Copyrighted material - Not for distribution

Contents

Copyrighted material - Not for distribution

Copyrighted material - Not for distribution

Copyrighted material - Not for distribution

TABLE

Copyrighted material - Not for distribution

Abbreviations

aDNA: ancient DNA
AMH: anatomically modern humans
APSL: above present sea level
BPSL: below present sea level
eDNA: environmental DNA
HGF: hunter-gatherer-fishers
IRSL: infrared stimulated luminescence
ISEA: Island Southeast Asia
kya: thousand years ago
LDD: long-distance dispersal
LGM: Last Glacial Maximum
LP: Lower Palaeolithic
LU: lithostratigraphic unit
MIS: marine isotope stage
MP: Middle Palaeolithic
MVP: minimum viable population
mya: million years ago
OSL: optically stimulated luminescence
PPN: Pre-Pottery Neolithic
RSL: relative sea level
sedaDNA: sedimentary ancient DNA
TAQ: *terminus ante quem*
UP: Upper Palaeolithic
U-Th: uranium-thorium dating

Copyrighted material - Not for distribution

Preface

The twenty-first century has seen a series of remarkable archaeological finds on islands suggesting that humans and some of our hominin ancestors crossed water gaps at surprisingly early dates. The first of these—and by far the most famous—was the 2004 discovery of a well-preserved skeleton (LB 1) and remains of up to eight other, more fragmentarily preserved individuals at the limestone cave of Liang Bua, on the Southeast Asian island of Flores. Initially dated to between 38,000 and 18,000 years ago, their age was no great surprise; after all, evidence already existed of modern humans moving through Island Southeast Asia by at least 50,000 years ago. What was surprising was the skeletons' tiny cranial capacity and diminutive size, with adults standing only about one meter tall—hence LB 1's widely used nickname "the Hobbit."

Debate over interpretation broke out at once. Did LB 1's abnormal features represent a small-bodied modern human affected by some sort of severe growth disorder? Or did the apparent mixture of primitive, derived, and unique features signal a new species of hominin, *Homo floresiensis*, perhaps descended from far more ancient East Asian *Homo erectus* arrivals on Flores, with subsequent dwarfing over evolutionary time—a well-documented process in many other species stranded on islands that lacked continued contact with the parent population. The latter interpretation has won out, bolstered and contextualized by two further astonishing discoveries on the same island a few

https://doi.org/10.5876/9781646426911.c000

Copyrighted material - Not for distribution

years later. At Wolo Sege, stone tools were found in a secure stratigraphic deposit dating to slightly older than 1 million years ago, while levels dated to roughly 800,000 years ago at nearby Mata Menge yielded crudely flaked artifacts associated with a few skeletal remains of a small hominin arguably ancestral to the Hobbit (whose own date was corrected recently to between 100,000 and 60,000 years ago). Meanwhile, from far to the west in the Mediterranean came dramatic news in 2010: the claim that chipped-stone artifacts recovered at Plakias on Crete should be dated to at least 130,000 years ago, far older than the earliest materials then known from anywhere on the island (in the ca. 7000 BC levels at the base of the tell on which the Palace of Minos at Knossos was later erected). These scholars had little doubt that their finds signaled open-sea voyaging by Lower Palaeolithic people. But can finds such as these convincingly support the seemingly unlikely conclusion that early hominins such as *H. erectus* had boats?

These remarkable, even startling discoveries reported in the first decade of the twenty-first century naturally led to much scholarly discussion, dissension, even denial—both on the printed page and beyond it in social media. Yet, in hindsight, a beginning of a wider Palaeolithic Seafaring Debate could perhaps be said to have occurred in 2014, and then largely by serendipity. In that year, the *Journal of Mediterranean Archaeology* (*JMA*) (of which one of us [JFC] was at the time co-editor) received, within a twenty-four-hour period, two manuscripts on the evidence for, or the likelihood of, a Mediterranean insular early Palaeolithic; neither of the authors, Tom Leppard and Curtis Runnels, had been aware in advance of the other's writing. The fact that these papers, while utilizing and reflecting upon the self-same body of available evidence, could reach such dramatically divergent conclusions led *JMA*'s co-editors to decide that they offered fertile ground for a special Discussion and Debate section in the journal; accordingly, they invited commentary from several archaeologists with credentials in the early prehistory of the Mediterranean islands, followed by responses from the original authors. The issues raised in this vigorous exchange of views have rumbled on ever since, many still without agreement or resolution. The debate continued privately in an extended series of emails between Leppard and Runnels, leading eventually to a joint article in *Antiquity*, published in 2017, which sought to set out as clearly and succinctly as possible what matters could or could not be agreed upon, which assumptions were shared or not, and—most important—what larger matters are at stake concerning human dispersal and human evolution.

Meanwhile, the discoveries did not stop. Additional evidence of an ultra-early human presence on islands continued to be reported from both the

Copyrighted material - Not for distribution

Mediterranean and Island Southeast Asia—but not (significantly, as we argue later) from elsewhere in the world. In the former, for example, fresh fieldwork over the past decade or more in the western Greek Ionian island archipelago has indicated that humans—possibly including Neanderthals—were attempting successful very short over-water transits to islands by at least ca. 60,000 years ago and perhaps earlier. More recent yet are the excavations at Stelida on Naxos in the Cyclades, where a stratified sequence of levels with chipped-stone artifacts and absolute dates reaches back to around 230,000 years ago.

Just in the past several years, evidence from Island Southeast Asia has also expanded notably, and to islands other than Flores. In excavated levels at Talepu on Sulawesi, a stone tool assemblage closely comparable to those on Flores was published in 2016, with dates between 195,000 and 18,000 years ago, while on the same island the deepest strata at Leang Burung 2 were reported two years later as having stone tools of Middle Pleistocene date. On Luzon in the Philippines, a 2018 publication described the site at Kalinga in the Cagayan Valley, which revealed a butchered endemic rhinoceros carcass with directly associated stone tools, deposited around 700,000 years ago. Also on Luzon, Callao Cave, which as early as 2010 had produced a single human bone directly dated to 67,000 years ago, has now yielded additional skeletal elements attributed in a 2019 paper to at least three small individuals, assigned to yet another new hominin species, *Homo luzonensis*. It seems entirely likely that further such discoveries will continue to be made and reported with some regularity—a humbling reminder to us as authors of this book that what we have written is almost certainly only provisional.

This onrush of challenging new data convinced us that there was both the opportunity and the need for a detailed synthetic overview of all the available evidence. For three complementary reasons, it moreover seemed essential that such a discussion should take place in a globally *comparative* framework: first, to explain why we think relevant data are (and will remain) available from only two parts of the world; second, because Mediterranean and Island Southeast Asian archaeological scholarly and publication networks have little communication with each other; and, finally, because of the need to evaluate how these latest data affect the Palaeolithic Seafaring Debate, one way or another. As will become apparent from what follows, there are some important lines of argument that we think have been significantly overlooked. Perhaps chief among these is the overwhelming empirical evidence that thousands of species, including primates, have experienced involuntary over-water translocation, a fact we can scarcely ignore in trying to explain the arrival of hominins on islands in deep time. Another is the necessity of limiting acceptable evidence

Copyrighted material - Not for distribution

to situations where at least some of what we have dubbed the "Gold Standard" applies—and there are not many of them. We hope that what we have written here helps both focus and widen the ongoing Palaeolithic Seafaring Debate. That has been our goal in writing this book.