Review article

Archaeology, archaeozoology and the study of pastoralism in the Near East

Canan Çakırlar*

Steven A. Rosen. *Revolutions in the desert: the rise of mobile pastoralism in the southern Levant*. 2017. xv+314 pages, numerous b&w illustrations. New York & London: Routledge; 978-1-62958-544-4 paperback £24.99.

Reuven Yeshurun, Lior Weissbrod, Nimrod Marom & Guy Bar-Oz (ed.). *Bones and identity: zooarchaeological approaches to reconstructing social and cultural landscapes in Southwest Asia*. 2016. xiii+338 pages, several b&w illustrations. Oxford & Philadelphia (PA): Oxbow; 978-1-78570-172-6 paperback £38.

Sheep and goat herding, the basis of pastoralism in the Near East, has been integral to the social organisation, diet, economy, religion and environment of the region since the beginnings of animal domestication. Interestingly, this omnipresent factor of life in the Near East has not been a popular topic of enquiry in its own right amongst archaeologists—of course, they deal with pastoralism in one way or another, but they mostly manage to keep the herder separate from the king. Instead, the study of pastoralism in this region has been largely the domain of archaeozoologists who study the sheep, goat and indeterminate 'sheep/goat' bones that dominate Near Eastern faunal assemblages from the Early Holocene onwards (the notorious difficulty of distinguishing sheep and goat bones led archaeozoologists to invent the sheep/goat, now an official taxon in the *Encyclopedia of Life* no less! http://eol.org).

This does not mean that all archaeozoologists dealing with sheep and goat remains are, or should only be, interested in herding as a subsistence strategy and way of life. But nor does it mean that 'traditional' Near Eastern archaeozoology—that is, the macro-analysis of hand-collected faunal remains, primarily from sizable tell sites—is properly equipped to address important and difficult questions such as: who herded the animals? How did herds move across the landscape? What symbolic and economic values were attributed to the primary (meat and hide) and secondary (dairy, wool and blood) products of herding? What was the social role of herding? And what were its environmental consequences? Traditional archaeozoology can at best assign a vaguely defined importance to herding based on the relative abundance of sheep and goat remains, and can infer the comparative economic significance of different products using reconstructions of culling ages. These kinds of analytical results and their interpretation are critical when dealing with sheep and goat domestication, the dispersals of these domesticates and the beginnings of secondary products usage. Once we move on to the Bronze Age and later periods, however, research priorities shift to other questions. The two books under review here illustrate where Near Eastern archaeology and archaeozoology stand in relation to each other and what they tell us about the study of pastoralism in the past.

Steven Rosen's book, *Revolutions in the desert: the rise of mobile pastoralism in the southern Levant*, is a *longue durée*, narrative of the pre- and proto-historic archaeology of the Negev, plus a short concluding essay on the historic periods (first millennium BC onwards). The book builds on Rosen's lifetime of experience with the archaeology of the Negev and is as much about his clear opinions on how to approach the archaeology of mobile desert pastoralism as it is about life in the pre- and proto-historic Negev.

Yet although mobile pastoralism—introduced to the Negev and adjacent deserts sometime during the late

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antiquity 91 359 (2017): 1375–1378 doi:10.15184/aqy.2017.148

seventh to early sixth millennia BC—is a central theme, Rosen declares that "this book is *not* a study of faunal archaeology" (p. 7, emphasis added). Indeed, he goes on to distance his aim of a holistic understanding of Near Eastern pastoral societies from what archaeozoology can tell us about these groups: that is, "subsistence and exploitation" (p. 7). This position appears to assign a stereotypical role to archaeozoology as a technical specialism, a tool for understanding pastoralist practices but not pastoralist societies.

The book outlines a manifesto that promotes the study of past desert cultures in their own right and not in terms of their relationship with the cultural groups occupying the surrounding arable lands. It also emphasises how studying the origins and evolution of these groups through the archaeological record mitigates the potentially misleading analogies to recent and present-day ethnographies of, for example, the Bedouin. Both of these positions liberate understanding of past pastoralism from the stereotypes derived from the written sources that, naturally, reflect the perspectives of settled communities. In addition, the book also: summarises the historical development of approaches to the archaeology of pastoral nomadism (Chapter 4); reviews relevant Holocene climate and environmental change showing how limited the regional proxy record remains (Chapter 5); and discusses the Pre-Pottery Neolithic B and Pottery Neolithic origins of desert societies in the Negev, followed by a chronological narrative of the archaeological cultural complexes, most specifically the Timnian culture of the Chalcolithic and Bronze Ages (Chapters 6–9). Rosen's framework for describing the Timnian cultural complex is one of revolutions and collapses. It is interesting that Rosen adopts this dramatic terminology—popularised for this region by V.G. Childe and H. Weiss to describe significant cultural transformations and long-term impacts (Childe 1936, 1950; Weiss *et al.* 1993)—despite distancing himself from the much-disputed implications of such language.

Although poor preservation sets clear limits on the ability of archaeozoological methods to investigate desert pastoralism, Rosen incorporates interpretations from archaeozoological analyses into his discussion in several places, most crucially when tracing the initial appearance of pastoralists in the Negev and adjacent deserts. Here he draws on the work of Martin and Edwards (2013) in southern Jordan, which shows that herding was practised alongside hunting and gathering for nearly a millennium before it came to dominate the economy and desert lifestyle. Comparable studies from the Negev, the geographic focus of Rosen's study, seem to be lacking. Nevertheless, in view of the wide distribution and continued use of 'desert kites' in the Negev—most likely used for hunting gazelles (Bar-Oz *et al.* 2011; see also Bar-Yosef, Chapter 6 in *Bones and identity*, below)—and other evidence for hunting and gathering, a longer and more intensive discussion on the changing relations between foragers and pastoralists, or hunting and pastoralism, would have been useful. In the (near) absence of bones, Rosen's strongest evidence for the beginnings of herding in the Negev comes from the study of dung layers, a subject in which archaeozoologists are also highly interested (cf. Marinova *et al.* 2013).

The second book under review here, *Bones and identity*, edited by R. Yeshurun, L. Weissbrod, N. Marom and G. Bar-Oz, consists of 17 articles resulting from the 11th Meeting of the Archaeozoology of Southwest Asia and Adjacent Areas (ASWA) Working Group at the University of Haifa in June 2013. ASWA meetings are attended by academic, professional and student archaeozoologists working across the vast region extending from Central Asia to south-eastern Europe. The meetings serve as platforms for collaboration, showcasing recent results and stimulating advances. Traditionally, the biannual meetings have no thematic focus and no call for sessions. While topics such as elite diets, domestication, animal husbandry systems, rituals and environmental change are recurrent, papers are data-heavy, the audience sharp on methodological detail and applications of archaeological theory are usually implicit at best.

Bones and identity is an attempt to diverge from these long-standing trends through the addition of a twist—although one which in practice has been implicit in the field from its inception. Identity is a core issue in the archaeology of Southwest Asia, but while archaeozoology has been neither detached from, nor immune to, discussions of ethnic, religious, territorial and class identities, with a few exceptions (e.g. Hesse & Wapnish 1998; Marom & Zuckerman 2012), its active contribution to such debates has been subtle. The proposal of identity as an "integrative theme" (p. ix) for the 11th ASWA meeting was never intended to steer the field away from its processual focus overnight;

https://doi.org/10.15184/aqy.2017.148 Published online by Cambridge University Press

it has, however, demonstrated what can grow in the context of ASWA when the seed of identity is planted, a point acknowledged in the editors' Introduction.

The results are manifest in several papers in the volume. In Chapter 7, for example, Bartosiewicz presents a report on a faunal assemblage from the Halaf centre of Tell Aqab in northern Syria, contrasting the implications of his findings on meat provisioning (diversity in animal exploitation; no signs of hierarchy) with an understanding of the Halaf phenomenon based on the material culture (similarity across a wide geographic area; the beginnings of hierarchy). In Chapter 9, Greenfield *et al*. interpret the faunal remains from the Early Bronze Age Tell es-Safi in the southern Levant as evidence for non-elite groups, undermining an earlier hypothesis about the identity of the occupants of the settlement. Kunst *et al*. (Chapter 10) scrutinise feasting activities at a Hittite centre using an intra-site contextual analysis of the faunal data, and Crabtree and Campana (Chapter 15) discuss the presence of pigs, cattle and chickens as indicators of class and Romanisation at a Late Roman settlement in Egypt. The list continues with analyses of faunal assemblages in relation to burial ritual in Armenia (Manaseryan, Chapter 13), ethnicity at Jerusalem and the Qumran Caves (Bouchnik, Chapter 16), and taboo topics such as cynophagy in Early Bronze Age Greece (Hadijkoumis, Chapter 11). While none of these contributors offers in-depth discussion of the processes leading to their interpretations, their papers demonstrate that archaeozoologists working in the region cherish the opportunity to use faunal material to tackle themes above and beyond 'subsistence and exploitation'.

Other papers include a review of past and present research on the archaeozoology of Palaeolithic Mount Carmel (Yeshurun, Chapter 1) and new archaeological and archaeozoological evidence with which to question the link between house mice (*Mus*) and early sedentism (Belmaker & Brown, Chapter 2). The latter forms part of a sequence of Chapters 2–5 that focus on subsistence in the Pre-Pottery Neolithic—arguably part of a process that had the most fundamental and enduring impact on the identities of the Near East. Most of these chapters also present significant quantities of data—crucial to achieving regional, chronological or diachronic understandings of various prehistoric and historical phenomena.

A particular problem for the archaeozoological study of pastoralism in the Near East is that archaeologists have tended to focus on the largest, tallest, 'most important' sites, which are often excavated for decades, providing large assemblages of faunal material, but which represent only one part of wider regional systems. Ideally, a comprehensive study of pastoralism requires data from a variety of site types: specialised urban centres, sites at various altitudes, villages, hamlets and campsites. Nonetheless, faunal assemblages from large sites can still be used to make inferences about pastoralism and the social role of pastoralists (e.g. Arbuckle 2012; Çakırlar *et al*. 2014). For instance, although not featured in either of the two books here, techniques such as isotope analyses of incremental enamel and dentine layers in caprine teeth can be used to trace the seasonal movement of animals between different climatic zones and the consumption of different types of vegetation (Balasse 2014; Makarewicz & Sealy 2015).

The investigation of pastoralism, especially mobile pastoralism in the Near East, requires a truly interdisciplinary effort from conception to dissemination that incorporates fieldwork, ecological and ethnographic baseline studies, material culture studies and bioarchaeology including archaeozoology and lipid residue analyses. Both archaeozoology and the archaeology of mobile pastoralism—the two specialisms at the heart of these books—are striving to transform their meaning and purpose, to divorce themselves from the legacy of site-based archaeology as commonly practised in the Near East and to devise new methodologies and theoretical approaches. In this way, they share more common ground than is reflected in these volumes.

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https://doi.org/10.15184/aqy.2017.148 Published online by Cambridge University Press