complex. This includes the data-rich Chapter 3, which assesses complex stratigraphy and associated site chronology and climate history. Subsequent chapters provide a chronological narrative (terminal Pleistocene to late Holocene) of human activity in the Niah Caves, with results presented alongside thoughtful interpretation of regional significance. This is particularly true for Chapters 4, 7 and 8, which afford remarkable insight into how the hominids at Niah behaved. For example, in Chapter 7, the authors use an impressive range of archaeological data (including strontium analysis, burial practices/positions, lithic residues and petrographic analysis of ceramics) to argue for the use of the Niah Caves by multiple human communities, with segregated areas for the living and the dead. The authors identify complexities that do not fit with the Austronesian voyager-farmer model, suggesting instead gradual change throughout the terminal Pleistocene and Holocene and the selective integration of a Neolithic 'package'. Arguably, the most fascinating results in the volume surround human activity during the late Holocene. Burial practices, grave goods, ceramics and lithics are used to demonstrate human individuality, community affiliation and "multiple or shifting trade alliances" (p. 339) with people as far away as India and China.

Should there be any weakness to this volume it is the repetition of information. The majority of the chapters are self-contained narratives incorporating broad arrays of context and discussion that make for rewarding reading; this format, however, also means that sizable chunks of information from Chapter 3 (e.g. chronology, environment history, stratigraphy) reappear in some of the later chapters. Nonetheless, such repetition detracts little considering the quantity of information that the volume provides, the accessibility of its writing style and the wider contribution of each chapter. The authors have successfully collated, condensed and interpreted the Niah Caves excavations, providing remarkable insights into the rich and diverse cultural heritage of Borneo and its broader implications for world (pre)history.

> DUNCAN WRIGHT School of Archaeology & Anthropology, Australian National University, Australia (Email: duncan.wright@anu.edu.au)

D.T. POTTS. *Nomadism in Iran: from antiquity to the modern era.* xxv+558 pages, 21 b&w illustrations, 5 tables. 2014. Oxford: Oxford University Press; 978-0-19-933079-9 hardback £55.

The author's agenda in this important and interesting, but flawed, book is clear:



In setting out, over five years ago, to chart the development of nomadism in Iran [my] goal was to demonstrate two things: first, the spurious nature of the evidence underpinning the claim

that Iranian nomadism was a phenomenon of great antiquity that can be identified in the archaeological record of the Neolithic, Chalcolithic, and Bronze Age in Luristan, Khuzestan, and Fars; and second, the ahistorical (even anti-historical) naiveté of underestimating the extent to which all nomadic groups in Iran have been subjected to such profoundly transformational forces that any assumption of behavioural continuity between groups observed in the twentieth century and those of antiquity must be viewed with considerable skepticism (p. 419).

This book, in short, aims to refute what has been for at least half a century the standard archaeological view of nomadism in Iran-that full-time, transhumant pastoral nomadism has been present in the region for somewhere between four and eight thousand years. In contrast, Potts argues that "nomadism is a comparatively late introduction which can only be understood within the context of particular political circumstances" (p. xiv) and concludes that "there is no evidence suggesting that the pattern of nomadism as practiced in the twentieth century pre-dates the Oghuz infiltration in the eleventh century" (p. 427). The standard view, Potts argues, is based on slipshod interpretations of ambiguous archaeological data and mistakenly applies analogies derived from ethnographic and personal observations of nineteenth- and twentieth-century nomads to archaeological data of vastly greater antiquity.

Potts is absolutely correct in pointing out that, when the available data are examined critically, there is scant evidence in the archaeological record for the presence of what he defines as true nomads. Too many scholars have been careless with their terminology, lazy in their interpretations and overeager to claim that evidence of nomadism is to be found in every isolated cemetery, low-mounded site and thin sherd scatter along the talus slopes of every intermontane valley in western Iran.

But I was disappointed, after Potts's often scathing condemnation of virtually every archaeologist who has worked in the Iranian Zagros and the adjacent lowlands, to read his own concluding assertions about pastoralism in the prehistory of Iran. Looking at the same inadequate record he roundly criticises, he concludes his review of the archaeological evidence by saying that from c. 8000 BC onward, herding "was ubiquitous" and that "[t]ranshumance was common, and shepherds made full use of upland pastures in the summer and lowland pastures in the winter, moving with their herds along well-worn routes that left behind small, ephemeral campsites that represent the debris of a few specialists, not the remains of entire tribes" (p. 41). With regard to these assertions, I would ask from Potts the same interpretive rigour he has demanded of everyone else: what is the archaeological evidence supporting these claims, and what specific data lead him to say the people managing those transhumant herds were 'a few specialists' rather than 'entire tribes'? He certainly does not present any such data in his summary of Iranian prehistory.

The fundamental problem with Potts's analysis is his trait list/pigeonhole approach to defining pastoral nomadism. He looks for five features:

the paramount economic role of herding; the extensive nature of herd-maintenance strategies and free-range grazing without the use of stables or the accumulation, storage, and transport of fodder; periodic mobility within or between certain pre-determined grazing territories; the participation of the vast majority of the group in seasonal migration; and the orientation of most economic effort toward primary subsistence rather than production for the market (pp. 2–3).

Hit all five and you win your nomad badge; sell animals to townspeople or bring too few relatives along on the migration, and you are out. All of Potts's traits are important elements in understanding pastoral adaptations, but given the near impossibility of unambiguously identifying such features from archaeological evidence, it is no surprise that Potts does not see the presence of 'true' nomads until he finds them in the written, historical record.

In contrast, I would argue that herding, agriculture, hunting, gathering and exchange have been elements in the subsistence economies of every group in the ancient Middle East since the origins of domestication. Every group utilised each element, with the balance between the various modes of procurement shifting with the seasons, with short- and long-term variations in physical, cultural and political environments, and with cultural preferences. Archaeologists should be examining how ancient groups and societies balanced these elements and how those balances changed over time. We need to establish, in a rigorous way, when activities such as long-distance pastoral transhumance were important in the subsistence economies of various regions and eras, and not argue about categorising groups into arbitrary classes.

A few other comments are in order. First, while I am genuinely impressed by the breadth and depth of Potts's historical scholarship, as a reader I often felt I was being subjected to a massive data dump. The book would have benefited from a more focused and selective approach. Second, Potts's apparent conviction that horses need to be present for pastoralists to gain the full benefits of nomadism strikes me as curious. I would welcome an argument that nomads sensu strictu need pack animals to move their families, tents, supplies and equipage over the long distances between highland and lowland pastures, but donkeys, domesticated from at least 3500 BC, would serve that purpose as well as horses. Third, in his analysis of the archaeological data, Potts devotes little attention to evidence about population and settlement patterns derived from surface surveys, of which there have been many throughout this region. Finally, I would suggest that larger multifamily groups would be much more effective than 'a few specialists' in managing and protecting herds of sheep and goat from the range of predatorslions, leopards and wolves, as well as other humanspresent in the mountains and valleys of Iran during the eighth to second millennia BC. In the end, it is much easier to make a case for the early appearance of full-time transhumant pastoral nomads in the Iranian Zagros than Potts's book admits.

> JOHN R. ALDEN University of Michigan Museum of Anthropological Archaeology, Ann Arbor, USA (Email: jralden@umich.edu)