow the focus to the tactical level, and analyse the ‘soldier’s battle’ at the sharp end itself, focusing on the interaction of differing troop types in actual combat. I will close by discussing the determinants of success in these engagements, and I will argue that only through an integrated understanding of battle dynamics at the two different levels can the clashes truly be understood.

II. THE GRAND TACTICAL LEVEL

In the pre-gunpowder era, the advantages conferred by natural or artificial defensive positions were such that an inferior army could often deter enemy attack simply by standing on a hill or staying within a fortified camp, while

¹² Hanson (1989), (1991b); Goldsworthy (1996).

¹³ Lloyd (1996b); Sabin (1996), (2000), (2007) chs. 3–4; Zhmodikov (2000); McCall (2002) chs. 4–5.

relying on city walls to protect its civilian population. Pitched battles were fought only when neither side felt at a disadvantage, and so they often occurred only after months or even years of cautious campaigning. When they did occur, this dependence on a degree of mutual consent tended to give the battles a certain set-piece formality almost akin to a duel.

The other key contextual feature of ancient land battle was its extreme compression in time and space. Although the armies, each a few tens of thousands strong, were significantly larger than during the preceding hoplite era, they were small enough not to have to disperse to live off the land, as Napoleonic corps had to do. Their primitive command and communications and their reliance on deep formations meant that battle-fields spanned only a few miles at most. Also, close-quarters combat was such an intense and stressful activity that it usually took only a few hours, if that, for one army to be completely shattered. I will now analyse the key grand tactical features of these sporadic and highly focused contests.

i. Deployment

By no means all battles in this era were fought between forces drawn up neatly on a plain in opposing battle lines. Sometimes the ignorance of one or both sides about the proximity of the enemy (due to obscuration by terrain features or weather conditions) produced a surprise engagement. At Cynoscephalae patrols blundered into one another on fog-shrouded hills, and as both sides sent reinforcements, the clash escalated into a full-scale battle.¹⁴ Where the ignorance was one-sided, the result could be the ambush of an enemy force in marching order, as when Timoleon caught the Carthaginians crossing the River Crimisus, and as in Hannibal's classic ambush of the Romans at Lake Trasimene.¹⁵ Armies occasionally used the cover of night to launch a surprise attack on the enemy camp – for Scipio this worked perfectly against Hasdrubal and Syphax, but for Pyrrhus at Beneventum the delays caused by a night approach through difficult terrain stymied the operation and left the Greeks facing a disadvantageous battle when dawn broke.¹⁶

More often, the opposing forces were aware of one another's presence, and could take steps to prepare themselves for action. Armies which felt themselves inferior in open battle would often defend hills or river lines as at the Granicus, Baecula or the Metaurus, sometimes even strengthening these positions with man-made fortifications as at Issus and Sellasia.¹⁷ However, these defences by no means always succeeded in deterring enemy attack, since they imposed a defensive posture and mindset, hindering

¹⁴ Hammond (1988a).

¹⁵ Plut. *Tim.* 27; Polyb. 3.83–4.

¹⁶ Livy 30.3–6; Plut. *Pyrrh.* 25.

¹⁷ Arr. *Anab.* 1.14, 2.10; Livy 27.18, 48; Polyb. 2.65.

counter-offensives and allowing the opposing force to strike wherever they chose. It is noteworthy that, in every instance just quoted, the defenders were beaten when their opponents proved bold enough to launch a direct attack.

The more usual approach which armies adopted in the face of the enemy was to pitch camp a few miles apart, and to draw up battle lines on the plain in front of the respective camps, thereby offering a more active deterrent stance than was possible through the defence of linear obstacles. Greek camps were initially unfortified, but from the early third century, it became the norm for most armies to protect their camps with field fortifications in the face of the enemy, so as to guard against surprise attack and provide a refuge and rallying point in the event of a reverse. Frontinus claims that Pyrrhus took the lead in this development, but Plutarch says that Pyrrhus himself was impressed by Roman camp discipline, and Polybius makes clear the superiority of Roman arrangements to the more *ad hoc* approach of the Greeks.¹⁸

The standard army deployment throughout this period consisted of heavy infantry in the centre in one or more lines, with cavalry on both flanks, and light infantry skirmishing in front. If one wing rested on rough terrain, then light infantry rather than cavalry might be deployed there, as at first Chaeronea and Issus.¹⁹ Elephants or chariots, if present, were usually spread out in front of part or all of the battle line. The result of this rather formulaic deployment pattern is that, in battles between combined arms forces, similar troop types tended to find themselves fighting one another – cavalry against cavalry, light infantry against light infantry, elephants against elephants, and so on. Only after their enemy counterparts had been defeated, or if the enemy lacked any similar troops of his own, were the various fighting arms able to engage dissimilar troop types and thereby to exploit the offsetting strengths and weaknesses within the combined arms mix.

The most striking overall contrast within deployment patterns in this era was between the Greeks, who tended to weight one wing more than the other, and other nations such as the Persians, Carthaginians and Romans, who adopted much more symmetrical battle lines in which each wing was usually a mirror image of the other wing unless terrain dictated otherwise (as at Issus and Magnesia).²⁰ The Greeks saw the right wing as the place of honour, and this right-handed perception persisted throughout the ancient period, as witness Vegetius' description of the left wing as playing a much more 'maimed' and defensive role.²¹ Hence, Alexander's classic battle tactic was to lead his picked troops forward on the right while Parmenio guarded

¹⁸ Frontin. *Str.* 4.1.14; Plut. *Pyrrh.* 16; Polyb. 6.42. ¹⁹ Hammond (1938); Devine (1985c).

²⁰ Devine (1985c); Bar-Kochva (1976) ch. 14. ²¹ Veg. *Mil.* 3.18; cf. Thuc. 5.71.

the left – an approach emulated by Successor kings such as Antiochus III and Philip V.²² Epaminondas had earlier reversed this emphasis by massing his Thebans on the left wing instead, and later Greek leaders such as Eumenes at Gabiene and Demetrius at Gaza sometimes adopted similar tactics (with rather less success), but such reversals did not alter the underlying tendency for Greek commanders to emphasize one wing at the expense of the other.²³

The battle deployments of other nations were usually much more symmetrical. The best troops were normally placed in the centre of the battle line rather than on either wing. Persian kings traditionally led from the centre, and this also fitted in with the Roman emphasis on heavy infantry rather than cavalry as the decisive arm. Carthaginian armies placed more reliance on cavalry to outflank the fearsome legionaries, but (even under the Greek mercenary commander Xanthippus) they tended to divide their cavalry between both flanks on a roughly even basis.²⁴ The same applied when able commanders such as Hannibal and Scipio broke with tradition by deploying their crack heavy infantry on the wings rather than in the centre – at Cannae and Ilipa, these contingents were split equally between both wings rather than being concentrated on one or the other.²⁵ The result was that non-Greek battles assumed a rather more symmetrical appearance, with double envelopments being more common than the single outflanking moves which the Spartans had pioneered.²⁶

Another interesting aspect of symmetry occurred between rather than within the opposing armies. Although in Alexander's battles it was quite common for cavalry to be deployed opposite enemy infantry, in later engagements in which both sides had large numbers of good-quality heavy infantry, the norm was for the infantry lines to be of roughly equal length even if one side had a significant numerical advantage. Armies with large numbers of heavy infantry tended to deploy their men in greater depth (as at Cannae and as with the thirty-two deep Seleucid phalanx at Magnesia) instead of extending their infantry line beyond that of the opponent.²⁷ The reason is unclear, but it probably has to do with the command problems posed by an unduly long infantry line and the difficulty of outflanking the enemy infantry in the face of intact enemy cavalry forces. Although cavalry made up only around 10 per cent of armies in this period, we should envisage the cavalry wings covering a significant frontage compared to the infantry centre, given Polybius' statements (12.18) that horsemen were not much use more than eight deep and that gaps were left between the squadrons equal to the width of the squadrons themselves.

²² Montagu (2000) 101–6, 122–32. ²³ Anderson (1970) 192–224; Devine (1984), (1985b).

²⁴ Lazenby (1996) 104–6. ²⁵ Lazenby (1978) 79–85, 145–50.

²⁶ Lazenby (1985) chs. 7–8. ²⁷ Daly (2002) 36–8; Bar-Kochva (1976) 167–9.

Maintaining a reserve of uncommitted troops behind the main fighting line has become an axiom of modern military wisdom, and this principle was far from unknown in antiquity.²⁸ However, in this period, the principle was honoured more in the breach than in the observance. Leaving aside skirmishers, elephants, chariots and camp guards, the troops in non-Roman armies were usually deployed in a single fighting line. Alexander did field a second infantry line at Arbela to guard against encirclement by the mass of Persian cavalry, and Hannibal emulated the Romans by deploying his infantry in three lines at Zama, but Sekunda's arguments that a similar 'double phalanx' was used more frequently in Hellenistic warfare rest on decidedly ambiguous evidence from Sellasia and Pydna.²⁹ The one nation which did make routine use of reserves was Rome, with its famous three-line formation of *hastati*, *principes* and *triarii*, and this had more to do at first with the nature of Roman infantry tactics than with the grand tactics of the battlefield as a whole. To understand why reserves played such a limited role in antiquity, it is necessary to turn our attention to battlefield command.

2. *Command*

The most important contribution which generals made to victory or defeat in battle in this period usually occurred before the battle itself. This was for two main reasons. First, a key priority was to deceive or provoke the opposing general into engaging in unfavourable circumstances – a situation perfectly captured in the precepts of Sun Tzu and in the stress which Onasander, Frontinus and Vegetius all place on the intelligence contest and on the need sometimes to restrain the eagerness of the troops.³⁰ Second, since battlefield communications were so primitive and ancient armies so unwieldy, most forces could do little more in battle than to put into practice what had been planned and ordered beforehand, and they would hear nothing from the general except perhaps a brief pre-battle speech to their section of the line.³¹

The sources tell us frustratingly little of the planning and intelligence dimension underlying command in this era. We have several accounts of debates between commanders as to whether and how to attack, but these are highly stereotypical and heavily influenced by hindsight.³² It is clear that generals did hold 'councils of war' with their senior officers, but the

²⁸ Veg. *Mil.* 3.17; Onasander 22.

²⁹ Marsden (1964) ch. 4; Lazenby (1978) 219–25; Sekunda (1989) 132–3.

³⁰ Griffith (1963); Onasander 10, 14; Frontin. *Str.* 1.1–2, 10; Veg. *Mil.* 3.9, 12.

³¹ Cf. Thuc. 4.94–6; Polyb. 15.10–11. ³² Arr. *Anab.* 1.13–14, 3.10–11; Polyb. 3.100–5, 110–13.

absence of formal staff structures placed a greater personal burden on the general himself, especially with regard to the collection and interpretation of intelligence from scouts, spies and deserters.³³

Roman efforts to deceive Hasdrubal in 207 into giving battle despite the arrival of Nero's reinforcements illustrate the importance of the intelligence contest. The deception failed when Hasdrubal noticed unfamiliar shields and unusually lean horses in the Roman ranks, but his subsequent retreat was hindered by a fresh intelligence failure as his guides deserted, and he was cornered and defeated at the River Metaurus (Livy 27.43–9). Usually, outclassed armies could not be forced into battle in this way, and so the typical clash of the period was between a larger force confident in its numerical superiority and a smaller one relying (usually correctly) on troop quality and clever generalship.

Onasander (29–30) later advised generals that they should sometimes let the enemy form their battle line first, so that the army's counter-deployment might be tailored accordingly. However, it is hard to see how complex grand tactical plans like those of the Carthaginians at Cannae could have been improvised on the spur of the moment in this way, and it seems more likely that Hannibal had advance intelligence of how the Romans would form up, allowing him to make his own plans the day before. Scipio's stratagems at Ilipa offer a perfect illustration of how a talented commander could obtain the best of all worlds. After several days of deploying opposite the Carthaginians with the best troops of both sides in the centre as usual, Scipio reversed this pattern and marched boldly towards the Punic camp at dawn, screened by his light infantry. Hasdrubal hurriedly deployed his troops in the normal way, and they were then left to stew for several hours on empty stomachs, not daring to change their formation, before the Romans finally launched their devastating flank attacks (Polyb. 11.22).

Once battle was actually joined, the role of commanders in this era underwent a gradual transition from that of 'heroic leader' to that of 'battle manager'.³⁴ Alexander is often seen as the epitome of the first model, and Arrian's account of the Granicus (*Anab.* 1.15–16) focuses almost exclusively on the wild Homeric duelling around the king, to the exclusion of any coherent overview of the battle as a whole. However, in his later battles, Alexander is seen coolly directing the preliminary manoeuvre and engagement of his forces as a whole, before plunging in at the head of his men towards the decisive point.³⁵ This combination of the two models became the epitome of successful generalship in this period, and found expression

³³ Daly (2002) ch. 5; Austin and Rankov (1995) ch. 3.

³⁴ Wheeler (1991). ³⁵ Hammond (1989a).

later in Caesar's memoirs.³⁶ Plutarch's description of Pyrrhus' conduct at Heraclea perfectly illustrates the integrated ideal:

Above all, although he exposed himself in personal combat and drove back all who encountered him, he kept throughout a complete grasp of the progress of the battle and never lost his presence of mind. He directed the action as though he were watching it from a distance, yet he was everywhere himself, and always managed to be at hand to support his troops wherever the pressure was greatest.³⁷

To obtain a less rose-tinted and formulaic view of the nature of battlefield command in this era, it is first necessary to recognize the stultifying effect of limited visibility and poor communications. Although the black powder smoke which would obscure later battlefields was not yet present, the dust clouds raised by the mass of men and horses would do a similar job of obscuring everything outside the commander's immediate vicinity.³⁸ In this situation, generals had little option but to delegate command of other parts of their army to trusted subordinates whom they had briefed in advance. At Cannae, Hannibal's personal contribution was to stiffen his hard-pressed centre, while the all-important double envelopment was in the hands of lieutenants such as Hasdrubal.³⁹ Scipio placed similar reliance on Laelius and others to help accomplish his own grand tactical manoeuvres.⁴⁰

This helps to explain why reserves in the modern sense played such a limited role in warfare in this period. The very nature of reserves is that they are held back to respond to some unforeseen contingency, but in order for this to occur, the general must first perceive the contingency and then get orders to the reserve. By the time this happened in antiquity, it might well be too late, so it was often preferable to commit the forces to the main battle line in the first place. The most that might be done was for the general to lead his own guards to relieve a crisis, as Alexander did at Arbela, and even this was problematic – by the time Antiochus III learnt at Raphia and Magnesia that the rest of his forces had not been as successful as his own right wing, it was already too late to help.⁴¹ The triumph of the Roman system was that the reserve infantry units originally intended for routine line replacement in frontal combat could be used by more inspired commanders such as Scipio for unplanned manoeuvres at the grand tactical level, but even here, it was just as often the initiative of junior officers rather than the generals themselves which allowed the Romans to counter enemy successes as they did at Cynoscephalae, Magnesia and Second Chaeronea.⁴²

If commanders could do little during the action to manage the battle as a whole, then how did they assist their own part of the line? We know

³⁶ Goldsworthy (1996) ch. 4. ³⁷ Plut. *Pyrrh.* 16, trans. Scott-Kilvert (1979).

³⁸ Cf. Diod. Sic. 19.42; Livy 22.46. ³⁹ Daly (2002) ch. 5.

⁴⁰ Scullard (1970). ⁴¹ Arr. *Anab.* 3.15; Bar-Kochva (1976) chs. 10, 14.

⁴² Scullard (1970); Livy 33.9, 37.43; Plut. *Sull.* 19.

from the close shaves suffered by Alexander at the Granicus, Eumenes at the Hellespont, and Pyrrhus at Heraclea that some Hellenistic generals did still lead from the very front rank.⁴³ However, this seems to have been less common than in hoplite warfare, to judge by the lack of casualties among *victorious* commanders in this era compared to the earlier loss of generals like Callimachus, Brasidas and Epaminondas at their moment of triumph.⁴⁴ Roman generals did still have a tradition of personal combat as late as 222 when Marcellus killed the Gallic chieftain Virdumarus, but when Marcellus himself was later killed by Hannibal's men, this was as a result of being overwhelmed with his consular colleague during a stupidly rash personal reconnaissance (Plut. *Marc.* 7; 29). Other Roman and Punic commanders took greater care of their personal safety, at least until all was clearly lost, as is well illustrated by Polybius' description (II.2) of Hasdrubal's conduct at the Metaurus. I will return in my final section to discuss how generalship and the fate of the general affected the fortunes of the army as a whole.

3. Manoeuvre

Even before this period, hoplite battle tactics had already come a long way from the traditional image in which both lines simply charged each other in a straightforward frontal assault. The grand tactical innovations of the Spartans and Thebans were developed further thereafter, and the growing importance of combined arms forces meant that grand tactics reached a peak of sophistication in this era, before descending back into the rather dour heavy infantry slogging matches of the late Republic.

The first to engage were normally the light infantry skirmishers, who screened the deployment of the rest of the line, and who duelled with their counterparts (sometimes for several hours) until their missiles were exhausted, at which point they retired through gaps in the main fighting line and played little or no role in the battle thereafter. Cavalry often joined in the preliminary skirmishing, but this did not prevent them from taking part in the main engagement. The horsemen might even engage one another more decisively at this initial stage – Polybius (3.115) says that the Roman cavalry by the river at Cannae were broken just before the light infantry in the centre was withdrawn. If either army fielded elephants or chariots, then the light infantry might play a more important role in protecting or opposing these instruments, but otherwise, it was only in unusual circumstances that the skirmishers had much effect on the battle proper.

⁴³ Arr. *Anab.* 1.16; Diod. Sic. 18.31; Plut. *Pyrrh.* 16–17. ⁴⁴ Wheeler (1991).

Once the skirmishing was over, part or all of the main battle lines would move forward to the attack. The 'oblique approach' pioneered by Epaminondas was adopted by later Greek commanders, and it became a common (though by no means universal) tactic for Greek armies to advance with their stronger wing while 'refusing' their weaker flank. Alexander did just this with his famous oblique attack at Arbela, and similar tactics were employed by Antigonus at Paraetacene, Demetrius at Gaza, and Philip V at Cynoscephalae.⁴⁵ Roman and Punic armies, with their greater emphasis on symmetry, were less prone to use such an angled advance, but Scipio at Ilipa did adopt a symmetrical variant by attacking with his Roman forces on both wings while holding back his less reliable Spanish centre.⁴⁶ Troops faced by such 'refused' sections of an enemy line seem to have been easily deterred from advancing by the threat to their exposed flanks. Certainly, at Cannae, when Hannibal expressly *wanted* the Roman infantry to pocket itself in this way, he drew up his thin Gallic and Spanish centre in a crescent pointing *towards* the Romans, precisely in order to tempt them into an ill-judged and over-eager advance.⁴⁷

Whereas Theban grand tactics focused on engaging only with the strongest part of the line, Spartan battlefield manoeuvres as developed at First Mantinea and the Nemea revolved around outflanking the enemy line and 'rolling it up' by defeating each contingent in turn.⁴⁸ In later battles there was still the same preoccupation with trying to take the enemy in flank or rear, but this was seen as something to be achieved by exploiting gaps caused by earlier frontal combat, rather than through pre-battle manoeuvre. Only by concealing forces in ambush, as Hannibal did at the Trebia and then on a much larger scale at Lake Trasimene, were armies of this era able to outflank their opponents without first achieving a frontal breakthrough.⁴⁹

Alexander achieved a triumphant unification of the Spartan and Theban systems in his victories at Issus and Arbela, by driving his wedge into a weak point of the Persian line, and then exploiting laterally against the flank of stronger contingents such as the Greek mercenaries.⁵⁰ Later generals, faced with enemy armies which were more resilient but in less overwhelming numbers, tended to focus on the flanks as the location for the crucial enabling breakthrough. This was because cavalry combat tended to be decided much more quickly than infantry clashes, so that there was time to exploit the cavalry victory before the infantry duel ended.

Unlike in hoplite battles, the contests of our era contain what I have called a 'battlefield clock', which gives some sense of the relative and absolute

⁴⁵ Devine (1984), (1985a), (1986); Hammond (1988a).

⁴⁶ Lazenby (1978) 146–50.

⁴⁷ Daly (2002) 38–43. ⁴⁸ Lazenby (1985) chs. 7–8.

⁴⁹ Lazenby (1978) ch. 3.

⁵⁰ Hammond (1989a) chs. 5–6.

duration of different types of combat.⁵¹ In hoplite warfare, it is almost impossible to judge whether clashes between individual contingents lasted minutes, tens of minutes or mere seconds – all we know is that one side fled long before an outflanking force like that of the Spartans at the Nemea could come to the rescue.⁵² In later battles, by contrast, there are plenty of instances in which frontal infantry fighting raged on undecided until troops from elsewhere on the field intervened by attacking the antagonists in flank or rear. Perhaps the clearest instance is the Metaurus, where Nero, frustrated by the difficult terrain protecting the Gauls on the Punic left, detached ‘several cohorts’ from the rear of the Roman right, marched them round behind the hotly engaged Roman centre and left, and outflanked the Spaniards and Ligurians on the Punic right (Livy 27.48). Given the size of the armies and the nature of the terrain, it must have taken at least an hour to make this wide-ranging manoeuvre, showing that infantry fighting in our era could be a fairly drawn-out process.⁵³

What this meant is that many of the battles in this period became something of a ‘race against time’, as one or both sides struggled to exploit a breakthrough on the wings before the central heavy infantry contest turned against them. Although the cavalry contests themselves were usually decided quickly, it could take time to rally the troopers from pursuing the fleeing enemy horsemen, and to bring them back onto the field as a coherent force. Scipio’s victorious cavalry at Zama only returned in the nick of time, despite the hard-fought nature of the multi-stage infantry contest, and Antiochus’ horsemen at Raphia came back too late to save the day (Polyb. 5.85, 15.14). It was also far from guaranteed that cavalry intervention by itself would be decisive, so generals like Hannibal and Scipio preferred to exploit the resultant open flanks with infantry as well.

Cannae was an iconic triumph of grand tactical manoeuvre, in which the exploitation of the cavalry victory by specially prepared columns of veteran African infantry allowed the encirclement and annihilation of a far larger Roman army.⁵⁴ Such tactics were decidedly risky, because they involved weakening the infantry centre itself – 10,000 Romans managed to punch through the centre and escape when Hannibal used similar tactics at Trebia two years earlier, and when Hasdrubal tried to repeat his brother’s achievement at Ibera the following year, his Spanish centre collapsed in short order, allowing the elder Scipio to turn against the stronger Punic wings and defeat them in turn (Livy 21.56, 23.29). Scipio the younger achieved more consistent success with his flanking tactics, and the *hastati* were able to hold the centre long enough by themselves even when the *principes* and *triarii* were moved out onto the wings as at the Great

⁵¹ Sabin (1996) 66, (2007) chs. 3–4. ⁵² Anderson (1970) ch. 8.

⁵³ Lazenby (1978) 187–90. ⁵⁴ Daly (2002) 38–43, 192–5.



Figure 13.1 Frieze showing Carthaginian armour and shield from a triumphal monument in Tunisia.

Plains and Zama, rather than being used in direct support of the frontal engagement.⁵⁵

We know from various battles that infantry lines could push one another back over significant distances during the course of the contest, without the withdrawing side being definitively beaten. At Sellasia the Macedonian phalanx allegedly fell back several hundred yards in the face of Spartan pressure before recovering and going on to win, while at Cannae the initially convex Punic crescent formation was compressed into a concave net without breaking at any point.⁵⁶ The differential success of the Macedonian right and left wings at Cynoscephalae was Philip's downfall, since it opened a gap which was exploited by twenty maniples to attack the hitherto victorious part of the phalanx in the rear.⁵⁷ Polybius (18.32) identified this vulnerability to differential fortunes as a key weakness of the pike phalanx, which depended above all on maintaining a continuous hedge of spear points. However, he is perhaps a little harsh about the inflexibility of the phalanx, since Eumenes' infantry at Gabiene and the Seleucid pikemen at Magnesia formed a hollow square and sought to withdraw in good order when their flanks were exposed.⁵⁸

⁵⁵ Scullard (1970) 129–31, 152–4. ⁵⁶ Plut. *Cleom.* 28; Polyb. 2.69, 3.115; Daly (2002) 184–91.

⁵⁷ Hammond (1988a) 75–6.

⁵⁸ Diod. Sic. 19.43; App. Syr. II.35.

It is interesting that Roman infantry themselves were so vulnerable to Punic attacks in flank and rear, despite the theoretical ability of their rear lines to turn and face the enemy. What seems to have been crucial is the unexpected nature of the attacks, and the lack of any room for outflanked Romans to recoil without becoming tangled up with their fellows. When the Gauls at Telamon were sandwiched between two Roman armies, they resisted successfully for a long while by drawing up in two separate lines facing in opposite directions (*Polyb.* 2.27–31). Where the more integrated Roman multi-line system came into its own was in its provision for the passage of lines, allowing fresh troops to support or relieve spent ones during a drawn-out contest. Other armies did not enjoy this luxury, and when Hannibal used a multi-line deployment himself at Zama, the result was a fiasco in which the various lines came to blows with one another in their desperation to escape the trap in which they found themselves (*Polyb.* 15.13).

4. Outcomes

The usual outcome of major land battles in this era was that one side suffered a clear (and often overwhelming) defeat. Fighting rarely lasted long enough for it to be ended indecisively by nightfall, as happened at Paraetacene.⁵⁹ Instead, one army was in full flight, and would be saved only by the proximity of a secure refuge or by the exhaustion of its pursuers. Losses tended to be highly asymmetric, with the victors escaping far more lightly than in the mutual bloodbaths of gunpowder era clashes. The abandonment of equipment and the impact of the battle on both sides' morale served to compound this asymmetry, and the only thing which might prevent the contest being decisive in the war as a whole was if the losers had both the manpower reserves and the determination to hold out in their fortified cities and raise new armies, as the Romans did after reverses like Cannae. For less populous or less resolute states like the Hellenistic kingdoms, or for Successor generals vying for control of the spoils of empire, a single defeat might be enough to decide the war.

The first priority of troops in the losing army was to escape their vulnerability to one-sided slaughter. If they were encircled or penned against an impassable obstacle as at Trasimene and Cannae, this was often impossible, and a grisly massacre would result (*Polyb.* 3.84, 116). Even if they had a line of retreat, infantry in particular would be desperately exposed to pursuing cavalry in open terrain. The only way for a broken army to escape such a catastrophe was for it to seek shelter within a nearby fortified camp, which is probably why armies sometimes stood opposite one another for days as

⁵⁹ Devine (1985a).

at Ilipa without engaging, each side being reluctant to move away from the favourable (often elevated) terrain just outside its camp (*Polyb.* 11.20–1).

Unfortified camps were, of course, useless in this regard, and were sometimes even raided by enemy detachments while the battle was still in progress. This happened to Alexander at Arbela, and proved disastrous for Eumenes at Gabiene, when his undefeated ‘Silver-shields’ (*Argyraspi-des*) handed him over for execution in exchange for the return of their plundered baggage.⁶⁰ Even fortified camps might prove untenable for the panicking men – at Sentinum, the Samnite general was killed while trying to organize the defence, while at Magnesia, the Romans forced their way in after a stiff fight, and continued the slaughter (*Livy* 10.29, 37.43). However, armies which had been less resoundingly defeated in the open field did sometimes benefit from having a nearby camp in which to rally, even if they could not hold it indefinitely. The Romans survived bloodied but intact at Asculum thanks to the proximity of their camp, while Hasdrubal found temporary refuge at Ilipa before slipping away the following night as his Spanish allies deserted.⁶¹

The ancient sources provide numerous specific figures for the losses suffered by each side in these various battles. These figures are obviously rather suspect, since the general unreliability of ancient historiography is compounded in this case by the partisan nature of casualty claims throughout all eras of military history. Contradictions between different ancient sources are commonplace, as at the Metaurus, where Polybius (11.3) says that 2,000 Romans and 10,000 Punic troops fell, compared to Livy’s figures (27.49) of 8,000 and 57,000 respectively. However, it is still worth discussing the various claims, since they bear directly on the asymmetry of losses discussed earlier, and are a key element when trying to understand the nature of ancient combat at the tactical level.

It is interesting to start with the most indecisive battles. At Paraetacene, Diodorus (19.31) claims that Antigonus had 3,700 foot and 54 horsemen killed and over 4,000 wounded, compared to 540 dead and 900 wounded for Eumenes. At Heraclea, Plutarch tells us that Hieronymus recorded losses of 7,000 for the Romans and 4,000 for the Greeks, while at Asculum the following year he apparently claimed that there were 6,000 Romans killed compared to Pyrrhus’ 3,505 casualties. Dionysius inflated the total losses for the two sides to 28,000 at Heraclea and 15,000 at Asculum, but this probably reflects exaggeration based on the legendarily bloody nature of these ‘Pyrrhic victories’ (*Plut. Pyrrh.* 17, 21). If one accepts the lower figures, one is looking at overall casualties of between 4 and 20 per cent of the forces engaged across these three battles – an interesting parallel with Krentz’s conclusion from similar statistics regarding hoplite engagements

⁶⁰ *Arr. Anab.* 14–15; *Diod. Sic.* 19.42–3.

⁶¹ *Plut. Pyrrh.* 21; *Livy* 28.15.

that the victors lost around 5 per cent and the vanquished an average of 14 per cent of their total strength.⁶²

In more decisive battles the losses of the defeated side were often increased by the wholesale surrender of infantry contingents, especially in Successor conflicts when they might hope to transfer their allegiance to the victors. Hence, the losing infantry surrendered *en masse* at Gabiene, while at Gaza, Diodorus (19.82, 85) records that Demetrius lost 500 killed and 8,000 captured from his 17,400 strong army.⁶³ In other battles, surrender was less likely to be accepted, as at the Granicus when Alexander refused to come to terms with the Greek mercenaries and butchered all but 2,000 as traitors to the Hellenic cause (Arr. *Anab.* 1.16). However, prisoners still usually made up a sizeable proportion of overall recorded losses – 25,000 killed and 8,000 captured at Sentinum, 10,300 killed and 4,000 captured at Raphia, 8,000 killed and 12,000 captured at Baecula, 8,000 killed and 5,000 captured at Cynoscephalae, and 20,000 killed and 11,000 captured at Pydna.⁶⁴

Sometimes, the overall losses of the defeated are claimed to have approached 90 per cent of their original force. Polybius (1.34) says that out of Regulus' 15,500 strong army, only 2,000 got away, 500 were captured, and the rest were slaughtered in the battle or the pursuit. Livy (22.49–52) claims that only some 14,500 Romans escaped the disaster at Cannae, with around 19,300 being taken prisoner on the field or in the surrounded camps, and a further 48,200 being massacred in the encirclement. Polybius (15.14) states that only a few of Hannibal's infantry escaped the Roman vengeance at Zama, with more than 20,000 being killed and almost as many captured as they fled across the open plain.

The victors sometimes suffered significant losses of their own in inflicting such crushing defeats. At Cannae, Polybius (3.117) tells us that Hannibal's dead included 4,000 Gauls, 1,500 Spaniards and Africans, and 200 cavalry, which altogether represented 11 per cent of his total force. As this breakdown of casualties suggests, losses tended to be greatest among those parts of the victorious army which had been driven back or even shattered before the overall triumph had been achieved. Livy (10.29) claims that at Sentinum, Fabius' wing suffered 1,700 casualties and Decius' more hard-pressed wing no less than 7,000, while Polybius (1.32–4) states that the 16,000-strong Punic army led by Xanthippus lost 800 from the mercenary contingent which was broken through by the 2,000 Romans who managed to escape.

Recorded losses for other victorious armies were more moderate – 1,500 infantry and 700 cavalry for the Ptolemaic forces at Raphia, 1,500 for Hannibal at Lake Trasimene, and 1,500 for the Romans at Zama (Polyb. 3.85, 5.86, 15.14). What is most striking of all is that, in two sets of battles in this

⁶² Krentz (1985a). ⁶³ Devine (1984), (1985b).

⁶⁴ Livy 10.29, 27.18–19, 44.42; Polyb. 5.86, 10.40, 18.27.

period, the victors are said to have escaped incredibly lightly, despite the slaughter which they managed to inflict. The first such case involves Alexander's victories. Arrian (*Anab.* 1.17, 3.16, 5.18) claims that the Macedonians lost only 105 dead at the Granicus, 100 men and 1,000 horses at Arbela, and 310 troops at the Hydaspes. The second case involves Rome's defeat of the Hellenistic kingdoms. Polybius (18.27) reports that the Romans lost just 700 dead at Cynoscephalae, while Livy (37.44, 44.42) says that they suffered only 350 fatalities at Magnesia and not more than 100 at Pydna, mostly from among the Paeligni who had been driven back by the élite Macedonian pikemen.

It is easy to dismiss these incredibly low casualty figures as mere propaganda, especially since Diodorus (17.36, 61, 89) gives losses for Alexander's battles which are several times higher. The sources also admit that the victors suffered large numbers of wounded in addition to the fatalities, whereas most of the wounded on the defeated side would subsequently be killed or captured – one reading of Curtius (3.11.27) has him claiming that Macedonian losses at Issus were 450 killed and no less than 4,500 wounded.⁶⁵ However, even if one believes that Arrian and Livy are seriously understating the true casualties, the overall picture which emerges from the sources is still one in which the victors usually get off far more lightly than the vanquished, with those contingents which did not sustain a reverse during the battle suffering very few fatalities despite often participating in sustained combat (as did Hasdrubal's cavalry at Cannae). We know from recent experience in Iraq and elsewhere that superior forces can sometimes win sweeping battlefield victories with only minuscule casualties, and rather than assuming that this simply could not happen in antiquity, we need to examine possible models of tactical combat which might explain the grand tactical patterns we can discern.

III. THE TACTICAL LEVEL

A major limitation of our sources on battles in any period of antiquity is that we lack the soldier's eye view which is available in profusion for more modern engagements. Even the tactical treatises, where one might hope to find such details, instead consist either of collections of clever stratagems used by the opposing generals or highly theoretical handbooks of drill and organization like that by the philosopher Asclepiodotus, which reflect the ideal order and symmetry of the school room much more than they do the practicalities of the battlefield.

Compounding this problem in our period is the more complex combined arms mix within opposing armies, which made the range of tactical

⁶⁵ On the proportion of wounded in ancient battles, see Gabriel and Metz (1991) ch. 4.

interactions far broader than in the heavy infantry clashes of the hoplite era. Each troop type had its own strengths and weaknesses relative to other troop types, giving the interaction a ‘rock, paper, scissors’ dimension – for example, light infantry could generally outshoot light cavalry, but could be caught and ridden down by heavier cavalry unless they had their own heavy infantry in support.⁶⁶ In this part of the chapter, I will outline what we know or can surmise about this wide variety of tactical interactions, by considering each troop type in turn and how it fought its various possible opponents.

1. Exotic weapons

This period of antiquity was the golden age of ‘exotic’ weaponry going beyond the enduring matrix of heavy and light infantry and cavalry. Chariots, though now largely replaced by cavalry as the dominant mounted arm, still retained some battlefield role, especially the notorious ‘scythed’ vehicles. The newly invented catapults, although designed primarily for siege warfare, also had some utility in the open field. But above all, this era was characterized by the rise and fall of the war elephant, which spread from its Indian roots and was adopted by all the major Mediterranean armies at one time or another between 350 and 150, before falling into disuse until its revival by Sasanid Persia over four centuries later.⁶⁷ I will discuss the tactical employment of each of these ‘exotic’ instruments in turn.

Two- or four-horse chariots continued to serve alongside cavalry in Indian, Punic and Gallic armies, but we have nothing comparable to Caesar’s later eye-witness account of British chariot tactics (*B Gall.* 4.33) (fig. 13.2). The chariots in our period seem to have operated mainly in conjunction with friendly cavalry. At Sentinum, this worked, and a chariot counterattack was instrumental in routing the whole Roman left, but at the Hydaspes, Porus’ chariots got stuck in the mud and were countered by horse-archers whom they were too unwieldy to catch.⁶⁸ At the Crimisus the Punic chariots protected the deploying infantry from Timoleon’s cavalry by threatening to break up their formation (Plut. *Tim.* 27), while in the later battle against Agathocles, both chariots and cavalry are said by Diodorus (20.12) to have launched an unusual frontal charge against the Greek infantry, being countered by missile fire and by the opening of gaps in the line. It appears that these traditional forms of war chariots added little to the combined arms mix once true cavalry were available, and it is hardly surprising that they died out over time.

Slightly more enduring were the specialist four-horse scythed chariots employed on occasion by Achaemenid Persia, the Seleucids and later the

⁶⁶ Jones (1988) 2–45.

⁶⁷ Scullard (1974).

⁶⁸ Livy 10.28; Arr. *Anab.* 5.14–18.



Figure 13.2 Gravestone from Padua showing a Celtic chariot with a double-hoop side, c. 300 BC.

kingdom of Pontus. These were designed as 'expendable' weapons to be deployed in front of the fighting line and intended to charge headlong into the enemy in order to break up their formations, with the drivers 'bailing out' before contact.⁶⁹ However, they were almost universally unsuccessful, being defeated (as at Cunaxa and Arbela) by a combination of missile fire and the opening of lanes to allow them to pass harmlessly through the line.⁷⁰ Had the chariots been followed up immediately by more conventional troops then it might have been possible to exploit the temporary disruption, but as it was, any troops deployed in the vicinity were themselves vulnerable to these double-edged weapons getting out of hand. This happened at Magnesia, where the panic of the scythed chariots under a hail of missiles was instrumental in starting the rout of the entire Seleucid left (Livy 37.41–2). The final indignity came at second Chaeronea, where Plutarch tells us (*Sull.* 18) that Sulla's men not only saw the vehicles off in short order but then laughed and clapped as if they were at the races, exhorting the enemy to 'Bring on more!'

Catapults were a much more potent device, which changed the face of siege warfare through their impact on the attack and defence of cities.

⁶⁹ Head (1982) 177–8. ⁷⁰ Xen. *An.* 1.8; Arr. *Anab.* 3.14.



Figure 13.3 Decadrachm minted in Babylon showing Alexander attacking Porus on an elephant.

However, they were too unwieldy and immobile to be used more than very occasionally in field battles. Polyaenus (*Strat.* 2.38) records how Onomarchus beat Philip II by emplacing catapults overlooking a hillside up which he lured the Macedonians by a feigned retreat, but at third Mantinea, Philopoemen seems to have foiled the Spartan use of catapults at intervals in front of their line simply by launching a rapid attack (*Polyb.* 11.12). Catapults were more useful in static situations such as the defence of mountain passes, and one of the most inspired uses of them in the field was by Alexander at the Jaxartes, when he employed their superior range to drive the Saka horse-archers away from the opposite river bank, allowing his own men to cross and seize a bridgehead.⁷¹

War elephants were much more potent battlefield weapons than either chariots or catapults, and they were present in one or both armies during over half of the major battles in this era (fig. 13.3). They were generally deployed in a single line in front of part or all of the army, with 50 to 100 feet between each beast.⁷² This was the same location as the light infantry, and the two arms seem often to have worked closely together, with each elephant being guarded by around fifty light infantrymen.⁷³ However, there

⁷¹ Marsden (1969) 164–8.

⁷² Arr. *Anab.* 5.15; Polyaenus, *Strat.* 4.3.22.

⁷³ Bar-Kochva (1976) 82.

was no question of deployed elephants withdrawing through the main line as unaccompanied skirmishers did, so armies instead sometimes placed them initially in reserve just behind the fighting line, as seems to have happened at Asculum and Magnesia.⁷⁴

If both sides had elephants, as at Paraetacene and Gabiene, they seem to have rather cancelled each other out, leaving the battle to be decided by other arms.⁷⁵ We know most about duels between opposing elephants from Polybius' account of Raphia (5. 84–5), where Ptolemy's African elephants (the small 'forest' variety) were easily defeated by the larger and more numerous Indian elephants on Antiochus' side.⁷⁶ However, this did not prevent Ptolemy's right-wing cavalry from seeing off their counterparts, by the simple expedient of riding round the flank of their own intimidated pachyderms and charging the enemy horsemen in flank and rear. It was when elephants did not face enemy pachyderms and fought directly against infantry or cavalry that they tended to have the greatest impact, one way or the other, on the wider battle.

They were at their best against enemy cavalry, because they could make horses which were unaccustomed to them unmanageable with fright. This helped to protect the Indian forces at the Hydaspes from Alexander's horsemen, and it was the decisive factor at Ipsus when a screen of hundreds of elephants shuffled along to block every effort by Demetrius' victorious cavalry to return to the battlefield and save his father.⁷⁷ Even smaller numbers of beasts could be decisive in appropriate circumstances. Pyrrhus' twenty elephants finally won the battle at Heraclea by routing the Roman horsemen, and Antiochus I used just sixteen pachyderms to panic the Galatian cavalry and chariots and win his so-called 'Elephant victory'.⁷⁸ However, cavalry were not always so intimidated, and they might even be able to assail elephants with missile fire, as at Paraetacene and Zama.⁷⁹

Against infantry, the honours were more even. Sometimes, as at the Hydaspes and the Metaurus, the elephants became embroiled in a drawn-out infantry slogging match.⁸⁰ On other occasions, as at Cynoscephalae and Pydna, the presence of elephants at the spearhead of an infantry attack helped put the enemy infantry quickly to flight (Livy 33.9, 44.41). Exactly how elephants and supporting heavy infantry worked together in combat is something of an enigma. We know from the defeat of Regulus that the elephant line usually remained out in front of the heavy infantry, since Polybius (1.34) says that some Romans were able to fight their way past the beasts and regroup, only to be cut to pieces by the unbroken Punic spearmen. When Antiochus at Magnesia adopted a more integrated deployment

⁷⁴ Garoufalios (1979) 91–2; Bar-Kochva (1976) 166–9. ⁷⁵ Devine (1985a), (1985b).

⁷⁶ Scullard (1974) 60–3. ⁷⁷ Devine (1987); Bar-Kochva (1976) ch. 6.

⁷⁸ Scullard (1974) 103–5, 121–3. ⁷⁹ Diod. Sic. 19.30; Polyb. 15.12.

⁸⁰ Arr. *Anab.* 5.17–18; Polyb. II.1.

with elephants in the gaps between brigades of the phalanx, this proved disastrous, as missile fire panicked the beasts, breaking up the infantry formation (App. *Syr.* 11.31–5). However, it is hard to see how a separate forward line, even of dozens of elephants, could physically defeat upwards of 10,000 enemy heavy infantry. Perhaps part of the explanation is that the vanquished tended to over-emphasize the role of the elephants, since it provided a better excuse for their defeat than more mundane factors such as Pyrrhus' generalship or Xanthippus' 8:1 cavalry superiority.

In fact, it was perfectly possible for determined infantry to see off elephants as happened at Gaza and Zama, and to turn them against their own side.⁸¹ The key lay not in exotic counter-measures like the Roman anti-elephant wagons at Asculum or Perseus' anti-elephant corps with spiked shields and helmets (though burning pigs did allegedly discomfit the pachyderms of Antigonus Gonatas).⁸² It was more a matter of avoiding the charges of the beasts (as with the lanes left between the maniples at Zama) and using light infantry to deluge them with missiles and to attack them from the flanks (Polyb. 15.9–12). Even cheers and trumpet calls might be effective against ill-trained pachyderms, and sometimes (as at Gabiene and Beneventum) it only took the death or wounding of one elephant to panic the rest.⁸³ Thereafter, the same trade-off arose as with scythed chariots – the closer that supporting troops were deployed, the more vulnerable they themselves were to the beasts getting out of hand. The 'self-destruct' system of mallet and spike employed by Hasdrubal at the Metaurus (if the mahouts remained alive to implement it) does not seem to have been in general use, and elephants often caused as much harm to their own side as they did to the enemy.⁸⁴

Despite all the lurid tales of the physical damage done by exotic weapons, their primary impact seems to have been psychological. There were usually too few of them to cause widespread direct devastation, and the sources lay great stress on the terrifying sights, sounds and smells which they created. (Perseus even apparently attempted to immunize his horses against these effects by hiding trumpeters inside dummy elephants coated in noxious paste.)⁸⁵ Troops themselves were not immune to the terror which these unfamiliar weapons could cause, as at Sentinum, where Livy (10.28) says that the din of the hooves and wheels of the Celtic chariots triggered blind panic among men and horses alike. Unfortunately, not only did this unfamiliarity sooner or later wear off, but the elephants and chariot horses themselves proved just as vulnerable to panic when things went wrong. Hence, it is not surprising that these double-edged devices gradually fell into disuse in favour of more tried and trusted means of securing battlefield success.

⁸¹ Diod. Sic. 19.83–4; Polyb. 15.12.

⁸² Scullard (1974) 107–9, 113–16, 184.

⁸³ Diod. Sic. 19.42; Dion. Hal. 20.12.

⁸⁴ Livy 27.49.

⁸⁵ Scullard (1974) 184.

2. Cavalry

Of all the many troop types in antiquity, cavalry is the one which has attracted the greatest scholarly attention over the past few decades, with several entire books by authors such as Hyland, Spence, Gaebel and McCall focusing on this specific topic.⁸⁶ However, although these works provide invaluable discussions of the logistics and sociology of ancient cavalry, they do not (despite the authors' best efforts) entirely resolve the uncertainties concerning the face of cavalry battle. As with other tactical aspects of ancient warfare, this is because the ancient battle accounts are too vague, whereas the tactical treatises on cavalry by Xenophon and Arrian focus more on command, training exercises and horsemanship than on how the different forms of cavalry actually fought.

We do know that horsemen tended to operate in individual squadrons of between fifty and a few hundred men, rather than as a solid battle line. Alexander's cavalry manoeuvred in *ilai* of this kind, and Diodorus' detailed descriptions of the cavalry deployments at Paraetacene and Gaza reveal a complex pattern of advance units and flank guards, reminiscent of the precepts of Byzantine tactical treatises like that attributed to the emperor Maurice.⁸⁷ Asclepiodotus (7) tells us that Macedonian cavalry used wedge formations copied from the Thracians and Scythians, whereas Thessalian cavalry used rhomboid formations and other Greek and Persian horsemen employed square or oblong ones.

It is easiest to understand the tactics of the lightest form of cavalry, namely horse-archers and javelin skirmishers such as the Numidians, who avoided close combat and sought to fight entirely from a distance. This could be a very potent form of combat against opponents not equipped to counter it, as witness Darius I's travails with the Scythians and Crassus' destruction by the Parthians.⁸⁸ It took all of Alexander's tactical ingenuity to surround and trap the elusive Saka horse-archers at the Jaxartes, and a detached Macedonian column of over 800 cavalry and 2,000 infantry was shot to pieces and massacred by such opponents.⁸⁹ They were experts at harassing and outflanking their enemies, scattering before a charge but then attacking again as their adversaries regrouped. In theory, a good way of countering such mounted skirmishers would have been to use light infantry to outshoot them, as with the Athenian archers at Plataea who brought down the Persian cavalry commander Masistius (Hdt. 9.20–4). However, it was evidently not so easy in practice, probably because the horsemen had the mobility to focus their attacks on less well-defended parts of the line.

⁸⁶ Hyland (1990), (2003); Spence (1993); Gaebel (2002); McCall (2002).

⁸⁷ Devine (1984), (1985a), (1986), (1987); Dennis (1984).

⁸⁸ Hdt. 4.120–42; Plut. *Crass.* 23–31. ⁸⁹ Hammond (1989a) 194–5.

A key tactical characteristic of mounted skirmishing is that it could take time, certainly compared to the swiftness of other forms of cavalry combat. This applied even if one side fielded heavier cavalry. Polybius (3.116) describes how Hannibal's Numidians stymied the Roman allied horsemen at Cannae by drawing them off and attacking from different quarters – neither side suffered serious casualties until Hasdrubal's victorious horse from the other wing approached from the rear, at which point the allied cavalry broke and the Numidians took up the pursuit which was their *forte*.⁹⁰ Greek armies often deployed their lighter cavalry on their refused wing, as at Paraetacene and Gabiene, so as to exploit this delaying effect.⁹¹ However, the differential did not always exist – at Zama, Masinissa's Numidians put the opposing Numidians to flight just as quickly as Laelius' Italian cavalry routed the Carthaginian horsemen on the other wing (Polyb. 15.12).

At the other extreme from mounted skirmishers, there were shock cavalry equipped purely for close combat. Alexander's Companions were heavy lancers armed with the *xyston* (as portrayed on the Issus mosaic: fig. 3.2), and these lances were so effective against the shorter weapons of the Persian horse that Darius apparently re-equipped some of his own cavalry with similar arms.⁹² Hellenistic heavy cavalry continued to consist largely of such *xystophoroi*, and the marriage of the lance with the heavy armour long worn by Scythian nobles and their mounts gave rise to the cataphract lancers fielded by the Parthians and the Seleucids.⁹³ Old ideas that the lack of stirrups made ancient cavalry incapable of effective shock action have long ago been exploded by practical experimentation, and the very prevalence of such armoured lancers shows how ridiculous the supposition was.⁹⁴

We get some feel for the nature of close-in cavalry combat from the accounts of the duels surrounding the generals at the Granicus, the Helle-spont and Heraclea.⁹⁵ Clearly, these were confused and fast-moving contests, in which front-line commanders played a key role, and in which the loss of a leader could easily trigger flight. The combats must have been very swiftly decided, since this seems the only way to reconcile the sheer danger of the situation with the low overall casualties which the horsemen suffered (for example, only fifty-four of Antigonus' cavalrymen were reported killed at Paraetacene, compared to 3,700 of his infantry).⁹⁶ It is often assumed that even armoured lancers could never defeat close-order infantry in a frontal contest – Hammond argued on this basis that Alexander's attack on the *Cardaces* at Issus was at the head of his infantry rather than cavalry guard.⁹⁷ However, Antiochus III was able to break experienced Roman legionaries

⁹⁰ Daly (2002) 182–4.

⁹¹ Devine (1985a), (1985b).

⁹² Arr. *Anab.* 1.15–16; Diod. Sic. 17.53.

⁹³ Head (1982) 102–35.

⁹⁴ Connolly (2000a).

⁹⁵ Arr. *Anab.* 15–16; Diod. Sic. 18.31; Plut. *Pyrrh.* 16.

⁹⁶ Diod. Sic. 19.31.

⁹⁷ Hammond (1992).

at Magnesia using a combination of cataphracts, guard lancers and guard pikemen, so it was not impossible (albeit surely very difficult) for shock cavalry to prevail in this way.⁹⁸

The majority of ancient horsemen, especially in Achaemenid Persia and in the western Mediterranean, fell somewhere in between these two extremes of pure skirmishers and armoured lancers. Many seem to have been able to fight either at close quarters or with missiles from a short distance, though the exact tactics varied according to circumstance and the cavalry involved. Livy's account of a clash in 200 between around 1,400 Macedonian cavalry and Illyrian and Cretan skirmishers and a similar number of Roman cavalry and light infantry is particularly interesting in this regard:

The king's forces took it for granted that the type of fighting would be what they were used to, that is, that the cavalry would advance and retreat alternately, discharging their weapons and then retiring; and that the speed of the Illyrians would be effective in quick dashes and sudden charges, and that the Cretans would pour volleys of arrows on an enemy pressing forward in disorder. But the Roman attack was as stubborn as it was spirited, and this threw the enemy's tactics out of gear. The Romans behaved as if it were a general engagement in line; the skirmishers began by hurling their spears and then proceeded to hand-to-hand combat with their swords; and the cavalry, as soon as they had reached the enemy, reined in their horses and either fought from horseback or jumped down and mingled with the footsoldiers in the fight. Thus the king's cavalry, unaccustomed to a stationary fight, were no match for the Roman horse, nor could his footmen hold their own against their Roman counterparts.⁹⁹

This passage highlights several key features of ancient cavalry combat. It was quite common for light infantry to cooperate with horsemen, perhaps even riding pillion behind them as Spanish *caetrati* did, before dismounting to fight.¹⁰⁰ Sometimes this combination proved disastrous (as at the Ticinus), but more often it yielded synergistic benefits (as at the Granicus and at Capua).¹⁰¹ Livy's account clearly brings out the contrast between the running fights which must have characterized the protracted initial skirmishing between light infantry and cavalry screens, and the much briefer and more decisive close-quarters combat. There are many references (as at Cannae) to horsemen dismounting during such harder-fought contests, though this seems not to have occurred among Greek and Persian cavalry.¹⁰² Perhaps here we do see some reflection of the absence of stirrups, in that the boundary between foot and mounted combat was less clear cut than it would become in more recent times.¹⁰³

⁹⁸ Bar-Kochva (1976) ch. 14. ⁹⁹ Livy 31.35, trans. H. Bettenson. ¹⁰⁰ Head (1982) 56.

¹⁰¹ Polyb. 3.65; Arr. *Anab.* 1.16; Livy 26.4.

¹⁰² McCall (2002) 62–73; Daly (2002) 178–82.

¹⁰³ Cf. Xen. *An.* 3.2, for an understandably partisan view.

We do not know exactly how general-purpose cavalry like that of Xanthippus, Hannibal and Scipio, having won the cavalry contest, would attack enemy heavy infantry in flank or rear with such decisive effect. Presumably missile fire was just as important as a full-blooded charge, given that the rear ranks of the infantry would surely have had sufficient awareness to turn to face the threat. However, as I argued earlier, the primary determinant of the outcome was almost certainly psychological, with the terrifying sight and sound of a mass of thundering horseflesh looming from an unexpected direction being enough to cause tired and unprepared individuals to panic, thereby encouraging the cavalry to charge home after all, and triggering the all-important moral collapse.¹⁰⁴

3. Infantry

Even in armies like those of Alexander and Hannibal, in which cavalry played such a key role, foot soldiers continued to make up the great majority of the troops deployed. Persian armies which relied predominantly on horsemen, as at the Granicus and Arbela, suffered abject defeat.¹⁰⁵ Infantry remained the ‘queen of battle’ in this period, so it is worth examining in some detail the mechanics of infantry combat.

Light infantry skirmishers armed with javelin, sling or bow sometimes made up a significant proportion of the total infantry force – 18,000 out of 35,000 in Eumenes’ army at Paraetacene, 9,000 out of 29,000 in Hannibal’s army at the Trebia, and 25,000 out of 59,000 in Antiochus’ army at Magnesia.¹⁰⁶ However, as in hoplite battles, many of these light infantry seem to have been of dubious quality, and they rarely made an impact at all commensurate with their numbers. I have already discussed the role they played in the initial skirmishing and in fighting with and against cavalry, elephants and chariots.¹⁰⁷ They do not seem to have been able to defeat the main line of heavy infantry, as elusive javelin men had earlier defeated detachments of Spartan hoplites at Sphacteria and Lechaeum.¹⁰⁸ An important exception to this is that Gallic and Galatian infantry were particularly vulnerable to skirmishers because of their own lack of light infantry and of body armour, and both Greeks and Romans exploited this weakness by wearing them down with prolonged missile fire, as at Thermopylae, Telamon and Mount Olympus.¹⁰⁹ In general, however, the contest which really mattered was that between opposing heavy infantry.

There were many different types of close-order infantry in this period, ranging from Greek hoplites and phalangites to Roman legionaries, Spanish

¹⁰⁴ McCall (2002) 55–62; Daly (2002) 195–6; cf. Polyb. 3.116.

¹⁰⁵ Hammond (1989a) 69–77, 137–49.

¹⁰⁶ Devine (1985a) 77–8; Polyb. 3.71–2; Bar-Kochva (1976) 166–9. ¹⁰⁷ Daly (2002) 172–8.

¹⁰⁸ Thuc. 4.31–38; Xen. *Hell.* 4.5.11–18. ¹⁰⁹ Paus. 10.19–23; Polyb. 2.29–30; Livy 38.19–27.

and Celtic swordsmen, Persian *Cardaces*, and even massed ranks of archers as at the Hydaspes and Raphia.¹¹⁰ The standard frontage seems to have been 3 feet per man, though pikemen might pack more closely together, whereas legionaries and others might sometimes fight in a looser array.¹¹¹ It may well have been possible to vary this spacing simply by having the men in each even-numbered rank step into or out of the gaps in the rank in front.¹¹² The number of ranks in the infantry line would also obviously vary if this expedient were adopted, so one should not get too preoccupied with exact figures for frontage and depth. What is clear is that, as in hoplite warfare, heavy infantry usually formed up in far more ranks than could engage the enemy in close combat. Polybius does say that the pikes of the first five ranks of phalangites projected beyond the front of the formation, but the usual depth for pikemen seems to have been sixteen ranks, and depths of twenty-four or thirty-two ranks were not uncommon, even when (as at Raphia) this left archers to hold part of the main line.¹¹³

As with cavalry, it is clear from the differing armament of close-order infantry that fighting tactics would be distinctly variable. Archers would obviously prefer to stand off and shoot, and even better-protected infantry sometimes preferred to use javelins rather than getting stuck in at close quarters – Livy (28.2) says that Celtiberian foot normally fought through a series of rapid skirmishing attacks. The *thureophoroi* who progressively replaced both peltasts and hoplites in Hellenistic armies seem to have been a cross between light and heavy infantry, skirmishing in open order, but able to close up for hand to hand combat against their own kind.¹¹⁴ Roman *velites* had similar dual capabilities after they were given helmets, swords and shields, as Livy's account in the previous section makes clear.¹¹⁵ Conversely, some infantry, such as hoplites, lacked missile weapons altogether, and could only engage by charging into close combat.

The heavy infantry contest which we understand best is the asymmetric duel between legion and phalanx, because here the battle accounts are supplemented by Polybius' detailed tactical analysis (18.28–32). The first stage was for the leading pikes to thud into the foremost Roman shields, and for the Greeks to use their superior depth to start shoving the legions back. Romans who tried to hack their way through the intact pike hedge, as at Asculum, often came to grief from the mass of blades (Plut. *Pyrhb.* 21). A defensive phalanx with secure flanks could hold out almost indefinitely (as at Atrax and Thermopylae), whereas an attacking phalanx would gradually push the Romans back (as at Cynoscephalae and Pydna) (fig. 13.4).¹¹⁶ However, the combination of Roman determination and the flexibility of

¹¹⁰ Head (1982). ¹¹¹ Asclep. *Tact.* 4; Polyb. 18.29–30; Veg. *Mil.* 3.14.

¹¹² Sabin (2000) 10; Daly (2002) 62–3.

¹¹³ Polyb. 18.29–30; Bar-Kochva (1976) 134–5.

¹¹⁴ Head (1982) 47, 114–15. ¹¹⁵ Head (1982) 159–60.

¹¹⁶ Livy 32.17, 33.8–9, 36.18, 44.41; Plut. *Aem.* 20.



Figure 13.4 Painting of a legion versus a phalanx at Pydna.

the manipular system meant that it was almost impossible for the phalanx alone to put the enemy to flight. This being the case, it was often only a matter of time before some combination of Roman javelin fire, the disruptive impact of rough terrain or an attack in flank or rear broke up the pike hedge and allowed the legionaries to begin a one-sided slaughter of the hapless phalangites.¹¹⁷

Much harder to understand is what happened when pikemen fought pikemen, or when legionaries or hoplites fought Samnite, Gallic, Spanish or Punic infantry. This is where we need to bring to bear deductions from the grand tactical context and from experience in different eras to fill the gaps in the ancient sources themselves. As I discussed earlier, heavy infantry clashes could last an hour or more, but at least one side (and probably both) suffered only light casualties before the panic which exposed the losers to a one-sided massacre. This obviously rules out the ‘Hollywood image’ in which opposing infantry charge through each other’s ranks and become inextricably intermingled. It also casts grave doubt on the alternative models of extended individual duelling between two front ranks of increasingly exhausted men, or of a protracted *othismos* or ‘shoving contest’ with shield pressed against shield, like that suggested for the much shorter clashes in

¹¹⁷ See Connolly’s telling illustration in fig. 13.4.

hoplite warfare.¹¹⁸ We need a new model, based on our wider experience of men in battle.

A marked feature of more recent military experience has been a visceral terror of ‘cold steel’, far greater than any fear of missile weapons. Troops who have stood for extended periods literally blasting each other to pieces with close range musketry would nevertheless turn and flee if the enemy nerved themselves to launch a bayonet charge.¹¹⁹ Duels with sword and spear in antiquity would have been equally psychologically traumatic, and probably only occurred sporadically, punctuated by longer intervals of close-range stand-off. It is in this context that Livy’s references to the continued role of missiles long after a clash began, and to the ‘repeated charges’ launched by the Punic infantry at Zama, start to make some sense.¹²⁰ How else can we explain the combination of long duration and low mutual casualties observed in these heavy infantry contests? With missile ammunition much more limited than in the gunpowder era, and with most javelins being intercepted by the large infantry shields, it is understandable why Livy (28.33) described missiles as ‘more of an irritant than a weapon capable of forcing a decision’.¹²¹

The very fact that the two-handed pike, with all its obvious failings, became such a popular infantry weapon in both ancient and early modern times suggests a deeply rooted need to find a close-combat weapon long enough to reach the enemy without the risk of being stabbed oneself. Why else would pike length escalate to an absurdly unwieldy 24 feet?¹²² Clashes between Hellenistic phalangites surely involved neither ‘mutual kebabs’ nor man to man shoving with the pikes held uselessly up at an angle as in some modern reconstructions, but rather cautious long-range fencing as is recorded in some early modern accounts.¹²³ Like Spartan hoplites before them, élite units such as the Silver-shields would be not only braver in pushing forward but also more intimidating to their opponents, which helps to explain how they won the all-important psychological edge and so defeated much larger numbers of enemy phalangites at Paraetacene and Gabiene.¹²⁴

This model also makes it easier to understand the enigma of the Roman line relief system and chequerboard formation, as described in Livy 8.8, and as confirmed indirectly by Polybius’ description (15.9) of the non-standard Roman deployment at Zama. Many scholars have argued that the front-line maniples must have filled the gaps between them before engaging, as Livy says the *triarii* did, but then how did they open the gaps again once engaged, so as to allow line relief?¹²⁵ If there were frequent periods

¹¹⁸ Goldsworthy (1997). ¹¹⁹ Griffith (1990) ch. 2.

¹²⁰ Sabin (2000) 12–17; Zhmodikov (2000).

¹²¹ Cf. Wheeler (2001) for a different view of missile effectiveness.

¹²² Polyb. 18.29.

¹²³ Connolly (2000a) 109–12; Reid (1987) 24–6.

¹²⁴ Devine (1985a), (1985b).

¹²⁵ Connolly (1981) 140–2; Daly (2002) 60–3.

of stand-off, it is not only much easier to envisage a passage of lines, but it also becomes plausible that the *hastati* and *principes* actually sometimes fought with gaps between the maniples, each covered by the troops of the following line. After all, if the entire Punic centre at Ilipa was deterred from advancing into the pocket created by Scipio's refused Spanish centre (Polybius II.24), then enemy infantry would presumably be even more deterred from breaking their line to push forward on the frontage of a single maniple. Conversely, the individual front-line maniples would seem ideal for surging forward the few extra yards into contact from a stand-off position, on the initiative of the centurions involved.¹²⁶

What all this suggests is that asymmetric clashes between legion and phalanx may actually have been exceptional in being determined so heavily by physical factors such as rough terrain and the respective strengths and weaknesses of Greek and Roman weaponry. In other infantry clashes, psychology and morale probably played a much more decisive role. As in more recent times, opposed formations of close-order infantry would be held in a dynamic balance of mutual dread, until one side became convinced that its enemies would no longer stand, in which case it would launch a full-blooded charge which would indeed put the enemy to flight.¹²⁷ Livy's constant emphasis on the greater willingness of the Romans than of their enemies to fight at close quarters is suspiciously jingoistic, but it may well capture a very important truth about how ancient battles were actually decided at the tactical level.

IV. DETERMINANTS OF SUCCESS

It does not take much to discern that numerical advantage was not the key to victory in battle. Even allowing for propagandistic distortion, it is clear that the losers often significantly outnumbered the victors (as at Issus and Magnesia).¹²⁸ Nor was superiority in exotic weapons such as elephants any guarantee of success, as indicated by the contrary experiences at Hydaspes, Gaza, Raphia and Zama.¹²⁹ A stronger case can be made that numerical advantage in cavalry was a decisive element. Polybius explicitly argued that Cannae 'demonstrated to posterity that it is more effective to have half as many infantry as the enemy and an overwhelming superiority in cavalry than to engage him with absolutely equal numbers'.¹³⁰ However, although this correlation holds up pretty well in other Punic Wars battles like the Trebia, Zama, and the defeat of Regulus, it falls apart in other instances such as the Granicus, Arbela and Magnesia.¹³¹

¹²⁶ Sabin (2000). ¹²⁷ Cf. Thuc. 5.10.

¹²⁸ Hammond (1989a) 95–111; Bar-Kochva (1976) ch. 14. ¹²⁹ Scullard (1974).

¹³⁰ Polyb. 3.117, trans. Scott-Kilvert (1979). ¹³¹ Gaebel (2002); Sabin (2007).

If we look for evidence that certain nationalities and military systems were routinely victorious, the findings are similarly equivocal. Although Macedonian and Hellenistic armies enjoyed the same battlefield dominance over the Persians as had their hoplite predecessors, the honours were much more even when Pyrrhus fought the Romans, and the balance swung decisively against the Greeks a century later. Roman and Carthaginian armies, for their part, were not immune to disastrous defeats at one another's hands, and later humiliations by the Germans and Parthians showed that Rome's military system was far from unbeatable, despite its success in conquering the Mediterranean world.

The one overall factor which shows a strong and enduring correlation with victory and defeat in battle is generalship. The three 'great captains' of this period – Alexander, Hannibal and Scipio – were undefeated in major battle, except at Zama where Hannibal faced Scipio in the 'Waterloo' of the ancient world.¹³² Hellenistic forces did better against the Romans under Pyrrhus than under any later commander, and Xanthippus transformed Punic fortunes against Regulus, even though his accompanying Greek mercenary contingent proved far from successful.¹³³ It is hard to escape the conclusion that generalship was probably the most important single factor in determining which army prevailed. However, since the influence of the general was a complex and wide-ranging phenomenon affecting the preparation and inspiration of the troops as well as battlefield tactics themselves, we need to look in more detail at exactly how the benefits of superior generalship made themselves felt.¹³⁴

As Lendon has very insightfully pointed out, there is a striking contrast between Greek and Roman explanations for success in battle.¹³⁵ For Greek writers such as Polybius, it was physical factors such as clever deployment, cavalry superiority, formation cohesion and the shortcomings of the phalanx's weaponry which were key. For Roman writers such as Livy, it was morale and fighting spirit which mattered more. Livy spends far less time than Polybius detailing the physical handicaps faced by Hellenistic pikemen when confronting the Roman legions, and instead stresses the demoralization caused among the Greeks when they saw the terrible slashing wounds caused by Roman swords.¹³⁶ Although Livy is in general a much less reliable source than Polybius, his more psychological model of battle finds strong support in the writings of Caesar, who was in a better position than either of them to know what combat really involved.

If it is true that mutual deterrence and the relative ineffectiveness of missile fire limited the casualties inflicted even in extended confrontations between opposing infantry or cavalry, then we need to explain why one

¹³² Lazenby (1978) 218–27. ¹³³ Garoufalios (1979) chs. 3, 5; Lazenby (1996) 102–6.

¹³⁴ Daly (2002) ch. 5. ¹³⁵ Lendon (1999), (2005). ¹³⁶ Livy 31.34, 44.41.

side or the other eventually broke and fled, thereby exposing themselves to one-sided slaughter at the hands of pursuers whose own previous fear and anxiety would instantly be transformed into a vengeful blood lust. Viewed from this perspective, flight (at least for heavy infantry) was a distinctly irrational act, since it placed the troops in far greater danger than they were in while they remained steady. Clearly, something must have happened in the minds of individual soldiers, either to make them give way to irrational panic, or to make them lose confidence in their fellow soldiers or in the overall outcome such that running away, with all its dangers, seemed a lesser evil than standing their ground alone and hence being killed for certain as the formation as a whole disintegrated.

One trigger for flight was clearly dread at facing a charge by what was perceived to be a superior enemy. At Cunaxa, the Allia, Ibera, the Great Plains and elsewhere, raw or dispirited troops broke at (or even before) the first onset by a more fearsome opponent.¹³⁷ Another factor associated with quick victories was lack of formation cohesion. At Lake Trasimene, Baecula and Cynoscephalae, troops who would in other circumstances have put up much more of a fight were broken when they were charged before they could properly form up.¹³⁸ Even formed troops were liable to panic if their formation was disordered by retreating comrades or rampaging elephants or chariots, as happened at Beneventum, Zama and Magnesia.¹³⁹

If troops did manage to weather the first onset, then fatigue seems to have been an important factor in deciding which side eventually gave way. Lack of endurance due to previous exertions or debauches, empty stomachs, or heightened vulnerability to heat or cold is said to have been a key influence at several battles, including Arbela, the Trebia, the Metaurus and Ilipa.¹⁴⁰ However, it is interesting that the sources do not give much sense in practice of Roman armies enjoying an in-built advantage in this regard thanks to being able to replace tired men with fresh ones using the line relief system described in Livy 8.8. Instead, it is Hannibal's much more *ad hoc* multi-line system at Zama which Polybius (15.16) said kept his veterans fresh and allowed them almost to overcome the tired legionaries. Perhaps this indicates that the *hastati* and *principes* did usually fight in a more closely integrated fashion with interleaved lines as I have suggested above, instead of the latter being held back at some distance from the fight until called upon to relieve the former.

A common trigger for flight after a drawn-out contest was some form of physical or psychological shock. In those cases where the death of generals did precede rather than follow the defeat of their army, it could have a significant demoralizing effect. The loss of leading Persian commanders

¹³⁷ Xen. *An.* 1.8, 10; Livy 5.37–9, 23.29, 30.8.

¹³⁹ Plut. *Pyrrh.* 25; Livy 30.33–4, 37.41–2.

¹³⁸ Polyb. 3.84, 10.39, 18.25.

¹⁴⁰ Arr. *Anab.* 3.11; Livy 21.54, 27.48, 28.15.

at the Granicus and the deaths of both Craterus and Neoptolemus at the Hellespont contributed greatly to the rout of their forces, and when the 'substitute' to whom Pyrrhus gave his distinctive armour at Heraclea was killed, it caused widespread demoralization until Pyrrhus showed his men that he was still alive.¹⁴¹ Loss of the commander to enemy action did not always cause a panic, as shown by the legend of the self-sacrificial *devotio* of consuls called Decius Mus at Suessa and Sentinum, which allegedly inspired their men to go on and win (Livy 8.9, 10.28–9). However, in both cases the other consul was doing better on the opposite wing, and the whole story may be no more than a patriotic fiction to cover up an embarrassing reverse. What certainly did demoralize troops was for their general to flee in panic, and the flight of Darius seems to have been a key element in Alexander's victories at Issus and Arbela (Arr. *Anab.* 2.11, 3.14).

A more common cause of shock (as discussed earlier) was an attack on the flank or rear of engaged forces. This proved decisive at Issus, the Trebia, Cannae, Baecula, the Metaurus, the Great Plains, Zama, Cynoscephalae and Thermopylae.¹⁴² No doubt there were physical reasons for the success of such attacks, in terms of the inability of the defenders to recoil without routing, as I have suggested that troops did routinely during frontal combat. However, probably at least as important was the transformation of the psychological relationship between the two sides. The attackers would be emboldened by the unpreparedness of the enemy into launching a less circumspect onslaught, while those individuals facing the attack would be demoralized both by the fact that they had not expected to find themselves in the front line and by this obvious indication that their own army's battle plan had gone very seriously awry.¹⁴³ In these circumstances, it was not just Hellenistic phalanxes who broke and ran – most other troops also fled, for all Polybius' rhetoric (18.32) about Romans being able to meet an attack from any quarter.

So how does all this relate to the correlation between good generalship and victory in battle? The simple fact seems to be that good generals were able to stack the odds in favour of their own side, across the whole range of physical and psychological factors highlighted by Greek and Roman writers respectively. Long before battle, such generals trained their men more effectively, won their confidence and admiration, and inspired them into thinking themselves unbeatable, thereby transforming even a polyglot army like that of Hannibal into a cohesive and resilient fighting force. When battle was imminent, good generals won the intelligence contest and devised clever tactics and stratagems which not only brought physical

¹⁴¹ Arr. *Anab.* 1.15–16; Diod. Sic. 18.30–2; Plut. *Pyrrh.* 17.

¹⁴² Head (1982) 65–81.

¹⁴³ Sabin (1996) 75–7; Daly (2002) 191–9.

benefits such as weakening or surprising the enemy, but also gave their own troops the all-important confidence to take on superior numbers, tackle enemy elephants, or whatever the challenge might be. Finally, during the battle itself, such generals exploited their charisma to provide inspirational leadership at the decisive point, as well as overcoming the problems of battlefield command by redirecting at least some of their forces in response to unfolding events. Unfashionable as it may seem in our age of social history, this really does seem to have been a period in which the strengths or limitations of the man at the top could make a very big difference indeed.

Why, then, did the Romans, with their oft-criticized consular command system, eventually prevail over adversaries like the Carthaginians and Greeks? This was partly because Rome had the manpower and determination to fight on despite initial reverses like Heraclea or Cannae, but it was also because Roman armies (especially after years of campaigning) managed to ‘institutionalize’ many of the above benefits and so became better able to succeed in later engagements like Beneventum and the Metaurus.¹⁴⁴ Roman equipment and tactics underwent continual improvement, and became a model for their adversaries (as with the re-equipment of Hannibal’s veterans with captured Roman arms, and as with the fielding by later Hellenistic states of ‘imitation legionaries’).¹⁴⁵ Roman troops developed the same confidence and ferocity that had earlier allowed Greeks and Macedonians to rout Persian opponents on fields from Marathon to Arbela. And, just as important, the rotational and competitive nature of the Roman command system meant that leaders eventually emerged who were at least the equals of their foreign counterparts.

Hence, although generalship was indeed the most important single determinant of victory or defeat in individual battles, the Romans enjoyed overall structural advantages which in the end proved decisive. When faced by talented generals such as Pyrrhus, Xanthippus and Hannibal, run-of-the-mill Roman commanders were usually defeated, but even then, the ferocious, flexible and stubborn legionaries were able to sell their lives dearly and inflict substantial casualties on their opponents. Against mediocre generals, even unremarkable Roman leaders were often able to win sweeping victories like those at Cynoscephalae, Magnesia and Pydna. When a military genius such as Scipio, Marius or Caesar came along, Roman armies were able to achieve strategically decisive victories of which other conquerors like Pyrrhus and Hannibal could only dream. The net result was that Rome, despite suffering frequent battlefield defeats, rose inexorably to dominate the entire ancient world.

¹⁴⁴ Garoufalios (1979) chs. 3, 5; Lazenby (1978) chs. 3–7.

¹⁴⁵ Polyb. 3.114; Sekunda (1994b) 16.

B. NAVAL BATTLES AND SIEGES

Philip de Souza

I. NAVAL COMBAT

Fleets were always of secondary importance when compared to armies in Greek and Roman warfare. No ancient state ever attempted to deploy naval forces without a land objective, so major naval engagements were normally fought for the purpose of eliminating an opposing fleet, forcing a passage to or from a harbour or coastline, defending a flotilla of transport or cargo vessels, or supporting or disrupting siege operations. Furthermore, due to the limitations of Hellenistic naval forces in terms of range and seaworthiness, almost all naval battles were fought very close to land and might even involve land-based forces.

It must be stressed from the outset that there are few detailed accounts of naval warfare in the surviving sources for this period. The situation is particularly acute for naval actions that did not involve the Romans. Aside from the narratives of the Punic Wars, the only two major naval battles that are described in detail are Salamis in 306 and Chios in 201. Livy and some of the later sources do provide us with accounts of smaller engagements between Roman and allied naval forces and the Antigonid or Seleucid monarchs in the second century, but it remains difficult to make general statements about the naval warfare of the eastern Mediterranean in this period with any sense of certainty. Yet there were numerous battles between large fleets in the fourth and third centuries. To take two examples, we know that in 322 the Athenians and their allies suffered a devastating defeat at the hands of a Macedonian fleet under Cleitus, which followed separate defeats for allied Greek fleets off Abydus and Amorgus, but we have no details at all for these engagements. Similarly, a major naval battle was apparently fought off the island of Cos during the Second Syrian War (260–253) between the forces of Antigonus II Gonatas and Ptolemy II Philadelphus, but the precise date is unclear and, although the battle was a decisive victory for Antigonus, we again have no details of the action or the composition of the fleets involved.¹⁴⁶

I. Tactics

What was the normal method of engaging the enemy in Hellenistic naval warfare? Was it ramming and sinking, or ramming, grappling and boarding? Most warships of this period seem to have been equipped with rams, and

¹⁴⁶ On these two battles and their significance, see Hammond et al. (1972–88) III.107–13, 122, 290–5.

many rams were lost in combat (breaking off and sinking), or were removed from captured ships to act as trophies. Yet only one example of a solid bronze ram has been found so far, off the coast at Athlit in Israel. It seems to be of a size appropriate for use on a 'four' or a 'five', and it was made in the late third or early second century. It is relatively short (a little over 2 metres), blunted and wider at its forward end. It seems designed only to penetrate a short distance into an enemy hull, perhaps to lessen the likelihood of the ship becoming caught on its victim. It has fins that would encourage splitting of the timbers of a ship's hull, making penetration easier. It weighs 462 kg and still had some of the heavy timbers from the ship's prow attached to it when it was discovered. These timbers will have been an integral part of the ram, bracing it and ensuring that the forces generated on contact were absorbed and distributed in such a way as to minimize damage and disruption to the ramming vessel.¹⁴⁷

Ramming was common in the naval warfare of this period, but for it to be used as the primary method of disabling enemy vessels probably required fast, relatively light ships and high levels of training and experience on the part of the warship crews. It was best to approach from the rear or at an acute angle, which normally meant outmanoeuvring an enemy ship in open water. The ship's captain and helmsman would need skill and judgement to time the attack. The ramming ship would then aim to withdraw and attack another ship while its first victim flooded and sank, although the lack of heavy ballast in warships usually meant that they only sank until their decks were awash. The best way to position a ship for ramming involved rowing through the opposing line and sailing round enemy ships to ram at an acute angle from the side or rear. These two stages were called the *diekplous* and the *periplous* (see ch. 7B in this volume). They required the application of superior speed, manoeuvrability and seamanship to be effective. A variation on actual ramming was to use the ram or the projecting beams alongside a ship's prow (Greek *epotides*) to break the oars and oarboxes of an enemy ship. Again, this will have been done by a stern or an acute-angled side approach.¹⁴⁸ The Rhodians seem to have favoured these tactics, for which their favoured warships, the 'four' and the *tribemiolia*, were well suited. Thus in the battle of Side in 190 the Rhodians defeated the forces of king Antiochus III under the command of Hannibal through their superior seamanship (Livy 37.23–4).

At Chios in 201 the Rhodians were unable to adopt their preferred tactics of *diekplous* and *periplous* because of the spoiling tactics adopted by Philip V's *lemboi*. These lighter vessels were interspersed among the heavier, decked ships, preventing the Rhodian ships from sailing in between the latter, and

¹⁴⁷ See Casson and Steffy (1991); Morrison and Coates (1996) 22, 366–9.

¹⁴⁸ See further Lazenby (1987); Whitehead (1987).

harassing them from all sides. Consequently the Rhodians were drawn into the same kind of close, confused fighting as their Pergamene and Byzantine allies. The *lemboi* attacked in groups, breaching the hulls of some Rhodian ships and damaging the oars and steering oars of others. Polybius says that the Macedonian marines fought particularly well. He describes the ‘five’ of the Rhodian admiral Theophiliscus ramming two enemy ships but then getting trapped in a swarm of vessels whose marines boarded his ship and killed most of the marines before another Rhodian ship came to the admiral’s rescue. Theophiliscus carried on directing the Rhodians in the battle but he had been severely wounded and died the following day. Polybius (16.4.11–12) gives details of the special ramming tactics employed by the Rhodians against the Macedonian *lemboi*:

When it came to the prow to prow clashes they used a certain technique. For by depressing their own ships towards the prow they took the strikes above the waterline, whilst striking their enemies below the waterline, inflicting irreparable damage.¹⁴⁹

The precise meaning of the Greek phrase translated as ‘depressing their ships towards the prow’ is obscure. If it has been correctly transmitted from Polybius’ original text, and presumably by him from his Rhodian sources, then it must refer to a technique which only the Rhodians were capable of employing, for it is not mentioned in any other context. One suggestion is that the men who were on the forward parts of the deck may have moved towards the prow at a given signal. Their weight and movement could have lowered the prow of the ship, enabling the ram to strike at a point well below the waterline of the enemy vessel.¹⁵⁰ Clearly this technique would only have worked with decked vessels, which includes the ‘fives’, ‘fours’, triremes and *tribemolai*. It is significant that Polybius says that the Rhodians ‘rarely’ used this particular technique, preferring to avoid direct clashes with the Macedonian ships, whose marines were fearsome adversaries in close combat. The Rhodians’ reluctance was probably also due to the hazardous and unreliable nature of the manoeuvre. The only men who could possibly have moved forward as the ships closed in to ram an enemy vessels will have been the marines. In order to avoid being thrown across, or even off the deck when the ships collided, they will have had to move quickly and precisely, then sit or crouch on the deck. Even with careful coordination and considerable practice it seems unlikely that this technique could have been successful on more than

¹⁴⁹ See Walbank (1957–79) II. 503–11.

¹⁵⁰ Morrison and Coates (1996) 364. An alternative suggestion is that the Rhodian ships had prows designed in such a way as to force the rams of enemy ships upwards, thus striking them well above the waterline; Tarn (1930) 146–7.

50 per cent of the occasions that it was attempted. A failed attempt might severely damage the ship and leave its complement of marines significantly weakened.

It was easier to ram a ship from the front, or square on to the side, but this could result in serious damage to the attacking ship. The prows of warships were heavily reinforced in order to withstand the impact of ramming, but they were prone to break off or become stuck if the attack was made in this way. When two ships were very close together, or even stuck fast, the marines would attempt to capture the enemy vessel by fighting with missile weapons and then by fighting hand-to-hand. This meant boarding the opposing ship, which could be difficult to manage even in calm seas unless the distance between the fighting decks was very small. One way to make it easier was to use a grappling hook to secure the enemy ship. This device was a regular feature of naval combat when ships were operating in confined spaces such as harbours and it was used in all the naval warfare of this period.¹⁵¹ Fleets whose captains were not confident in the speed and agility of their ships would tend to prefer to ram prow-to-prow or obliquely, and then grapple and board their opponents' ships.

2. *The corvus*

Like the Rhodians, the Carthaginians had a long tradition of naval warfare, and their experience in this area meant that in the First Punic War their main tactic was ramming, whereas the Romans preferred to grapple and board.¹⁵² Early in the First Punic War, the Romans introduced a new form of boarding involving the use of a special piece of equipment, a boarding-bridge called the 'crow' (Latin *corvus*).¹⁵³ The circumstances of this development are sketchy. The Romans had built a fleet in the latter part of 260, based on a captured Carthaginian vessel (see ch. IIIB in this volume). The first proper voyage for this new fleet took it along western coast of Italy towards the Straits of Messina. An advance force of seventeen ships, under the command of Gnaeus Cornelius Scipio, one of the consuls of 260/59, headed directly to Messana. Its aim was to arrange for supplies and other facilities for the main fleet (Polyb. 1.21.4). Scipio was diverted to the Lipari Islands, possibly by the promise that they would be

¹⁵¹ The Greek term for this devices in the sources is *cheires siderai*, literally 'iron hands'. The Latin term, *harpago*, is derived from the Greek *harpagē*, which is a general word for a hook.

¹⁵² Carthaginian naval endeavours went back as far as the sixth century. In the early fourth century, Carthage had a substantial fleet (perhaps as many as 200 ships in their war against Dionysios of Syracuse in 398). Excavations of the naval harbour at Carthage indicate a capacity of c. 200 shipsheds; see Hurst (1976), (1977).

¹⁵³ Our source for this innovation, Polybius, uses the Greek word *korax/korakes* meaning crow(s); no extant Latin author uses *corvus/corvi*, but modern scholars prefer the Latin name.

betrayed to him, but he was captured by Boodes, a Carthaginian commander who sailed out with a large naval force from Panormus and caught Scipio off guard. He abandoned his small squadron of ships and surrendered, earning the nick-name 'Asina' (she-ass). It is most likely that the new Roman ships did not have the *corvus* fitted to them, otherwise the Carthaginians would have been better prepared for it in the battle at Mylae, which occurred soon afterwards. Similarly, when the Carthaginian admiral Hannibal went out to reconnoitre the approaching Roman fleet with fifty ships and lost most of them, having come upon the Romans unexpectedly, it was a straightforward naval encounter, again not featuring the *corvus* (Polyb. 1.21.9–11).

It was apparently after these two episodes that the Romans introduced the *corvus*, probably as a result of appraising their tactical performance in the recent clash with the fifty Carthaginian ships under Hannibal. It would certainly seem logical for them to have introduced such a tactical innovation in order to counter a perceived weakness in their combat methods.¹⁵⁴ For a description of the *corvus* we are reliant upon Polybius (1.22). The key details are as follows. It consisted of a pole 7.3 m (24 feet) high and 22–5 cm (9–10 inches) thick, with a pulley on top, from which was suspended the boarding bridge itself. This was 11 m (36 feet) long and 1.2 m (4 feet) wide. It had a spike on the underside at the far end to fix it into the deck of an enemy ship. A slot 3.65 m (12 feet) from the lowest end enabled it to slide up the pole (probably less than all the way to the top) and to be swung around. Rings were used to attach ropes to the far end so that it could be raised and lowered via the pulley. Polybius says it was mounted on the prows of the Roman warships, but it must have been set some way back from the very end of the prow, as it seems to have been swivelled around to grapple with ships on either side of the Roman vessel. The device was designed for a dual function: it held enemy ships fast and provided a relatively easy means for the Roman marines to board them. It also offered an alternative naval combat tactic to ramming.¹⁵⁵

Polybius implies that the *corvi* were a late addition to the Roman ships, a last-minute modification in anticipation of imminent naval combat. It is not unlikely, therefore, that the Romans made as much use as possible of

¹⁵⁴ Thiel (1954) 183 suggests it was an invention of Archimedes, who was then living in Syracuse, a city allied to Rome. It certainly has some affinities with his celebrated inventions, but such an attribution is speculative and unnecessary. It was not beyond the collective ingenuity of the ship captains and military commanders of the Roman fleet to come up with the new device themselves. Scullard (1989) 550 implies that the *corvus* was already on the ships as they sailed south, but this must be wrong; Polybius' narrative sequence puts the introduction of the *corvus* after Scipio's capture and the initial clash with Hannibal.

¹⁵⁵ For a full description and analysis see Wallinga (1956); also Lazenby (1993) 67–70; Scullard (1989) 551.

existing fixtures and fittings. They may even have incorporated the footings or tabernacle used for masts. The fact that they are described as being on the prows of the Roman ships and swivelled around to grapple ships approaching from the sides could indicate that they were positioned where the forecastle would have been.¹⁵⁶

The invention of the *corvus* could be characterized as a typical Roman response to a military problem by engineering a technological solution. Alternatively, it could just be seen as a desperate gamble aimed at turning sea-battles into land-battles and relying on the training and determination of the Roman legionaries turned marines to succeed in close-quarter fighting. However it is viewed, this bold tactical innovation certainly worked. The ensuing battle of Mylae in 260 was the first major naval battle of the First Punic War (Polyb. 1.23; Diod. Sic. 33.10). About 100 Roman ships defeated about 130 Carthaginians. The Carthaginians were puzzled by their first sight of the *corvi*, but attacked the Roman fleet with determination. They lost their thirty lead ships immediately, all having been grappled by *corvi* and boarded. This included the admiral Hannibal's flagship, a 'seven', but he escaped in a skiff. The remaining Carthaginian ships tried to use their superior speed and manoeuvrability to get at the Romans from better angles to avoid the *corvi*, but the swivel mechanism allowed the Romans to grapple some of these as well. The Carthaginians retreated after losing about fifty ships, and the victorious Roman commander, the consul Gaius Duilius, was honoured with a column in the forum, decorated with the prows of the captured ships.

Four years later, another major sea-battle at Ecnomus also ended in defeat for the Carthaginians. This battle was a deliberate attempt by one large naval expeditionary force to intercept and destroy another. It produced a sprawling, multi-part confrontation which happened within sight of the land, and may have been partly influenced by the proximity of the shoreline, but it was essentially a battle at sea between two fleets of warships heavily laden with marines. The Romans won because their various squadrons were able to defeat and drive off the Carthaginian squadrons in direct confrontations and then come to the aid of their fellows. Polybius insists that Carthaginian ships were faster (1.26.10, 1.27.10), but that does not seem to have made a great deal of difference. Most of the Roman captains were able to avoid being rammed in their vulnerable stern quarters and either grapple with the enemy or keep them at bay. For all their speed, the Carthaginians seem to have been too intimidated by the *corvi* to engage the Romans properly on the open sea.¹⁵⁷

¹⁵⁶ See the reconstruction drawings of a 'five' in Morrison and Coates (1996) 302, 330 and the trireme rigging described in Morrison and Coates (1986) 222–5.

¹⁵⁷ See further Lazenby (1993) 81–96.

3. Casualties

Casualty rates are unlikely to have been very high among the crews of warships engaged on the open sea. It is likely that many rowers, marines and even sailors would not have been strong swimmers, especially after exerting themselves in a battle, so they were perhaps as likely to die from drowning as from wounds or injuries. The proximity of an accessible shoreline was bound to be a major factor. Hence many of the Tyrian crews whose ships were attacked by Alexander during their own sortie against the Cypriot fleet at Tyre in 332 were able to abandon their ships and swim back to the island city (*Arr. Anab.* 2.22.5). Oarsmen were probably more likely to be captured with their ships than the marines whose duty it was to defend them. In a naval battle there seem to have been two principal ways that a ship might be 'lost' in combat. At the battle of Salamis in 306 the defeated Ptolemy I Soter lost forty ships 'captured with their crews' (Diod. Sic. 20.52.6), implying that the marines and sailors on them may not have fought too long before surrendering, either because they were overwhelmed, or their ships were so disabled that they could not escape. Diodorus says a further eighty were disabled to the point of being swamped and were towed away 'full of sea water', which implies that the marines on them were either all killed (probably a rare occurrence) or left to swim, drown or, if they were lucky, be picked up by friendly ships. Isolated ships were more likely to be lost than those which kept formation, as were flotillas which could not manoeuvre against their opponents, or were caught between two groups of enemy ships. Transport ships were particularly vulnerable if their escorting warships were defeated. At Salamis Ptolemy lost nearly 8,000 soldiers who were captured on over 100 transport ships.

The heaviest casualties among the oarsmen, who are rarely considered worthy of special mention in the ancient sources, were likely to be from ramming manoeuvres, either when the ships were breached or the oars and oarboxes were broken. In the cramped conditions of a rowed warship, almost unimaginable carnage would have been caused by heavy oars being forced against bones, or splintering into flesh, as well as planks bursting inwards and outriggers being torn apart by the heavy prows of enemy ships. Even a successful ramming might have caused broken bones and soft-tissue injuries among the crew of the ramming ship.

Heavy losses were sometimes suffered by fleets caught out by bad weather. The Romans lost 264 out of 284 ships in a storm off Camarina when trying to rescue elements of their African invasion force in 255. Polybius says that over 100,000 Romans and Italians perished and this was their worst ever disaster at sea (*Polyb.* 1.37.2–3). His sources seem to have blamed the commanders of the Roman fleet for overriding their helmsmen's advice (1.37.4). It is also possible that the heavy and unwieldy *corvi* may have made ships

particularly vulnerable, which would explain why they were not used by later Roman fleets.¹⁵⁸ Adverse weather could sometimes be used to gain an advantage. In 258, under the cover of a mist, the Roman commander Sulpicius Paterculus made a surprise attack on the Carthaginians' base in Sardinia and sank most of their ships. The rest were abandoned and captured by the Romans (Zonar. 8.12; Oros. 4.8.4). In 213 and 212 Carthaginian fleets commanded by Bomilcar were able to supply and partly reinforce the defenders of Syracuse by sea. They managed to enter and escape from the Great Harbour, in spite of the presence of a Roman fleet of 100 ships. On the occasion of Bomilcar's second escape, which occurred as the Romans were capturing the Euryalus fortress, Livy explains his success by saying that a storm was blowing too hard for the Roman fleet to maintain their station out to sea. Bomilcar was later able to return with a fleet of 100 warships (Livy 25.25.11–13).

4. Catapults in naval warfare

Torsion catapults, hurling either bolts or stones, are first clearly attested in a naval battle when used by Demetrius I Poliorcetes against the fleet of Ptolemy I Soter at Salamis in 306. Diodorus (20.49.4) says he put stone-throwing catapults on his ships, along with arrow-shooting catapults on their prows.¹⁵⁹ Prior to the fleets closing for ramming and boarding, Demetrius' men, 'using bows, stone-throwers and numerous javelins, kept inflicting wounds on those who came within their field of fire' (Diod. Sic. 20.51.2). These kinds of artillery weapons were of most use in naval warfare in the initial stage of a ship-to-ship encounter, when the vessels were still a considerable distance from each other. They could be used at this point against the fighting personnel of an enemy ship (and possibly its artillery), but accounts of naval battles suggest that once the ships were at close quarters ordinary javelins and bows were used to clear away the personnel of the enemy ship so that the marines could board it. In the naval battle between Prusias of Bithynia and Eumenes II of Pergamum in 184, Hannibal, commander of the Bithynian fleet, used his catapults to fire pots filled with poisonous snakes onto the decks of the Pergamene ships. The initial amusement of Eumenes' men turned to horror when the contents of the pots were revealed, and the panic caused on the ships made them flee rather than fight, although their numbers were superior, and thus the stratagem helped to achieve a victory for Prusias' fleet.¹⁶⁰ Although the

¹⁵⁸ Lazenby (1993) 122.

¹⁵⁹ It should be noted that in this battle Demetrius had over fifty ships rated 'five' or higher and he had recently been assaulting the Cypriot city of Salamis, employing a range of catapults (Diod. Sic. 20.48). It would have been relatively easy for his men to transfer some of the catapults onto the larger ships.

¹⁶⁰ Frontin. *Str.* 4.7.10–11; Nep. *Hannibal.* 10.4–11.6; Just. *Epit.* 32.4.6–7.

precise nature of the missiles was rather unusual in this instance, they nevertheless demonstrate quite clearly the basic purpose of missile weapons in ancient naval warfare, namely to neutralize enemy crews, particularly marines and sailors, prior to boarding.

One reason for building the larger, higher-rated polyremes that Demetrius Poliorcetes especially favoured might have been the scope they offered for mounting artillery, but there can be no doubt that the principal use of catapults in the period covered by this chapter was in siege warfare. Even if they were effective in disabling helmsmen and clearing decks for boarding, Hellenistic and Roman naval commanders would have been reluctant to place too much reliance on weapons which required lengthy preparation, careful maintenance, specific ammunition, expert operation and a steady firing platform.¹⁶¹ Very large catapults might have been effective at close range, but they do not seem to have been used at all, probably because their additional weight caused such a loss of speed as to make the ships too vulnerable to smaller, less heavily armed vessels. In order to sink or seriously disable a ship by artillery alone, large stone-throwing machines with considerable numbers of heavy missiles would have been required. Such devices would not have been feasible on ancient warships. The main function of artillery at sea was to clear the way for a boarding party, much as the use of torsion artillery on land was particularly to clear the walls so that infantry could advance and establish a foothold. Even if only a few ships in a given fleet had machines, their opponents still had to be prepared to deal with them, which might require them also to have vessels equipped with artillery to counter those of the enemy. Hence there was a need to include some large ships in a fleet, which could carry significant artillery as well as extra marines.¹⁶² The fact that specialist catapult officers are listed among the crews of Rhodian warships, which were never very large, is an indication that one or two catapults might have become standard on any ship with a fighting deck.¹⁶³

An exceptional case of heavy artillery being used in naval combat occurred when the Roman fleet commanded by Scipio Africanus was

¹⁶¹ Philo (*Belopoeica* 57) draws attention to one of the key problems of using torsion catapults in naval or land battles, namely that a damaged catapult takes far too long to repair and is thus rendered inoperable for the remainder of the engagement; Marsden (1969) 168. In the time scale of a siege, this problem would have been far less significant.

¹⁶² Marsden argues that while a 'five' could carry up to 120 armed men in addition to its normal crew (as the Romans did at the battle of Ecnomus in 256), creating a weight of 9 tons (120 men at c. 12 stone each), a three-span arrow-firing catapult weighs only 1 hundredweight. He therefore suggests that a 'five' could readily accommodate, in addition to its full crew: ten three-span arrow-firers (10 cwt), two small *lithoboloi*, or stone-firing catapults ($2 \times 2 = 4$ tons), the artillermen and ammunition ($1\frac{1}{2}$ tons), plus forty marines (3 tons). This does not take account of whether there would be sufficient space on deck. See Marsden (1969) 169–73.

¹⁶³ Gabrielsen (1997) 94–7. Tarn (1930) 120–1, 152, says catapults were definitely not used in naval warfare, but the counter-evidence is strong.

attacked at Tunis in 203 by a Carthaginian fleet. Many of Scipio's ships were equipped with catapults, but these were intended for siege operations. Consequently the ships were far too heavily laden to contemplate a proper naval engagement. He had his ships gathered together and surrounded by merchant vessels that were rigged for siege activities with ladders and towers, to form a floating fortress, which he hoped would be deemed too formidable for the Carthaginians to risk attacking. After a day of contemplation the Carthaginians summoned up the courage to attack and discovered that the immobile warships and merchant vessels were unable to mount an effective defensive bombardment, mainly through fear of hitting their own men. They made a series of raids and captured around sixty of the specially prepared merchantmen (Livy 30.10.8–21; Polyb. 14.10.9).

Another unusual device employed in exceptional circumstances in naval warfare was fire. In 190 a Rhodian fleet commanded by the admiral Pausistratus was trapped in the harbour at Panhormus on the island of Samos. In order to force a path out through the waiting enemy ships, Pausistratus had two poles with funnel-shaped iron baskets fixed onto the prows of some of his ships. The baskets were filled with flaming material and could be tipped over to deposit the flames onto an enemy ship. The opposing fleet of Antiochus III, commanded by the Rhodian exile Polyxenidas, gave way before these terrifying devices, but the ships that were not so equipped were overwhelmed (Polyb. 21.7; Livy 37.11; App. *Syr.* 24).¹⁶⁴ Fire-ships were also used, such as when the Tyrians launched them against Alexander's siege machines in 332, but this tactic was only effective in a confined area, close to land (*Arr. Anab.* 2.19).

5. Controlling access to harbours

Ancient naval warfare was never about the control of the open sea. Ancient ships, especially warships, could not stay at sea for more than a few days at a time. Whenever possible, the crews of warships would put into shore at least once a day for rest, water and food. Hence their fleets needed to operate between secure beaches, or, preferably, harbours. The First and Second Punic Wars illustrate perfectly the vital importance of access to good harbours. Most of the First Punic War resolved itself into a struggle for control of key harbours. Without such bases as Caralis, Lilybaeum and Drepana the Carthaginians were unable to supply and reinforce their armies in Sicily and Sardinia during the first war. By the same token, the Romans were unable to drive the Carthaginians out of Sicily and Sardinia unless

¹⁶⁴ Appian (*Syr.* 27) says that these fire-pots were later fitted as standard equipment in the Rhodian fleet, but that is to be doubted because of the extreme risk involved in carrying any sort of fire on a wooden vessel. At the very least they cannot have been used after the end of the war with Antiochus.

they could defeat them in naval confrontations and isolate these bases. In the second war, the naval contest once again focused on controlling harbours, at Syracuse and Tarentum in particular, but it also required the guarding of standard routes, such as that along the coast of Spain, by which reinforcements might be sent to Italy. The alliance between Hannibal and Philip V of Macedon necessitated a strong Roman naval presence on the southern Adriatic coast, and turned several of the ports and islands of the Ionian Sea into battlegrounds in what is known as the First Macedonian War.¹⁶⁵

6. Surprise attacks

Surprise attacks were less easy to bring off in naval warfare than on land, for the simple reason that the approach of a substantial force by sea could not be hidden from the enemy except in cases where the coastal topography was particularly favourable, or the approach could be made at night or in poor visibility. The attack launched by a flotilla of warships from Tyre against Alexander's Cypriot fleet during the siege of 332 achieved initial surprise because the embarkation and departure of the Tyrian vessels was literally 'screened' from view through the erection of sails across the harbour to mask their preparations (*Arr. Anab.* 2.21.8). Once the ships reached the open sea they were visible to their targets and had to rely on the speed of their assault. In 249 when the Roman consul Publius Claudius Pulcher decided to take his newly re-manned fleet and launch a surprise attack on Drepana, which was now the Carthaginians' main supply base in Sicily, he set out at night to avoid detection. His plan might have worked, but his fleet became dispersed in the darkness, possibly because of inexperienced crews, especially the recently arrived oarsmen. When they began to reach Drepana they lacked the formation to carry out the intended assault on the harbour, trapping the enemy inside. The Carthaginian commander, Adherbal, took his fleet out in good order and forced the Romans back towards the shore south of Drepana. The ensuing battle was the one occasion in which the Carthaginians were able to put their superior speed and manoeuvrability to good effect, employing the tactics of *diekplous* and *periplous* (*Polyb.* 1.51.4–6).¹⁶⁶

¹⁶⁵ For the First Punic War see Lazenby (1993) chs. 5–9; Scullard (1989). Rankov (1996) analyses the naval strategies of the Second Punic War in the light of the practical limitations of ancient seafaring.

¹⁶⁶ Why did these tactics succeed here, when they had conspicuously failed at the battle of Ecnomus in 256? The most obvious explanation would seem to be that the Romans were no longer able to rely on the intimidating presence of the *corvi* to keep their opponents away. The absence of the *corvi* is not explicitly commented on by Polybius, but it can be inferred from his failure to mention them in his account of the battle (1.49–51).

7. Communication and coordination

Communication between ships, or between land forces and fleets, was another area of weakness in naval warfare. When the Tyrians launched their surprise attack on the Cypriot fleet in 332, they were themselves attacked and caught out in the open sea by the rest of Alexander's naval forces. The Tyrians in the besieged city tried frantic shouts of warning and, when these were not heard above the din of battle, visual signals to warn their fleet of the approach of Alexander's ships. By the time the message had been received and understood it was too late to avoid Alexander's ships (*Arr. Anab.* 2.22.3–5).

Coordinating the activities of many large fleets would have been made even more difficult by the fact that often they were composed of various allied contingents, who may not always have shared a single common language. For example, Alexander's naval forces at Tyre in 332 included Macedonians, southern and Asian Greeks, Cilicians and Phoenicians. The Persian kings had several fleets, mainly drawn from the coasts of Anatolia and Phoenicia, but also with a substantial Egyptian contingent. When the commander in chief was Persian, or Greek as in the case of Memnon of Rhodes, it is not clear what the language of command would have been. It is quite likely that such commanders used interpreters to talk to some squadrons. The Roman fleets in the Punic Wars and the conflicts with the Hellenistic Greeks in the third and second centuries will have comprised a mixture of Latin-, Oscan- and Greek-speaking contingents, supplemented by some who spoke Punic and Sicel and Sardinian. It seems most likely that Greek was the language of command, but among the oarsmen there may not have been one common language.

When fleets were split up and operating in separate flotillas, the biggest problem was the speed at which information could be relayed. Most ancient naval commanders seem to have used scout ships of some kind or another to carry out reconnaissance of the enemy positions and movements. For example, the Roman commander Cn. Cornelius Scipio Calvus in 217 used two fast ships from Massilia to scout ahead of his fleet along the Spanish coast (*Polyb.* 3.95.6). Land-based observers and signallers were also a common feature of ancient naval warfare. Thus Scipio's Carthaginian opponent Hasdrubal was given early warning of the Roman fleet's approach in 217 by his lookout on the shore (*Polyb.* 3.96.1). Simple fire or smoke signals could be used to warn of imminent danger, but often naval commanders needed to know more than whether or not the enemy were only a few miles away. Reports on the observation of enemy vessels and their movements could only be carried out at close quarters and the information relayed back to commanders as fast as ships could be rowed or sailed, or men on foot or horseback could travel overland.

In 190 a Rhodian fleet was heading east along the Pamphylian coastline looking for the ships of Antiochus III under Hannibal the Carthaginian. At the mouth of the River Erymmedon they were told by people from Aspendus that Hannibal was at Side, further east (Livy 37.8.3). This seems to be a typical example of the phenomenon of news of naval forces travelling quickly along the established sea lanes. Livy does not specify whether the information came from eye-witnesses, such as sailors or merchants in cargo ships who had actually seen Hannibal's fleet, or whether it was passed on by locals who had already spoken to such people. Hannibal had been ordered by Antiochus in the previous winter to gather a new fleet, and he had spent a considerable time assembling ships from Cilicia and Phoenicia (App. Syr. 22). The creation of such a large fleet, which Livy says comprised ten triremes, thirty 'fives', four 'sixes' and three 'sevens', plus an unspecified number of undecked ships (Livy 37.23.5, 24.6), must have been the major talking point in all the cities along the Pamphylian and Cilician coastline.¹⁶⁷

8. Kings, admirals, captains and helmsmen

The importance of having skilled personnel in naval forces can easily be taken for granted. The basic tactical unit in any ancient naval force was the individual vessel. The ships' captains were, therefore, primarily responsible for the success or failure of the fleet, not just in tactical terms, but also when it came to basic navigation. An experienced captain and helmsman were probably the most important elements in making a warship effective. We only occasionally hear the names of such people, but in Polybius' account of the battle of Chios, which derives from mostly Rhodian sources, an individual helmsman is named – Autolycus, who was piloting the ship captained by Nicostratus. Polybius also names, besides the Rhodian admiral Theophiliscus, another ship's captain (*nauarchos*) called Philostratus (Polyb. 16.5.1–3).

The overall commander of a fleet was probably more restricted in his capacity to influence the outcome of a naval encounter than a land-based one, although there were stratagems, tactical approaches and aspects of the deployment of naval forces which did allow the commanders to display the extent of their military skills. To what extent did any commanders specialize solely in naval, rather than land-based warfare? In the Hellenistic period there is no clear case of a commander whose expertise was considered exclusive to naval warfare. Roman fleet commanders cannot be seen as specialists, and the Carthaginian Hannibal had very little naval experience when he was put in charge of naval forces for Antiochus III. Nevertheless, at the level of subordinate commanders there are some indications of

¹⁶⁷ See de Souza (2002) for further discussion and examples.

specialization and reliance on acknowledged experts. The presence of several Rhodian commanders among the fleets which were active in the eastern Mediterranean in the early second century is one indication that there was a pool of élite naval specialists. For example, Pausistratus and Polyxenidas, who were on opposing sides at Panhormus in 190, were both Rhodians and seem to have known each other quite well (*Livy* 37.10–11).

Accounts of naval warfare demonstrate the importance of identifying the 'flagship', which normally carried the commander of a fleet. If this was captured, then the fleet would make the assumption that their leader had been lost, which often badly affected their morale. Cornelius Nepos says that in a battle between the forces of Prusias of Bithynia and Eumenes II of Pergamum in 184, Hannibal, commander of the Bithynian fleet, used a fake message to Eumenes, which the latter assumed would be an offer of peace, in order to find out which vessel the king was sailing on, so that his ships could direct their attacks against it and force the king to withdraw from the battle, to the detriment of his fleet's morale (*Nep. Hann.* 10.5–11.4). Signals are often mentioned in accounts of naval battles. They allowed admirals to communicate with all or part of their fleet. Presumably they were by means of flags or pennants and it would have been necessary for someone on each ship to keep an eye on the flagship for them.

II. SIEGES

In a speech delivered to the Athenian assembly in the summer of 341, the Athenian orator and statesman Demosthenes drew a contrast between the old style of warfare that was typical of the Greek city-states in the early classical period and what he saw as the realities of the present day:

So archaic were their practices, or rather so citizen-based (*politikos*), that no-one ever even bribed anyone, but the conduct of war was all open and above board. Yet nowadays, without doubt, you see that most total defeats are due to treachery, and none of them happen as the result of pitched battles.

Demosthenes went on to complain that it was no longer phalanxes of heavy infantry that were the dominant factor in Greek warfare, but the mixed forces of Philip II of Macedon:

Whenever, with these forces, he attacks those who are at odds with each other, and who, through distrust, do not put any forces in the field, he sets up his engines and besieges them.

(*Dem.* 9.48–50)

This was the third of Demosthenes' celebrated *Philippics*, a series of political speeches directed against Philip and his supporters. Although treachery is emphasized by Demosthenes as a way of taking cities, the history of the

next 200 years shows that the 340s were the beginning of an era in which siege warfare was transformed. By the end of the second century sieges had become commonplace and were probably more typical of the combat experience of Greek and Roman soldiers than pitched battles.¹⁶⁸

1. Commanding siege operations

The role of the commander in a siege, whether on the defensive or the offensive side, was significantly different from that of the commander on the battlefield. In the context of a siege, the ancient commander could exercise a greater degree of coordination and direction of the efforts of his forces. Indeed, it might be argued that siege warfare offered the greatest and most comprehensive challenges to the military skills of Hellenistic and Roman commanders, because they involved large forces and the many different types of equipment needed careful coordination.

The combat conditions of ancient sieges seem to have provided something of a dilemma for commanders in this period. While personal presence and involvement in the action could have a significant morale-boosting effect at key moments, it also exposed them to the possibility of being struck by missiles, whether intentional or lucky shots. Perhaps it is no coincidence that Philip II and Alexander were both wounded during sieges. Philip famously lost an eye in the siege of Methone in 354 (Diod. Sic. 16.34.5; Just. *Epit.* 7.6.14). The arrow that gave him this distinctive disfigurement might very easily have ended his life. During the siege of Tyre in 332 Alexander personally led an expedition into the Anti-Lebanon region to enforce his authority in an area which supplied much-needed timber for his siege towers and other devices. He also led a naval counterattack against the Tyrian forces after they had raided the Cypriot fleet as it lay at anchor to the north of the city, but Alexander's bravery and inspirational leadership verged on recklessness, and at Gaza in 332 he was wounded by a catapult bolt shot from the walls (Arr. *Anab.* 2.27.2). Alexander can be seen as a good example of a successful field commander who found it difficult to adapt to the role of siege coordinator. He seems to have lacked the patience and methodical temperament appropriate to long-duration siege warfare. This is not to say that Alexander was unsuccessful, for he captured many cities and strongholds in his brief but action-filled reign as king of Macedon. Nevertheless his impulsive nature resulted in rash and sometimes very costly decisions, not just for Alexander himself, but for the men under his command.¹⁶⁹ His insistence on assaulting those Indians who had taken

¹⁶⁸ For a survey of sieges in this period see Kern (1999) chs. 8–11.

¹⁶⁹ See the evaluation of Kern (1999) 201.

refuge on the so-called rock of Heracles in 327 is but one example (*Arr. Anab.* 4.28–30).

In contrast to Alexander, Roman generals like Marcus Claudius Marcellus, who took two years over the siege of Syracuse (214–12), can seem models of patience and restraint. Marcellus proceeded in stages, gradually capturing some of the outlying fortifications and gradually penning the defenders up in the old city. He made several attempts to gain entry by negotiation and treachery, and eventually his troops were admitted through a side gate guarded by Spanish mercenaries whose commander had been tempted to change sides (Livy 25.30). Even the young Publius Cornelius Scipio Africanus comes across as cautious in comparison with Alexander. When he ventured near to the front lines at New Carthage in 209 he was accompanied by three personal shield-bearers (Livy 26.44.6). Although he needed to capture that city quickly he did not throw everything into a single assault, but probed the defences at several places and used both ships and an ingenious crossing of the lagoon as the tide was receding to find the weakest points in the defences (Livy 26.44–6). We are also told that, when there was a dispute over whether a marine or a legionary soldier should be rewarded with the prestigious honour of a crown for being the very first over the city wall, Scipio diplomatically awarded it to both of them, avoiding a feud between his fleet and army (Livy 26.48).

2. *Personnel*

The conflicting needs of the charismatic battle commander and the methodical siege coordinator may have been partly responsible for the emergence of specialists in siege warfare. We see the appearance of specialized military engineers in the second half of the fourth century. It can reasonably be argued that there was a general trend towards specialization in many walks of life across the Greek world in the fourth century. This trend was particularly marked in warfare and it seems to be a result of the increasing technical complexity of combat. As the requirements of military strategy expanded to include the capture or defence of cities, men like the Thessalians Polyidus, catapult-maker for Philip II, and Diades and Charias, siege engineers of Alexander the Great, rose to prominence. Archimedes is best known today as a scientist, but he spent his last years inventing ways to defend his home city of Syracuse against the Romans. The famous intellectual centre of Ptolemaic Alexandria was home to Ctesibius, a military engineer who wrote a technical treatise on torsion artillery in the third century. It also seems that the rise of these specialists was closely linked to the rise of what might be called the military monarchs in the fourth century BC. The unitary authority and autonomy of the king or tyrant was a prerequisite for the type of command structure in which a specialist could

operate effectively, building up a corps of well-equipped and technically proficient engineers.

The military operations of Philip V of Macedon in Greece in the latter part of the third century show that he could deploy a wide range of siege and assault methods. He took Ambracus and Psophis by storm in 219 and 218 (Polyb. 4.61–3, 70–2), he surrounded Phthiotic Thebes with a double rampart, protected by stone- and bolt-throwing catapults, and then undermined a section of the walls in 217 (Polyb. 5.99–100), undermined both the outer wall and a newly built inner one at Abydus in 201 (Polyb. 16.30–4), and in 198 at Eretria on Euboea he made a surprise attack at night and took the city virtually unopposed (Livy 32.16). This brief survey of the sieges of Philip V includes examples of the three main forms which attacks on cities and fortifications took in this period – assault, blockade and surprise.

3. Assault

The simplest way to overcome city walls was with ladders. In Bactria in 329, Alexander took a succession of small towns by direct assault, using scaling ladders under the cover of a barrage from his catapults, javelins men archers, slingers. No siege works were required, although at the largest town, Cyropolis, he was preparing to use his siege engines to assault the walls and make a breach when it was discovered that the channels of a dried-up water course provided a much easier entry (Arr. *Anab.* 4.2–3). When the walls could not be easily scaled, the preferred method of assaulting a strong fortification was to create a breach or weakness in it and exploit the opening with a strong force. This was the approach favoured by Philip II and Alexander, when circumstances permitted. The capture of Amphipolis in 357, Philip II's earliest siege victory, resulted from the rapid exploitation of a breach in the city walls created by battering rams (Diod. Sic. 16.8.2–3). At Tyre in 332, Alexander's breakthrough was achieved through his successful deployment of his ship-borne artillery and rams against one of the weaker sections of the city wall on the southern side. Having created a breach, he waited for calm weather before he moved other engines into place to widen it, then he personally led his élite troops, the Hypaspists, into the breach and took control of a substantial section of the city walls. He quickly poured more of his Macedonian troops into the city and forced the defenders to abandon their walls. Tyre fell very quickly once this assault had achieved its primary objective (Arr. *Anab.* 2.18–24).

Defenders often tried to forestall such attacks by building a second wall inside the one being battered or undermined, as was done at Perinthus in 340 (Diod. Sic. 16.74) and Lilybaeum in 250 (Polyb. 1.42–8). The determination of both attackers and defenders would lead to protracted

contests of battering, mining, re-building and counter-mining. So Polybius describes the siege of Abydus by Philip V of Macedon in 201. The king's engineers mined underneath the city's outer wall and caused sections of it to collapse, but the defenders had by this time erected a second wall, which the sappers also undermined. The defenders began a counter-mining operation, but abandoned this in favour of fighting to defend the breach in the second wall (Polyb. 16.30–4). Mining and battering, or boring, were the most commonly used methods of breaching walls throughout this period.

4. Siege artillery

The invention of the catapult seems to have occurred around 399 in Syracuse in the reign of Dionysius I, who gathered together experts in armaments to prepare for his campaign against the Carthaginians. Diodorus says (14.42.1): 'Artillery was discovered at that time in Syracuse, a natural consequence of the assembly in one place of the most skilful craftsmen from all over the world.' According to Diodorus, this was also the context for the developments of the polyremes (see ch. 11B in this volume). The earliest form of artillery was the *gastraphetes* or 'belly bow', an early form of crossbow. It was a large composite bow, of such power that it could not be drawn and fired by hand alone, so it required devices to enable firing, including ratchets, a slider and a trigger mechanism, plus the characteristic stock with its semi-circular belly rest, to enable the operator to lean his full weight against the bow as he drew it back. In the mid-fourth century, the size and power of the machines was increased by mounting them on solid frames and using winches to pull back the arms of the bow. These non-torsion catapults could fire bolts of great length (1.8 m/6 feet or more) over long distances (up to 274m/300 yards). The next development, which occurred in the second half of the fourth century, was the invention of torsion artillery, utilizing tightly wound and stretched hair or sinew ropes to increase the power of the bow element.

The invention of torsion catapults seems to have occurred as a result of a concentration upon improving the techniques of siege warfare in Macedonia at this time. It was centred on Philip's leading siege engineer, Polyidus the Thessalian. By 345 an Athenian comic writer could raise a laugh by describing the warlike Macedonians as swallowing swords, eating spears and arrow heads, sitting on shields with slings and bows as their footstools, 'crowned with catapults'.¹⁷⁰ Philip captured Amphipolis in 357 by breaching the walls with the use of siege engines (*mechanas*) and battering rams (Diod. 16.8.2). This suggests a keen early interest in siege warfare. Polyidus

¹⁷⁰ Mnesimachus *Philip* F7 (Edmonds 1957: 366–8).

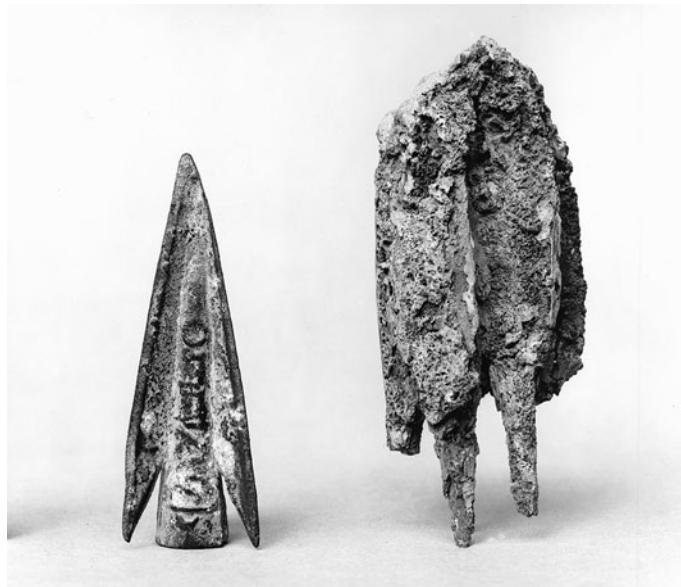


Figure 13.5 Bronze triple-finned triple bolt head inscribed for Philip of Macedon.

had developed his torsion catapults by 340, when they were used against Perinthus and Byzantium. The defensive uses of catapults were gradually recognized across the Greek world. In 340 Perinthus was defended against Philip II by catapults, with ammunition supplied by Byzantium (Diod. 16.74.4; 75.2). Philip's siege of Olynthus certainly involved the use of catapults by both sides, as the numerous bolt heads that have been found there show (fig. 13.5).¹⁷¹

In the period covered by this chapter most cities had to incorporate catapults into their defences and to train men to operate them.¹⁷² In 295–294, Agathocles made a successful attack against Croton and Hipponion using a combination of stone-throwers, mining and boring operations (Diod. Sic. 21.4.1; 8.1), which suggests that by about 300, torsion catapults were to be found in Sicily. An inscription from Ceos records an early third-century law about duties of the *gymnasiarch* in preparation for a festival that apparently included javelin-throwing, archery and catapult-firing competitions for the young men, compulsory three times per month (*Syll.*³ III.958). The Rhodians had a special interest in artillery and kept up with the latest developments, helped by close ties with Alexandria. Philo says that he inspected a catapult in the Rhodian arsenal that had been constructed by

¹⁷¹ Snodgrass (1967) 116–17.

¹⁷² See Marsden (1969) ch. 3.

Dioynsius of Alexandria (Philo, *Belopoeica* 73).¹⁷³ Catapults also became essential for anyone attempting to assault a city. Philip V of Macedon was regularly employing artillerymen towards the end of the third century. His use of catapults included deploying both bolt- and stone-throwing types to prevent the defenders of Palos in Cephallenia from interfering with siege works (Polyb. 5.4.6). The following year at Phthiotic Thebes he positioned 150 bolt-throwers and 25 stone-throwers in towers along his fortifications (Polyb. 5.99.9). Just as important as the catapults and the skilled operators was ammunition of the right size for these increasingly well-calibrated machines. In 218 the city of Psophis fell to Philip V's assault partly because the defenders ran out of bolts and shot for their catapults (Polyb. 4.71).

Philip V used catapults against the Aetolians in his siege of Phthiotic Thebes in 217. He had 150 bolt-throwing and 25 stone-throwing catapults (Polyb. 5.99.7). A similar ratio of bolt- to stone-throwers (6:1) can be observed among those captured by Scipio at New Carthage in 209 (Livy 26.47.5–6). Catapults hurling bolts could be used to clear away defenders on walls to allow easy access for ladders or towers or for the approach of sappers. The larger stone-throwers were used to disable defensive catapults and knock down sections of battlements, depriving the defenders of cover. When Demetrius I attacked Salamis in 306 and Rhodes in 305 he used stone- and bolt-throwers in a huge mobile siege tower (the *helepolis* or 'city taker') to bombard the walls, covering the work of battering rams.

Catapults were also deployed on ships in order to bombard a besieged maritime city, as in the case of Alexander at Tyre in 332, who used his horse-transport ships and his triremes to provide firing platforms. Demetrius Poliorcetes' attacks against Rhodes in 305–4 made effective use of ship-mounted catapults against the city's harbour areas (Diod. Sic. 20.85–90).¹⁷⁴ Ships were used as platforms for assault towers and ladders, which were sometimes called *sambucae*, as at Syracuse in 214. In response, Archimedes devised a machine to hook onto approaching ships, pull them up and cause them to capsize (Livy 24.34).

The development of technically complex machinery like catapults put greater emphasis on the need for the professionals who designed, built and operated them. In addition, large armies, like those of Alexander, or Philip

¹⁷³ The Rhodians kept themselves well supplied with catapults, hair and sinew cords, bolts and stones. After the earthquake of 227, gifts to the Rhodians from cities and monarchs anxious to see their power and security maintained included catapults, hair and resin, which was probably used to protect springs from water (Polyb. 5.88–9).

¹⁷⁴ Further examples of (siege) artillery mounted on ships: 213–11, siege of Syracuse (Livy 24.34.5); 211, Roman ships at Anticyra (Livy 26.26.3); 209, Roman warships and merchantmen at Tarentum (Livy 27.14.5); 209, Laelius has artillery on ships at siege of New Carthage (Livy 26.44.10; Polyb. 10.12.2); 204, Scipio at Utica (Livy 30.4.10; App. *Pun.* 16).

V of Macedon, needed knowledgeable and skilled men to make siege towers and battering rams and to supervise mining operations. A corps of such men was certainly in existence by the end of Philip II of Macedon's reign. They also operated under Alexander in his early campaign in the Balkans in 335, where Arrian mentions them covering his withdrawal at a river crossing (*Arr. Anab.* 1.6.8). A siege train would consist of a relatively small group of men who carried with them specialist equipment, like the metal fittings for torsion catapults, and who could easily manufacture other items. They certainly did not do all the construction work. Basic work like digging ditches and making scaling ladders would be done by the companies of men that were going to use them. The siege train may also have included skilled carpenters and joiners, who could have doubled up as soldiers. If a general or king knew that he was setting out on a campaign of siege warfare then he would probably take such men with him, but otherwise they could be recruited on the spot. The key specialists were the engineers (*mechanopoioi*), men like those whom Alexander collected for the siege of Tyre in 332 from Cyprus and Phoenicia, who combined their expertise with that of Alexander's own engineers to devise and construct the various machines which were used against the city (*Arr. Anab.* 2.21.1).

5. Defensive fortifications

An increasing sophistication and determination was exhibited by besiegers during the fourth and third centuries, partly as a necessary response to improvements in fortification walls that had been introduced in the previous hundred years. A wealthy state like Syracuse or Athens could afford to have numerous well-fortified centres of defence.¹⁷⁵ With the increase in attempts to batter walls and storm fortifications, and the adoption of torsion artillery, walls had to be strengthened and defences made more robust (fig. 13.6). Bossed stonework was one solution to the problem of battering. Towers and battlements, strong enough to withstand stone-throwing catapults, were added to allow defenders more scope for firing missiles at would-be attackers, including sappers (fig. 13.7). Sally ports were used in city walls to allow the defenders to counterattack. Ditches and moats were added to make mining more challenging and also to try to push catapults back from the walls, but they could quite easily be overcome by filling and bridging.¹⁷⁶ At Syracuse in 213 Archimedes had the existing walls pierced at lower points to enable missiles to be fired at attackers who were very close to the walls (*Polyb.* 8.5.6; *Livy* 24.34.9). In general, the advantage lay with the attackers, provided they had sufficient resources of men and materials to see the job through.

¹⁷⁵ See Lauter (1992).

¹⁷⁶ See McNicoll (1982), (1997); Winter (1982); Lawrence (1979).

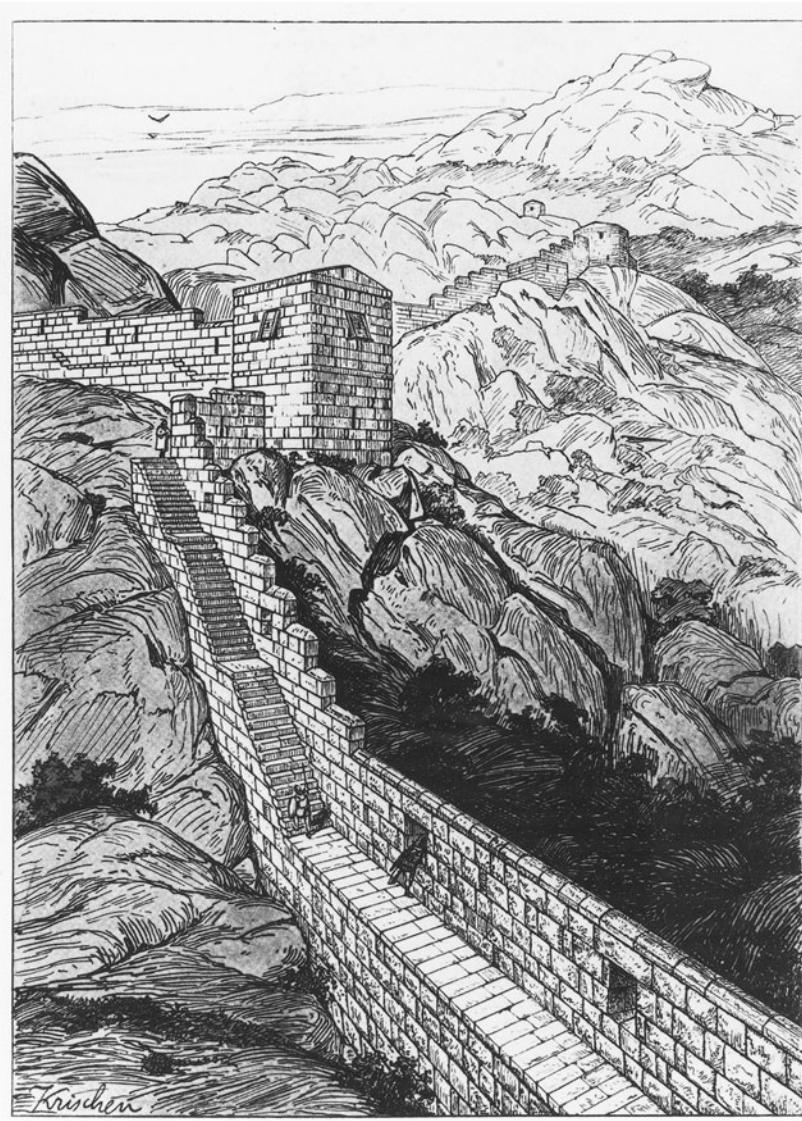


Figure 13.6 The walls of Heraclea under Latmos in Asia Minor.

6. Blockade

If a city could not be taken by a direct assault, then it might be forced to surrender through a blockade. Often this would involve a circumvallation, such as those which the Romans erected around Lilybaeum in 250 and Capua in 212. They comprised double rows of ditches and ramparts, usually



Figure 13.7 Tower at Perge with three large artillery ports.

linking larger fortified camps, and were aimed as much at keeping relieving forces out as hemming the besieged population in. At Capua, Hannibal almost managed to break through to the city with the aid of some elephants, but he was driven back (*Livy* 26.5–6). Sometimes circumvallation was just the prelude to an assault, as in the case of the Syracusan attack on Croton in 295 (*Diod. Sic.* 21.4.1).

Where a city was on the coast and had good harbour facilities, effective blockading was very difficult. During the siege of Perinthus in 340, Philip II was compelled to break off his attempts to storm the city in order to attack Byzantium, which was supplying Perinthus by sea. In the Second Punic War the length of the siege of Syracuse was partly due to the impossibility of stopping Carthaginian fleets from getting in and out of the harbour with supplies, reinforcements and communications. The exploits of Hannibal the Rhodian at Lilybaeum are a good example of ‘blockade running’ and attempts to prevent it (*Polyb.* 1.46.4–13). Hannibal used a particularly well-built, fast ship with an experienced crew and determined marines, plus local

knowledge of shoals, to run the Romans' attempted blockade several times and encourage others to do so as well. Thus he kept the Carthaginians in communication with their commander Adherbal at Drepana, in spite of efforts of the Romans in their ten fastest ships. He was captured, however, when the Romans took over a particularly well-built Carthaginian 'four' that had run aground and been abandoned. They put their own hand-picked crew and marines on board and chased him on one of his night-time sorties out of the harbour. They overhauled his ship and succeeded in boarding and capturing it. The defenders of Lilybaeum eventually took advantage of a fierce gale to set fire to the Romans' siege towers, engines, battering rams and protective penthouses. Because of the strong winds the Romans found it very difficult to put the fires out and were hampered by missile fire from the city's defenders. So complete was the destruction that the Romans abandoned their attempt to assault the city and break through the walls, settling instead for a very long siege that became the focus of the entire war.

The psychological impact of the various mechanical devices which were deployed in sieges in this period may have been almost as important as their tactical effectiveness. Philip II's siege train was a new and shocking development in the Greek world. Constructions like the mole built by Alexander's men at Tyre, the *Helepolis* towers of Demetrios I Poliorcetes, and Archimedes' devices used in the siege of Syracuse, had a tremendous impact on the morale of both attackers and defenders.

7. Surprise

A sudden, unheralded attack on a city or fortress might succeed if there were not good defences in place. Alexander tried to surprise Myndus in 334 with an attack that was swift because he did not bring any of his siege train, but after collapsing one of its towers he failed to breach the walls and withdrew (*Arr. Anab.* 1.7.10). In 251 the Achaeans captured the city of Sicyon by scaling its walls on ladders that could be taken to pieces, transported by cart and quickly reassembled (*Plut. Arat.* 4–8). When the Romans attacked Chalcis on Euboea in 200 just before dawn, they achieved complete surprise because the defenders were still asleep (*Livy* 31.23.4). Philip V managed a similar attack on Eretria in 198 (*Livy* 32.16.5). Another often successful way of capturing a city was through treachery. The final capitulation of Syracuse in 212 is a good example of this. The Roman commander Marcus Claudius Marcellus used the opportunity provided by the visit of a delegation from the city to infiltrate an agent who suborned one of the Spanish mercenary commanders. It was this commander who allowed Marcellus' soldiers into the city via a gate in the section of the wall that his men were supposed to be guarding (*Livy* 25.30). In the same year, the Romans lost control of

Tarentum because some of the local aristocracy arranged to let his troops in through a gate that one of their number had regularly been using at night, pretending to be going out hunting (Livy 25.7–8).

8. Food supplies and logistics

There were major logistical problems for the commanders of all ancient armies, but siege warfare created particular difficulties. All ancient armies were voracious consumers of basic necessities, such as water, food and fodder, and to keep an army in a single place for a long period of time the commander needed to have a secure and dependable supply of water, food and, if there were significant numbers of horses and other animals, good forage and fodder. The siege operations conducted by Alexander the Great along the Levantine coast in 332 have been studied by Engels in his detailed analysis of Alexander's logistical requirements and the methods which he employed to meet them.¹⁷⁷ Engels has shown how, when a besieging army devoted a substantial amount of its forces to the secondary task of obtaining supplies and materials, its offensive capacity would be reduced accordingly. The obvious solution to this dilemma was to obtain the supplies without deploying too large a proportion of the combat personnel, which is what led Alexander to demand provisions from the Jewish high priests at Jerusalem in 332, while he was engaged in the siege of Tyre (Joseph. *AJ* II.317–19). Engels' study demonstrates, however, that the meagre resources of the Palestinian coastal plain could not possibly have been sufficient to provide Alexander and his forces with adequate supplies of essentials like grain and water. The considerable naval forces which he accumulated at Tyre and also used at Gaza must have been vital for his logistical needs, helping to bring in supplies from further afield.

If the besiegers did run short of basic supplies, they ran the risk of having to abandon a siege. The Roman siege of Agrigentum (262/1) was marked by supply problems for both sides. The Romans encircled the city with double ditches, pickets and fortified posts to prevent the secret infiltration of supplies that Polybius says was usual when cities were besieged (Polyb. I.18.3). Since the city was very crowded, with at least 50,000 people according to Polybius (I.18.7), it soon began to run short of supplies. However, the Romans also suffered from illness and deprivation, especially after a Carthaginian relief force under Hanno captured their supply depot at Herbesus. Only the provision of supplies by their ally Hiero of Syracuse kept the Romans going (Polyb. I.18.9–11).¹⁷⁸

¹⁷⁷ Engels (1978) 54–60.

¹⁷⁸ See Lazenby (1993) 56–8.

9. Siege conditions for defenders

It is clear from several ancient accounts that the defenders and inhabitants of a city under siege might have to endure extremely harsh conditions. If a city was so closely invested that the blockade on supplies was total, then the population would eventually suffer from malnutrition and starvation, as happened at Numantia in 133 (App. *Hisp.* 96). Water might also be a problem, although most ancient cities had good supplies. In the summer of 212 a plague swept through both attackers and defenders at Syracuse, causing great loss of life in the city and prompting the Carthaginian admiral Bomilcar to risk attack by the Roman fleet rather than keep his ships in the harbour (Livy 25.26–7).¹⁷⁹ In some cases cities that had anticipated unpleasant sieges removed their non-combatants to safety. Some of the women and children of Tyre were sent to Carthage in 332 and so avoided the fate of those captured by Alexander (Diod. Sic. 17.46.4).

For Aeneas the Tactician, writing in the first half of the fourth century, the active role of women in a city that was under attack was limited to hurling roof-tiles at the enemy once they were inside the walls, a desperate measure which could occasionally have a significant impact. Pyrrhus of Epirus was killed as the result of being hit by a tile (reputedly thrown by a woman) at Argos in 272 (Plut. *Pyrrh.* 34).¹⁸⁰ Aeneas also mentions an instance of women being used to swell the numbers of the defenders on the walls, although it is noticeable that they were equipped with bronze utensils, rather than real weapons and armour (Aen. Tac. 40). In the desperation of a siege, other social and political distinctions might be abandoned. According to Diodorus, the Thebans recruited metics and freed slaves to man the walls of their city against Alexander's army in 335 (Diod. Sic. 17.11.2). The Syracusans offered freedom to slaves in 214 to boost the numbers of those prepared to defend the city against the Romans (Livy 24.32.4). The desire to avoid the humiliation of submission to the enemy was sometimes so great that besieged populations committed suicide rather than surrender. In 201 the citizen men of Abydus, realizing that they could no longer resist the assaults of Philip V of Macedon, resolved together to kill themselves and their families; the king granted them three days to carry out their wishes, which they did by a variety of means, including hanging, cutting throats, burning and jumping off roof-tops (Polyb. 16.32–5).

The consequences of defeat varied considerably, but they were often disastrous. Defeated populations could expect to be despoiled, dispossessed, enslaved or even executed, depending upon the victorious commander's attitude to their resistance. In 353 the Athenian general Chares captured

¹⁷⁹ See Lazenby (1978) 117. ¹⁸⁰ See Barry (1996).

Sestos and massacred the citizens, selling their women and children into slavery. In the same year Philip II allowed the inhabitants of Methone to leave their city dressed only in a single garment. Thus the treatment of the famous city of Thebes by Alexander and the Greeks in 336 was considered harsh in antiquity, but it was by no means rare. Many of the inhabitants were slaughtered in the capture of the city, which was then destroyed and the survivors sold into slavery (Diod. Sic. 17.14.3). Alexander's attitude could be quite different, as in the case of the city of Miletus. He allowed some of its Greek defenders to join his army, but his men killed the Persians. Fierce or stubborn resistance would be answered by brutal slaughter of survivors, as happened to the Tyrians in 332, 2,000 of whom were crucified after the fall of the city (Diod. Sic. 17.46.4; Curt. 4.4.17). The ancient sources include stories of chivalry and barbarity after the end of sieges in roughly equal measure.¹⁸¹ Livy and Polybius try to present the Romans as more restrained by virtue of their superior discipline, but it is clear from their accounts that the emotions of soldiers who had endured the physical and mental stresses and strains of a siege were regularly released in an orgy of rape, murder, pillage and destruction over which their commanders exercised little direct control.¹⁸²

The settling of old scores was also a common reason for harsh treatment. At Iliturgi in 207 Scipio Africanus' men massacred the inhabitants after they stormed the city. Appian claims that this was a spontaneous reaction to the fact that their commander had been wounded in the assault, but it seems more likely that, as Livy suggests, the Romans were exacting a deliberate revenge for the betrayal of Roman refugees to the Carthaginians after the defeat of Scipio's father and uncle in 211 (App. *Hisp.* 32; Livy 28.19).¹⁸³ Plundering by the victorious army was almost inevitable. It is arguable that there were no commonly agreed conventions, and that the particular circumstance of each siege determined what would be done with the inhabitants.¹⁸⁴ In 146 the Romans displayed a ruthless indifference, sacking and destroying both Carthage and Corinth, bringing ruin to two of the greatest cities of the ancient world.¹⁸⁵

¹⁸¹ For discussions of the treatment of captured cities see Kern (1999) chs. 9, 13.

¹⁸² See Harris (1979) 50–3, 263–4; Ziolkowski (1993). ¹⁸³ See Richardson (2001) 131.

¹⁸⁴ This was often the case in medieval warfare, for which see France (forthcoming).

¹⁸⁵ The former had held out for three years and was a long-standing enemy of Rome, whereas the latter had surrendered after a pitched battle. Nevertheless in both cases the populations were enslaved and the cities destroyed.

CHAPTER 14

WARFARE AND THE STATE

JOHN SERRATI

I. THE HELLENISTIC WORLD

The defining element of the Hellenistic world is most certainly warfare. The age was characterized by almost endless military struggles, with up to five major powers battling each other over the remnants of Alexander's empire. Warfare in the Hellenistic world was so ubiquitous that general narratives of the period often skip over entire military campaigns, due to their tangled politics and lack of enduring impact. Although there are some excellent modern studies of Hellenistic warfare, some areas remain largely elusive and have traditionally been given short shrift. Imperialism, finance and in particular the links between the two, are subjects that, while of tremendous importance to Hellenistic warfare, have rarely been studied in depth.¹ This section, while too brief to redress the balance, none the less aims to be a starting point for further study.

Modern scholars often forget about the tribal roots of the Macedonians, and that their society in the fourth and third centuries was still one of warrior élites. Macedonian generals of the Hellenistic world still fought from the front as their predecessors had, and kings were traditionally seen as the first among equals.² Although modern scholarship tends to assign credit for the conquest of the East exclusively to Alexander, the sources suggest that the *Diadochoi* viewed it as a more broadly Macedonian achievement.³ This goes part of the way towards explaining the ubiquity of warfare in the Hellenistic period; warfare was what the Successors did, they were both generals and warriors, and in theory they, like all Macedonian kings, should have had the ability to plan and undertake a massive campaign, and at the same time to fight the enemy in the thick of combat. The wars fought by the early

¹ With notable exceptions. Apart from Archibald et al. (2001), the study of these areas has largely been confined to French scholarship; see Austin (1986); Lévéque (1968); Préaux (1989).

² Diod. Sic. 20.9.1; Plut. *Mor.* 183d; *Pyrrh.* 9; Polyb. 5.6, 69, 71, 84, 7.15, 9.41, 10.28–30, 16.3–6, 22.3, 31.29. See Austin (1986) 458; Bar-Kochva (1976) 85–6; Préaux (1989) 196–8. For the idea of the warrior king in Hellenistic literature see Beston (2000); Walbank (1984) 81–4. Contrast ideas of weak and feeble Hellenistic monarchs: Livy 44.42.1–2; Plut. *Aem.* 19.3, 23, 33; Polyb. 5.34.4–10, 87.3, 22.17, 29.17.3, 36.15.

³ Diod. Sic. 18.50.2, 5, 54.4, 19.41.1, 20.37.4; Plut. *Demetr.* 15.3, *Eum.* 12.1. See Austin (1986) 455.

Successors may be seen as the logical extension of this. As the empire was Macedonian and had been won by themselves, and as no obvious successor to Alexander had emerged, why should they not fight each other for the spoils for which they had spent over a decade campaigning? Why should the strongest not triumph and take control of the empire? This was what would have happened in the age before Philip II, and therefore it should come as no surprise that this happened in 323. Only the scale of the warfare had changed.

I. Philip and Alexander

This era was essentially initiated by Philip II himself, and although it is likely that changes to the Macedonian military structure were already afoot before he took the throne in 359, there is no doubt that his twenty-three-year reign represented a watershed in the development of the Macedonian army as the most successful fighting force of its time. Philip was able to achieve this because of his successful management of several areas of political and military dynamics, not the least of which was Macedonia's finances. Macedonia was certainly not poor upon Philip's assumption of the throne; he could count upon a good amount of monies coming into his coffers via the export of timber (upon which a royal monopoly existed), taxes on land, and his mineral reserves, which were always substantial.⁴ Nevertheless, these reserves increased dramatically once Philip occupied southern Edonis in 356 and Chalcidice in 348, tapping into the rich veins of gold and silver there. The wealth of Thessaly also made a major contribution. This increased financial strength gave Philip the freedom to engage in imperialism first towards Greece and then Persia, not only paying for his army but also allowing him to attract desirable men to his beautified court and to conduct extensive economic diplomacy.⁵

With his new found sources of wealth Philip was able to bolster his already large native force with troops of every kind. Thousands of infantry, cavalry and missile troops could be hired from all over the Mediterranean, and he used cash incentives to attract scientists and engineers to his court in order to build him a siege train. Siege trains were relatively new in Greek warfare, and had previously only been employed with any effect by Dionysius I of Sicily (405–367); afterwards, Syracuse continued to be a centre of the study of siege technology, and this process culminated with the machines of Archimedes in the third century. Thus we may presume that Philip's wealth attracted many a Syracuse-based engineer. Although this siege train was not always successful at first (Perinthus and Byzantium both resisting

⁴ *Arr. Anab.* 1.16.5. See Billows (1995a) 5–7; Errington (1990) 7–8 n. 10.

⁵ See Diod. Sic. 16.8.6. See also Bosworth (1988a) 8–10; Hammond et al. (1972–88) II.69–73.

attack), the size of Philip's army allowed him the time to conduct lengthy sieges as he now had the ability to fight on multiple fronts.⁶

Philip's resources also allowed him to conduct extensive, and aggressive, diplomatic efforts that largely centred on financial inducements and bribery (as long used by the Persian empire). In order that he might turn to Greece, he first used his wealth to pacify his northern border, and throughout his reign he acquired many allies in that region through payments, while those who would not side with him were often paid off so that he could concentrate his efforts elsewhere (Diod. Sic. 16.3.4).

Most of Philip's purchases of goodwill were, however, reserved for the Greeks. He used his wealth as a diplomatic tool as much as he used the threat of force; money could buy him either allies, neutrality, or outright peace. For those who would not acquiesce, Philip could and did fund fifth-column elements within many states, and paid several parties who staged successful coups in many *poleis*, the party in power then becoming both his ally and his client.⁷ The skilled use of his resources purchased allies for him all over Greece, and eliminated many potential obstacles to his plans for a greater integration of Macedonia into the political culture of the Greek world. And when these plans turned to categoric imperialism, these previous efforts made his invasion and eventual take-over of Greece all the easier.

Notwithstanding the advantages this gave him when he did turn to military imperialism, Philip's exercise of diplomatic imperialism should in no way be seen as overly aggressive; in fact it was normal for the times in which he lived.⁸ This type of behaviour was characteristic of all Greek states in the fourth century, as it was simply expected that one's wealth would be used to win these sorts of gains over opponents. Because of the end result of Philip's dealings, namely the loss of autonomy of the Greek *poleis*, one is tempted to see Philip as introducing a seditious element into Greek politics, but the affairs of the Greek states before his ascendancy illustrate that his actions, although acted out on a larger scale, were in fact canonical.

Alexander's finances are much more straightforward than his father's, since he used his wealth largely for the purpose of conquest. Although he had the funds to launch his expedition, this depended on heavy borrowing after the large expenditures of Philip's reign, and it is questionable how long he could have maintained it.⁹ During the early years he relied on his Macedonian coffers and requisitions of supplies from the locals, but his finances still appear to have been taxed, as evidenced by the disbanding of his navy, which would have proved invaluable during the siege of Halicarnassus and against the Persian counter-offensive in Greece. However, this soon

⁶ See Dem. 9.58; Garlan (1994) 689. ⁷ Dem. 9.56–66; Diod. Sic. 16.53.2.

⁸ Bosworth (1988a) 9. ⁹ Arr. *Anab.* 7.9.6; Curt. 10.2.24; Plut. *Alex.* 15.2.

changed as his finances were bolstered by periodic influxes of plunder, as at Sardis in 334, Issus in 333 and Damascus the following year. Even greater wealth came once he ventured into the Persian heartland and took Babylon and Susa in 331 and Persepolis and Ecbatana in 330; these places, the latter in particular, provided Alexander with the full resources of the Persian kings.¹⁰ From this point onward, he shows a marked disregard for finances, and funding was no longer something about which he had to worry.

A significant amount of the movable plunder that was seized from the main urban centres of the Persian empire was melted down in order to mint coins.¹¹ From the early 320s Alexander coinage went into heavy circulation, and managed to displace some local coinages within a short time. Several mints were set up within his realm.¹² Used mostly by Alexander personally to pay his mercenaries, these coins served a greater purpose in that they promoted Alexander himself, his new universal empire, and perhaps even his divinity.¹³

Alexander appears to have cared little for the tribute that was ostensibly paid to him by various parts of his empire, largely because it was simply not required. A similar reason surely lies behind the fact that he did not bother to seize most of the satrapal treasures that he came across, with the notable exception of those already mentioned. Ironically, left intact, some of these treasures were seized upon his death, and they allowed the Successors a measure of financial independence which they used to strike out on their own.¹⁴

2. *The early Successors*

As already mentioned, the level of warfare undertaken by the Successors (*Diadochoi*) was different to anything that the Mediterranean world had seen previously. This scale was made possible through the increased wealth of each of the individual *Diadochoi*. Hellenistic armies were massive compared to their classical predecessors – in 317 at Paraetacene, Antigonus and Eumenes fielded armies with a combined total of nearly 80,000 troops (Diod. Sic. 19.27–8), while by the time of Raphia exactly a century later, the forces of Antiochus III and Ptolemy IV Philopater totalled nearly 140,000 (Polyb. 5.79). Furthermore, these forces were composed of professional soldiers, in the form of both mercenaries and regular standing units. Concerning the former, the bullion of Darius and Alexander that was in circulation in the early Hellenistic world, coupled with the increased demands of the *Diadochoi* for troops, drove up the prices of mercenaries considerably. It has

¹⁰ Diod. Sic. 17.80.3; Just. *Epit.* 12.1.3; Strabo 731. See Bellinger (1963) 68–70; Bosworth (1994) 865.

¹¹ Curt. 8.12.16; Plut. *Alex.* 59.5.

¹² Bosworth (1994) 866; Bellinger (1963) 41–61; Head (1911) 224–8, 777, 833–4.

¹³ Bosworth (1988a) 287; Cawkwell (1994). ¹⁴ Diod. Sic. 18.14.1, 19.46.6, 48.7–8, 56.5.



Figure 14.1 Hellenistic inscription from Locri which includes at the bottom a simple sketch plan of a defensive tower constructed with the money listed in the text above.

been calculated that standard pay for mercenaries actually doubled from the average of 4 Attic obols a day for a hoplite and 8 Attic obols a day for a cavalryman in classical Greece and under Philip and Alexander, to 8 obols a day and 16 obols a day respectively.

Another cost to Hellenistic warfare that had risen considerably from its classical predecessor was that of siege warfare. As defensive works quickly caught up to the Macedonian advances in siege technology from the mid-fourth century, so offensive siege weapons had to improve. As witnessed at Demetrius Poliorcetes' siege of Rhodes from 305 to 304 (Diod. Sic. 20.81–100), this now became a business unto itself, and as a business it is likely to have had no small effect upon the economies where production of machines was greatest.¹⁵ Highly experienced and highly expensive scientists and engineers now began to build massive and complex engines in order to topple the walls of Hellenistic cities. As a result of this, defensive works again experienced a technological advancement, with many cities now beginning major fortification projects (fig. 14.1). More remembered today for his mathematical genius, during his own age the great Archimedes was actually a master of defensive siege warfare, and his devices significantly delayed the Roman capture of Syracuse.¹⁶

¹⁵ Davies (2001a) 36

¹⁶ Diod. Sic. 26.18; Livy 24.33.9–34.16; Plut. *Marc.* 14.3, 15.1–17.3; Polyb. 8.3–7.10; Tzetz. *Chil.* 2.103–49; Zonar. 9.4.

In terms of numbers of warships, Hellenistic fleets did not balloon as much as the land forces did in comparison with their classical predecessors. In 315, while making preparations for the coalition war that was about to be waged against him, Antigonus Monophthalmus created a navy that was 240 vessels strong. However, nearly half of these warships were quadriremes or larger (Diod. Sic. 19.62.8), suggesting that Antigonus' navy, never mind those of his adversaries, was manned by between 85,000 and 90,000 men. These numbers exceeded even those seen in the fleets of the Athenian empire, and were enormous by ancient Greek standards. It is for these reasons that warfare in the Hellenistic age was such an expensive prospect, as the maintenance of these massive forces taxed the finances of even the most economically astute of the Successors.¹⁷

Little can be said concerning the finances of many of the original *Diadochoi*, largely because they were not around long enough. They and their armies seem to have lived mainly off plunder and the seizing of various mints and treasures containing bullion and coinage that had belonged to Alexander, Philip and the Achaemenids, though taxation of rich areas such as Asia Minor must have played an increasingly important role as the bullion was gradually expended. Antipater and Craterus did receive additional funding from their peers to fight the Lamian war (323–322), but both died within three years of the War's conclusion. Antipater's son Cassander joined the fray in 318 and was originally funded for his invasion of Greece and conquest of Macedonia by Antigonus Monophthalmus, but he later turned against his patron and joined the coalition war against him (315–311). From 316 he was the ruler of Macedonia, where he could rely on the funds of the mints, especially that of Pella, and the mines of the region. These however, fell drastically short of what the other dynasts had in their coffers, particularly the massive wealth of his former patron Antigonus, who funded cities to ally against him. He also suffered from a lack of troops, as Macedonia's manpower had been severely tapped by the Alexandrian conquest. Only another coalition war against Antigonus saved him from a massive invasion by Demetrius Poliorcetes, Antigonus' son.

Cassander's death in 297 once again left Macedonia in chaos. His main rival in Greece during these years was Polyperchon. In 321 Polyperchon was allotted funds for the coalition war against Perdiccas, and afterwards was able to fund his forces in Greece out of the resources in Macedonia. From his expulsion from Macedonia in 316 by Cassander until at least 303, he maintained himself mostly in the Peloponnese. At first he seems to have received some funding from Eumenes of Cardia, but after the latter's death, he sustained himself and his army by 'plundering the greater part of Greece' (Diod. Sic. 20.100.6). Eumenes himself was provided with funding

¹⁷ See Reger (2002) 147–8.



Figure 14.2 (a)–(e) Macedonian coinage: (a) a bronze coin of Cassander; (b) and (c) silver tetradrachms of Demetrius Poliorcetes; (d) and (e) silver tetradrachms of Antigonus Gonatas.

by Perdiccas for his subjugation of Cappadocia in 322, and afterwards mostly lived on what he seized in Asia Minor. That his income was gradually running dry is illustrated by the disastrous campaign in the Iranian highlands that led to his death at the hands of Antigonus in 316.

Lysimachus did not fare well financially with Thrace as his province – the place generated little wealth, and his early expenditures were high as he first had to fight against the natives. After Ipsus in 301, however, he was granted much of western Asia Minor as an extension to his province. This brought with it some of the wealthiest lands of Alexander's former empire, and they included several treasuries. Over time he amassed a fortune of over 9,000 talents, much of it contained in his main treasury at Pergamum. Lysimachus also forced a heavy burden of tribute onto the cities in his realm, and these sources funded his campaigns to the north and his conquest of Macedonia in 285. In the same year we are told that a large hidden treasure hoard in Thrace was revealed to him, increasing his wealth yet again (Diod. Sic. 21.13). Now at the height of his power and wealth, he was defeated and killed by Seleucus I at the battle of Corupedium in 281.

Each ruler needed to maintain an economic system that was specifically designed to finance his aims in the sphere of war. This is what largely fuelled the efforts of Antigonus Monophthalmus in his bid to reunite Alexander's empire. Plunder taken in actual campaigns was certainly a very important source of income for Antigonus,¹⁸ but his chief sources of finance were the treasuries that he possessed and those that he subsequently seized after 318. As one of Alexander's satraps, Antigonus already controlled the treasuries at Pergamum, Sardis and Synnada in Phrygia, and perhaps others as well; from early on, he began to use the contents of these treasuries to fund his personal army and navy.¹⁹ Most importantly, at the outset of his bid for power he seized control of the treasuries at Ecbatana, Susa and Cyinda in Cilicia (Diod. Sic. 19.46.6, 48.7–8, 56.4–5). These all held taxes, tribute and plunder that had been collected not just by Alexander, but also by Darius III and his Achaemenid predecessors. To this he added what Diodorus calls the 'treasures of Asia' (18.50.2), with Anatolia offering both a major source of wealth and a huge recruiting ground.

While plunder and the lands and treasuries that he already controlled made Antigonus formidable, those that he seized made him nearly unstoppable; the wealth he now possessed in the form of Macedonian and Persian bullion was overwhelming, and his fortune has been estimated at 35,000 talents.²⁰ In fact it is doubtful that he even needed a significant

¹⁸ Diod. Sic. 20.49–52.6; Plut. *Dem.* 16.2–3.

¹⁹ Diod. Sic. 20.107.3–5. See also Paus. 1.8.1; Polyaenus, *Strat.* 4.9.4; Strabo 13.623.

²⁰ Billows (1990) 256.

percentage of this to achieve his aims, and he would probably never even have come close to using most of it. This is illustrated by the fact that a substantial war chest was left for his son Demetrius to carry on the fight (Plut. *Dem.* 32.1). So, from this point forward, Antigonus could comfortably afford to hire as many troops and construct as large a navy as manpower availability allowed.²¹ Although he was certainly not struggling for funds, the loss of Greece in 308 was a blow to his ambitions. Greece represented a large recruiting ground for both soldiers and sailors, possessed several well-trained navies, and was a source of additional income; this helps to explain the celerity with which he sought to retake the place the following year.²²

On campaign, both in Greece and elsewhere, Antigonus carried with him a large mobile treasury so that he could quickly raise, equip, and pay armies and navies.²³ Additionally, both Monophthalmus and subsequent Antigonid leaders often received payments from cities within their realm; these took the form of voluntary gifts and of extraordinary payments that were demanded on top of any tribute, taxes, or payments towards the maintenance of a garrison.²⁴ While never a major source of income, this practice nevertheless could represent a useful top-up to a dynast in a particular time of need.

Antigonus made deliberate efforts to lessen his need for imports such as grain, and to run a partially closed economy.²⁵ Such measures could well have been forced upon him by his enemies refusing to trade with cities within the Antigonid sphere. However, even if this was not the case and the scheme was initiated by Antigonus, it was not a planned economy by any modern definition of the term, but in fact represented an extension of Antigonid military policy by other means. It was not designed to aid his own producers by forcing consumers to buy products made within his realm, but rather to offset imports from the rest of the Hellenistic world and thus strike an economic blow at his enemies, in particular Ptolemy I from whom Asia annually imported a large amount of grain. It would also have had the effect of making Antigonus and his forces less dependent upon outsiders for supplies. The scheme's intention was purely military, and as a result we should see it as no different from the grain tithe of Ptolemy and the royal estate taxes of Seleucus; it was designed by Antigonus with the

²¹ Billows (1990) 107–8.

²² On Greece as a source of money and manpower see Austin (1981) 31–2; *SEG* XLII.1069, 1803; *RC* 1. See also Billows (1990) 147–8, 215–16.

²³ *SEG* XXXII.102; Diod. Sic. 19.57.5, 61.5.

²⁴ *SEG* XLII.1069; Plut. *Mor.* 182a. On cities paying for their own garrisons see Panagopoulou (2001) 348; Prœaux (1989) 1.309–10.

²⁵ *RC* 3; Diod. Sic. 19.58.1–6, 20.82.1–2; Plin. *HN* 12.56, 13.73; Polyaenus, *Strat.* 4.6.16; Theophr. *Hist. pl.* 4.8.4, 9.4.8.

aim of giving himself an advantage in warfare.²⁶ The success of the plan is unknown, but Antigonus is unlikely to have been around long enough to have seen its full implementation. The fact that there is no evidence for its continuance under the Seleucids, despite their own struggles with the Ptolemies, is highly significant.

3. The Hellenistic states

One of the main characteristics of warfare among the *Diadochoi* was the fact they were not yet tied to states and were largely fighting over the empire that had been left by Alexander. This had little administrative and financial infrastructure, and as such it took decades before anything like stable states developed. Once this did happen, leaders still could derive a great deal of income from plunder, and war was still lucrative, but it could also be costly due to the size of the forces involved, and thus other sources of funding needed to be found to maintain the dynasts and their armies. So monarchies became less imperialist over time, and settled into non-aggressive means of raising capital. The most famous instance is Ptolemy II Philadelphus' system of taxation in Egypt in the 260s, which was designed not only to finance his military ventures but also to feed his armies. This Ptolemaic agricultural tithe system later went on to become the chief source of income for the dynasty. Its function was based upon a combination of state, regional and local officials mixed with a heavy dose of private enterprise.²⁷ As the army was dependent for its financing upon the tithe, the heavy government involvement should come as no surprise.

The Ptolemaic government was involved on nearly every level of the tithe. Although private estates never ceased to exist in Egypt, the king himself was in theory the owner of all land, and various portions were rented out or given away as gifts and rewards.²⁸ The office of *dioiketēs* ran the tithe system from the highest level, and under him worked an army of civil servants who judged the yields of people's farms, collected the tithe and at times even transported it. The relationship between the Ptolemies and the farmers was in theory reciprocal, where the former supplied the seed and the necessary implements and at harvest the farmers would be expected to hand over a fixed amount of grain, which by the standards of

²⁶ Panagopoulou (2001) 346–8; Reger (2002) 146–9; *contra* Billows (1990) 291–2; Rostovtzeff (1941) III.1354, who argue for a planned economy. While Billows does admit that the profits went to make war, he does not see the attempt to form a closed economy as a belligerent act in itself.

²⁷ For the Ptolemaic tithe's influence see Lintott (1993) 75 n. 29; Prichard (1970) 365–8; *contra* Serrati (2000) 125, who argues that most tithe systems developed in isolation. For the tithe's history see Bowman (1996) 71–113; Shipley (2000) 225–32.

²⁸ For private land see Mattha (1975) col. 6.3–4; *POxy.* 46.3285, fr. 1.1–3; *P Teb.* 1.5; *W Chrest.* 110.12.

other ancient and medieval tithe systems was excessively large, at times as much as sixty per cent, and must have been difficult to bear.²⁹

Although some cases of royal collection and transport are known, for the most part individuals and conglomerates would bid for the right to collect the tithe, exact the agreed percentage from each farmer on the threshing-floor, pay the king his due, and sell the rest for profit.³⁰ Transport of the grain was also largely handled by private river boats under sub-contract, but it seems that at least a small merchant marine was used by the Ptolemies when the proceeds of the tithe went directly to supplying their armies in the field.³¹ The high degree of centralization, in which extensive records were kept, and where codes and edicts governed nearly every foreseeable scenario, also appears to have been a heavy burden for the native Egyptian farmer. The proceeds of the tithe that went to feed the Ptolemaic armies included both grain and products manufactured in royal factories from the tithe's produce, such as beer, wine and oil.

The system was far from perfect, but overall it was a success. The Ptolemies took steps towards maximizing the Egyptian economy, but the excessive bureaucracy and the heavy burdens shouldered by the peasants meant that the full potential of such a tithe would never be realized.³² Nevertheless, this would have made little difference to the Ptolemies, since it was never their intention to maximize the profits so that their kingdom as a whole could be wealthy. The Ptolemies were not capitalists, mercantilists or even shrewd financiers; they were unabashedly military dynasts and imperialists, and their tithe system existed to provide them with the means to wage war.³³ The economic growth of Egypt was only furthered if it could provide the Ptolemies with greater resources for combat.

The success of the tithe, combined with the fact that Egypt was difficult to invade, go a long way towards explaining why the Ptolemies were the least aggressive of the Hellenistic dynasties but were able to maintain themselves as major players in the eastern Mediterranean longer than any of the other *Diadochoi*. Not only did they survive for longer, but the Ptolemies were considered fantastically wealthy, even by Hellenistic standards – Cicero tells us that even as late as the first century, the annual revenues of the Ptolemies were 12,500 talents.³⁴ And the rulers did not hesitate to show this off, since among the Hellenistic monarchs wealth was intrinsically tied to military power.³⁵ None the less, it was the maximization of the economy for war

²⁹ *P Bour.* 42; *W Chrest.* 341. ³⁰ Turner (1984) 149, 150, 152–3 n. 96.

³¹ Thompson (Crawford) (1983) 75. Although much of the transport was private, the Ptolemies nevertheless were known to have financed several vessels; see *P Ryl.* 4.576.

³² See Davies (2004) 44. ³³ See Will (1979–82) 1.180–200.

³⁴ Cic. *ap.* Strabo 17.1.13. This figure has been questioned by Hopkins (2002) 196. Diod. Sic. 17.52 reports that the annual income of the Ptolemies was 6,000 talents, but even this is a very formidable sum for a kingdom to be amassing on a yearly basis.

³⁵ See Callixeinos of Rhodes, *FGrH* 627 F2; Theoc. 17.75–6.

that eventually led to cracks in the system, as the constant and large scale warfare of the Hellenistic age created too much of a strain and eventually led to social unrest and acute economic problems that irrevocably curtailed Ptolemaic ambition.³⁶

Although smallholders made up the majority of farmers in Ptolemaic Egypt, a proportion of the land was occupied by military settlers known as cleruchs.³⁷ Previously, the pharaohs had given land to Greek soldiers in their service, and Macedonian precedents for the cleruchy system also existed in terms of Alexander's grants of land to mercenaries in the East and Philip's policy of attracting good soldiers to his army by promises of agricultural plots. The Ptolemies not only continued this practice, but widened it both in terms of numbers and in terms of the ethnic origin of the military settlers.³⁸ The original settlers were from the Macedonian army and the mercenaries of Ptolemy I Soter, and in the first half of the third century the grant of land was one of the main incentives towards service in the Ptolemaic army. While Greeks themselves were the most numerous, and formed the highest class of cleruch, a great number also migrated from Judaea and Caria; many other soldiers came from Arabia, Galatia, Idumaea, Cyrenaica, Nabataea, Palestine, Syria and Thrace. Some Persian garrison forces who remained after the Macedonian conquest became cleruchs, while the success of the system in attracting quality soldiers is attested by the fact that it also featured more than a few Campanians, Sicels and southern Italian Greeks.³⁹ These cleruchs would have been allotted a parcel of land – varying in size according to their rank – in Egypt in return for loyal service. Other cleruchs were ex-mercenaries hired by the king and then issued with the land after a campaign or a period of service. Still others were prisoners of war, who are also known to have been forcibly settled. Although they were a privileged class, cleruch land was subject to the same tithe that the native farmers paid.⁴⁰

The command structure of the Ptolemaic military cleruchies is not fully known, but at the lowest level they were commanded by eponymous

³⁶ See *POxy.* 1415; see also Austin (1986) 451; Bowman (1996) 72; Shipley (2000) 229, 232. For the revenues of the tithe see Préaux (1939) 364 n. 1. To an extent, this goes against the thesis of Rostovtzeff (1941) 1.269, 271–4, which argues that the Ptolemies scrupulously planned and managed every aspect of their economy. In fact, Rostovtzeff manages to argue this about nearly every Hellenistic economy. While the work in question remains seminal, that specific thesis has long since been refuted. See Archibald (2001).

³⁷ For the cleruchy system in Egypt see *C. Ord. Ptol.* 22; *P Enteux* 8; *P Hib.* 81, 110; *P Rev.* cols 24, 36; *P Teb.* 5; see also Crawford (1971) 53–85, 147–73, 185–7; Launey (1949–50) 45–50; Lesquier (1911) 192–201; Préaux (1939) 463–77; Rostovtzeff (1941) 1.284–7; Turner (1984) 124–5; Uebel (1968).

³⁸ See Rathbone (2002) 160–1.

³⁹ *P Petr.* 2.47, 3.19, 55; *P Stras.* 2.115; *P Teb.* 64, 815; *SB* 417–18, 599; see Fraser (1972) 1.58 n. 171, 154–5; Launey (1949–50) 1.570–1, 605, II.1231–45, 1252, 1261–3.

⁴⁰ *P Petr.* 2.38; *P Rev.* 259; *P. Teb.* 5, 746. See Crawford (1971) 15–18, 139.

officers, whose units were simply referred to as belonging to them, such as the 'foot soldiers of Nautos' or the 'horsemen of Heraklides'.⁴¹ These men were responsible for the mobilization of their units at designated muster points. Called a 'state within a state', cleruchs made up a separate class in Egyptian society, one that was privileged both socially and economically over the natives, and with its own language, culture, social structure, and even religious associations and festivals.⁴² Within this class was another hierarchy, with Greeks of high rank at the top and foreign (i.e. non-Greek) foot soldiers at the bottom.⁴³

Cleruchies were scattered all over Egypt, but were particularly numerous in the north, where it has been estimated that up to 37 per cent of the land was given over to cleruchs in some places.⁴⁴ Following Ipsus in 301, the system spread to southern Coele-Syria, and by the mid-third century it was almost certainly in use in Cyprus and Cyrenaica as well.⁴⁵ This spread, however, was not accompanied by any increase in troops from these areas, as over half the soldiers entering into Ptolemaic service as cleruchs in the third century continued to come from areas outside of direct Ptolemaic control, in particular Macedonia, Greece, Caria and Thrace.⁴⁶ This is in contrast to the practices we find all over the Hellenistic East for recruiting mercenaries, where rulers tended to hire (or, more likely, were only able to hire) soldiers from within their own lands or from lands where they enjoyed strong influence.⁴⁷ Although the Ptolemies did have significant influence in Greece and (at times) in parts of Thrace and Caria, the fact that so many new cleruchs came from areas controlled by rival dynasts illustrates just how good the offer of land was as an incentive to individual soldiers.

One of the reasons why Ptolemy I adopted the system of land grants to foreign troops was to offset the influence of the *machimoi*, the traditional warrior class of Egypt, who had on several occasions proved to be a seditious element for the Ptolemies' pharaonic predecessors, even staging a coup in

⁴¹ *BGU* 1226–7, 1246–6, 1270, 1273, 1275–7; *P Frankf.* 2, 4; *P Hib.* 1.90–1; *SB* 6303.5; *P Petr.* 1.11, 2.38; *P Teb.* 61a, 62, 87; *P Würzb.* 4.

⁴² Quotation from Bagnall (1976) 4; see also Thompson (2000). For the religious associations and festivals of the cleruch class see *P. Teb.* 61b; Austin (1981) 234; Richter (1884) 137 no. 8; Robert and Robert (1977) no. 566; *SEG* XLVII.1870. See also Fraser (1972) 1.48, 280–1.

⁴³ For the class system amongst Hellenistic Egyptian cleruchs see *P Mich. Zen.* 9.6–7; Turner (1984) 173.

⁴⁴ Bagnall (1984) 9; Crawford (1971) 44, III, 160–1; Thompson (2000).

⁴⁵ Bagnall (1976) 240. ⁴⁶ Bagnall (1984) 14–16; Griffith (1935) 254–63.

⁴⁷ The pattern was not universally the same in the West with Carthage and Syracuse, the two great mercenary employers of that area; the former, with the notable exception of the Gallic forces in its service, tended to hire its mercenaries from within the lands that it controlled in north Africa and Spain (see Ameling 1993: 210–21), while the latter relied more upon central and southern Italians (see Tagliamonte 1994: 191–216).

570. In fact, the pharaohs had also taken to combating the power of the *machimoi* by hiring substantial mercenary forces, and these troops, who were predominantly Greek and Carian, had been used to fight openly against the *machimoi* during civil wars.⁴⁸ The *machimoi*, often doubling as civil servants, have been calculated as making up a substantial percentage of the population, perhaps as high as 15 per cent of adult males at certain times; thus, when they were motivated into action, they would have represented a significant threat to royal power, be it pharaonic, Persian or Ptolemaic.⁴⁹ It would therefore make sense for these rulers to have at their disposal a large group of professional, and most importantly foreign, soldiers, loyal only to them.

Nevertheless, while cleruchies served their purpose for a time during the first half of the third century, by the mid-third century recruitment of cleruchs had dropped off, especially among Greeks. By the time of Raphia in 217 nearly a third of the Ptolemaic army were native Egyptians (Polyb. 5.65, 79), and the number of non-Greeks in Ptolemaic service only accelerated in the second century. The reasons for the system's decline and lack of success are not fully known, but (as with the Achaemenid system of military colonists) it is likely to have something to do with the rights held over cleruch land.

In theory, cleruch land, like any other in Egypt, belonged to the king; the cleruch did not have the right to sell, mortgage, or bequeath it, and it was revocable upon his death. In practice however, from the very outset of the scheme, cleruch land tended to be owned for life and then passed down to a succeeding generation. Although the descendants still served in the same capacity as their predecessors, many cleruchs very quickly became more like landed gentry than soldiers, holding on to land well beyond the age at which they were still fit for service.⁵⁰ By the mid-second century, cleruch land was being bought and sold, and by the first century we see women inheriting cleruchies, meaning that military service and the grant of land were no longer intrinsically linked.⁵¹ Moreover, if land was not available in certain places, then the king would often force the native farmers from their plots in order to convert their lands to cleruchies, and when space for a dwelling was not available, such as in places already overcrowded, the king would billet cleruchs upon the local population. Both of these policies were a source of frequent tension between the foreign military settlers and the native Egyptians, and these tensions at times erupted into violent

⁴⁸ Hdt. 2.154. See also Lloyd (1975–88) 1.16. For relations between the Ptolemies and the *machimoi* see Launey (1949–50) 1.58; Lesquier (1911) 5–7; Lloyd (1975–88) III.184–5.

⁴⁹ Lloyd (1975–88) III.190–1, 198–9; (1982) 169.

⁵⁰ BGU 8; P Hib. 48; P Lille 4; SB 16.12720; P Petr. 1.19; P Teb. 61a, 73, 107; for the military service of cleruch descendants see Polyb. 5.65.10.

⁵¹ P Berl. inv. no. 16223; BGU 1261.

clashes, thus making the entire cleruchy system very unpopular in parts of Egypt.⁵²

The system would appear to have been largely the brainchild of Ptolemy I and II, the latter of whom settled a massive number of cleruchs in 268 and 267, dispossessing and angering many native farmers in the process.⁵³ Subsequent rulers usually left the number of cleruchs alone, most probably because the system had not illustrated its worth, as the cleruchs did not prove to be markedly better than the mercenary forces that continued to be hired. New military settlers did still come to Egypt in greatly reduced numbers from Ptolemy III Euergetes onwards, but after the mid-third century more and more cleruchs tended to be heirs to the first few generations of settlers. Recruitment from this point falls off sharply, and the scheme attracted almost no new foreign recruits after c. 130.⁵⁴ The real legacy of the system of Hellenistic military *klerouchoi* is measured in the fact that these settlements served as powerful instruments of Hellenization in Egypt and the Near East, both among the natives and among the foreigners who joined their ranks.⁵⁵

The cleruchy system is also known to have been used by the Seleucids, who settled cleruchs as entire communities, as opposed to Egypt where they were almost always settled individually. This was a continuation of the policy of Alexander himself, who had settled many of his mercenaries throughout the Near East.⁵⁶ The Seleucids continued the scheme, and granted land in communities to veterans and ex-mercenaries. Not only did the cleruchs therefore provide troops for the army, but their settlements served as garrisons for some of the far reaches of the Seleucid kingdom. Those in the east mostly tended to contain native troops such as Indians, Medians, Parthians and Persians, while the urban centres west of the Euphrates contained mostly Macedonians, Greeks, Carians, Thracians, Pisidians and Cappadocians. Many of these retained strong Greek identities and took on the characteristics of *poleis*, with similar social, religious and political organization.⁵⁷

A situation similar to Ptolemaic Egypt developed in the Seleucid realm in terms of decline, as from the early third century we find cleruchs holding land well beyond the age at which they could possibly serve in the military.

⁵² Austin (1981) 249 (with commentary); *C. Ord. Ptol.* 24; *P Ent.* 12; *P Petr.* 3.20, 104; *P Teb.* 54, 61a, 62–3; see Crawford (1971) 52; Rostovtzeff (1941) 1.285–6.

⁵³ *P Petr.* 1.14, 23.

⁵⁴ Bagnall (1984) 18–19; *contra* Griffith (1935) 117; Lesquier (1911) 113, 134, who argue that the system of recruiting cleruchs continued unabated well into the second century.

⁵⁵ It should be noted that this process worked both ways, as evidence exists for Greek cleruchs adopting native customs as well as the reverse. See Crawford (1971) 92 n. 1.

⁵⁶ Billows (1995a) 150–1.

⁵⁷ For the cleruchy system under the Seleucids see *SEG* xlvi.2129; Joseph. *AJ* 12.148–51; Griffith (1935) 147, 162–3; Musti (1984) 198–9, 201; Tarn (1985) 7–9; see also Bikerman (1938) 51–105.

Here as well, inheritance was the norm, and it seems from the very beginning that women were included. Thus, even earlier than in Egypt, the Seleucid cleruchs became more like a very well-off landed class rather than a major source of troops for the army.⁵⁸

Although the Seleucids expanded Alexander's settlement policy, their cleruchy system never reached the same heights as that in Ptolemaic Egypt. The Seleucids in the third century were still able to rely on recruiting Greek and Macedonian troops supplemented by mercenaries. After 200 they came to depend more on the descendants of their third-century forces, who had often settled or been settled in Asia. They are known to have used native levies, particularly for their cavalry and light infantry, but, unlike the example of Rome and the Italians, the Seleucids did not treat the natives as partners in the empire, and as a result they never mustered the full manpower potential of the Near East into their armies.⁵⁹

The Seleucids paid for these forces by a number of means. First, their empire also produced a fair amount of profit; they accumulated a good deal of cash from the annual tributes and irregular gifts paid to them from various regions and cities, and they are known to have levied heavy taxes and customs duties on goods travelling to or within their realm. Their greatest means of regular income, however, were their royal estates that were scattered throughout the Near East. These places were worked by tenant farmers and functioned similarly to their Ptolemaic counterparts, though to what extent is impossible to say, since we know far less about these lands than we do for their equivalents in Egypt. They were surely less numerous and less profitable than their Egyptian counterparts, but they do seem to have generated a large amount of wealth on a dependable basis for the Seleucids.⁶⁰

Although the Seleucids could maintain their realm on the wealth that their lands generated, they required a far greater source to have the ability to wage their frequent wars and to expand their empire. This source was mainly plunder. The amount of plunder taken by the Seleucids in the period 323–168 should not be underestimated, nor should its impact upon royal finances and the ability of the dynasty to wage war. As such, the seizure of Asia in 301 represented a highly significant advance in finances for Seleucus I Nicator, and the sheer volume of wealth that he was able to seize from the Asian coffers of Antigonus Monophthalmus significantly enhanced his ability to compete with the other *Diadochoi*.⁶¹

Conquest of Coele-Syria also brought with it a large amount of money and timber, and this goes a long way towards explaining the perennial wars fought between the Seleucids and the Ptolemies over that very area. Every

⁵⁸ Musti (1984) 200. ⁵⁹ Bar-Kochva (1976) 48–53.

⁶⁰ RC 18; *Macc.* 1.10.29–30, 42; Polyb. 21.41.2; [Arist.] *Oec.* 2.1.4–6 (1345b–1346a). See Aperghis (2001) 76–82; Bikerman (1938) 106–7; Musti (1984) 193.

⁶¹ Diod. Sic. 18.50.3; see Billows (1995a) 88–90.

time it changed hands, the conqueror was able to lay his hands upon much movable plunder.⁶² Moreover, within these wars, if an aggressor was able to push even further than Syria, then the plunder only increased. Antiochus IV's two invasions of Egypt between 170 and 168 produced enough booty to finance his kingdom for decades (*Polyb.* 30. 25–6). On the brink of disaster because of the crippling war between Antiochus III and Rome from 192 to 188, the haul that was taken in Egypt allowed the Seleucid empire to make a full recovery. Simply put, for all of the Successors, war was profit. It was a major source of revenue, and for the Seleucids, was in fact their chief source of military funding.⁶³

From 276 the Antigonid dynasty ruled Macedonia. The kingdom had been greatly weakened by the acute losses of manpower that it had been experiencing for over half a century. Financially, Macedonia was still wealthy enough to seek continued control over Greece, but not to such an extent that the Antigonid dynasty could ever really compete financially with the Seleucids or the Ptolemies. Although the Macedonian levy still produced upwards of 20,000 soldiers, the Antigonids nevertheless were forced to rely more on mercenary forces for large campaigns and for garrison duty. This proved an even further strain upon Macedonian finances, and the reduced capital is evident in the fact that the Antigonids were forced to cut back severely on their navy. All the same, the destruction of the Antigonid monarchy in the second century was not due to either a lack of manpower or financial resources, but to the military superiority of Rome.

Although geographically small by the standards of the time, the Attalid kingdom of Pergamum was nevertheless one of the Hellenistic world's wealthiest states. From the outset, the lands that were left behind by Lysimachus after his death in 281 were immensely wealthy. Pergamum had been Lysimachus' main treasury, and as such held a fortune of 9,000 talents. This money funded the lucrative expansions undertaken by Eumenes I and Attalus I in the third century, as Pergamum assumed control of some of Asia Minor's wealthiest territories. By siding with Rome in the war against Antiochus III, Eumenes II benefited greatly from the Peace of Apamea in 188, with the new lands making the kingdom wealthier than ever. The Attalids personally and skilfully supervised the finances of their kingdom, and derived a great deal of wealth from the tributes exacted from the cities within their realm, as well as royal revenue from trade in olives, wine and timber. Pergamum remained a wealthy Hellenistic capital even after much of the East came under the influence or direct rule of Rome, until Attalus III bequeathed the kingdom to the Romans upon his death in 133.⁶⁴

⁶² Austin (1986) 461; Bellinger (1963) 83–5; Pédech (1964) 141; Shipley (2000) 287.

⁶³ Plunder was usually a far greater source of income than annual revenues, though it came in less frequently. See Billows (1990) 257–8.

⁶⁴ Allen (1983) 109, 114.

The only place in the Hellenistic world where the linkage between warfare and financial profit was broken was in the western Mediterranean, and this was largely due to the smaller nature of the states there, as well as the more immediate influence of Rome. Agathocles, like so many Sicilian tyrants before him, derived the monies with which to wage his wars from the profits of the tithe system that existed in his kingdom, Syracuse. His successor Hieron II not only continued this tithe, but reformed it, and made it into a highly regimented system that by all accounts functioned very well and yielded unprecedented profits for his realm. His system bears many resemblances to the tithe in Ptolemaic Egypt, yet, while this may have influenced him (or vice versa), it is unlikely to have been a direct copy, since the two schemes developed contemporaneously.⁶⁵ It is with Hieron II and his tithe system that we diverge from the Hellenistic East, however, since for the most part profit was now no longer equated with imperialism.

Although Hieron, like Agathocles before him, used the profits of his tithe to hire and equip his navy and a mercenary army to fight his battles (first as a general from 275, then as *strategos autokrator* from 271, and finally as king from 269), from 263 until the end of his reign in 215 he was an ally of Rome, and as such was unable to conduct a foreign policy in any type of independent manner. While his kingdom was certainly free and did not constitute part of the Sicilian *provincia*, he was nevertheless a client king whose every decision had to be taken with Rome in mind. Thus, from this point onwards, the profits of his tithe system no longer went towards warfare, as Hieron needed only a small land and sea force for defence, mostly from Rome's enemy Carthage. Hieron was forced to break with the tradition of rulers of his generation and channel his profits into other pursuits. This he did by using them to style himself as a Hellenistic monarch on a par with his contemporaries in the East; he illustrated the wealth of his kingdom by coming to the aid of eastern Mediterranean states in times of crisis and by engaging in expensive competitive philanthropy with the other Hellenistic kingdoms, in particular Ptolemaic Egypt. In fact, the extended peace and the security that his kingdom enjoyed through its alliance with Rome bolstered his profits significantly and allowed these other pursuits to become more extravagant.⁶⁶

Hieron's non-military economy was very much the exception that proves the rule for the Hellenistic world. Most monarchs of the age, especially the *Diadochoi*, had few if any actual fiscal policies, and thought of economic profit only in terms of how it could provide them with the means to make war. This of course was not new. War and the economy were intrinsically

⁶⁵ Lintott (1993) 75 n. 29; Prichard (1970) 365–8; Serrati (2000) 125.

⁶⁶ On Hieron see SEG xii.370; (*Auctorum*) *De vir. ill.* 37.5; Cic. *Verr.* 2.3.15; Diod. Sic. 26.8; Livy 22.37.10, 23.21.5, 25.28.8, 29.7, 26.30.1, 32.4; Mosch. *ap. Ath.* 5.209b; Polyb. 1.16.10, 5.88.5–8, 7.8.6; Sil. 14.83–4. See also Karlsson (1993); Serrati (2000) 116–9.

linked in classical times as well, as states were expected to use the profits of combat to make themselves strong militarily.⁶⁷ The *Oikonomika*, perhaps written by a student of Aristotle's and dated to c. 320–300, speaks of Hellenistic rulers all attempting to maximize their economies (2.1345b); and this illustrates how in terms of finances the dynasts in fact had a great deal in common with each other, and shared more similarities than differences.⁶⁸ Even when they derived income from non-aggressive means, they still used their profits not to directly benefit their people, their realms or even themselves – they used these monies to wage war.

4. Hellenistic imperialism

Modern writers from the 1870s through to the 1970s often spoke of a 'balance of power' that was intentionally maintained in the East between the negotiations of 311 (Diod. Sic. 19.105.1–4) and the time when Rome began to intervene in the early second century. This assumed that, if one of the *Diadochoi* ever tried to exert sovereignty over the others, or simply became too powerful, then the rest would band together and force him into acquiescence in the status quo.⁶⁹ However, this theory has largely been refuted as a reflection of European pre-First World War and then Cold War political geography. Although each king did indeed attempt to maintain as large, if not a slightly larger, force than his closest rivals, their purpose in doing so was much more competitive and aggressive than the 'balance of power' image tends to imply.⁷⁰

For Hellenistic monarchs, success in war was vital. Not only did they require the finances that victory would bring, but due to the personal nature of their reigns, they themselves had to be seen as warrior kings. Their forces, their generals, their friends and even their kingdoms were attached to them through their own personalities, and thus they had to be viewed by all as successful. Defeat was equated with weakness, and once a king started to show signs of weakness, those who surrounded him could quickly fall away, and his power itself would be eroded. Successful campaigns, and the wealth that accompanied them, were the life blood of the Hellenistic king, and so each and every monarch was to an extent imperialist, seeking to illustrate his power, and to gain more, at the expense of his contemporaries.

Aside from the desire to accumulate plunder and enrich oneself, and to have the resources to provide for more forces, Hellenistic kings were, and needed to be, imperialist for a number of other reasons. In direct opposition

⁶⁷ Austin (1986) 460; Finley (1983) 61–4, 109–16; (1999) 204–7; Millett (1993) 184–94.

⁶⁸ For [Arist.] *Oec.* 2.1345b see Finley (1999) 20; van Groningen (1933) 37–48.

⁶⁹ For the 'balance of power' theory see Droysen (1836–78) III.182; Klose (1972) 91–2; Rostovtzeff (1941) I.23–4, 47, 552–3, II.1026–9.

⁷⁰ Heinen (1984) 419–20, 445; Will (1979–82) 1.154–5 cf. Eckstein (2006).

to the ‘balance of power’ theory, Hellenistic kings viewed themselves as warriors and thought that when their domains ceased to expand then they began to contract. Alexander’s immediate Successors in particular were all technically usurpers and not as yet tied to specific lands or states, so they waged war in effect to consolidate and maintain power over those lands that they did possess (*Theoc.* *Id.* 17.91–105). Moreover, most of them had taken their crowns after significant military victories, and they embodied the old Macedonian ideal that a king won his position through force. Thus they were also defending the fact that they themselves had a right to their crowns. The implications of this process are obvious, for if the *Diadochoi* based their monarchical power on its military equivalent, then in theory it was possible for anyone to assume the diadem if they became powerful enough, as was the case with Agathocles in Syracuse in 305 (*Diod. Sic.* 20.79.2) and Attalus I in Pergamum in 238 (*Polyb.* 18.41). Hellenistic kings not only conquered to justify their crowns, but also to keep monarchy exclusive. If the ‘balance of power’ theory can be applied anywhere in the Hellenistic world it is here, where kings cooperated to keep would-be claimants to the throne in their place.

Such ideals would also be prevalent for new or young kings. They had to make a name for themselves and to live up to and even surpass the deeds of their predecessors. Young kings could easily be viewed as weaklings who had not won their crowns in battle as their predecessors had, and thus the deposition or assassination of young kings was not uncommon (see *Livy* 24.21.7; *Polyb.* 4.48.7–8). Conquest would allow them to stamp their authority upon the army, and from Alexander onwards, younger kings tended to be some of the most imperialistic as well. Their Macedonian subjects respected nothing more than a warrior king, and while a lack of military success did not necessarily lead to ruin, the norm for a young Hellenistic king was that, in order to have a successful reign, it needed to be legitimized through war.⁷¹

The sources portray strong and successful leaders as honourable and attractive figures, while defeated and weak kings are morally deficient and of poor physical appearance.⁷² Groupings or communities of soldiers, as well as entire regiments, could become fiercely loyal to one dynast if they thought of him as a winner.⁷³ Conversely, while some troops might stay with a king if the pay was right, in other instances we find troops deserting

⁷¹ Beston (2000) 315; Walbank (1984) 81. Though a rarity, the reverse could also be true, as successful Hellenistic warrior kings could still have unsuccessful reigns. See Bosworth (2002) 251–3, 268. See also Gruen (1985).

⁷² *Suda s.v. βασιλεία (basileia)*; *Ael. VH* 12.17; *Arr. Anab.* 4.19.5; *Polyb.* 22.22, 26.15.1–3, 28.31.3, 32.15.9, 33.4; *Plut. Alex.* 46; *Plut. Demetr.* 9.3–4; *Xen. An.* 1.2.12; *Cyr.* 4.6.11. See also *Arist. Pol.* 1311b–1312a. See Beston (2000) 316, 326, 328–9 n. 8; Roy (1998a) 120.

⁷³ *SEG* XLVIII.1487; *Diod. Sic.* 33.4a; *Polyb.* 5.57.6–8, 15.25–33.

a king once he became perceived as a failure. Even worse, troops sometimes actually switched sides, on one occasion even assassinating the king – the unfortunate Seleucus III in 223 (Polyb. 4.48.7–8).⁷⁴ Such disloyalty could also be shown over pay – if a commander could not meet the pay demands of his forces, he risked not just their loyalty but much of his power.⁷⁵

The king also depended upon success in warfare to maintain the loyalty of his friends. These friends formed his inner circle, and not only were his advisors and companions, but from among them the king might recruit his military officers, provincial governors, civil servants and ambassadors. The king relied upon this group for advice and service, but their loyalty came at a price; in return they expected not only prestigious positions, but also lucrative gifts, and the latter often took the form of plunder accumulated from a successful campaign. In fact, the king's friends expected him to foster their own economic aims by undertaking military campaigns. Even when gifts in the form of plunder were not forthcoming, it was still essential that the king be viewed by his friends as strong and powerful, since, as was the case with the military, friends would desert a monarch whom they perceived as weak, often taking up the friendship of a rival dynast afterwards.⁷⁶

Thus, the maintenance of one's friends was for Hellenistic monarchs an integral part of showing themselves to be powerful, and the most respected way of doing so was through military victories. A strong concept for many Macedonian monarchs was that of 'spear-won' territory; they went to war and conquered simply because that was what Macedonian kings did. They considered it their natural aim in life to win territory by the spear.⁷⁷ As such, kings maintained Macedonian military traditions, including dress, until the very end. The vast majority of dynasts also continued to lead their troops from the front, as Philip and Alexander had done.

Leaders who were successful in warfare were quick to propagandize their own victories.⁷⁸ In direct opposition to mid-Republican Rome at this time, where successful generals like Scipio Africanus were curbed by the collective body of the Senate, in every aspect of self-presentation, from their inscriptions to their coinage to their festivals, the Hellenistic kings stressed their military achievements before their army, their friends and their subjects, to the point where such achievements became the exclusive property of the kings, as with the later monopoly on military glory by the Roman emperors (upon which this Hellenistic practice had no little influence). Furthermore,

⁷⁴ *IG* II.2.469; Polyb. 5.40.57. See Griffith (1935) 33–56; Launey (1949–50) II.690–5; Parke (1933) 206–26.

⁷⁵ Diod. Sic. 20.113.3; Préaux (1989) 1.306–9.

⁷⁶ Diod. Sic. 18.14.1, 28.5–6, 33–6, 50, 53, 61–2, 19.25, 26; Livy 35.18.1; Plut. *Dem.* 49–50. For the institution of monarchic friends in the Hellenistic world see Bringmann (1993); Herman (1980), (1997).

⁷⁷ Billows (1995a) 24–9.

⁷⁸ *SEG* XLVIII.1507; *OGIS* 273–9 (277=SEG XIV.2230).

both of these arrangements, with one's friends and with one's army, were of course reciprocal, as in return for success in war, good kings received obedience, loyalty, power, wealth, territory and fame.⁷⁹

Unlike Rome, where warfare might benefit individuals or entire cities, the *Diadochoi* used the profits of warfare to enhance their own imperial ambitions. This was because their finances were personal finances, and not those of a state. Kings actively sought to be associated with wealth, hence the lavish processions, festivals and competitive philanthropy that characterized the Hellenistic age. It should thus come as no surprise when we see a number of Hellenistic wars started for economic reasons alone. Antigonus Monophthalmus fought to gain control of the lucrative frankincense and bitumen trades, Eumenes I incorporated the region around Mount Ida into his kingdom of Pergamum in order to control the area's lucrative timber business, and the Seleucids and Ptolemies fought a number of bloody campaigns over Coele-Syria, an area that contained a large number of Alexander's former mints.⁸⁰ In just one of those campaigns, Ptolemy III Euergetes seized 40,000 talents in gold and silver (*Jer. Comm. Dan.* II.9), a fortune by any standard. Successful warfare gave a dynast more money and a greater ability to hire troops and build navies, and these in turn brought him greater success.

Thus the 'balance of power' theory could never truly have applied, as dynasts needed to wage warfare against each other to remain powerful. In fact, it has been postulated that the Hellenistic world was in a constant state of warfare, with treaties being only temporary halts to the violence.⁸¹ Leaders like Ptolemy III, Antiochus III ('the Great'), and Philip V attempted to live the very ideal of the Macedonian warrior king, and were keenly aware of the achievements of their dynastic forefathers. Even beyond the three major kingdoms, men like Agathocles of Syracuse, Pyrrhus of Epirus and Demetrius I of Bactria embodied the spirit of the age as both monarchs and conquerors. In this sense, the age of Philip and Alexander never really passed – their spirits lived on through the belief that conquest was a necessary requisite of kingship. Only the coming of the Romans brought an end to this era of competing warrior kings.

II. THE ROMAN REPUBLIC

Warfare and the state were intrinsically linked for the Romans during the Republic; in fact, with the possible exception of Sparta, for no other society in the ancient world were the two more fundamentally related. Warfare

⁷⁹ Van Wees (1998b) 16–17.

⁸⁰ Diod. Sic. 20.94–100.2; Aperghis (2001) 94–5; Billows (1990) 288; Bellinger (1963) 83–5.

⁸¹ Austin (1986) 461.

bonded all ranks of Roman society together and was an integral part of the state's social, political and cultural life. Warfare not only benefited the Roman state, but it also crossed monetary divides and linked together Romans of different classes. It therefore follows that the Roman state was imperialist, and that the Romans themselves favoured war as an externalization of their socio-political system.

1. Roman imperialism

The concept of imperialism, defined as 'the behaviour by which a state or people takes and retains power over other states or peoples or lands', first came into existence in the nineteenth century, and in many ways its historiography for Rome mirrors how Europeans have written and continue to write about empire.⁸² Imperialism then, as opposed to our Western concept of the term now, was not seen in a negative light in the mid-nineteenth century. In the political arena it was perfectly acceptable, and even beneficial, for nineteenth-century politicians to throw out imperialist rhetoric. In the realm of scholarship, this ideal was expounded nowhere more firmly than in T. Mommsen's seminal work *Römische Geschichte*, which first appeared in 1854 and was largely a justification of the Roman, and hence the German, empire.

In the late nineteenth and early twentieth centuries, most European empires had been consolidated, and as such the views of empire shifted towards how states had acquired their overseas territories by legitimate and righteous means, often in the name of defending themselves. This found its way into ancient history in the early twentieth century through scholars who originated the doctrine of 'defensive imperialism'. Its central claim was that, in their constant wars, the Romans were largely defending themselves, and conquest occurred only to protect their own interests and those of their allies.⁸³ The main argument of this group of scholars is based on the idea of a Roman fear of powerful neighbours; Rome had been going to war for so long that a 'neurosis of fear' had developed within them, and their motives were more psychosomatic than aggressively imperialist. In short, Rome went to war only when necessary and did not always conquer, doing so only when its own territory was threatened. Subscribers to this belief claim that any profit incurred was purely coincidental, and that those who assign economic motives to the Romans are being anachronistic, taking modern

⁸² Quotation from Harris (1979) 5. For historiographical surveys of the debate between Roman aggressive and defensive imperialism see Frézouls (1983) 141–62; Hermon (1989) 407–16; Rich (1993) 38–44.

⁸³ Badian (1968) 6; Eckstein (1985); Frank (1914) 90–1; Hoyos (1998) 19–22, 30, 54, 271–4; Sherwin-White (1980) 178–9.

concepts of a more mercantilist imperialism and placing them upon the Romans.⁸⁴

The defensive imperialism theory has been attacked and largely debunked by historians such as Harris (1979), writing in the 'post-colonial' era, when the notion of empire was viewed in a much more negative light. These scholars maintained that the Romans were in fact the aggressors in most of their wars, finding excuses to declare a 'just war' solely for territorial expansion, economic gain and individual political advancement. Moreover, the fact that the Romans were so aggressive and mobilized for war year after year proves that they were less, not more, afraid of powerful neighbours than other states. Conquest was part of the socio-political make-up of the Roman state, as success in politics revolved around war and militarism and the desire for plunder was present within Romans of all classes. Furthermore, the constant warfare actually maintained a harmony between the various different classes of citizens, as the Republic of the late fourth to mid-second centuries, the period of greatest conquest, was largely free of internal *stasis*.

Contemporary scholarship is rather more nuanced in its views. North (1981) has highlighted the distinction between conscious Roman decision making in specific instances, and the structural factors in Roman society which shaped the policy context. Others have acknowledged the possibility of some defensive wars (such as the early fourth-century Gallic conflicts) and of a certain amount of Roman trepidation concerning other imperialist states (for example the Roman concern over the rapid rearmament of Carthage in the mid-second century).⁸⁵ Nevertheless, it is now generally accepted that the Romans were an aggressive imperialist power, even though not all of their wars fell into this pattern and not all of their aggression stemmed from conscious political choice.

Rome was a society for which war and conquest were the norm, and it would not be too strong a statement to say that, during the early and mid-Republic at least, the Romans were socialized to make war. Between the beginning of the Second or Great Samnite War in 327 and the end of the First Punic War in 241, an eighty-six-year period, the Romans mustered their legions, called out their allies, and marched to war in all but five years, an average of 94 per cent. During the eighty-one years that saw combat, seventy-four triumphs were celebrated, meaning that on average, 91 per cent of years witnessed this ceremony.⁸⁶ The fact that we hear of little if any grumbling on the part of even the common soldiery of this era shows that warfare united Roman society, and that all levels of the citizenry could be

⁸⁴ Badian (1968) 17–18, 20.

⁸⁵ Hermon (1983) 177–84, (1989) 407–16; North (1981) 1–9; Rich (1993) 38–68, (1996) 1–37.

⁸⁶ See Harris (1979) 9–10, 256–7; Nicolet (1969) 117; Rich (1993) 44.

equally bellicose. Such attitudes towards warfare won for them first Italy and eventually the entire Mediterranean.

As opposed to the Hellenistic world, where military finance and society could be separated, the key issue in terms of the Republic is the interlinking of war, finance and politics. Warfare was intrinsic to the Roman way of life, and as such it did not require many special finance measures that were present in other societies. Although Roman war financing and economic planning were present, since they were necessary to get campaigns off the ground in the first place, in the majority of years the plunder and lands that were taken made any initial investment by the state or by private citizens very worthwhile. Yet this was not the dominant factor in Roman war-making, as society itself, with its assemblies set up along military lines, its political systems, and its veneration of successful generals, must be seen as the binding force between warfare and the state in Republican Rome.

Roman legions marched out to war nearly every single year, and warfare represented more than just territorial ambition. Because of its location on the River Tiber and because it controlled the nearby salt flats, Rome always had a prominent position within Latium. Etruscan rule in the sixth century appears to have ushered in a period of significant growth for the city, and in the decades following the overthrow of the last Etruscan warlords in 509, Rome assumed control of Latium and formed a common Latin army, which it led. From the mid-fifth century onwards, Rome's imperialist tendencies were becoming more pronounced, and it was beginning to use the Latin army to give itself a dominant position in central Italy, assimilating and eliminating other states in the process, in particular the Etruscan city of Veii (Rome's main trading rival at the time), which was destroyed in 396. A major incursion by Gallic tribes in the early fourth century, culminating in the sack of Rome in 390,⁸⁷ curtailed the city's imperialism for a time, but after the suppression of a Latin revolt from 341 to 338, Rome began a new, more rigorous, period of conquest.⁸⁸

These conquests were made possible by two crucial factors – the Roman political system in the mid-Republic, and Rome's alliance system. In terms of the latter, as Rome expanded and conquered new territories, the places that were absorbed were with a few exceptions left free to govern their own affairs and not subject to Roman government or garrisons. Although the relationship was not one among equals, the subdued Italian states were in fact referred to by the Romans as their allies (*socii*), and their only obligation was to contribute troops to the communal Italian army. Technically, any state could call out the collective army, and whoever did so was allowed to

⁸⁷ These are the conventional dates, according to the Varronian chronology. Greek sources, especially Polyb. 1.6.1, suggest a real date three or four years later. See Cornell (1989a) 311–14.

⁸⁸ See Alföldi (1964) 355–91; Cornell (1989b) 309–23, (1995) 202–4, 223–30, 293–326.

lead it, but from a very early stage it was almost exclusively called out, and thus led, by the Romans, and used for their purposes. Thus, it is technically a misnomer to refer to the 'Roman' army of the mid-Republic, since it was a force recruited from across Italy on behalf of what modern historians call the 'Italian confederacy'.

For the conquest of Italy, the system perpetuated itself, as the more Rome expanded, the larger its collective army became. Some states even joined the alliance system voluntarily, recognizing its benefits. Newly conquered areas were also made safe by a series of colonies that Rome planted throughout Italy, many of which went on to become large cities in their own right and provided Rome with even more troops. The confederacy provided immense resources of manpower which go a long way towards explaining Rome's military success during the mid-Republic. The system allowed Rome both to conquer large parts of the Mediterranean and to defend Italy from incursions by the Gauls and by Pyrrhus and Hannibal. They could now fight wars on multiple fronts and survive bitter and costly defeats, as the human capital of Italy gave them enough resources virtually to guarantee eventual success.⁸⁹

The other major factor which facilitated Roman conquest was the political system of the Republic. In third- and second-century Rome there was as yet no difference between a politician and a general, and the greatest exploit of any Roman aristocrat with political ambitions was victory in battle. Warfare was the surest way of achieving *dignitas*, *gloria* and *laus*, and the consul, who had but one year in office, always had to make sure that he had equal access to the glories of his predecessors.⁹⁰ Due to the brief period for which every office lasted, Roman politicians spent most of their years out of office and merely as senators, and thus the authority and dignity that they had won as commanders were vital for them to exercise influence over assemblies and over their peers. The Romans may have vigorously competed with each other for political office, but at the same time they respected nothing more in their fellow senators than military achievement.⁹¹ Hence, warfare was a necessary means towards political advancement.

In Rome in the mid-Republic, schooling in rhetoric and philosophy was rudimentary, and the part of a young man's education which really mattered occurred on the battlefield. No man could, in theory at least, even run for political office before he had seen service in ten military campaigns, during which he should have risen to the rank of military tribune (Polyb. 6.19.4). Any man who was elected consul had served this as the bare minimum, and probably significantly more, since he was required to hold (again, in

⁸⁹ See Badian (1958) 289–95; Cornell (1989a) 365–8, (1995) 347–52; David (1996) 35–43.

⁹⁰ Cic. *Leg. Man.* 6; *Mur.* 19–30; *Off.* 1.38, 74–8, 121; *Rep.* 5.7.9; Sall. *Cat.* 7.3–6. See Harris (1979) 21–2; Nicolet (1960) 248–51; North (1981) 5–6.

⁹¹ See Nicolet (1969) 144–6.

theory) a series of lower offices before he reached the consulship. As an elected quaestor and praetor he may have seen battle, and at some point he may also have been appointed a military legate.

While one could achieve a degree of political prominence without being a successful general, and while a military failure did not necessarily preclude an individual from holding any future magistracies in the mid-Republic, by and large the rule for this period was that to achieve the status of a senior statesman, one normally had to have been a victorious general, as victory in battle was looked upon as the crowning achievement in an aristocrat's life. Once a man had reached the consulship, it was almost inevitable that he would take command of a Roman army in the field during his single year in office. It was exceptionally rare for a consul not to do so in the mid-Republic, and usually both consuls went into battle, at times to separate fronts and at times even to separate wars. Warfare made a general famous and often won him the ultimate prize of a triumph, where he, dressed as Jupiter, would process in a chariot through the city with his army and his spoils of war.⁹² A particularly lucrative or important victory might give him the opportunity to erect a piece of monumental architecture or to dedicate a temple, thus making his achievement immortal. Rome was covered with such monuments, all glorifying both an individual's and the state's successes in war. Moreover, both the general and those senators who served with him would incur great monetary and occasionally territorial benefits from a victory, and this in turn would gain the senator a stronger base of clients.⁹³ Thus, a pattern developed whereby senators fostered each other's aims on the battlefield; a Roman aristocrat knew that, upon becoming consul, his chances of being voted a war to wage as he saw fit would be much greater if he had supported previous consuls in the same situation. Hence the never-ending circle of warfare which characterized mid-Republican Rome.

This was the political climate that fostered Roman imperialism in the early and mid-Republic. Not only did conquest and plunder actually maintain harmony among the aristocracy at Rome, but the initial conquest of Italy had much to do with this harmony's creation. The more Rome went to war, the more the traditional aristocracy, the patricians, had to rely upon wealthy plebeians to assume more military responsibilities. This is the so-called 'struggle of the orders', whereby from the fall of the Etruscan kings in 509 until the late fourth century the plebeians clamoured for, and eventually won, more rights from the patricians.⁹⁴ While much of the struggle is mired in myth and anachronism, it is nevertheless true that by the fourth century plebeians began to hold higher offices and eventually won triumphs, whereas previously they were absent from these areas, at least in terms of

⁹² See Versnel (1970) 56–93, 164–95, 313–49, 356–97.

⁹³ Harris (1979) 11, (1984c) 14.

⁹⁴ See Momigliano (1986); Raaflaub (1986a).

our sources. There is little doubt that this would have been a two-way process, as the patricians relied upon the plebeians to fight and take on more responsibilities as wars became larger, and the wealthy plebeians themselves wanted access to the wealth and prestige that accompanied consulships and triumphs.

After the suppression of the aforementioned Latin revolt in 338, the Second or Great Samnite War (327–304) was the ultimate test of Rome's hold on central Italy. The Samnites were in fact the peninsula's second great power, but lacked the urban infrastructure and the political cohesiveness of Rome. For a time the fate of Italy hung in the balance, as from 321 until 315 Rome was actually on the verge of losing. However, the fact that eventual Roman victory in this war came at the same time as the end of the struggle of the orders should not be seen as a coincidence. This war taxed Roman strength as no conflict had before, and as a result, more plebeian participation was necessary, as evidenced by the fact that the first regular plebeian triumphs occur in the war's final years.⁹⁵ Although this was not the final chapter in the conquest of Italy, victory in the Second Samnite War virtually sealed the peninsula's fate. War itself had forced social harmony upon Rome, and it was war which would allow this social harmony to continue.

2. The financial dimension

While political success, glory and triumph-hunting were certainly important elements of Roman imperialism, the prospect of financial gain was of at least equal significance. This was not confined to the senatorial class, as all groups of combatants in Rome benefited financially from warfare.⁹⁶ This is especially evident in the conquests of the third and second centuries, and we have direct evidence that the Roman people themselves voted for and wholly supported war when they envisaged the campaign would be lucrative (*Polyb.* 1.2.2–4, 35.4.1–8). After Italy had been subdued or brought into alliance, Rome turned its armies towards the Mediterranean, and deliberately sought conflict with wealthier areas such as Sicily, North Africa, Macedonia, Greece and Asia.

Plunder was the chief source of remunerative profit from war, but it was far from the only one. Rome frequently demanded war reparations, indemnities and heavy tributes from defeated foes, all of which would compensate the treasury for the initial cost of the conflict. Another important factor would have been the state contracts that would arise from a war. Expeditionary forces would have to be fed, and extended service would mean that the arms that the soldiers supplied for themselves would

⁹⁵ Diod. Sic. 20.101.5; Livy 9.44.5–15, 45.1–4.

⁹⁶ See Brunt (1971) 394.

eventually be damaged or lost and would have to be replaced through private contractors at state expense.

The Roman Republic never had, nor would it ever develop, the means by which the state could transport large quantities of goods, supply armies or collect taxes; all of these things were farmed out to private contractors.⁹⁷ Mostly made up of wealthy non-aristocrats, though often financed by senators, they banded together into groups to bid for state contracts and by the mid-second century formed a visible class of businessmen in Rome known as the *publicani*.⁹⁸ They are known to have transported goods for the army during the Second Punic War (Livy 23.48.4–49.4, 25.3.8–5.1), and by the early second century they were collecting taxes in the provinces.⁹⁹ Their role in the Roman economy was made possible and greatly increased through war and conquest, and their growth mirrors that of Rome's empire. They make their first appearances when Rome fights its early overseas conflicts, where the *publicani* undertook contracts for long-distance military supply. Soon after the establishment of the first provinces, they bid for the right to collect and transport state taxes and revenues. It is safe to say that the empire could not have functioned without them. War and empire for them represented significant profit, and as the empire grew and incorporated more and more territory, so too the *publicani* themselves became larger. By the first century they had emerged as a powerful political force in Rome.

While plunder and indemnities might bring profit after a victory, financing was required to get a campaign off the ground. From 406 the Romans began to issue their soldiers with pay, as they were spending more and more time in the field (fig. 14.3).¹⁰⁰ The cost of war must have increased significantly in the First Punic War (264–241), partly because of the massive navies which Rome fielded in this conflict,¹⁰¹ and partly because the Romans began to keep their troops in the field for more than just a single campaign season – bringing them home every autumn from Sicily was now both logistically difficult and strategically foolish.¹⁰² Finally, in 123, a bill was passed that called upon the state to pay for the arms and equipment of all legionaries.¹⁰³

⁹⁷ See Badian (1972) 16–18; Garnsey (1994) 32; Rickman (1980) 268–9; *contra* Erdkamp (1998) 58–61, 84–94, 112, 116–21.

⁹⁸ On the origin of the *publicani* see Polyb. 6.17.2–3. The passage is certainly anachronistic and probably refers to Polybius' own time; see Badian (1972) 45.

⁹⁹ Livy 34.9.8–11. See Badian (1972) 32–4; Brunt (1962) 105.

¹⁰⁰ Diod. Sic. 14.16.5; Livy 4.58–60.

¹⁰¹ An often overlooked fact for the period after the First Punic War; see Rankov (1996) 49–57; Thiel (1946) 183–9, 281–93, 420, (1954) 63–73, 83–96.

¹⁰² Polyb. 1.25.6, 40.1; Zonar. 8.9, 11, 15. See Krasilnikoff (1996) 11; Serrati (2000) 127–8. It is true that a Roman army was kept in the field for the winter at the earlier date of 280–279, but this was a punishment for troops who were defeated by Pyrrhus; see Frontin. *Str.* 4.1.24.

¹⁰³ Asc. *Corn.* 68c; Diod. Sic. 34/35.25.1.

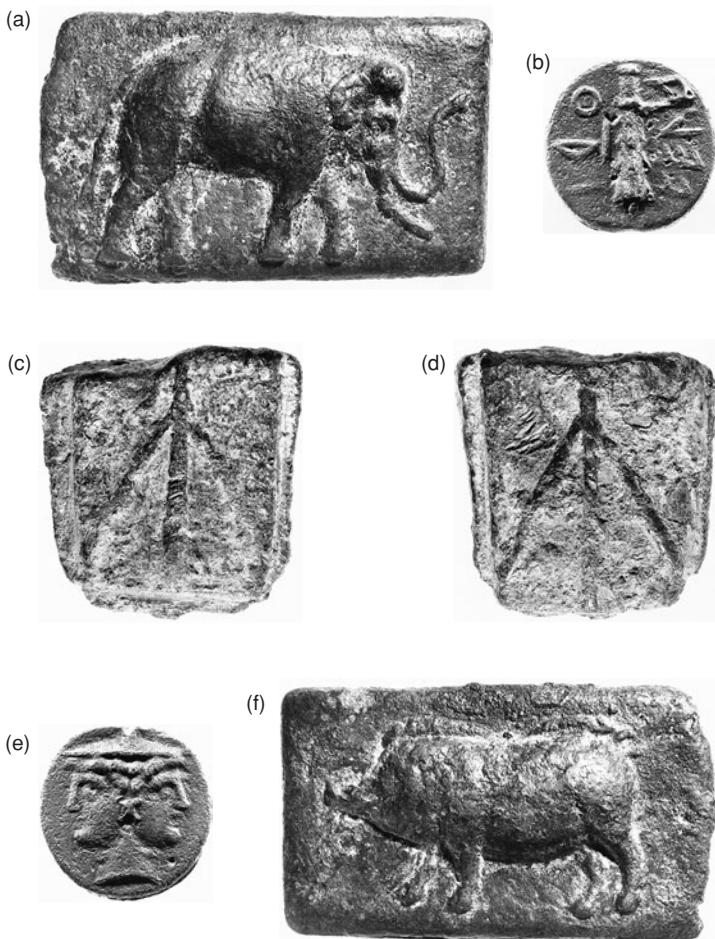


Figure 14.3 (a)–(f) Early Roman coinage: *aes signatum* ('signed bronze') of the third century BC.

The most direct method of financing was the regular *vectigal*, a tax on public property (including not just *ager publicus* but also public pasture lands, ports, gates, mines and salt-works), and also the irregular *tributum*, a tax collected from all property-owners because of special circumstances, often to raise money for a campaign. Warfare could also be financed via private donations or an extra *tributum* in times of grave emergency,¹⁰⁴ or a commander could elect to forego state finance in the middle of a campaign

¹⁰⁴ Livy 23.48–9; Polyb. 1.59.1–2.

if he was deriving enough revenue to cover his expenses from plunder or his demands from the locals, as was the case with Cato the Elder in Spain in 195–194.¹⁰⁵ This mostly changed after 167, however, when the Roman general Aemilius Paullus plundered Macedonia and took control of the mines there, supposedly bringing in the colossal sum of 120,000,000 sesterces to the coffers at Rome.¹⁰⁶ After this date, Roman wars were financed by these monies and by the additional plunder that continued to flow into the treasury from the Mediterranean conquests. As a result, citizens were now exempt from the *tributum*, and it was only levied again on rare occasions.

In this sense Roman warfare fed off itself, and the wealth derived from initial conquests facilitated future military endeavours. This can be seen primarily with plunder and indemnities, but the natural resources that other regions provided also contributed greatly to the financing of Roman warfare in the Republic. The conquest of Sicily allowed Rome to take over the grain tithe that was already present there, and then to use the island's bountiful yields to feed their legions in the East and in Spain. The latter region also provided food for the legions, but more importantly supplied precious metals for coins and the iron ore from which the Romans constructed some of their weapons. Hence, as with the Hellenistic kingdoms, Rome's military power relied heavily on victory in war.

It has been argued that provincial taxation was only created by Rome to replace plunder,¹⁰⁷ yet this seems unlikely considering the fact that the Romans certainly took over existing tax structures in Sicily and Macedonia, and that Sicily, Sardinia and Spain were all taxed significantly before the mid-second century, the age during which Rome was taking in its largest amount of plunder. Provincial structure appeared in the Roman Empire not as a result of conquest, but as the consequence of the expanding nature of economic exploitation. Territories conquered by Rome often did not become full provinces for a number of years, and were left without a Roman administrative system until it became necessary to put one in place because the economic exploitation of that area had grown, and thus now demanded greater Roman supervision.

3. Control and exploitation

In the late third and early second centuries the Romans developed two broad systems by which they exerted control over a particular area or people.

¹⁰⁵ Frontin. *Str.* 4.7.31; Gell. 2.22.28; Livy 34.11–12, 16.7–10, 21.7, 46.2–3; Plut. *Cat. Mai.* 10.2. For other examples see *SEG* xxxiv.558; App. *B Civ.* 3.11; *Mith.* 30; *Pun.* 94; Caes. *B Afr.* 24; [Caes] *B Alex.* 1, 9, 49, 51; *B Civ.* 2.66, 3.5, 43; *B Gal.* 1.16, 6.4.4–5; Cic. *Font.* 13; Livy 34.6.9–10, 43.6.1–9; Polyb. 1.18; Sall. *Ep. Cn. Pompei ad Senatum* 9; *Iug.* 56.3. See also Erdkamp (1998) 98–100; Millar (1984a) 14.

¹⁰⁶ Livy 45.40.1; Plut. *Aem.* 32. ¹⁰⁷ Hopkins (2002) 204.

Direct military conquest leading to the creation of a province was the hallmark of their campaigning in the West, while influence and irregular economic exploitation were characteristic of their Eastern wars.¹⁰⁸ In the western Mediterranean, specifically Sicily, Sardinia and Spain, the Romans first established military control over these areas and in the process began a system of economic exploitation. In Sicily and Sardinia this took the form of the grain tithes that went to feed the legions, while Spain was exploited for its agricultural and mineral resources. Assigning elected magistrates to run these provinces was both necessary and beneficial to Rome. In all of these places, security was essential, either because of external threats from Carthage or internal rebellions by the natives. The creation of provinces brought a degree of military and economic stability that allowed for the more efficient collection of taxes, and it also required an increase in the number of annually elected praetors, to four per year from 227 and six per year from 197.

Another broad model of Roman control existed, and this was applied in the eastern Mediterranean – specifically Illyria, Macedonia and Greece. Here, the Romans conquered but did not occupy; they sought to subdue and exploit the regions without committing any permanent forces or magistrates to the area. Yet the Romans campaigned many times in the east between the opening of the First Macedonian War in 215 and the creation of the province of Macedonia in 146, and each time they eventually pulled out and created anarchy either by disbanding leagues and turning states against each other, or by breaking up larger states and installing puppet governments. So, at least in theory, these states remained free.¹⁰⁹

'Defensive imperialists' have traditionally placed great stress on this reluctance to pursue eastern conquests.¹¹⁰ From this perspective, the presence of Hannibal as a refugee in the east from 195 was a double-edged sword for the Hellenistic kingdoms, since it served to awaken Roman nightmares of another invasion of Italy if they did not take pre-emptive action. However, as discussed in Chapter 10, Rome clearly felt that large parts of the East lay within its 'sphere of influence' in the second century, long before formal

¹⁰⁸ In this chapter, I use 'province' in its most common modern sense, meaning a defined area of Roman control with a magistrate as its governor. I recognize that, for the third and second centuries, the Latin term *provincia* in the military sense referred simply to any area of control, whether for only one campaign season or on a more permanent basis. Thus, to the Romans of this time, there was little if any difference between the *provincia* given to a general in which to fight a campaign, and a *provincia* where the Romans simply maintained control and collected taxes. J. S. Richardson calls the latter a 'regularised *provincia*', and I am grateful to Prof. Richardson for numerous discussions on this topic as well as allowing me to view sections of *The Language of Empire: The Development of Roman Imperialism from the Third Century BC to the First Century AD* (forthcoming). This chapter has been much improved as a result.

¹⁰⁹ Macedonia was assigned as a *provincia* in 200–194, 191–187, 171–167, 149–146. For full references see *MRR* 1; Brunt (1971) 423–9.

¹¹⁰ Badian (1958) 85–8.

annexation.¹¹¹ The fact that different policies were pursued from those in the west does not in itself mean that Rome's combative and acquisitive instincts have been overestimated. It may simply be that occupation seemed a less attractive immediate option in these specific cases, especially in light of the demands imposed by Rome's on-going expansion around the western Mediterranean at the time.

Rome's third extra-Italian conquest came with the First Illyrian War of 229, yet upon the conclusion of hostilities, unlike in Sicily, they did not occupy. Instead, they established a protectorate in the area, and commissioned Demetrius of Pharos to guarantee the peace.¹¹² While this might at first appear odd, it makes perfect sense if one considers what the area had that would have been advantageous to Rome, and what protection it needed. In 229 Rome had gone to war to protect its traders from Illyrian piracy, and once that threat was eliminated, there was no need to conquer. The waters were policed by Demetrius, and Illyria, unlike Sicily and Spain, had little to offer the Romans. Therefore, any occupation of the area would have brought them little benefit. Rome made it clear that the arrangement with Demetrius was only temporary, perhaps a premonition of future hostility in the area (App. *Ill.* 8).

From the end of the Second Macedonian War in 196, Macedonia and Greece were under the control of Rome, and although the Romans did perennially assign Macedonia as an area of military command to an elected magistrate during times of war and for the settlements that immediately followed, they did not occupy with any permanency, and therefore no province was formed in this region. Nevertheless, it is likely that the Roman armies in Greece during the years 196–146 periodically requested grain from the local populace. The powers contained within a consul's *imperium* gave him the right to make demands from civilians at any time (Sall. *Cat.* 29.3), and a large amount of grain was demanded from the Epirotes in 169 (Livy 44.16.2).

Even when the Romans had withdrawn, their influence in Greece was heavily felt. Rome practised a brand of political manipulation whereby it attempted to turn states against one another in order to foster division, thus keeping Greece disunited and lessening the chances that cities would combine forces. Even friends were not immune; in 168 and 167 king Eumenes II of Pergamum, one of Rome's staunchest allies in the East, was treated with disdain, as he was given no aid to bolster his claims to the throne and he was blocked whenever he attempted to expand his territory.

In 168, over twenty years before the creation of a province, some of the cities of north-western Macedonia and Illyria were ordered to begin to pay taxes to Rome. The following year, Rome demanded that the Macedonians

¹¹¹ Alcock (1993) 13; Larsen (1935). ¹¹² App. *Ill.* 8; Polyb. 2.11.17.

pay to them half of the tax they had formerly paid to their kings; iron and copper mines were taxed at the same rate. The Romans now took control of all reserve stocks of grain and oil in Greece; these they either seized for themselves or distributed to loyal cities as they saw fit. Rome also began to control trade, regulating the sale of salt. In 158 the Romans reopened the Macedonian silver mines and began to exploit them for their own profits. Finally, after his sack of Corinth in 146, Lucius Mummius imposed taxes upon all of Greece in a blanket policy of exploitation, regardless of the fact that many of the Greek states were still technically free, and some were even allies.¹¹³ On all of these occasions, the Senate continued to claim that the Greeks and Macedonians were in fact free. However, the fact that they paid taxes to Rome suggests that they should be regarded as Roman subjects, regardless of the fact that they were not within the boundaries of a province.

It has been argued that these taxes were not imposed with any regularity or within any scope of a larger imperial plan, since the Romans had no long-term design to conquer Greece, and mostly went through the first half of the second century making *ad hoc* measures to meet certain situations.¹¹⁴ It is certainly anachronistic to speak of Roman foreign policy in the modern sense; they responded to each situation individually and differently, and it is doubtful that they ever had any long-term foreign strategies or goals (the desire of some to eliminate Carthage in the first half of the second century being a possible exception). However, the sheer volume and indiscriminate nature of Roman exploitation in the East does seem to suggest a deliberate objective of establishing control with minimal use of the legions. In short, the state sought to incur maximum profit, which went to funding its wars elsewhere, with the least possible risk. This is further demonstrated by the economic benefit that Rome incurred, not only from the taxes, but more than anything else from the overwhelming amount of movable plunder taken from Greece over half a century. These benefits meant that it may actually have been more advantageous for Rome not to turn Macedonia and Greece into provinces in the first instance.

4. Manpower and the allies

Just as gainful military campaigns account to a degree for the lack of internal *stasis* in mid-Republican Rome, this type of warfare was also necessary for Rome's relationship with its Italian allies, as the latter were taxed not in

¹¹³ Eumenes: Livy 45.19–20.3; Polyb. 30.1–3; taxes upon Illyria and north-west Macedonia: Diod. Sic. 31.8.5; Livy 45.18.7, 26.1–2, 11–15; taxes upon Macedonia: Diod. Sic. 31.8.9; Livy 45.18.1–7; grain reserves: Livy 45.33.3–4; Plut. *Aem.* 28.2–3; salt: Livy 45.29.12–13; mines: Cassiod. *Chron.* 2.130; taxes upon Greece: Paus. 7.16.9. See Alcock (1993) 20; Hammond et al. (1972–88) III.520; Will (1979–82) II.236, 326, 334.

¹¹⁴ Gruen (1984) II.525–6, see Shipley (2000) 397.

money or kind but in men for the communal army. This alliance system served as indirect financing for the Roman state at war, as the costs of combat for Rome itself were greatly reduced due to the large presence of the allies, who met their own expenses. The system accounts for much of Rome's success on the battlefield, as the vast reserves of Italian manpower saw the Republic through many long and bitter conflicts. Furthermore, many of the allies did not serve by compulsion, as they saw for themselves the economic benefits brought about by plundering others.¹¹⁵

It is clear that plunder played a major role in recruitment for the army. Not only did the Romans unabashedly start wars with the specific design of acquiring plunder, but the amount of plunder that could be won on any given campaign was directly related to the ability of the Romans to recruit citizen legionaries. After the Second Punic War, with Roman territory spanning from Spain to Illyria, the Republic came to depend more and more on the allies as armies were required for fighting in multiple theatres and garrisoning Rome's new provinces. Yet the allies themselves did not see increased benefits accompanying their increased service. The problem became particularly acute after 146; this date witnessed the sack of both Carthage and Corinth, but it also saw a significant break in Rome's wars of conquest.

From the mid-second century onwards provincial appointments could and often did take the place of warfare in terms of the personal enrichment of the senatorial class. The economic and administrative forms of Roman imperialism that were now taking place in the provinces could prove more lucrative and less dangerous for the ruling classes than military campaigning.¹¹⁶ Warfare now took on a different form, in that campaigns for a time ceased to be those of conquest in wealthy areas and instead were characterized by guerrilla fighting in areas nominally already under Roman control. The wars in Spain and the slave rebellions in Sicily during this period produced much danger and little plunder, and fewer and fewer Roman volunteers stepped forward for service, so that the dependence upon the Italian allies was only increased.

Part of the problem may have stemmed from what is traditionally described as the Roman 'manpower crisis', where constant warfare saw the impoverishment and eventual disappearance of the Italian small farmer, the man who made up the bulk of the army's heavy infantry. Toynbee famously blamed this on 'Hannibal's Legacy' from the Second Punic War, an argument comprehensively rejected in Brunt's classic work on Italian manpower.¹¹⁷ Most scholars have tended to follow Brunt, especially since

¹¹⁵ See Harris (1984a) 13–58, (1984b) 89–113; North (1981) 7; Rich (1993) 43; Rosenstein (1999) 201.

¹¹⁶ Garrison work could sometimes still produce top-ups to a soldier's pay, but it rarely proved lucrative. See Sall., *Iug.* 44.1.

¹¹⁷ Toynbee (1965); Brunt (1971) esp. 269–77.

survey archaeology has revealed little evidence of any decline in small-holdings throughout this period.¹¹⁸ However, there must have been some reason for the build-up of discontent which preceded the attempted agrarian reforms of the radical tribunes Tiberius and Gaius Gracchus in the 130s and 120s, and it is plausible that this lay in the centuries-old pressures of military recruitment, capitalistic land demand and the ready availability of slave labour, especially since the scope for new colonization was much reduced after the Po valley and Liguria were settled in the early second century.¹¹⁹ The Gracchan reforms saw a redistribution of some public lands in Italy, and a law passed that from this point onwards demanded that the state pay to equip and arm all soldiers. However, this probably had more of an effect in harmonizing the arms and armour of the legions that had previously been quite different depending upon one's ability to purchase such items.

Whatever the truth may be regarding the 'manpower crisis', a much clearer reason for the dearth of recruits is that Roman wars were now visibly less profitable.¹²⁰ In 151, when the call went out for the dangerous and non-lucrative wars in Spain, not nearly enough men could be found and the Italian allies had to make up the numbers (*Polyb.* 35.4.1–8). Yet when the Romans were undertaking an expedition to conquer wealthy Carthage only two years later, volunteers abounded (*App. Pun.* 75). Thus, the perception of how much plunder each individual soldier would gain on a campaign was directly related to Rome's success, or lack thereof, in recruitment. The Italian allies were particularly badly affected, since not only were they being required to contribute more men to less profitable wars, but it was southern Italy which seems to have borne the brunt of the agrarian crisis.¹²¹ Allied agitation eventually led them to call for citizenship and then to rise up in the Social War of 90–88.¹²²

The reforms of Marius at the end of the second century solved the recruitment problem by abolishing the property qualification for service once and for all, thereby giving the legions access to the landless *proletarii*. These reforms, followed by the Social War and the extension of Roman citizenship throughout Italy, laid the foundations for the more fully professional army of the late Republic.¹²³ The age was characterized by renewed conquest, but also by the rise of individual strongmen, a process which transformed the relationship between war and the Roman state. The lucrative nature of provincial appointments, combined with the fact that Italy faced no significant threats from foreign invaders after the Gallic War of 104–101, helped drive aristocratic political competition to new levels of

¹¹⁸ Morley (1996) 103; Rathbone (1981) 18–19. ¹¹⁹ Cornell (1996) 97–113.

¹²⁰ See Dyson (1992) 23–55; Rich (1983). ¹²¹ Cornell (1996).

¹²² Gabba (1976). ¹²³ On the reforms of Marius see Gabba (1976) 9–19; Lintott (1994) 37–9.

ferocity. With more troops now available, this competition for offices eventually spilled over onto the battlefield in what has been compared to an internalization of Clausewitz's famous dictum, as warfare now became a continuation of domestic politics by other means.¹²⁴ Although there was nothing new in Roman aggression being driven by internal political factors, what had once united the Roman state now proved fatally divisive – a phenomenon which will be explored in Volume II as it echoed throughout the late Republic and the succeeding imperial eras.

¹²⁴ Brunt (1988) 1–92; Rosenstein (1999) 210.

CHAPTER 15

WAR AND SOCIETY

J. E. LENDON

I. INTRODUCTION

Peloponnese stretches three ambitious fingers towards the coast of Africa. Taenarum is the middle cape, and the longest, a terror to mariners despite the pleading temple to Poseidon set upon its rocky tip. And in the years after the death of Alexander the Great, this crag redoubled its evil fame as a hiring fair for mercenary soldiers.¹ Here that breed of ‘exiles, deserters, a congeries of evil-doers’ (*Isoc.* 8.44) awaited those who came to bid for their services, thrust into the sea as far from respectable hearths as geography allowed. And to Taenarum bidders came, for despite their dark reputation mercenaries were ubiquitous in the armies of the Hellenistic world: sometimes whole hosts were hireling, or nearly so; often mercenaries formed the corps in which most confidence was placed; rarely were they absent.

Yet a mercenary arriving in Latium would despair of his reward. In the middle Republic, when the Romans traded a parochial sway in Italy for lordship of the Mediterranean world, they employed mercenaries only rarely. This contrast between the Greek world and Rome betrays the dissimilarity of their military cultures, the different ways Greeks and Romans thought about the nature of military prowess. The Hellenistic Greeks, although they valued inborn courage, were inclined to regard soldiering as a learned craft, while the Romans, although they accepted that there was much to learn about warfare, were more apt to think that fighting displayed inherited virtue. This disparity of outlook is a matter of delicate shading rather than stark contrast, but it has consequences for the evolution of military technique, the harmony of society and the incidence of war.²

II. THE HELLENISTIC WORLD

That many in the Greek world were prepared to sell their swords requires little explanation. Greece had always been rich in poverty; frequent warfare

¹ Griffith (1935) 259–60.

² That Roman culture was more martial than Greek, and that this contributed to Roman expansion, is conventional: but note A. M. Eckstein’s attack on this view (2006) 118–243, more briefly (1997) and (2000) 867–71.



Figure 15.1 Third-century terracotta statuette of a mercenary, carrying a sword and other gear, a caricature type also common in contemporary comedy.

drove men from the land; the Greek genius for political tangle created tribes of wandering exiles. For centuries Greeks had served as mercenaries, both in the East where their reputation as infantry was high, and in the pay of Greek tyrants – especially in the West, in Sicily – who could not trust their own citizens in peace or in war.³ The question, rather, is why, despite the expense, dubious loyalty and bad repute of mercenaries, Hellenistic monarchs and Greek cities hired them in large numbers when they could have used their own people as soldiers (fig. 15.1).

The widespread use of mercenaries by mainland Greeks pre-dates the ascendancy of Macedon. In the Peloponnesian War Athens is found hiring

³ Parke (1933) 3–13.

barbarian specialists, light infantry from Thrace.⁴ The hiring of mercenaries with unusual skills – archers from Crete are perhaps the most prominent – remains common in the Hellenistic era, and does not present the same puzzle as the enrolment of outsiders to fight in ways that would have been familiar to citizens.⁵ As fourth-century Greece staggered towards its confrontation with Macedon the use of Greek mercenaries to supplement – or occasionally replace – citizen-soldiers became more common.⁶ Orators' railing at this development has been distilled into diagnosis of decline: moral enfeeblement or decadence, learned men said once; now they speak of the decay of civic patriotism or the expansion of the private sphere at the expense of the public.⁷

Shifts in the Greek outlook there may have been, but they explain no more than why citizens might have been reluctant to serve, not why hiring mercenaries was more appealing than enticing or compelling natives. Through the fifth century and beyond most Greeks believed that the state was defended by a hoplite army that included, and drew its ethos from, its social élite, 'good' men, to whose social superiority were ascribed *aretê*, excellence, *andreia*, courage, and so success on the battlefield.⁸ Mercenaries – 'murderers, mutilators, thieves, housebreakers' (Polyb. 13.6.4) – were the very opposite, destitute, criminals and exiles, the very type of 'bad' men, a perception hardly leavened by the occasional exiled aristocrat or gentleman adventurer, like Xenophon, in their ranks. How could such wretches, deficient by definition in *aretê* and *andreia*, possibly be victorious on the battlefield? The widespread use of mercenaries in the fourth century and the Hellenistic era necessarily implies a revolution in attitudes towards what made an effective warrior.

I. Military excellence as craft

Polybius identifies skill at arms as the characteristic excellence of the mercenary, and points to the technical skill of soldiers as a significant factor in battle.⁹ With programmes of public military training for young men, Hellenistic cities endorsed the importance of skill with sweat and treasure. At Athens from the late fourth century ephebes – young men in training – were instructed in hoplite fighting, the javelin, the bow and shooting the catapult ([Arist.] *Ath. Pol.* 42.3). Young men's games in many Hellenistic

⁴ Parke (1933) 17–18. Economically on fourth-century and Hellenistic mercenaries, Hamilton (1999) 180–3.

⁵ Griffith (1935) 236–63. ⁶ Burckhardt (1996) 76–153.

⁷ Compare, e.g. Grote (1846–56) xi.389–96 with Sinclair (1988) 59.

⁸ Van Wees (1995a); Pritchard (1998) 44–53. For the aristocratic ethos behind this conception, conveniently, Donlan (1999).

⁹ Polyb. 11.13.3, 15.13.1; cf. Diod. Sic. 19.109.1–2; Arist. *Eth. Nic.* 1116b.

towns had a military cast: they competed not only in running, wrestling and boxing, but with the bow and the javelin; even in fighting in armour and with the catapult. In the Hellenistic gymnasium expert teachers of these martial skills were provided.¹⁰ This is far from the amateur ethos of fifth-century Athens, where Thucydides could have Pericles boast that the Athenian army took no training and needed none – the natural courage of the free Athenian citizen would triumph – and where it could be seriously debated (in Plato's *Laches*) whether taking instruction in the technique of hoplite fighting from a paid professional was of any use.¹¹

It was not only skill with weapons that was acquired. Good order and physical courage find more mention in Polybius than skill at arms as decisive factors in battle. But good order – maintaining formation in all circumstances – was also understood to be a result of training and practice; Hellenistic games gave prizes for *eutaxia*, 'discipline'.¹² And physical courage could be conceived as a mixture of inborn quality and experience.¹³ To the degree that military excellence – skill, order and courage – was understood more as an acquired than an inborn quality,¹⁴ to that degree the mercenary could be conceived as a satisfactory replacement for, or superior to, the citizen soldier (Diod. Sic. 29.6.1). The widespread use of mercenaries depended on military quality being conceived less as inborn *aretê*, and more as learned craft, *technê*.

It was not only the common soldier whose excellence was conceived as a craft, but the excellence of generals as well. 'Tactics is the highest craft [*technê*] of war', and tactics was the disposition, movement and formation of troops upon the field of battle.¹⁵ Tactics and trickery – stratagems – were the two main intellectual divisions of Hellenistic generalship. In a battle opposing generals might first try to get the better of each other with stratagems, but if 'both outgeneral the other, as in a preliminary contest of intellect', and prove equal in that department, then they 'use different formations, vying with each other in this skill as well' (Diod. Sic. 19.26.9–27.1). If civic trainers were supplied to the young soldier-in-training, books were written for the commander, both comprehensive military manuals and (especially) books treating formations and offering lists of stratagems used by generals of old. Books descended from these genres survive from the Roman period: Asclepiodotus, Aelian and Arrian on tactics, Frontinus, Polyaenus and Julius Africanus on stratagems. But practical experience was better than reading, and at least one Hellenistic general is reported to have

¹⁰ Launey (1949–50) II.815–35; Lendon (2005) 141–3. Cf. Plut. *Phil.* 7.4.

¹¹ Thuc. 2.39; Pl. *Lach.* 182e–184c; see ch. 5 in this volume, p. 134.

¹² Polyb. 10.23.1–9; games: Crowther (1991b). ¹³ Polyb. 6.48.3, 52.10.

¹⁴ Polyb. 1.6.6, 2.20.9, 3.35.8, 89.5; Diod. Sic. 19.30.5–6.

¹⁵ Quoted Plut. *Phil.* 14.5; cf. Polyb. 9.20.9.

taken employment as a mercenary commander – on Crete, the very home of diabolical stratagems – to keep up his skills.¹⁶

The Greeks had always admitted the existence of skills, *technai*, in which anyone could be trained. But in the classical Greek city it was vulgar trades – that of the potter, of the sandalmaker – that tended to be conceived in this way. *Aretê*, prowess in noble activities – politics and warfare in particular – tended rather to be ascribed, viewed as the nature or inheritance of man or city: natural ability might merely (even this was disputed) be augmented by training. To treat all warlike accomplishments, even the planning of generals, fundamentally as a matter of training or experience – as a *technê* – marks a shift from older thinking, or at least the victory of an advanced strain of thinking, which can be seen in Thucydides and Plato and Xenophon, over that of their traditionally minded contemporaries.¹⁷

In the fifth century the idea that skills suitable for upper-class persons could be envisioned as *technai* is associated especially with the sophists, itinerant intellectuals-for-hire who were ambitious to teach skills that had traditionally been thought inborn, and who were thinking deeply about whether men acted as they did because of their nature, *physis*, or human convention, *nomos*. So there arose a distinction between socially acceptable (military and intellectual) and *déclassé* (banausic) *technai*.¹⁸ In the late fifth century teachers of military skills to the sons of the rich – military sophists – appear in Greece; in the fourth, military experts become common, and begin writing manuals. The question of whether to employ such men is the pretext of Plato's *Laches* and arises for discussion in Xenophon's *Cyropaedia* (1.6.12–14). Sophistic teaching can explain why generalship came to be understood as a craft, and why formations and stratagems – the parts of command most easily reduced to theory – were emphasized. The parallel is to the contemporary formalization of training in rhetoric: in both cases teaching came to emphasize what could best be taught rather than what worked best in the real world, and students were left to hammer reality to a matching shape. But even so this new vogue in aristocratic education, limited to a tiny handful of the rich, can hardly explain why the business of the common soldier in the line came to be understood to be as much *technê* as *aretê*.

Perhaps mercenaries were not merely the beneficiaries of this change in outlook, but were in part its creators. The Ten Thousand trod a deep-rutted path east in the pay of a Persian dynast. But when they returned from their miraculous march to the Black Sea – having demonstrated their quality empirically under the most exacting circumstances – they were the first large

¹⁶ Plut. *Phil.* 13.3–6. On Hellenistic command, see Beston (2000); Lendon (2005) 143–52.

¹⁷ Thuc. 2.86–9; Pl. *Resp.* 374b–d; Xen. *Cyr.* 2.1.22–9, as against Arist. *Eth. Nic.* 1116b.

¹⁸ Compare Diod. Sic. 20.63.4 with 26.1.1; cf. Arist. *Pol.* 1337b.

group of Greek mercenaries to be hired by a mainland Greek state, Sparta.¹⁹ The Spartans had hired Greek mercenaries in small numbers during the Peloponnesian War, and had also sent helots out to fight their battles.²⁰ These developments were predictable, because Sparta had the only Greek army all of whose soldiers took regular training during the fifth century.²¹ The Spartans were the first to think military excellence acquired, rather than inborn: ‘man differs little from man by nature, but he is best who trains in the hardest school’, as Thucydides has a Spartan king say.²² So the Spartans were the first to view fighting as – at least in part – a *technê*. As Xenophon put it, ‘you’d think everybody else mere improvisers in soldiering, and the Lacedaemonians the only artisans (*technitai*) of war’.²³ And this Spartan conception – fighting as *technê* – proved successful in practice: Spartan victories in the fifth century, her triumph in the Peloponnesian War, and her ascendancy thereafter, produced trained corps in imitation, most famously the Sacred Band at Thebes.²⁴ In the fourth century Thebes defeated Sparta, and the trained army of Macedon defeated all: thus was the Spartan insight spread and reinforced.

2. *Consequences*

The conception of warfare as a collation of crafts had, it is attractive to suppose, a number of historical consequences. A first, strictly military, was to allow more rapid innovation in military technique. By modern standards military methods changed extremely slowly in antiquity – 1914–18 saw more innovation than any ancient century – but some periods saw more change than others, and the Hellenistic centuries were an era of comparatively rapid evolution.

Where a dominant method of fighting – classical Greeks fighting in the phalanx, for example – enacts a cultural ideal, like the brave immobility of the citizen-soldier, innovation is slow. Changes in ways of fighting are resisted on cultural grounds, as when the Athenians used their heavy infantry, their ‘steady hoplite foot soldiers’, as marines:

they are used to jumping ashore frequently and running back fast to their ships again, and it does not seem shameful to them not to die bravely standing their ground against the enemy onset, and fair excuses are ready to hand for them when

¹⁹ Cartledge (1987) 318–21. ²⁰ Mercenaries: Parke (1933) 15–16; helots: Talbert (1989) 25.

²¹ Arist. *Pol.* 1338b; there are traces of élite – and perhaps trained – units in other fifth-century armies: see ch. 5 in this volume, pp. 144–5, and Pritchett (1971–91) II.221–2.

²² Quoted Thuc. 1.84.4; cf. 2.39.1; Lendon (2005) 106–14.

²³ Quoted Xen. *Lac.* 13.5; cf. Plut. *Ages.* 26.4–5. Spartans were forbidden, of course, to practise any banausic crafts, Plut. *Lyc.* 24.2; cf. Hdt. 2.167.

²⁴ Pritchett (1971–91) II.221–4; on the influence of Spartan ways in Greece after the Peloponnesian War: Rawson (1969) 33–55.

they cast away their arms and flee in what they call ‘not shameful flight’. Such phrases are what usually result from using hoplites as marines, and rather than being worth ‘a thousand praises’ they deserve the opposite. For one should never accustom men to bad habits, especially not the best part of the citizens.

(Pl. *Leg.* 706c–d)

The view of fighting as craft, by contrast, is a weaker sea-anchor to change: individual military crafts are less firmly rooted in the wider culture, and there is less resistance to abandoning or modifying them. It had been a great thing when Athenian cavalrymen were willing to serve as hoplite marines at Salamis (Plut. *Cim.* 5.2–3); it had been an even greater thing when prosperous Athenians had been willing to row in the Athenian fleet at the battle of Arginusae (406).²⁵ In classical Athens how a man fought was an important part of who he was, an expression of standing not lightly to be sacrificed. The soldiers of Philip V’s Hellenistic phalanx, by contrast, easily adapted to rowing or even digging (Polyb. 5.2.5).

So in Hellenistic times it was possible – and common – to retrain soldiers and existing units to fight in a different style. Philopoemen reformed the infantry of the Achaean League on the Macedonian model (Plut. *Phil.* 9.1–3). The generals of Ptolemy IV could take a variously armed body of mercenaries, divide them by age and origin, and retrain them ‘paying no attention to how they were armed before’ (Polyb. 5.64.1). Others could learn the tactics of the cavalry of Tarentum in southern Italy, and so ‘Tarentine’ cavalry could appear all over the Hellenistic world.²⁶ The large shield of the Gauls could be adopted and fighting with it even become a contest in Hellenistic games.²⁷ When Pyrrhus fought in Italy his dispositions seem to have been influenced by Italian tactics, and his revised tactics in turn seem to have influenced tactics in Greece. Certainly Hannibal cast away the Greek-style weapons his army carried to Italy and adopted Roman ones (Polyb. 18.28.9–10). As the states of the eastern Mediterranean had more and more contact with Rome, they experimented with Roman ways of fighting; it has recently been argued that in the 160s the infantries of both Ptolemaic Egypt and the Seleucid empire were systematically reformed along Roman lines, and that by the first century BC, when Rome put an end to Hellenistic armies, they were largely equipped and fighting in the Roman style.²⁸ Conceiving military skills as crafts decoupled specific methods of fighting from the ideals of their practitioners, and made them more amenable to change.

²⁵ Xen. *Hell.* 1.6.24; cf. Thuc. 3.18.3.

²⁶ Griffith (1935) 241–51 cf. Lendon (2005) 153–5.

²⁷ Polyb. 5.53.8, 10.29.6; games: Launey (1949–50) II.817–20.

²⁸ Sekunda (2001b), and esp. 117–24 for Roman influence before the 160s, and 176–9 for the first century BC.

Second, and more broadly significant, it may be that to conceive military skills as *technai* played a role in social unquiet. The Greeks had never wanted for reasons to divide into parties and murder their neighbours, but these reasons had changed, or at least multiplied, over time. If in the fifth century oligarchs killed democrats and democrats killed oligarchs, if helots and Spartans slaughtered each other, and if haters and lovers of Athens fell to blows, it appears that in fourth-century and Hellenistic Greece a greater share of the pervasive unrest is to be attributed to the economic resentment of the free poor for the rich, of debtor for creditor, and of landless for landed.²⁹ Yet changed economic circumstances are not a fully adequate explanation: in the fifth century the social gulfs were vast enough, and the misery of the poor abject enough, to justify any amount of strife. But fifth-century Greek society was aristocratic in tenor. The poor looked upon the rich with envy, but also with respect as their natural betters: 'We had our generals from the greatest houses, first in wealth and birth, and we prayed to them like gods' (Eup. fr. 103.4–6). A consequence of this attitude was the long sequence of aristocratic politicians in democratic Athens. This habit of deference depended in part on a set of intellectual heirlooms: the assumption that *aretê* was heritable – 'the *aretê* of those who are well born shows in their children'³⁰ – and the Homeric bundling of all ascribed *aretaî* together with wealth and birth. To be rich and well born, then, carried with it the presumption that one was also better.³¹ Yet in the fourth century, at least at Athens, deference tended to decay. Respect for the claims of wealth and birth was unpredictable in the Athenian courtroom: a speaker might argue that the rich and well born were usually quite worthless,³² and a poor soldier might regard his out-of-shape rich comrade with contempt (Pl. *Resp.* 556d–e). To envisage military skill as *technê* may have played its part in tarnishing aristocratic glamour, for to understand martial prowess thus was to untie the Homeric bundle of *aretaî* and shake out its largest element. If prowess in war was not an inborn virtue but a set of crafts that anyone could learn, the powerful lost much of their right to respect: viewed no longer as natural superiors, they may have come to be viewed as enemies instead.

Military excellence as craft could also undermine civic harmony by reducing the dependence of the rich citizen upon his neighbours. If the artisan of war – the mercenary – was as effective a soldier as the citizen, the ordinary man was no longer necessarily his wealthy brother's potential shield-fellow (Pl. *Resp.* 556d). As the reliance of leading citizens upon their

²⁹ Fuks (1984a). ³⁰ Quoted Eur. fr. 232; cf. Arist. fr. 94 Rose. ³¹ Donlan (1999) 113–53.

³² Ober (1989) 192–259; cf. Dover (1974) 91–2. There had, of course, been plenty of doubts in fifth-century Athens as well: Donlan (1999) 137–9. Speaker: Arist. *Rh.* 139ob–1391a.

humbler townsmen declined, so might their need to treat them with tact. In a world of mercenaries the rich could defend the city with their treasure, and demand power in exchange. Perhaps this is one reason that in the Hellenistic era democratic regimes commonly evolved into oligarchies, *de facto* or *de jure*.³³ And to fund expensive mercenary contingents the rich might increase their pressure on the poor.

The old conception of military excellence as *aretê* tended to bind a Greek city together: the poor admired the rich, and the greater needed the lesser. Military excellence as *technê* cut at both roots of that concord. It is against this troubled background that the military training of young men in Hellenistic cities should perhaps be understood. It is sometimes supposed that public military training – in the Hellenistic gymnasium or *ephebeia* or both – was universal among young male citizens. But some suspect that it was in practice confined to the upper strata of society.³⁴ Certainly the Athenian *ephebeia*, even if originally universal, soon became optional and socially élite,³⁵ and the well-known gymnasiarchal law of Beroea excludes tradesmen from the gymnasium, a gymnasium in which the presiding official was to ensure that the ephebes practised their archery and javelin-throwing every day.³⁶ No doubt it was in the interest of the city as a whole to have citizens trained in war. But in a world where rich and poor increasingly regarded each other with suspicion, the warlike training of the sons of the rich assumes a more sinister aspect. It may reflect at least the anxiety of the rich to reclaim part of their ancestors' immemorial legitimacy: of old, great men had basked in the easy assumption that they were best in peace and war, but the Hellenistic rich were obliged to practise the crafts of war to reclaim by artifice the respect that had been rendered, by nature, to their forebears.

Finally, conceiving the use of weapons, and generalship, as crafts had the potential to be a structural cause of war. Hellenistic dynasts were heirs to the martial tradition of Alexander the Great:³⁷ Alexander had conquered his realm with the spear and the might of his successors depended in part on their too being conceived as warrior kings, able both to command in war and to fight hand-to-hand in person, as Alexander had.³⁸ Macedonian soldiers 'were wont of old to deem him kingliest who was best in arms'.³⁹ But this model of kingship did not in itself compel the kings to make war. For Hellenistic kingship had any number of ascribed qualities – qualities that ruler and ruled conspired to accept that the king possessed unproven: the king was divine, but never obliged to throw thunderbolts to prove it; the king was the embodiment of the law; the king was the benefactor

³³ De Ste Croix (1981) 300–26. ³⁴ E.g. Ma (2000) 347. ³⁵ Pélékidis (1962) 169.

³⁶ For an accessible text, Gauthier and Hatzopoulos (1993); English translation, Austin (1981) 203–7.

³⁷ Plut. *Pyrhh.* 8.1; Polyb. 5.102.1. ³⁸ Gehrke (1982); Austin (1986) 457–9.

³⁹ Quoted Plut. *Demetr.* 44.5; cf. Polyb. 11.39.16; *Suda s.v. basileia*.

of all.⁴⁰ Martial excellences could easily have been ascribed qualities as well, assumed to be in kingship's chrestomathy of merits and so needing no proof; the military ability of some Romans of high family in the late Republic was conceived in this way, or so Sallust had his Marius complain (*Iug.* 85). But while the divinity of Hellenistic kings was assumed, kings felt a powerful need to take training at arms and prove their military ability by fighting actual wars, like the restless campaigns of Pyrrhus and Demetrius Poliorcetes.⁴¹ Why? Was it in part the definition of command in war as a set of learned crafts that barred it from the comfortable realm of a purely ascribed quality – inherited or god-given – and compelled Hellenistic kings to take the field to prove it? Was it in part the classification of actual hand-to-hand fighting as a set of skills that compelled Hellenistic kings to throw themselves into the heat of the action at the head of their troops,⁴² or to seek out single combat with the enemy leader,⁴³ as lesser generals also did,⁴⁴ despite the terrible dangers to man and state that the king's hazarding himself posed (Polyb. 10.32.7–33.6)? Did kings have to show they could fight because fighting – unlike godhood, say – was understood to be a *technē* that anyone could practise?

At the same time, for war-making to be imagined as a collection of crafts implied that the king's chosen wars would not necessarily command the passion of all his subjects. The old ascribed military virtue – ascribed to man, or family, or class or city – easily flattered all those to whom it was ascribed to vindicate it in war. But conceiving fighting as craft was part of the process of the 'civilianization' of Greek society, the growing distinction – evident in the fourth century and tending to increase over time – between those who practised civilian and military functions, be they mercenaries or, more usually, citizen professionals.⁴⁵ The boastful captain, brought on stage for mockery in the Greek New Comedy (and so in Roman comedy), emphasizes the extent of this cultural divide. Over time even different regimens of exercise and diet were recommended for the civilian athlete and the soldier (Plut. *Phil.* 3.2–4). The wars of fifth-century Greece were the wars of the whole citizenry; the wars of the Hellenistic kings were the wars of their hosts of martial craftsmen. For the rest, the kings' wars crashed terrifying overhead like the Wild Hunt in its career.

If in the Hellenistic period the idea of military excellence as an inborn virtue tended to lose ground, among Greek-speakers, to the notion of such excellence as a learned craft, the former concept – despite its diminution

⁴⁰ Billows (1995a) 56–80.

⁴¹ Training: Polyb. 22.3.8–9; Plut. *Phil.* 13.3; wars: esp. Plut. *Pyrrh.* 13.1, 14.2–8, 22.1.

⁴² Polyb. 10.49; Livy 27.32.4–6, 31.24.11–17; Plut. *Pyrrh.* 22.6, 34.1–2.

⁴³ Plut. *Pyrrh.* 7.4–5, 24.2–3. ⁴⁴ Plut. *Phil.* 7.6–7; Polyb. 11.17–18; Livy 26.39.15–17.

⁴⁵ Polyb. 24.11.2; Plut. *Phoc.* 7.3; *Pyrrh.* 16.2. Cf. the growing distinction between military men and civilian politicians in fourth-century Athens, Hansen (1989b) 17–21.

never extinct – found a new significance because of its age-old role in establishing the relative military quality of ethnic groups.⁴⁶ Greeks had always been contemptuous of the martial potential of non-Greeks, but before the conquests of Alexander they had never had at their disposal large numbers of non-Greeks whom they could, if they chose, enroll as soldiers. Yet Greek and Macedonian ascription of superior inborn prowess to themselves ensured that Hellenistic kings did everything they could to recruit as many ethnic Greeks and Macedonians as possible for their armies. This encouraged the use of Greek mercenaries – suspicion of mercenaries never died, but even bad Greeks were better than barbarians – and enforced upon the kingdoms elaborate measures for the care and breeding of scarce Greek and Macedonian soldiers, in an attempt to maintain European standing armies, a stage beyond the *ad hoc* employment of mercenaries. In Egypt this need manifested itself in a system of land-grants to soldiers,⁴⁷ in Asia Minor and further east in chains of military colonies in which colonists from Greece enjoyed lands in exchange for service.⁴⁸ Only slowly and reluctantly, in the face of an absolute scarcity of Greeks and Macedonians, did Hellenistic monarchs yield to the necessity of training their native subjects for the phalanx, and the subsequent revolt of the native Egyptian troops with whom Ptolemy IV had won at Raphia in 217 did not encourage repetition of the experiment (Polyb. 5.107.1–3). In the sandy penetralia of Alexander's empire all Greeks and Macedonians were nature's noblemen and war's adepts – at least compared to their subjects: among Greek-speakers themselves excellence was pursued by practice and training, as a craft.

III. THE ROMANS

By the third century Rome was a full member of the Hellenistic cosmos, trading and treating and fighting with Greece, the Hellenistic kingdoms and the Hellenized maritime power of Carthage. And if, unlike the Greeks and Carthaginians, the Romans employed mercenaries rarely,⁴⁹ this was hardly for want of the treasure to pay them: by 300 Rome dominated Italy, and could have laid her under tribute of money. In fact the Romans did not employ mercenaries for a deeper reason: they saw no cause to pay others to do something they yearned to do themselves, and they had allies who shared their outlook. For centuries Romans of all classes – and many of

⁴⁶ E.g. Polyb. 1.2.6, 2.38.2–3, 5.44.7, 6.52.10; Diod. Sic. 17.III.4, 19.101.1.

⁴⁷ Lesquier (1911); and economically on Hellenistic military settlements, Hamilton (1999) 177–80.

⁴⁸ Billows (1995a) 146–82.

⁴⁹ Griffith (1935) 234–5 gathers the clear instances, but there are other cases, in which the status of the Roman *auxilia* is unclear, where they might well be mercenaries, e.g. Livy 23.46.6–7 (215 BC), 24.47.11 (213 BC), 26.10.5 (211 BC), 27.8.15 (209 BC), 27.38.11 (207 BC), 28.20.1 (206 BC). Rarity of Roman use of mercenaries is noted by Diod. Sic. 29.6.1; Livy 24.49.8.

their Italian allies – felt a powerful urge to go to war in order to demonstrate their courage, their *virtus*.

i. Military excellence as virtue

The Romans never doubted that there was much that could be learned about fighting and commanding in battle, but early Romans did not conceive of military excellence primarily as a set of learnable skills. Success in battle was primarily the consequence of the inborn human quality that Romans most admired, *virtus* or masculine courage (from which, eventually, the English word virtue). *Virtus* is analogous to the Greek *andreia*, but is a value far more basic to the Roman sense of self than Greek *andreia* had been to Greek identity in historical times.⁵⁰ Sings a wife in a Roman play:

I want my man to be cried as a victor in war: that's enough for me. *Virtus* is the greatest prize; *virtus* comes before everything, that's certain: liberty, safety, life, property and parents, homeland and children it guards and keeps safe. *Virtus* has everything in it: who has *virtus* has everything good.⁵¹

Virtus was proved in battle, and ideally by young men in single combat (Polyb. 6.54.4). The Romans imagined that the practice of single combat was handed down hallowed from their most remote antiquity: Romulus, the very founder of their city, was the first to win the honour of the *spolia opima*, a dedication made by a Roman leader who killed the enemy leader with his own hand. And seeking out single combat was a regular part of Roman warfare in historical times. The late third-century Roman general Marcellus fought many such fights, and the consul of 202, Marcus Servilius, killed no fewer than twenty-three men in separate single combats.⁵² Victors in single combat hung the armour of their victims on their houses, as 'witnesses to their bravery'.⁵³ Under the Roman law such spoils could not be removed even if the house were sold (Plin. *HN* 35.7). King Pyrrhus of Epirus was a famous one-on-one fighter in the Macedonian royal tradition. But when fighting the Romans, after an attack upon his person by an Italian officer, even Pyrrhus wearied: he gave his cloak and armour to a friend who was promptly killed by another Italian (Plut. *Pyrrh.* 16.8–17.2).⁵⁴

⁵⁰ Polyb. 31.29.1; McDonnell (2006); McCall (2002) 83–96.

⁵¹ Plaut. *Amph.* 648–53, long recognized as a Plautine addition to his Greek original: Genzmer (1956) 123–5.

⁵² Oakley (1985). ⁵³ Quoted Polyb. 6.39.10; see Rawson (1991a).

⁵⁴ Since Hellenistic generals and monarchs sought out single combat as well (above nn. 43–4) can this practice be used to distinguish Roman martial culture from Greek? Eckstein (2006) 198–9 thinks not. But Greek single combats (which are fewer, and individual Greeks fighting more than a handful are unknown) mostly seem to involve supreme commanders: Hellenistic single combat was entwined with leadership, proving a leader worthy of obedience. At Rome single combat was a *rite de passage*.

The Roman sense that *virtus* was inborn was emphasized by their scornful treatment of their own soldiers who fled in battle or were taken prisoner. Romans taken prisoner in war lost their citizenship. Those who survived the blood offering of Cannae by flight were banished to Sicily and heaped with obloquy, despite Rome's need for men in that hard hour.⁵⁵ Those who surrendered to Hannibal the Romans refused to ransom, preferring to free and enrol slaves, which was more costly than paying Hannibal for the captives.⁵⁶ 'No state has ever held prisoners of war as more worthless than ours', Livy has an envoy from the prisoners admit to the Senate (22.59.1). Against the captives' plea for ransom Livy has the stern voice of Roman tradition inveigh, 'Fifty thousand citizens and allies lay fallen around you on that day! If so many examples of *virtus* did not move you, nothing ever will!' (22.60.14). Who has once failed in *virtus*, an innate quality, will do no better in future. The Greeks usually ransomed their prisoners: to them military excellence was in some sense exterior to the soldier, an acquisition. Greeks thought that bad craftsmen could be retrained in their craft, Romans that nothing could be done with born cowards.

The Roman cult of *virtus* manifests itself in the degree to which Roman society was adapted to the making of war.⁵⁷ The Roman religious calendar bristled with military festivals; the city of Rome was crowded with temples vowed to the gods in time of war and pompous structures built by victorious generals with the spoils of victory. Military decorations were worn in religious processions in the city (Polyb. 6.39.9). A coward in battle was mocked at home by his own relations (Polyb. 6.37.13). To run for political office a Roman had to have served in ten campaigns: for the first five at least he served in the ranks – of the cavalry if he was rich enough to have political ambitions – and only thereafter could he be elected an officer, a military tribune. It was during these youthful years that an ambitious Roman sought single combat, a famous single combat – recalling that of Manlius Torquatus or Valerius Corvus – being a launching pad to a meteoric political career (Plut. *Marc.* 2.1–2). Rome's aristocracy was narrowly military: until the late Republic only fighting brought advancement to an ambitious young Roman of high family. The sons of great Romans could not forswear violence and achieve eminence as jurisconsults or rhetoricians or bishops, as their descendants did: their choice was the sword or the shadows. Even the reputations of Romans known for accomplishments other than war – like Cato the Elder, say – were undergirded by military success (Plut. *Cat. Mai.* 1). A great Roman was a warrior first, and a politician or an orator or a lawyer only second. The glory of military accomplishment

⁵⁵ Rosenstein (1990) 102–4.

⁵⁶ Polyb. 6.58; Livy 22.57.11–61.2.

⁵⁷ For what follows see Harris (1979) 9–53, and Hopkins (1978) 25–37; but Rich (1993) adds important nuance and Eckstein (2006) 191–229 argues that Rome was not exceptional in this respect.

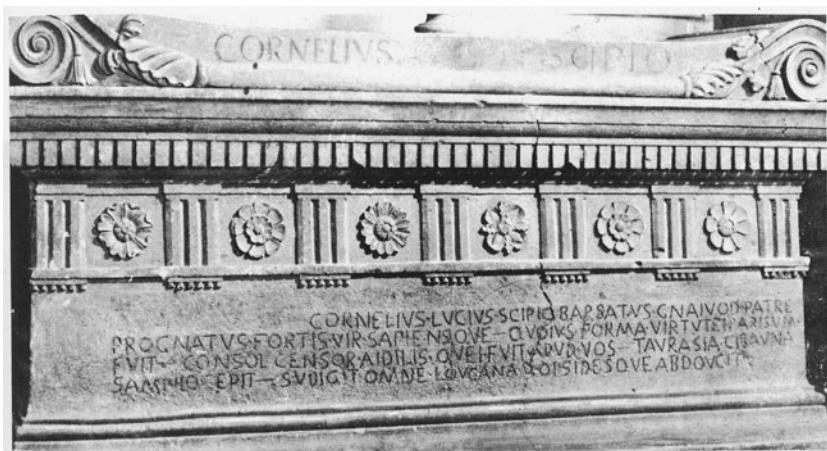


Figure 15.2 Sarcophagus of Lucius Cornelius Scipio Barbatus, consul of 298 BC, with an inscription dating to c. 200 BC which illustrates the competitiveness of the Roman élite: the text boasts that he 'captured Taurasia and Cisauna in Samnium, subdued all Lucania and brought back hostages'.

was indispensable to election to high office: candidates showed their honourable scars to the voters.⁵⁸ The ultimate reward of a successful political career was the consulship (fig. 15.2), and with it command of an army. And a successful consulship was crowned with a triumph, celebrating a bloody victory.

Their corporate behaviour lets us see the Romans beneath the highest classes following the same path of *virtus* as their superiors. Rome of the mid-Republic went to war nearly every year.⁵⁹ The Roman people voted wars in assembly – the *comitia centuriata*, itself a body with military origins – and no case is known of its refusing a war the Senate wanted.⁶⁰ Individuals might have resisted the call to arms with impunity, since the Roman state was quite incapable of compelling the unwilling to serve in the army, but Roman men did not (*Polyb.* 6.26.4). When there was widespread resistance to the call-up in 151 Polybius reports that this was new to Roman experience.⁶¹ And comparison of the size of Roman armies to census numbers reveals that the Romans were able to mobilize a remarkably large proportion of their men for war. From 200 to 168, when the Republic faced nothing we would accept as a threat to its security, nearly one out of six adult male citizens was in the field every year. During the crisis of the Second Punic War

⁵⁸ McCall (2002) 91–5. ⁵⁹ Harris (1979) 9–10, 256–7; Oakley (1993) 14–16.

⁶⁰ Harris (1979) 41, 263; Gabba (1984). The people were initially unwilling in 200, but the consul talked them around, *Livy* 31.6.1–8.1.

⁶¹ *Polyb.* 35.4.2–6. He was not quite right, but close: Rich (1983) 316–18.

(218–201) the proportion had been higher – more than a quarter. Apply these figures to individuals and their terrible significance becomes clear: to field one-sixth of the adult male citizens, the average male citizen must spend one sixth of his adult life in the army (at least during campaigning season).⁶² The conclusion to be drawn is that middling and even quite humble Romans – for the absolutely destitute were excluded from the army in the mid-Republic – were as eager to fight as their betters. If the aristocracy wore gold rings to signal their status, the commons wore iron rings as an emblem of their *virtus*.⁶³ *Virtus* was as central to their identity as it was to that of the noble families.

All ancient states were far more bellicose – they devoted proportionally far more of their attention, energy, time and resources to war – than contemporary democracies. Yet even among ancient states Rome of the middle Republic seems to stand out for its warlike culture. When and why did Rome become so singularly concentrated upon war? At any rate before 338, when Rome's victory in the Latin War set the stage for her rapid march to dominate Italy. Had Rome once been a more ordinary place – as some think – driven to a bloody way by the alarms of the previous century and a half?⁶⁴ This is to see Rome in the shadow of Sparta, where the terrible Messenian Wars are supposed to have made a glade of the muses into a barracks-state. Or did Rome's domestic politics – in particular the conflict of the orders, which opened offices and commands previously the domain of a hereditary caste to a wider circle of the wealthy – exacerbate aristocratic competition and so encourage war?⁶⁵ Or was Rome driven to perpetual war by her alliance system?⁶⁶ We know too little about Rome in the fifth and early fourth centuries ever to be certain.

2. Consequences

One consequence of envisaging warfare as a contest in *virtus* may have been to discourage rapid innovation in one realm of military technique. Polybius praises the Romans for being very quick to embrace new methods of fighting, and instances their adoption of Greek cavalry equipment (Polyb. 6.25.3–11). But the way the infantry of the middle Republic fought battles on land – in the array we call the manipular legion (see ch. 11 in this volume, pp. 349–51) – is a striking exception to this flexibility. We do not know exactly when the Romans adopted the manipular system: probably some time in the fourth century. But they were still using it at the turn of the first century: they fought in this way, with some small adjustments, for

⁶² Rosenstein (1999) 206; Hopkins (1978) 31–5.

⁶³ Livy 22.12.1–2 vs. Plin. *HN* 33.9.

⁶⁴ Raaflaub (1996) contra Eckstein (2006) 229–37.

⁶⁵ Harris (1990) 505–6; Hölseskamp (1993).

⁶⁶ Momigliano (1975) 45–6; and now Cornell (1995) 365–6.

two centuries at least. Such a lack of change is a puzzle, given the different peoples – with their different styles of fighting – the Romans faced in battle over those hundreds of years. Might not a people as adaptable as the Romans have modified or abandoned the formation after defeats by the Macedonian-style phalanxes of Pyrrhus and Hannibal, and some very narrow victories in Greece?⁶⁷

One reason for the longevity of the manipular legion is that it responded to a cultural imperative: the pressure to prove *virtus* in single combat left its mark on Roman tactics. The Roman cavalry often dismounted to fight on foot, so that its members – the sons of Rome's great families – could fight single combats.⁶⁸ The manipular array accommodated the identical desire of Rome's less superb youth.⁶⁹ We may never fully understand the working of the manipular legion. But we know that the youngest soldiers fought in a swarm in front of the formed array of the maniples. These *velites* often wore a wolf skin on their heads, or some other distinguishing mark so that their brave deeds could be recognized (Polyb. 6.22.3). As for the decorations given to Roman soldiers, for wounding and stripping or killing a foe,

these are not given to a soldier if in the formed array . . . he should wound or despoil one of the enemy, but to those who in the skirmishing or in similar circumstances in which there is no need to engage in single combat, have voluntarily and by choice placed themselves in danger.

(Polyb. 6.39.4)

The *velites* were placed in front of the array, then, partly so that the boldest of the young men could distinguish themselves in the ancestral fashion by seeking out single combat with individual enemies.⁷⁰ This is why they needed to be identifiable, and why they, rather than the soldiers in the array behind them, were awarded decorations. The *velites* performed two different roles: the first parallel to Greek skirmishers, harassing the foe before the onslaught of the formed infantry and forming a fast-moving body that could be sent on independent missions. To fulfil this role any Roman soldier, of whatever age, who could not afford the equipment of the formed array, was enrolled in the *velites* (Polyb. 6.21.7). But the young warriors – however wealthy, as long as they could not afford to serve in

⁶⁷ Even after the Roman victories over the phalanx in the early second century, it seems – since Polybius had to argue the opposite (18.28.5, 31–2) – that most Greeks thought the phalanx superior to the manipular system, and attributed Roman success to fortune.

⁶⁸ Polyb. 3.115.3; McCall (2002) 69–72 on the Roman custom of dismounting. The Roman cavalry also fought single combats mounted, and many recorded Roman single combats are on horseback, McCall (2002) 84–5; given our sources, it is naturally the single combats of the highest class that we hear about.

⁶⁹ For this interpretation of the manipular array, see Lendon (2005) 178–91.

⁷⁰ In a confused passage (8.8.6) Livy describes the first line of the manipular array, including the skirmishers, as the *florem iuvenum*, the 'flower of the youth'.

the cavalry – fought in the *velites* also as an expression of Roman ideals; and the highborn cavalry might dismount to fight on foot alongside the *velites* (Livy 31.35.5). The articulation of the rest of the manipular array into lines according to the age of the warriors (Polyb. 6.21.7) so that the younger fought in front, also reflected the need for young Roman men to display their *virtus*, to compete with their elders who had proved theirs in campaigns long ago.⁷¹ The manipular legion was a way of fighting embedded in the martial culture of the Romans. Traces can be seen of intense resistance to another aspect of the Roman way of war that seemed contrary to *virtus*: the use of strategy and trickery in warfare,⁷² which manifested itself most clearly in the opposition to Fabius Maximus' strategy of delay against Hannibal, denounced as cowardly and cast jeeringly aside by the Romans who rushed to slaughter at Cannae.⁷³ Nor did the Romans all learn their lesson there: eight years after Cannae the Senate still puzzled as to where it could find cautious generals (Livy 27.33.9–11). No surprise, then, that the manipular array lasted so long: it could hardly be changed until the cultural need it met weakened, when the ambitions of young Romans shifted in the late Republic.

If the Hellenistic conception of military excellence as craft had the potential to be socially disruptive, the Roman reverence for *virtus* might contribute to social cohesion. *Virtus* was an ideal shared between high and low and played a part, as a common core value, in the remarkable consensus of the Romans of the mid-Republic. All praised *virtus*, all agreed that it should be rewarded.⁷⁴ *Virtus* was expected to be hereditary, and the young men of the ruling families vindicated that claim with their blood on a hundred stricken fields.⁷⁵ So the nobles excelled in a quality that the commons admired, and as a result the nobles were not merely richer, but seemed better – like Greek aristocrats they called themselves ‘the good’ – and the commons regarded them with deference. At the same time the contest of *virtus* was open to all Romans who served in the army: not just to the richest, but to all but the poorest, who were not allowed to serve. The swarms of the *velites*, again, their fighting the particular arena of *virtus*, were constituted of the young and the least well-off.

On a practical level the societal urge to demonstrate *virtus* produced brave armies (Polyb. 1.64.6), large armies, and armies that could be reconstituted year after year even in the wake of bloody defeats, as during the Second

⁷¹ In the same confused passage (8.8.8) Livy describes the *triarii*, the furthest back and oldest line, as ‘veterans of tried valour’ (*spectatae virtutis*), and the *rorarii*, an older name for the *velites*, as *minus roboris aetate factisque*, ‘weaker in age and deeds’, i.e. young and yet to prove themselves.

⁷² Polyb. 13.3.7, 36.9.9; which is not to say that there were not Romans who advocated trickery: Wheeler (1988c); Lendon (2005) 193–211; the Romans were conflicted.

⁷³ Polyb. 3.89.3, 90.6, 94.8, 103.3–4; cf. 3.80.4. ⁷⁴ Cf. Diod. Sic. 31.6.

⁷⁵ Hereditary: e.g. *ILLRP* 316; Plaut. *Pseud.* 581; and implied by the provision in the Twelve Tables that the military decorations of a son may be worn by his father: Cic. *Leg.* 2.60 = Crawford 1996: 708–10.

Punic War. Roman manpower poured forth like a fountain (a Greek might observe); fighting the Romans was like fighting the hydra, cut one head off, and others sprung forth in its place.⁷⁶ Roman opinion demanded that wars that were going badly should not be settled, but fought more fiercely.⁷⁷ The consequence was eventual victory over all the foes the Romans faced during the middle Republic. And in the short term victory reduced the tension between rich and poor – a salient characteristic of Rome in the fifth century – as the confiscation of Italian land made it possible to settle poor Romans comfortably on conquered farms.⁷⁸ Eventually the unequal distribution of the treasure of conquest was to have terrible consequences – the rich, who got more of it, were moved to push the poor from their land – and the resulting agrarian crisis is often thought to be a central cause of the fall of the Republic. But before the Romans choked on the surfeit, the bounty of conquest bought their nation centuries of social tranquillity.

Finally, as well as contributing to social stability, the Roman cult of *virtus* was a structural cause of war in the middle Republic.⁷⁹ A nation in which the most admired human quality could best be displayed in war naturally made war frequently. All wanted to compete in *virtus*: the rich also needed war for political advancement, while the poor yearned for loot. There is therefore a certain unreality to the scholarly industry of investigating the ‘origins’ of individual Republican wars, if to look for origins is to seek grave causes adequate to get a modern, and peaceable, democratic state to go to war. The Romans (at least judging by their reports of themselves) did not cheerfully attack their neighbours crying that they were doing it to display their courage. Like us, they liked to think (and to convince others – for they cared what others thought of them) that their wars were justified, and to Romans justified wars were those fought to defend the state or its allies or to avenge an insult. But the Roman cult of *virtus* manifested itself instead in extreme tenderness about their and their allies’ security and national honour. Nearly any act that could be construed as unfriendly or inadequately deferential, however weak and distant its practitioner, was a potential justification for war.⁸⁰ Given the rough-and-tumble of international politics, the Romans always had an enticing collection of potential opponents at their disposal (Polyb. 32.3.12). The trick was to choose which wars to fight in a given year (so as not to over-tax Roman resources) (Polyb. 32.13.4), to select which wars could not be fought, and to decide which wars (like the Second Macedonian War against Philip of Macedon) would have been postponed with quiet regret until a greater war (that against Hannibal’s Carthage) had been brought to a victorious end.⁸¹

⁷⁶ Plut. *Pyrrh.* 21.10, 19.5.

⁷⁷ Harris (1979) 9–53.

⁷⁸ Livy 31.1.8–10; cf. Polyb. 1.7.9, 36.2.1; Diod. Sic. 30.8.

⁷⁷ Polyb. 3.118.7–9, 6.52.7.

⁸⁰ Polyb. 1.6.5, 35.2–3; Mattern (1999) 213–22; see Vol. II ch. 1.

⁸¹ Although the Romans fought somewhere

⁷⁸ Rosenstein (1999) 197–8.

nearly every year, the size of their wars and the number fought simultaneously did vary: Rich (1993)

53–65.

IV. CONCLUSION

In the old days, the belief that the Romans were like us, and that we were good, blinded us to the Roman taste for blood. But eventually we came to suspect that we were not so very good, and so the Romans were not constrained to be good either. And now we suspect that the Romans were not much like us, anyway: so for twenty years a picture of the Romans has been wrought by many hands, a picture nearly of a river of driver ants, pure appetite, careless of their own single lives, irresistible as a body and destructive of everything in their path. This conception by the very force of contrast encourages a vision of the Romans' Hellenistic Greek contemporaries as peace-loving and flower-sniffing. Not so: the Greek cities of the Hellenistic world fought petty wars among themselves just as the cities of the classical world had done.⁸² They fought for territory and they fought for revenge; they fought for freedom and they fought for loot. Leagues of cities fought to defend themselves and to bring other cities under their domination just as the Athenian empire had done in the fifth century. And just as in classical times, wars were also fought against invading barbarians: the Gauls, who crashed down into the Greek world in the third century, and the Romans. But added to these conflicts were wars on a whole new plane: the wars of the kings. The Hellenistic world was a world where war was pervasive.⁸³ It was only pacific in contrast to Rome, where war was continuous.⁸⁴

For war held a different place in Roman than in Hellenistic culture. If the Romans were like the shark, the Greeks were like the dolphin: both ravening predators, but the one morose and single-minded, the other playful and inquisitive. In the Greek world war had become a craft and therefore a choice: other choices might be made, other arts exercised. In Rome war was the ground of masculine self-respect: a Roman's choice was battle or disgrace. Civilian Greeks might hire journeymen of war – mercenaries – to do their fighting for them. The Romans did not. In Italian wars and foreign, in disaster and in triumph, *virtus* manned the legions.

⁸² Ma (2000). ⁸³ Lévêque (1968); Eckstein (2006) 79–117.

⁸⁴ For what it is worth, Polybius hints (31.29.1) that Rome was especially warlike, 'a reputation for courage being important in any state, but especially at Rome'; cf. 1.37.7.

CHRONOLOGICAL TABLE

Dates are BC

1600–1100 Late Bronze Age.

Introduction of chariots.

Supposed era of thalassocracy of Minos and of legendary wars against Troy and Thebes, c. 1200.

1100–750 Early Iron Age (or ‘Dark Ages’ in Greece).

Introduction of cavalry (first attested in Assyria, c. 900).

725–700 First hoplite armour; traditional date of conquest of Amyclae by Sparta and destruction of Asine by Argos.

700–479 Archaic age in Greece.

c. 700 Approximate date of destruction of Melia, Lelantine War, First Messenian War (?).

c. 680 onwards Expansion of Lydia under Gyges (c. 680–652) and Ardys (c. 652–630) against Greek cities.

664 First Greek mercenaries hired in Egypt; first Greek naval battle, between Corinth and Corcyra (?).

c. 650 Cimmerian invasions.

c. 640–600 Second Messenian War (?).

c. 625 Single thrusting-spear becomes main hoplite weapon.

c. 615–605 Lydian war against Miletus.

612 Sack of Nineveh.

Mycenaean kingdoms; New Kingdom in Egypt; Hittite, Babylonian and Assyrian empires.

Neo-Assyrian empire, c. 900–612.

776 Traditional date of first Olympic games.

From c. 750 First signs of urbanization in Greece.

From c. 900, Phoenician settlement in West.

From c. 750, Greek settlement in West; foundation of Syracuse (trad. date 733).

First settlement at Rome (trad. foundation date 753).

First settlement at Carthage (trad. foundation date 814).

Cypselus of Corinth, c. 650.

Chigi vase, c. 640.

Sadyates of Lydia, 630–610.

612 Neo-Babylonian and Median empires established.

Alyattes of Lydia, 610–560.

c. 650 First signs of urbanization in Rome.

616–578 Traditional dates for Tarquinius Priscus' reign in Rome.

- c.* 600 Athenian conquest of Salamis and Sigeum; final Spartan conquest of Messenia (?); First Sacred War (sack of Cirrha), *c.* 590 (?).
- c.* 560 War between Sparta and Tegea (battle of the Fetters).
Lydians subject Greek cities in Asia.
- c.* 550 Persians defeat Medes, create Achaemenid empire (*c.* 550–330).
- c.* 550 Sparta seizes Cynouria; Athenian force takes Chersonese. *c.* 550
Persians conquer Lydia (*c.* 546), Greek cities of Asia Minor (*c.* 545) and Babylon (539).
Battle of the Champions, 546.
- c.* 530 Introduction of trireme to Greek cities.
525 Persians conquer Egypt.
c. 525/4 Sieges of Siphnos and Samos.
525–500 Naval pay attested in Eretria.
- 513/12 Persians invade Scythia.
511, 510, 508, 506 Spartan campaigns against Athens.
506 Thebes and Chalcis invade Attica.
- c.* 500 Athenian conquest of Lemnos.
c. 500–491 Athenian war against Thebes and Aegina.
500/499–494 Ionian Revolt.
498 Persian siege of Old Paphos on Cyprus.
494 Battle of Lade.
- c.* 500–480 War between Phocis and Thessaly, incl. ‘Phocian Despair’.
494 Sparta invades Argos; battle of Sepeia.
492 Persian conquests in Thrace.
- Periander of Corinth, *c.* 600.
Bias of Priene, *c.* 600.
Thales of Miletus, *c.* 600.
Reforms of Solon, 594.
Peisistratus, 561–527.
Croesus of Lydia, 560–546.
Cyrus II the Great, 559–530.
c. 550 Peloponnesian League formed (?); alliance between Sparta and Lydia.
550–500 (?) Introduction of public messes and ‘Lycurgan’ regime in Sparta.
- Polycrates, *c.* 535–522.
Cambyses II, 530–522.
Hippias of Athens, 527–510.
Cleomenes I, *c.* 520–490.
Darius I, 522–486.
Demaratus, 515–491.
Reforms of Cleisthenes, 508; military reform, 501.
493 Persians impose new ‘democratic’ regimes and stricter control on Greek cities in Asia.
493 First fortification of Piraeus in Athens.
- Leotychidas II, 491–469.
- c.* 600 Foundation of Massalia by Phocaean.
- 578–534 Traditional dates for Servius Tullius’ reign in Rome.
- c.* 550 Sybaris creates alliances with many cities in southern Italy.
- 534–509 Traditional dates for Tarquinius Superbus’ reign in Rome.
- 511/10 Sack of Sybaris by Croton.
509 Creation of Roman Republic; first treaty between Rome and Carthage (?).
- 494–287 ‘Struggle of the Orders’ in Rome.

- 490 Persian conquests in Aegean: sack of Eretria; battle of Marathon.
- 489 Athenian siege of Paros.
- 488–481 Athens and Aegina at war.
- 483 Athenian naval expansion.
- 480–479 Xerxes' invasion of Greece: battles of Thermopylae, Artemisium, Salamis (480); Plataea, Mycale (479); siege of Sestus (479).
- 479–323 Classical age in Greece.
- 478 Allied Greek campaigns in Cyprus and Byzantium.
- 476 Athenians capture Eion.
- c. 475 Athenians capture Scyros.
- c. 474 Athenians capture Carystos.
- c. 469 Athenians capture Naxos.
- c. 466 Battle of Eurymedon.
- 465–463 Siege of Thasos.
- 465 Athenian defeat at Drabescus.
- 465 Argives capture Mycenae.
- 462 Egyptian revolt from Persia.
- 460/459–446 First Peloponnesian War.
- 460/459–455/4 Athenian expedition to Cyprus and Egypt in support of revolt.
- 459/8 Battles at Halieis, Megara; naval battles off Cecryphaleia, Aegina.
- 458/7 Battles of Tanagra, Oenophyta; Athenian conquest of Boeotia, Aegina.
- 489/8 Death of Miltiades.
- Xerxes, 486–465.
- 481/80 Hellenic League.
- Leonidas I, 490–480.
- Pausanias, regent, 480–c. 470.
- Pleistarchus, 480–459.
- 479 Athens' city-walls (re-)built.
- 478/7 Athens creates Delian League.
- 472–456 Building of temple of Zeus at Olympia.
- Archidamus II, 469–427.
- 460s Death of Themistocles.
- Artaxerxes I, 465–423.
- 464 Earthquake hits Sparta.
- 464–455(?) Messenian revolt.
- 462 Ephialtes' reforms.
- Alliance between Athens, Megara, Argos, Thessaly.
- c. 461 Building of Long Walls of Megara.
- Pleistoanax, 459–409.
- c. 459 Building of Long Walls of Athens.
- 485–478 Conquests of Gelon of Syracuse.
- 480 Carthage intervenes in Sicily; defeated by Gelon in battle of Himera.
- Hiero I of Syracuse, 476–466.
- 475 Syracusans defeat Etruscans in battle of Cumae.
- 459–440 Sicel revolts.

- 456–454 Athens raids Peloponnese.
454 Athens intervenes in Pharsalus.
- 451/50 Athenian expedition to Cyprus and Egypt.
450s (?) Introduction of hoplite pay in Athens.
- 448 Second Sacred War.
- 447.6 Athenians lose control of Boeotia; battle of Coronea.
- 446 Revolts of Athenian allies.
- 446 Spartan invasion of Attica.
- 446 Athenian reconquest of Euboea.
- 440/39 Athenian siege of Samos; first Greek use of siege engines (?).
- 435–433 War between Corinth and Corcyra; battles of Leucimme (435), Sybota (433).
- 432–430/29 Siege of Potidaea.
- 431–404 Peloponnesian War.
- 431–421 Archidamian War.
- 430–426 Athenian campaigns in W. Greece (Phormio, 430–428; Asopius, 428/7; Demosthenes, 427–426).
- 429–427 Siege of Plataea.
- 428–427 Mytilenean Revolt.
- 427 Demosthenes' defeat in Aetolia.
- 426 Battle of Olpae.
- 425 Athenian campaigns in Peloponnese: capture of Sphacteria; battle of Solygea.
- 424 Athenians take Cythera, Nisaea.
- 424(?) Sparta occupies Lepreum.
- 424–421 Spartan and Athenian campaigns in northern Greece.
- 454 Transfer to Athens of Delian League treasury.
- 451 Five-year truce between Sparta and Athens.
451 Thirty Years' Peace between Sparta and Argos.
451/50 Death of Cimon.
- 449 Peace of Callias (?).
- 447–432 Parthenon built.
- 447 Boeotian League established.
- 446 Thirty Years' Peace between Sparta and Athens.
- 437/6 Foundation of Amphipolis.
- 434/3 Expansion of Piraeus.
433/2 Athens' alliances with Rhegium, Leontini renewed.
- 432 Megarian decree.
- 431/0 Pericles' funeral oration.
- 430–428 Plague in Athens.
- 429 Death of Pericles.
- 427 Civil war in Corcyra.
Agis II, 427–399.
- 427–424 Athenian interventions in Sicily.

424 Athenian intervention in Boeotia; battle of Delium.

423 Spartans capture Amphipolis, Torone, Lecythus; Athenians capture Mende; 423–421 siege of Scione.

423/2 Battle of Laodocium between Mantinea and Tegea.

422 Battle of Amphipolis.

422 Boeotians capture Panactum.

421 Sparta invades Parrhasia.

421 War between Phocis and Locris.

419–418 Argos attacks Epidaurus.

418 (First) Battle of Mantinea.

417/16 Spartans sack Hysiae.

416 Athenians sack Melos.

415–413 Athenian expedition to Sicily.

413 Spartans take and fortify Decelea.

413 Mercenaries sack Mycalessus.

412/11 Spartan sack of Iasus.

412/11 Naval battle off Cnidus.

411 Naval battles of Cynossema and Abydus.

410 Thrasyllus' campaign in Ionia.

409 Siege of Byzantium.

Darius II Ochus, 423–405.

423/2 Armistice between Sparta and Athens.

422 Deaths of Brasidas and Cleon.

421 Peace of Nicias.

421 Alliance between Argos, Mantinea, Elis and Corinth.

420 Alliance Argos–Athens.

418 Alliance Argos-Sparta.

415 Athenians sack Hyccara.

415 Battle of Syracuse.

414–413 Siege of Syracuse; sea-battles in Great Harbour.

412 Revolts of Athens' allies.

412/11 Sparta–Persia treaty.

411 Oligarchic coup of the Four Hundred in Athens.

Pausanias, 409–395.

409 Selinus and Himera sacked by Carthaginians.

- 406 Battle of Arginusae.
- 406/5 Eteonicus' fleet at Mytilene.
- 405 Battle of Aegospotami.
- 405/4 Spartan sack of Cedreæ and Lampsacus; siege and surrender of Athens.
- 402–400 Sparta invades Elis.
- 401–399 Revolt of Cyrus the younger against Artaxerxes; battle of Cunaxa; return journey of Greek mercenaries (the Ten Thousand).
- 399–395 Spartan campaigns in Asia; siege of Artaeus (398); battle of Sardis/Pactolus River (396).
- 395–386 Corinthian War.
- 395 Battle of Haliartus.
- 394 Battles of the Nemea, Coronea; naval battle of Cnidus.
- 392–388 Spartan invasions of Argos; Spartan defeat at Lechæum (390).
- 389 Spartan invasion of Acarnania; Athenian siege of Methymna.
- 387 Teleutias' raid on Aegina, Piraeus.
- 385 Spartan siege of Mantinea.
- 382–379 Spartan war against Olynthus; Spartan occupation of the Cadmea at Thebes.
- 381–379 Spartan siege of Phlius.
- 379 Sphodrias' raid on Attica.
- Artaxerxes II, 405–359.
- 404 Death of Alcibiades.
- 404/3 Regime of the Thirty in Athens; civil war.
- Agesilaus II, 400–360.
- 399 Trial and execution of Socrates.
- 399 Conspiracy of Cinadon.
- Agesipolis I, 395–381.
- 386 Peace of Antalcidas (King's Peace).
- Cleombrotus I, 381–371.
- 406 Military pay in Rome.
- 406/5 Carthaginian invasion of Sicily.
- 405–367 Dionyius I of Syracuse.
- 399 Syracusan siege of Motya; introduction of non-torsion artillery and quinqueremes.
- c. 392 Roman capture of Veii.
- 386 Gallic invasion of Italy; battle of Allia; sack of Rome.

GREECE AND THE EAST: MILITARY

GREECE AND THE EAST: POLITICAL AND OTHER

ITALY, SICILY AND THE WEST

379/8–375 Spartan campaigns in Boeotia; battle of Tegyra (375).	378/7 Second Athenian Confederacy established.	378 ‘Servian’ walls built at Rome.
376 Naval battle of Naxos.	<i>c.</i> 375–370 Jason of Pherae tagos of Thessaly.	
375 Spartan force to Phocis.		
375–372 Athenian and Spartan campaigns in Corcyra.		
374/3 Iphicrates’ expedition to Egypt.		
373/2 Thebans sack Plataea, Thespiae.		
371 Spartan invasion of Boeotia; battle of Leuctra.	Agesipolis II, 371–370. 371 Renewal of King’s Peace.	
370 Spartan campaign in Mantinea.	Cleomenes II, 370–309.	
370/69 Theban invasion of Laconia; liberation of Messenia; first all-stone city walls in Greece (Messene).	370 Mantinea refounded; Arcadian League created. 370/69 Messene founded.	
369–368 Theban campaigns in Peloponnese, Thessaly and Macedon.	369–358 Alexander tyrant of Pherae.	
368 Sparta sacks Caryae, invades Parrhasia, wins ‘tearless battle’ against Arcadians and Argives.	368 Megalopolis founded.	367–344 Dionysius II of Syracuse; first construction of ‘sixes’.
366 Theban campaigns in Peloponnese, occupation of Oropus; Athenian campaign in Sicyon and siege of Samos (366/5).	<i>c.</i> 365 Satraps’ Revolt.	366 Peace treaty between Syracuse and Carthage.
365–363 War between Arcadia and Elis.	364–352 Clearchus tyrant of Heraclea Pontica.	
364 Theban campaigns in Aegean and Thessaly.	362/1 Common Peace.	
362 Theban campaign in Peloponnese; (second) battle of Mantinea.	Archidamus III, 360–338. Philip II, 360–336.	
360 Chares’ expedition to Corcyra.	Artaxerxes III, 359–338.	
359/8 Military reforms of Philip II: creation of the Macedonian phalanx.		
350s Invention of torsion artillery (?).		

- 357 Athenian intervention in Euboea.
- 357–355 Social War.
- 357–354 Campaigns of Philip II in N. Greece:
Amphipolis (357); Potidaea, Edonis (356);
Methone (355/4).
- 355–346 Third Sacred War.
- 353 Chares captures Sestos.
- 352 (Second) battle of Thermopylae.
- 349/8 Philip II occupies cities of Chalcidice,
including Olynthus.
- 347 Athenian intervention in Euboea.
- 343–340 Athenian campaigns in northern
Greece.
- 340 Philip II captures Perinthus, attacks
Selymbria, Byzantium.
- 338 (First) battle of Chaeronea.
- 336/5 Greek revolt against Alexander.
- 335 Sack of Thebes.
- 334–323 Alexander III's conquest of the Persian
empire.
- 334 Battle of the Granicus; capture of Sardis;
sieges of Miletus, Myndus and Halicarnassus.
- 333 Battle of Issus.
- 332/1 Sieges of Tyre, Gaza; treasures at
Damascus seized; Egypt conquered.
- 346 Peace of Philocrates.
- Artaxerxes IV, 338–336.
Agis III, 338–331.
338/7 League of Corinth.
- 336–323 Alexander III 'the Great' of Macedonia.
- 336–330 Darius III of Persia.
- 348 Treaty between Carthage and Rome.
- Timoleon, 344–337; war against Carthaginians;
battle of the Crimisus (341).
- 343–341 First Samnite War.
- 342 War between Tarentum and Lucanians,
Messapians.
- 341–338 Latin War.
- 340 *Devotio* of Decius Mus.
- 334–341 Alexander of Epirus intervenes in S.
Italy.

331	Battle of Gaugamela (Arbela); capture of Babylon and Susa; suppression of Greek revolt; reorganization of Macedonian infantry into <i>chiliarchiai</i> .	Eudamidas I, 331–305. 331 Alexandria founded.
330	Capture of Persepolis and Ecbatana.	330 Expansion of Piraeus.
329–328	Pursuit of Bessus; campaigns in Bactria and Sogdiana (crossing of Hindu Kush; capture of Cyropolis; battle of Jaxartes, 329).	
327/6	Invasion of India; siege of Rock of Aornus/Heracles.	
326	Battle of the Hydaspes; siege of Sangala; mutiny at the Hyphasis/Beas.	326 Death of Lycurgus.
326/5	Conquest of the Malli.	326–304 Second (Great) Samnite War.
325	March through Gedrosian desert.	
324	Inclusion of 'barbarian' troops in Macedonian army; mutiny at Opis.	
323–31	Hellenistic age.	
323/2	Greek revolt in Bactria suppressed by Peithon.	Philip III Arrhidaeus, 323–317. Alexander IV, 323–310.
323–322	Lamian War; naval battles off Abydos, Amorgos; battle of Crannon.	
322–276	Wars of the Successors.	
322	Perdiccas and Eumenes of Cardia conquer Cappadocia.	322–317 Oligarchy imposed on Athens.
322/1	Ptolemy I conquers Cyrenaica.	
321	Coalition against Perdiccas and Eumenes. Perdiccas attacks Ptolemy in Egypt; Craterus and Neoptolemus attack Eumenes at the Hellespont.	321–319 Antipater regent 321 Perdiccas assassinated; deaths in battle of Craterus and Neoptolemus.
		321 Romans defeated by Samnites at Caudine Forks.

- 320–316 Antigonus I attacks Eumenes and Alcetas in Asia; battles of Paraetacene (317), Gabiene (316).
- 318–315 Antigonus I and Cassander attack Polyperchon and Olympias: siege campaigns in Greece (318–315).
- Naval battles between Cleitus and Nicanor in Hellespont (318); defection of Eurydice's army (317).
- 315–311 Cassander, Ptolemy and Lysimachus make war on Antigonus I and his son Demetrius Poliorcetes.
- 315 Siege of Tyre.
- Invasion of Nabataea, battle of Gaza, 312.
- 312–309 Seleucus drives Antigonus out of Mesopotamia and Iran.
- 309/8 Ophellas of Cyrene attacks Carthage.
- 308–303 Seleucus campaigns in India.
- 307 Cassander's and Demetrius' campaigns in Greece; Demetrius takes Athens.
- 306 Antigonus and Demetrius take Cyprus; naval/land battles of Salamis; first attested use of naval catapults. Antigonus' failed invasion of Egypt.
- 305–4 Demetrius' failed siege of Rhodes.
- 319–317 Polyperchon regent; recall of Olympias.
- 317–307 Demetrius of Phaleron governs Athens.
- 317 Nicanor assassinated.
- 317 Olympias and Eurydice compete for regency.
- 316 Death of Olympias.
- 315–297 Cassander rules Macedonia (king from 305).
- 315/14 Foundation of League of Islanders.
- 314 Revolt of Argos.
- 312 Start of dating by 'Seleucid Era'.
- 309 Alliance between Ophellas and Agathocles. Areus I, 309–265.
- Antigonus assumes kingship.
Antigonus I the One-Eyed (Monophthalmus), 306–301.
- Archidamus IV, 305–275.
New kings established: Cassander, 305–297; Ptolemy I Soter, 305–283; Lysimachus, 305–281; Seleucus I Nicator, 305–281.
- 316–288 Agathocles tyrant of Syracuse (king from 304).
- 312–307 War between Syracuse and Carthage; battle of Himerae R. (311).
- 311 Roman consular armies doubled in size.
- 310–307 Agathocles invades Africa.
- 305 Battle of Torgium between Agathocles and Sicilian exiles.

GREECE AND THE EAST: MILITARY

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302–1 Coalition of four kings campaigns against Antigonus and Demetrius; battle of Ipsus (301).

296–291 Demetrius campaigns in Greece and Macedonia.

288 Lysimachus and Pyrrhus of Epirus conquer and partition Macedonia.

285 Lysimachus drives Pyrrhus out.

282/1 Seleucus attacks Lysimachus, who is defeated and killed in the battle of Corupedium (281).

279–277 Gauls invade Macedonia, Greece and Thrace.

278/7 Gauls invade Asia Minor.

270s Adoption of *thureos* shield by Achaean and Boeotian leagues.

274–1 First Syrian War, between Ptolemy II and Antiochus I.

274–272 Pyrrhus of Epirus campaigns in Macedonia and Greece.

302 Demetrius establishes new League of Corinth.

301 New territories agreed.
Demetrius I Poliorcetes (the Besieger), 301–286.

300/299 Foundations of Antioch, Seleucia-in-Pieria.

Philip IV, 297.
Antipater and Alexander V of Macedon, 297–294.
297 Foundation of Museum and Library at Alexandria.

Demetrius king of Macedon, 294–288.

Pyrrhus king of Macedon, 288–285.
Lysimachus king of Macedon, 285–281.

Ptolemy II Philadelphus, 283–246.

281 Seleucus assassinated; Antiochus I Soter succeeds, 281–261.
Ptolemy Ceraunus rules Macedon, 281–279.
280 Achaean League revived.

270s Aetolian League gains in prominence.

c. 277–239 Antigonus II Gonatas king of Macedon.

Eudamidas II, 275–244.

272 Pyrrhus killed during capture of Argos.

303–293 War between Tarentum and the Bruttii; interventions of Cleonymus of Sparta and Agathocles of Syracuse.

298–290 Third Samnite War; battle of Sentinum, *devotio* of P. Decius Mus, 295.

295–294 Agathocles attacks Croton and Hipponion.

281 Alliance of Tarentum and Pyrrhus of Epirus against Rome.

280–275 Pyrrhic War; battles of Heraclea (280), Asculum (279), Beneventum (275).

279 Treaty between Carthage and Rome.

272 Rome defeats Tarentum.

- c. 270 Antiochus I defeats Gauls in 'Elephant Battle'.
- 267–261 Chremonidean War, of Greek states against Antigonus II.
- 260–253 Second Syrian War, between Ptolemy II and Antiochus II; incl. naval battle off Cos.
- c. 260–257 Parthia, Bactria break away from Seleucid kingdom.
- 251 Achaean League captures Sicyon.
- 246–241 Third Syrian War, between Ptolemy III and Seleucus II.
- c. 245 Adoption of Macedonian phalanx in Boeotia.
- 243 Achaean League takes Corinth.
- 228/7 Reforms in Sparta, incl. adoption of Macedonian phalanx.
- 222 Antigonus III defeats Spartans in battle of Sellasia; Spartan reforms undone and kingships abolished.
- Acrotatus, 265–262.
Eumenes I, 263–241.
- 259 Ptolemy II institutes new tax system.
- Leonidas II, 254–236.
- Ptolemy III Euergetes, 246–221; Seleucus II, 246–226/5.
- Agis IV, 244–241; reforms in Sparta, 242.
Eudamidas III, 241–228.
Attalus I, 241–197.
Demetrius II, 239–229.
Cleomenes III, 236–222.
Antigonus III Doson, 229–221.
Archidamus V, 228/7.
Eucleidas 227–222.
Seleucus III, 226/5–223.
Antiochus III the Great, 223–187.
Philip V, 221–179.
Ptolemy IV, 221–204.
- Hiero II, 270–215.
- 264–241 First Punic War.
- 260 Naval battles of Lipari Islands and Mylae; Romans introduce the *corvus*.
- 259–257 Roman attacks on Sardinia and Corsica.
- 256 Naval battle of Ecnomus.
- 256–255 Campaigns of M. Atilius Regulus in Africa.
- 254 Capture of Panormus.
- 251–249 Siege of Lilybaeum.
- 249 Battle of Drepana.
- 241 Final Roman naval victory off Aegates islands.
- 241–238 Mercenary War in Carthage.
- 229/8 First Illyrian War.
- 226 Ebro treaty between Rome and Carthage.
- 225 Romans defeat Gauls in battle of Telamon; 224–222 conquest of Cisalpine Gaul; 222 Marcellus' *spolia opima*.

220–217 Social War (Macedon and Achaean League vs. Aetolian League and Sparta). Philip V captures Ambracus (219), Psophis (219/218); attacks Cephallenia, 218), captures Phthiotic Thebes (217).

219–217 Fourth Syrian War (Ptolemy IV vs. Antiochus III); capture of Seleucia-in-Pieria (219); battle of Raphia (first mobilization of native Egyptian levies, 217).

212–205 Antiochus III recovers eastern territories, incl. Bactria (208).

211–205 First Macedonian War (Philip V and Achaean League vs. Rome, Aetolian League, and Sparta).

209–208 Reforms of Achaean League cavalry and infantry by Philopoemen.

207 Philopoemen defeats Sparta in (Third) Battle of Mantinea.

215 Alliance between Hannibal and Philip V.

211 Roman treaty with Aetolia.

Nabis, sole king/tyrant of Sparta, 207–192.

220/19 Second Illyrian War.

219 Hannibal campaigns in Spain, captures Saguntum.

218–206 Spanish campaigns of the Scipios: captures of New Carthage (209), Ilturgia (207); battles of Baecula (208), Ilipa (206).

218–201 Second Punic War ('Hannibalic War') in Italy.

218 Hannibal crosses Alps; battles of Ticinus, the Trebia.

217 Battle of Lake Trasimene.

216 Battle of Cannae.

214 Rome lowers property qualification for soldiers.

213–211 Roman siege of Syracuse.

212 Hannibal captures Tarentum.

211 Romans capture Capua, adopt Greek cavalry equipment.

210 First mention of a cohort (in Spain); 209 (?) Romans adopt Spanish sword.

208 Hasdrubal's campaign; battle of the Metaurus (207).

202–200	Fifth Syrian War (Ptolemy V vs. Antiochus III); battle of Panium (200).	Ptolemy V, 204–180.	204	Romans invade Africa; battle of Great Plains (Scipio vs. Syphax, 203); battle of Zama (202); surrender of Carthage (201).
202–201	Philip V's Aegean offensive; siege of Abydus, naval battle of Chios.			
200–197	Second Macedonian War. Romans invade Illyria, sack Chalcis (200); Philip V captures Eretria (198); siege of Atrax (198); battle of Cynoscephalae (197); surrender of Philip and proclamation of Greek freedom (196).	Eumenes II, 197–159.	197	Spanish 'rebellions' quashed in 196 (Cato), 191–189 (Paullus), 179–178 (Gracchus).
192–189	Rome's 'Syrian' war (vs. Antiochus III and Aetolian League). First mention of cataphract cavalry (Antiochus); Sparta joins Achaean League (192); Antiochus defeated in (Third) Battle of Thermopylae (191); naval battles between Antiochus and Rhodes (Panormus, Side, 190); Romans capture Phocaea, invade Asia, win battle of Magnesia (190); defeat of Aetolians (189); defeat of Galatians in battle at Mt Olympus (189). Peace of Apamea, 188.			
186–183	Prusias I of Bithynia attacks Eumenes II of Pergamum; naval battle won for Prusias by Hannibal (184).	Seleucus IV, 187–175. Ptolemy VI, 180–145. Perseus, 179–168. Antiochus IV, 175–164.	183	Death of Scipio Africanus.
171–167	Third Macedonian War. Battle of Pydna (168). Partitioning of Macedon (167).		182	Death of Hannibal.
170–168	Sixth Syrian War: Antiochus IV invades Egypt. War ended by Roman intervention.	Ptolemy VIII, 170–163, 145–116. Cleopatra II, 170–164, 163–116.		
166	Antiochus IV holds parade at Daphnae; intervenes in Jerusalem.			
166/5	Maccabean Revolt in Judaea.			
163	Antiochus V intervenes in Judaea.			
158	Macedonian silver mines reopened under Roman control.	Attalus II, 159–139.	154–150	Spanish revolts.
149–148	Fourth Macedonian War.		149–146	Third Punic War; sieges of Nephheris and Carthage.

GREECE AND THE EAST: MILITARY

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146 Achaean League defeated by Lucius Mummius. Corinth destroyed.

146 Creation of provinces of Macedonia and Africa.

147–139 Revolt of Viriathus in Spain.
146 Carthage destroyed.

Cleopatra III, 139–101.

Attalus III, 139–133.

133 Rome inherits Pergamum.

129 Creation of province of Asia.

143–133 Revolt of Numantia in Spain; siege of Pallantia (136), sack of Numantia (133).
136–132 Slave revolt in Sicily.

125–123 Roman conquests in Transalpine Gaul; 123–121 occupation of the Balearics; 123 reforms of C. Gracchus; state begins to provide arms and armour for legionaries.

111–105 Jugurthine War; 109–107 campaigns of Metellus, incl. capture of Thala (108) and last known use of *velites*.

105 Roman defeat by Cimbri and Teutones at Arausio.

104–101 Slave revolt of Tryphon in Sicily.

104–101 Gallic War. Marius abolishes property qualification for legionaries.

GLOSSARY

- agema** ‘leading unit’: the name used for a division of several Greek and Hellenistic armies.
- agogê** ‘education’, used by modern scholars as a technical term for the Spartan programme of education for boys between the ages of seven and twenty.
- agonal, –istic** ‘competitive’, a technical term for institutions, customs and attitudes which treat war as a rule-bound and game-like contest (Greek: *agôn*).
- agora** ‘(place of) assembly’, open meeting and marketplace in Greek cities.
- akolouthos** ‘follower’, a Greek soldier’s personal attendant.
- amicitia** ‘association’, a relation of mutual obligation between peers.
- Amphictyony** a group of states responsible for managing and protecting a sanctuary.
- andreia** ‘manliness’; classical Greek word for ‘courage’.
- anthippasis** a sham cavalry battle, staged as a public show in Athens.
- antidosis** ‘exchange’, a legal procedure which allows a person reluctant to perform a LITURGY to nominate another man who must either perform the liturgy instead or hand over his entire estate in exchange for the estate of the original appointee.
- Apaturia** a three-day festival celebrated by IONIANS in October/November.
- apoikia** ‘settlement abroad’, a new town founded either as the result of private emigration or as a state-controlled ‘colony’.
- archê** ‘leadership’; in modern usage a technical term for ‘empire’ as opposed to ‘hegemony’ (*HEGEMONIA*). In classical Greek, the terms are interchangeable.
- aretê** ‘excellence’ in any and all personal qualities, both physical (‘prowess’) and mental (‘virtue’); a prominent Greek ideal.
- argyrologia** ‘silver-collection’; euphemism for extortion of money by military force.
- aristeion, –eia** ‘prize for valour’. *Aristeia* can also mean ‘a display of valour’.

- aspis** ‘shield’, especially the two-handled HOPLITE shield.
- astrateia** ‘draft-dodging’, a criminal offence in classical Athens.
- asylia** ‘immunity from plunder’, a special status which makes a city inviolable.
- auletēs** ‘aulos-player’ or piper; pipers played at sacrifices and other ritual occasions, as well as setting a rhythm for rowers and, in Sparta, for marching soldiers.
- auxilia** troops provided by Rome’s allies (*socii*).
- barbarians** Greek term for all those who spoke no Greek (*barbaroi*).
- bellum iustum** ‘just war’; a concept central to Roman international relations.
- boulē** ‘council’; Greek term for deliberative bodies smaller than the popular assembly, such as the classical Athenian Council of Five Hundred.
- Cadmea** the acropolis of the city of Thebes.
- Carneia** a nine-day festival celebrated by DORIANS in August/September.
- catapult** generic term for a mechanical missile launcher (Greek *katapeltēs*).
- centuria** the smallest unit of the Roman army, notionally (and perhaps originally) consisting of 100 men led by a *centurio*, but normally (and later) consisting of some 60–80 men.
- centurion** officer in charge of a century (*CENTURIA*)
- choinix** Greek measure of volume; the Attic *choinix* held just over 1 litre.
- cleruchs** see *klerouchoi*.
- cliens, –entes** ‘client’; person(s) formally obliged to perform certain services for a patron (*PATRONUS*) and entitled to receive certain benefits in exchange.
- cohort (cohors)** a military unit forming one-tenth of a LEGION, usually formed of six *CENTURIAE*; first mentioned as in use in 209 BC adopted as the main tactical unit by the end of the second century BC; also used by auxiliary infantry.
- comitia** formal assembly of the people in Rome, organized either by fictive kinship units (*curiae > comitia curiata*), territorial units (*tribus > comitia tributa*) or military units (*CENTURIAE > comitia centuriata*).
- Common Peace** a multilateral peace treaty which obliges all parties not to attack one another, and to join forces against anyone who breaks the treaty (see KING’S PEACE).
- consuls** the two chief annual magistrates of the Roman Republic.
- Contio** an informal gathering of the people in Rome.
- deditio in fidem** ‘surrender into our good faith’; Roman form of unconditional surrender.

deilia ‘cowardice’; in classical Greece a criminal offence on the battlefield.
dekatē ‘tithe’; specifically, one-tenth of the spoils dedicated to a god.

Delian League modern term for a network of military alliances created and led by Athens, named after the original location of its meeting place and treasury on Delos; also known as ‘the Athenian empire’.

diabatēria ‘crossing-sacrifice’ made before an army crossed a border.

Diadochoi see SUCCESSIONS.

dictator Roman magistrate with sole power appointed for six months to replace the CONSULS in times of emergency.

diekplous ‘sailing-through-and-out’; a naval manoeuvre designed to ram an enemy ship; probably the movement of a single ship breaking through the enemy line before turning round (see *PERIPLOUS*) and catching an enemy ship in the flank from behind.

Dorians one of the major ‘ethnic’ groups within Greece, alongside the IONIANS and others. Dorians – including Spartans, Argives and Corinthians – claimed common descent from a mythical ancestor Doros and a common origin in the region Doris.

doriktetos chora ‘spear-won land’, a Macedonian and Hellenistic concept which expresses the idea that military conquest brings legitimate power over territory.

dory ‘spear’, especially the 1.8–2.4 m (6–8 ft) thrusting-spear of the HOPLITE.

drachma a common Greek unit of silver currency; the Athenian (Attic) drachma weighed c. 4 gr. and consisted of 6 OBOLES.

eisphora ‘contribution’; a one-off tax occasionally levied in Athens, especially to raise money for military purposes.

ekecheiria ‘a hands-off’, a formal cessation of hostilities, especially for the duration of religious festivals, such as the Olympic truce.

ekklesia the popular assembly, especially in Athens.

enomotia ‘sworn band’, the smallest military unit in Sparta (and in the army of the TEN THOUSAND), consisting of thirty to forty men commanded by an *enomotarchēs*.

eparitoi the standing forces of the fourth-century Arcadian League.

ephebes eighteen- and nineteen-year-old youths (*epheboi*), specifically those who in fourth-century Athens undertook a two-year programme of military training (*ephebeia*).

ephors a college of five magistrates which held supreme judicial power in Sparta, and took a leading role in political decision making alongside the kings and council of elders.

epibatēs, -tai ‘passenger’; a HOPLITE serving as a marine on board a TRIREME.

epidosis ‘extra gift’; a voluntary donation to state (military) funds.

- epilektoi** ‘picked men’: an élite unit, whether permanent or selected *ad hoc*.
- epimachia** (colloquial) term for a defensive alliance.
- epiteichismos** ‘building a wall against [the enemy]’; the strategy of building a fortified position in enemy territory as a base for raiding expeditions.
- ethnos** ‘a people’; in modern usage a term for a political entity which contains a number of settlements of roughly equal status (‘tribal state’), as opposed to the *POLIS*, a political entity dominated by a single major settlement (‘city-state’).
- fetial law** early Roman procedure for the ritual declaration of war by priests known as *fetales*.
- foedus, -dera** Roman term for a treaty of alliance.
- formula togatorum** the Roman roster of Italian military manpower.
- gymnasion** a public place for recreational athletic exercise.
- gymnetês, -tai** ‘naked soldier’, unarmoured infantryman equipped only with missiles.
- hamippos** ‘horse-escort’, light infantryman attached to a cavalry troop.
- hegemonia** ‘leadership’; in modern usage a technical term for ‘hegemony’ as opposed to ‘empire’ (*ARCHÈ*). In classical Greek, the terms are interchangeable.
- Hellenotamiae** ‘treasurers of the Greeks’, a body of Athenian magistrates in charge of the treasury of the Delian League.
- helot (*heilotê*)** a ‘serf’ in Sparta, assigned to the service of an individual master but subject to various kinds of public control.
- Hexapolis** a group of six cities; used of the six Dorian cities in SW Asia Minor.
- hippagogoi** ships designed for, or converted to, use as ‘horse-transports’.
- hipparch** ‘cavalry commander’ (*hipparchos*).
- hippeis** ‘horsemen’, in one of four senses: (1) most commonly, cavalry; (2) in Athens, the second highest of four property classes; (3) in Sparta, an élite unit of 300 HOPLITES, perhaps originally mounted; (4) in archaic Greece, mounted HOPLITES.
- hippotoxotai** ‘horse-archers’, a classical Athenian unit of 200 mounted archers.
- holkas** a merchant cargo-ship, as opposed to a TRIREMЕ.
- hopla (sg. hoplon)** generic Greek term for (pieces of) military equipment, sometimes applied specifically to the hoplite shield (*aspis*).
- hoplitagogos** ship designed for, or converted to, use as ‘troop-transport’.
- hoplite (*hoplîtes*)** heavy infantry soldier, named after his equipment (*HOPLA*), including a distinctive two-handled shield (*ASPIS*).
- hoplomachos** a specialist trainer in weapons-drill (*hoplomachia*).

Hyacinthia a festival celebrated by DORIANS in late summer.

hybris an attitude or act of unprovoked aggression which humiliates the victim.

hypaspist (*hypaspistēs*) ‘shield-bearer’, a HOPLITE’s personal attendant.

hyperesia ‘staff’, the sailors (helmsman, look-out, *KELEUSTĒS*, *AULETĒS*, purser, shipwright and deck-hands) on board a TRIREME.

hyperetēs ‘servant’, specifically a HOPLITE’s personal attendant.

hypozugoi ‘yoked animals’, including both the pack- and the draught-animals, whether belonging to private soldiers or a public supply train.

imperium the formal power of military command in Rome.

Ionians one of the major ‘ethnic’ groups within Greece, alongside the DORIANS and others. Ionians – including Athenians, Samians and Milesians – claimed common descent from a mythical ancestor Ion and a common origin in Attica.

isopolarity an agreement between two *POLEIS* to grant equal rights to one another’s citizens (*isopoliteia*).

katalogos ‘list’, specifically the list of names of HOPLITES (or sometimes rowers) levied for an expedition; perhaps also a list of names of all men liable for military service.

katastasis ‘establishment grant’, an Athenian state subsidy towards the cost of acquiring and maintaining a cavalry horse.

keleustēs ‘caller’, the rowing-master on a TRIREME.

keras ‘horn’: (1) the wing of a battle formation; (2) a marching column.

keryx ‘herald’, a sacrosanct public official who conveys messages both within the community and in international relations.

King’s Peace a COMMON PEACE treaty among Greek cities negotiated and (notionally) upheld by the king of Persia; the first such peace was concluded in 386 BC.

kleros, -oi an allotment of land; see *klerouchoi*

klerouchoi ‘allotment-holders’: Athenian citizens to whom a share of conquered territory is assigned; they usually, but not always, leave Athens to settle on their land.

koinē eirenē see COMMON PEACE.

kratēr a vessel for mixing wine and water.

Lacedaemonians the common Greek name for the Spartans, including all free inhabitants of the region of Laconia, both full Spartiate citizens and subordinate *PERIOIKOI*.

laphyropolai ‘booty-sellers’, officials in the classical Spartan army.

League of Corinth an alliance of all Greek states (except Sparta) imposed and led by Philip II of Macedon from 338 BC onwards.

legion (*legio*) largest unit of the Roman army. Originally Rome had a single legion which comprised the entire citizen militia of perhaps 6,000 men, but by 500 BC citizen troops were divided into two legions, from 311 BC into four, and the number continued to grow thereafter. The normal strength of these later legions was 4,000–5,000 men.

leia ‘booty’, ‘spoils’, ‘plunder’.

leistēr, leistēs ‘freebooter’, ‘booty-chaser’, a private raider or pirate.

lemnōs, -oi a fast and highly manoeuvrable light ship which played a significant role in Hellenistic naval warfare.

lipotaxia ‘leaving the ranks’, the criminal offence of desertion.

liturgy a form of semi-voluntary public service (*leitourgia*) whereby rich men contribute to financing major public expenditures, above all the TRIERARCHY.

lochagos the commander of a *LOCHOS*.

lochos a generic Greek term for a sub-division of a military force, applicable to units of widely varying sizes and at different levels of the hierarchy. In classical Athens, a sub-division of the tribal *TAXIS*; in Sparta, variously the largest military unit or a subdivision of the *MORA*; in Argos the largest military unit; among the TEN THOUSAND, the largest sub-division of the mercenary contingents. Small units of picked troops are also called *lochos*, as in Thebes (the ‘Sacred Band’, *hieros lochos*), and in Hellenistic authors *lochos* often means a single file.

logadēs ‘picked troops’: an élite unit, whether permanent or selected *ad hoc*.

lustratio a Roman ritual of purification for armies at the end of campaigns.

maniple (*manipulum*) ‘handful’: military unit consisting of two *centuriae*; adopted as the main tactical unit of the Roman army in the (late) fourth century BC; later superseded by the COHORT.

mantis, -teis ‘seer’, ‘diviner’, an expert interpreter of sacrifices, omens and other divine signs; professional diviners were employed by classical and Hellenistic Greek armies.

maza barley bread or porridge, a staple of the Greek soldier’s diet.

medimnos a Greek measure of volume; an Attic *medimnos* holds just over 52 litres; an Attic *medimnos* of barley meal weighs about 33.5 kg.

Medism, -izing collaboration with the ‘Medes’, i.e. the Persians.

meson ‘the middle’, an important concept in Greek moral and political philosophy; in Aristotle also specifically ‘the middle class’.

metaichmion ‘the space between the spears’: the no man’s land on the battlefield.

metic (*metoikos*) ‘fellow-dweller’ or resident alien, an immigrant without citizen rights.

military fund see STRATIOTIC FUND.

misthos ‘pay’, specifically the wage of citizen-soldiers, mercenaries (often called *mistophoroi*) and naval personnel.

monomachia ‘single combat’, sometimes fought before, or instead of, pitched battle.

mora the largest unit within the Spartan army, attested from 403 to 371 BC, probably consisting of c. 600 men commanded by a POLEMARCH.

neodamodeis ‘new citizens’, emancipated HELOTS with limited citizen rights.

obol a common Greek unit of currency; there were six obols to a DRACHMA.

officium Roman term for a formal obligation.

oikist (*oikistēs*) founder of a new settlement, often worshipped after his death.

oikoumenē ‘the inhabited world’, i.e. the known world.

othismos ‘the push’: the decisive moment in a hoplite battle at which the enemy is ‘pushed’ back and driven off the battlefield; the term can be used both literally and metaphorically and it is debated which interpretation is appropriate in hoplite battle.

ouragos ‘tail-commander’: the soldier stationed at the end of a file.

paean (*paian*) a song in honour of a variously identified god, sung during the advance into battle, to mark a victory in battle and on other occasions.

pandemēi mobilization ‘by the whole people’, i.e. a general levy (= *panstratiai*).

panoplos ‘fully equipped’: another word for HOPLITE.

panstratiai mobilization ‘by the whole army’, i.e. a general levy (= *pan-demēi*).

parataxis ‘an organized formation’, i.e. a set-piece, open battle.

pater patratus ‘fathered father’, a member of the Roman élite (*patres*) appointed to act as Rome’s public representative, specifically in FETIAL LAW.

patronus ‘patron’, person formally obliged to perform certain services for a client (*cliens*) and entitled to receive certain benefits in exchange.

Peloponnesian League modern term for a network of military alliances created and led by Sparta, normally referred to in antiquity as ‘the Lacedaemonians and their allies’.

peltast a type of light-infantry soldier, equipped with a light shield made of wicker or leather (*peltē*), especially common in northern Greece and Thrace.

pentekontor (os) see PENTEKONTOR (OS)

- pentekontor(os)** a fifty-oared ship, used for both military and other purposes, especially in archaic Greece, before the invention and spread of the TRIREME.
- pentekostys** ‘a fiftieth’ (or ‘a fifty’), a military unit in Sparta and among the TEN THOUSAND, led by a *pentekontér*, between the *ENOMOTIA* and the *LOCHOS* and/or *MORA*.
- perioikoi** ‘neighbours’, inhabitants of subject communities with reduced citizen rights, as in Sparta, Thessaly, Crete, Elis and elsewhere.
- periplous** ‘sailing round’; a naval manoeuvre designed to ram an enemy ship; probably the movement of a single ship turning round after breaking through the enemy line (see *DIEKPLOUS*) and catching an enemy ship in the flank from behind.
- phalangite** heavy infantry soldier of the Macedonian *PHALANX*, equipped with a distinctive long pike (*SARISSA*).
- phalanx** an infantry formation; in modern scholarship applied specifically to the formations of the classical Greek *HOPLITE* and Macedonian *PHALANGITE*.
- philia, philioi** ‘friendship’, ‘friends’: a recognized form of relationship between states in Greek international relations. In Hellenistic kingdoms, *philioi* is also used for the ‘friends’ of the king who act as his informal advisors and form his ‘court’.
- phoros** ‘contribution’, the term used for payments made by members of the Delian League to the common treasury; usually translated as ‘tribute’ by modern scholars.
- phratries** ‘brotherhoods’ (*phratria, patra*), fictive kinship groups which formed the basis of administrative, and sometimes military, units in many Greek states.
- pleonexia** ‘desire for more’, whether wealth or honour, a key concept in Greek thinking about the causes of war and conflict.
- polemarch** ‘war-leader’ (*polemarchos*), the title of various high-ranking military officers: the supreme commander of the archaic Athenian army (later superseded by the *STRATEGOI*), and the commander of a *LOCHOS* or *MORA* in the classical Spartan army.
- polemos** ‘war’, sometimes qualified as ‘heraldless’ (*akeryktos*, see *KERYX*) or ‘truceless’ (*aspondos*, see *SPONDAI*) to indicate a war fought with particular ferocity.
- polis, poleis** ‘city’, as a political community; in modern usage a term for a political entity dominated by a single major settlement ('city-state'), as opposed to the *ETHNOS*, a political entity which contains a number of settlements of roughly equal status ('tribal state').
- pomerium** the ritually marked boundary of a city, specifically Rome.

- praetor** one of the chief Roman magistrates, ranking below the **consuls**, charged with administering justice in Rome and later governing provinces.
- presbeis** ‘elders’; Greek term for ambassadors.
- prodromoi** ‘advance runners’, infantry or cavalry used as scouts.
- proeisphora** ‘advance contribution’, the payment of *EISPHORA* by one person on behalf of an entire group of taxpayers (*SYMMORY*).
- protostatēs** ‘the man who stands in front’, i.e. the soldier at the head of a file.
- proxenos** ‘representative of foreigners’, a citizen officially appointed by another community to represent their interests in his home state.
- psiloi** ‘the light ones’: Greek term for unarmoured infantry.
- rerum repetitio** ‘demand for the return of things’, the formal Roman procedure for making claims against an enemy.
- rhipaspia** ‘shield-dropping’, the criminal offence of throwing away one’s shield while running away from the enemy.
- rorarii** light-armed soldiers similar to, or identical with, the *VELITES*.
- salpinx** a trumpet-like reed instrument used to give a variety of military signals.
- sarissa** a pike, between 3.6 and 4.8 m (12–16 ft) in length; the distinctive weapon of the Macedonian *PHALANGITE*.
- satrap (satrapēs)** governor of a province in the Persian empire.
- scutum** curved rectangular shield used by legionary heavy infantry.
- sitos** ‘wheat’, ‘bread’, ‘food’, especially soldiers’ rations (as opposed to pay).
- skeuophoros** ‘baggage carrier’, a Greek soldier’s personal attendant.
- socii** ‘allies’, specifically the Italian allies of Rome.
- Sophists** Greek derogatory term for professional teachers of ‘higher’ education.
- spear-won land** see *DORIKTETOS CHORA*.
- sphagia** blood-sacrifice, specifically of a goat or ram just before hoplite battle.
- spolia opima** ‘fat booty’, the spoils taken by a Roman general who has personally killed an enemy general in battle.
- spondai** ‘libations’, i.e. pledges; the Greek term for a formal cessation of hostilities, whether a short-term truce or a long-term peace treaty.
- stadion** a Greek measure of distance of c. 180 m (600 ft).
- stasis** ‘a stand-up (fight)’; Greek term for civil conflict and civil war.
- stichos** ‘row’, ‘line’; Greek term for a single file (later *LOCHOS*) or column.
- strategos, -oi** ‘army leader’, ‘general’. In classical Greece, the term normally refers to a member of an elected board of generals; Athens annually elected ten *strategoi*.

stratiotēs ‘soldier’, literally a ‘member of the army’ (*stratos, strateia, strateuma*); the term may be applied to both citizen-soldiers and mercenaries.

Stratiotic Fund or Army Fund; a separate public treasury created in fourth-century Athens to provide better financial support for military enterprises.

stratiotidēs ships designed for, or converted to, use as ‘troop-transports’.

Successors the first generation of Hellenistic rulers (323–281); the commanders who, after the death of Alexander the Great, took control of the various territories conquered by him.

symbola a treaty to regulate the private dealings and disputes between citizens of one state with the citizens of another.

symmachia a treaty to ‘fight together’, i.e. a military alliance, whether defensive, offensive, equal or unequal. The ally is called *symmachos*, ‘fellow fighter’.

symmory a group of men formally designated to share between them the burden of the taxes and/or LITURGIES to which they are collectively liable.

sympolity ‘shared citizenship’ (*sympoliteia*, also *homopoliteia*), a formal treaty by which two states mutually grant full rights of citizenship to one another’s citizens.

synedrion ‘council’, specifically a congress of representatives of allied states, as in the Second Athenian League.

syngeneia ‘kinship’, including perceived kinship between communities and nations.

synoecism ‘settling together’ (*synoikismos*); the merging of settlements into a single political unit, by administrative unification or by physical migration to a new centre.

syntrierarchy ‘joint command of a TRIREME’; a sharing of the financial and other responsibilities of the TRIERARCHY between two or more men.

talent Greek measure of weight and unit of currency (*talanton*); the Attic talent weighed 26.2 kg, and as a unit of (silver) currency it was subdivided into 60 minae (*mna*) and 6,000 drachmas.

taxisarch (taxiarchos) ‘commander of a TAXIS’.

taxis ‘formation’, ‘organization’; a term used for (1) battle order or battle stations and (2) units within armies. In classical Greece, the *taxis* is often the largest sub-division of an army (as at Athens, where each of the ten TRIBES formed one *taxis*), but in Hellenistic authors the term is also used of much smaller units.

technē (professional) ‘skill’.

Ten Thousand conventional name for the more than 10,000 Greek mercenaries hired by Cyrus the Younger for his attempted rebellion against

his brother, the Persian king Artaxerxes II; after his defeat, they fought their way back home, and many were subsequently hired by the Spartans for their campaigns in Asia Minor and in the Corinthian War.

tetradrachm a silver coin worth 4 drachmas.

thalassokratia ‘sea-power’, thalassocracy; a form of hegemony based on naval power which was among the major military ambitions of many Greek states.

Theoric Fund a treasury set up c. 350 BC to subsidize the attendance of citizens at the dramatic performances at Athenian religious festivals.

theoroi ‘spectators’; sacred envoys sent abroad by a state to consult oracles or attend major religious festivals, including the Panhellenic games.

thes, thetes ‘hired labourers’; a term used not only in the literal sense but also as the name of the lowest of the Athenian property classes, which provided much naval manpower.

thureophoroi ‘door-carriers’: a type of Hellenistic and Celtic infantry whose name derives from the large size of their shields.

timē ‘honour’, ‘respect’, a key Greek value.

triarii the oldest and most experienced soldiers who formed a third and final line of MANIPLES in the mid-Republican Roman battle order, originally armed with thrusting-spears.

tribes important administrative units in both Greece (where they are called *phylai*) and Rome (*tribus*); they sometimes serve as military units, as probably in archaic Sparta and certainly in classical Athens.

trierarch ‘commander of a trireme’, captain of a warship (*trierarchos*).

trierarchy the position of TRIERARCH; in Athens and probably elsewhere this position was held as a form of LITURGY.

tribemolia a hybrid of the trireme and the *hemiolia* (a light warship widely used by pirates), developed in Hellenistic Rhodes.

trireme (trierès) ‘three-oared’, a galley with three banks of oars.

tropaion ‘trophy’, literally ‘turning-point marker’; a temporary monument consisting of armour hung up on a tree trunk, set up to mark a victory in battle at the point where the enemy turned to flight (or in sea battles on the nearest island or headland).

velites a distinctively equipped body of light-armed infantry attached to the Republican Roman legion; see also RORARI.

virtus ‘manly courage’, ‘excellence’, a key attribute of the ideal Roman male.

xenia, xenos ‘guest-friend(ship)’, a formal relation of private friendship between ‘strangers’ (*xenoi*), i.e. members of different political communities; see also PROXENOS.

zeugitēs member of the Athenian property class of *zeugitai*, ranked above the *THETÊS* and consisting of those who had an annual income equivalent to between 200 and 300 *MEDIMNOI* (of barley) and were obliged to provide themselves with hoplite arms and armour.

zugon ‘yoke’, a term used also to refer to a rank (as opposed to a file) in an infantry formation, usually in the expression ‘the first yoke’, i.e. the front rank.

ANCIENT AUTHORS

Aelian (1): Aelianus Tacticus, second century AD, a Greek resident in Rome; author of a treatise on tactics (*Tactica*), probably written in AD 106.

Aelian (2): Claudius Aelianus, c. AD 170–235, from Praeneste; author of a variety of works, including *Historical Miscellany* (*Varia historia*), a collection of historical anecdotes.

Aeneas Tacticus/the Tactician, c. 350 BC, perhaps from Stymphalus in Arcadia; author of one of the earliest Greek military manuals. Its only surviving portion (*Poliorcetica*) is variously known as *On the Defence of Fortified Positions* or *On Siegecraft* or *How to Survive under Siege*.

Aeschines, c. 390–314 BC, from Athens; a politician who became one of the ten canonical Attic orators. Three of his speeches survive.

Aeschylus, c. 525–456 BC, from Athens; composer of tragic plays, including *The Persians* (472 BC). He fought in the major battles of the Persian Wars.

Aesop is a semi-legendary figure who was believed to have lived in the early sixth century BC and to have created a large repertoire of fables. These were probably current only in oral form until written collections were compiled from the fourth century BC onwards; the surviving *Fables* are a compilation made by the Byzantine monk Maximus Planudes, c. AD 1300.

Agathias, AD 536–82, from Myrina; a poet and author of a contemporary history covering the years 552–8, a sequel to the work of Procopius.

Alcaeus, c. 600 BC, from Lesbos; a poet whose work survives only in fragments.

Alcman, c. 600 BC, from Sparta; a poet whose work survives only in fragments.

Ammianus Marcellinus, c. AD 330–400, from Antioch; author of a history of the Roman Empire. Only books 14–31, covering the years AD 354–78, survive.

Anaximenes, c. 380–320 BC, from Lampsacus; a rhetorician who wrote histories of Greece and Philip II (fragments in *FGrH* 72). He accompanied Alexander the Great on his campaigns

Andocides, c. 440–390 BC, from Athens; a politician who became one of the ten canonical Attic orators. Several of his speeches survive.

Androtion, c. 350 BC; author of an *Attis*, a history of Attica.

Anthologia Palatina is an anthology of about 4,000 ancient Greek poems compiled from earlier anthologies by the Byzantine scholar Constantinus Cephalas in the tenth century AD.

Antiphon, c. 480–411 BC, from Athens; one of the leaders of the oligarchic regime established in 411 and a writer of law court speeches who came to be regarded as one of the ten canonical Attic orators. Several of his speeches as well as his collection of rhetorical exercises, the *Tetralogies*, survive. Perhaps the same person as Antiphon ‘the sophist’, fragments of whose philosophical work also survive.

Apollonius Rhodius/of Rhodes, c. 270–190 BC, from Alexandria (but for a time resident in Rhodes); a teacher of rhetoric and head of the Library at Alexandria who composed the epic *Argonautica*.

Appian of Alexandria, second century AD; author of a Roman history covering civil wars and foreign wars, arranged by geographical area (Italy, Libya, Sicily, Syria, etc.).

Archilochus, c. 680–640 BC, from Paros; a poet whose work survives only in fragments.

Aristophanes, c. 445–385 BC, from Athens; a comic poet whose plays included *Acharnians* (425), *Knights* (424), *Wasps* (422), *Peace* (421), *Lysistrata* (411) and *Frogs* (405).

Aristotle, 384–322 BC, from Stagirus; a philosopher and teacher (of among others Alexander the Great), who wrote treatises on a vast range of subjects, including *Politics* and two works on *Ethics*. A series of studies of the political institutions of city-states, including *The Athenian Constitution* (*Ath. Pol.*), and a treatise *On Economics* (*Oikonomika*) are also attributed to him, though they were probably compiled by his students.

Arrian (Flavius Arrianus Xenophon), c. AD 85–175, from Nicomedia; consul in 129 or 130, governor of Cappadocia 130/1–137/8, and author of many works, including *The Formation against the Alans* (134/5), *Tactica* (136/7), and the later *Anabasis of Alexander*.

Asclepiodotus, first century BC; author of a treatise on *Tactics*.

Asconius (Quintus Asconius Pedianus), mid-first century AD, probably from Patavium; author of commentaries on Cicero’s speeches.

Athenaeus, c. AD 200, from Naucratis; author of *Deipnosophistae*, a miscellany in the form of an erudite conversation at a dinner party.

Augustine (Aurelius Augustinus), AD 354–430, from Thagaste; bishop of Hippo in north Africa, and author of the *Confessions* (397–8) and *The City of God* (413–26).

- Bacchylides**, c. 505–425 BC, from Iulis on Ceos; composer of *Odes* dated to c. 480–450 BC.
- Caesar (Gaius Julius Caesar)**, 100–44 BC, from Rome; general and statesman who wrote Commentaries on his own campaigns: the Gallic War and the Civil War. Falsely attributed to him are Commentaries on the Spanish War, African War and Alexandrine War.
- Callisthenes**, c. 360–328 BC, from Olynthus; author of histories of Greece and ‘court’ historian of Alexander the Great. His work survives only in fragments.
- Cassiodorus (Flavius Magnus Aurelius Cassiodorus Senator)**, fl. c. AD 484–585, from Scyllaceum; Roman statesman who served under Theoderic the Great, and author of works including *Chronica*, a world history up to AD 519, and a *History of the Goths*.
- Cassius Dio (Dio Cassius Cocceianus)**, AD 155 – after 229, from Nicaea; Roman senator and governor, and author of a world history up to AD 229 in eighty books.
- Celsus (Aulus Cornelius Celsus)**, first century AD, from Rome; author of an encyclopedic work of which only the medical section (*De Medicina*) survives, but which also covered military tactics.
- Chronicle of Pseudo-Joshua**, a history of events in Edessa and Mesopotamia from AD 494 to 506, attributed to the Syriac Christian writer Joshua the Styliste.
- Cicero (Marcus Tullius Cicero)**, 106–43 BC, from Arpinum; Roman orator, statesman and prolific author. Almost a thousand of his letters to family and friends, and in particular to his friend Atticus, survive; as do dozens of his speeches (including those against Verres and Catiline and the *Philippics* against Mark Antony) and twenty philosophical studies.
- Claudius Quadrigarius, Quintus**, first century BC; author of an annalistic history of Rome from at least 390 to 78 BC.
- Constantine VII Porphyrogenitus**, AD 905–59; emperor of Byzantium and scholar, who produced (or had produced in his name) several compilations of older works.
- Critias**, c. 460–403 BC, from Athens; member of the oligarchy of the Thirty in 403, and author of a range of literary works, including a *Spartan Constitution*.
- Ctesias**, c. 400 BC, from Cnidus; served as physician at the court of Artaxerxes II and wrote a number of works about Asia, especially *Persica*, of which only fragments survive.
- Curtius Rufus, Quintus**, first century AD; Roman author of a *History of Alexander*.
- De Viris Illustribus** is an anonymous collection of biographies of famous men of the Roman Republic, compiled in the fourth century AD.

Demetrius of Phaleron, late fourth century BC; ruler of Athens, 317–307 BC, and author of a number of philosophical works, including a lost treatise on international relations.

Demosthenes, 384–322 BC, from Athens; statesman and orator. The corpus of sixty political and legal speeches which survive under his name also includes a number of speeches composed by others, most notably Apollodorus, son of Pasion.

Digest (Digesta) is a collection of laws and legal rulings, compiled in the sixth century AD on the orders of the emperor Justinian, including much earlier material, especially from the late second-century jurists Ulpian, Paulus and Papinius.

Diodorus Siculus/of Sicily, c. 80–20 BC, from Agyrium; author of the *Library of History*, a forty-book history of the world, compiled from earlier sources, including Ephorus.

Dionysius of Halicarnassus, late first century BC; Greek teacher of rhetoric in Rome under Augustus, and author of *Roman Antiquities*, a history down to 264 BC, in twenty books.

Ephorus, c. 400–330 BC, from Cyrene; author of a *Universal History*, in twenty-nine books, edited and published by his son Demophilus, who added a thirtieth book.

Eupolis, c. 446–411 BC, from Athens; author of comic plays which survive only in fragments.

Euripides, 484–407 BC, from Athens; author of almost a hundred tragic plays, of which seventeen survive; he also composed a victory ode for Alcibiades at Olympia (416).

Fabius Pictor, Quintus, c. 200 BC, from Rome; author of the first Roman history (*Annales*).

Frontinus (Sextus Julius Frontinus), AD 40–103, from Rome; magistrate and general whose works on the water supply of Rome and on stratagems (*Strategemata*) survive.

Gellius, Aulus, c. 130–80 AD, probably from Rome; author of *Attic Nights (Noctes Atticae)*, a miscellany of historical and other information in twenty books.

Hellenica Oxyrhynchia is the modern title given to the fragments of a fourth-century continuation of Thucydides discovered in 1906 in Oxyrhynchus in Egypt. Its author is unknown but highly regarded: Theompompos and Cratippus are among the candidates.

Hero(n), first century AD, from Alexandria; author of a number of treatises on aspects of engineering and measurement, including *Mechanics* and *Pneumatics*.

Herodotus, 480s–420s BC, from Halicarnassus; author of the *Histories*, a universal history which culminates in an account of the Persian Wars.

Hesiod is a semi-legendary poet from Ascra in Boeotia to whom in antiquity many epic poems were attributed, including the *Theogony* and *Works and Days* (c. 700 BC?).

Hieronymus of Cardia, c. 360–260 BC; a general and magistrate who played a role in the wars following the death of Alexander, supporting Eumenes of Cardia and later the Antigonids; author of a history covering the period 323–272 BC.

Hippocratic Corpus is the modern name for a collection of about sixty treatises on medicine, dating from 430 BC to AD 200, falsely attributed to Hippocrates of Cos, c. 460–380 BC.

Hippodamus of Miletus, early fifth century BC; an architect and town planner who also wrote a treatise on the organization of the ideal state.

Homer, semi-legendary poet to whom in antiquity many epic poems were attributed, including the *Iliad* and *Odyssey* (c. 750–650 BC?) and a number of archaic *Hymns*.

Horace (Quintus Horatius Flaccus), 65–8 BC, from Venusia; poet of the *Epodes*, *Satires*, *Odes*, *Epistles* and *Carmen saeculare*.

Isaeus, c. 415–340 BC, from Chalcis; one of the ten canonical Attic orators, eleven of whose speeches survive, along with some fragments.

Isidore of Seville, AD 560–636, from Cartagena; archbishop of Seville (canonized in 1598) and prolific scholar whose works included a universal history (*Chronica*), a History of the Goths, and an encyclopedic compendium of ancient literature, known as *Etymologiae*.

Isocrates, 436–338 BC, from Athens; one of the ten canonical Attic orators. Twenty-one of his speeches and rhetorical showpieces, and nine *Letters*, survive.

Itinerarium Alexandri ('The Journeys of Alexander the Great and Trajan') is an anonymous account of Alexander's expedition, written for the emperor Constantius in AD 340.

Jerome (Eusebius Sophronius Hieronymus), c. AD 340–420, from Stridon; canonized translator of the Bible into Latin and author of many theological studies, historical works (including a continuation of Eusebius' *Chronicon* and biographies of Christian writers), a commentary on the Book of Daniel and letters.

John of Ephesus, c. AD 505–85, from Amida; bishop of Ephesus under the emperor Justinian and author of hagiographies and an *Ecclesiastical History*.

John the Lydian (Joannes Lydus), sixth century AD; public official under the emperor Justinian and author of a number of works, including *On Magistracies*.

Josephus (Flavius Josephus), AD 37–101, from Jerusalem; author of an account of the Jewish Revolt of AD 66–73 (*The Jewish War*), a history of

- the Jews until AD 66 (*Jewish Antiquities*) and a defence of Jewish traditions (*Against Apion*).
- Justin Martyr**, c. AD 105–65, from Flavia Neapolis in Palestine; canonized Christian preacher and martyr, who published a number of works in defence of Christianity.
- Justinus (Marcus Junianus Justinus)**, third century AD; author of an *Epitome* of Gnaeus Pompeius Trogus' *Philippic Histories*, a universal history centred on the rise and conquests of Macedon, composed under Augustus.
- Livy (Titus Livius)**, 59 BC–AD 17, from Patavium; author of *Ab urbe condita*, a 142-book history of Rome to 9 BC, of which books 1–10 and 20–45, plus summaries of the rest, survive.
- Lucian**, c. AD 120–80, from Samosata in Syria; Greek author of many satirical works, including the *Dialogue of the Dead* and *How to Write History*.
- Lucilius, Gaius**, c. 180–102 BC; Roman author of satires of which fragments survive.
- Lysias**, c. 458–380 BC, foreign resident of Athens; businessman and professional speechwriter, one of the ten canonical Attic orators. Thirty-one of his speeches, and fragments, survive.
- Malalas (John Malalas)**, c. AD 491–578, from Antioch; author of *Chronographia*, a chronicle ranging from the mythical past to contemporary events of the reign of Justinian.
- Malchus**, c. AD 500, from Philadelphia, author of a detailed history covering the years AD 473/4–91 of which only fragments survive.
- Marcellinus Comes**, c. AD 500, from Illyria; author of *Chronicon* covering AD 379–534.
- Menander Protector**, c. AD 600; author of a continuation of the history of Agathias, covering the years AD 558–82.
- Mimnermus**, c. 640–600 BC, from Colophon, poet whose work survives only in fragments.
- Mnesimachus**, c. 350 BC, from Athens; author of comic plays which survive only in fragments.
- Nepos (Cornelius Nepos)**, c. 100–25 BC, from Cisalpine Gaul; author of *De Viris Illustribus*, a series of short biographies comparing famous Greeks and Romans.
- Nicolaus of Damascus**, c. 65 BC–AD 5; prominent figure at the court of the kings of Judaea, and author of a *Life of Augustus* and a universal history in 144 books.
- Notitia Dignitatum** is an official listing of all Roman civil and military posts, c. AD 400.
- Old Oligarch (or Pseudo-Xenophon)** is the modern name given to the late fifth- or early fourth-century anonymous author of a political pamphlet on the Athenian constitution.

- Onasander**, c. AD 50; Greek author of a military treatise, *The General (Strategikos)*.
- Orosius**, fifth century AD, from Bracara in Portugal; author of works in defence of Christian orthodoxy and of a *History against the Pagans*, completed in AD 418.
- Pausanias**, c. AD 175, from Asia Minor; traveller and author of a *Description of Greece*.
- Philo(n) of Byzantium**, late third century BC; author of work on *Mechanics*, including artillery.
- Philochorus**, c. 320–261 BC, from Athens; author of an *Atthis* covering events to 262 BC.
- Pindar**, 522–443 BC, from Thebes; poet of whose many works forty-five victory odes for winners at the Olympic, Pythian, Isthmian and Nemean games survive intact.
- Plato**, 427–347 BC, from Athens; author of numerous philosophical studies in the form of conversations attributed to his teacher Socrates. Some Socratic dialogues ascribed to Plato, such as *Alcibiades* are the work of unknown other authors.
- Plautus (Titus Maccius Plautus)**, c. 254–184 BC; Roman actor and author of twenty-one comic plays. .
- Pliny the Elder (C. Plinius Secundus Maior)**, AD 23–79, from Como; Roman official and author of an encyclopedic work of which thirty-seven books on *Natural History* survive.
- Plutarch**, c. AD 45–120, from Chaeronea; Greek author of a vast and highly influential body of work of which fifty biographies (*Parallel Lives*) and seventy-eight essays (*Moralia*) survive.
- Polyaenus**, second century AD, from Macedon; rhetorician who compiled a collection of some 900 historical anecdotes on *Stratagems*, published at the start of the Parthian War in AD 162.
- Polybius**, second century BC, from Megalopolis; leading figure of the Achaean league and author of a history covering the rise of Rome, 220–146 BC, part of which survives.
- Porphyry**, AD 232–305, from Tyre; Neo-Platonic philosopher and polymath whose many works include *Against the Christians*, *On Abstinence* and a *Life of Plotinus*.
- Posidonius**, c. 135–51 BC, from Apamea; Stoic philosopher and polymath, who taught in Rhodes. His (lost) history in fifty-two books covered the years 146–88 BC.
- Priscus**, fifth century AD, from Panium; philosopher and author of a history in eight books, probably covering AD 433–74. Surviving fragments include an account of the court of Attila.
- Procopius**, c. AD 500–565, from Caesarea; assistant to Belisarius, who in the 550s wrote two accounts of the reign of Justinian, one favourable (the

Histories or Wars, covering the emperor's campaigns up to 554 BC) and one extremely hostile (*Secret History*).

Pseudo-Joshua Stylites See *Chronicle of Pseudo-Joshua*.

Pseudo-Maurice is the name now given to the anonymous author of the sixth-century AD treatise *Strategikon*, traditionally attributed to the Byzantine emperor Maurice I (BC 539–602).

Ptolemy (Ptolemaeus), 367–283 BC, from Eordaea; Macedonian general, and later king of Egypt, who wrote an account of Alexander's campaigns, now lost but much used by Arrian.

Sallust (Gaius Sallustius Crispus), 86–34 BC from Amiternum; Roman magistrate who in the late 40s BC published accounts of the *Catiline Conspiracy* and the *Jugurthine Wars*, both extant, and subsequently a *History* of the years 78–67 BC, of which only fragments survive.

Sappho, c. 600 BC, from Lesbos, poetess whose work survives only in fragments.

Seneca (Lucius Annaeus Seneca), 4 BC–AD 65, from Corduba; Stoic philosopher, magistrate and tutor to Nero who wrote many works, including a treatise on 'favours' (*De beneficiis*).

Silenus of Caleacte, late third century BC; (lost) historian of the Hannibalic War.

Silius Italicus, c. AD 25–101, no birthplace known; Roman magistrate and author of *Punica*, an epic poem on the Hannibalic War.

Simonides, c. 556–469 BC, from Iulis on Ceos; poet of a variety of works commissioned by powerful families and city-states, including epigrams on the dead of the Persian Wars and an elegy on the battle of Plateae, fragments of which were rediscovered in 1991.

Solon, c. 600 BC, from Athens, statesman and poet whose law code of 594 BC and poetry survive only in fragments.

Sophocles, c. 495–406 BC, from Colonus; Athenian general in 440 BC and author of many works of poetry, including about 120 plays, seven of which survive.

Sosylus of Sparta/Lacedaemon, late third century BC; (lost) historian of the Hannibalic War.

Stobaeus (Joannes Stobaeus), late fifth century AD, from Macedonia; compiler of the *Florilegium*, a didactic work consisting of extracts from some 500 earlier authors.

Strabo, c. 63 BC–AD 23, from Amasia in Pontus; author of a lost *History* and of the *Geography*, a description of the known world, with historical digressions.

Suda is the title of a lexicon compiled in the tenth century AD, which includes many citations from earlier writers. The lexicon is also referred to as Suidas, on the incorrect assumption that this is the author's name.

Syrianus Magister, an author of the sixth century AD, responsible for works on *Strategy*, *Naval Warfare* and *Military Rhetoric*.

Tacitus (Publius or Gaius Cornelius Tacitus), c. AD 55–120, from Gaul; senator, consul and provincial governor, who in AD 98 wrote monographs on *Germania* and on the campaigns of his father-in-law *Agricola*, between AD 105 and 108 published *Histories* which originally covered the years 68–96 but of which now only the section dealing with 68–70 survives, and finally wrote *Annals* covering the years AD 14–68, three-quarters of which survive.

The Contest of Homer and Hesiod is a short account of these two poets and the fictional competition between them, by an anonymous compiler in the late second century AD, but mostly derived from Alcidamas' *Mouseion*, written in the early fourth century BC.

Theocritus, third century BC, from Syracuse; poet of the *Idylls*, composed under the patronage of Ptolemy II.

Theognis, c. 540 BC, from Megara, a poet whose work survives in a later anthology.

Theophrastus, 371–287 BC, from Lesbos; philosopher and teacher active in Athens; author of the *History of Plants* as well as comical sketches of *Characters*.

Theophylact Simocatta, c. 580s–640s AD, from Egypt; Byzantine court official and author of a *History* covering the reign of the emperor Maurice (AD 582–602).

Theopompus, c. 378–320 BC, from Chios; orator and author of *Hellenica*, a continuation of Thucydides covering 411–394 BC in twelve books, and *Philippica*, a universal history in fifty-eight books, centred on the reign of Philip II of Macedon; only fragments of both works survive.

Thucydides, 460s–390s BC, from Athens; general in 424 BC and author of a massively detailed history of the Peloponnesian War down to 411 BC.

Timaeus, c. 345–250 BC, from Tauromenium in Sicily; author of a (lost) *History* covering the earliest times to contemporary events with particular reference to Sicily and Italy.

Tyrtaeus, c. 640–600 BC, from Sparta, poet whose work survives only in fragments.

Tzetzes, Joannes, twelfth century AD; Byzantine grammarian and author of works on Homer, commentaries and the *Chiliades*, a miscellany quoting some 400 earlier authors.

Vegetius (Publius Flavius Vegetius Renatus), c. AD 400; Roman official and author of treatises on warfare (*Epitoma rei militaris*, c. 390) and veterinary medicine.

Virgil (Publius Vergilius Maro), 70–19 BC, from Mantua; poet of the *Elegiacs* (37 BC), *Georgics* (30 BC) and the *Aeneid* (19 BC).

Xenophon, c. 430–350 BC, from Athens; a mercenary commander and author of a wide range of works, including an account of his own mercenary expedition (*Anabasis*), a history of Greece from 411 to 362 BC (*Hellenica*), a biography (*Agesilaus*), a historical novel (the *Education of Cyrus*), a collection of anecdotes about Socrates (*Memorabilia*), a treatise on household management (*Oikonomikos*) and several short tracts, including *Horsemanship*, *Cavalry Commander*, *Lacedaemonian Constitution*, and *Ways and Means* (*Poroī*). A treatise on the Athenian constitution is falsely attributed to him: see *Old Oligarch*.

Zonaras, Joannes, twelfth century AD; Byzantine court official who wrote a number of theological works; author of a *Historical Epitome* in eighteen books which covered events from the Creation to AD 1118.

BIBLIOGRAPHY

ABBREVIATIONS

JOURNALS

<i>AAA</i>	<i>Archaiologika Analecta ex Athenon</i>
<i>ABSA</i>	<i>Annual of the British School at Athens</i>
<i>AC</i>	<i>L'Antiquité classique</i>
<i>AClass</i>	<i>Acta Classica</i>
<i>AH</i>	<i>Ancient History</i>
<i>AHB</i>	<i>Ancient History Bulletin</i>
<i>AHR</i>	<i>American Historical Review</i>
<i>AJA</i>	<i>American Journal of Archaeology</i>
<i>AJAH</i>	<i>American Journal of Ancient History</i>
<i>AKG</i>	<i>Archiv für Kulturgeschichte</i>
<i>AncSoc</i>	<i>Ancient Society</i>
<i>AncW</i>	<i>Ancient World</i>
<i>AntJ</i>	<i>Antiquaries Journal</i>
<i>ASNP</i>	<i>Annali della Scuola normale superiore di Pisa, classe di lettere e filosofia</i>
<i>BAGB</i>	<i>Bulletin de l'Association Guillaume Budé</i>
<i>BASP</i>	<i>Bulletin of the American Society of Papyrologists</i>
<i>BE</i>	<i>Bulletin épigraphique</i>
<i>BICS</i>	<i>Bulletin of the Institute of Classical Studies</i>
<i>BNJbb</i>	<i>Byzantinisch-neugriechische Jahrbücher</i>
<i>BRGK</i>	<i>Bericht der römisch-germanischen Kommission des deutschen archäologischen Instituts</i>
<i>BStudLat</i>	<i>Bollettino di Studi latini.</i>
<i>C&M</i>	<i>Classica et Mediaevalia</i>
<i>CA</i>	<i>Classical Antiquity</i>
<i>CAH</i>	<i>Cambridge Ancient History</i>
<i>ChrEg</i>	<i>Chrononique d'Égypte</i>
<i>CP</i>	<i>Classical Philology</i>
<i>CPCActs</i>	<i>Acts of the Copenhagen Polis Centre</i>
<i>CPPCPapers</i>	<i>Papers from the Copenhagen Polis Centre</i>
<i>CQ</i>	<i>Classical Quarterly</i>
<i>CR</i>	<i>Classical Review</i>
<i>CSCA</i>	<i>California Studies in Classical Antiquity</i>

CW	<i>Classical World</i>
DArch	<i>Dialoghi di archeologia</i>
DHA	<i>Dialogues d'histoire ancienne</i>
G&R	<i>Greece and Rome</i>
GRBS	<i>Greek, Roman and Byzantine Studies</i>
HSCP	<i>Harvard Studies in Classical Philology</i>
JDAI	<i>Jahrbuch des deutschen archäologischen Instituts</i> (1886–)
JEA	<i>Journal of Egyptian Archaeology</i>
JHS	<i>Journal of Hellenic Studies</i>
JRA	<i>Journal of Roman Archaeology</i>
JRMES	<i>Journal of Roman Military Equipment Studies</i>
JRS	<i>Journal of Roman Studies</i>
LF	<i>Listy Filologiczne</i>
MDAI(A)	<i>Mitteilungen des deutschen archäologischen Instituts (Athen. Abt.)</i>
MEFRA	<i>Mélanges d'archéologie et d'histoire de l'École française de Rome, Antiquité</i>
OxJArch	<i>Oxford Journal of Archaeology</i>
PAPhS	<i>Proceedings of the American Philosophical Society</i>
P&P	<i>Past and Present</i>
PBSR	<i>Papers of the British School at Rome</i>
PP	<i>La parola del passato</i>
REG	<i>Revue des études grecques</i>
REL	<i>Revue des études latines</i>
RH	<i>Revue d'histoire</i>
RhM	<i>Rheinisches Museum</i>
SO	<i>Symbolae Osloenses</i>
SV	<i>Staatsverträge des Altertums</i>
SyllClass	<i>Syllecta Classica</i>
TAPhA	<i>Transactions of the American Philological Association</i>
WS	<i>Wiener Studien</i>
ZRG	<i>Zeitschrift der Savigny-Stiftung für Rechtsgeschichte (Romanistische Abteilung)</i>
ZPE	<i>Zeitschrift für Papyrologie und Epigraphik</i>

EDITIONS AND REFERENCE WORKS

Austin	M. M. Austin, <i>The Hellenistic World from Alexander to the Roman Conquest: A Selection of Ancient Sources in Translation</i> (Cambridge 1981)
BGU	<i>Berliner Griechische Urkunden (Ägyptische Urkunden aus den Kgl. Museen zu Berlin</i> , 15 vols., ed. W. Schubart et al. (Berlin 1895–1983)
C. Ord. Ptol.	<i>Corpus des ordonnances des Ptolémées</i> , ed. M. T. Lenger (1964)
Chambers	M. Chambers, <i>Hellenica Oxyrhynchia, post Victorium Bartoletti</i> . ed. (Stuttgart 1993)
Fornara	C. W. Fornara (ed.), <i>Archaic Times to the End of the Peloponnesian War</i> , 2nd edn, Translated Documents of Greece and Rome 1 (1983)
FGrH	<i>Fragmente der griechischen Historiker</i> , ed. F. Jacoby et al. (Leiden 1923–)

<i>HCT</i>	<i>Historical Commentary on Thucydides</i> , ed. A. Gomme et al. (Oxford 1945–81)
<i>ID</i>	<i>Inscriptions de Délos</i> (1926–)
<i>IG</i>	<i>Inscriptiones Graecae</i> (1873–)
<i>IK</i>	<i>Inscriptions griechischer Städte aus Kleinasiens</i> (1972–)
<i>ILLRP</i>	<i>Inscriptiones Latinae Liberae Rei Publicae</i> , ed. A. Degrassi, vol. 1 ² (1965), II (1963)
<i>Inscr. Prien.</i>	<i>Inscriptions von Priene</i>
<i>LP</i>	E. Lobel and D. L. Page, <i>Poetarum Lesbiorum Fragmenta</i> (Oxford 1955)
<i>LSJ</i>	Liddell and Scott, <i>Greek–English Lexicon</i> , 9th edn, rev. H. Stuart Jones (Oxford 1925–40); Suppl. by E. A. Barber and others (1968)
<i>ML</i>	R. Meiggs and D. Lewis, <i>A Selection of Greek Historical Inscriptions to the End of the Fifth Century BC</i> . Rev. edn (Oxford 1988)
<i>MRR</i>	<i>Magistrates of the Roman Republic</i> , 3 vols., ed. T. R. S. Broughton (New York 1951–86)
<i>OGIS</i>	<i>Orientalis Graecae Inscriptiones Selectae</i> , ed. W. Dittenberger (1903–5)
<i>Page</i>	D. L. Page (ed.), <i>Poetae Melici Graeci</i> (Oxford 1962)
<i>RC</i>	<i>Royal Correspondence in the Hellenistic Period: A Study in Greek Epigraphy</i> , ed. C. B. Welles (London 1934)
<i>RE</i>	<i>Paulys Realencyclopädie der classischen Altertumswissenschaft</i> , ed. G. Wissowa et al., 2nd edn (Stuttgart 1894–1963)
<i>RO</i>	P. J. Rhodes and R. Osborne, <i>Greek Historical Inscriptions 404–323 BC</i> (Oxford 2003)
Rose	V. Rose, <i>Aristotelis qui ferebantur librorum fragmenta</i> (Leipzig 1886)
<i>SB</i>	<i>Sammelbuch griechischern Urkunden aus Ägypten</i> , 23 vols., ed. F. Preisigke et al. (Wiesbaden 1915–2002)
<i>SEG</i>	<i>Supplementum Epigraphicum Graecum</i> (1923–)
<i>Syll.³</i>	<i>Sylloge Inscriptionum Graecarum</i> , 3rd edn, ed. W. Dittenberger (1915–24)
<i>SV</i>	<i>Die Staatsverträge des Altertums</i> , vol. II (rev. edn), ed. H. Bengtson (Munich 1975), vol. III, ed. H. H. Schmitt (Munich 1969)
<i>TH</i>	Linear B tablets from Thebes
Thalheim	<i>Lysiae Orationes</i> , ed. T. Thalheim (Leipzig 1913)
Tod	M. N. Tod, <i>Greek Historical Inscriptions</i> , vol. 1 ² (1946), II (Oxford 1948)
<i>W Chrest</i>	<i>Grundzüge und Chrestomathie der Papyruskunde</i> , 2 vols., ed. L. Mitteis and U. Wilcken (Leipzig and Berlin 1912)
West	M. L. West, <i>Iambi et Elegi Graeci</i> (Oxford 1992)

PRIMARY SOURCES

The names of literary authors and works are in general abbreviated according to the usage of *The Oxford Classical Dictionary* (3rd edn, 1996). Inscriptions are cited according to the usage of *AE* and *SEG*. Papyri, ostraka and tablets are cited according to: J. F. Oates et al., *Checklist of Editions of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets* (Atlanta 1992)

(<http://scriptorium.lib.duke.edu/papyrus/texts/clist.html>).

MAIN BIBLIOGRAPHY

- Achard, G. (1994) ‘*Bellum iustum, bellum sceleratum* sous les rois et sous la république’, *BStudLat* 24: 474–86.
- Adam, J.-P. (1982) *L’architecture militaire grecque*. Paris.
- Adams, J. P. (1976) ‘Logistics of the Roman imperial army: major campaigns in the eastern front in the first three centuries AD’ (Yale University diss.).
- Adams, W. L. (1984) ‘Antipater and Cassander: generalship on restricted resources in the fourth century’, *AncW* 10: 79–88.
- Adcock, F. E. (1940) *The Roman Art of War Under the Republic*. Cambridge.
- (1957) *The Greek and Macedonian Art of War*. Berkeley and Los Angeles.
- Adcock, F. E. and Mosley, D. J. (1975) *Diplomacy in Ancient Greece*. London.
- Afzelius, A. (1942) *Die römische Eroberung Italiens (340–264 v. Chr.)*. Copenhagen.
- Ager, S. L. (1996) *Interstate Arbitration in the Greek World, 337–90 BC*. Berkeley and Los Angeles.
- (2003) ‘An uneasy balance: from the death of Seleukos to the battle of Raphia’, in Erskine (2003) 35–50.
- Ahlberg, G. (1971) *Fighting on Land and Sea in Greek Geometric Art*. Stockholm.
- Alcock, S. E. (1993) *Graecia Captia: The Landscapes of Roman Greece*. Cambridge.
- Alcock, S. E. and Luraghi, N. (eds.) (2003) *Helots and their Masters*. Washington D.C.
- Alfoldi, A. (1952) *Der frührömische Reiteradel und seine Ehrenabzeichen*. Baden-Baden.
- (1964) *Early Rome and the Latins*. Ann Arbor.
- (1968) ‘(Centuria) Procum Patricium’, *Historia* 17: 444–60.
- Allen, R. E. (1983) *The Attalid Kingdom: A Constitutional History*. Oxford.
- Alston, R. (1995) *Soldier and Society in Roman Egypt*. London.
- Ambaglio, D. (1981) ‘Il trattato “Sul comandante” di Onasandro’, *Athenaeum* 59: 353–71.
- Ameling, W. (1993) *Karthago: Studien zu Militär, Staat und Gesellschaft*. Munich.
- Amit, M. (1965) *Athens and the Sea: A Study in Athenian Sea-Power*. Brussels.
- Ampolo, C. (1987) ‘I contributi alla prima spedizione ateniese in Sicilia (427–404 A.C.)’, *PP* 42: 5–11.
- Anastasiadis, V. (2004) ‘Idealised *scholē* and disdain for work’, *CQ* 54: 58–79.
- Anderson, J. K. (1961) *Ancient Greek Horsemanship*. Berkeley and Los Angeles.
- (1965) ‘Homeric, British and Cyrenaic chariots’, *AJA* 69: 349–52.
- (1967) ‘Philopoemen’s reform of the Achaean army’, *CPh* 62: 104–6.
- (1970) *Military Theory and Practice in the Age of Xenophon*. Berkeley and Los Angeles.
- (1975) ‘Greek chariot-borne and mounted infantry’, *AJA* 79: 175–87.
- (1976) ‘Shields of eight palms width’, *California Studies in Classical Antiquity* 9: 1–6.
- (1984) ‘Hoplites and heresies: a note’, *JHS* 104: 152.
- (1985) *Hunting in the Ancient World*. Berkeley and Los Angeles.
- (1991) ‘Hoplite weapons and offensive arms’, in Hanson (1991b) 15–37.

- Anderson, M. (1997) *The Fall of Troy in Early Greek Poetry and Art*. Oxford.
- Andreau, J., Briant, P. and Descat, R. (eds.) (2000) *Economie antique: la guerre dans les économies antiques*. Saint-Bertrand-de-Comminges.
- Andreau, J. and Virlouvet, C. (eds.) (2002) *L'information et la mer dans le monde antique*. Rome.
- Andrewes, A. (1956) *The Greek Tyrants*. London.
- (1961) 'Phratries in Homer', *Hermes* 89: 129–40.
- (1992) 'The Spartan resurgence', *CAH* V², 464–98.
- Anglim, S., Jestice, P. G., Rice, R. S., Rusch, S. M. and Serrati, J. (2002). *Fighting Techniques of the Ancient World, 3000 BC–AD 500: Equipment, Combat Skills and Tactics*. London.
- Anson, E. M. (1981) 'Alexander's hypaspists and the Argyraspides', *Historia* 30: 117–20.
- (1991) 'The evolution of the Macedonian army assembly, 330–315 BC', *Historia* 40: 230–47.
- Aperghis, M. (2001) 'Production–population–taxation–coinage: a model for the Seleukid economy', in Archibald et al. (2001) 69–102.
- Aravantinos, V., Godart, L. and Sacconi, A. (1995) 'Sui nuovi testi del palazzo di Cadmo a Tebe', *Rendiconti della classe di scienze morali, storiche e filologiche dell'Accademia dei Lincei* 9: 809–45.
- Archibald, Z. H. (1998) *The Odrysian Kingdom of Thrace*. Oxford.
- (2001) 'Away from Rostovtzeff: a new *SEHHW*', in Archibald et al. (2001) 379–88.
- Archibald, Z. H., Davies, J. K., Gabrielsen, V. and Oliver, G. J. (eds.) (2001) *Hellenistic Economies*. London.
- Ardant du Picq, C. J. J. J. (1987) 'Battle studies', *Roots of Strategy*, Book 2. Mechanicsburg, Penn.
- Arnaud, A. (1971) 'Quelques aspects des rapports de la ruse et de la guerre dans le monde grec du VII^e au Ve siècle'. *Thèse de 3e cycle*. Paris.
- Arnould, D. (1981) *Guerre et paix dans la poésie grecque*. New York.
- Ascani, K., Gabrielsen, V., Kvist, K. and Rasmussen, A. H. (eds.) (2002) *Ancient History Matters: Studies Presented to Jens Erik Skydsgaard on his Seventieth Birthday*. Rome.
- Ash, R. (1999a) 'An exemplary conflict: Tacitus' Parthian battle narrative (*Annals* 6. 34–5)', *Phoenix* 53: 114–35.
- (1999b) *Ordering Anarchy: Armies and Leaders in Tacitus' Histories*. London.
- (2002) 'Epic encounters? Ancient historical battle narratives and the epic tradition', in Levine and Nelis (2002) 253–73.
- Asher, D. (1966) *Distribuzioni di terre nell'antica Grecia*. Turin.
- Ashley, J. R. (1998) *The Macedonian Empire: The Era of Warfare under Philip II and Alexander the Great, 359–323 BC*. Jefferson.
- Astin, A. (1967) *Scipio Aemilianus*. Oxford.
- Austin, M. M. (1981) *The Hellenistic World from Alexander to the Roman Conquest*. Cambridge.
- (1986) 'Hellenistic kings, war and the economy', *CQ* 36: 450–66.
- Austin, N. J. E. (1979) *Ammianus on War*. Brussels.

- Austin, N. J. E. and Rankov, N. B. (1995) *Exploratio: Military and Political Intelligence in the Roman World from the Second Punic War to the Battle of Adrianople*. London.
- Autenrieth, G. (1958) *A Homeric Dictionary*. Norman, Okla.
- Aymard, A. (1957) 'Le partage des profits de la guerre dans les traités d'alliance antiques', *RH* 217: 233–49.
- (1967) 'Sur quelques vers d'Euripide qui poussèrent Alexandre au meurtre', in *Etudes d'histoire ancienne* (Paris) 50–72.
- Bachrach, B. (1993) *Armies and Politics in the Early Medieval West*. Aldershot.
- Badian, E. (1958) *Foreign Clientelae*, 264–70 BC. Oxford.
- (ed.) (1966) *Ancient History and Institutions: Studies Presented to Victor Ehrenberg*. Oxford.
- (1968) *Roman Imperialism in the Late Republic*. Oxford.
- (1972) *Publicans and Sinners: Private Enterprise in the Service of the Roman Republic*. Oxford.
- (ed.) (1976) *Alexandre le grand: image et réalité* (Entretiens Hardt 22). Geneva.
- (1977) 'The battle of the Granicus: a new look', in *Ancient Macedonia II* (Thessaloniki) 271–93.
- Bagnall, R. S. (1976) *The Administration of the Ptolemaic Possessions Outside Egypt*. Leiden.
- (1984) 'The origins of Ptolemaic cleruchs', *BASP* 21: 7–20.
- Baker, P. (1999) 'Les mercenaires', in Prost (1999a) 240–55.
- (2001) 'La vallée du Méandre au IIe siècle: relations entre les cités et institutions militaires', in Bresson and Descat (2001) 61–75.
- Balcer, J. (1983) 'The Greeks and the Persians: the processes of acculturation', *Historia* 32: 257–67.
- Balot, R. (2001) *Greed and Injustice in Classical Athens*. Princeton.
- Baltrusch, E. (1994) *Symmachie und Spondai. Untersuchungen zum griechischen Völkerrecht der archaischen und klassischen Zeit (8.–5. Jahrhundert v. Chr.)*. Berlin.
- Barbieri, G. (1955) *Conone*. Rome.
- Bar-Kochva, B. (1976) *The Seleucid Army: Organization and Tactics in Great Campaigns*. Cambridge.
- Barnes, T. D. (1985) 'Constantine and the Christians of Persia', *JRS* 75: 126–36.
- (1998) *Ammianus Marcellinus and the Representation of Historical Reality*. Ithaca.
- Baronowski, D. W. (1984) 'The formula togatorum', *Historia* 33: 248–52.
- (1993) 'Roman military forces in 225 BC (Polybius 2. 23–4)', *Historia* 42: 181–202.
- Barringer, J. (2001) *The Hunt in Ancient Greece*. Baltimore.
- Barry, W. D. (1996) 'Roof tiles and urban violence in the ancient world', *GRBS* 37: 55–74.
- Baslez, M.-F. (1984) *L'étranger dans la Grèce antique*. Paris.
- Bauer, A. (1891) 'Ansichten des Thukydides über Kriegsführung', *Philologus* 50: 401–29.
- Bauslaugh, R. A. (1991) *The Concept of Neutrality in Classical Greece*. Berkeley and Los Angeles.

- Bazant, J. (1983) 'War, poetry and Athenian vases', *LF* 106: 203–9.
- Becker, C. (ed.) (1960) *Tradition und Geist: Gesammelte Essays zur Dichtung*. Göttingen.
- Bekker-Nielsen, T. and Hannestad, L. (eds.) (2001) *War as a Cultural and Social Force: Essays on Warfare in Antiquity*. Copenhagen.
- Bell, H. I., Martin, V., Turner, E. G. and van Berchem, D. (1962) *The Abbinaeus Archive: Papers of a Roman Officer in the Reign of Constantius II*. Oxford.
- Bell, M. J. V. (1965) 'Tactical reform in the Roman republican army', *Historia* 14: 404–22.
- Bellinger, A. R. (1963) *Essays on the Coinage of Alexander the Great*. New York.
- Bérard, C. and Vernant, J.-P. (eds.) (1989) *A City of Images*. Princeton.
- Berent, M. (1996) 'Hobbes and the "Greek tongues"', *History of Political Thought* 17: 36–59.
- (2000) 'Anthropology and the classics: war, violence and the stateless polis', *CQ* 50: 257–89.
- Bernand, A. (1999) *Guerre et violence dans la Grèce antique*. Paris.
- Best, J. G. P. (1969) *Thracian Peltasts and their Influence on Greek Warfare*. Groningen.
- Beston, P. (2000) 'Hellenistic military leadership', in van Wees (2000b) 315–35.
- Bevan, E. (1927) *A History of Egypt during the Ptolemaic Dynasty*. London.
- Bianco, E. (1997) 'Ιφίκρατε, ρήτωρ καὶ στρατηγός', *MGR* 21: 179–201.
- Bikerman, E. J. (1938) *Institutions des Séleucides*. Paris.
- Bilde, P. (ed.) (1993) *Centre and Periphery in the Hellenistic World*. Aarhus.
- Billows, R. A. (1990) *Antigonus the One-Eyed and the Creation of the Hellenistic State*. Berkeley and Los Angeles.
- (1995a) *Kings and Colonists: Aspects of Macedonian Imperialism*. Leiden.
- (1995b) 'The succession of the Epigonoi', *SyllClass* 6: 1–11.
- (2003) 'Cities', in Erskine (2003) 196–215.
- Bishop, M. C. (ed.) (1983) *Roman Military Equipment. Proceedings of a Seminar held in the Department of Ancient History and Classical Archaeology at the University of Sheffield, 21st March 1983*. Sheffield.
- Bishop, M. C. and Coulson, J. C. N. (1993) *Roman Military Equipment*. London.
- Blackman, D. (1969) 'The Athenian navy and allied contributions in the *Pentecontaetia*', *GRBS* 10: 179–216.
- Blockley, R. C. (1981) *The Fragmentary Classicising Historians of the Later Roman Empire*. Liverpool.
- Blümlein, C. (1925) *Jahresbericht über die Fortschritte der Klassischen Altertumswissenschaft* 20: 1–64.
- (1928) *Jahresbericht über die Fortschritte der Klassischen Altertumswissenschaft* 21: 69–100.
- (1935) *Jahresbericht über die Fortschritte der Klassischen Altertumswissenschaft* 24: 148–99.
- (1941) *Jahresbericht über die Fortschritte der Klassischen Altertumswissenschaft* 27: 115–51.
- Blythe, P. H. (1977) 'The effectiveness of Greek armour against arrows in the Persian War' (University of Reading diss.).

- Boardman, J. (ed.) (1994) *Cambridge Ancient History: Plates to Volumes V and VI, the Fifth to the Fourth Centuries BC*. Cambridge.
- Boedeker, D. and Sider, D. (eds.) (2001) *The New Simonides*. Oxford.
- Boog, H. et al. (eds.) (1986) *Die Bedeutung der Logistik für die militärische Führung von der Antike bis in die neuste Zeit* (Vorträge zur Militärgeschichte 7). Herford.
- Borza, E. N. (1987) 'Timber and politics: Macedon and the Greeks', *PAPhS* 131: 32–52.
- (1990) *In the Shadow of Olympus: The Emergence of Macedon*. Princeton.
- Bosworth, A. B. (1973) 'ΑΣΘΕΤΑΙΠΟΙ', *CQ* 23: 245–53.
- (1980–95) *A Historical Commentary on Arrian's History of Alexander*. Vol. I (1980). Vol. II (1995). Oxford.
- (1986) 'Alexander the Great and the decline of Macedonia', *JHS* 106: 1–12.
- (1988a) *Conquest and Empire: The Reign of Alexander the Great*. Cambridge.
- (1988b) *From Arrian to Alexander: Studies in Historical Interpretation*. Oxford.
- (1994) 'Alexander the Great, Part 2: Greece and the conquered territories', *CAH* VI², 846–75.
- (1996) *Alexander and the East: The Tragedy of Triumph*. Oxford.
- (2002) *The Legacy of Alexander: Politics, Warfare and Propaganda under the Successors*. Oxford.
- Bousquet, J. (1988) 'La stèle des Kyténiens à Xanthos de Lycie', *REG* 101: 12–53.
- Bowersock, G. W., Brown, P. and Grabar, O. (eds.) (1999) *Late Antiquity: A Guide to the Postclassical World*. Cambridge, Mass.
- Bowman, A. K. (1994) *Life and Letters on the Roman Frontier*. London.
- (1996) *Egypt After the Pharaohs, 332 BC–AD 642: From Alexander to the Arab Conquest*, 2nd edn. Oxford.
- Bowra, C. M. (1964) *Pindar*. Oxford.
- Braddock, M. J. (2000) *State Formation in Early Modern Europe, c. 1550–1700*. Cambridge.
- Bradeen, D. (1974) *The Athenian Agora XVII: The Athenian Councillors*. Princeton.
- Bradford, A. S. (2001) *With Arrow, Sword and Spear*. Westport, Conn.
- Braun, T. (1995) 'Barley cakes and emmer bread', in Wilkins et al. (1995) 25–37.
- Braund, D. C. (2003) 'After Alexander: the emergence of the Hellenistic world, 323–281 BC', in Erskine (2003) 19–34.
- Bravo, B. (1980) 'Sulân: représailles et justice privée contre des étrangers dans les cités grecques', *ASNP* 3rd ser. 10: 675–987.
- Bresson, A. and Descat, R. (2001) *Les cités d'Asie Mineure occidentale au IIe siècle a. C.* Bordeaux.
- Briant, P. (1978) 'Colonisation hellénistique et populations indigènes: la phase d'installation', *Klio* 60: 57–92.
- (1999) 'The Achaemenid Empire', in Raaflaub and Rosenstein (1999) 105–28.
- Bringmann, K. (1993) 'The king as benefactor: some remarks on ideal kingship in the age of Hellenism', in Bulloch et al. (1993) 7–24.
- Briscoe, J. (1972) 'Flamininus and Roman politics, 200–189 BC', *Latomus* 31: 22–53.
- Brisson, J.-P. (1969a) 'Les mutations de la deuxième guerre Punique', in Brisson (1969b) 33–59.
- (ed.) (1969b) *Problèmes de la guerre à Rome*. Paris.

- Brock, R. and Hodkinson, S. (eds.) (2000) *Alternatives to Athens: Varieties of Political Organization and Community in Ancient Greece*. Oxford.
- Bruce, I. A. F. (1967) *An Historical Commentary on the Hellenica Oxyrhynchia*. Cambridge.
- Brulé, P. (1999) 'La mortalité de guerre en Grèce classique: l'exemple d'Athènes de 490 à 322', in Prost (1999a) 51–68.
- Brulé, P. and Oulhen, J. (eds.) (1997) *Esclavage, guerre, économie en Grèce ancienne: hommages à Yvon Garlan*. Paris.
- Brun, P. (1983) *Eisphora-syntaxeis-stratiotika. Recherches sur les finances militaires d'Athènes au IV^e siècle av. J.-C.* Paris.
- Brunt, P. A. (1962) 'The equites in the late Republic', in Seager (1962) 83–115.
 (1971) *Italian Manpower, 225 BC–AD 14*. Oxford.
 (1976) *Arrian, History of Alexander, I*. Cambridge, Mass.
 (1983) *Arrian, History of Alexander, II*. Cambridge, Mass.
 (1988) *The Fall of the Roman Republic and Related Essays*. Oxford,
- Bryant, J. M. (1990) 'Military technology and socio-cultural change in the ancient Greek city', *Sociological Review* ns 38: 484–516.
- Buchanan, J. J. (1962) *Theorika: A Study of Monetary Distributions to the Athenian Citizenry in the Fifth and Fourth Centuries BC*. New York.
- Büchholz, H. G. (1977) *Kriegswesen* (*Archaeologia Homericā* 1). Göttingen.
- Buckler, J. (1980a) 'Plutarch on Leuctra', *SO* 55: 75–83.
 (1980b) *The Theban Hegemony, 371–362 BC*. Cambridge, Mass.
 (1985) 'Epaminondas and the embolon', *Phoenix* 34: 134–43.
 (1995) 'The battle of Tegyra, 375 BC', *Boeotia Antiqua* 5: 43–58.
 (1996) 'The battle of Koroneia and its historiographical legacy', *Boeotia Antiqua* 6: 59–72.
- Budelmann, F. and Michelakis, P. (eds.) (2001) *Homer, Tragedy and Beyond: Essays in Honour of P. E. Easterling*. London.
- Bugh, G. R. (1988) *The Horsemen of Athens*. Princeton.
 (1998) 'Cavalry inscriptions from the Athenian agora', *Hesperia* 67: 81–90.
- Bulloch, A. W., Gruen, E. S., Long, A. A. and Stewart, A. (eds.) (1993) *Images and Ideologies: Self-Definition in the Hellenistic World*. Berkeley and Los Angeles.
- Buraselis, K. (1982) *Das hellenistische Makedonien und die Aegaeis*. Munich.
- Burchett, W. and Roebuck, D. (1977) *The Whores of War: Mercenaries Today*. Harmondsworth.
- Burchill, S. (2001) 'Realism and neo-realism', in Burchill et al. (2001) 70–102.
- Burchill, S., Devetak, R., Linklater, A., Paterson, M., Reus-Smit, C. and True, J. (eds.) (2001) *Theories of International Relations*, 2nd edn. Basingstoke.
- Burckhardt, J. (1998) *The Greeks and Greek Civilization* (ed. with introduction by O. Murray). London and New York.
- Burckhardt, L. A. (1996) *Bürger und Soldaten: Aspekte der Politischen und Militärischen Rolle Athenischer Bürger im Kriegswesen des 4 Jahrhunderts v. Chr.* (Historia Einzelschriften 101). Stuttgart.
 (2001) Review of Hunt (1998), *Klio* 83: 236–7.
- Burford, A. (1993) *Land and Labor in the Greek World*. Baltimore.

- Burn, A. R. (1929) ‘The so-called “trade leagues” in early Greek history and the Lelantine war’, *ABSA* 49: 14–37.
- (1962) *Persia and the Greeks*. London.
- Burnham, B. and Johnson, H. (1979) *Invasion and Response: The Case of Roman Britain*. Oxford.
- Burstein, S. M. (1985) *The Hellenistic Age from the Battle of Ipsos to the Death of Cleopatra VII*. Cambridge.
- Burton, P. (2000) ‘*Amicitia* in Roman social and international relations, 350–146 BC’ (University of Maryland diss.).
- Butz, P. (1996) ‘Prohibitionary inscriptions, *xenoi* and the influence of the early Greek polis’, in Hägg (1996) 75–95.
- Buxton, R. (1994) *Imaginary Greece: The Contexts of Mythology*. Cambridge.
- Cairns, F. (1991) ‘The “Laws of Eretria” (*IG XII.9.1273* and 1274): epigraphic, legal, historical and political aspects’, *Phoenix* 45: 291–313.
- Cameron, Alan and Long, J. (1993) *Barbarians and Politics at the Court of Arcadius*. Berkeley and Los Angeles.
- Cameron, Averil (1985) *Procopius and the Sixth Century*. London.
- (ed.) (1989) *History as Text: The Writing of Ancient History*. London.
- Camp, J. M. (1991) ‘Notes on the towers and borders of classical Boiotia’, *AJA* 95: 193–202.
- (2000) ‘Walls and the polis’, in Flensted-Jensen et al. (2000) 41–51.
- Campbell, B. (1994) *The Roman Army, 31 BC–AD 337: A Sourcebook*. London.
- Campbell, J. K. (1964) *Honour, Family and Patronage: A Study of Institutions and Moral Values in a Greek Mountain Community*. Oxford.
- Cappelletti, L. (1997) ‘Il ruolo dei fetiales e il concetto di civitas in Liv. IX 45.5–9’, *Tyche* 12: 7–13.
- Cargill, J. (1981) *The Second Athenian League: Empire or Free Alliance?* Berkeley and Los Angeles.
- (1995) *Athenian Settlements of the Fourth Century BC*. Leiden.
- Carman, J. and Harding, A. (1999) *Ancient Warfare: Archaeological Perspectives*. Stroud.
- Carneiro, R. L. (1970) ‘A theory of the origins of the state’, *Science* 109: 733–8.
- (1994) ‘War and peace: alternative realities in human history’, in Reyna and Downs (1994) 3–28.
- Carney, E. (1996) ‘Macedonians and mutiny: discipline and indiscipline in the army of Philip and Alexander’, *CP* 91: 19–44.
- Cartledge, P. A. (1977) ‘Hoplites and heroes: Sparta’s contribution to the technique of ancient warfare’, *JHS* 97: 11–27.
- (1979) *Sparta and Lakonia: A Regional History, 1300–362 BC*. London.
- (1987) *Agesilaos and the Crisis of Sparta*. London.
- (1991) ‘Richard Talbert’s revision of the Spartan–Helot struggle: a reply’, *Historia* 40: 379–81.
- (1996) ‘La nascita degli opliti e l’organizzazione militare’, in Settis (1996) 681–714.
- (2001) *Spartan Reflections*. London.
- Cartledge, P. A., Garnsey, P. D. A. and Gruen, E. S. (eds.) (1997) *Hellenistic Constructs: Essays in Culture, History and Historiography*. Berkeley and Los Angeles.

- Cartledge, P. A., Millett, P. and von Reden, S. (eds.) (1998) *Kosmos: Essays in Order; Conflict and Community in Classical Athens*. Cambridge.
- Cascione, C. (1992) 'Bellum iustum', *Index* 20: 575–81.
- Casson, L. (1966) 'Galley slaves', *TAPhA* 97: 35–44.
- (1971) *Ships and Seamanship in the Ancient World*. Princeton.
- (1994) *Ships and Seafaring in Ancient Times*. Austin.
- (1995a) 'The feeding of the trireme crews and an entry in *IG II²* 1631', *TAPhA* 125: 261–9.
- (1995b) *Ships and Seamanship in the Ancient World*, rev. edn. Baltimore.
- Casson, L. and Steffy, R. J. (1991) *The Athlit Ram*. College Station, Tex.
- Cataldi, S. (1983) *Symbolai e relazioni tra le città greche nel V secolo a. C.* Pisa.
- Cataldi, S., Moggi, M., Nenci, G. and Panassa, G. (eds.) (1981) *Studi sui rapporti interstatali nel mondo antico*. Pisa.
- Caven, B. (1990) *Dionyius I: War-lord of Sicily*. New Haven.
- Cawkwell, G. L. (1963) 'Eubulus', *JHS* 83: 47–67.
- (1972) *Xenophon: The Persian Expedition*. Harmondsworth.
- (1978) *Philip of Macedon*. London.
- (1980) Review of Engels (1978), *CR* 94: 244–6.
- (1983) 'The decline of Sparta', *CQ* 33: 385–400.
- (1984) 'Athenian naval power in the fourth century', *CQ* 34: 334–45.
- (1989) 'Orthodoxy and hoplites', *CQ* 39: 375–89.
- (1994) 'The deification of Alexander the Great: a note', in I. Worthington (ed.), *Ventures into Greek History* (Oxford) 293–306.
- (1997) *Thucydides and the Peloponnesian War*. London.
- Ceccarelli, P. (1993) 'Sans thalassocratie, pas de démocratie? Le rapport entre thalassocratie et démocratie à Athènes dans la discussion du Ve et IVe siècle av. J. C.', *Historia* 42: 444–70.
- Chambers, J. (1977/78) 'On Messenian and Lakonian helots in the fifth century', *The Historian* 40: 271–85.
- Chaniotis, A. (1996a) 'Conflicting authorities: *asylia* between secular and divine law in the classical and Hellenistic *poleis*', *Kernos* 9: 65–86.
- (1996b) *Die Verträge zwischen kretischen Poleis in der hellenistische Zeit*. Stuttgart.
- Chaniotis, A. and Ducrey, P. (eds.) (2002) *Army and Power in the Ancient World*. Stuttgart.
- Chastagnol, A., Nicolet, C. and van Effenterre, H. (eds.) (1977) *Armées et fiscalité dans le monde antique* (Colloques nationaux du CNRS 936). Paris.
- Christ, M. R. (2001) 'Conscription of hoplites in classical Athens', *CQ* 51: 398–422.
- (2004) 'Draft evasion onstage and offstage in classical Athens', *CQ* 54: 33–57.
- Clark, M. (1995) 'Did Thucydides invent the battle exhortation?', *Historia* 44: 375–6.
- Clarysse, W. and Schepens, G. (1985) 'A Ptolemaic fragment of an Alexander history', *ChrEg* 60: 30–47.
- Coates, J. F. (1993) 'Carrying troops in triremes', in Shaw (1993) 78–81.
- Coates, J. F., Platis, S. K. and Shaw, J. T. (1990) *The Trireme Trials 1988*. Oxford.
- Cobet, J. (1986) 'Herodotus and Thucydides on war', in Moxon et al. (1986) 1–18.

- Cohen, A. (1997) *The Alexander Mosaic: Stories of Victory and Defeat*. Cambridge.
- Cohen, G. M. (1978) *The Seleucid Colonies: Studies in Founding, Administration and Organization* (Historia Einzelschriften 30). Wiesbaden.
- (1995) *The Hellenistic Settlements in Europe, the Islands and Asia Minor*. Berkeley and Los Angeles.
- Cole, S. G. (1988) 'The uses of water in Greek sanctuaries', in Hägg et al. (1988) 161–5.
- Connolly, J. B. (1996) 'Parthenon and *parthenoi*: mythological interpretation of the Parthenon frieze', *AJA* 100: 53–80.
- Connolly, P. (1981) *Greece and Rome at War*. London.
- (1984) 'Hellenistic warfare', *CAH* VII².1, 81–90.
- (1998) *Greece and Rome at War*, rev. edn. London.
- (2000a) 'Experiments with the sarissa – the Macedonian pike and cavalry lance – a functional view', *JRMES* II: 103–12.
- (2000b) 'The reconstruction and use of Roman weaponry in the second century BC', *JRMES* II: 43–6.
- Connor, W. R. (1988) 'Early Greek land warfare as symbolic expression', *P&P* 119: 3–29.
- Cook, M. L. (1990) 'Timocrates' 50 talents and the cost of ancient warfare', *Eranos* 88: 69–97.
- Cooper, F. A. (2000) 'The fortifications of Epaminondas and the rise of the monumental Greek city', in Tracy (2000) 155–91.
- Corcoran, S. (1996) *The Empire of the Tetrarchs: Imperial Pronouncements and Government, AD 284–324*. Oxford.
- Cornell, T. J. (1989a) 'The conquest of Italy', *CAH* VII².2, 351–419.
- (1989b) 'The recovery of Rome', *CAH* VII².2, 309–50.
- (1989c) 'Rome and Latium to 390 BC', *CAH* VII².2, 243–308.
- (1995) *The Beginnings of Rome: Italy and Rome from the Bronze Age to the Punic Wars, c. 1000–264 BC*. London and New York.
- (1996) 'Hannibal's legacy: the effects of the Hannibalic War on Italy', in Cornell et al. (1996) 97–117.
- Cornell, T. J., Rankov, N. B. and Sabin, P. A. (eds.) (1996) *The Second Punic War: A Reappraisal* (BICS Supplement 67). London.
- Corsten, T. (1999) *Vom Stamm zum Bund: Gründung und territoriale Organisation griechischer Bundesstaaten*. Munich.
- Corvisier, J.-N. (1994) 'Médecine et démographie, l'exemple de Plutarque', *REG* 107: 129–57.
- (1999) 'Guerre et démographie en Grèce à la période classique', *Pallas* 51: 57–99.
- Craig, G. (1971) 'Delbrück: the military historian', in Earle (1971) 260–86.
- Crawford, D. J. (1971) *Kerkeosiris: An Egyptian Village in the Ptolemaic Period*. Cambridge.
- Crawford, M. H. (1996) *Roman Statutes*, vol. II. London.
- Crawley, R. (tr.) (1910) *Thucydides: The History of the Peloponnesian War*. London and New York.
- Creighton, J. D. and Wilson, R. J. A. (eds.) (1999) *Roman Germany: Studies in Cultural Interaction* (JRA Supplement 32). Portsmouth, R.I.

- Crielaard, J.-P. (ed.) (1995) *Homeric Questions*. Amsterdam.
- Croke, B. and Crow, J. (1983) 'Procopius and Dara', *JRS* 73: 143–59.
- Crowther, C. V. (1995) 'Iasos in the second century BC. (3): foreign judges from Priene', *BICS* 40: 91–138.
- (1998) 'Aus der Arbeit der *Inscriptiones Graecae* I: drei Dekrete aus Kos für δικαστογωγοί', *Chiron* 28: 87–100.
- (1999) 'Aus der Arbeit der *Inscriptiones Graecae* IV: Koan decrees for foreign judges', *Chiron* 29: 251–319.
- Crowther, N. B. (1991a) 'The apobates reconsidered (Demosthenes lxi 23–9)', *JHS* III: 174–6.
- (1991b) 'Euexia, eutaxia, philoponia: three contests of the Greek gymnasium', *ZPE* 85: 301–4.
- Curty, O. (1995) *Les parentés légendaires entre cités grecques. Catalogue raisonné des inscriptions contenant le terme SYNGENEIA et analyse critique*. Geneva.
- D'Arms, J. H. and Kopff, E. C. (eds.) (1980) *The Seaborne Commerce of Ancient Rome: Studies in Archaeology and History* (Memoirs of the American Academy in Rome 36). Rome.
- Dabrowa, E. (ed.) (2001) *Roman Military Studies* (Electrum 5). Kraków.
- Dalby, A. (1992) 'Greeks abroad: social organisation and food among the Ten Thousand', *JHS* 112: 16–30.
- Daly, G. (2002) *Cannae*. London.
- Daniel, T. (1992) 'The *taxis* of Alexander and the change to chilarchies, the companion cavalry and the change to hipparchies: a brief assessment', *AncW* 23: 43–57.
- David, E. (1979/80) 'The influx of money into Sparta at the end of the fifth century BC', *SCI* 5: 30–45.
- David, J.-M. (1996) *The Roman Conquest of Italy*. Oxford.
- Davies, J. K. (1981) *Wealth and the Power of Wealth in Classical Athens*. New York.
- (1984) 'Cultural, social and economic features of the Hellenistic world', *CAH* VII².1, 257–320.
- (2001a) 'Hellenistic economies in the post-Finley era', in Archibald et al. (2001) 11–62.
- (2001b) 'Temples, credit and the circulation of money', in Meadows and Shipton (2001) 117–28.
- Davies, R. (1989) *Service in the Roman Army*. New York.
- Davis, E. W. (1964) 'The Persian battle plan at the Granicus', *James Sprunt Studies in History and Political Sciences* 46: 34–44.
- Dawson, D. (1996) *The Origins of Western Warfare: Militarism and Morality in the Ancient Greek World*. Boulder, Colo.
- de Romilly, J. (1968) 'Guerre et paix dans la poésie grecque', in Vernant (1968) 207–20.
- de Sélincourt, A. (tr.) (1996) *Herodotus: The Histories*. Harmondsworth.
- de Souza, P. (1998) 'Towards thalassocracy? Archaic Greek naval developments', in Fisher and van Wees (1998) 271–93.
- (1999) *Piracy in the Graeco-Roman World*. Cambridge.
- (2001) 'A guide to Greek and Roman warships?', *CR* 51: 103–5.

- (2002) 'Beyond the headland: locating the enemy in ancient naval warfare', in Andreau and Virlouvet (2002) 69–92.
- de Souza, P. and France, J. (eds.) (forthcoming) *War and Peace in Ancient and Medieval History*. Cambridge.
- de Ste Croix, G. E. M. (1953) 'Demosthenes' TIMHMA and the Athenian *Eisphora* in the fourth century BC', *C&M* 14: 30–70.
- (1972) *The Origins of the Peloponnesian War*. London.
- (1981) *The Class Struggle in the Ancient Greek World*. London.
- Deacy, S. (2000) 'Athena and Ares: war, violence and warlike deities', in van Wees (2000b) 285–98.
- Delbrück, H. (1962) *Geschichte der Kriegskunst im Rahmen der politischen Geschichte*, vol. I: *Das Altertum*, 3rd edn. Berlin.
- (1975) *A History of the Art of War within the Framework of Political History*, vol. I: *Antiquity*. Westport, Conn.
- (1990) *A History of the Art of War*, vol. I: *Warfare in Antiquity*, Lincoln, Nebr.
- Dennis, G. T. (ed.) (1981) *Das Strategikon des Maurikos* (*Corpus Fontium Historiae Byzantinae* 17). Vienna.
- (tr.) (1984) *Maurice's Strategikon*. Philadelphia.
- (1985) *Three Byzantine Military Treatises*. Washington, D.C.
- Derow, P. (1979) 'Polybius, Rome and the East', *JRS* 69: 1–15.
- (1994) 'Historical explanation: Polybius and his predecessors', in Hornblower (1994) 73–90.
- Derow, P. and Parker, R. (eds.) (2003) *Herodotus and his World*. Oxford.
- Develin, R. (1985) 'Anaximenes (*FGrHist* 72 F 4)', *Historia* 34: 493–6.
- Devine, A. M. (1979) Review of Engels (1978), *Phoenix* 33: 272–6.
- (1983) 'Embolon: a study in tactical terminology', *Phoenix* 37: 201–17.
- (1984) 'Diodorus' account of the battle of Gaza', *AClass* 27: 31–40.
- (1985a) 'Diodorus' account of the battle of Paraitacene (317 BC)', *AncW* 12: 75–86.
- (1985b) 'Diodorus' account of the battle of Gabiene', *AncW* 12: 87–96.
- (1985c) 'Grand tactics at the battle of Issus', *AncW* 12: 39–59.
- (1986) 'The battle of Gaugamela', *AncW* 13: 87–116.
- (1987) 'The battle of the Hydaspes', *AncW* 16: 91–113.
- (1988) 'A pawn-sacrifice at the battle of the Granicus', *AncW* 18: 3–20.
- (1989) 'Aelian's Manual of military tactics', *AncW* 19: 31–64.
- (1996) 'The short sarissa again', *AncW* 27: 52–3.
- Devoto, J. (ed.) (1993) *Flavius Arrianus, Tactical Handbook*. Chicago.
- Dillery, J. (1995) *Xenophon and the History of his Times*. London.
- Dixon, K. R. and Southern, P. (1992) *The Roman Cavalry*. London.
- Dodge, T. A. (1993) *Hannibal* (2 vols.). London.
- Doenges, N. A. (1998) 'The campaign and battle of Marathon', *Historia* 47: 1–17.
- Domaradzki, M. (1977) 'Shields with metal fittings in the eastern Celtic region', *Przegląd Archeologiczny* 25: 53–97.
- Donlan, W. (1980) *The Aristocratic Ideal in Ancient Greece*. Lawrence, Kan. (repr. with additional chapters as Donlan (1999)).

- (1999) *The Aristocratic Ideal in Ancient Greece and Selected Papers*. Wauconda, Ill.
- Dougherty, C. (1993) 'It's murder to found a colony', in Dougherty and Kurke (1993) 178–98.
- Dougherty, C. and Kurke, L. (eds.) (1993) *Cultural Poetics in Archaic Greece: Cult, Performance, Politics*. Cambridge.
- Dover, K. J. (1974) *Greek Popular Morality in the Time of Plato and Aristotle*. Oxford.
- Dreher, N. (1995) *Hegemon und Symmachie: Untersuchungen zum zweiten Athenischen Seebund*. Berlin and New York.
- Drews, R. (1993) *The End of the Bronze Age: Changes in Warfare and the Catastrophe ca. 1200 BC*. Princeton.
- Drijvers, J. W. and Hunt, D. (eds.) (1999) *The Late Roman World and its Historian: Interpreting Ammianus Marcellinus*. London.
- Droysen, H. (1889) *Heerwesen und Kriegsführung der Griechen* (K. F. Hermann's Lehrbuch der griechischen Antiquitäten II.2). Freiburg.
- Droysen, J. G. (1836–78) *Geschichte des Hellenismus* (6 vols.). Hamburg.
- Drummond, A. (1989) 'Rome in the fifth century I: the social and economic framework'; 'Rome in the fifth century II: the citizen community', *CAH* VII².2, 113–71; 172–242.
- Du Boulay, J. (1974) *Portrait of a Greek Mountain Village*. Oxford.
- Ducat, J. (1990) *Les hilotes*. Paris.
- (1999) 'La société spartiate et la guerre', in Prost (1999a) 35–50.
- Ducray, P. (1968) *Le traitement des prisonniers de guerre dans la Grèce antique*. Paris.
- (1971) 'Remarque sur les causes du mercenariat dans la Grèce ancienne et la Suisse moderne', in *Buch der Freunde für J. R. von Salis* (Zürich) 115–23.
- (1985) *Warfare in Ancient Greece*. New York.
- (1995) 'La muraille est-elle un élément constitutif d'une cité?', in Hansen (1995b) 245–56.
- (1997) 'Aspects de l'histoire de la guerre en Grèce ancienne, 1945–1996', in Brûlé and Oulhen (1997) 123–38.
- (1999) *Le traitement des prisonniers de guerre dans la Grèce antique*, 2nd edn. Paris.
- (2000) 'Les aspects économiques de l'usage de mercenaires dans la guerre en Grèce ancienne: avantages et inconvénients du recours à une main-d'œuvre militaire rémunérée', in Andreau et al. (2000) 197–209.
- Dyson, S. L. (1992) *Community and Society in Roman Italy*. Baltimore.
- Eadie, J. and Ober, J. (eds.) (1985) *The Craft of the Ancient Historian*. Lanham, Md.
- Earle, E. M. (ed.) (1971) *Makers of Modern Strategy: Military Thought from Machiavelli to Hitler*. Princeton.
- Easterling, P. E. (1985) 'Anachronism in Greek tragedy', *JHS* 105: 1–10.
- Eckstein, A. M. (1984) 'Rome, Saguntum and the Ebro treaty', *Emerita* 52: 51–68.
- (1985) 'Polybius, Syracuse and the politics of accommodation', *GRBS* 26: 265–82.
- (1987) *Senate and General: Individual Decision Making and Roman Foreign Relations, 264–194 BC*. Berkeley and London.
- (1995) 'Glabrio and the Aetolians: a note on *deditio*', *TAPhA* 125: 271–89.
- (1997) 'Physis and nomos: Polybius, the Romans and Cato the Elder', in Cartledge et al. (1997) 175–98.

- (2000) 'Review article: brigands, emperors and anarchy', *International History Review* 22: 862–79.
- (2006) *Mediterranean Anarchy, Interstate War and the Rise of Rome* (Berkeley and Los Angeles).
- Eddy, S. K. (1968) 'Athens' peacetime navy in the age of Perikles', *GRBS* 9: 141–56.
- Eder, W. (ed.) (1990) *Staat und Staatlichkeit in der frühen römischen Republik*. Stuttgart.
- Edmonds, J. M. (1957) *The Fragments of Attic Comedy after Meineke, Bergk, and Kock*. Leiden.
- Ehrenberg, V. (1960) *The Greek State*. Oxford.
- Ehrenreich, B. (1997) *Blood Rites: Origins and History of the Passions of War*. New York.
- Ehrhardt, C. (1995) 'Speeches before battle', *Historia* 44: 120–1.
- Eichberg, M. (1987) *Scutum: die Entwicklung einer italisch-etruskischen Schildform von den Anfängen bis zur Zeit Caesars*. Frankfurt.
- Ellis, J. R. (1976) *Philip II and Macedonian Military Imperialism*. London.
- (1977) 'The dynamics of fourth-century Macedonian imperialism', *Ancient Macedonia II* (Thessaloniki) 103–14.
- Elton, H. W. (1996a) *Frontiers of the Roman Empire*. London.
- (1996b) *Warfare in Roman Europe, AD 350–425*. Oxford.
- Elwyn, S. (1988) 'Isopoly and inter-state kinship', *AAPhA* 112.
- Engels, D. W. (1978) *Alexander the Great and the Logistics of the Macedonian Army*. Berkeley and Los Angeles.
- (1986) 'Alexander's intelligence system', *CQ* 30: 327–40.
- Erdkamp, P. (1992) 'Polybius, Livy and the Fabian strategy', *AncSoc* 223: 127–47.
- (1995) 'The corn supply of the Roman armies during the third and second centuries BC', *Historia* 44: 168–91.
- (1998) *Hunger and the Sword: Warfare and Food Supply in Roman Republican Wars, 264–30 BC*. Amsterdam.
- Errington, R. M. (1971) *The Dawn of Empire: Rome's Rise to World Power*. London.
- (1990) *A History of Macedonia*. Berkeley.
- Erskine, A. (2001) *Troy between Greece and Rome: Local Tradition and Imperial Power*. Oxford.
- (ed.) (2003) *A Companion to the Hellenistic World*. Oxford.
- Fehling, D. (1979) 'Zwei Lehrstücke über Pseudo-Nachrichten', *RhM* 122: 199–210.
- Fentriß, M. (1979) *Numidia and the Roman Army*. Oxford.
- Ferguson, R. B. (1984a) 'Introduction: studying war', in Ferguson (1984b) 1–81.
- Ferguson, R. B. (ed.) (1984b) *Warfare, Culture and Environment*. Orlando, Fla.
- (1999) 'A paradigm for the study of war and society', in Raaflaub and Rosenstein (1999) 389–437.
- Ferguson, W. S. (1932) *The Treasurers of Athena*. Cambridge, Mass.
- Ferrill, A. (1985) *The Origins of War from the Stone Age to Alexander the Great*. London and New York.
- (1986) *The Fall of the Roman Empire: The Military Explanation*. London.
- Feugère, M. (1993) *Les armées des Romains, de la République à l'antiquité tardive*. Paris.
- Feyel, M. (1942) *Polybe et l'histoire de Béotie au IIIe siècle avant notre ère*. Paris.

- Figueira, T. (1991) *Athens and Aegina in the Age of Imperial Colonization*. Baltimore.
- Fink, R. (1971) *Roman Military Records on Papyrus*. Cleveland.
- Finley, M. I. (1981) *Economy and Society in Ancient Greece*. London and New York.
- (1983) *Politics in the Ancient World*. Cambridge.
 - (1985) *Ancient History: Evidence and Models*. London.
 - (1986) *The Use and Abuse of History*. London.
 - (1999) *The Ancient Economy*, 3rd edn. Berkeley.
- Fiorato, V., Boylston, A. and Knüsel, C. (eds.) (2000) *Blood Red Roses: The Archaeology of a Mass Grave from the Battle of Towton, AD 1461*. Oxford.
- Fisher, N. (1992) *Hybris: A Study in the Values of Guilt and Shame in Ancient Greece*. Warminster.
- (1998) 'Gymnasia and the democratic values of leisure', in Cartledge et al. (1998) 84–104.
 - (1999) ‘“Workshops of villains”: was there much organised crime in classical Athens?’, in Hopwood (1999) 53–96.
 - (2000) ‘Hybris, revenge and stasis in the Greek city-states’, in van Wees (2000b) 83–123.
- Fisher, N. and van Wees, H. (eds.) (1998) *Archaic Greece: New Approaches and New Evidence*. London.
- Flensted-Jensen, P., Nielsen, T. H. and Rubinstein, L. (eds.) (2000) *Polis and Politics: Studies in Ancient Greek History*. Copenhagen.
- Foard, G. (1995) *Naseby: The Decisive Campaign*. Whitstable.
- Ford, M. (2001) *The Ten Thousand*. New York.
- Fornara, C. W. (1971) *The Athenian Board of Generals from 501–404 BC* (Historia Einzelschriften 16). Wiesbaden.
- (1979) ‘On the chronology of the Samian War’, *JHS* 99: 7–19.
- Forrest, W. G. (1957) ‘Colonisation and the rise of Delphi’, *Historia* 6: 160–75.
- (1966) *The Emergence of Greek Democracy*. London.
 - (2000) ‘The pre-polis polis’, in Brock and Hodkinson (2000) 280–92.
- Foss, C. (1977) ‘The battle of the Granicus: a new look’, in *Ancient Macedonia II* (Thessaloniki) 495–502.
- Foulon, E. (1995) ‘ΜΙΣΘΟΦΟΡΟΙ et ΞΕΝΟΙ hellénistiques’, *REG* 108: 211–18.
- (1996a) ‘La garde à pied, corps d’élite de la phalange hellénistique’, *BAGB* 1: 17–31.
 - (1996b) ‘Hypaspistes, peltastes, chrysaspides, argyrapides, chalcaspides’, *REA* 98: 53–63.
- Foxhall, L. (1997) ‘A view from the top: evaluating the Solonian property classes’, in Mitchell and Rhodes (1997) 113–36.
- Foxhall, L. and Forbes, H. A. (1982) ‘Σιτομετρεία: the role of grain as a staple food in classical antiquity’, *Chiron* 12: 41–90.
- Foxhall, L. and Salmon, J. (eds.) (1998) *When Men Were Men: Masculinity, Power and Identity in Classical Antiquity*. London and New York.
- France, J. (forthcoming) ‘Siege conventions in Western Europe and the Latin East’, in de Souza and France (forthcoming).
- Frank, T. (1914) *Roman Imperialism*. New York.
- Fraser, A. D. (1942) ‘The myth of the phalanx-scrimmage’, *CW* 36: 15–16.
- Fraser, P. M. (1972) *Ptolemaic Alexandria* (3 vols.). Oxford.

- Fraser, P. M. and Rönne, T. (1957) *Boeotian and West Greek Tombstones* (Acta Instituti Atheniensis Regni Sueciae 6). Lund.
- Frederiksen, M. W. (1968) 'Campanian cavalry: a question of origins', *DArch* 2: 3–31.
- Freeman, P. and Kennedy, D. (eds.) (1986) *The Defence of the Roman and Byzantine East* (BAR Int. Ser. 297). Oxford.
- French, A. (1993) 'A note on the size of the Athenian armed forces in 431 bc', *AHB* 7: 43–8.
- Frézouls, E. (1983) 'Sur l'historiographie de l'impérialisme romain', *Ktema* 8: 141–62.
- Fried, M. H. (1967) *The Evolution of Political Society*. New York.
- Frier, B. (1975) 'Licinius Macer and the *consules suffecti* of 444 bc', *TAPhA* 105: 79–97.
- Fröhlich, P. (1999) 'Les magistrats de la guerre', in Prost (1999a) 108–36.
- Frost, F. J. (1980) *Plutarch's Themistocles: A Historical Commentary*. Princeton.
- (1984) 'The Athenian military before Cleisthenes', *Historia* 33: 283–94.
- Fuks, A. (1984a) 'Patterns and types of social-economic revolution in Greece from the fourth to the second century bc', in Fuks (1984b) 9–39.
- (ed.) (1984b) *Social Conflict in Ancient Greece*. Jerusalem.
- Fuller, J. F. C. (1954) *A Military History of the Western World*. New York.
- (1958) *The Generalship of Alexander the Great*. London. (= 1960)
- (1960) *The Generalship of Alexander the Great*. New Brunswick, N.J. (= 1958)
- Gabba, E. (ed.) (1974) *Polybe: neuf exposés suivis de discussions* (Entretiens Hardt 20). Geneva.
- (1976) *Republican Rome: The Army and the Allies*. Oxford.
- (1984) 'Il consenso popolare alla politica espansionistica romana fra III e II sec. A.C.', in Harris (1984b) 115–29.
- Gabbert, J. J. (1983) 'The grand strategy of Antigonus II Gonatas and the Chremonidean Wars', *AncW* 8: 129–36.
- (1997) *Antigonus II Gonatas: A Political Biography*. London and New York.
- Gabriel, R. A. and Boose, D. (1994) *The Great Battles of Antiquity: A Strategic and Tactical Guide to Great Battles that Shaped the Development of War*. Westport, Conn.
- Gabriel, R. A. and Metz, K. S. (1991) *From Sumer to Rome: The Military Capabilities of Ancient Armies*. New York.
- (1992) *A History of Military Medicine*. Vol. I: *From Ancient Times to the Middle Ages*. New York.
- Gabrielsen, V. (1993) 'Rhodes and Rome after the Third Macedonian War', in Bilde (1993) 132–61.
- (1994) *Financing the Athenian Fleet: Public Taxation and Social Relations*. Baltimore.
- (1997) *The Naval Aristocracy of Hellenistic Rhodes*. Aarhus.
- (2001a) 'Economic activity, maritime trade and piracy in the Hellenistic Aegean', *REA* 103: 219–40.
- (2001b) 'Naval warfare: its economic and social impact on ancient Greek cities', in Bekker-Nielsen and Hannestad (2001) 72–89.

- (2002a) 'The impact of armed forces on government and politics in archaic and classical Greek *poleis*: a response to Hans van Wees', in Chaniotis and Ducrey (2002) 83–98.
- (2002b) 'Socio-economic classes and ancient Greek warfare', in Ascani et al. (2002) 203–20.
- Gaebel, R. E. (2002) *Cavalry Operations in the Ancient Greek World*. Norman, Okla.
- Gallant, T. (1991) *Risk and Survival in Ancient Greece*. Stanford.
- Gallie, W. B. (1991) *Understanding War*. London.
- Gardiner, R. (ed.) (1995) *The Age of the Galley*. Annapolis, Md.
- Gareau, E. (ed.) (1972) *Valeurs antiques et temps modernes*. Ottowa.
- Garlan, Y. (1972) 'Les esclaves grecs en temps de guerre', in *Actes du Colloque d'Histoire Sociale* (1970) (*Annales littéraires de l'Université de Besançon*) (Paris) 29–62.
- (1973) 'Cités, armées et stratégie à l'époque hellénistique d'après l'œuvre de Philon de Byzance', *Historia* 22: 6–33.
- (1974) *Recherches de poliorcéétique grecque*. Paris.
- (1975) *War in the Ancient World: A Social History*. London and New York.
- (1977) 'Le partage entre alliés des dépenses et des profits de guerre', in Chastagnol et al. (1977) 149–64.
- (1984) 'War and siegework', *CAH* VII².1, 353–62.
- (1988) *Slavery in Ancient Greece*. Ithaca.
- (1989) *Guerre et économie en Grèce ancienne*. Paris.
- (1994) 'Warfare', *CAH* VI², 678–92.
- Garland, R. (1987) *The Piraeus: From the Fifth to the First Century BC*. Ithaca.
- Garnsey, P. D. A. (1994) 'L'approvisionnement des armées et la ville de Rome', in *Le ravitaillement en blé de Rome et des centres urbains des débuts de la république jusqu'au haut empire* (Naples) 31–4.
- Garnsey, P. D. A., Gallant, T. and Rathbone, D. W. (1984) 'Thessaly and the grain supply of Rome during the second century BC', *JRS* 74: 30–44.
- Garnsey, P. D. A., Hopkins, K. and Whittaker, C. R. (eds.) (1983) *Trade in the Ancient Economy*. London.
- Garnsey, P. D. A. and Rathbone, D. W. (1985) 'The background to the grain law of Gaius Gracchus', *JRS* 75: 20–5.
- Garoufalios, P. (1979) *Pyrrhus, King of Epirus*. London.
- Garst, W. D. (2000) 'Thucydides and the domestic sources of international politics', in Gustafson (2000) 67–97.
- Gauthier, P. (1999) 'Symbola athéniens et tribunaux étrangers à l'époque hellénistique', *BCH* 123: 157–74.
- Gauthier, P. and Hatzopoulos, M. B. (1993) *La loi gymnasياarchique de Beroia*. Athens.
- Gawantka, W. (1975) *Isopoleitiae: ein Beitrag zur Geschichte der zwischenstaatlichen Beziehungen in der griechischen Antike*. Munich.
- Gehrke, H.-J. (1982) 'Der siegreiche König', *AKG* 64: 247–77.
- (1985) *Stasis: Untersuchungen zu den inneren Kriegen in den griechischen Staaten des 5. und 4. Jahrhunderts v. Chr.* Munich.
- Gellner, E. (1983) *Nations and Nationalism*. Cambridge.
- Genzmer, J. (1956) *Der 'Amphitruo' des Plautus und sein griechische Original*. Kiel.

- Ghirshman, R. (1962) *Iran, Parthians and Sassanians*. London.
- Gibbon, E. (1896–1900) *The History of the Decline and Fall of the Roman Empire* (7 vols.), ed. J. Bury. London.
- Gill, C., Postlethwaite, N. and Seaford, R. (eds.) (1998) *Reciprocity in Ancient Greece*. Oxford.
- Gillis, C., Risberg, C. and Sjöberg, B. (eds.) (1997) *Trade and Production in Pre-monetary Greece*. Göteborg.
- Gilliver, C. M. (1996) ‘The Roman army and morality in war’, in Lloyd (1996a) 219–38.
- Golden, M. (1998) *Sport and Society in Ancient Greece*. Cambridge.
- Goldsworthy, A. K. (1996) *The Roman Army at War, 100 BC–AD 200*. Oxford.
- (1997) ‘The *othismos*, myths and heresies: the nature of hoplite battle’, *War and History* 4: 1–26.
- (1998) ‘‘Instinctive genius’’: the depiction of Caesar the general’, in Welch and Powell (1998) 193–219.
- (2000a) *The Punic Wars*. London.
- (2000b) *Roman Warfare*. London.
- Gomme, A. W., Andrewes, A. and Dover, K. J. (1945–81) *A Historical Commentary on Thucydides*, Vol. I (1945). Vol. II (1956). Vol. III (1956). Vol. IV (1970). Vol. V (1981). Oxford.
- Goodburn, R. and Bartholomew, P. (eds.) (1976) *Aspects of the Notitia Dignitatum: Papers Presented to the Conference in Oxford, December 13–15, 1974* (BAR Suppl. Ser. 15). Oxford.
- Goodwin, W. W. (1880) ‘ΔΙΚΑΙ ΑΠΟ ΣΥΜΒΟΛΩΝ and ΔΙΚΑΙ ΣΥΜΒΟΛΑΙΑ’, *AJP* 1: 4–16.
- Goudineau, C. (ed.) (1994) *Vercingétorix et Alésie*. Paris.
- Graham, A. J. (1964) *Colony and Mother-City in Ancient Greece*. Manchester.
- (1982) ‘The colonial expansion of Greece’, *CAH* III².3, 83–162.
- (1983) *Colony and Mother-City in Ancient Greece*, 2nd edn. Chicago.
- (1992) ‘Thucydides 7.13.2 and the crews of Athenian triremes’, *TAPhA* 122: 257–70.
- (1998) ‘Thucydides 7.13.2 and the crews of Athenian triremes: an addendum’, *TAPhA* 128: 89–114.
- (2001) *Collected Papers on Greek Colonization*. Leiden.
- Grainger, J. (1990) *Seleukos Nikator: Constructing a Hellenistic Kingdom*. London and New York.
- Greatrex, G. (1998) *Rome and Persia at War, 502–532 BC*. Leeds.
- Green, P. (1974) *Armada From Athens*. Garden City, N.Y.
- (1996) *The Greco-Persian Wars*. Berkeley and Los Angeles.
- Greenhalgh, P. A. L. (1973) *Early Greek Warfare: Horsemen and Chariots in the Homeric and Archaic Ages*. Cambridge.
- Griffin, J. (1980) *Homer*. Oxford.
- Griffith, G. T. (1935) *The Mercenaries of the Hellenistic World*. Cambridge.
- (1968) *The Mercenaries of the Hellenistic World*. Groningen (reprint of 1935 edn).
- Griffith, J. G. (1977) ‘A note on the first *eisphora* at Athens’, *AJAH* 2: 3–7.
- Griffith, P. (1990) *Forward into Battle*, 2nd edn. Swindon.
- Griffith, S. G. (tr.) (1963) *Sun Tzu: The Art of War*. Oxford.

- Gröschel, S.-G. (1989) *Waffenbesitz und Waffeneinsatz bei den Griechen*. Frankfurt am Main.
- Grote, G. (1846–56) *History of Greece* (12 vols.). London.
- Gruen, E. S. (1975) ‘Rome and Rhodes in the second century BC: an historiographical inquiry’, *CQ* 25: 58–81.
- (1984) *The Hellenistic World and the Coming of Rome* (2 vols.). Berkeley and Los Angeles.
- (1985) ‘The coronation of the *Diadochoi*’, in Eadie and Ober (1985) 253–71.
- Grundy, G. B. (1948) *Thucydides and the History of his Age*. Oxford.
- Gustafson, L. S. (ed.) (2000) *Thucydides' Theory of International Relations: A Lasting Possession*. Baton Rouge.
- Hachmann, R. (1990) ‘Grundestrup-Studien. Untersuchungen zu den spät-keltischen Grundlagen der frühgermanischen Kunst’, *BRGK* 71: 565–903.
- Hackett, J. (ed.) (1989) *Warfare in the Ancient World*. London.
- Hägg, R. (ed.) (1996) *The Role of Religion in the Early Greek Polis*. Stockholm.
- Hägg, R. and Marinatos, N. (eds.) (1993) *Greek Sanctuaries: New Approaches*. London and New York.
- Hägg, R., Marinatos, N. and Nordquist, G. C. (eds.) (1988) *Early Greek Cult Practice*. Stockholm.
- Hall, E. (1989) *Inventing the Barbarian: Greek Self-Definition through Tragedy*. Oxford.
- Hall, J. M. (1995) ‘How Argive was the “Argive” Heraion? The political and cultic geography of the Argive plain, 900–400 BC’, *AJA* 99: 577–613.
- (2002) *Hellenicity: Between Ethnicity and Culture*. Chicago and London.
- Hamel, D. (1998a) *Athenian Generals: Military Authority in the Classical Period*. Leiden.
- (1998b) ‘Coming to terms with *lipotaxion*’, *GRBS* 39: 361–405.
- Hamilton, C. D. (1979) *Sparta's Bitter Victories: Politics and Diplomacy in the Corinthian War*. Ithaca.
- (1999) ‘The hellenistic world’, in Raflaub and Rosenstein (1999) 163–91.
- Hamilton, C. D. and Krentz, P. (eds.) (1997) *Polis and Polemos: Essays on Politics, War and History in Ancient Greece in Honor of Donald Kagan*. Claremont, Calif.
- Hamilton, W. (tr.) (1967) *The Symposium*. Harmondsworth.
- Hammond, N. G. L. (1938) ‘The two battles of Chaeronea (338 BC and 86 BC)’, *Klio* 31: 186–218.
- (1980a) ‘The battle of the Granicus River’, *JHS* 100: 73–88.
- (1980b) Review of Engels (1978), *JHS* 100: 256–7.
- (1980c) ‘Training in the use of a sarissa and its effect in battle, 359–333 BC’, *Antichthon* 14: 53–63.
- (1981) *Alexander the Great: King, Commander and Statesman*. London.
- (1983a) ‘Army transport in the fifth and fourth centuries’, *GRBS* 24: 27–31.
- (1983b) *Three Historians of Alexander the Great*. Cambridge.
- (1984a) ‘Alexander’s veterans after his death’, *GRBS* 25: 51–61.
- (1984b) ‘The battle of Pydna’, *JHS* 104: 38–47.
- (1987) ‘A papyrus commentary on Alexander’s Balkan Campaign’, *GRBS* 28: 331–47.

- (1988a) 'The campaign and battle of Cynoscephalae (197 BC)', *JHS* 108: 60–82.
- (1988b) 'The royal journal of Alexander', *Historia* 37: 129–50.
- (1989a) *Alexander the Great*, 2nd edn. Bristol.
- (1989b) 'Casualties and reinforcements of citizen soldiers in Greece and Macedonia', *JHS* 109: 56–68.
- (1989c) *The Macedonian State: The Origins, Institutions and History*. Oxford.
- (1991) 'The various guards of Philip II and Alexander III', *Historia* 40: 397–418.
- (1992) 'Alexander's charge at the battle of Issus in 333 BC', *Historia* 41: 395–406.
- (1993–7) *Collected Studies I–IV*. Vol. I (1993a). Vol. II (1993b). Vol. III (1994). Vol. IV (1997). Amsterdam.
- (1996) 'A Macedonian shield and Macedonian measures', *ABSA* 91: 365–7.
- (1997b) 'What may Philip have learned as a hostage in Thebes?', *GRBS* 38: 355–72.
- Hammond, N. G. L., Griffith, G. T. and Walbank, F. W. (1972–88) *A History of Macedonia*. Vol. I: *Historical Geography and Pre-History* (1972). Vol. II: 550–336 BC (1979). Vol. III: 336–167 BC (1988). Oxford.
- Hannestad, L. (2001) 'War and Greek art', in Bekker-Nielsen and Hannestad (2001) 110–19.
- Hansen, M. H. (1976) 'The theoretic fund and the *graphe paranomon* against Apollodorus', *GRBS* 17: 235–46.
- (1983) 'The Athenian "politicians", 403–322 BC', *GRBS* 24: 33–55.
- (1988) *Three Studies in Athenian Demography*. Copenhagen.
- (ed.) (1989a) *The Athenian Ecclesia II: A Collection of Articles*. Copenhagen.
- (1989b) 'The Athenian "politicians", 403–322 BC', in Hansen (1989a) 1–23 (orig. publ. in Hansen (1983)).
- (1991) *The Athenian Democracy in the Age of Demosthenes: Structure, Principles and Ideology*. Oxford.
- (1993) 'The battle exhortation in ancient historiography: fact or fiction?', *Historia* 42: 161–80.
- (1995a) 'The "autonomous city-state": ancient fact or modern fiction?', in Hansen and Raaflaub (1995) 21–43.
- (ed.) (1995b) *Sources for the Ancient Greek City-State* (CPCActs 2). Copenhagen.
- (ed.) (1996) *Introduction to an Inventory of Poleis* (CPCActs 3). Copenhagen.
- (1998) *Polis and City-State: An Ancient Concept and its Modern Equivalent* (CPCActs 5). Copenhagen.
- (2002) 'Was the *polis* a state or a stateless society?', in Nielsen (2002) 17–47.
- Hansen, M. H. and Raaflaub, K. A. (eds.) (1995) *Studies in the Ancient Greek Polis* (CPCPapers 2) (*Historia Einzelschriften* 95). Stuttgart.
- Hanson, V. D. (1988) 'Epameinondas, the battle of Leuktra (371 BC) and the "revolution" in Greek battle tactics', *CA* 7: 190–207.
- (1989) *The Western Way of War: Infantry Battle in Classical Greece*. New York (repr. as Hanson (2000b)).
- (1991a) 'Hoplite technology in phalanx battle', in Hanson (1991b) 63–84.
- (ed.) (1991b) *Hoplites: The Classical Greek Battle Experience*. London.
- (1995) *The Other Greeks: The Family Farm and the Agrarian Roots of Western Civilization*. New York.

- (1996) 'Hoplites into democrats: the changing ideology of Athenian infantry', in Ober and Hedrick (1996) 289–312.
- (1998) *Warfare and Agriculture in Classical Greece*, 2nd edn, Berkeley and Los Angeles.
- (1999a) 'Hoplite obliteration: the case of the town of Thespiae', in Carman and Harding (1999) 203–17.
- (1999b) *The Other Greeks: The Family Farm and the Roots of Western Civilization*, 2nd edn. Berkeley and Los Angeles.
- (1999c) *The Soul of Battle*. New York.
- (1999d) 'The status of ancient military history: traditional work, recent research and on-going controversies', *Journal of Military History* 63: 379–414.
- (1999e) *The Wars of the Ancient Greeks*. London.
- (2000a) 'Hoplite battle as ancient Greek warfare: when, where and why?', in van Wees (2000b) 201–32.
- (2000b) *The Western Way of War: Infantry Battle in Classical Greece*, 2nd edn. Berkeley and Los Angeles.
- (2001) *Carnage and Culture: Landmark Battles in the Rise of Western Power*. New York.
- Harding, P. (1985) *From the End of the Peloponnesian War to the Battle of Ipsus*. Cambridge.
- (1998) 'Athenian defensive strategy in the fourth century', *Phoenix* 42: 61–71.
- Harmand, J. (1973) *La guerre antique, de Sumer à Rome*. Vendôme.
- Harris, E. M. and Wallace, R. W. (eds.) (1996) *Transitions to Empire: Essays in Greco-Roman History, 360–146 BC*, in Honor of E. Badian. Norman, Okla.
- Harris, W. V. (1979) *War and Imperialism in Republican Rome, 327–70 BC*. Oxford.
- (1984a) 'Current directions in the study of imperialism', in Harris (1984b) 13–58.
- (ed.) (1984b) *The Imperialism of Mid-Republican Rome* (Papers and Monographs of the American Academy in Rome 29). Rome.
- (1984c) 'The Italians and the empire', in Harris (1984b) 89–113.
- (1990) 'Roman warfare in the economic and social context of the fourth century BC', in Eder (1990) 494–510.
- Hartmann, A. V. and Heuser, B. (eds.) (2001) *War, Peace and World Orders in European History*. London and New York.
- Harvey, D. (1985) 'Women in Thucydides', *Arethusa* 18: 67–87.
- Hatzopoulos, M. B. (1996) *Macedonian Institutions Under the Kings* (Meletemata 22). Athens.
- (2001) *L'organisation de l'armée Macédonienne sous les Antigonides*. Athens.
- Hausmann, U. (1983) 'Zur Eroten- und Gallier-Ikonographie in der Alexandrinischen Kunst', in *Alessandria e il mondo Ellenistico-Romano. Studi in onore di Achille Adriani*, II (Studi i Materiali 5). (Palermo) 283–95.
- Havelock, E. (1972) 'War as a way of life in classical culture', in Gareau (1972) 15–78.
- Head, B. V. (1911) *Historia Nummorum: A Manual of Greek Numismatics*, 2nd edn. Oxford.
- Head, D. (1982) *Armies of the Macedonian and Punic Wars*. Worthing.
- Heckel, W. (1992) *The Marshals of Alexander's Empire*. London.

- Heinen, H. (1984) 'The Syrian–Egyptian wars and the new kingdoms of Asia Minor', *CAH* VII², 1, 412–45.
- Heinimann, F. (1945) *Nomos und Physis: Herkunft und Bedeutung einer Antithese im griechischen Denken des 5. Jahrhunderts*. Basel.
- Held, D. (1995) *Democracy and the Global Order*. Cambridge.
- Hellmann, O. (2000) *Die Schlachtszenen der Ilias. Das Bild des Dichters vom Kampf in der Heroenzeit*. Stuttgart.
- Herman, G. (1980) 'The "friends" of the early Hellenistic rulers: servants or officials?', *Talanta* 12: 103–49.
- (1987) *Ritualised Friendship and the Greek City*. Cambridge.
- (1997) 'The court society in the Hellenistic age', in Cartledge et al. (1997) 199–224.
- Hermon, E. (1983) 'Concept de pouvoir et concept d'empire à l'époque républicaine à Rome: pour une analyse linguistique et historique', *Ktema* 8: 177–84.
- (1989) 'L'impérialisme Romain républicain: approches historiographiques et approches d'analyse', *Athenaeum* 67: 407–16.
- Herrman, P. (1965) 'Antiochos der Große und Teos', *Anadolu* 9: 29–159.
- Herzfeld, M. (1987) *Anthropology through the Looking-Glass: Critical Ethnography on the Margins of Europe*. Cambridge.
- Hignett, C. (1963) *Xerxes' Invasion of Greece*. Oxford.
- Hoare, M. (1989) *The Road to Kalamata: A Congo Mercenary's Personal Memoir*. Lexington, Mass.
- Hodge, A. T. (1975) 'Marathon to Phalerum', *JHS* 95: 169–71.
- Hodkinson, S. (1997) 'The development of Spartan society and institutions in the archaic period', in Mitchell and Rhodes (1997) 83–102.
- (2000) *Property and Wealth in Classical Sparta*. London and Swansea.
- Hodkinson, S. and Powell, A. (eds.) (2002) *Sparta: Beyond the Mirage*. London and Swansea.
- Hoffmann, D. (1969–70) *Das spätrömischen Bewegungsheer und die Notitia Dignitatum* (2 vols.). Düsseldorf.
- Holder, A. (1982) *The Roman Army in Britain*. London.
- Hölkeskamp, K.-J. (1993) 'Conquest, competition and consensus: Roman expansion in Italy and the rise of the *nobilitas*', *Historia* 42: 12–39.
- (1997) 'La guerra e la pace', in Settimi (1997) 481–539.
- Holladay, A. J. (1982) 'Hoplites and heresies', *JHS* 102: 94–103.
- (1988) 'Further thoughts on trireme tactics', *G&R* 35: 149–51.
- Holleaux, M. (1935) *Rome, la Grèce et les monarchies hellénistiques au IIIe siècle avant J.-C. (273–205 BC)*. Paris.
- (1938) 'Sur un passage mal interprété de Polybe (28.7, 8–10)', in *Études d'épigraphie et d'histoire grecques* I (Paris) 441–3.
- Holoka, J. P. (1997) 'Marathon and the myth of the same-day march', *GRBS* 38: 329–53.
- Hopkins, K. (1978) *Conquerors and Slaves*. Cambridge.
- (2002) 'Rome, taxes, rents and trade', in Scheidel and von Reden (2002) 190–230.

- Hopwood, K. (ed.) (1999) *Organised Crime in Antiquity*. London.
- Horden, P and Purcell, N. (2000) *The Corrupting Sea: A Study of Mediterranean History*. Oxford.
- Hornblower, J. (1981) *Hieronymus of Cardia*. Oxford.
- Hornblower, S. (1987) *Thucydides*. London.
- (1991–6) *A Commentary on Thucydides*. Vol. I (1991); Vol. II (1996). Oxford.
- (1992) ‘The religious dimension to the Peloponnesian War, or, what Thucydides does not tell us’, *HSCP* 94: 179–97.
- (ed.) (1994) *Greek Historiography*. Oxford.
- (1995) ‘The fourth-century and hellenistic reception of Thucydides’, *JHS* 115: 47–68.
- (2000) ‘Sticks, stones and Spartans: the sociology of Spartan violence’, in van Wees (2000b) 57–82.
- (2002) *The Greek World, 479–323 BC*. London.
- (2004) *Thucydides and Pindar: Historical Narrative and the World of Epinikian Poetry*. Oxford.
- Hornblower, S. and Greenstock, M. C. (eds.) (1986) *The Athenian Empire* (LAC-TOR I), 3rd edn. Cambridge.
- Houghton, A., Hurter, S., Mottahedeh, P. E. and Scott, A. (1984) *Festschrift für Leo Mildenberg: Numismatik, Kunstgeschichte, Archäologie*. Wettern.
- Howard, M. (1976) *War in European History*. Oxford.
- Howard, M., Andreopoulos, G. J. and Shulman, M. R. (eds.) (1994) *The Laws of War: Constraints on Warfare in the Western World*. New Haven.
- Hoyos, B. D. (1998) *Unplanned Wars: The Origins of the First and Second Punic Wars*. Berlin.
- Huizinga, J. (1950) *Homo Ludens*. Boston.
- Humble, R. (1980) *Warfare in the Ancient World*. London.
- Humphrey, J. (1999) *Rome and the Byzantine Near East II*. Portsmouth, R.I.
- Hunt, P. (1997) ‘The helots at the battle of Plataea’, *Historia* 46: 129–44.
- Hunt, P. (1998) *Slaves, Warfare and Ideology in the Greek Historians*. Cambridge.
- Hunter, V. (1994) *Policing Athens: Social Control in the Attic Lawsuits, 420–320 BC*. Princeton.
- Hurst, H. (1976) ‘Excavations at Carthage’, *AntJ* 56: 177–97.
- (1977) ‘Excavations at Carthage’, *AntJ* 57: 232–61.
- Hurwitt, J. W. (2002) ‘Reading the Chigi Vase’, *Hesperia* 71: 1–22.
- Hutchinson, G. (2000) *Xenophon and the Art of Command*. London.
- Hutchinson, G. O. (1985) *Aeschylus Septem contra Thebas*. Oxford.
- Hyland, A. (1990) *Equus: The Horse in the Roman World*. London.
- (1993) *Training the Roman Cavalry: From Arrian's Ars Tactica*. Gloucester.
- (2003) *The Horse in the Ancient World*. Stroud.
- Ilari, V. (1980) *Guerra e diritto nel mondo antico*. Vol. I: *Guerra e diritto nel mondo greco-ellenistico fino al III secolo*. Milan.
- Illinois Greek Club (eds.) (1923) *Aeneas Tacticus, Asclepiodotus and Onasander*. Cambridge, Mass.
- Irwin, T. (tr.) (1985) *Aristotle, Nicomachean Ethics*. Indianapolis.
- Isaac, B. (1990) *The Limits of Empire: The Roman Army in the East*. Oxford.

- Jackson, A. H. (1969) 'The original purpose of the Delian League', *Historia* 18: 12–16.
- (1991) 'Hoplites and the gods: the dedication of captured arms and armour', in Hanson (1991b) 228–59.
- Jacob, O. (1932) 'La cité grecque et les blessés de guerre', in *Mélanges Gustave Glotz*, II (Paris) 961–81.
- Jacquemin, A. (2000) *Guerre et religion dans le monde grec (490–322 av. J.-C.)*. Paris.
- Jameson, M. H. (1991) 'Sacrifice before battle', in Hanson (1991b) 197–227.
- Jarva, E. (1995) *Archaiologia on Archaic Greek Body Armour* (Archaeologica Septentrionalia 3). Rovaniemi.
- Jeffery, L. H. (1976) *Archaic Greece: The City-States, c. 700–500 BC*. London.
- Jones, A. (1988) *The Art of War in the Western World*. London. (= 1989)
- (1989) *The Art of War in the Western World*. New York. (= 1988)
- Jones, C. P. (1999) *Kinship Diplomacy in the Ancient World*. Cambridge, Mass.
- Jongman, W. and Kleijwegt, M. (eds.) (2002) *After the Past: Essays in Ancient History in Honour of H. W. Pleket*. Leiden.
- Jordan, B. (1975) *The Athenian Navy in the Classical Period*. Berkeley and Los Angeles.
- (2000) 'The crews of Athenian triremes', *AC* 69: 81–101.
- Junkelmann, M. (1994) *Die Legionen des Augustus: der römische Soldat im archäologischen Experiment*, 6th edn. Mainz am Rhein.
- (1997) *Panis Militaris: die Ernährung des römischen Soldaten oder der Grundstoff der Macht*. Mainz am Rhein.
- Kagan, D. (1969) *A New History of the Peloponnesian War: The Outbreak of the Peloponnesian War*. Ithaca.
- (1974) *A New History of the Peloponnesian War: The Archidamian War*. Ithaca.
- (1981) *A New History of the Peloponnesian War: The Peace of Nicias and the Sicilian Expedition*. Ithaca.
- (1987) *A New History of the Peloponnesian War: The Fall of the Athenian Empire*. Ithaca.
- (1995) *On the Origins of War and the Preservation of Peace*. New York.
- Kähler, H. (1965) *Der Fries vom Reiterdenkmal des Aemilius Paullus in Delphi*. Berlin.
- Kallet, L. (1983) 'Iphikrates, Timotheos and Athens, 371–360 BC', *GRBS* 24: 239–52.
- Kallet-Marx, L. (1989) 'The Kallias decree, Thucydides and the outbreak of the Peloponnesian War', *CQ* 39: 94–113.
- (1993) *Money, Expense and Naval Power in Thucydides' History 1–5.24*. Berkeley and Los Angeles.
- (1994) 'Money talks: *rhetor, demos* and the resources of the Athenian empire', in Osborne and Hornblower (1994) 227–51.
- Karavites, P. (1982) *Capitulations and Greek Interstate Relations: The Reflection of Humanistic Ideals in Political Events* (Hypomnemata 71). Göttingen.
- Karlsson, L. (1993) 'Did the Romans allow the Sicilian Greeks to fortify their cities in the third century BC?', *Acta Hyperborea* 5: 31–51.
- Kaul, F. (1995) 'The Gundestrup cauldron reconsidered', *Acta Archaeologica* 66: 1–38.
- Kearns, E. (1990) 'Saving the city', in Murray and Price (1990) 323–44.

- Keegan, J. (1976) *The Face of Battle*. London and New York. (= 1978)
- (1978) *The Face of Battle*. Harmondsworth. (= 1976)
- (1993) *A History of Warfare*. New York.
- (ed.) (1997–) *Cassel's History of Warfare*. London.
- Keil, B. (1902) *Anonymus Argentinensis: Fragmente zur Geschichte des perikleischen Athens aus einem Strasburger Papyrus*. Strasburg.
- Kelly, T. (1966) ‘The Calaurian amphictiony’, *AJA* 70: 113–21.
- (1970) ‘The traditional enmity between Sparta and Argos’, *AHR* 75: 971–1003.
- Keppie, L. (1984) *The Making of the Roman Army: From Republic to Empire*. London.
- Kern, P. B. (1999) *Ancient Siege Warfare*. Bloomington, Ind.
- Kertész, I. (1980). ‘Die Schlacht bei Cannae und ihr Einfluss auf die Entwicklung der Kriegskunst’, in *Miscellen zur Wissenschaftsgeschichte* (Wissenschaftliche Beiträge der Martin-Luther Universität). Halle-Wittenberg, 29–43.
- Kiehr, F. (ed.) (1907) *Lesbonax*. Leipzig.
- Klaasen, W. (1978) ‘The doctrine of the “Just War” in the West: a summary’, *Peace Research Reviews* 7: 1–70.
- Kleiner, G., Hommel, P. and Müller-Wiener, W. (1967) *Panionion und Melie*. Berlin.
- Klose, P. (1972) *Die Völkerrechtliche Ordnung der Hellenistischen Staatenwelt in der Zeit von 280 bis 168 v. Chr.* Munich.
- Knoepfler, D. (2000) ‘La loi de Diatôndas, les femmes de Thèbes et le collège des Béotarques au IV^e et au III^e siècle avant J. C.’, in *Prezenza e funzione della città di Tebe nella cultura greca*. Pisa and Rome. 355–66.
- Köchly, H. A. T. and Rüstow, W. (1852) *Geschichte des griechischen Kriegswesens von der ältesten Zeit bis auf Pyrrhos*. Aurau.
- (eds.) (1853–5) *Die Griechische Kriegsschriftsteller* (2 vols.). Leipzig.
- Kolonas, L. (1989/90) ‘Anaskafi Oiniadon: ta neoria’, *Archaiognosia* 6: 153–9.
- Konecny, A. (2001) ‘Κατέκοψεν τὴν μόραν’Ιφικράτης. Das gefecht bei Lechaion im Frühsommer 390 v. Chr.’, *Chiron* 31: 79–127.
- Konstan, D. (1997) *Friendship in the Classical World*. Cambridge.
- Kraemer, C. J. (1958) *Excavations at Nessana Conducted by H. D. Colt, Jr.* Vol. III: *The Non-Literary Papyri*. Princeton.
- Krasilnikoff, J. A. (1992) ‘Aegean mercenaries in the fourth to second centuries BC: a study in payment, plunder and logistics of ancient Greek armies’, *C&M* 43: 23–36.
- (1996) ‘Mercenary soldiering in the west and the development of the army of Rome’, *Analecta Romana Instituti Danici* 13: 7–20.
- Kremmer, M. (1890) ‘De catalogis heurematum’ (Leipzig diss.).
- Krentz, P. (1985a) ‘Casualties in hoplite battles’, *GRBS* 26: 13–21.
- (1985b) ‘The nature of hoplite battle’, *CA* 4: 50–61.
- (1991) ‘The salpinx in Greek warfare’, in Hanson (1991b) 110–20.
- (1994) ‘Continuing the *othismos* on *othismos*’, *AHB* 8: 45–9.
- (1997) ‘The strategic culture of Periclean Athens’, in Hamilton and Krentz (1997) 55–72.
- (2000) ‘Deception in archaic and classical Greek warfare’, in van Wees (2000b) 167–200.

- (2002) 'Fighting by the rules: the invention of the hoplite *agôn*', *Hesperia* 71: 23–39.
- Krentz, P. and Wheeler, E. L. (trs. and eds.) (1994) *Polyaenus, Stratagems of War* (2 vols.). Chicago.
- Krischer, T. (1988) 'Dynamische aspekte der griechischen kultur', *WS* 101: 7–40.
- Kroll, J. H. (1977) 'An archive of the Athenian cavalry', *Hesperia* 46: 83–140.
- Kromayer, J. and Veith, G. (1903–31) *Antike Schlachtfelder in Griechenland* (4 vols.). Berlin.
- (1928) *Heerwesen und Kriegsführung der Griecher und Römer* (Handbuch der Altertumswissenschaft IV,3.2). Munich.
- Kuhrt, A. (1995) *The Ancient Near East, c. 3000–330 BC* (2 vols.). London.
- Kurke, L. (1992) 'The politics of *habrosynê* in archaic Greece', *CA* 11: 90–121.
- (1999) *Coins, Bodies, Games and Gold: The Politics of Meaning in Archaic Greece*. Princeton.
- Laing, D. R. Jr. (1960) 'A new interpretation of the Athenian naval catalogue, IG II² 1951' (University of Cincinnati diss.).
- Lammert, F. (1938) 'Phalanx', *RE* XIX.2, 1625–46.
- (1941) *Jahresbericht über die Fortschritte der Klassischen Altertumswissenschaft* 274: I–II4.
- Lane Fox, R. J. (1973) *Alexander the Great*. London.
- (1997) 'The itinerary of Alexander: Constantius to Julian', *CQ* 47: 239–52.
- (ed.) (2004) *The Long March: Xenophon's Anabasis, Old and New*. New Haven.
- Larsen, J. A. O. (1935) 'Was Greece free between 196–146 BC?', *CP* 30: 193–214.
- (1937) '*Perioikoi*', *RE* XIX.1, 816–33.
- (1946) 'The Acharnians and the pay of taxiarchs', *CP* 41: 91–8.
- Larson, S. (2000) 'Boiotia, Athens, the Peisistratids and the *Odyssey*'s catalogue of heroines', *GRBS* 41: 193–222.
- Latacz, J. (1977) *Kampffparänese, Kampfdarstellung und Kampfwirklichkeit in der Ilias, bei Kallinos und Tyrtaios*. Munich.
- Launey, M. (1949–50) *Recherches sur les armées hellénistiques* (2 vols.). Paris.
- (1987) *Recherches sur les armées hellénistiques* (reprint of 1949–50 edn).
- Lauter, H. (1992) 'Some remarks on fortified settlements in the Attic countryside', in van de Maele and Fossey (1992) 77–91.
- Lavelle, B. M. (1997) 'Epikouros and epikouroi in early Greek literature and history', *GRBS* 38: 229–62.
- Lawrence, A. W. (1979) *Greek Aims in Fortification*. Oxford.
- Lazenby, J. F. (1964) 'The strategy of the Greeks in the opening campaigns of the Persian War', *Hermes* 92: 264–84.
- (1978) *Hannibal's War*. Warminster.
- (1985) *The Spartan Army*. Warminster.
- (1987) 'The *diekplous*', *G&R* 34: 169–77.
- (1988) Review of Morrison and Coates (1986), *JHS* 108: 250.
- (1991) 'The killing zone', in Hanson (1991b) 87–109.
- (1993) *The Defence of Greece, 490–479 BC*. Warminster.
- (1996) *The First Punic War*. London.
- Lazenby, J. F. and Whitehead, D. (1996) 'The myth of the hoplite's *hoplon*', *CQ* ns 46: 27–33.

- Le Bohec, S. (1993) *Antigon Dôsôn roi de Macédoine*. Nancy.
- Le Bohec, Y. (1994) *The Roman Imperial Army*. New York.
- Le Bohec, Y. and Wolff, C. (2004) *L'armée romaine de Dioclétien à Valentinien Ier*. Paris.
- Le Gall, J. (1980) *Alésia: archéologie et histoire*. Paris.
- Lee, J. W. I. (2004) 'The Lochos in Xenophon's *Anabasis*', in C. Tuplin (ed.), *Xenophon and his World. Papers from a Conference held in Liverpool in July 1999*, Historia Einzelschrift 172 (Stuttgart) 289–317.
- Leimbach, R. (1980) 'Review of Latacz (1977)', *Gnomon* 52: 418–25.
- Leitao, D. (2002) 'The legend of the Sacred Band', in Nussbaum and Sihvola (2002) 143–69.
- Lendon, J. E. (1999) 'The rhetoric of combat: Greek military theory and Roman culture in Julius Caesar's battle descriptions', *CA* 18: 273–329.
- (2000) 'Homeric vengeance and the outbreak of Greek wars', in van Wees (2000b) 1–30.
- (2005) *Soldiers and Ghosts: A history of battle in classical antiquity* (New Haven and London).
- (2007) 'Athens and Sparta and the coming of the Peloponnesian War', in Samons (2007) 258–81.
- Lepper, F. and Frere, S. (1988) *Trajan's Column*. Gloucester.
- Leriche, P. and Tréziny, H. (eds.) (1982) *La fortification dans l'histoire du monde grec*. Paris.
- Lesquier, J. (1911) *Les institutions militaires de l'Égypte sous les Lagides*. Paris.
- Lévêque, P. (1968) 'La guerre à l'époque hellénistique', in Vernant (1968) 261–87.
- Levine, D. S. and Nelis, D. P. (eds.) (2002) *Clio and the Poets: Augustan Poetry and the Traditions of Ancient Historiography*. Leiden.
- Lewis, D. M. (1954) 'Notes on Attic inscriptions', *ABSA* 49: 17–50.
- (1988) 'The tyranny of the Pisistratidae', *CAH* IV², 287–302.
- (1989) 'Persian gold in Greek international relations', *REA* 91: 227–34.
- (1990) 'Public property in the city', in Murray and Price (1990) 245–63.
- Lewis, S. (1996) *News and Society in the Greek Polis*. London.
- Liampi, K. (1998) *Der makedonische Schild*. Bonn.
- Lieu, C. N. (1991) *The Roman Eastern Frontier and the Persian Wars, AD 226–363*. London.
- Link, S. (1994) *Das griechische Kreta: Untersuchungen zu seiner staatlichen und gesellschaftlichen Entwicklung vom 6. bis zum 4. Jhd. v. Chr.* Stuttgart.
- Lintott, A. W. (1982) *Violence, Civil Strife and Revolution in the Classical City*. London.
- (1987) 'Democracy in the middle Republic', *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte* 114: 34–52.
- (1993) *Imperium Romanum: Politics and Administration*. London.
- (1994) 'The Roman empire and its problems in the late second century', *CAH* IX², 16–39.
- Lippelt, O. (1910) *Die griechischen Leichtbewaffneten bis auf Alexander den Grossen*. Jena.
- Lipsius, J. H. (1908) *Das Attische Recht und Rechtsverfahren mit Benutzung des Attischen Processe*. Leipzig.

- Lissarrague, F. (1989) 'The world of the warrior', in Bérard et al. (1989) 39–51.
- (1990) *L'Autre guerrier. Archers, peltastes, cavaliers dans l'imagerie attique*. Paris and Rome.
- Littauer, M. and Crouwel, J. H. (1983) 'Chariots in late Bronze Age Greece', *Antiquity* 57: 187–92.
- (1996) 'Robert Drews and the role of chariotry in Bronze Age Greece', *OxJArch* 15: 297–305.
- Lloyd, A. B. (1975–88) *Herodotus Book II. Introduction* (1975); *Commentary* 1–98 (1976); *Commentary* 99–182 (1988). Leiden.
- (1982) 'The inscription of Udjahorresnet, a collaborator's testament', *JEA* 68: 166–80.
- (ed.) (1996a) *Battle in Antiquity*. London.
- (1996b) 'Philip II and Alexander the Great: the moulding of Macedon's army', in Lloyd (1996a) 169–98.
- Lock, R. A. (1977) 'The origins of the Argyraspides', *Historia* 26: 373–8.
- Lonis, R. (1969) *Les usages de la guerre entre Grecs et barbares*. Paris.
- (1979) *Guerre et religion en Grèce à l'époque classique*. Paris.
- (1980) 'La valeur du serment dans les accords internationaux en Grèce classique', *DHA* 6: 267–86.
- (1985) 'La guerre en Grèce: années de recherche, 1968–1983', *REG* 98: 321–79.
- Loomis, W. T. (1992) *The Spartan War Fund: IG V 1, 1 and a New Fragment*. Stuttgart.
- Loraux, N. (1985) 'La cité, l'historien, les femmes', *Pallas* 32: 7–27.
- (1986) *The Invention of Athens: The Funeral Oration in the Classical City*. Cambridge, Mass.
- Lorimer, H. L. (1947) 'The hoplite phalanx', *ABSA* 42: 76–138.
- Losada, L. (1970) *The Fifth Column in the Peloponnesian War*. Leiden.
- Lotze, D. (2000) *Bürger und Unfreie im vorhellenistischen Griechenland*. Stuttgart.
- Luginbill, R. D. (1994) 'Othismos: the importance of the mass-shove in hoplite warfare', *Phoenix* 48: 51–61.
- Lumpkin, H. (1975) 'The weapons and armour of the Macedonian phalanx', *Journal of the Arms and Armour Society* (June): 193–208, pls. lxxv–lxxx.
- Luttwak, E. (1976) *The Grand Strategy of the Roman Empire*. Baltimore.
- Ma, J. (2000) 'Fighting poleis of the Hellenistic world', in van Wees (2000b) 337–76.
- Macleod, C. W. (1983) *Collected Essays*. Oxford.
- MacMullen, R. (1963) *Soldier and Civilian in the Later Roman Empire*. Cambridge, Mass.
- Mahaffy, J. P. and Smyly, J. G. (eds.) (1891–1905) *The Flinders Petrie Papyri* (3 vols.). Dublin.
- Malkin, I. and Rubinson, Z. (eds.) (1995) *Leaders and Masses in the Roman World: Studies in Honor of Zwi Yavetz*. Leiden.
- Mälzer, J. (1912) *Verluste und Verlustlisten im griechischen Altertum bis auf die Zeit Alexanders des Großen*. Jena.
- Manganaro, G. (2000) 'Kyme e il dinasta Philetairos', *Chiron* 30: 403–14.
- Mann, C. (2002) *Athlet und Polis im archaischen und frühklassischen Griechenland* (Hypomnemata 138). Göttingen.

- Mann, J. C. (1979) 'Power, force and the frontiers of the Roman Empire', *JRS* 69: 175–83.
- (1983) *Legionary Recruitment and Veteran Settlement during the Principate*. London.
- Mann, M. (1986) *The Sources of Social Power*. Vol. I: *A History of Power from the Beginning to A.D. 1760*. Cambridge.
- Manti, P. A. (1983) 'The cavalry sarissa', *AncW* 8: 73–80.
- (1992) 'The sarissa of the Macedonian infantry', *AncW* 23: 30–42.
- (1994) 'The Macedonian sarissa again', *AncW* 25: 79–91.
- Manville, P. B. (1990) *The Origins of Citizenship in Ancient Athens*. Princeton.
- Marek, C. (1984) *Die Proxenie*. Frankfurt.
- Marinatos, S. (1970) 'Further news from Marathon', *AAA* 3: 153–66.
- Marinovich, L. P. (1988) *Le mercenariat grec au IVe siècle avant notre ère et la crise de la polis*. Paris.
- Markle, M. M. (1977) 'The Macedonian sarissa, spear and related armor', *AJA* 81: 323–9.
- (1978) 'The use of the sarissa by Philip and Alexander of Macedon', *AJA* 82: 483–97.
- (1999) 'A shield monument from Veria and the chronology of Macedonian shield types', *Hesperia* 68: 219–54.
- Marsden, E. W. (1964) *The Campaign of Gaugamela*. Liverpool.
- (1969) *Greek and Roman Artillery: Historical Development*. Oxford.
- (1971) *Greek and Roman Artillery: Technical Treatises*. Oxford.
- Marshall, A. J. (1975) 'Roman women and the provinces', *AncSoc* 6: 109–27.
- Martin, A. (1887) *Les cavaliers athéniens* (Bibliothèque des Écoles françaises d'Athènes et de Rome 47). Paris.
- Mattern, S. (1999) *Rome and the Enemy: Imperial Strategy in the Principate*. Berkeley and Los Angeles.
- Mattha, G. (ed.) (1975) *The Demotic Legal Code of Hermopolis West*. Cairo.
- Matthews, J. F. (1989) *The Roman Empire of Ammianus*. London.
- Maule, Q. F. and Smith, H. R. W. (1959) *Votive Religion at Caere: Prolegomena*. Berkeley and Los Angeles.
- Maxfield, V. A. (1981) *The Military Decorations of the Roman Army*. London.
- McCall, J. B. (2002) *The Cavalry of the Roman Republic: Cavalry Combat and Elite Reputations in the Middle and Late Republic*. London and New York.
- McCann, D. and Strauss, B. (eds.) (2001) *War and Democracy*. Armonk, N.Y.
- McCredie, J. (1966) *Fortified Military Camps in Attica*. Princeton.
- McDonnell, M. A. (2006) *Roman Manliness: Virtus and the Roman Republic* (Cambridge).
- McKechnie, P. (1989) *Outsiders in the Greek Cities in the Fourth Century BC*. London and New York.
- (1994) 'Greek mercenary troops and their equipment', *Historia* 43: 297–305.
- McNicoll, A. (1982) 'Developments in techniques of siegework and fortification in the Greek world, ca. 400–100 BC', in Leriche and Tréziny (1982) 305–13.
- (1997) *Hellenistic Fortifications from the Aegean to the Euphrates*, rev. edn (with an additional chapter by N. P. Milner). Oxford.

- Meadows, A. R. (1993) 'Greek and Roman diplomacy on the eve of the Second Macedonian War', *Historia* 42: 40–60.
- Meadows, A. R. and Shipton, K. (eds.) (2001) *Money and its Uses in the Ancient Greek World*. Oxford.
- Mehl, A. (1980–1) 'Doriktetos *Chora*: kritische Bemerkungen zum "Speererwerb" im Politik und Völkerrecht der hellenistische Epoche', *AncSoc* 11–12: 173–212.
- Meiggs, R. (1972) *The Athenian Empire*. Oxford.
- (1982) *Trees and Timber in the Ancient Mediterranean World*. Oxford.
- Mertens, N. (2002) 'Ouk homoioi, agathoi de: the *perioikoi* in the classical Lakedaimonian polis', in Powell and Hodkinson (2002) 285–303.
- Migeotte, L. (1984) *L'emprunt publique dans les cités grecques*. Quebec and Paris.
- (1992) *Les souscriptions publiques dans les cités grecques*. Quebec and Geneva.
- Millar, F. G. B. (1984a) 'The Mediterranean and the Roman revolution: politics, war and the economy', *P&P* 102: 3–24.
- (1984b) 'The political character of the classical Roman Republic, 200–151 BC', *JRS* 74: 1–19.
- (1986) 'Politics, persuasion and the people before the Social War, 150–190 BC', *JRS* 76: 1–II.
- (1989) 'Political power in mid-Republican Rome: *Curia* or *Comitium*', *JRS* 79: 138–50.
- (1995) 'Popular politics at Rome in the late Republic', in Malkin and Rubino (1995) 1–15.
- (1998) *The Crowd in Rome in the Late Republic*. Ann Arbor.
- Millett, P. (1993) 'Warfare, economy and democracy in classical Athens', in Rich and Shipley (1993a) 177–96.
- Milner, N. P. (ed. and tr.) (1993) *Vegetius, Epitome of Military Science*. Liverpool.
- Milns, R. D. (1966) 'Alexander's Macedonian cavalry and Diodorus XVII 17.4.', *JHS* 88: 167–8.
- (1976) 'The army of Alexander the Great', in Badian (1976) 87–136.
- Mitchell, B. (1975) 'Herodotus and Samos', *JHS* 95: 75–91.
- Mitchell, L. G. (1997) *Greeks Bearing Gifts: The Public Use of Private Relationships in the Greek World, 435–323 BC*. Cambridge.
- (1998) 'Review of Hamel (1998a)', *Bryn Mawr Classical Review* 1998.09.11.
- Mitchell, L. G. and Rhodes, P. J. (eds.) (1997) *The Development of the Polis in Archaic Greece*. London.
- Mitchell, S. (ed.) (1983) *Armies and Frontiers in Roman and Byzantine Anatolia*. Oxford.
- Mixer, J. R. (1992) 'The length of the Macedonian sarissa during the reigns of Philip II and Alexander the Great', *AncW* 23: 21–9.
- Momigliano, A. (1966a) 'Some observations on causes of war in ancient historiography', in Momigliano (1966b) 112–25.
- (1966b) *Studies in Historiography*. London.
- (1975) *Alien Wisdom: The Limits of Hellenization*. Cambridge.
- (1986) 'The rise of the plebs in archaic Rome', in Raafflaub (1986) 175–97.
- Mommsen, T. (1854–6) *Römische Geschichte* (3 vols.). Berlin.
- (1887–8) *Römisches Staatsrecht* (3 vols.). Leipzig.

- Montagu, J. D. (2000) *Battles of the Greek and Roman Worlds*. London.
- (2006) *Greek and Roman Warfare* (London)
- Moore, J. M. (tr.) (1983) *Aristotle and Xenophon on Democracy and Oligarchy* (with introduction and notes). London.
- Morgan, C. (1990) *Athletes and Oracles: The Transformation of Olympia and Delphi in the Eighth Century BC*. Cambridge.
- (2001) 'Symbolic and pragmatic aspects of warfare in the Greek world of the eighth to sixth centuries BC', in Bekker-Nielsen and Hannestad (2001) 20–44.
- (1996) 'Achaian poleis and Achaian colonisation', in Hansen (1996) 164–232.
- Morley, N. (1996) *Metropolis and Hinterland: The City of Rome and the Italian Economy, 200 BC to AD 200*. Cambridge.
- Morris, I. (1987) *Burial and Ancient Society: The Rise of the Greek City-State*. Cambridge.
- (1996) 'The strong principle of equality and the archaic origins of Greek democracy', in Ober and Hedrick (1996) 19–48.
- Morris, I. and Powell, B. (eds.) (1997) *A New Companion to Homer*. Leiden and New York.
- Morrison, J. S. (1984) 'Hyperesia in naval contexts in the fifth and fourth centuries BC', *JHS* 104: 48–59.
- (1987) 'Athenian sea-power 323/2 BC: dream and reality', *JHS* 107: 88–97.
- (1991) 'The Greek ships at Salamis and the diekplous', *JHS* 111: 196–200.
- Morrison, J. S. and Coates, J. F. (1986) *The Athenian Trireme: The History and Reconstruction of an Ancient Greek Warship*. Cambridge.
- (1987) *An Athenian Trireme Reconstructed: The British Sea Trials of 'Olympias'*. Oxford.
- (1996) *Greek and Roman Oared Warships, 399–330 BC*. Oxford.
- Morrison, J. S., Coates, J. F. and Rankov, N. B. (2000) *The Athenian Trireme: The History and Reconstruction of an Ancient Greek Warship*, 2nd edn. Oxford.
- Morrison, J. S. and Williams, R. T. (1968) *Greek Oared Ships, 900–322 BC*. Cambridge.
- Moxon, I. S., Smart, J. D. and Woodman, A. J. (eds.) (1986) *Past Perspectives: Studies in Greek and Roman Historical Writing*. Cambridge.
- Munn, M. (1993) *The Defense of Attica: The Dema Wall and the Boiotian War of 378–375 BC*. Berkeley and Los Angeles.
- Murray, O. (1972) 'Herodotus and Hellenistic culture', *CQ* 22: 200–13.
- (1993) *Early Greece*, 2nd edn. London.
- Murray, O. and Price, S. (eds.) (1990) *The Greek City from Homer to Alexander*. Oxford.
- Musti, D. (1984) 'Syria and the East', *CAH* VII².1, 175–220.
- Myres, J. L. (1943) 'ΑΚΗΠΥΚΤΟΣ ΠΟΛΕΜΟΣ (Herodotus V. 81)', *CR* 57: 66–7.
- Nefedkin, A. K. (2001) *Chariotry of the Ancient Greeks (Sixteenth–First Centuries BC)*. St Petersburg. (In Russian).
- Nenci, G. (1981a) 'La neutralità nella Grecia antica', in Cataldi et al. (1981) 147–60.
- (1981b) 'Les rapports internationaux dans la Grèce archaïque', in Cataldi et al. (1981) 57–72.

- Nicolet, C. (1960) 'Consul togatus: remarques sur le vocabulaire politique de Cicéron et de Tite-Live', *REL* 38: 236–63.
- (1962) 'Les Equites Campani et leurs représentations figurées', *MEFRA* 74: 463–517.
- (1966) *L'ordre équestre à l'époque républicaine*. Paris.
- (1969) 'Armée et société à Rome sous la république: à propos de l'ordre équestre', in Brisson (1969b) 117–56.
- Nielsen, T. H. (ed.) (2002) *Even More Studies in the Ancient Greek Polis* (CPCPapers 6). Stuttgart.
- Nielsen, T. H. and Roy, J. (1999) *Defining Ancient Arkadia*. Copenhagen.
- Nilsson, M. (1929) 'Die Hoplitentaktik und das Staatswesen', *Klio* 22: 240–9.
- Noguera Borel, A. (1997) 'La falange macedonia: el problema de los Ἀσθέταιροι', in D. Plácido, J. Alvar, J. M. Casillas and C. Fornis (eds.), *Imágenes de la Polis* (ARYS 8) (Madrid) 215–32.
- (1999) 'L'évolution de la phalange macédonienne: le cas de la sarisse', Institute for Balkan Studies (ed.), *Ancient Macedonia: Sixth International Symposium* (Thessalonica). Vol. II: 39–50.
- North, J. A. (1981) 'The development of Roman imperialism', *JRS* 71: 1–9.
- (1990) 'Democratic politics in Republican Rome', *P&P* 126: 3–21.
- Nowag, W. (1983) *Raub und Beute in der archaischen Zeit der Griechen*. Frankfurt.
- Nussbaum, G. B. (1967) *The Ten Thousand: A Study in Social Organization and Action in Xenophon's Anabasis*. Leiden.
- Nussbaum, M. C. and Sihvola, J. (eds.) (2002) *The Sleep of Reason: Experience and Sexual Ethics in Ancient Greece and Rome*. Chicago.
- O'Brien, J. M. (1992) *Alexander the Great: The Invisible Enemy. A Biography*. London and New York.
- Oakley, S. P. (1985) 'Single combat in the Roman Republic', *CQ* 35: 392–410.
- (1993) 'The Roman conquest of Italy', in Rich and Shipley (1993b) 9–37.
- (1997–8) *A Commentary on Livy Books VI–X*. Vol. I: *Introduction and Book VI* (1997). Vol. II: *Books VII and VIII*. Oxford.
- Oates, J. F. (1963) 'The status designation: ΠΕΡΣΗΣ, ΤΗΣ ΕΠΙΓΟΝΗΣ', *YCS* 18: 1–129.
- Ober, J. (1985a) *Fortress Attica: Defense of the Athenian Land Frontier, 404–322 BC*. Leiden.
- (1985b) 'Thucydides, Pericles and the strategy of defense', in Eadie and Ober (1985) 171–88 (repr. in Ober 1996a).
- (1987) 'Early artillery towers: Messenia, Boiotia, Attica, Megarid', *AJA* 91: 569–604.
- (1989) *Mass and Elite in Democratic Athens*. Princeton.
- (1994) 'Classical Greek times', in Howard et al. (1994) 12–26 and 227–30 (repr. as Ober 1996b).
- (1996a) *The Athenian Revolution: Essays on Ancient Greek Democracy and Political Theory*. Princeton.
- (1996b) 'The rules of war in classical Greece', in Ober (1996a) 53–71.
- Ober, J. and Hedrick, C. (eds.) (1996) *Démokratia*. Princeton.
- Ogilvie, R. M. (1965) *A Commentary on Livy Books I–V*. Oxford.

- Oliver, G. J., Brock, R., Cornell, T. J. and Hodkinson, S. (eds.) (2000) *The Sea in Antiquity* (BAR Int. Ser. 899). Oxford.
- Olmstead, A. T. (1948) *History of the Persian Empire*. Chicago.
- Olshausen, E. (1974) *Prosopographie der hellenistischen Königsgesandten*. Teil I: *Von Triparadeisos bis Pydna* (Studia Hellenistica 19). Leuven.
- Oman, C. (1969) *On the Writing of History*. New York.
- Osborne, R. (1985) *Demos: The Discovery of Classical Attika*. Cambridge.
- (1987) *Classical Landscape with Figures*. London.
- (1991) 'Pride and prejudice, sense and subsistence: exchange and society in the Greek city', in Rich and Wallace-Hadrill (1991) 119–45.
- (1998) 'Early Greek colonization? The nature of Greek settlement in the West', in Fisher and van Wees (1998) 251–69.
- Osborne, R. and Hornblower, S. (eds.) (1994) *Ritual, Finance, Politics: Athenian Democratic Accounts Presented to David Lewis*. Oxford.
- Osgood, R. (1998) *Warfare in the Late Bronze Age of Northern Europe*. Oxford.
- Palmer, R. E. A. (1997) *Rome and Carthage at Peace*. Stuttgart.
- Panagopoulos, A. (1978) *Captives and Hostages in the Peloponnesian War*. Athens.
- Panagopoulou, K. (2001) 'The Antigonids: patterns of a royal economy', in Archibald et al. (2001) 313–64.
- Pandermalis, D. (2000) 'Βασιλέ[ως Δημητρ]ίου', in Μύρτος. Μνήμη Ιουλίας Βοκοτοπολού (Thessaloniki) xviii–xxii.
- Parke, H. W. (1933) *Greek Mercenary Soldiers: From the Earliest Times to the Battle of Ipsus*. Oxford.
- (1981) *Greek Mercenary Soldiers: From the Earliest Times to the Battle of Ipsus*. Chicago. (Reprint of 1933 edn).
- Parker, G. (1988) *The Military Revolution: Military Innovation and the Rise of the West, 1500–1800*. Cambridge.
- (ed.) (1995) *The Cambridge Illustrated History of Warfare*. Cambridge.
- Parker, H. M. D. (1971) *The Roman Legions*. Oxford.
- Parker, R. (1983) *Miasma*. Oxford.
- (1989) 'Spartan religion', in Powell (1989) 142–72.
- (1996) *Athenian Religion: A History*. Oxford.
- (2000) 'Sacrifice and battle', in van Wees (2000b) 299–314.
- Parker, V. (1997) *Untersuchungen zu lelantischen Krieg und verwandten Problemen der frühgriechischen Geschichte*. Stuttgart.
- Paul, G. M. (1982) 'Urbs capta: sketch of an ancient literary motif', *Phoenix* 36: 144–55.
- Pédech, P. (1964). *La méthode historique de Polybe*. Paris.
- Pélékidis, C. (1962) *Histoire de l'éphébie attique*. Paris.
- Petrakos, B. (1995) *Marathon*. Athens.
- Phillips, D. and Pritchard, D. M. (eds.) (2003) *Sport and Festival in the Ancient Greek World*. Swansea.
- Piccirilli, L. (1973) *Gli arbitrati interstatali greci I: dalle origini a 338 a. C.* Pisa.
- Pierart, M. (2003) 'The common oracle of the Milesians and the Argives (Hdt. 6. 19 and 77)', in Derow and Parker (2003) 275–96.
- Pierson, C. (1996) *The Modern State*. London.

- Pikoulas, Y. A. (1985) ΟΔΙΚΟ ΔΙΚΤΥΟ ΚΑΙ ΑΜΥΝΑ: 'Από τὴν Κόρινθο στὸ Ἀργός καὶ τὴν Ἀρκαδία (Athens).
- (1999) 'The road-network of Arkadia', in Nielsen and Roy (1999) 248–319.
- Pippidi, D. M. (ed.) (1979) *Actes du VIIe Congrès internationale d'épigraphie grecque et latine*. Paris and Bucharest.
- Pleket, H. (1998) 'Sport and ideology in the Graeco-Roman world', *Klio* 80: 315–24.
- Poliakoff, M. (1987) *Combat Sports in the Ancient World*. New Haven.
- Powell, A. (1989) *Classical Sparta: Techniques behind her Success*. London.
- (ed.) (1995) *The Greek World*. London.
- (1998) *Athens and Sparta: Constructing Greek Political and Social History from 487 BC*. London.
- (2002) 'Dining groups, marriage, homosexuality', in Whitby (2002) 90–103 (repr. from Powell 1998: 221–31).
- Préaux, C. (1939) *L'économie royale des Lagides*. Brussels.
- (1989) *Le monde hellénistique: la Grèce et l'Orient de la mort d'Alexandre à la conquête romaine de la Grèce, 323–146 av J-C.*, 2nd edn (2 vols.). Paris.
- Pressfield, S. (2000) *Gates of Fire*. New York.
- Prichard, R. T. (1970) 'Cicero and the *Lex Hieronica*', *Historia* 19: 352–68.
- Pritchard, D. M. (1998) ‘“The fractured imaginary”: popular thinking on military matters in fifth-century Athens’, *AH* 28: 38–61.
- (2003) ‘Athletics, education and participation in classical Athens’, in Phillips and Pritchard (2003) 293–349.
- Pritchard, J. B. (ed.) (1958) *The Ancient Near East: An Anthology of Texts and Pictures* (2 vols.). Princeton.
- Pritchett, W. K. (1965–92) *Studies in Ancient Greek Topography*. Part I (1965). Part II: *Battlefields* (1969). Part III: *Roads* (1980). Part IV: *Passes* (1982). Part V (1985). Part VI (1989). Berkeley and Los Angeles; Part VII (1991). Part VIII (1992). Amsterdam.
- (1971–91) *The Greek State at War*. Part I (1971). Part II (1974). Part III: *Religion* (1979). Part IV (1985). Part V (1991). Berkeley and Los Angeles.
- (1991b) ‘A recent theory of Homeric warfare’, in Pritchett (1965–92) VII. 181–90.
- (1994a) *Essays in Greek History*. Amsterdam.
- (1994b) ‘The general's exhortation in Greek warfare’, in Pritchett (1994a) 27–109.
- (1994c) ‘The general on the battlefield’, in Pritchett (1994a) 111–14.
- (2002) *Ancient Greek Battle Speeches and a Palfrey*. Amsterdam.
- Prost, F. (ed.) (1999a) *Armées et sociétés de la Grèce classique: aspects sociaux et politiques de la guerre aux Ve et IVe s. av. J.-C.* Paris.
- (1999b) ‘Les combattants de Marathon: idéologie et société hoplitiques à Athènes au Ve s.’, in Prost (1999a) 69–88.
- Quesada Sanz, F. (1997) ‘Gladius hispaniensis: an archaeological view from Iberia’, *JRMES* 8: 251–70.
- Raaflaub, K. A. (1979) ‘Beute, Vergeltung, Freiheit? Zur Zielsetzung des delisch-attischen Seebundes’, *Chiron* 9: 1–22.
- (1986a) ‘From protection and defense to offense and participation: stages in the conflict of the orders’, in Raaflaub (1986b) 198–243.

- (ed.) (1986b) *Social Struggles in Archaic Rome: New Perspectives on the Conflict of the Orders*. Berkeley.
- (1996) 'Born to be wolves? Origins of Roman imperialism', in Harris and Wallace (1996) 273–314.
- (1997) 'Soldiers, citizens and the evolution of the early Greek polis', in Mitchell and Rhodes (1997) 49–59.
- (1999) 'Archaic and classical Greece', in Raafalaub and Rosenstein (1999) 129–61.
- Raafalaub, K. A. and Rosenstein, N. (1999) *War and Society in the Ancient and Medieval Worlds*. Washington D.C. and Cambridge, Mass.
- Rahe, P. A. (1980) 'The military situation in western Asia on the eve of Cunaxa', *AJPh* 101: 79–96.
- Randsborg, K. (1995) *Hjortspring: Warfare and Sacrifice in Early Europe*. Aarhus.
- (2001) 'From bronze to iron: the rise of European infantry', in Bekker-Nielsen and Hannestad (2001) 155–65.
- Rankov, N. B. (1994) 'Reconstructing the past: the operation of the trireme reconstruction, *Olympias*, in the light of the historical sources', *Mariner's Mirror* 80: 131–46.
- (1996) 'The Second Punic War at sea', in Cornell et al. (1996) 49–57.
- Rathbone, D. W. (1981) 'The development of agriculture in the "Ager Cosanus" during the Roman Republic: problems of evidence and interpretation', *JRS* 71: 10–23.
- (1993) 'The census qualifications of the *Assidui* and the *Prima Classis*', in Sancisi-Weerdenburg et al. (1993) 121–52.
- (2002) 'The ancient economy and Graeco-Roman Egypt', in Scheidel and von Reden (2002) 155–69.
- Rawlings, L. (1999) 'Condottieri and clansmen', in Hopwood (1999) 97–127.
- (2000) 'Alternative agonies: hoplite, martial and combat experiences beyond the phalanx', in van Wees (2000b) 233–59.
- Rawson, E. (1969) *The Spartan Tradition in European Thought*. Oxford.
- (1971) 'The literary sources for the pre-Marian army', *PBSR* 39: 13–31.
- (1991a) 'The antiquarian tradition: spoils and representations of foreign armour', in Rawson (1991b) 582–98 (repr. from Eder 1990: 157–73).
- (1991b) *Roman Culture and Society*. Oxford.
- Reger, G. (2002) 'The price histories of some imported goods on independent Delos', in Scheidel and von Reden (2002) 133–54.
- Reid, S. (1987) *Gunpowder Triumphant*. Essex.
- Reinhardt, K. (1938) *Das Parisurteil*. Frankfurt am Main (repr. in Becker 1960: 16–36).
- Reus-Smit, C. (2001) 'Constructivism', in Burchill et al. (2001) 209–30.
- Reyna, S. P. (1994) 'A mode of domination approach to organized violence', in Reyna and Downs (1994) 29–67.
- Reyna, S. P. and Downs, R. E. (eds.) (1994) *Studying War: Anthropological Perspectives*. Langhorne, Penn.
- Rhodes, P. J. (1981) *Commentary on the Aristotelian Athenaion Politeia*. Oxford (repr. with addenda 1992).

- Rice, E. E. (1991) 'The Rhodian navy in the Hellenistic age', in Roberts and Sweetman (1991) 29–50.
- Rich, J. W. (1983) 'The supposed manpower shortage of the later second century BC', *Historia* 32: 287–331.
- (1993) 'Fear, greed and glory: the causes of Roman war-making in the middle Republic', in Rich and Shipley (1993b) 38–68.
- (1996) 'The origins of the Second Punic War', in Cornell et al. (1996) 1–37.
- (2001) 'Warfare and external relations in the middle Roman Republic', in Hartmann and Heuser (2001) 62–71.
- Rich, J. W. and Shipley, G. (eds.) (1993a) *War and Society in the Greek World*. London.
- (eds.) (1993b) *War and Society in the Roman World*. London.
- Rich, J. W. and Wallace-Hadrill, A. (eds.) (1991) *City and Country in the Ancient World*. London and New York.
- Richardson, J. S. (2001) *Appian: Iberike*. Warminster.
- Richardson, N. J. (1993) *The Iliad, A Commentary VI: books XXI–XXIV*. Cambridge.
- Richmond, I. A. (1963) *The Pelican History of England I: Roman Britain*. Harmondsworth.
- Richter, R. O. (1884) 'Mittheilungen aus Cypern', *MDAI(A)* 9: 133–40.
- Rickman, G. (1980) 'The grain trade under the Roman Empire', in D'Arms and Kopff (1980) 261–75.
- Riedinger, J.-C. (1976) 'Remarques sur la *timê* chez Homère', *REG* 89: 244–64.
- Rigsby, K. (1996) *Asylia: Territorial Inviolability in the Hellenistic World*. Berkeley and Los Angeles.
- Rihll, T. (1993) 'War, slavery and settlement in early Greece', in Rich and Shipley (1993a) 77–107.
- Risberg, C. (1997) 'Evidence of metal-working in early Greek sanctuaries', in Gillis et al. (1997) 185–96.
- Ritterling, E. (1925) 'Legio', *RE* XII.1–XII.2, 1186–1837.
- Robert, J. and Robert, L. (1977) 'Egypte et Nubie: no. 566', *BE* 8 (1974–7): 468–70.
- Robert, L. (1940) *Les gladiateurs dans l'orient grec*. Paris.
- (1970) *Die Epigraphik der klassischen Welt*. Bonn.
- Roberts, M. (1956) *The Military Revolution, 1560–1660*. Belfast.
- Roberts, W. R. and Sweetman, J. (eds.) (1991) *New Interpretations in Naval History*. Annapolis.
- Roebuck, C. (1955) 'The early Ionian League', *CP* 50: 26–40.
- Roesch, P. (1979) 'La cavalerie bœotienne à l'époque hellénistique (338–172)', in Pippidi (1979) 243–51.
- (1982) *Études bœotiennes*. Paris.
- Roisman, J. (1993) *The General Demosthenes and his Use of Military Surprise* (Historia Einzelschriften 78). Stuttgart.
- (2003) 'The rhetoric of courage in the Athenian orators', in Rosen and Sluiter (2003) 127–43.
- Rollinger, R. and Ulf, C. (eds.) (2004) *Griechische Archaik: interne Entwicklungen, externe Impulse*. Berlin.

- Rosen, R. and Sluiter, I. (eds.) (2003) *Andreia: Studies in Manliness and Courage in Classical Antiquity*. Leiden.
- Rosenstein, N. (1990) *Imperatores Vici: Military Defeat and Aristocratic Competition in the Middle and Late Republic*. Berkeley and Los Angeles.
- (1999) 'Republican Rome', in Raablaub and Rosenstein (1999) 193–216.
- (2004) *Rome at War: Farms, Families and Death in the Middle Republic*. Chapel Hill.
- Rosivach, V. J. (1985) 'Manning the Athenian fleet, 433–426 bc', *AJAH* 10: 41–66.
- (1999) 'Enslaving *barbaroi* and the Athenian ideology of slavery', *History* 48: 130–57.
- (2002) 'Zeugitai and hoplites', *AHB* 16: 33–43.
- Rostovtzeff, M. I. (1941) *The Social and Economic History of the Hellenistic World* (3 vols.). Oxford.
- Roth, J. P. (1999) *The Logistics of the Roman Army at War, 264 BC–AD 235*. Leiden.
- Rougemont, G. (1973) 'La hiéroménie des Pythia et les "trêves sacrées" d'Éleusis, de Delphes et d'Olympie', *BCH* 97: 75–106.
- Roy, J. (1998a) 'The masculinity of the Hellenistic king', in Foxhall and Salmon (1998) 311–35.
- (1998b) 'Thucydides 5.49.1–50.4: the quarrel between Elis and Sparta in 420 bc', *Klio* 80: 360–8.
- Runciman, W. G. (1990) 'Doomed to extinction: the polis as an evolutionary dead-end', in Murray and Price (1990) 347–68.
- (1998a) 'Greek hoplites, warrior culture and indirect bias', *Journal of the Royal Anthropological Institute* 4: 731–51.
- (1998b) 'The selectionist paradigm and its implications for sociology', *Sociology* 32: 163–88.
- Rusch, S. M. (1997) 'Poliorcetic assault in the Peloponnesian War' (University of Pennsylvania diss.).
- Russell, F. S. (1999) *Information Gathering in Classical Greece*. Ann Arbor.
- Rutherford, R. B. (1996) *Homer* (Greece and Rome New Surveys in the Classics 26). Oxford.
- Ryder, T. (1965) *Koine Eirene: General Peace and Local Independence in Ancient Greece*. London, New York and Toronto.
- Sabin, P. A. G. (1996) 'The mechanics of battle in the Second Punic War', in Cornell et al. (1996) 59–79.
- (2000) 'The face of Roman battle', *JRS* 90: 1–17.
- (2007) *Lost Battles: Reconstructing the Great Clashes of the Ancient World* (London and New York).
- Sacco, G. (1979) 'Sui NEANΙΣKOI dell'età ellenistica', *RFIC* 107: 39–49.
- Sage, M. M. (1996) *Warfare in Ancient Greece: A Sourcebook*. London and New York.
- Salazar, C. F. (ed.) (2000) *The Treatment of War Wounds in Graeco-Roman Antiquity*. Leiden.
- Sallares, R. (1991) *The Ecology of the Ancient Greek World*. Ithaca.
- Salmon, J. (1977) 'Political hoplites?', *JHS* 97: 84–101.
- Samons, J. (ed.) (2007) Cambridge Companion to the Age of Pericles. New York.

- Samuels, M. (1990) 'The reality of Cannae', *Militärgeschichtliche Mitteilungen* 47: 7–29.
- Sancisi-Weerdenburg, H. et al. (1993) *De Agricultura: In Memoriam Pieter Willem de Neeve (1945–1990)*. Amsterdam.
- Sanders, J. M. (ed.) (1992) *Philolakon*. London.
- Santosuoso, A. (1997) *Soldiers, Citizens and the Symbols of War from Classical Greece to Republican Rome, 500–167 BC*. Boulder and Oxford.
- Sargent, R. L. (1927) 'The use of slaves by the Athenians in warfare', *CP* 22: 201–12, 264–79.
- Sartre, M. (1979) 'Aspects économiques et aspects religieux de la frontière dans les cités grecques', *Ktema* 4: 213–24.
- Saulnier, C. (1980) *L'armée et la guerre dans le monde étrusco-romain (VIIIe. – IVe. s.)* Paris.
- Saunders, K. (1999) 'The wounds in *Iliad* 13–16', *CQ* 49: 345–63.
- Schaps, D. (1982) 'The women of Greece in wartime', *CP* 77: 193–213.
- Scheidel, W. and von Reden, S. (eds.) (2002) *The Ancient Economy*. Edinburgh.
- Schlüter, W. (1999) 'The battle of the Teutoberg Forest: archaeological research at Kalkkreise near Osnabrück', in Creighton and Wilson (1999) 125–59.
- Schmitt, H. H. (1969) *Die Staatsverträge des Altertums*. Vol. III: *Die Verträge der griechisch-römischen Welt von 338 bis 200 v. Chr.* Munich.
- Schmittbühler, W. and Zoepffel, R. (eds.) (1982) *H. Strasburger, Studien zur alten Geschichte* (2 vols.). Hildesheim and New York.
- Schmitz, W. (2004) *Nachbarschaft und Dorfgemeinschaft im archaischen und klassischen Griechenland* (*Klio Beihefte* 7). Berlin.
- Schmookler, A. B. (1995) *The Parable of the Tribes: The Problem of Power in Social Evolution*. Albany.
- Scholten, J. B. (1999) *The Politics of Plunder: Aitolians and their Koinon in the Early Hellenistic Era, 279–217 BC*. Berkeley and Los Angeles.
- Schuler, C. (1998) *Ländliche Siedlungen und Gemeinden in hellenistischen und römischen Kleinasiens*. Munich.
- Schuller, W. (1974) *Die Herrschaft der Athener im Ersten Attischen Seebund*. Berlin and New York.
- Schwartz, J. et al. (eds.) (1963–89) *Papyrus Grecs de la Bibliothèque Nationale et Universitaire de Strasbourg* (11 vols.). Strasbourg.
- Schweitzer, B. (1936) 'Spätellenistische Reitergruppen', *JDAI* 51: 158–73.
- Schwertfeger, T. (1982) 'Der Schild des Archilochos', *Chiron* 12: 253–80.
- Scott, L. (2000) 'Were there polis navies in archaic Greece?', in Oliver et al. (2000) 93–115.
- Scott-Kilvert, I. (tr.) (1979) *The Rise of the Roman Empire, Polybius* (with an introduction by F. W. Walbank). Harmondsworth.
- Scullard, H. H. (1970) *Scipio Africanus: Soldier and Politician*. Ithaca.
- (1974) *The Elephant in the Greek and Roman World*. Cambridge.
- (1989) 'Carthage and Rome', *CAH* VII².2, 486–569.
- Seager, R. (ed.) (1962) *The Crisis of the Roman Republic*. Cambridge.
- (1994) 'The Corinthian War', *CAH* IV², 97–119.
- Sealey, R. (1966) 'The origin of the Delian League', in Badian (1966) 233–55.

- Seibert, J. (1986) 'Die Logistik der Feldzüge Alexander des Großen', in Boog et al. (1986) 11–33.
- Sekunda, N. V. (1984) *The Army of Alexander the Great* (with plates by A. McBride). London.
- (1986) *The Ancient Greeks: Armies of Classical Greece, Fifth and Fourth Centuries BC* (with plates by A. McBride). London.
- (1989) 'Hellenistic warfare', in Hackett (1989) 130–5.
- (1994a) 'Classical warfare', in Boardman (1994) 167–94.
- (1994b) *Seleucid and Ptolemaic Reformed Armies, 168–145 BC*. Vol. I: *The Seleucid Army under Antiochus IV Epiphanes* (with plates by A. McBride). Stockport.
- (1996) *Roman Republican Army, 200–104 BC*. London.
- (1998) *The Spartans*. London.
- (2000) *The Greek Hoplite, 480–323 BC* (with plates by A. Hook). London.
- (2001a) 'Antigonid shield-device on a stele of a Cretan from Demetrias', *Archaeologia*: 52: 19–22.
- (2001b) *Hellenistic Infantry Reform in the 160's BC*. Lodz.
- (2001c) 'The sarissa', *Acta Universitatis Lodzienensis, Folia Archaeologica* 23: 13–41.
- Seltman, C. (1955) *Greek Coins: A History of Metallic Currency and Coinage Down to the Fall of the Hellenistic Kingdoms*, 2nd edn. London.
- Serrati, J. (2000) 'Garrisons and grain: Sicily between the Punic Wars', in Smith and Serrati (2000) 115–33.
- Settimi, S. (ed.) (1996) *I Greci II.1*. Turin.
- (ed.) (1997) *I Greci II.2*. Turin.
- Shahîd, I. (1995) *Byzantium and the Arabs in the Sixth Century*. Washington.
- Shatzman, I. (1972) 'The Roman general's authority over booty', *Historia* 21: 177–205.
- Shaw, B. (1999) 'War and violence', in Bowersock et al. (1999) 130–69.
- Shaw, I. (1996) 'Battle in ancient Egypt: the triumph of Horus or the cutting edge of the temple economy', in Lloyd (1996a) 239–69.
- Shaw, J. T. (ed.) (1993) *The Trireme Project, Operational Experience 1987–1990, Lessons Learnt*. Oxford.
- Shay, J. (1994) *Achilles in Vietnam: Combat Trauma and the Undoing of Character*. New York.
- Shean, J. F. (1996) 'Hannibal's mules: the logistical limitations of Hannibal's army and the battle of Cannae, 216 BC', *Historia* 45: 159–87.
- Sherk, R. K. (1984) *Rome and the Greek East to the Death of Augustus*. Cambridge.
- Sherwin-White, A. N. (1980) 'Rome the aggressor?', *JRS* 70: 177–81.
- Shipley, G. (1993) 'Introduction: the limits of war', in Rich and Shipley (1993a) 1–24.
- (2000) *The Greek World after Alexander, 323–30 BC*. London.
- (2002) 'Perioecic society', in Whitby (2002) 182–9 (repr. from Sanders 1992: 211–26).
- Siedentopf, H. B. (1968) *Das hellenistische Reiterdenkmal*. Waldsassen.
- Siewert, P. (1977) 'The ephebic oath in fifth-century Athens', *JHS* 97: 102–11.
- (1982) *Die Trittyen Attikas und die Heeresreform des Kleisthenes*. Munich.
- Silk, M. (1987) *Homer: The Iliad*. Cambridge.

- Sinclair, R. K. (1966) 'Diodorus Siculus and fighting in relays', *CQ* ns 16: 249–55.
- (1988) *Democracy and Participation in Athens*. Cambridge.
- Singor, H. W. (1991) 'Nine against Troy: on epic *phalagges, promachoi* and an old structure in the story of the *Iliad*', *Mnemosyne* 44: 17–62.
- (1999) 'Admission to the *syssitia* in fifth-century Sparta', in Hodkinson and Powell (1999) 67–89.
- Sinn, U. (1993) 'Greek sanctuaries as places of refuge', in Hägg and Marinatos (1993) 88–109.
- Sion-Jenkins, K. (2001) 'La disparition du mercenariat en Asie Mineure occidentale au IIe siècle a. C.: éléments de réflexion', in Bresson and Descat (2001) 19–35.
- Smith, C. J. and Serrati, J. (eds.) (2000) *Sicily from Aeneas to Augustus: New Approaches in History and Archaeology*. Edinburgh.
- Smith, R. E. (1958) *Service in the Post-Marian Army*. Manchester.
- Snodgrass, A. M. (1964) *Early Greek Armour and Weapons from the End of the Bronze Age to 600 BC*. Edinburgh.
- (1965) 'Hoplite reform and history', *JHS* 85: 110–22.
- (1967) *Arms and Armour of the Greeks*. Ithaca.
- (1993) 'The "hoplite reform" revisited', *DHA* 19: 47–61.
- (1999) *Arms and Armour of the Greeks*. Baltimore.
- Sommerstein, A. (ed. and tr.) (1980) *Aristophanes, Acharnians*. Warminster.
- (ed. and tr.) (1990) *Aristophanes, Lysistrata*. Warminster.
- Sonnabend, H. (ed.) (1999) *Mensch und Landschaft in der Antike: Lexikon der Historischen Geographie*. Stuttgart.
- Sordi, M. (1998a) 'Deditio in fidem e perdono', in Sordi (1998b) 157–66.
- (ed.) (1998b) *Responsabilità, perdono e vendetta nel mondo antico*. Milan.
- Speidel, M. P. (1992) *The Framework of an Imperial Legion*. Cardiff.
- (1994) *Riding for Caesar: The Roman Emperors' Horse Guards*. Cambridge, Mass.
- Spence, I. G. (1993) *The Cavalry of Classical Greece: A Social and Military History*. Oxford.
- Spiegel, N. (1990) *War and Peace in Classical Greek Literature*. Jerusalem.
- Spielvogel, J. (1993) *Amicitia und Res Publica: Ciceros Maxime während der innenpolitischen Auseinandersetzungen der Jahre 59–50 v. Chr.* Stuttgart.
- Stadter, P. A. (1965) *Plutarch's Historical Methods: An Analysis of the Mulierum Virtutes*. Cambridge, Mass.
- Stamatopoulou, M. and Yeroulanou, M. (eds.) (2002) *Excavating Classical Culture: Recent Archaeological Discoveries in Greece*. Oxford.
- Stanley, K. (1993) *The Shield of Homer: Narrative Structure in the Iliad*. Princeton.
- Stanton, G. R. (1994) 'The tritypes of Cleisthenes', *Chiron* 24: 161–207.
- Stary, P. F. (1979) 'Foreign elements in Etruscan arms and armour: eighth to third centuries BC', *Proceedings of the Prehistoric Society* 45: 179–206.
- Sternberg, R. H. (1999) 'The transport of sick and wounded soldiers in classical Greece', *Phoenix* 53: 191–205.
- Stevenson, R. B. (1997) *Persica*. Edinburgh.
- Storch, R. H. (1998) 'The archaic Greek "phalanx"', *AHB* 12: 1–7.

- Strasburger, H. (1972) 'Homer und die Geschichtsschreibung', in *Sitzungberichte der Heidelberger Akad, Wiss. Ph.-hist. Kl.*, 1972.1: 5–44 (repr. in Schmittner and Zoepffel 1982: 1057–97).
- Strassler, R. (ed.) (1996) *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War*, rev. trans. of Crawley (1910). London and New York.
- Strauss, B. S. (1987) *Athens After the Peloponnesian War: Class, Faction and Politics*, 403–386 BC. Ithaca and London.
- (1996) 'The Athenian trireme, school of democracy', in Ober and Hedrick (1996) 313–25.
- (2000a) 'Democracy, Kimon and the evolution of Athenian naval tactics in the fifth century BC', in Flensted-Jensen et al. (2000) 315–26.
- (2000b) 'Perspectives on the death of fifth-century Athenian seamen', in van Wees (2000b) 261–83.
- (2004) *Salamis: The Greatest Naval Battle of the Ancient World, 480 BC*. London.
- (2006) *The Trojan War: A New History* (London).
- Strauss, B. S. and Ober, J. (1990) *The Anatomy of Error: Ancient Military Disasters and their Lessons for Modern Strategists*. New York.
- Syvänen, I. (2004) *The Age of the Hippotoxotai*. Tampere.
- Taeubler, E. (1913) *Imperium Romanum I: Die Staatsverträge und Vertragsverhältnisse*. Berlin and Leipzig.
- Tagliamonte, G. (1994) *I figli di Marte: mobilità, mercenari e mercenariato Italici in Magna Grecia e Sicilia*. Rome.
- Taillardat, J. (1968) 'La trière athénienne et la guerre sur mer aux Ve et IVe siècles', in Vernant (1968) 183–205.
- Talbert, R. J. A. (1989) 'The role of the helots in the class struggle at Sparta', *Historia* 38: 22–40.
- Tandy, D. W. (1997) *Warriors into Traders: The Power of the Market in Early Greece*. Berkeley and Los Angeles.
- Tarn, W. W. (1930) *Hellenistic Military and Naval Developments*. Cambridge.
- (1985) *The Greeks of Bactria and India*, 3rd edn. Chicago.
- Tausend, K. (1987) 'Der Lelantische Krieg – ein Mythos?', *Klio* 69: 499–514.
- (1992) *Amphiktyonie und Symmachie*. (Historia Einzelschriften 73). Stuttgart.
- Thiel, J. H. (1946) *Studies on the History of Roman Sea-Power in Republican Times*. Amsterdam.
- (1954) *A History of Roman Sea Power before the Second Punic War*. Amsterdam.
- Thomas, R. (1989) *Oral Tradition and Written Record in Classical Athens*. Cambridge.
- Thompson (Crawford), D. J. (1983) 'Nile grain transport under the Ptolemies', in Garnsey et al. (1983) 64–75.
- (2000) 'The Greek frontier: settlers in the south Fayum', lecture delivered at the University of California, Berkeley, published at <<http://ist-socrates.berkeley.edu/~tebtunis/ancientlives/thompson.html>>, September 2000.
- Thompson, M. (1984) 'Paying the mercenaries', in Houghton et al. (1984) 241–7.
- Thomsen, R. (1964) *Eisphora: A Study of Direct Taxation in Ancient Athens*. Copenhagen.
- (1977) 'War taxes in classical Athens', in Chastagnol et al. (1977) 137–47.

- Tilley, A. (1992) 'Three men to a room – a completely different trireme', *Antiquity* 66: 599–610.
- (2000) 'The iconography of ancient ships', in Oliver et al. (2000) 117–25.
- (2004) *Seafaring in the Ancient Mediterranean: New Thoughts on Triremes and Other Ancient Ships* (Oxford).
- Tilly, C. (ed.) (1975a) *The Formation of the National State in Western Europe*. Princeton.
- (1975b) 'Reflections on the history of European state-making', in Tilly (1975a) 3–83.
- (1992) *Coercion, Capital and European States, AD 990–1992*, rev. edn. Oxford.
- Tod, M. N. (1913) *International Arbitrations amongst the Greeks*. Oxford.
- Tomlinson, R. A. (1972) *Argos and the Argolid: From the End of the Bronze Age to the Roman Occupation*. Ithaca.
- Toynbee, A. J. (1965) *Hannibal's Legacy* (2 vols.). Oxford.
- Tracy, J. (ed.) (2000) *City Walls: The Urban Encounter in Global Perspective*. Cambridge.
- Tredennick, H. and Waterfield, R. (trs.) (1990) *Conversations of Socrates: Xenophon*. London.
- Treloar, A. (1971) 'The Roman shield: Polybius vi. 23. 2', *CR* 21: 3–5.
- Tritte, L. A. (1989) 'Epilektoi at Athens', *AHB* 3: 54–9.
- (1997) 'Hector's body: mutilation in ancient Greece and Vietnam', *AHB* 11: 123–36.
- (2000) *From Melos to Mylai*. London.
- Trundle, M. (2001) 'The Spartan revolution: hoplite warfare in the later archaic period', *War & Society* 19: 1–17.
- Tsibidou-Avloniti, M. (2002) 'Excavating a painted Macedonian tomb near Thessaloniki: an astonishing discovery', in Stamatopoulou and Yeroulanou (2002) 91–7.
- Turner, E. G. (1984) 'Ptolemaic Egypt', *CAH* VII.1, 118–74.
- Udwin, V. M. (1999) *Between Two Armies: The Place of the Duel in Epic Culture*. Leiden.
- Uebel, F. (1968) *Die Kleruchen Ägyptens unter den Ersten sechs Ptolemäern*. Berlin.
- Ulf, C. (1996a) 'Griechische Ethnogenese versus Wanderungen von Stämmen und Stammstaaten', in Ulf (1996b) 240–80.
- (ed.) (1996b) *Wege zur Genese griechischer Identität: die Bedeutung der früharchaischen Zeit*. Berlin.
- (2004) 'Die Instrumentalisierung der griechischen Frühzeit: Interdependenzen zwischen Epochencharakteristik und politischer Überzeugung bei Ernst Curtius und Jacob Burckhardt', in Rollinger and Ulf (2004) 51–103.
- Unz, R. K. (1985) 'The surplus of the Athenian *phoros*', *GRBS* 26: 21–42.
- Urban, R. (1979) *Wachstum und Krise des Achäischen Bundes* (Historia Einzelschriften vol. 35). Wiesbaden.
- van de Maele, S. and Fossey, J. M. (eds.) (1992) *Fortificationes Antiquae*. Amsterdam.
- van Groningen, B. A. (1933) *Aristote. Le second livre de l'Economique*. Leiden.
- van Wees, H. (1986) 'Leaders of men? Military organisation in the *Iliad*', *CQ* 36: 285–303.

- (1988) 'Kings in combat: battles and heroes in the *Iliad*', *CQ* 38: 1–24.
- (1992) *Status Warriors: Violence and Society in Homer and History*. Amsterdam.
- (1994) 'The Homeric way of war: the *Iliad* and the hoplite phalanx (I) and (II)', *G&R* 41: 1–18, 131–55.
- (1995a) 'Politics and the battlefield: ideology in Greek warfare', in Powell (1995) 153–78.
- (1995b) 'Princes at dinner: social event and social structure in Homer', in Crielaard (1995) 147–82.
- (1996) 'Heroes, knights and nutters: warrior mentality in Homer', in Lloyd (1996a) 1–86.
- (1997) 'Homeric warfare', in Morris and Powell (1997) 668–93.
- (1998a) 'A brief history of tears: gender differentiation in archaic Greece', in Foxhall and Salmon (1998) 10–53.
- (1998b) 'The law of gratitude: reciprocity in anthropological theory', in Gill et al. (1998) 13–49.
- (1999a) 'The mafia of early Greece', in Hopwood (1999) 1–51.
- (1999b) 'Tyrtaeus' *Eunomia*: nothing to do with the Great Rhetra', in Hodkinson and Powell (1996) 1–41.
- (2000a) 'The development of the hoplite phalanx: iconography and reality in the seventh century', in van Wees (2000b) 125–66.
- (ed.) (2000b) *War and Violence in Ancient Greece*. London.
- (2001a) 'The myth of the middle class army: military and social status in ancient Athens', in Bekker-Nielsen and Hannestad (2001) 45–71.
- (2001b) 'War and peace in ancient Greece', in Hartmann and Heuser (2001) 33–47.
- (2002a) 'Greed, generosity and gift-exchange in early Greece and the western Pacific', in Jongman and Kleijwegt (2002) 341–78.
- (2002b) 'Tyrants, oligarchs and citizen militias', in Chaniotis and Ducrey (2002) 61–82.
- (2003) 'Conquerors and serfs: wars of conquest and forced labour in archaic Greece', in Alcock and Luraghi (2003) 33–80.
- (2004) *Greek Warfare: Myths and Realities*. London.
- van't Dack, E. (1988) *Ptolemaica selecta: études sur l'armée et l'administration lagides*. Louvain.
- Vaughn, P. (1991) 'The identification and retrieval of the hoplite battle-dead', in Hanson (1991b) 38–62.
- Vernant, J.-P. (ed.) (1968) *Problèmes de la guerre en Grèce ancienne*. Paris.
- (1990a) 'City-state warfare', in Vernant (1990b) 29–53.
- (1990b) *Myth and Society in Ancient Greece*. New York.
- Versnel, H. S. (1970) *Triumphus: An Inquiry into the Origin, Development and Meaning of the Roman Triumph*. Leiden.
- Vial, C. (1977) *Diodore de Sicile. Bibliothèque historique*, vol. XV. Paris.
- Vidal-Naquet, P. (1986) *The Black Hunter: Forms of Thought and Forms of Society in the Greek World*. Baltimore.
- Volkmann, H. (1961) *Die Massenversklaverungen der Einwohner erobter Städte in der hellenistischen-römischer Zeit*. Mainz.

- von Bothmer, D. (1961) *Ancient Art from New York Private Collections: Catalogue of an Exhibition Held at the Metropolitan Museum of Art, December 17, 1959–February 28, 1960*. New York.
- von Schlieffen, A. (1931) *Cannae*. Fort Leavenworth.
- Wacher, J. (ed.) (1987) *The Roman World* (2 vols.). London.
- Wade-Gery, H. T. and Meritt, B. (1957) 'Athenian resources in 449 and 431 BC', *Hesperia* 26: 163–97.
- Walbank, F. W. (1957–79) *A Historical Commentary on Polybius*. Vol. I: *Books I–VI* (1957). Vol. II: *Books VII–XVII* (1967). Vol. III: *Books XVIII–XVII* (1979). Oxford.
- (1972) *Polybius*. Berkeley and Los Angeles.
- (1984) 'Monarchies and monarchic ideas', *CAH* VII².1, 62–100.
- Wallinga, H. T. (1956) *The Boarding Bridge of the Romans*. Groningen.
- (1993) *Ships and Sea-Power before the Great Persian War: The Ancestry of the Ancient Trireme*. Leiden.
- Walsh, J. J. (1988) *Titus Quinctius Flamininus in Greece, 197–194 BC*. Austin.
- (1996) 'Flamininus and the propaganda of liberation', *Historia* 45: 344–63.
- Warry, J. (1980) *Warfare in the Classical World*. New York.
- Waterfield, R. (tr.) (1998) *Herodotus: The Histories*. Oxford.
- Watson, G. R. (1983) *The Roman Soldier*. London.
- (1987) 'The army of the Republic', in Wacher (1987) I: 75–88.
- Weber, M. (1972) *Wirtschaft und Gesellschaft*, 5th edn. Tübingen.
- Webster, G. (1982) *The Roman Invasion of Britain*. London.
- (1985) *The Roman Imperial Army of the First and Second Centuries AD*. London.
- Weil, S. (1957) 'The *Iliad*, poem of might', in *Intimations of Christianity among the Ancient Greeks* (London) 24–55 (orig. publ. 1940).
- Welch, K. (1998) 'Caesar and his officers in the Gallic War commentaries', in Welch and Powell (1998) 85–110.
- Welch, K. and Powell, A. (eds.) (1998) *Julius Caesar as Artful Reporter: The War Commentaries as Political Instruments*. London.
- Welles, C. B. (1963) *Diodorus of Sicily* (Loeb Classical Library viii). Cambridge, Mass.
- Wells, C. (1972) *The German Policy of Augustus: An Examination of the Archaeological Evidence*. Oxford.
- Welwei, K.-W. (1974) *Unfreie im antiken Kriegsdienst*. Wiesbaden.
- Westlake, H. D. (1969) *Thessaly in the Fourth Century BC*. Groningen.
- Whatley, N. (1964) 'On the possibility of reconstructing Marathon and other ancient battles', *JHS* 84: 119–39.
- Wheeler, E. L. (1978) 'The occasion of Arrian's *Tactica*', *GRBS* 19: 351–66.
- (1979) 'The legion as phalanx', *Chiron* 9: 303–18.
- (1982) 'Hoplomachia and Greek dances in arms', *GRBS* 22: 223–33.
- (1983) 'The hoplomachoi and Vegetius' Spartan drillmasters', *Chiron* 13: 1–20.
- (1984) 'Sophistic interpretations and Greek treaties', *GRBS* 25: 253–74.
- (1987) 'Ephorus and the prohibition of missiles', *TAPhA* 117: 157–82.
- (1988a) 'The modern legality of Frontinus' stratagems', *Militärgeschichtliche Mitteilungen* 44: 7–29.

- (1988b) ‘πολλὰ κενὰ τοῦ πόλεμου: the history of a Greek proverb’, *GRBS* 29: 153–84.
- (1988c) ‘Sapiens and stratagems: the neglected meaning of a cognomen’, *Historia* 37: 166–95.
- (1988d) *Stratagem and the Vocabulary of Military Trickery* (Mnemosyne Supplement 108). Leiden.
- (1990) Review of Hanson (1989), *Journal of Interdisciplinary History* 21: 122–5.
- (1991) ‘The general as hoplite’, in Hanson (1991b) 121–70.
- (1992) ‘Legion vs. phalanx: the credibility of Polybius 18.28–32’, paper delivered at the 124th Annual Meeting of the *American Philological Association*, New Orleans, 27–30 December 1992.
- (1993) ‘Methodological limits and the mirage of Roman strategy (I) and (II)’, *Journal of Military History* 57: 7–42, 215–40.
- (1998) ‘Battles and frontiers’, *JRA* 11: 644–51.
- (1999) ‘Taktik’, in Sonnabend (1999) 533–9.
- (2001) ‘Firepower: missile weapons and the “face of battle”’, in Dabrowa (2001) 169–84.
- (2004) ‘The legion as phalanx in the late Empire (I)’, in Le Bohec and Wolff (2004) 309–58.
- Wheeldon, M. J. (1988) ‘“True stories”: the reception of historiography in antiquity’, in Averil Cameron (1989) 36–63.
- Whitby, (L.) M. (1986a) ‘Procopius’ description of Dara (*Buildings* II. 1–3), in Freeman and Kennedy (1986) 737–83.
- (1986b) ‘Procopius and the development of Roman defences in upper Mesopotamia’, in Freeman and Kennedy (1986) 717–35.
- (1987) ‘Notes on some Justinianic constructions’, *Byzantinisch-Neugriechische Jahrbücher* 23: 89–112.
- (1988) *The Emperor Maurice and his Historian: Theophylact Simocatta on Persian and Balkan Warfare*. Oxford.
- (ed.) (2002) *Sparta*. Edinburgh.
- (2004) ‘Four Notes on Alexander’, *Electrum* 8 (Kraków): 35–47.
- Whitehead, D. (1983) ‘Competitive outlay and community profit: *philotimia* in classical Athens’, *C&M* 34: 55–74.
- (1986) *The Demes of Attica, 508/7–c. 250 BC*. Princeton.
- (trs. and comm.) (1990) *Aineias the Tactician, How to Survive under Siege*. Oxford.
- (1991) ‘Who equipped mercenary troops in classical Greece?’, *Historia* 40: 105–13.
- Whitehead, I. (1987) ‘The *periplous*’, *G&R* 34: 178–86.
- Whittaker, C. R. (1994) *Frontiers of the Roman Empire: A Social and Economic Study*. Baltimore.
- Whittow, M. (1999) ‘Rome and the Jaffnids: writing the history of a sixth-century tribal dynasty’, in Humphrey (1999) 207–24.
- Wiedemann, T. (1983) ‘Ἐλάχιστον . . . ἐν τοῖς ἄρσεσι κλέος’: Thucydides, women and the limits of rational analysis’, *G&R* 30: 163–70.
- (1986) ‘The *Fetiales*: a reconsideration’, *CQ* 36: 478–90.
- Wilkins, J., Harvey, D. and Dobson, M. (eds.) (1995) *Food in Antiquity*. Exeter.

- Will, É. (1979–82) *Histoire politique du monde hellénistique, 323–30 av. J-C.*, 2nd edn (2 vols.). Nancy.
- Willets, R. (1955) *Aristocratic Society in Ancient Crete*. London.
- Williams, G. (1978) *Change and Decline: Roman Literature in the Early Empire*. Berkeley and Los Angeles.
- Wilson, D. (2002) *Ransom, Revenge and Heroic Identity in the Iliad*. Cambridge.
- Winter, F. E. (1971) *Greek Fortifications*. Toronto.
- (1982) ‘A summary of recent work on Greek fortifications in Greece and Asia Minor’, in Leriche and Tréziny (1982) 23–9.
- Wiseman, T. P. (1979) *Clio's Cosmetics: Three Studies in Greco-Roman Literature*. Leicester.
- (1981) ‘Practice and theory in ancient historiography’, *History* 66: 375–93.
- Wood, E. M. (1988) *Peasant-Citizen and Slave*. London and New York.
- Woodhead, A. G. (1960) ‘Thucydides’ portrait of Cleon’, *Mnemosyne* 13: 289–317.
- Woodhouse, W. J. (1933) *King Agis of Sparta and his Campaign in Arkadia in 418 BC*. Oxford.
- Woodman, A. J. and Martin, R. H. (1996) *The Annals of Tacitus: Book 3*. Cambridge.
- Worley, L. A. (1994) *Hippies: The Cavalry of Ancient Greece*. Boulder, Colo.
- Zacharia, K. (2001) ‘The rock of the nightingale: Sophocles’ *Tereus* and kinship diplomacy’, in Budelmann and Michelakis (2001) 91–112.
- Zhmodikov, A. (2000) ‘Roman Republican heavy infantrymen in battle (fourth–second centuries BC)’, *Historia* 49: 67–78.
- Ziegler, K.-H. (1991) ‘*Deditio* und *Fides* im römischen Völkerrecht’, *ZRG* 108: 279–85.
- Ziegler, W. (1975) *Symbolai und Asylia*. Bonn.
- Ziolkowski, A. (1990) ‘Credibility of numbers of battle captives in Livy, books XXI–XLV’, *PP* 45: 15–36.
- (1993) ‘*Urbs direpta*, or how the Romans sacked cities’, in Rich and Shipley (1993b) 69–91.
- Zlattner, M. (1997) *Hannibals Geheimdienst im Zweiten Pünischen Krieg* (*Xenia* 39). Constance.