A Prehistory of the North: Human Settlement of the Higher Latitudes

John F. Hoffecker
New Brunswick, NJ: Rutgers University Press, 2004, 225 pp. (paperback), $29.95.
ISBN 0-8135-3469-0

Reviewed by: JULIEN RIEL-SALVATORE
Department of Anthropology, Arizona State University, PO Box 872402, Tempe, AZ 85287-2402, USA

A Prehistory of the North… is a well-written overview of the archaeological evidence for the gradual northward spread of humanity from Africa over an interval spanning the Pliocene to the present-day. The text is relatively jargon-free, which makes it easy to follow Hoffecker's arguments, and plentiful maps, illustrations and text boxes about climatic regimes at different times artfully illuminate his discussion. Following an enthusiastic foreword by B. Fagan and an introduction dealing with Vikings in North America, the book is divided into six chronologically ordered chapters and complemented by an extensive corpus of endnotes and a comprehensive bibliography. Throughout, Hoffecker weaves the evidence he presents into a sequence of arguments about why, how and when humans expanded northwards from their evolutionary birthplace. At 142 pages, the text necessarily glosses over some detail, but what emerges is nonetheless a coherent and stimulating summary of results often published in sources that, for various reasons, can be hard to access for many Western scholars. As such, the book constitutes a useful reference to put in context salient issues about human evolution that frequently are discussed mainly on the basis of the African and Western Eurasian evidence alone.

The first chapter begins with a discussion of the ephemeral Viking implantation in North America, the fleetingness of which is attributed to their inability to adapt their behavioral repertoire to deteriorating climatic conditions. This well-crafted narrative effectively sets the tone of the rest of the volume by highlighting from the get-go the importance of effective climate-behavior interactions to allow prolonged occupations of septentrional environments throughout the course of the human career. While environmental factors are clearly presented as a major factor dictating the (im)possibility of settling the northern latitudes (as notably detailed in his discussion of the oceanic effect which imposed a longitudinal as opposed to latitudinal expansion of the human ecological niche), Hoffecker rightly emphasizes behavioral versatility as the main force allowing for progressive northward expansion of humans during the Pleistocene. The chapter concludes with an outline of six stages of "the prehistory of the north," starting with phase 0 (the origins of humans in equatorial Africa) and ending with phase 5 (the continuous modern human settlement of the Arctic).

Chapter 2, "Out of Africa," paints in broad strokes an overview of early human evolution from the Miocene apes to early representatives of the genus *Homo*. Hoffecker summarizes fossil and genetic evidence to establish the background for hominoid evolution, and individuates phases of marked climatic changes as watersheds for the development of both certain ape populations and, especially, early hominids. He argues that bipedalism was the key adaptation that enabled these early hominids to occupy a broader range of environments and he underlines especially the importance of fully bipedal locomotion in allowing systematic tool use in hominids. This sets the stage for the development of technological innovations that would prove essential in the colonization of northerly climes by later human groups. Despite the advantages provided by Oldowan technology to its makers, notably in terms of securing access to animal protein, it apparently did not enable them to expand their latitudinal range relative to that of earlier hominids. In fact, it is only after about 1.8 mya that evidence for relatively continuous human settlement between 16º-41/42º N is documented archaeologically. While not truly cold environments, Hoffecker argues that the occupation of those latitudes nonetheless reflects significant modifications of the strategies employed by hominins to exploit their environments. This is in reflected by some significant changes in skeletal morphology (i.e., the *Homo erectus* form), as well as by technological and behavioral innovations that enabled the settlement of regions colder, more seasonal and less biologically-rich than tropical ecosystems previously settled by humans. These innovations include a greater reliance on meat in the hominin diet, the potential use of fire and the development of Acheulean technology (especially bifacial handaxes) and permitted a tremendous expansion of the human niche, as reflected in the settlement of the southern parts of Near East, Central Asia and East Asia after 1.8 mya.

In Chapter 3, "The First Europeans," Hoffecker narrows his discussion of the empirical evidence to Western Europe. He focuses specifically on the earliest settlement of this region – which is made more hospitable by the "oceanic effect" whereby masses of warm, moist air from the Atlantic temper the climate—a topic of considerable ongoing debate among prehistorians. Hoffecker claims that early evidence for human settlement in Europe is scarce and often of dubious credibility, and he emphasizes that only after ca. 500 kya do we find reliable evidence for it. This initial permanent settlement is associated with a suite of morphological and behavioral adaptations by *Homo heidelbergensis* to the distinctive environmental conditions of Middle Pleistocene Europe. Based on the evidence presented in this chapter, he suggests that the first settlement of southern Europe was the result of hominins shifting their range in response to climatic changes that would have expanded or contracted their ecological niches. An-

other important factor seems to have been the extinction of several species of large carnivores at roughly the same time, which would have made the procurement of meat considerably easier for hominins. Hoffecker concludes that hunting (rather than only scavenging) therefore likely was a significant facet of the behaviors that enabled hominins to settle this region, a fact he argues is suggestively reinforced by archaeologically-documented technological innovations such as bifaces and wooden spears.

The next chapter, "Cold Weather People," is an extensive discussion of morphological and behavioral characteristics of the Neanderthals. As hominins that developed a host of biological adaptations to cold climates (i.e., the "hyperpolar" morphological package), Neanderthals understandably occupy an important segment of the book, being referred to repeatedly in chapters 4, 5 and 6. While Hoffecker devotes quite a bit of space to the biological peculiarities of Neanderthals, he also emphasizes the range of technological achievements necessary for their continued occupation of Europe during some of the coldest episodes of the Late Pleistocene. Among those are composite tools, prepared core technology, wooden implements, and the unambiguous controlled use of fire. Given these innovations and the Neanderthals capacity for fully modern hunting of large game, a looming question throughout this chapter is exactly why they should have disappeared from the fossil record of Eurasia. Hoffecker suggests that a partial answer to this question lies in their more rudimentary technological repertoire relative to that of the subsequent modern human populations. Even more detrimental, according to him, would have been their limited capacity for language and symbolic behavior.

"Modern Humans in the North" is the fifth chapter. It details the arrival of modern humans in Eurasia and how they replaced the Neanderthal populations they encountered during their expansion out of Africa. It thus provides some tentative answers to the questions raised in the previous chapter. Specifically, Hoffecker argues that the use of more effective technology to manufacture tailored clothing (at least in Eastern Europe, where early examples of eyed needles are found), the capacity for complex language, and the capacity for intricate symbolic behavior gave modern humans a critical edge over the Neanderthals. Throughout this chapter, Hoffecker implies that this was an intrinsic component of the early Upper Paleolithic modern human behavioral package and one that enabled the rapid replacement of Neanderthals (which, as he emphasizes, occurred at a pace and scale unparalleled in any other documented case of population replacement). However, it is important to stress that much of the evidence for such complex behavior dates to considerably later than the earliest Upper Paleolithic and much of it is not as geographically widespread as implied throughout this chapter. For instance, given that eyed needles appear in Western Europe only after ca. 20 kya, one can well wonder whether the process of the "human revolution" was identical and fueled by the same technological and behavioral innovations throughout its range. Despite this, it is undeniable that after ca. 30 kya, anatomically and behaviorally modern humans occupy the vast majority of Eurasia and display a novel range of behaviors. Many of these, such as the rich Gravettian-age burials of the Russian Plain and Moravia, appear explicitly symbolic in nature. These do belie the development of abstract thought and complex thinking that would undoubtedly have provided critical advantages in terms of structuring relationships between humans and the natural world. Hoffecker's review of Gravettian technological and architectural innovations also hints at the fact that the makers of that industry likely were the first to develop technological solutions akin to of those used by some ethnographically documented groups of cold-adapted hunter-gatherers.

Chapter 6, "Into the Arctic," chronicles the final stages of the Pleistocene and the human settlement of the Arctic Circle. Presenting the regional evidence in a west-to-east fashion starting in Western Europe, he ends the chapter with an overview of the earliest evidence of human occupation of Beringia and the Americas ca. 15 kya. This chapter emphasizes how rich and diverse the Late Upper Paleolithic archaeological record was in both the Old and New Worlds as well as how regional cultural and technological differences became readily apparent as humans learned to cope and display astounding adaptability within the ever-expanding set of ecosystems they settled. Be it through the development of more efficient hunting technology (e.g., harpoons, bows and arrows, microliths), housing (e.g., mammoth bone houses, semi-subterranean houses) or transportation (e.g., skis, sledges), humans at that time were fully able to exploit boreal forest and tundra, especially after the Late Glacial Maximum, when northern Eurasia became deglaciated.

The last chapter, "People of the Circumpolar Zone," provides an overview of the recent occupants of the circumpolar regions, from the beginning of the Holocene to the present. Throughout this section of the book, Hoffecker emphasizes the importance of maritime adaptations for human implantation in those regions worldwide, a fact well illustrated by his discussion of the Scandinavian and Arctic North American records. Though the Siberian Neolithic is also briefly discussed, the bulk of this chapter is devoted to the evidence from the Paleo-Eskimo, Dorset, Thule, and recent Inuit groups, and to potential explanations of their often comparatively rapid succession in arctic climes. Again, technological and foraging innovations appear to have been of paramount importance in this process, allowing groups to rapidly replace one another as their technology became best suited to settings resulting from slight shifts in regional conditions. The book ends rather abruptly with a brief jump forward in time which discusses the impact of the Cold War on contemporary arctic settlement and an anecdotal account of Thule remains being unearthed as Cold-War-era radar facilities began to be torn down which underscores the fleetingness of our own occupation of the Arctic.

If there is one reservation I would bring up regarding

the book as a whole, it is that Hoffecker tends to present hotly debated issues (e.g., the earliest settlement of Europe, the disappearance of the Neanderthals) as largely resolved. While the need to summarize and gloss over some detail in as far-ranging a synthesis as this one is understandable, his arguments would not have been weakened in the least had he mentioned that many of those issues are not as cut and dried as he suggests they are. Given that the book appears directed at a broader readership than solely the paleoanthropological community, it may have been unavoidable to skip over some of the details of these debates. However, keeping this audience in mind, it is also necessary to highlight why debate exists on those issues, if only to highlight that debate is part and parcel of scientific research rather than an indication of any explanatory or conceptual failings.

Nevertheless, *A Prehistory of the North…*overall makes for compelling and enjoyable reading, combining as it does Hoffecker's detailed and up-to-date knowledge of the archaeological record (especially that of Eastern Europe) and his ability to distill from a staggering body of knowledge an accessible and very engaging narrative, albeit one clearly reflecting his own views on certain topics. While some may feel that his emphasis on "the North" is gimmicky, I would opine that it rather serves the important function of focusing his arguments around a common theme. It also provides an original intellectual anchor to ground his review, an element sadly missing from many archaeological syntheses that tend, even today, to remain intensely regional in scope. Not that Hoffecker's is unable or unwilling to work within the framework of the regional synthesis, an ability expertly demonstrated in his volume *Desolate Landscapes* (2002). Rather, his willingness to forgo the narrow limits of that form of archaeological synthesis allows him to develop a much richer framework within which to structure his ideas as well as to discuss themes of more fundamental anthropological import. Hoffecker's engaging prose make this stimulating book very enjoyable to read, and it delineates the level at which paleoanthropologists broadly defined should be writing for their peers and, perhaps most importantly, for the educated public. In the current intellectual and political climates, I can think of few things more important than to sensitize the public at large as to the significance of paleoanthropological research and of our evolutionary past. Hoffecker is thus to be praised for providing, with *A Prehistory of the North…*, a volume both empirically well-grounded and sure to appeal to multiple categories of readership.

REFERENCE

Hoffecker, J.F. 2002. *Desolate Landscapes: Ice Age Settlement in Eastern Europe*. New Brunswick, NJ: Rutgers University Press.