P.B. Kern, *Ancient Siege Warfare*. Bloomington and Indianopolis: Indiana University Press 1999. 419 pp. ISBN 0 253 33546 9.

This is a chronological survey of siege warfare from early times to the First Jewish Revolt. Kern makes clear his aims and approach to the subject in the introduction (1-5): all war is horrifying, the horrors reach culmination in siege warfare. Borrowing from Carl von Clausewitz, he cites the cases of Jericho, Troy and Mycalessus as examples of the ultimate level of violence, 'the complete destruction of the opposing society'. While the avowed aim is 'to study the conduct of siege warfare both on a moral and a technical level', Kern leaves no doubt about his subjective stance: 'I confess that I have endeavoured to arouse the pity of my readers for the women and children caught in siege warfare and that I have found literary sources, most especially the tragic poets, useful for that purpose'.

In each of the five parts of the book Kern deals first with the technical aspects of siege warfare, that is, both the siege machinery and tricks operated by the attackers and the fortifications and means used by the defenders, and then discusses the treatment of the captured cities. The antiquity covered in the book is divided into five periods: the origins (Jericho, ancient Egypt, Mesopotamia and the Hittites to the late second millennium BCE); the Middle East, which treats Israel, the Neo-Assyrian Empire and Persia; the Greeks to the early 4<sup>th</sup> century, including Dionysius I and the Carthaginians; the Macedonians, that is Philip II, Alexander III and Demetrius I; and the Romans from the origins to the 1<sup>st</sup> century CE. Twelve figures illustrate technical means of attack and defense, e.g., archers shooting from the wall of a besieged city, battering rams, a mobile tower, catapults. Eleven maps help the reader follow accounts of specific sieges, e.g., the Athenian siege of Syracuse, Alexander's siege of Tyre, the Roman siege of Carthage; none of the maps are original.

Although lengthy at times in his accounts of the various sieges, Kern provides the reader with a fairly reasonable description of the development of siege warfare in antiquity and the features and phenomena that characterized it. He sensibly draws attention to the distinction between a blockade, which only those rulers and states equipped with sufficient manpower, ample economic resources and time could afford to apply in the hope of forcing the besieged into capitulation through starvation, and offensive siege warfare, which aimed at bringing the war into the city besieged by climbing over the wall, breaching it or digging under it. He is probably right to say that the level of siege warfare reached by the end of the second millennium BCE (use of ramps, battering rams, tunnels, scaling ladders, siege towers, etc.), would not basically change much despite the invention of the catapult — until the introduction of gunpowder (21). It is no less correct to observe that with the advance of siege techniques, so too fortifications developed, and vice versa. There is also much truth in the generalization that efficient social organization was more important than technology in siege warfare (18). The fate of the population, both combat and civilian, of a long list of captured cities that is spelled out in detail — massacres, tortures, raping, enslavement — drives home convincingly the contention of Kern that siege warfare was much more horrible, brutal and destructive than the pitched battle. A desponding lesson one learns is that by the conventions and rules of war prevalent in antiquity, in the Graeco-Roman world not less than in Assyria, the victor was allowed and free to treat the vanquished in whatever way he liked, including the razing to the ground of a captured city and annihilation of its population. Even though it is appalling, the modern reader will probably not regard this kind of behaviour as incredible.

But there are deficiencies that the reader should be aware of. To begin with, the use of sources, particularly those for the second period. Kern writes: 'despite the Hebrews' modest role in the history of siege warfare, the Bible remains a source of prime importance', and proceeds to

discuss in some detail the Biblical evidence (29-46). The trouble is, and classicists should not be assumed to be familiar with this problem, that the reliability of the Biblical accounts of the Israelite conquest of Eretz Israel and of the United and Divided Monarchy has been the subject of a fierce debate in the last two decades, some scholars denying it completely and others arguing for the basic historicity presented by them (I list here just three of the recent publications on this subject, on both sides of the controversy, in which one can find ample literature: L.K. Handy (ed.), The Age of Solomon. Scholarship at the Turn of the Millennium, Leiden 1997; S. Japhet, 'Can the Persian Period Bear the Burden? Reflections on the Origins of Biblical History', Proceedings of the Twelfth World Congress of Jewish Studies. Division A. (Jerusalem 1999), 35\*-45\*; N. Na'aman, 'In Search of Reality behind the Account of David's Wars with Israel's Neighbours', IEJ 52 (2002), 200-24). Therefore, it makes a lot of difference whether one accepts the radical criticism, which means that the Biblical stories are worthless for the study of siege warfare in the Late Bronze Age and the Iron Age, or follows the view of those scholars who defend the basic reliability of the accounts. Even in the latter case, a careful and detailed examination of the relevant evidence is needed to demonstrate that it is not vulnerable to heretical attacks. As it is, Kern deals with the Biblical stories as if the controversy did not exist, and although he does question the account of the conquest of Jericho (30-1), he does not heed even the conventional theory that the Book of Joshua belonged to a work commonly called 'the deuteronomistic history'; that is, it was written at least six hundred years after the supposed time of the conquest of Jericho by Joshua. Basically, the same uncritical approach characterizes Kern's use of the sources for the early history of Roman siege warfare (251-6), and only the specialist will be able to appreciate the full meaning of the cautionary reservation that that period is shrouded in legend.

Another defect concerns the exploitation of the archaeological evidence. Kern does indeed refer sometimes to relevant or instructive findings (e.g., those relating to the Persian siege of Paphos, 60-1), but far less often than is needed for an adequate presentation of the subject. Even worse, the evidence cited is often out-of-date, problematic or controversial. For example, to substantiate the solemn profession that 'Siege warfare is older than civilization', Kern cites, in the first place, the case of Jericho, whose wall dates back to early Neolithic times, and continues with some comments on the connection between the development of agriculture, the construction of fortifications and the invention of projectile weapons (9-10). His authorities for the function of that wall are Y. Yadin, The Art of Warfare in the Light of Archaeological Discovery, London 1963, and A. Ferrill, The Origins of War from the Stone Age to Alexander the Great, London 1985, but not the publications of K.M. Kenyon who excavated the site. However, was it really a defensive wall? Not according to O. Bar-Yoseph, a leading expert on pre-historic archaeology, who suggested that the wall was constructed to protect the site from floods of water and mud (Current Archaeology 27 [1986], 157-62). Bar-Yoseph need not be right, but one should know that in this case the function of the wall is a matter for interpretation. Three more examples will illustrate my point. Kern rightly mentions the tunnel dug by Polycrates for his famous aqueduct (Hdt. 3.60), an important element of the fortifications he constructed to improve the defense of Samos (92). There is, however, not a word on the discovery of the tunnel in 1882, which has helped us to appreciate the engineering and hydraulic skill of the Greeks at that time (see A. Trevor Hodge, Roman Aqueducts and Water Supply [London 1991], 27-30 and the literature cited on pp. 394-5). Kern notes the invention of the catapult under Dionysius I (in fact some beginnings had been made in the late 5th century) and discusses at length the sieges waged by Philip II, Alexander and Demetrius I (197-248), but ignores studies that utilize the rich archaeological evidence relating to the improvements introduced in fortifications to counterbalance the new siege techniques in the Hellenistic age. A relatively long account is devoted to the Roman siege and conquest of Veii (253-5), which, according to Livy, the Romans were finally able to accomplish by digging a tunnel that led to the citadel of Veii. No mention is made of the archaeological evidence, of cuniculi beneath the city wall, that may clarify the background of this story (J.B. WardPerkins, *PBSR* 27 [1959], 43-7 with R.M. Ogilvie, *A Commentary on Livy Books 1-5* [Oxford 1965], 672-3). Speaking more generally, although Kern refers to the important works of F.E. Winter (1971), Y. Garlan (1974), J. Ober (1985) and L. Karlsson (1992), several major publications where the archaeological evidence is presented and exploited are conspicuous by their absence, notably — to cite only a few — A.W. Lawrence, *Greek Aims in Fortifications*, Oxford 1979; P. Leriche and H. Tréziny, eds., *La Fortification dans l'histoire du monde grec*, Paris 1986; E. Stern, ed., *The New Encyclopedia of Archaeological Excavations in the Holy Land*, 1-4, Jerusalem 1993.

Given Kern's recognition, evinced in scattered comments, that for the besiegers success depended on the control of ample material resources and efficient organization (18, 116-7, 163-4, etc.), it is a pity that no attempt has been made to analyse and present in full the logistics involved in the conduct of at least one of the major sieges discussed in the book. Occasional references to D.W. Engels, Alexander the Great and the Logistics of the Macedonian Army, Berkeley and Los Angeles (note Engels' brief account of the siege of Tyre on 55-6) are no substitute for such a discussion. Kern could have used, e.g., T.K. Kissel, Untersuchungen zur Logistik des römischen Heeres in den Provinzen des Griechischen Osten (27 v. Chr.-235 n. Chr.), and in particular the dissertation of J. Roth, The Logistics of the Roman Army in the Jewish War, Columbia University, 1991 and his paper 'The Length of the Siege of Masada', SCI 14 (1995), 87-110. Equally puzzling is the fact that previous fine analyses of specific sieges are ignored, for instance those of Alexander's sieges of Tyre and Gaza by P. Romane, Ancient World 16 (1987), 79-90; 18 (1988), 21-30.

The descriptions of the fate of captured cities also suffer from a certain lack. The theme of the captured city had become a literary and artistic topos by the fifth century, the destruction of Troy serving as a model; in other words, the description of the urbs capta had been conventionalized and historians no less than poets aimed at creating a pathetic and sensational representation rather than a factual account. Authors of rhetorical manuals taught practitioners how to present a vivid account of a captured city in a public speech (e.g. Quintilian, Inst. 8.3,67-70). For two valuable discussions of this subject (ignored or overlooked by Kern) see G.M. Paul, 'Urbs Capta: Sketch of an Ancient Literary Motif', Phoenix 36 (1982), 144-55; V. D'Huys, 'How to Describe Violence in Historical Narrative', Ancient Society 18 (1987), 209-50. In view of Kern's declared aim of arousing pity in his readers, it is quite odd that he has neglected to draw their attention to the fact that Greek and Roman authors had the same aim. Of course one should not infer that a description that followed the rules of the topos was fiction pure and simple; rather, it testifies to the taste and attitude of the audience toward the phenomena that occurred in a captured city. As for the actual behaviour of Roman soldiers there is much more to be found in A. Ziolkowski, 'Urbs Direpta, or How the Romans Sacked Cities', in J. Rich and G. Shipley, eds., War and Society in the Roman World (London 1993), 69-91.

Finally, it is disappointing that Kern ends his survey with the First Jewish Revolt, thus eschewing the treatment of the world of late antiquity. The reason given — that with the waning of the empire offensive siege warfare became secondary to defense — is hardly persuasive. To begin with, the very notion of continuous decline of the empire from the Flavian period to the fifth century or so is open to serious objections. Secondly, the view that Roman siege warfare went down after the apogee it reached in the First Jewish Revolt was strongly contested long ago by F. Lammert, Klio 31 (1938), 389-411, not rejected by Kern himself (399 n. 3). The capability of the Roman army to fight siege warfare and to operate artillery efficiently, in both defensive and offensive situations, is well attested by Ammianus Marcellinus; see G.A. Crump, Ammianus Marcellinus as a Military Historian (Wiesbaden 1975), 97-113; J. Matthews, The Roman Empire of Ammianus Marcellinus (London 1989), 288-95. Thirdly, sieges did take place in this period and some of them deserve serious consideration. Septimius Severus, for example, forced Byzantium to capitulate after more than a two-year siege, but failed to take Hatra. What went wrong in his siege of the latter city? Does his failure indicate a structural regression in Roman siege warfare? Shapur

II failed repeatedly to take Nisibis in the 340s CE, but succeeded in his siege of Amida in 359, of which Ammianus provides a relatively detailed and instructive account. How skilled were the Persians in siege warfare? How did they treat captured cities? In sum, a missed opportunity to examine thoughtfully the art of siege warfare within a wide and potentially instructive historical context.

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Moshe Fischer, Mordechai Gichon, Oren Tal, 'En Boqeq. Excavations in an Oasis on the Dead Sea, Vol. II: The Officina — an Early Roman Building on the Dead Sea Shore. With contributions by Ruth E. Jackson-Tal, Trude Kertesz, Arie Kindler, Hanan Lernau, Nili Lipschitz, Oded Potcher and Moshe Sade. Mainz: Philipp von Zabern, 2000. xxx + 181 pp., 75 photographs, 7 plates, 9 plans and sections in a separate pocket. ISBN 3 8053 1791 3.

The oasis of 'En Boqeq on the western shore of the Dead Sea is located opposite the Lisan (Lashon), between 'En Gedi in the north and Zoora (Ghor es Safi) in the south. The springs of 'En Boqeq and 'En No'ith (thermal, 39°C), provided water, via two aqueducts and a system of pools, for the irrigation of terraced fields extending over an area of ca. 200 dunams (200,000 m²). According to the authors (xvii) other remains cover an area of ca. 5 km². Two structures, 400m apart, are the landmarks of this oasis. They were excavated during the years 1968-1981. The Late Roman *castellum*, on the northern bank of Nahal Boqeq, was the subject of the first volume, while the present volume is dedicated to the second structure — a Herodian pharmaceutical and cosmetics workshop (officina) of this agricultural estate, situated on the southern bank, and nearer to the sea shore.

Settlement at the site, located on the fringes of Judaea, overlooking Nabataea on the other side of the Dead Sea, began as a small square surveillance tower. This fortified tower was incorporated, early in the first c. CE, in the SE angle of a rectangular structure (15.60x20.50m) — with six rooms and halls surrounding a courtyard on three sides (S, E and W). Entrance was via two openings on the N and on the S. Twenty-six installations and appurtenances: ovens, basins, stone mortars, grinding stones, containers, pressing floors, hand mill base, and thick accumulations of ashes in all rooms and in the courtyard indicate that the entire ground level served as manufacture and storing grounds. A staircase (or a wooden ladder) led to the roofs. An upper storey existed in the tower, and perhaps above some of the other rooms. In the absence of another alternative, this storey might have served for dwelling.

The stratigraphy is well illustrated in the detailed sections and its chronology is well substantiated by the coins and pottery finds (the absence of a stone-to-stone plan is at odds with the high standard of the documentation). The chapters on the small finds — pottery, stone and glass vessels, metal artifacts and coins — are fine studies, addressing issues of typology, chronology, quantitative analysis (pie-charts), commercial contacts and cultural influences. The chapters on the dendro-archaeological remains and on fish and bird bones address issues of ecology and diet.

The lucrative character of the site is evident in the absence of fine import Terra Sigillata wares. Noteworthy is the fact that of the 57 coins, 56% are Nabataean, 29% are Roman, while only 15% are Jewish coins, indicating close commercial contacts with Nabatene. On the other hand, the scarcity of Nabataean pottery relative to the predominance of the local Judaean ware, as well as the presence of Jerusalemite stone vessels, and more general historical-geographical

M. Gichon et al., En Boqeq. Ausgrabungen in Einer Oase am Toten Meer, Band I: Geographie und Geschichte der Oase, das spätrömisch-byzantinische Kastell, Mainz 1993.