maritime sphere of interaction is clearly long overdue but I wonder if the pendulum has in some cases swung too far. It is clear that many societies feel at home on the sea and can exploit it to their considerable advantage, but some societies are afraid of the sea, with good reason, and avoid it. Those societies need to be considered and understood as well.

NIALL SHARPLES Cardiff University, UK

doi 10.1017/eaa.2017.48

Evangelia Kiriatzi and Carl Knappett, eds. *Human Mobility and Technological Transfer in the Prehistoric Mediterranean* (British School at Athens, Studies in Greek Antiquity. Cambridge: Cambridge University Press, 2016, xvii and 278 pp., 26 figs, 2 tables, hbk, ISBN 978-1-14243-5)

This volume appears in a new, British School at Athens series published in association with Cambridge University Press; it represents the outcome of a two-day workshop held at the British School in June 2010. The long gestation of this work inevitably means that some of the volume's twelve chapters now show their age. Nonetheless, the editors obviously did their best to update the text and references in at least some of the papers. Even so, the 'current "mobility turn" (p. xv) is no longer so current (e.g. Beaudry & Parno, 2013; Hahn & Weiss, 2013), but what makes this volume new and noteworthy is the aim of engaging mobility with the transmission of technological knowledge and practice, i.e. 'technological transfer'.

In the editors' words (p. 8, original emphasis), 'This volume therefore seeks to develop *technological* perspectives on the processes of human movement, focusing primarily on the diverse landscapes and seascapes of the prehistoric Mediterranean'. In so doing, it considers other issues of current archaeological interest—connectivity, communities of practice, the *chaîne opératoire*, the social life of objects, and more. The editors highlight what they see as two 'problems' with mobility: (1) a tendency to define mobility on only a single scale (e.g. 'migration'), when multiple

scales should be considered; and (2) the ways archaeologists conceptualize and understand (or not) the relationships between people and things (e.g. raw materials, artefacts, and technologies move along with people, in different ways, and for different reasons). The solutions the editors propose to resolve these problems are: (1) to be more explicit about who or what was moving and why; (2) to engage the diversity and abundance of material remains (e.g. not just pottery and metals but stone-working, fresco-painting, and glass-all treated in this volume), with some materials serving as a 'passport' to mobility, others perhaps hindering it; and (3) to problematize and attempt to gauge how technologies may be transmitted and transferred by different kinds of human mobility. The editors also emphasize the need to consider 'technological mobility'e.g. metallurgical technology requires specialists (miners, metalsmiths) to traverse physical if not social landscapes to locate exploitable ores. Some types of subsistence or craft technologies seem to be adapted to particular material or social landscapes (stone-working, glass-making, ore prospection, and mining), whilst others may be more readily transmitted between socially and/or spatially separated groups or

communities. In most case studies presented in the volume, it seems evident that political elites facilitated technological mobility, especially where skilled craftspeople were involved. Why this was so, who (and what) was involved, and how technologies or technological knowledge were borrowed, appropriated, transmitted, and adopted are some of the key issues raised.

So, to what extent and in what respects do the contributors to the volume engage with these editorial goals and ideals? The papers span a range of time and space, from the later Neolithic of northern Greece (Ch. 3, by Urem-Kotsou) to the end of the Late Bronze Age in the Levant (Ch. 8, by Boileau). Curiously, no less than four papers (five if you include the editorial introduction) offer some sort of commentary to the volume's seven case studies: Broodbank on the Mediterranean setting, and seafaring (Ch. 8); Kristiansen offers a view based on Scandinavian Bronze Age maritime traditions, links between Europe and the Mediterranean, and a case study based on the Po Valley Terramare culture (Ch. 10); Blake presents a view based on state-motivated mobility and the movement of 'specialists' in Bronze Age Italy (Ch. 11); and Gosselain a view based on technological traditions in contemporary sub-Saharan Africa (Ch. 12). Whilst the paper by Kristiansen offers interesting if decidedly 'maximalist' case studies on its own, and that by Blake useful comments on all the papers, Gosselain's is the most thoughtful and compelling: he discusses four themes related to his own ethnographic research that he finds to be characteristic of this volume-connectivity, mobility, community, and the 'social utility' of material objects, techniques, practices, or ideas. If anything, all this self-analytical excess makes a reviewer's work almost redundant.

Several papers in this volume unsurprisingly discuss imported or transferred goods and raw materials, all of which demand functional, social, or symbolic analysis in terms of their contexts of reception and consumption, not simply with respect to their origins and classifications—technological or otherwise. Of course, such an approach is now common in a range of postcolonial, network, and 'globalization' studies related to mobility, identity, representation, hybridization and consumption practices, and more. Two papers co-authored by the editors discuss cases that at least show an awareness—but more obviously a wariness of postcolonial approaches.

Nikolakopoulou and Knappett (Ch. 7) reexamine cases made for 'Minoanization'especially regarding wall paintings and pottery-within and beyond the Aegean, explaining that two basic, 'extreme' models have been involved: 'colonization' and 'acculturation'. The authors propose that we consider instead 'intermediate' modelsmulti-scale 'learning'; communities and 'communities of practice'. Nonetheless, time and again they call upon the acculturation model, which has been roundly critiqued elsewhere in archaeology for at least two decades. In the end, and after exploring the data through their own models, they suggest that either Theran craftspeople travelled to Crete or else received training from itinerant Cretan artisans visiting Thera, with the result that local (Cycladic) people went from being novices to skilled craftsmen able 'to produce imitations, hybrids, or entirely new creations' (pp. 108-09). Although they refer in passing to what they see as a relevant discussion of 'Romanization' (Woolf, 1998), they make no reference to multiple case studies elsewhere and at other times in the Mediterranean, based on postcolonial models, and concepts of hybridization practices or transculturation (e.g. van Dommelen, 2005; Vives-Ferrándiz, 2008; Knapp, 2012). Although they refer to various 'hybrid' aspects of the material, the discussion remains descriptive. And whilst 754

they treat in an authoritative manner such issues as 'technological (or technical) identity', learning networks, and diverse scales of technological as well as social mobility, it might have been equally if not more useful to evaluate 'Minoanization' in the light of postcolonial models.

In contrast, the paper by Kiriatzi and Andreou (Ch. 9)—which examines the technological impact of Mycenaean pottery across much of the Mediterranean ('Mycenaenization')-demonstrates an awareness of at least some eastern Mediterranean cases that engage with postcolonial theory and 'hybridization processes', but critiques them as failing to consider the phenomenon in its social context (p. 131). Kristiansen's overview likewise complains that interpretations based on transculturation and hybridization fail to identify the socioeconomic forces behind cultural change. Kiriatzi and Andreou suggest that studies of 'Mycenaenization' have been limited to approaches based on 'acculturation' and 'core/periphery' models. Following the volume's general aims, the authors propose instead to revisit 'the meaning and social life of these objects' through a multi-scalar and technology-based approach to human mobility. Beyond discussing 'top-down' and 'bottom-up' perspectives, however, there is no real engagement with the social life of things, nor any mention of the by-now classic and fully relevant studies of, e.g., Kopytoff (1986) or Gosden and Marshall (1999). Moreover, the general conclusion seems somewhat mundane, given the lofty aims: 'travelling potters/craftspeople (together with seamen, merchants, state officers) played a significant role in the spread of Mycenaean ways of doing things and the emergence of trans-regional styles, in parallel with local potting traditions' (p. 152). Kiriatzi and Andreou's detailed and thoughtful study certainly contemplates several likely impetuses that lay behind the mobility of craftspeople and various aspects of technological practice, transmission, and appropriation-e.g. that pottery production was largely decentralized and thus enabled entrepreneurial potters to function independently of the 'palace'. However, it never quite achieves its aim of providing a better understanding of the social life of Mycenaean pottery, beyond the central Macedonian case. The central and east Mediterranean cases are far too brief, and marred by a limited familiarity with the relevant and recent literature.

Boileau's paper (Ch. 8) is similarly concerned with the 'Aegeanization' of (northern) Levantine culture at the end of the Late Bronze Age. She views this process, however, through a study of the manufacturing technology-embracing the concept of the chaîne opératoire-involved in the transmission and diffusion of Aegean and Aegean-type pottery at the site of Tell Kazel in Syria. Technological variability here is examined in terms of learning networks, communities of practice, and especially 'mixed' types of pottery, e.g. 'Syrian vessels with "borrowed" Aegean features' (p. 117). Boileau observes that these 'mixed' (i.e. 'Aegean-style') vessels are not simply substitutes for Aegean pottery but probably attest to changes in the local systems of expression and consumption practices' (p. 122). Having considered some of the archaeological signatures of mobility, she concludes that the different types of Aegean and Aegean-style pottery found at Tell Kazel were produced by small groups of migrant potters and artisans (from mainland Greece). Here, then, mobility is seen primarily in terms of migration, but this process of 'Aegeanization' might have benefitted from an approach based on hybridization practices or transculturation.

One paper that admirably meets the volume's goals is that of Georgakopoulou (Ch. 4), who examines the smelting technology involved in metallurgical production at several Cycladic, Cretan, and Attic sites in the Early Bronze Age southern Aegean. She suggests the following scenarios: direct access by local communities to nearby ore sources in 'metal-rich' zones, which were then smelted locally in the settlement or at special-purpose sites nearby; direct access by more distant groups to these 'metalrich' zones, and smelting nearby or shipping the same ores home for smelting or exchanging them elsewhere. Thus different social groups as well as craft specialists, if not some types of equipment (or the knowledge and means to make them), moved within the same physical, insular landscape in order to find, mine, make, or exchange metal(s), using distinct smelting practices. Georgakopoulou concludes that the unique insular landscape of the southern Aegean, combined with the scattered disposition of ore sources and production sites, meant that seasonal mobility by craft specialists was a prerequisite for metallurgical production in this region.

Several papers in this volume seem to agree that technological transfer/mobility is the outcome of sustained communications and close interaction amongst skilled craftsmen, attached specialists, and apprentices, often within communities of practice. Bevan and Bloxham (Ch. 5), for example, in their paper on stonemasons and craft mobility in Old Kingdom Egypt and the Late Bronze Aegean, emphasize that the craft of stonemasonry necessitated long periods of apprenticeship within formal or informal communities of practice, whether kin- or family-based groups, 'travelling tinkers', or collectives such as craft guilds and fraternities or state-based specialists. Posing a different developmental trajectory, Urem-Kotsou (Ch. 3) suggests that changes in pottery production during the Middle-Late Neolithic transition in northern Greece emerged when local potters adopted new technologies in a context of social competition. Shortland's paper (Ch. 6) demonstrates that although the Egyptian and Near Eastern technology of making glass from raw materials never spread beyond that region, various glass objects—relief beads, plaques, inlays—were manufactured in Late Bronze Age Greece from imported rods or ingots of glass. Here even an immobile technology led to the widespread production of diverse endproducts.

None of my comments should detract from the importance of this volume for anyone involved in the study of human mobility and technological transfer in the Bronze Age Mediterranean. Given the specific expertise of the editors and several contributors, the volume overall tends toward an Aegeocentric focus but covers to varying extents a Mediterranean expanse from Sardinia to the southern Levant, and beyond to Scandinavia and Africa. Overall, careful study of the papers in this volume will help to improve archaeological understanding of who and what were involved in technological mobility during the Bronze Age, and how technical knowledge was transmitted within, throughout, or beyond the region.

## References

- Beaudry, M.C. & Parno, T.G., eds. 2013. Archaeologies of Movement and Mobility (Contributions to Global Historical Archaeology). New York: Springer.
- Gosden, C., & Marshall, Y. 1999. The Cultural Biography of Objects. *World Archaeology*, 31: 169–78.
- Hahn, H.P. & Weiss, H. eds. 2013. Mobility, Meaning and Transformations of Things: Shifting Contexts of Material Culture through Time and Space. Oxford & Philadelphia: Oxbow Books.
- Knapp, A.B. 2012. Matter of Fact: Transcultural Contacts in the Late Bronze Age Eastern Mediterranean. In: J. Maran & P.W. Stockhammer, eds. *Materiality and Social Practice: Transformative Capacities of Intercultural Encounters*. Oxford & Philadelphia: Oxbow Books, pp. 32–50.

- Kopytoff, I. 1986. The Cultural Biography of Things: Commoditization as Process. In: A. Appadurai, ed. *The Social Life of Things: Commodities in Cultural Perspective.* Cambridge: Cambridge University Press, pp. 64–91.
- van Dommelen, P. 2005. Colonial Interactions and Hybrid Practices: Phoenician and Carthaginian Settlement in the Ancient Mediterranean. In: G.J. Stein, ed. *The Archaeology of Colonial Encounters*. Santa Fe, NM: School of American Research Press, pp. 109–41.
- Vives-Ferrándiz, J. 2008. Negotiating Colonial Encounters: Hybrid Practices and Consumption in Eastern Iberia (8th–6th

Centuries BC). *Journal of Mediterranean Archaeology*, 21: 241–72. doi:10.1558/jmea. v21i2.241

Woolf, G. 1998. Becoming Roman: The Origins of Provincial Civilization in Gaul. Cambridge: Cambridge University Press.

A. BERNARD KNAPP University of Glasgow, UK — Cyprus American Archaeological Research Institute, Nicosia, Cyprus

doi 10.1017/eaa.2017.49

Rachel Crellin, Chris Fowler and Richard Tipping, eds. *Prehistory without Borders: The Prehistoric Archaeology of the Tyne-Forth Region* (Oxford: Oxbow Books, 2016, 244 pp., 124 b/w figs, 19 tables, hbk, ISBN 978-1-78-570199-3)

Borders, in the sense of modern geopolitical boundaries, have no bearing on prehistoric realities, yet they do affect archaeology as a discipline-particularly when one is committed to thinking, working, and writing on regions that transcend administrative limits, whether regional or national. While such issues are inherently most salient and visible in parts of the world with enduring geopolitical conflicts and contested borders (e.g. Chazan, 2014: 183), they apply equally to various parts of northwestern Europe (e.g. Webley, 2016: 10, 18, 27). The editors of Prehistory without Borders have published a rich and well-illustrated collection of sixteen papers (plus an introduction) that aim to showcase the necessity and merits of transregional approaches in archaeology, using cases from the Tyne-Forth region of northern England and southern Scotland as the main geographical border zone.

The first three chapters are devoted to highlighting the relevance, urgency, and problems faced by 'cross-border archaeology'. In Chapter 1, the volume editors show the ways (e.g. research traditions, administrative and heritage management organization, and research agendas) in which archaeology on either side of the Anglo-Scots border has developed differently. While one could extrapolate such 'border differences' to any given European administrative boundary, the Tyne-Forth region is notable for the initiatives undertaken to actively counter any negative effects of such administrative divisions. In 2009, the Tyne-Forth Prehistory Forum was founded to promote collaboration and to link archaeologists, heritage professionals, and other interested parties, across the administrative divide, through a series of symposia that ran between 2010 and 2012. I believe that the value of such transregional symposia is fundamental. Having ample experience with later prehistoric archeology in the Low Countries, I have a personal awareness of the importance of integrating and disseminating research across national and language boundaries (facilitated in those regions by similar initiatives such as the Arbeitsgemeinschaft, Lunula, and Metaaltijden symposia). This is not just stating the obvious: in her analysis of