

LHIII to the first phase of the Early Iron Age, and onwards to its later stage after 900 BC. Rather than seeing Protogeometric Stamna as an exotic creation of external migrants, Dietz considers it to be part of a koine from early PG onwards, linking South-West Aetolia, the Ionian Islands and Achaia. He confidently characterizes Post-Mycenaean Aetolia as a contrast between a dynamic, stratified and outward facing society in the South-West, and less progressive rural inland Central Aetolia centred on the local centre of Thermon.

JOHN BINTLIFF
UNIVERSITY OF EDINBURGH
johnlbintliff@gmail.com

Dietz, S. 2019. Calydon in Context: Town and Sanctuary in Aetolia, in E. C. Partida and B. Schmidt-Dounas (eds) *Listening to the Stones: Essays on Architecture and Function in Ancient Greek Sanctuaries in Honour of Richard Alan Tomlinson*: 54-65. Oxford: Archaeopress.

Archaic to Hellenistic

Oliver Hüllden, *Das griechische Befestigungswesen der archaischen Zeit. Entwicklungen – Formen – Funktionen.* Österreichisches Archäologisches Institut Sonderschriften Bd. 59. pp. 560, 200 ills. Vienna: Verlag Holzhausen GmbH, 2020. ISBN 978-3-903207-41-7, hardcover €165.

This extensive and lavishly illustrated work is based on the Munich habilitation thesis of the author and is the most comprehensive treatment of the subject to date. The regrettably long-neglected Greek fortifications have received increased attention in recent years and decades. The extensive bibliography (pp. 523-560) lists over 700 titles, two of which are particularly noteworthy because they deal with the same subject: F. Lang, *Archaische Siedlungen in Griechenland. Struktur und Entwicklung* (Berlin 1996) and R. Frederiksen, *Greek City Walls of the Archaic period* (Oxford 2011). The latter goes back to a dissertation from 2001 and for that reason alone justifies a renewed in-depth study of the Archaic fortifications of the Greek world.

When did the first Greek fortified settlements of the Iron Age come into existence, and where? How is the rise of the Greek polis interconnected with the development of fortifications? And which role did fortifications play in this process? Were fortifications a unique characteristic of poleis? Were early Greek fortifications influenced by Oriental models and if so, to what extent? Or was the development of Greek fortifications stimulated by the Greek colonization of the West during the 9th and 8th centuries BC? Was there something like a ‘cultural reflux’?

Answers are not readily at hand and require a broad approach to the topic. The scope of Hüllden’s investigation, therefore, comprises Crete and the Aegean Islands, Asia Minor, Cyprus, Magna Graecia as well as mainland Greece and the Black Sea region. It is, therefore, evidently the most comprehensive study ever presented on the topic. O. Hüllden started his scientific career with a Master thesis on the fortifications of Herakleia at Latmos, which was deemed worthy of being published in a renowned periodical (Hüllden, “Pleistarchos und die Befestigungsanlagen von Herakleia am Latmos”, *Klio* 82, 2000: 382-408). From further research in Asia Minor together with T. Corsten and thanks to

a multi-year grant from the German Archaeological Institute, the topic of his habilitation thesis gradually arose. In the spirit of F.G. Maier, Hüllden also wanted to break away from the mere treatment of the architecture of ancient fortresses and see them as evidence of the historical development of the settlements – clearly not an easy undertaking given the sources available.

After a brief but accurate characterization of the history of research (pp. 17-35), there follows a treatment of the methodological principles and problems of researching historical fortifications (pp. 35-58). Hereby Hüllden rightly emphasizes the problem of their chronological classification as central, which has so far only been unsatisfactorily solved in too many cases. He also shares the scepticism of F.G. Maier towards the dating of fortifications according to the 'style' of their walls. However, he does not treat this as a fundamental criticism, but rather shows how the changing wall styles can be of help for their temporal classification while observing methodological principles. In addition, individual architectural forms, but above all the still far too sparse excavation results can be helpful. Literary sources are almost entirely absent for the Archaic period, while pictorial evidence is hardly usable.

Having thus outlined his methodological approach, an extensive, geographically structured *catalogue raisonnée* of fortified settlements of the Early Iron Age and the Archaic period (pp. 59-421) is presented. It comprises Crete (pp. 59-66), the islands of the central Aegean (pp. 67-103), Greek Asia Minor (pp. 104-210), parts of indigenous Asia Minor (pp. 211-251), Cyprus (pp. 252-264), Magna Graecia (pp. 265-334), mainland Greece (pp. 335-416) and finally the Black Sea region (pp. 417-421). Hüllden's investigation thus covers the entire Greek and parts of the Greek-influenced cultural area. In this geographical reach Hüllden treats more than 153 sites of the Early Iron Age and the Archaic Period, 7 on Crete, 17 on the Aegean islands, 38 in Asia Minor, 9 on Cyprus, 26 in Magna Graecia, 3 in North Africa, 48 in mainland Greece and 5 in the Black Sea region.

Although the author always maintains a critical attitude towards earlier conceptions and interpretations, it is completely evident that it is impossible, in view of the great abundance of material, to do full justice to any single site and to the problems involved. It is a general phenomenon in today's archaeology that the overkill of highly specialised literature means that opinions often are only opposed to each other, but the respective arguments are no longer checked and weighed.

This is occasionally evident in the work of Hüllden in the form of an undecided stance on issues. See for instance his attitude towards the identification of Melia (p. 143-149), which by no means could any longer be identified with the Carian fortification on Kale Tepe at Güzelçamlı (Western Turkey). Or by his treatment of Eleusis (pp. 370-377), which was part of Attica at least since the time of Solon if not earlier. The well-founded doubts that Hüllden expresses about the chronology and function of the walls of Eleusis are to be welcomed and largely coincide with my own (see H. Lohmann, *Teichos* (Wiesbaden 2021), pp. 78-88). However, his remarks do not result in a consistent rejection of the chronology established by G. Mylonas and J. Travlos. It likewise deserves approval that the author more decidedly dismisses the fantasies of a completely walled Archaic Large-Miletus of 120 hectares (pp. 153-155) – a critique, which is clearly supported by the fact, that the so called Theatre Tower, a key testimony for the "larger" Archaic wall of Miletos, cannot be dated before the 2nd half of the 5th century BC because of its drafted corners. Such do not appear earlier. He rightly also turns down the interpretation of the no longer visible walls W. Voigtländer has documented in the 1980s at Saplı Adası, ancient Teichioussa, as remains of fortifications, which, however, are attested by its name. I cannot go into any more detail here, the few examples mentioned are only chosen in order to elucidate the intrinsic problems of such a great overview as Hüllden has provided. One last example might underline this. The pitfalls of dating walls on basis of 'style' have already been mentioned. Since the allegedly Archaic 'acropolis' (generally the term 'citadel' should be preferred instead) of Larisa on Hermos is crucial to our understanding of the standards and stage of development of Archaic fortifications, its date deserves a particularly thorough examination. There are considerable doubts that tower 1 (p. 125, fig. 36) with its marvellous polygonal walls, interrupted by decoratively embossed horizontal bands, has correctly been dated to the late Archaic period. Decorative bosses are undeniably an element of intentional incompleteness which, according to Th.E. Kalpaxis, *Hemiteles* (Mainz 1986), does not occur in artistic architecture before the later 5th century BC (cf. Lohmann, *loc. cit.*, p. 87, n. 126). By pointing out that similar bands occur also in the Archaic house architecture of the Aiolis and have therefore to be regarded as a local phenomenon, Hüllden relies on the flimsy evidence of just one single specimen at Mytilene on Lesbos (Lang, *loc. cit.*, pp. 247 s., no. 55), which itself is by no means securely dated (D. Chatzi, *Μυτιλήνη*, *ADelt* 28, 1973, B2, p. 516, pl. 483β). Moreover, the layer of ashlar

blocks over the polygonal part of the wall does not display any decorative bosses.

The third and last part “Gesamtanalysen” (overall analyses, pp. 432-508) tries to draw a conclusion in several steps, thereby covering the entire spectrum of questions. Starting from the forms of fortifications, then moving to their architectural elements in relation to the warfare of Archaic times, especially the state of siege craft, and finally to the development of early fortifications. Questions of origin and distribution, their costs and finally their function and meaning are likewise considered. With this overall analysis, which is characterized by a much appreciated critical attitude towards traditional perceptions, the author establishes the current, still highly disparate state of research. Nevertheless, from his analysis it becomes entirely clear that any simplifying models or theories do not do justice to the extraordinarily complex diversity in the genesis and development of fortified Greek settlements.

The reviewer himself feels totally inept to do justice to this excellent, thought provoking work which doubtlessly will stand out as a lighthouse and point of reference for many years to come. Facing the decreasing perception of German archaeological literature in the anglophone world, he wishes to express the hope, that it might be translated into English, the *lingua franca* of the 21st century, in order to make it available to a larger audience.

HANS LOHMANN
BOCHUM UNIVERSITY
hans.lohmann@rub.de

Peter van Alfen and Ute Wartenberg (eds) (with Wolfgang Fischer-Bossert, Haim Gitler, Koray Konuk, and Catharine C. Lorber), *White Gold: Studies in Early Electrum Coinage*. pp. x + 707, b/w and col ill, charts, maps and tbls. New York: The American Numismatic Society; Jerusalem: The Israel Museum, 2020. ISBN 978-0-89722-349-2, hardcover \$150.

The title of this book, *White Gold*, derives from the phrase used once by Herodotus (λευκοῦ χρυσοῦ, 1.50.2) and more frequently in inscriptions to describe electrum, an alloy of gold and silver from which the first coins in the western tradition were made. The alloy was mostly referred to as electrum

(ἤλεκτρον), which could also mean ‘amber’ – the application of the word to coins derived from their colour. The origin of the book goes back to a spectacular exhibition held in 2011 at the Israel Museum, Jerusalem, in which five hundred such coins were displayed. Two conferences, held in Jerusalem (2011) and New York (2013), were convened to address the many problems presented by these coins. The present book arises from the proceedings of those conferences, but includes also invited contributions by two scholars who were not present (Kleber, Jones) and additional contributions from some who were. One paper delivered at the conference has previously appeared elsewhere (R. W. Wallace, ‘Redating Croesus: Herodotean chronologies and the dates of the earliest coinages’, *JHS* 136 (2016): 168-81). The resulting book is an outstanding, systematic and informative collection of articles on electrum coinage in the Greek world, the first and most comprehensive in many years, covering not only the earliest coins struck from that metal, but also the ‘continuation’ coins, in particular those of Cyzicus, which were issued down to the time of Alexander III of Macedon and which potentially offer comparative material and possible insights into the rationale for coining in electrum in general. After a succinct *Introduction* surveying the main problems addressed in the book (the overall conclusion is that much is illuminated, much remains difficult to understand), the material is presented in four sections: *I: The Great Transformation*, *II: The Earliest Electrum: The Evidence*, *III: The Earliest Electrum: Interpretations – Why Coinage?*, and *IV: Electrum Continuation*. The topics addressed in the four sections quite often overlap or interlock, but overall they embrace four main questions: *The What?* (covering two broad topics, the nature of the alloy used for electrum coinage and comparisons of its composition over a number of different issues); *the When?* (the book presents a consensus on this much contested topic); *the Where?* (in general, the view that electrum coinage began in western Asia Minor is maintained, but questions concerning responsibility for it remain contested: whether the initiative was state or private; whether the Lydian king, or subject tyrants or oligarchs of the Greek poleis, or independent *dynastai* or elites, or a combination of these entities, had a hand in it); and *the Why?* (there are two distinct aspects to this question: *Why coinage at all?* And then, *Why coinage in electrum?*). To throw light on these questions the whole range of the scholarly fire power is deployed: archaeological contexts, literary and epigraphical evidence, coin circulation with reference to hoards and find spots, studies of dies and weights, metallurgical analyses, and economic