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She keeps her distance from 'Western concepts' such as classicism and orientalism, but nevertheless employs modern anthropological theories as heuristic tools. The author sets up essential principles (chapter 3), such as the multi-layered syncretism of current Greek religion; the relationship between mentality, as an implicit system of reference for a social group, and ideology, as an explicit ideal about reality conveyed by the ruling elite; and, in the author's view, the presence of sympathetic magic in all religious festivals, ancient and modern, and its practice within the Orthodox Church. The fertility cult is thereby considered to be an enduring mentality linked to mother goddesses, such as Demeter and the Virgin Mary.

The fourth chapter displays the results of several years of fieldwork on modern festivals. Håland studies seven festivals in all: five Church and two carnival. She selects these for the parallels that their rituals and symbols present to those of ancient cults and their times of celebration, marking transitional periods within the agricultural year. Women play a fundamental role in these celebrations, performing various rituals that are associated, in the author's view, with fertility, death and healing cults. Håland considers the holy persons to whom the festivals are dedicated as powerful deceased mediators between humans and 'stronger powers', an approach already expressed in her previous monograph Rituals of Death and Dying in Modern and Ancient Greece (Newcastle upon Tyne 2014).

Seven ancient festivals are selected due to their positions within the agricultural year and the important roles played by women (Panathenaia, Eleusinian Mysteries, Thesmophoria, Haloa, Anthesteria, City Dionysia and Adonia). These festivals are described (chapter 5) and compared (chapter 6) to the modern ones. Although most of the ancient festivals represented official polis ideology, they incorporated essential elements of 'popular' fertility, death and healing cults. The festivals integrated socio-economic agricultural content with narratives about the divinities involved. Håland draws a parallel between Pierre Bourdieu's Kabyle calendar (Le sens pratique, Paris 1980), which displays a male (dry) and a female (wet) season, and the ancient Greek calendar. She thus associates the Kabyle gender classification of the world with the ancient Greek polar concept of male and female elements. Among the latter, one of the more important is the maternal womb, which the author associates with various natural sites and artefacts such as caves. swamps, megara, kistai, jars, etc.

Although Håland uses Bourdieu's theories, she criticizes his androcentric perspective of male dominance over women, i.e. 'the official male elitist description of the relationship between men and women' (2.352). She claims to use a gendered and 'gyno-inclusive' or 'chthonic' approach to the problem, viewed 'from the bottom-up ... in contrast to the usual androcentric top-down approach' (2.352). Her study reveals a complementary relationship between the roles of the two genders and also the common values shared by two competing cultures: official ideology and popular cult.

Greek Festivals, Modern and Ancient: A Comparison of Female and Male Values is a provocative book. The use of modern festivals to shed light on ancient ones, the numerous hypotheses about ancient festivals founded on the results of modern fieldwork, the often harsh judgements made by the author of the theories of numerous reputed scholars and the overlooking of recent bibliography on specific particulars will all arouse controversy. Nevertheless, the book offers a new and often neglected point of view - the female one - as well as several interesting descriptions of modern festivals. It will be welcomed by those interested in Greek religion, and in festivals in particular, both modern and ancient.

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WHITEHEAD (D.) **Philo Mechanicus,** *On Sieges* (Historia Einzelschriften 243).
Stuttgart: Franz Steiner Verlag, 2016. Pp. 510.
€84. 9783515113434.

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This is the first complete English translation of Philo of Byzantium's treatise on fortifications and sieges. Written in Greek in the third century BC, it was part of a larger text, sometimes referred to as a *Mechanical Syntaxis*, which originally included sections on pneumatics, harbour building and catapult construction. This volume is also the latest instalment in a series of translations of ancient 'technical' works, many on military matters, through which Whitehead and his publishers are providing a very significant contribution to scholarship and a service to the public understanding of the ancient world.

While on the whole informative and useful, the introduction and to some extent the commentary are dominated by comparison with Aeneas Tacticus, whose fourth-century treatise was edited and translated by Whitehead as How to Survive Under Siege (Bristol 2001, 2nd edition) and whose prose he finds livelier and more interesting than Philo's over-technical and dry style (25). Whitehead also assesses Philo on the basis of his originality and his direct experience of the military matters he writes about. In his view, On Sieges uses Aeneas Tacticus as a source (25). These issues would make for interesting debate; originality and direct experience could have been usefully discussed in the context of a fuller analysis of Philo's own work on its own terms, both in relation to his other extant texts and against the general background of Hellenistic literature. Greater contextualization might have allowed deeper exploration of issues of readership and rhetorical strategies, and complicated the simple distinction between being a 'dilettante' and having 'actual experience' (24). Philo's citing practice also needs to be examined further: why not refer to Aeneas, if he was drawing so extensively on him, when elsewhere in his work he does not hesitate to mention other engineers?

Perhaps, as Whitehead explains, the intervention of an epitomizer in the Greek text of On Sieges drastically limits the possibilities of further textual analysis (25, 60). The sorry state of the text is exacerbated both by the use of terms whose precise meaning eludes us and by the presence of different words for what one suspects is often actually the same thing. Whitehead's efforts to make the text make sense are at times nothing short of heroic. In his commentary he extensively assesses interpretations given by previous scholars and provides reasons for his choice of text, when emendations or additions seem necessary, and translation. The commentary is, however, not exclusively philological; Whitehead deftly marshals archaeological and epigraphical resources as well, in order to give the reader a sense of what the material world of fortifications was like, along with the social realities of paying for, building, maintaining and repairing wall circuits in towns around the Greek Mediterranean in the Hellenistic period. Disappointingly, there are no illustrations; there are, however, five appendixes.

The opening of *On Sieges* is missing. Whitehead, however, accepts the reconstruction, based on other extant treatises, of a dedication to Ariston, an addressee about whom nothing much is

known (22–3, 67, 135). The treatise contains advice on fortifications, provisioning and preparation, and defensive and offensive measures. Philo launches straight into instructions for building walls around a city. There is particular emphasis on the shape of towers, including a discussion about which polygonal shape offers the best protection against external projectiles and the strongest advantage when discharging counter-fire. The perspective here is mostly that of the besieged, until Philo switches to the point of view of the attacker later in the text. The context is one where different types of catapult and other siege engines and techniques (digging under walls, for instance) are in common use.

Philo provides some specifications for the breadth of walls and their distance from the houses of the city, which reflects his practice in, for instance, his book on constructing catapults. There is mention of specific materials, particular places (for example, Rhodes, which, from his *Belopoietica*, we know to have been somewhere he spent some time and practised his profession) and other engineers, all consistent with Philo's practice in other texts. He mentions cost – also noted in his other treatise as a consideration when building catapults – and indirectly provides a representation (self-representation) of the role of the *mēchanopoios* as simultaneously a social, political and epistemic expert.

Overall, Philo's technology is tailored to human-led military strategy, including elements of what we would call psychological warfare and how to deploy the help of non-combatants in case of necessity, and also to specifically human needs, including the storage and sourcing of food in the event of sieges. Hopefully, Whitehead's openended contribution will encourage readers to use the text as a starting point for further enquiries into the Hellenistic face of war.

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CORDOVANA (O.D.) and CHIAI (G.F.) (eds)

Pollution and the Environment in Ancient
Life and Thought (Alte Geschichte,
Geographica Historica Band 36). Stuttgart:
Franz Steiner Verlag, 2017. Pp. 296. €54.
9783515116671.

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Stemming from a 2014 conference in Berlin, this collection of essays seeks to interrogate 'the historical process, which has led *homo sapiens* in