coherent overview or critical reflection on the phenomenon of tumuli as whole. This is a missed opportunity. Although the editors are careful from the start to emphasise that they will offer no overall conclusions about the social and cultural significance of tumuli, the cumulative effect of the papers is to hint at precisely this, and a concluding chapter would have added greatly to the volume.

The volume as an artefact is a pleasure to read. It is the latest offering in the lavishly-produced Topoi series, designed to showcase the research of the Topoi Excellence Cluster in Berlin. Like others in the series, it is beautifully produced, with very few errors. The text is accompanied by a separate volume of full-colour plates, making them easy to consult in tandem. The text volume is primarily written in English, although two papers are written in German and one in French. It is completed by helpful indices of names, places, tumulus names, and ancient sources. One rather odd oversight is that the illustrations for Ronchetta's paper are included within the text volume, rather than in the separate volume of figures as for all other papers. This decision seems particularly strange given that the figures take up a considerable portion of the text volume (53 pages). Otherwise, this is a fabulous volume, and will be a crucial addition to any serious archaeology collection.

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S. Müth, P. I. Schneider, M. Schnelle, P. D. DeStaebler (eds) *Ancient Fortifications. A Compendium of Theory and Practice*. pp. 352. 2016. Oxford & Philadelpia: Oxbow Books. ISBN 978-1-78570-139-9 hardback \$88.00. 978-1-78570-142-9 e-publication \$44.00.

Fortifications of different kinds and various ages are handed down to us all over the world in great numbers, frequently in excellent state of preservation and sometimes also of remarkable aesthetic qualities. Since prehistoric times they did not only determine the appearance of settlements, towns, and landscapes, but also the life of the inhabitants - economically, politically, and socially. Nonetheless, for any number of reasons, mostly founded in the history of the different archaeological disciplines, the systematic study of ancient fortifications did not keep up with the scientific research on ancient settlements or works of art. The reasons for this deficit are clear: due to their sheer size isolated ancient fortresses as well as fortifications of ancient towns form a laborious, time consuming, and expensive subject of research. In addition, excavations of fortresses and fortifications of any kind are not expected to

come up with precious objects of art or any other spectacular finds. No wonder, therefore, that even well preserved sites often are not precisely dated or their function is not well understood. The more it has to be welcomed, that within the frame of the cluster of excellence 'TOPOI' of the German Archaeological Institute at Berlin the network 'Fokus Fortifikation. Ancient Fortifications in the Eastern Mediterranean / Antike Befestigungen im östlichen Mittelmeerraum' was established, which up to now published two comprehensive volumes – the one reviewed here and a second one entitled 'Focus on Fortifications. New Research on Fortifications in the Ancient Mediterranean and the Near East', which will be reviewed below (p. 467).

The bibliography of the present volume comprises no less than 763 publications, by no means all concerning fortifications or fortification systems, but mirroring the broad historico-cultural access to the topic. The criticism of the editors, however (p. X), that the scientific research since the 1980s 'did not, however, generally lead to a new understanding of ancient fortifications as complex results and mirrors of the interaction between natural environment and social, political and cultural systems' should take into account, that such ambitious goals require reliable facts, which in most instances have to be established first. Since for most of the prehistoric and ancient fortification all prerequisites are missing in order to answer such complex questions, their concern might only be fulfilled in the far future and only within a limited number of instances.

The present volume comprises 12 contributions, most of them written by more than one author, and are in their majority concerned with questions of methodology in the field of ancient fortifications, from a more theoretical approach as well as from a more practical with respect to surveying and documentation.

Chapter 1, 'Methods of interpretation' (pp. 1–23), raises the question of the scientific potential of ancient fortresses through sociological aspects. For instance, what do fortifications tell about the societies of their builders, especially which impact the often enormous costs had on the respective societies. Starting from the definition, what a fortification is, the object of research is concisely described, beginning from the history of the research on ancient fortifications up to the practical problems of studying them. The question of a 'symbolic meaning' of fortifications is again discussed in chapter 7 in more detail. The authors propose to distinguish seven different types of fortifications, thereby taking as a basis their

formal appearance, not their function. The short explanation of this typology does not do full justice to the diversity of manifestations and functions of ancient fortifications. The problem of dating ancient fortresses is treated to some extent here and is running like a red thread through almost all contributions of the present volume. The sociocultural and economic factors of fortifications are touched, as well as the problem of the estimation of costs. Finally an overview of the functional aspects is given and, analogous to the proposed typology, six primary functions of fortifications are defined.

In a book, devoted primarily to methodology, a contribution coping with the questions of documentation and surveying ancient fortresses seems indispensable (chapter 2, pp. 24-39). Thanks to rapid advances in the field of geodesy by photogrammetry and remote sensing the article by J. Ley, E. Richter, and M. Jansen is already by now slightly outdated. Today it is possible by means of a customary drone like the Phantom DJI 4 and with the aid of suitable software to map and document even very large fortresses and fortifications with high precision within an extremely short time. From the aerial photos even detailed plans of any object can be generated. Some well allotted points of reference suffice. The Real Time Kinematic, which only a couple of years ago marked the heyday of surveying and made work a lot easier, is, therefore, already outdated.

J. Giese *et al.* (chapter 3, pp. 40–60) offer suggestions for the formalized description and documentation of ancient fortifications including even standardised forms. This might be found helpful in some respects. But facing the distinctive trend to individualism especially in the humanities, it is to be feared, that even such well-founded proposals might prove inapt to implement binding standards.

Chapter 4 (pp. 61–74) by P. D. De Staebler 'The Building Experience' is decidedly devoted to the difficult discussion of socio-economic topics, especially the estimate of costs, which had already been touched in chapter 1. He substantiates and exemplifies his considerations by regarding more closely the city walls of Aphodisias in Caria as an example from his own field of research.

Chapter 5 (pp. 75–100) 'Mauerwerksformen und Mauerwerkstechniken' by Chr. Brasse and S. Müth seizes once more the old problem already touched in chapters 1 and 3, but finally going back to the work of W. Wrede, of dating walls by 'style' (german 'Mauerstil') – a term, the authors reject with good reasons, although there is no alternative. Another section of the chapter is concerned with the terms for walls built with and without mortar. The synoptic

table (p. 85) for the description of walls with mortar is unfortunately not accompanied by a similar one for walls without. The concise overview of the relationship between building structures, properties of the building materials and their choice elaborates to which extent the available building materials and topographical conditions determine the construction of fortification walls. These implementations are carried by the continual endeavours to take into consideration as many aspects as possible, as for instance the influence of local or regional traditions of building on the appearance of walls. Economical aspects are considered as well as defensive and tactical (the term 'strategic' used by the authors should be reserved instead for paramount matters as for instance the defensive system of a whole landscape). The symbolic-representative aspects of fortifications mentioned here, are treated in more detail in chapter 7 (pp. 126-158). Summing up, the authors conclude (p. 99), that by analysing the building techniques of walls alone, no reliable scientific findings for their dating and their history can be gained.

In chapter 6 (pp. 101-125) 'Defensive Funktionen' (defensive functions) B. Jansen tries to fathom, to which extent the respective elements of a given fortification serving its primary destination - the defence - may be separated from those going beyond. She wisely warns to draw on dates which are deduced from the fortified state a given fortress represents. Moreover, she points to the multiple factors which influence planning, building and running a fortification. In the second section of the chapter she focusses on the 'human factor', thereby stating, that the wall itself formed only one element within the complex system of defence ('die gemauerte Umfassung war nur ein Element im komplexen System der Verteidigung', p. 124). The chapter is rounded up by a 'checklist' of the fortified functions in order to separate them from the more symbolic.

Chapter 7 (p. 126–158) 'Symbolische Funktionen' (symbolic functions) by S. Müth et al. outlines the problem of the functions of a fortification serving representative needs and constituting identity – a topic, which former studies have touched only cursorily, but has never before been treated systematically. Thanks to numerous examples for the visualization of claims for prestige, power or legitimation, the ancient sources available – literary as well as visual – for the symbolic functions of ancient fortifications and the question, how they have been perceived, prove unexpectedly rich. A detailed questionnaire (pp. 150–158) to determine symbolic functions of a given fortification completes this highly thought-provoking contribution.

In chapter 8 (pp. 159-172) 'Urban Functions and Aspects' S. Müth deals with the urban functions and aspects of city walls or rather with the interaction of urban and fortifying functions. Since the relationship between settlements and their inhabitants differs largely with respect to time, topography and the need for safety no overall patterns of this relation are discernible, except for some fundamental relationships, as S. Müth convincingly points out. One of these fundamental patterns affects the chronological relation of settlement and fortification, for which S. Müth establishes four different variants (p. 160). Another describes the relation of the need for protection versus the limitation of the living space by the fortifications of a settlement or town. Although the important role of city walls for customs or as sacred border is underlined, the question has not arisen, to what extent city walls might also mark a social border between an urban upper class and the rural population - as might be exemplified by the phenomenon of the absentee landlords. It is enough here to point at Olynthos, whose population lived at the best indirectly from agriculture. The model of the ancient Greek polis as largely being populated by peasants – i.e. the model of the 'Ackerbürgerstadt' - has evidently consequences for the interpretation of secondary city gates, when S. Müth writes: 'In earlier fortifications, posterns were installed mainly for infrastructure purposes, i.e. agricultural activities ...' (p. 167). To sum up: fortifications and the layout of the urban space go hand in hand; fortifications determined to a high degree the daily life of their inhabitants and served the development of their identity.

The authors of chapter 9 (pp. 173–195) 'Source Criticism: Fortifications in Written Sources and the Visual Arts' do not aim at a complete and circumstantial inventory of all written and iconographical sources on fortifications in the Greek and Roman world, but at a critical introduction to these sources. Appropriate to this, the chapter is divided into two sections: the first dealing with the written sources (pp. 174–184), and the second with the visual or iconographical sources (pp. 184–195).

The concise methodological explanations of E. Laufer in chapter 10 (pp. 196–206) 'Die Befestigung als historische Quelle' (the fortification as historical source) sum up the potentials of scientific insights provided by the archaeological record already referred to in chapters 4 and 7.

The detailed contribution (chapter 11) 'Studying Rural Fortifications: A Landscape Approach' by S. Fachard (pp. 207–230) is devoted to the numerous small 'fortifications' in the countryside. In his far

reaching overview he strongly supports the view, that the numerous isolated towers in their vast majority were part of farmsteads serving first and foremost the protection of their owners, while their representative and prestigious aspects should not be omitted in silence. This view, first expressed clearly by J. Young in the 1950s, had largely been accepted by German scholarship long before it became the *communis opinio*.

In the last chapter 12 (pp. 231-248) 'Regional Phänomene' (regionally begrenzte limited phenomena) S. Müth und U. Ruppe introduce a topic, which, according to them, has so far never been touched upon before. As an (unfortunately unsuitable) example they point to the large number of farmsteads with towers on the Aegean islands (p. 233). But the farmstead with tower (the German 'Turmgehöft') is an ubiquitous phenomenon, although in the past many of them have been misinterpreted as state-run posts of control or signal towers. At the most it might be pointed out, that their density is higher on the islands than elsewhere. The places of refuge in Northern Macedonia (p. 233-234) are, on the contrary, indeed a regionally limited phenomenon as are their analogies in Caria, which are not considered here. But city walls with indented profiles are again less apt to display regional specialities. The Dema wall, mentioned in this context, does not date to the third quarter of the 4th century BC, but 403/2 BC. The so-called 'Turmtore' (towers with a gate) are claimed by the authors as another regional type of a fortified component, which they hold to be limited to Pamphylia and southern Pisidia. Doubts should be allowed. More convincing is the evaluation of architectonical details or certain building or construction techniques as regional phenomena like the corbels under the door lintels of Boeotian fortresses, the 'Leitermauerwerk' (ladder-like walls) at Stageira or the typical Lycian margin ('Randschlag') on fortifications in Lycia.

Finally the authors substantiate and exemplify their firmly formalized description of ancient fortifications in a voluminous catalogue (pp. 249–386) of selected regions, fortifications, building elements and details. One might find this helpful or doctrinaire: it is evidently in line with the current trend to split down everything into tiny little bits and pieces of information. Only the future will show, if this way of documentation and description will become the new standard.

On the whole the present volume is well worth reading and offers an excellent introduction into the field of ancient fortifications and into the possibilities and methods of investigating them. For everybody new in the field the book marks the state of the art, when dealing with problems of fortifications and defence - last but not least thanks to its lavish bibliography. Those scholars, already acquainted with the topic, may gain rich advice and new insights for the study and interpretation of ancient fortifications from the throughout profound and learned contributions and their multiple perspectives. Many of the questions and problems related to ancient fortifications and urbanism have already been treated in the extant literature. What distinguishes the present volume is the highly successful attempt, to concentrate a large variety of different starting points and to arrange them systematically in well-matching contributions. To sum up: This volume may not be missed in any archaeological library.

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Rune Frederiksen, Silke Müth, Peter I. Schneider and Mike Schnelle (eds) Focus on Fortifications. New Research on Fortifications in the Ancient Mediterranean and the Near East (Monographs of the Danish Institute at Athens 18). 2016. Oxford: Oxbow Books. ISBN 978-1-78570-131-3 hardback \$110.

The present volume – the 2nd of the series 'Focus on Fortifications' -, comprises the papers given at an international conference organised by the Danish Institute and the German Archaeological Institute at Athens in the new Acropolis-Museum in December 2012. The total of 57 papers in German, English and French delivered by 73 authors, some of which participated in more than one contribution, spans a wide arc, reaching from the ancient civilizations of the Near and Middle East to the Early Byzantine era and geographically from Syria in the East to Spain in the West and from Gallia in the North to Yemen in the South. The contributions are not arranged in chronological order, but according to seven subjects: 'Origins of Fortifications' (9 papers), 'Physical Surroundings and Technique: The Building Experience' (5 papers), 'Functions and Semantics' (11 papers), 'Historical Context' (8 papers), 'The Fortification of Regions' (9 papers), 'Regionally Confined Phenomena' (9 papers), and 'The Fortifications of Athens and New Field Research' (7 papers). With a total of 732 pages the present volume is among the most comprehensive, but also