between the Parthian and Roman Empires (3–58). The second part is dedicated to the presentation and study of the archaeological remains of the Roman base and the presences of Roman soldiers outside the base (61–236). The third and final part establishes a basis for a discussion of the question of how life in the town was framed by the presence of the Roman soldiers (239–316). The book finishes with a short chapter about the damages caused to the site during the Syrian civil war (317–18). As J. himself underlines, his new evaluation of the evidence led to three outcomes which are important for answering the main question of the volume (315): first, the Roman base came into being in the last decades of the second century A.D.; second, the population was much more extensive than previously estimated; and third, the extended military community — what Stoll would call the 'Militärgesellschaft' or 'Garnisionsgesellschaft' (*Ehrenwerte Männer. Veteranen im römischen Nahen Osten der Kaiserzeit* (2015), 39–52) — has to be regarded as a city within the city.

Now, J.'s splendid and detailed analysis does indeed provoke a re-interpretation of the evidence regarding the question of the cohabitation of soldiers and civilians in Dura-Europos. This applies firstly to the population figures. Contrary to earlier views, J. allows a population of 10,000–15,000 individuals (300), a figure which is in line with other recent estimates (J. A. Baird, *Dura-Europos* (2018), 90). Secondly, contrary to earlier studies, but in accordance with Stoll, he underlines that one has to focus not only on the soldiers, but also on their wives, children, slaves and other relatives, which is why the group in question has to be conceptualised as an extended military community (250–5, 299–300). Working with a number of 2,000 Roman soldiers at the garrison's height (250), J. assumes that this community comprised 3,000–6,000 individuals, which would mean a ratio of roughly 3:1 between the civilians and the military (300). Furthermore, the Roman military base evidently comprised a quarter, if not a third, of the intramural area, as J. underlines (258). Accordingly, the impact of the military presence has to be thought of as having been much higher than assumed in earlier studies (300–1). J. acknowledges that the archaeological and textual evidence gives every reason to believe that — as underlined in earlier studies — the garrison had a positive economic effect on the city and that the co-existence of the military community and civilians was harmonious (301–3). However, his generally quite negative perception of Roman soldiers, which is best exemplified by his interpretation of the Roman camps as 'wolf-cages' (276), causes J. to think about the negative consequences of the Roman military presence for different social groups within the city, which applies especially (according to J.) to the lower social strata of Dura's society (295–313). All in all, J. does not draw a black-and-white picture of the impact of the base and garrison on civic life, but one which is characterised by a lot of different shades, or — as he puts it — by the *chiaroscuro* of the Italian Renaissance (315).

J. has written a wonderful study, which without any doubt will be a point of reference for any future study of Roman Dura-Europos and the relations between soldiers and civilians in the Roman world more generally. It is characterised by a scrupulous interpretation of the sources, a high level of methodological sophistication, and the awareness that every attempt to reconstruct the past is framed and biased by the present of those who undertake this endeavour.

Universität Kassel KAI RUFFING
kai.ruffing@uni-kassel.de
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JANE DEROSE EVANS, *COINS FROM THE EXCAVATIONS AT SARDIS: THEIR ARCHAEOLOGICAL AND ECONOMIC CONTEXTS. COINS FROM THE 1973 TO 2013 EXCAVATIONS* (Archaeological Exploration of Sardis 13). Cambridge/London: Harvard University Press, 2018. Pp. xxi + 305, illus., maps, graphs. ISBN 9780674987258. £64.95.

In recent years, there have been significant increases in the number of publications concerning the coins unearthed during archaeological excavations in Anatolia. Every publication is important for the light it sheds on the economic history of ancient Anatolia, but this importance varies according to the duration of the excavations. Longer-term excavations with supporting stratigraphic studies make numismatic documents more meaningful. Among excavations carried out in Anatolia, the place

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and importance of Sardis (which has been excavated since 1910) is particularly significant, not least because it has more than one monograph devoted to numismatic finds. The first publication on the coins from the Sardis excavations dates to 1916, and covers the coins found during the excavations carried out by H. C. Butler on behalf of Princeton University in 1910–14 (H. W. Bell, *Sardis XI: Coins, Part I: 1910–1914*). The coins recovered during the early years of the excavations initiated by Harvard and Cornell Universities in 1958 were subject to two important publications: G. E. Bates, *Byzantine Coins* (1971) and T. V. Buttrey and others, *Greek, Roman, and Islamic Coins from Sardis* (1981). Volume 13 of the Archaeological Exploration of Sardis monograph series, prepared by Jane DeRose Evans, is a continuation of the last two monographs, and concerns more than 8,000 coins unearthed by excavations conducted by Crawford H. Greenewalt (1976–2007) and Nicholas Cahill (2008–2013).

After editorial prefaces by Andrew Ramage and Cahill and summaries in English and Turkish, ch. 1 presents a brief introduction to the monograph and points out E.'s methodology of recording coins and the overall aims of the book, as well as defining the terms used. Ch. 2 is titled 'Excavation Coins as Evidence of the Economy and Trade', and is divided into seven chronological parts. In this section, E. concentrates on the economic and commercial life of the ancient city in the light of the numismatic evidence, especially the Sardian coins found in the excavations. Due to their frequent discovery in excavations, she focuses on copper-alloy coins, and evaluates the excavation finds within the determined chronological time frame. As well as discussing whether the coins uncovered in the excavations were discarded or accidentally lost, E. also considers the dating of the Sardis mints. In the section devoted to the Hellenistic bronze coins, the chronology of the successors' bronze coinages is revisited and new datings are proposed.

In ch. 3, 'Archaeological Contexts of Note', an evaluation is made of the character of the historical documentation created by the archaeological contexts of the coins excavated in Sardis. This section focuses on the non-economic contexts of the coins as well as their historical significance. In this comprehensive and impressive section, the coins are considered as primary deposits, or secondary or tertiary deposits, and are examined either as singular objects or as group deposits, depending on the character of the finds. This point of view also makes the editors' words more meaningful: 'E. thus comes to this study wearing two hats: as an experienced field archaeologist and excavation director with long experience dealing with the complexities of archaeological stratigraphy' (ix). These chapters are followed by four appendices: countermarks, monograms, reverse types of late Roman bronzes, and statistical formulae, supplemented by a concordance between the catalogue and field numbers from the excavations. The nineteen high-quality plates contain illustrations of 118 coins, eleven maps and fourteen graphs.

After the historical and archaeological interpretations, the catalogue of the coins found in the Sardis excavations is divided into three main parts: Lydian through Roman (seventh century B.C.–A.D. 330), including 1,199 coins, Late Roman (A.D. 324–491), including 6,832 coins, and Byzantine (A.D. 491–*c.* 1250), including 595 coins. For each coin, axis, diameter and weight are given, and both denomination and bibliographic references are given (usually *BMC*, *RPC* or *RIC*). Although E. adds some comments under each coin type where necessary, it is noteworthy that some bibliographical references are missing. For example, for the bronzes with Macedonian shield on obverse attributed to Sardis (123, nos 11.1–3), or a Pergamene coin (129, no. 65), relevant recent publications have not been referred to, with resulting confusion over dating. Moreover, as L. Robert pointed out in *Monnaies antiques en Troade* (1966), 105, the catalogue of coins uncovered in an excavation can be rendered scientifically more meaningful by following a geographical distribution scheme based on proximity to the city concerned, rather than (e.g.) a distribution based on Strabo's *Geography*. In other words, the catalogue ought first to classify coins minted by the excavated city, followed by civic coins of the same region, then coins from neighbouring regions and finally cities from more remote areas. In this way, the meaning of the information-rich maps that E. gives in the last part of her book could have been increased (Figs 2.6–2.9, 2.14–2.18). In fact, in preparing these maps, E. usefully decided to include all the coins found between 1958 and 2013, in order to gain the best possible understanding of foreign coins at Sardis. The inclusion on the maps of all the findings of a 55-year-old excavation renders them highly important for our understanding of Sardis' history, enabling us easily to monitor the city's exchanges with other cities in the immediate region and wider Mediterranean basin.

In conclusion, E. ought to be congratulated for bringing together more than 8,000 coins and for examining the deposits and isolated finds in both their historical and archaeological contexts. Her

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monograph will hold a very important place among publications of coins found in excavations in Anatolia.

Ankara University ZEYNEP ÇIZMELI ÖĞÜN
zeynepogun1@gmail.com
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II. LITERATURE AND RESPONSE

GIUSEPPE PEZZINI and BARNABY TAYLOR (EDS), *LANGUAGE AND NATURE IN THE CLASSICAL ROMAN WORLD*. Cambridge: Cambridge University Press, 2019. Pp. xii + 240. ISBN 9781108480666. £75.00.

What is linguistic naturalism? Some readers will think of the etymologies in Plato's *Cratylus* and the discussion of whether they reveal the true natures of the things denoted by the words. For other readers the phrase will evoke Lucretius' description of early humans creating language out of natural cries. But neither Lucretius nor the *Cratylus* make much of an appearance in this work, which focuses primarily on Varro and also on Cicero, Lucilius, Nigidius Figulus, Posidonius and Dionysius of Halicarnassus. Of course, the views of 'nature' in these different writers were not the same; often multiple views can be found even within a single text. But the volume embraces this diversity and uses a maximally inclusive definition of 'nature' in order to explore the phenomenon to the full.

Does it succeed? That would depend on one's definition of 'success'. Wolfgang De Melo ('Naturalism in morphology: Varro on derivation and inflection', 103–20) offers a detailed study of Varro's use of the word *natura* in linguistic contexts, providing a persuasive explanation of the term's different meanings and uses, and of Varro's understanding of morphology. David Blank ('What's Hecuba to him? Varro on the natural kinship of things and of words', 121–52) argues that Varro's treatment of nature as a linguistic force reveals his debt to the Stoics and their ideas of *oikeiosis* (accommodation and appropriation). But then in the last chapter James Zetzel ('Natural law and natural language in the first century B.C.E.', 191–211) offers a completely different perspective: 'Varro does not make coherent sense ... "Nature" is not a term with a single meaning, and therefore claims to rely on nature are necessarily inconsistent and incoherent; naturalism approaches meaninglessness ... "Nature" is what we invoke in order to explain what we do not understand and therefore cannot explain' (194). This statement challenges the basic premise on which De Melo's and Blank's chapters were based, namely that ancient texts do make sense. If you do not start from that premise, then neither their arguments nor any of the other chapters are convincing. But is that premise as weak as Zetzel claims? Does polysemy really render a word useless? Perusal of the *Oxford Latin Dictionary* suggests that most Latin words have multiple meanings: are all such words meaningless?

Readers would be in a better position to engage properly with this challenge if the authors and editors of this book had prioritised clarity more highly: confidence that one has fully grasped all the arguments earlier in the book and understands the evidence on which they are based is a pre-requisite for tackling Zetzel's chapter, and few readers are likely to reach it with that confidence. This unclarity has multiple causes. Sometimes it is not made clear what the basis for an argument is, as when we are told that an 'extreme naturalistic doctrine' of spelling long *i* with *ei* in forms used for senses that are naturally fuller 'underlies Lucilius' guideline (358–61 M.; 364–6 M.) for the choice between *ei* and *i* both in the body of a word (*mille, meilia*) and in the case endings (e.g. gen. sing. *pueri*, dat. sing. *puerei*)' (58). But when the relevant passages of Lucilius were quoted (51–2), a normal reader would have thought that Lucilius was advocating the *ei* spelling in both *mille* and *milia* (*'mille hominum, duo milia' item: huc 'e' utroque opus: 'meille'*) and that *puerei* was a nominative plural (*iam 'puerei uenere' 'e' postremum facito atque 'i', ut 'puerei' plures fiant*). How exactly did the author get from those quotations to that interpretation?

Other sources of unclarity include terminology that will be unfamiliar to many readers (e.g. 'morpholexical', 97), distinctions that could have done with more explanation (e.g. 'he goes beyond our concept of naturalness and reaches the higher concept of naturalism', 119), expressions that do not seem to make any sense (e.g. 'φιλήτης < *ὑφειλέτης, with the first letter "taken away", ὑφεῖλον FOR steals the < ὑφείλω', 59), and expressions that do make sense, but

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