

Book reviews

NICOLE BOIVIN, RÉMY CRASSARD & MICHAEL PETRAGLIA (ed.). *Human dispersal and species movement. From prehistory to the present*. 2017. Cambridge: Cambridge University Press; 978-1-107-16414-7 £89.99.



This 20-chapter book, edited by three archaeologists, results from a 2013 conference held in Paris. The stated focus of the conference, according to the preface (p. xxi), was “the myriad ways in which humans have shaped the movements of other species”. The back cover states the focus of the book a little differently, adding that it “explores human movements through time, the impacts of these movements on landscapes and other species, and the ways in which species have co-evolved and transformed each other as a result”. The resulting chapters are organised into four sections, the first focused on the Pleistocene, then on dispersal at various times across water, then on the Holocene and finally a fourth on more recent invasive species and diseases. As with all edited books, the individual authors go their own ways for the most part, with occasional cross-references added by the editors. I estimate that 9 or 10 of the 20 chapters are about ‘archaeology’ in the classic sense of the word; the rest emanate from other disciplines such as palaeontology, biogeography, ancient DNA, archaeobotany, animal behaviour and the genomics and molecular biology of diseases. Space constraints only permit examination of certain highlights, as seen from my perspective.

Pleistocene highlights include discussions of the impacts of the first out-of-Africa hominins on native faunas in Eurasia (Lewis, Dennell), followed by a useful general review from Petraglia of human impacts and extinctions during the Pleistocene, also in Eurasia. There follows an informative exploration by Drake and Blench of human and animal movements northward through the many Pleistocene occurrences of a ‘green Sahara’. The following section on ‘Species movements by coast and sea’ contains chapters by Erlandson on mangrove and kelp coastal ‘highways’, by Denham on ‘Breaking down barriers’ between Island Southeast

Asia and Sahul, and by Hunt and Lipo on the ^{14}C chronology of human settlement in Remote Oceania.

As Denham discusses a part of the world in which I do research, I need to interpose a brief comment. In my view, he dismisses far too casually the role of a movement of Austronesian-speaking Neolithic migrants through Taiwan and the Philippines in the settlement of much of Island Southeast Asia and Oceania, and pays no attention to current research in Southeast Asian archaeology (both Mainland and Island), skeletal biology, genomics or ancient DNA. His suggestions that pigs, rice, chickens and cord-marked and paddle-impressed pottery all moved from the Malay Peninsula into Island Southeast Asia, rather than from southern China through Taiwan and the Philippines (p. 169), are based on little more than guesswork. Indeed, a later paper by Larson notes problems with the suggestion that the ancestors of prehistoric Oceanic pigs all entered Island Southeast Asia via the Malay Peninsula. The reality was clearly more complex, partly because the ‘Pacific clade’ of pigs originated phylogenetically far to the north, beyond the Isthmus of Kra. It is simply not clear by which route it entered Island Southeast Asia.

The third section, on species movements in the Holocene, opens with a paper on the archaeology of the Arabian peninsula, followed by that of Larson on current ancient DNA research on animal movements, especially of pigs. Larson points out how rapid the mitochondrial ‘indigenization’ of domestic animals brought into new territories can be, as with Near Eastern pigs brought into Neolithic Europe, thus giving false impressions of indigenous domestication. The following paper in this section, by Zeder on the spread of domesticated mammals from the Fertile Crescent (sheep, goat, cattle, pig) into Europe and Africa, is one of the most data-rich in the book, covering not only origins, sites and dates, but also problems with the actual identification of mammal ‘domestication’ in bone assemblages.

Then follow Fuller and Lucas on the Neolithic spread of food crops through Eurasia, wherein they note continuous reduction in the diversity of the Fertile Crescent Neolithic plant food repertoire as it was carried ever farther west and east, towards Ireland

and Pakistan. This Neolithic ‘falling out’ of cereals and pulses as they were carried into less suitable environments for successful propagation resembles that for rice as it penetrated Island Southeast Asia, but differs from that of the much more resilient package of Fertile Crescent animals (as also noted by Zeder). Smith comes next on the spread of maize from its Mexican homeland into North America. The final paper in this section, by Boivin, examines historical-era translocations of plants and animals in Eurasia.

The final section in the book is on ethological and molecular topics. D’Ettorre looks at ants as social and invasive insects with their networks of cooperation. Hall then discusses cultural opinions about invasive alien species. Achtman offers salutary warnings about the unreliability of molecular clock dating methods, before turning to the migratory careers of *Helicobacter pylori* (including one leg with ancestral Polynesian migrants from Taiwan to New Zealand) and *Yersinia pestis* (plague). Webb analyses the malignant histories of the *vivax* and *falciparum* forms of malaria in pre-Neolithic Africa, concluding that the latter probably arose with relatively large and seasonally sedentary Palaeolithic hunter-gatherer populations. Green adds more on malaria, tuberculosis, leprosy, smallpox and plague. Finally, Tatem focuses on modern spreads of pathogens, pointing out what I suspect will forever be obvious: humans had a great deal to do with it.

Having weighed in a little above on the question of Austronesian dispersal in Island Southeast Asia, I should add here my other quibbles. Yes, I do have a few. The Australian emu is not extinct (p. 103), *Sus scrofa* is not native in Sulawesi (p. 247) and fig. 20.4 desperately needs a spellcheck. Zeder overlooks, no doubt intentionally, the northward and eastward movement of Fertile Crescent animals through the Caucasus and into Iran and South Asia. But someone, sometime, needs to add this side of the story as well. I suspect that Fuller and Lucas exaggerate the number of independent origins of cultivation (around 20, by their count, p. 205) by regarding many botanical homelands for specific crops as also independent human behavioural homelands of farming. Smith, as with Denham for Island Southeast Asia, minimises population movement as a vector for the spread of maize into the south-western USA, and dismisses any link with Uto-Aztecan languages. No archaeological or linguistic data are offered to support this view, and we are left to wonder if hunter-gatherer adoption of maize as a

minor addition to their diet can really explain those villages in Arizona (such as Las Capas) with networks of irrigation canals and underground store pits dating to more than 3000 years ago? Personally, I doubt it.

That was a long read. Was it all worth it? Yes, I think so, in the sense that a lot was new, at least to me. But, as with most edited books, this one is full of unblended ingredients. Specialists will find issues to investigate, but those who want a coherent A–Z history of the human species and its many co-travellers might need to search elsewhere.

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GORDON NOBLE. *Woodland in the Neolithic of Northern Europe: the forest as ancestor*. 2017. Cambridge & New York: Cambridge University Press; 978-1-107-15983-9 £75.



Woodland-dominated landscapes provided the settings in which the lives of many Northern European Early Neolithic communities were played out. The

scale of woodland, its composition, clearance and regeneration in some places have been the subject of palaeo-environmental studies; but within many synthetic archaeological accounts of the period, woodland features little—appearing more as a stage setting than an immersive environment of affordance, constraint and conceptual possibility. Gordon Noble’s book seeks to redress that marginalisation within interpretive accounts, offering thoughts and examples on how human-environment relations during the period might be recast. Much emphasis is placed on working this through in relation to the new conditions posed by the beginnings of the Neolithic. Temporally, the study covers the fourth and third millennia BC; geographically, Britain and Southern Scandinavia.

The aim of *Woodland in the Neolithic* is to “capture the lively qualities” (p. 20) of Neolithic environments, and the reciprocal relations that probably existed between people, woodland and its constituent elements (e.g. trees). Noble’s theoretical stance draws upon the anthropological critique of nature-culture opposition, and the mix of Actor

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