

P. ERDKAMP, *HUNGER AND THE SWORD: WARFARE AND FOOD SUPPLY IN ROMAN REPUBLICAN WARS (264–30 BC)*. Amsterdam: J. C. Gieben, 1998. Pp. vii + 324, 4 maps. ISBN 9-0506-3608-x. £45.00/Fl. 145.

Only four years ago, A. Goldsworthy, in his work *The Roman Army at War*, wrote that producing a book on the logistics of the Roman army was simply not possible because not enough evidence existed to do so credibly. Paul Erdkamp's book proves beyond a doubt that Goldsworthy was incorrect, and that enough evidence does exist to produce a work on the logistics of the Roman army. In fact, although E. does employ a wide variety of evidence, he relies mainly upon the literary sources, illustrating the abundant material that has hitherto been largely neglected. There are a few exceptions; mention should be made of Labisch's *Fruementum Commeatusque: Die Nahrungsmittelversorgung des Heeres Caesars* (1975), and more recently Junkelmann's *Panis Militaris: Die Ernährung des römischen Soldaten oder der Grundstoff der Macht* (1997) (absent from E.'s bibliography). The only work to appear in English exclusively on ancient military logistics is Engel's at times misguided *Alexander the Great and the Logistics of the Macedonian Army* (1978). Therefore, it can be said that E. has produced the first work of this kind, the first book whose main thesis concerns the supply of the Roman army. However, it must be noted that, although E. has written the first book on Roman army supply, he has not penned the only book on the subject. Within six months of the publication of *Hunger and the Sword*, Jonathan P. Roth brought forth *The Logistics of the Roman Army at War (264 BC–AD 235)*. Neither scholar had access to the other's work, and this has resulted in a tremendous amount of overlap between the two.

Still, the significance of E.'s work alone cannot be taken for granted. The author begins by explaining the problems he encountered with the source material. It would appear that the supply of Roman armies was a subject not even covered by contemporaries. Excepting the writings of Julius Caesar and Ammianus Marcellinus, logistics were, on the whole, taken for granted, and mention was usually only made when something went wrong. Therefore, gleaning exactly what were the regular practices is often difficult. In the opening chapter, E. examines the problems involved with supplying armies in general, and draws many comparisons from pre-mechanized warfare: the sixteenth-century Spanish, seventeenth-century Ottoman, and eighteenth-century British armies are but a few of those looked at in order to gain a solid foundation for his examination of Roman logistics. Although we should never take comparisons of this kind as a replacement for contemporary evidence, and recognizing that significant differences existed between Caesar's army operating in Gaul and the British army fighting in North America is important, these types of comparisons do work, as pre-mechanized armies were largely supplied in the same fashion, whatever the period. Ch. 2 deals with the Roman soldier's rations, and sensibly begins with analysis of the words of Polybius on the subject (6.39). E. goes on to describe the varied diet of the typical Republican legionary: beans, fruit, vegetables, and meat. Concerning the last item, E. argues (*contra* Roth, 27–32) that meat was a larger part of the soldier's diet than has previously been thought, and he cites authors to show that cattle could often accompany armies on campaign. Of course, grain was the staple of Roman armies everywhere. Its high nutritional value, long life, and easily transportable nature meant that it was an ideal source of food. The author does well to make the point that a legionary's diet was most likely better than that of his civilian counterpart. The Roman military carried their own grain with them whenever possible, making for very lengthy baggage trains. As well as providing sustenance for the army and its cavalry and draft animals, grain might also have to be carried for servants and scores of other non-combatants that accompanied armies before the modern age. E. estimates that these may have increased the size of the army by up to 20 per cent.

The book then goes on to examine how supplies were transported and protected, i.e., what exactly were Roman supply lines. Both E. and Roth reach the same conclusion that it was in the First Punic War that the Romans learnt the art of long-distance supply. Crossing over to Sicily in 264 B.C., the Romans had never had to deal with supplying themselves outside Italy. Over the next twenty-three years, they learnt, through trial and often fatal error, how to construct a long-distance supply line. They fortified ports and towns and established a series of supply-stations along their line of march, constructing these themselves when captured towns were not available. This process came to fruition with the campaign of Scipio in Africa during the next war with Carthage, as he encountered few supply problems. The chapter also deals with transport; it is here that E. puts forward his argument that Roman armies were supplied by the state, in essence, by a fleet of government-maintained freighters. However, there is strong evidence to the contrary; more than one contemporary mid-Republican account speaks of *publicani* transporting grain to the army. Furthermore, it would appear that the *publicani* transported the tithe grain that came to Rome from Sicily and, at least once in the second century, Thessaly. The *societates publicanorum* did indeed have the incentive, ability, and financial means to carry out military supply. *Publicani* certainly undertook military transport during the imperial period, yet if the state did own and operate a merchant fleet of its own during the Republic, there is precious little evidence for it. There is

mention of state-owned freighters in the sources, but the examples for this type of state activity are few and the fleets are often small, and there is little ground for reaching the conclusion, as E. does, that the state was responsible for most of the military grain supply, with the *publicani* helping out in times of emergency. Rather, the reverse would appear more likely, that the *publicani*, using their own ships, conducted the majority of Roman army supply under contract from the government, with the latter filling in when necessary.

E. goes on to look at other sources of supply, most notably foraging, pillaging, local requisitions, and allied supply of Roman armies in the field. This is presented and examined at length and is one of the strengths of the work. However, perhaps greater attention should have been given to trade with locals and allied armies. Barter between armies or between soldiers and locals is common even till this day (British army field manuals actually suggest it as a legitimate means of obtaining supplies); surely this practice was in use in the ancient world. Even if no evidence exists, it should have at least merited a mention.

The role of logistics in military strategy and in the political administration of the Empire is where E. puts forward some truly groundbreaking work. Here, the author makes some very substantial arguments about aspects of Roman economic history all but neglected by other historians. In the military sphere, it should never be forgotten that the location of food most often determined the location of a war. Armies had little choice but to march to places where they could gain supplies, and battles often commenced because two armies found themselves in the same region for the same purpose. Moreover, the time of year during which warfare took place was not so much regulated by the availability of men from the farms (the Romans were keeping soldiers in the field all year round by the First Punic War at the latest), but by the accessibility of pasture for pack and cavalry animals to graze upon. Dealing with the administration of the Empire, E. rightly points out that military logistics was one of the fibres that held the Empire together, and that the Romans often needed to secure for themselves from the local populations the means for making war upon others. 'Rome intervened in local affairs as little as possible, because it had no need to do so. Its main interest in the regions under its rule was to ensure that local communities, whether these were towns or tribes, maintained internal stability, kept peace with their neighbours and provided Rome with money, troops and supplies' (108–9).

The second part of the work, much shorter than the first, attempts to look at warfare and the production of food from a civilian standpoint. Again, this is a neglected field that E. does well to include, as most military historians tend to ignore the effects of warfare upon the local populations. War in the ancient world could at times bleed an area dry, and lead to famine and starvation. This theme passes into the final section of the work, a case study of the effects of the Hannibalic War upon the Italian peninsula. E. points out that devastation by a roaming army leading to mass land abandonment is a literary topos, but at the same time he does prefer the arguments of Toynbee that small farmers were indeed impoverished when they returned to ravaged land, thus forcing abandonment or sale to the wealthy. E. puts a new spin on debate by claiming that the effect of this was only temporary. However, it does not appear that he has made a strong enough case, albeit a well-argued one, to refute the works of Brunt, Cornell, De Neeve, and Lomas.

This work does contain many strengths. Unfortunately, there are also several flaws that should not be above mention. Firstly, the author has a terrible habit of repeating evidence and arguments. The book contains little in the way of cross-referencing, and often the reader becomes bogged down in arguments that are stated for the second or even the third time. For example, 84–94 and 112–21 basically state the same arguments and reach the same conclusions. This is compounded by the fact that the work contains no index. This is a serious defect and makes the work nearly impossible to use for reference purposes. Indices in this age are neither optional nor difficult, and this reviewer finds it particularly exasperating that a work on such a specialized subject should be considered complete without a thorough reference section at the end. These factors combine to make the book a frustrating read. Furthermore, it is disappointing to have to report that E.'s (or his publisher's) map of Italy and Sicily on p. 157 is taken from R. J. A. Talbert's *Atlas of Classical History* (1985), 97, without acknowledgement.

Finally, to describe a Roman supply-base, the author has chosen to use the word 'magazine', a word he relies upon heavily. This is an odd choice considering 'magazine' is a relatively modern term; it is the case that magazines are used to store any number of items, but the word is of Arabic derivation and did not enter European vocabulary until the late sixteenth century, and was not used in English until a century later; it has usually referred to a building used for storing gunpowder. E.'s choice of words is even more confusing considering the alternatives; depot (favoured by Roth), store, and station all have good classical etymologies and *statio* in particular was common in Latin military jargon (e.g. Liv. 35.29; Suet., *Aug.* 24; and numerous references in Caes., *BG*); it would seem that other terms, derived from Latin or Greek, would have carried less baggage and given the reader a clearer representation of Roman military storage facilities.

There is little doubt that this, taken as a whole, is a highly important work. If anything, E. has not just illustrated the means by which Roman armies were supplied, but he has drawn attention to the importance of logistics to the entire Roman world. Military historians, whether Greek or Roman, will find the book of particular interest, yet it should be read by ancient historians of any speciality, as it is a seminal work that presents the Roman Mediterranean in a very different light. E. had done a tremendous amount of research and has pulled together a large body of evidence on a topic that even the ancients mentioned only in passing. A book on Roman logistics can indeed be written, and, together with Roth, E. has shown scholarship the way forward, illustrating that this is a topic that can no longer be ignored.

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J. P. ROTH, *THE LOGISTICS OF THE ROMAN ARMY AT WAR (264 B.C.–A.D. 235)* (Columbia Studies in the Classical Tradition 23). Leiden / Boston / Köln: Brill, 1999. Pp. xxi + 400, 9 figs. ISBN 90-04-11271-5. Fl. 210/US\$123.50.

The Roman soldier of the late Republic and early Empire marched along roads of his own construction, carrying his own rations and equipment, and supported by supply lines which conveyed food and material by water, wherever possible, or by waggon- and mule-train. At the end of a day's march, he might be billeted on civilians, particularly in winter, but more usually joined his fellow-soldiers in constructing a camp, where they would be accommodated in tents.

Under the Republic, the Senate authorized the equipping of the army from year to year, obtaining grain from the provinces by requisition, taxation, and forced purchase. From the time of Augustus, when the establishment of the *aerarium militare* took financial control away from the Senate, the emperor exercised complete control through his legates. Supply in the individual provinces was the responsibility of the governor, while, at unit level, the legionary *praefectus castrorum* played a key role. Several new officials, like the *praepositus annonae*, come to light, particularly during campaigning, and it is likely that they commissioned civilian contractors to deliver supplies to the periphery of any war zone.

This is Roth's thesis, in a nutshell. He presents seven chapters, covering supply needs and rations; packs, trains, and servants; forage, requisition, and pillage; supply lines; sources of supply; the administration of logistics; and logistics in Roman warfare. Much of the detail comes from the Republican armies of Livy, Polybius, and Caesar, with the Empire largely represented by Josephus. R. makes the tacit assumption that whatever prevailed at the time of the First Punic War pretty much held for the Jewish War, or for that matter Maximinus Thrax's German campaign.

R. designates the source of the supplies as the 'strategic base', from where they were shipped into an 'organisational base', corresponding to a friendly port, and thence to the army's location, or 'tactical base'.

Four separate categories of baggage train are defined, but the distinction between an 'army train' and a 'troop train' is forced. In the absence of clear evidence, it would seem preferable to allow that each unit probably saw to its own baggage (a 'troop train' in R.'s parlance), and made its own decisions regarding the proportion of wagons to pack-animals. (R. would have each unit use only pack-animals, as vehicles would compromise responsiveness.)

Many of the works cited in the footnotes do not appear in the bibliography. There is some repetition, and lapses of grammar and infelicities of expression often lead to ambiguity. Nevertheless, as the first accessible account of this fascinating subject in English, R.'s book is guaranteed a place on every Roman military book shelf.

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DUNCAN B. CAMPBELL

F. BERNSTEIN, *LUDI PUBLICI. UNTERSUCHUNGEN ZUR ENTSTEHUNG UND ENTWICKLUNG DER ÖFFENTLICHEN SPIELE IM REPUBLIKANISCHEN RÖM* (Historia Einzelschriften 119). Stuttgart: Franz Steiner, 1998. Pp. 408. ISBN 3-515-07301-9. DM 148.

Bernstein's aim is to 'do justice to the overall historical development of the Roman phenomenon of the *ludi publici*' (20) with special reference to the religious and political factors behind the rapid increase from their beginnings to the end of the Republic. The games' public character excludes consideration of *munera* (14–15), which received private sponsorship under the Republic.

After an introduction surveying secondary literature, B. traces the games back to Etruscan times. They were linked to the dedication of temples, notably that of Jupiter Optimus Maximus in the sixth century, and their essentially religious character is marked by a *pompa* to the place of worship. Greek influence led to the introduction of anthropomorphic images of gods thought to be