UC Berkeley

UC Berkeley Previously Published Works

Title

Homes for hunters?: Exploring the concept of home at hunter-gatherer sites in upper paleolithic Europe and epipaleolithic Southwest Asia

Permalink

https://escholarship.org/uc/item/9nt6f73n

Journal

Current Anthropology, 60(1)

ISSN

0011-3204

Authors

Maher, LA Conkey, M

Publication Date

2019-02-01

DOI

10.1086/701523

Peer reviewed

Homes for Hunters?

Exploring the Concept of Home at Hunter-Gatherer Sites in Upper Paleolithic Europe and Epipaleolithic Southwest Asia

by Lisa A. Maher and Margaret Conkey

In both Southwest Asia and Europe, only a handful of known Upper Paleolithic and Epipaleolithic sites attest to aggregation or gatherings of hunter-gatherer groups, sometimes including evidence of hut structures and highly structured use of space. Interpretation of these structures ranges greatly, from mere ephemeral shelters to places "built" into a landscape with meanings beyond refuge from the elements. One might argue that this ambiguity stems from a largely functional interpretation of shelters that is embodied in the very terminology we use to describe them in comparison to the homes of later farming communities: mobile hunter-gatherers build and occupy huts that can form campsites, whereas sedentary farmers occupy houses or homes that form communities. Here we examine some of the evidence for Upper Paleolithic and Epipaleolithic structures in Europe and Southwest Asia, offering insights into their complex "functions" and examining perceptions of space among hunter-gatherer communities. We do this through examination of two contemporary, yet geographically and culturally distinct, examples: Upper Paleolithic (especially Magdalenian) evidence in Western Europe and the Epipaleolithic record (especially Early and Middle phases) in Southwest Asia. A comparison of recent evidence for hut structures from these regions suggests several similarities in the nature of these structures, their association with activities related to hunter-gatherer aggregation, and their being "homes" imbued with quotidian and symbolic meaning.

All of this is my home
these fjords rivers lakes
the cold the sunlight the storms
The night and day of the fields
happiness and sorrow
sisters and brothers
All of this is my home
and I carry it in my heart (Valkeapää and Nordgren 1994)

In this paper, we examine some archaeological evidence for contemporary Epipaleolithic (EP) and Upper Paleolithic (UP) structures in Southwest Asia and Europe, offering insights into the complex and varied functions of huts or tent-like structures and examining our sometimes contrasting perceptions of space and place between hunter-gatherer and later farming communities. We do this through examination of two con-

Lisa A. Maher is an Associate Professor in the Department of Anthropology at the University of California at Berkeley (232 Kroeber Hall, Berkeley, California 94720-3710, USA [maher@berkeley.edu]). **Margaret W. Conkey** is the Class of 1960 Professor Emerita of Anthropology and Professor of the Graduate School at the University of California at Berkeley (Department of Anthropology #3710, Berkeley, California 94720-3710, USA [meg@berkeley.edu]). This paper was submitted 22 VI 17, accepted 22 X 17, and electronically published 8 II 19.

temporary, yet geographically and culturally distinct, examples: the EP record (especially Early and Middle phases) in Southwest Asia and the UP (especially Magdalenian) evidence in Western Europe. A comparison of recent evidence for huts or "dwelling" structures from these regions suggests several similarities in the nature of these features, their association with activities related to hunter-gatherer aggregation and social life, and, importantly, their treatment in relation to later Neolithic "homes." Most notably, we promote here the use of the term "home" in relation to these hunter-gatherer structures and "communities" to describe hunter-gatherer aggregation sites. Further, a hunter-gatherer community extends from a site to include other sites and places in between sites as entangled together in an interconnected hunter-gatherer social landscape. A sense of community across a landscape is inherent in the very way we describe hunter-gatherer lifeways in both regions. For example, an aggregation site implies a high degree of connectivity, both indirectly, in the existence of other socially connected locations or sites (perhaps as imagined communities) from which people came to congregate, and directly, with complex intracommunity connections as people gather at the ag-

In examining these case studies we aim to demonstrate two key points about hunter-gatherer societies in these regions, both of which relate to how we use the terms "huts," "houses," and "homes": (1) within sites, both "permanent" houses and

© 2019 by The Wenner-Gren Foundation for Anthropological Research. All rights reserved. 0011-3204/2019/6001-0005\$10.00. DOI: 10.1086/701523

"ephemeral" huts or dwelling structures can be made homes, as the center of entangled economic, social, and symbolically charged places; and (2) the spaces between sites-"the landscape"—can be considered spaces where the concept of dwelling, home, and home-making also apply. A home is not limited to a structure or a dwelling, per se, but includes also a landscape of attachment, connection, familiarity, and belongingness. In the following sections of this paper, we will explore how concepts of dwelling, house, and home are variably considered in the archaeology of these regions, explore why these issues are relevant to long-term narratives of prehistory here, and suggest ways to further consider these concepts for terminal Pleistocene Western Europe and Southwest Asia. "Huts," "tents," and "houses" are commonplace terms and have broadly understood meanings related to differences in their physical constituents; huts and tents are generally considered to be of a smaller scale and showing less spatial differentiation and permanence than houses (Finlayson and Warren 2010). Although one could attempt to disentangle the symbolic nature of home or dwelling from the physical structures of house and hut, one could equally argue that this entanglement of symbolically created places and material spaces is necessary to understand the recursive and interdependent nature of people-place-thing relationships (cf. Hodder 2012) and, thus, of meaning-making. Acknowledging this entanglement, and that homes can be made in all sorts of contexts, we define the home and home-making broadly as both the material house and its associated assemblages, as well as the less tangible locus for the culturally contingent expression of symbolic values and social relationships—often to family, however defined (Benjamin, Stea, and Arén 1995; Finlayson and Warren 2010; Ingold 2000; McFadyen 2008; Moore 2000; Watkins 1990).

In this endeavor we build upon the large body of ethnographic and archaeological literature from a variety of settings that explores a wide range of issues tied to hunter-gatherer perspectives on settlement, homes, and landscape, and apply these to time periods and places where such issues are reaching some primacy in hunter-gatherer research. In light of recent work that highlights an "origin" of agriculture and distinctions between mundane and symbolic life as artificial concepts (e.g., Asouti and Fuller 2013; Finlayson 2013; Goring-Morris and Belfer-Cohen 2002, 2003; Watkins 2013), we aim here to dispel any notion of a conceptual difference between the homes of farmers and hunter-gatherers. We present recent archaeological research at two sites (Peyre Blanque, France, and Kharaneh IV, Jordan) that contribute to growing archaeological literature on huntergatherer gathering localities, and how these new insights can be used in the future to better understand the broader context in which hunter-gatherers flourished.

Defining Prehistoric Hunter-Gatherer Lifeways: Becoming Neolithic?

Prehistoric hunter-gatherer research in Southwest Asia and Western Europe has traditionally focused on the complex and multifaceted transitions toward settled village farming life (Bellwood 2004; Fuller, Allaby, and Stevens 2010; Price and Bar-Yosef 2011; Rowley-Conwy 2011; Zeder 2011). Indeed, in the past both regions fell under the tyranny of the unending search for the earliest domesticates and the origins and spread of agriculture and sedentism, with a perspective emphasizing preconditions and intentionality "leading" to agriculture and a settled way of life (see Maher, Banning, and Chazan 2011). More recently, alternate approaches are gaining traction, ones that focus on understanding the world of hunter-gatherers as themselves complex and multifaceted peoples (Bailey and Spikins 2008; Finlayson 2013; Finlayson and Warren 2010; Goring-Morris and Belfer-Cohen 2010; Watkins 2010, 2013; Zubrow, Audouze, and Enloe 2010). In addition, attention is given to how hunter-gatherer groups in these two areas created, modified, and "lived in" their landscapes, filling them with meaning and challenging our long-held assumptions about how they perceived spaces and places, and the intersections between them (Asouti et al. 2015; Bailey and Spikins 2008; Bar-Yosef and Valla 2013; Dobres 2000; Gamble 2013; Goring-Morris and Belfer-Cohen 2010; Maher 2016; Olszewski and al-Nahar 2016; Vasil'ev, Soffer, and Kozłowski 2003).

Part of the apparent dichotomy in lifeways between huntergatherers and farmers stems from how we have traditionally defined each based primarily on opposing modes of mobility and subsistence. However, today, what it means to be a huntergatherer varies widely by disciplinary, spatial, and temporal perspectives (Guenther 2007; Kent 1996; Lee 2006). In very general terms, hunter-gatherers are considered to be societies who obtain most of their food from wild sources; however, issues of intensification, mobility, delayed and immediate return systems, the presence of social hierarchies, information and exchange networks (including with so-called agriculturalists), and the emergence of social complexity are inevitably wrapped up in contemporary definition(s) and are variously emphasized, as are the spectrums upon which each of these behaviors are individually expressed (e.g., Bettinger, Garvey, and Tushingham 2015; Kelly 2013; Sassaman 2004; Veth, Smith, and Hiscock 2008; Whallon, Lovis, and Hitchcock 2011; Yellen 1977b). In the prehistoric Southwest Asian and European records, archaeological definitions often focus around small populations of seasonally and highly mobile groups who relied on wild resources, but varied considerably in the expression of socalled social complexity that becomes commonplace in defining the subsequent Neolithic periods in each region. In Southwest Asia, for example, these features include large and dense sites,

1. The term "social complexity" is itself highly debated in archaeology. It is beyond the scope of this paper to address this long-standing debate; however, for the purposes of our discussion we define the term as broadly as possible to include both cultural complexity (diversity of material cultural expressions) and social complexity (heterarchy and hierarchy; Chapman 2003).

permanent architecture, flourishing art and ornamentation, cemeteries and elaborate burial practices, rich bone tool industries, economic intensification and technological diversification, a built environment, long-distance interaction networks, and clearly symbolic behaviors (Bar-Yosef and Valla 2013; Boyd 2006; Finlayson 2013; Maher, Richter, and Stock 2012). In Europe, many of these same features are evoked, along with an emphasis on the use of durable materials for architecture, more visible elaborations of architectured spaces, and more identifiable and varied evidence for attention to the human body (Bellwood 2004; Borić and Robb 2008; Thomas 1991*b*; Whittle 1996).

Nevertheless, despite acknowledgement of significant variability in hunter-gatherer lifeways both across space and time and that so-called Neolithic behaviors have precedence in earlier periods, there remains a distinct setting apart of the Neolithic and an attempt to explain how hunter-gatherers "became" farmers, rather than acknowledgement that some of these "Neolithic" behaviors emerged and existed in entirely hunter-gatherer worlds (Veth, Ward, and Ditchfield 2017). With a focus on "becoming Neolithic" (Neolithization) and trajectories toward agricultural village life, issues of intensification and complexity are often at the forefront of huntergatherer archaeologies here (Bar-Yosef and Valla 2013; Belfer-Cohen and Goring-Morris 2011; Finlayson 2013; Goring-Morris and Belfer-Cohen 2011; Richter and Maher 2013; Watkins 2013; Zeder 2011). In Europe, Renfrew, for example, insisted that the cultural fluorescence made manifest to us in the form of the UP arts is not part of a trajectory of cultural development, but rather, an unusual episode; true complexity and cultural accomplishments arrive only with the Neolithic when "sedentism is on its way" (Renfrew 1990:90). Other models take the position that with climatic changes at the end of the Ice Age, hunter-gatherer groups retreated into smaller networks and refugia before the arrival and spread of agriculturalists (Haak et al. 2010). However, recent work at sites in Southwest Asia like Ohalo II (Nadel et al. 2012; Ramsey et al. 2016; Snir et al. 2015), as well as at sites in Europe (Botigué et al. 2017; Conolly, Colledge, and Shennan 2008; Germonpré, Lázničková-Galetová, and Sablin 2011), is shedding new light on the early emergence of plant management strategies, animal domestication, and sedentary behaviors among hunter-gatherers. These are matched by exciting new breakthroughs in ancient DNA research that trace complicated genetic links between hunter-gatherer populations and later agricultural societies, showing long-term decreases in genetic differentiation between groups in the Levant and Zagros (Lazaridis et al. 2016) and, later, between Near Eastern and European farmers (Fernández et al. 2014; Gamble et al. 2005; Haak et al. 2010). They highlight the nuanced, dynamic, and socially entangled relationships between existing hunter-gatherer and "emergent" Neolithic groups (Bailey and Galanidou 2009; Bailey and Spikins 2008; Conneller et al. 2012; Mithen 2011), as well as push these notions further back into the Paleolithic to challenge some long-held perspectives that focus on the uniqueness of Paleolithic "art" at the expense of understanding a larger Paleolithic worldview (d'Errico et al. 2003; Nowell 2006).

Yet, despite this recent work in both regions, research that forefronts hunter-gatherer lifeways in their own right and does not impose intentionality on these groups toward "becoming Neolithic" still lags behind contemporary hunter-gatherer research elsewhere where hunter-gatherers were engaged in longterm landscape modification, such as in Australia (Littleton and Allen 2007; Lourandos 1997; Veth et al. 2008) and the West Coast of North America (Erlandson, Rick, and Peterson 2005; Lightfoot and Cuthrell 2015; O'Neill 2014), perhaps because the adoption of agriculture, as known in Southwest Asia and Europe, is not part of prehistoric narratives there (e.g., McDonald 2016; McDonald and Harper 2016; Veth et al. 2008). To address this apparent difference in how we study hunter-gatherers here versus there, we explore two interrelated concepts key to reshaping how we understand these prehistoric groups: hunter-gatherer home-making and the construction of socialized landscapes.

Aggregation sites, for example, in both Southwest Asia and Europe, with evidence for larger-than-usual numbers of people and clear organization of space with individual hut or tent structures, are rare but nonetheless present at several sites (Bosinski and Bosinski 2007; Conkey 1980; Garrard and Byrd 2013; Julien 2003; Julien and Karlin 2014; Maher, Richter, Macdonald, et al. 2012; Maher, Richter, and Stock 2012; Nadel and Werker 1999).2 Interpretation of the structures at such sites ranges greatly, from mere ephemeral shelters to places "built" into a landscape with meaning beyond refuge from the elements (Brooks 1995; Goring-Morris and Belfer-Cohen 2003, 2008; Olive and Pigeot 2006; Soffer 2003). One might argue that the ambiguity in meaning assigned to these structures stems from a largely functional interpretation of shelters that is embodied in the very terminology we use to describe them in comparison to the houses and homes of later farming communities: mobile hunter-gatherers build and occupy huts/tents that, if found in multiples, form campsites, whereas sedentary farmers (and foragers) build houses and homes that form communities (Byrd 2005; Goring-Morris and Belfer-Cohen 2008; Kuijt 2002; Verhoeven 2004; Watkins 1990, 2012). Indeed, the appearance of stone structures, as with the Natufian, is one (of many) criterion for hunter-gatherer complexity used to mark part of the process of "becoming Neolithic" (see Boyd 2006). Although

2. We realize the imprecision of the phrase "larger-than-usual numbers of people" to describe intensity of occupation; however, given that both population size and duration of occupation estimates are notoriously difficult to determine for sites of any time period, we feel it reasonable to describe hunter-gatherer sites that are (a) notably larger in size, (b) denser in material culture, (c) with stratigraphic evidence for repeated occupation, (d) with isotopic and other evidence for multiseasonal occupation, and (e) with radiocarbon dates indicating temporally lengthier occupations (>100s yrs) than other nearby contemporary sites (Conkey 1980; Maher 2016).

there is much to be said about the use of this language and the exclusionary emphasis placed on Neolithic homes and communities, much of this literature is focused on the origins of symbolism tied to agriculture (Bradley 2012; Cauvin 2000; Goring-Morris and Belfer-Cohen 2002; Hodder 1990; Jones 2005; Renfrew 2009; Tresset and Vigne 2007; Verhoeven 2002; Whittle 1996). Rather than revisit the continued debates around the nature of the transition to agriculture in each region, instead we focus here on the treatment of entirely hunter-gatherer places occupied by peoples without intent to "become" Neolithic.

Space and Place in Hunter-Gatherer Archaeology

The literature on spaces and places in archaeology over the past several decades has been voluminous (e.g., Ashmore 2002; Ashmore and Knapp 1999; Chapman 1988; David and Thomas 2008; Ucko and Layton 2003 [1999]). There is much thoughtful insight on the reconstruction of the organization of space and the meaningfulness of places (Tilley 1994), albeit less common are studies that integrate concepts of space and place in an attempt to mesh together the experiential with the tangible concepts of a landscape (Bradley 2000). Recent approaches focus on place-making within both contemporary and prehistoric hunter-gatherer landscapes (Ingold 1993, 2000; Langley 2013; Rockman 2013; Whitridge 2004), especially from a comparative perspective in Australia (e.g., Lourandos 1997).

Following from Whitridge (2004), we eschew the distinctions made between place and space in archaeological reconstructions of past people's interactions with what we now call sites and landscapes. Although we as archaeologists often make a distinction between space as an objective, universal, and quantifiable location and place as a socially constructed, experiential, and qualitative notion (e.g., Bender 1999, 2001; Knapp and Ashmore 1999; Tilley 1994), when discussing prehistoric huntergatherers we prefer the encompassing concept of place-making. Thus, "human spatialities are everywhere complex and heterogeneous, at each historical moment articulating embodied actors with a simultaneously symbolic, social, and biophysical world. . . . The investment of particular locations with meaning (place-making) is a ubiquitous social and cognitive process" (Whitridge 2004:214). Given the deep time frame for the hunter-gatherer groups of Southwest Asia and Europe under discussion here and the dramatic changes in local environments over the last 20,000 years, space is inevitably constructed through both practical aspects of fieldwork and available data sets. However, recent work on paleolandscapes and prehistoric movements in both regions (and elsewhere) suggests there are ways to use (or develop) these spatial constructs to get at past place-making (e.g., Collar et al. 2015; Coward and Gamble 2008; Coward and Knappett 2013; Gamble 1993, 1996, 1998; Rockman 2013). Place, therefore, referring "to a qualitative, historically emergent, experientially grounded mode of inhabiting or dwelling in the world that invests particular locations with personal and collective significance" (Whitridge 2004:

215), is a more holistic and, arguably, realistic way to conceive of hunter-gatherer experiences, past and present.

Concepts of Dwelling, House, and Home

Our approach to understanding hunter-gatherer dwellings and the construction of homes relies on some familiar archaeological concepts; that is, that everyday activities (behaviors) and how people construct and interact with the world around them (worldview) are made manifest as patterns in the tangible material record (objects, structures, landscapes; Hendon 2000, 2009; Madella et al. 2013; Matthews 2012; Parker and Foster 2012; Wilk and Rathje 1982). In this sense, our approach to hunter-gatherer homes as constructed through social relations within dwellings or structures and with and within landscapes can be inferred by the way people lived in places and interacted with material culture. The focus is on people, not strictly houses, and social relationships and dwelling are understood to operate on multiple scales. Here, kin and coresidence groups are separate constructs (Hendon 2004), gender is central to understanding social dynamics (Moore 1986), and the use of space as explored through macro- and microscale analyses of the archaeological record (Matthews 2012) allows us to reconstruct these behaviors.

We focus on social relations and how they are created and maintained through the "interaction between structure and agency, larger social forms, and the individual" (Hendon 2004:272). The house is "the spatial setting in which people live and carry out their day-to-day practices" (272) and within which social relations occur, thus it yields important material evidence of social relationships regardless of its size, shape, and durability/permanence. Indeed, this approach emphasizes that "houses and the people who live in them are in a 'mutually constituting' relationship" (Hendon 2004:272). Recognizing that a house is more than an analytical unit, but nonetheless is traced as a set of material cultural residues, we ask here some basic questions that prompted our present discussion: What do the terms "hut," "tent," "house," "home," and "dwelling" mean to an archaeologist? How do they differ, if at all? How are they used to reconstruct hunter-gatherer (vs. other) lifeways? How can dwelling be identified in the archaeological record of prehistoric hunter-gatherers? Or, perhaps one question will do: Do hunter-gatherers really do things differently than farmers?

Homey Huts and Temporary Tents versus a "House and Home"

The terms "hut" and "house" appear as distinct and mutually exclusive in literature from both Southwest Asia and Europe. A hut is a shelter built as temporary protection from the elements; it is usually ephemeral and can even be flimsy in construction (see Goring-Morris and Belfer-Cohen 2008 for a thorough discussion of huts and houses). Mobile hunter-

gatherers build huts at campsites, which can sometimes be clustered to form base camps. In contrast, sedentary groups build houses; they are permanent, usually stone-built (although exceptions include Northwest Coast village houses; Ames and Maschner 1999) and more solid constructions that, when appearing together, form villages (Watkins 2010). These houses individually or collectively form households, as kin and/or economic units, modified from the original house society model of Lévi-Strauss (1982).

To our knowledge, the related idea of home is almost always used in combination, or synonymous with, the term "house," as a place of dwelling imbued with economic, social, and symbolic meaning, and often associated with a hearth—a claim we discuss below. In Southwest Asia, for example, the term "hut" is used exclusively for hunter-gatherers and house (and home) for more settled farmers (Watkins 1990). Traditional models suggest the construction of houses and villages are linked to a significant symbolic shift with the structuring of the (built) environment and, thus, the construction of a society (Cauvin 2000; Verhoeven 2004; Watkins 2012; Wilson 1991). In reference to changes in architecture throughout the EP, Goring-Morris and Belfer-Cohen (2002) suggest that "there is clear evidence that building activities reflect the differentiation between temporary, mobile aspects of human behavior and more permanent, stable facets of societies" (65). Although Goring-Morris and Belfer-Cohen (2002, 2008) recognize the complicated and "messy" domestic and symbolic aspects of even hut structures, a regional focus, however, remains on the more visible changes starting with Natufian stone architecture, assumed to be indicative of more permanent (see Boyd 2006) "dwelling" in the EP. In this view, huts or tents are different and temporary, found in the camps of mobile huntergatherers, and not part of a built environment or, implicitly, the creation of complex social structures. Although we do not argue with the evidence for significant differences in the type and style of architectural features over the EP and Early Neolithic, we disagree that this is in any way a reflection of an impermanence or instability in hunter-gatherer lifeways. We would argue that not only does the presence of hut structures in clearly organized space indicate a home, but that sedentism and permanent architecture are not the defining features of dwelling; dwelling in a landscape (or any parts of one) is just as much home-making.

In *The Domestication of Europe*, Hodder (1990) emphasizes the house or *domus* as critical to the tangible and symbolic aspects of the mutual domestication of plants, animals, land-scapes, and people. In the transition to the Early Neolithic (Pre-Pottery Neolithic A) in Southwest Asia, the house was the mobilizer behind the transformation of nature into culture and, thus, new worlds emerged through the construction of new houses (Belfer-Cohen and Goring-Morris 2011; Verhoeven 2004; Watkins 2012). The term "home" is used in reference to the establishment of a permanent structure in a permanent Neolithic village (Goring-Morris and Belfer-Cohen 2008; Watkins

1990) or, more liberally, in the establishment of a "homeland" during the Natufian (Belfer-Cohen and Bar-Yosef 2000; Grosman 2003). This homeland, located in the western portion of the southern Levant, represents the area where Early Natufian semisedentary base camps with stone architecture are first found. Put simply, pre-Natufian hunter-gatherers in Southwest Asia did not seem to have homes or, at least, not in the same symbolic or home-building way as these later groups (for discussion of repeatedly used structures/places, see Belfer-Cohen and Goring-Morris 2007; Goring-Morris and Belfer-Cohen 2003; Nadel 2006).

Despite a review of the literature of many of the structures, huts, or even "longhouses" identified for UP Europe (Gaudzinski-Windheuser 2011; Gaussen 1980; Leroi-Gourhan and Brézillon 1973; Sackett 1999), the term "home: is almost completely absent save for an aside by Movius (1977) in reference to a "house-and-home" structure at the Abri Pataud (Dordogne, France). Interestingly, Tomášková (1991) once pointed out how the use of the term "home" in the earliest (1950s) and more popular discussions of the site of Dolní Věstonice (Czech Republic) was specifically meant to create a sense of the value and cultural significance of the site to contemporary society during then-developing notions of our relatedness to ancient peoples. The French term foyer implies a hearth-and-home scenario that highlights the close relationships between household, home, and hearth (e.g., Zubrow et al. 2010). Yet, Tringham (1995) notes that the in-depth archaeological analysis of these hearths is almost always one of the household, not of home and, in this particular case (Magdalenian period), of "domesticity" as defined by Zubrow et al. (2010); that is, of daily tasks, such as butchering and toolmaking among a group of actors. Indeed, house, household, family, and home are intentionally blurred. Questions are raised about the nature of hearths as multifunctional and with potential to be social gathering places, but it is a concept developed through the ambiguous lens of domesticity (Sterling 2015) and household. Other publications on archaeological foyers (e.g., Olive and Taborin 1989) focus primarily on them as archaeological features, not as manifestations of homes. Whereas other illuminating work uses hearths as the focal point for methodological analyses of intrasite spatial patterns (Leonova 2003; Stapert 2003), "home" generally does not feature in description or interpretation.

Examining the variety of ways that people conceive of, build, dwell in, maintain, and even destroy the "home," Moore (2012:3–5) suggests that "humans build and occupy a diversity of dwellings, those constructions require assessing multitude factors, and dwellings are a pivotal place around which humans construct cultural meanings . . . the specific constellations of dimensions and meanings encoded by dwellings [are] extraordinarily variable and complex." For example, Moore (2012:37) uses his work in Baja, California, to suggest that the way huntergatherer groups moved through a landscape created familiar places and could also result in the creation of home. In this re-

spect, we agree with Moore's (2012:21) take on "the home" as the combination of something that bears archaeological evidence of human intention/intervention where, for example, people had to carry things to dwellings to build, maintain, and furnish them, and as places where a multitude of activities and behaviors were performed. This broad definition of home allows one to conceive of a physical place—perhaps, but not necessarily, bounded by features like huts or tents or houses as home; places that could range from a repeatedly occupied aggregation site to a larger landscape that includes several sites and the places and pathways in between them. Homes are locations imbued with meanings and attachments often, but not always, associated with landscape modifications that can range from discrete stone or brush arrangements (Maher 2016) to broader activity areas or "taskscapes" (Ingold 1993) to rock art (McDonald and Veth 2012) or other more obtrusive built environments (Banning 2010; Bird et al., forthcoming; Watkins

Despite attempts to clearly address these terms, definitions that would result in something on the ground and detectable to the archaeologist remain vague and inconsistent. In Southwest Asia and Europe the study of hunter-gatherer homes is nascent, and the ways we would get at these archaeologically are as yet underexplored, leading to several still-to-be-addressed questions: Can a hunter-gatherer-forager have a home, or is it something defined by permanence and tied to a sedentary lifestyle? Can a home be both mobile and sedentary? Could it include, for example, the "portable households" of US Plains groups (Wilson 1995) or some other "lightweight residential construction" (Leonova 2003)? Could not the often-used term "base camp" refer to a home (e.g., Isaac 1976; Sept 2011)? Have we been duped by the differences between so-called "sedentarist" and "nomadic" metaphysics (after Cresswell 2006) whereby located-ness is privileged over the un-rootedness of mobility, with its purported lack of attachment to place? These questions essentialize the ongoing debate about whether there is any qualitative difference between a permanent, semipermanent, or temporary structure. We acknowledge that there may be differences in the processes of home-making between permanent and mobile structures and place-making, in general. However, distinguishing between permanent, semipermanent, and mobile houses is notoriously difficult in prehistory, and often simply based on the presence of what we consider "durable" constructions as markers of effort and time invested in building a house (e.g., Boyd 2006), ignoring issues of preservation and site-formation processes, such that both "costly" and "simple," but easily degraded, houses remain invisible (Boivin 2000; Friesem et al. 2014; Matthews 2012). Moreover, ethnographic studies show us that differences in the construction of home are not based on its intended permanence, but in the qualitative, culturally constituted nature of symbolic connections between people and places; the permanence of a structure can be one of degree, and can change at different points in time (Lourandos 1997).

Reconstructing Home as Daily Life: Practice Theory

As we explore the framing of some hunter-gatherer structures as homes, we draw on certain tenets of practice theory (Bourdieu 1977; Dobres and Hoffman 1992; Giddens 1984; Ortner 2006) that prompt us to recognize explicitly the active agency of hunter-gatherers in daily practices that engender the creation, maintenance, and transformations of space, technologies, and social relations within sites and across landscapes through paths, tracks, trails, and other movements. It is through daily practices that within-site homes are created, but as these daily activities frequently include off-site places, homes can also be found within larger landscapes made manifest physically, cognitively, and emotionally in various environmental and material culture forms and relationships. It is interesting to us that although hunter-gatherer archaeologists often take up concepts of hunter-gatherer ranges and territories (Bettinger et al. 2015; Chabot-Hanowell and Smith 2012; Kelly 2013), this use of space is less readily framed in terms of landscapes of attachment, belonging, or identity (Basso 1996; Brody 1982). In doing so here, we suggest the same approach currently taken to reconstructing daily practices through understanding the organization of space and repeated patterns of behavior on-site where, through the exploration of connections between sites and landscape constituents, the creation of a built environment can be extended to reconstruct the regular movements (and creation of places) by people on a larger landscape.

Although focused on the architectural record of the European Neolithic, Tringham (1995) highlights several critical points regarding house and home in prehistory that relate directly to one of our main points here—that "home" is, and even should be, an ambiguous term that means much more than just the location of a house. It comprises "multiple interpretations of the archaeological record and multiple narratives that can be reconstructed" (Tringham 1995:81). Of particular relevance here, she argues that by carefully examining the multiscaled remains of houses we can get at more than simply use of space, but also the construction of place and what makes a home (Tringham 1995). Thus, the house-burning and subsequent rebuilding that appears to characterize some of the Neolithic structures at Opovo (Serbia) is more than a marking of the hypothesized termination of a household cycle (Tringham 2000), but the ongoing redefinition and re-creation of home. Taken further, even the activities performed in structures not thought to be "homes," such as storage facilities, can still document evidence of space- and place-making (Kent 1995). One might even argue that storage facilities, caches, and other types of resource-invested loci (e.g., so-called provisioning places) are as likely to be imbued with meaning and connotations of attachment and a part of the experience of "home."

Concerned here with the archaeologically visible practices of home-making, and recognizing it can occur at multiple scales from the individual structure and its organization to a community within a site and a landscape (Chesson 2003; Tringham

1995), methodologically, we advocate for careful examination of the everyday and repeated practices attainable by microscale excavation and analyses of the spaces within and between structures, paired with multiscale exploration of site organization and broader local landscapes. In this view, homes can be seen as both places—home places—and containers at the same time (Chesson 2003). Home as the house and home in a landscape are places to store and structure material things, memories, and relationships. Archaeologists generally recognize the building of a house or a home as a phenomenon involving technological, social, economic, and ideological/symbolic activities and interactions and, thus, it has meaning in all these realms (Boivin 2000; Tringham 1995). A home has both a material presence and is a social unit of space; it is much more than a "shelter." We can explore these meanings through microscale analyses of daily activities and their rhythmicity that relate to the enmeshed quotidian and symbolic lives of those who build, rebuild, maintain, use, and abandon or destroy these structures. Taking the very materiality of homes as a starting point, we can focus on the archaeological residues/materials we excavate as ways to explore patterns in the presence of objects and associations between objects. These are the materials through which we explore less tangible concepts such as "memory work" and social relationships (Mills and Walker 2008; Van Dyke and Alcock

Through examining the domestic, symbolic, ideological, technological evidence for activities associated with lived-in spaces in Southwest Asia and Europe, we question whether, despite a lack of so-called permanence (however ill-defined that term is), a hunter-gatherer hut is any less a home than a Neolithic house. Beyond functional interpretations where people build structures, enhance and rejuvenate them, and destroy them or allow them to disintegrate, these actions serve to create a social memory through architecture, structure daily activities, and create a built environment imbued with meaning and serving as the context for social interactions (Banning 2010; Giddens 1984; Gieryn 2002; Hillier and Hanson 1984). Rather than a "gimme shelter" functional approach to huts, we argue that it is imperative to allow hunter-gatherers homes as both physical spaces and social places embodied with a certain permanence, even if "only" in memory and myth.

Approaches to Hunter-Gatherer Landscapes: Aggregation, Mobility, and Interaction

Extending beyond architecture, we ask how people might create social memories in the larger landscape (e.g., Bradley 2000) and how an archaeologist would identify it as such. Perhaps part of the reason we don't as easily perceive landscapes as homes is because of the difficulty of reconstructing a prehistoric landscape and its associated human activities (Anschuetz, Wilshusen, and Schieck 2001; Ashmore 2002; Ashmore and Knapp 1999; Bender 2001; Bradley 2000; David and Thomas 2008; Feinman 2015; Hirsch and O'Hanlon 1995; Llobera

2001; Tilley 1994; Ucko and Layton 2003 [1999]). Although these landscape archaeology approaches are particularly useful in elucidating the importance of physical and experiential landscape considerations, we emphasize here one aspect recently emerged out of these foundational works—the inseparability between a landscape and the people dwelling within it

The Inseparability of People and Places

Defining a landscape, like defining a home, can be a tricky task, as it can range from the physical aspects of a location to the experience of "being-in-the-world" (David and Thomas 2008); indeed, several have made a case for the very existence of landscape through a human experiential lens (Ingold 1993; Whitridge 2004). To examine how prehistoric people created a social landscape and how we might identify it as such, we need to see on-site and off-site spaces as a continuum that enmesh physical landscape aspects (trees, caves, streams, rocks, etc.) with economic and technological significance and include social/cosmological interactions with these spaces (Ingold 1993). Contemporary landscape archaeology sees humans as inextricably linked to nature, and most likely not differentiated from what Western epistemologies mean by nature (versus culture; Descola 2013). Taking cues from historical ecology and human eco-dynamics (Balée 2006; Cresswell 2006; Crumley 1994; Kirch 2007; McGlade 1995), we acknowledge that humans both adapt to changes in their environment and modify the environment through actions resulting in temporary and permanent changes; throughout prehistory, humans have had a transformative role in landscape creation. The everyday tasks involved in dwelling in a place over an extended time accumulate in the physical landscape (Ingold 1993; Kolen 1999) in ways detectable by the archaeologist. Here, spatial reconstructions of the organization of activities and examining microscale traces of these activities through micromorphology have proven particularly useful (e.g., Boivin 2000; Friesem 2016; Goodman-Elgar 2008; Matthews 2012; Matthews et al. 1997; Shahack-Gross et al. 2005; Shillito et al. 2011). The activities of building, food processing, knapping, hunting, cooking, eating, and so forth are informed by economic, technological, political, social, and ideological factors such that their meaning is embedded in the landscape within which an activity was performed (Barton et al. 2004; Ingold 2000; Shahack-Gross 2017), providing a life history of place (Ashmore 2002). By examining the organization of on-site and off-site activities, we can explore human decision making and its consequences within a socioecological landscape. Following this approach, we focus on the nuanced, complex, symbolic, socially interconnected, and socially embedded landscapes of hunter-gatherer groups, much like Langley's "storied landscapes" (Langley 2013). In thinking about the landscape-as-home dimension, we find the concept of dwelling to be a useful complement to the notion of home.

Dwelling in a Landscape: Homelands and Heartlands

"Dwelling" is a term with multiple interrelated meanings, some of which are clearly specific to a structure (a home), others more open-ended in meaning and related to a broader experience of being-in-the-world or meaning-making at the landscape scale. Ingold defines dwelling in this latter context, both directly as integral to human livelihood and indirectly through movement as a means of becoming knowledgeable in our everyday practices of negotiating the world (Ingold 1995; Ingold and Vergunst 2008). Archaeological literature often uses the term "dwelling," but with a great deal of ambiguity and vagueness, perhaps intentionally, given the difficulties of identifying it in the distant prehistoric past (Barrett 1999; David and Thomas 2008; Hirsch and O'Hanlon 1995; Hutson 2009; Ingold 1993; Knapp and Ashmore 1999; Lévi-Strauss 1966; Wilson 1991). Some researchers have even suggested that there are, archaeologically, "latent dwelling" places where there is not the usual kind of expected evidence but a kind of open space adjacent to activity debris that itself may represent a once-present structure (e.g., Gelhausen, Kegler, and Wenzel 2004). One of the few to tackle this term in relation to deep prehistory, Kolen considers "dwelling" as

the ordering and differentiation of space by a recognition of places, including a home, and the use of those places according to specific temporal rhythms and schemes . . . it is a focus of daily activities and a centre for the organization of tasks to be performed elsewhere. (Kolen 1999:139)

For both Kolen (1999) and Ingold (1993), a key aspect of dwelling is organized space that is imbued with social and symbolic meanings and that we should expect traces of these activities; thus, it is something that prehistorians could detect and reconstruct at the intrasite scale (Haakanson and Jordan 2011; Leonova 2003) as well as at the intersite scale of land-scape or across the landscape so that we all dwell in landscapes (Fano et al. 2015; Garcia-Moreno 2013). Thus, a general consensus emerges where

dwelling in human societies is embedded in a mythical ordering of space—a "mythical geography." Within such a geography, the settlement and house are taken up in a network of bestowed places, sacred sites, and mythical paths and tracks. . . . Although in highly variable ways, the mythical ordering of space through dwelling is characteristic of almost all (anatomically) modern humans, both sedentary and nomadic, non-western and western, and both present-day and [pre]historic. (Kolen 1999:140–141)

Similarly, we argue that dwelling can be a specific locale (the hut or house or other identifiable structured or "built" space) and people can dwell in a landscape that extends beyond one site. Although GIS and other related tools allow one to "model" movements in relation to actual landscape features, these approaches to movement are not always successful in translating into real, variable human behaviors that involve movements that are not always obvious or "economical" and

that include sites and off-site locales in nonhierarchical terms (e.g., Llobera 2001). Movements in the landscape reflect complicated social relationships between people and places; thus, we agree with Kolen (1999), Gamble (1993, 1994), Ingold (1995, 2000), and Tilley (1994) that prehistoric hunter-gatherers dwelt in a landscape on many levels.

In EP Southwest Asia, the term "homeland" (Bar-Yosef and Belfer-Cohen 1989b; Belfer-Cohen and Bar-Yosef 2000; Grosman 2003) is used to describe the geographic area showing the highest density of large and rich Early Natufian base camps as a likely point of origin for early sedentism and social complexity. For the European UP, one finds terms such as "heartland," referring primarily to the concentration of particular phenomena (e.g., Paleolithic art) or to a density of settlements (e.g., Dordogne region of France). Such classifications of homelands and heartlands are certainly the result of discovery strategies and histories, concentrations of archaeological work, preservation of sites, and research preferences, in addition to whatever "real" settlement densities may have been in the past. Furthermore, as some archaeologists often complain, despite excellent and well-documented research outside these so-called homelands/heartlands, evidence and accounts of prehistoric lifeways in such areas are often marginalized or just not referred to at all (cf. Jordan 2011; Richter 2014; Soffer 1987). Perhaps the concept of dwelling could have use in these two regions to help move beyond the simplified dichotomy set up by having a central/core area (the home or hearth) and a peripheral/marginal surrounding area (e.g., a catchment or provisioning zone).

Aggregation, Sedentism, and Mobility

It is predictably difficult to extricate one aspect of huntergatherer practice from others, as they are entangled in what we know as a wide diversity of lifeways. We expect to, and do, see variations in mobility strategies along a continuum over time and space, rather than the simple progressive trajectory of highly mobile to sedentary over time. There are many well-known issues with the term "sedentism" itself (e.g., Kelly 1992, 2013) that highlight the fact that although some sites are certainly more obtrusive and occupied for longer durations than other sites, we cannot be certain they were occupied "permanently" (see also Boyd 2006). Aggregation sites complicate these notions of a transition over time from simple, mobile groups to complex, sedentary groups, and where sedentism is a necessary step toward "Neolithization" (e.g., Belfer-Cohen and Goring-Morris 2011; Conkey 1980; Goring-Morris and Belfer-Cohen 2010, 2011; McDonald and Veth 2012; Weissbrod et al. 2017).

Recent literature on hunter-gatherer landscape use and place-making (Gamble 1996, 2013; Littleton and Allen 2007; Lourandos 1997; Veth et al. 2008) shows that patterns of hunter-gatherer movements are much more nuanced than sedentary versus mobile, and that hunter-gatherer behaviors cannot be characterized only within individual, isolated spots on a landscape; instead the landscape is filled with places, path-

ways, and localities that hold a wide variety of meanings and import. In this light, aggregation sites may stand out as one of many places of dwelling and interaction used simultaneously and separately by multiple groups and persisting on the landscape, perhaps for generations. The site, then, is a hub of interaction or node for the intersecting movements of groups for a variety of purposes-many of which can be traced as social networks reconstructed through movement of material objects, knowledge, or practices. These movements through a node create a site and help us understand use of less-easy-to-detect places in between (Borck et al. 2015; Collar et al. 2015; Gjesfjeld 2015; Knappett 2011; Latour 2005; Mills et al. 2013). Although aggregation sites have been little explored in Southwest Asia and Europe, their potential to mark increases in social interaction and symbolic practices have been noted (Belfer-Cohen and Bar-Yosef 2000; Conkey 1980; Goring-Morris and Belfer-Cohen 2002). Sites like Kharaneh IV and Peyre Blanque help us to reconceptualize variations in the nature, duration, and intensity of occupation at hunter-gatherer sites, as well as how we contextualize individual sites within a larger social landscape to reconstruct both intergroup and human-landscape interactions.

We use here two sites—dots on maps—to advocate for a broader approach to landscape that "connects the dots" precisely because these two sites do show clear connections to their surrounding landscape, as well as to other sites both near and far. Acknowledging and recognizing the important sitebased research in both regions that necessarily continues today, it is now possible—exactly because of this research—to attempt a broader understanding of landscape. There are several notable examples of hunter-gatherer place-making and even "built landscapes" elsewhere that attest to the value of such an approach, such as recent indigenous landscape management studies of California and Northwest Coast groups (Anderson 2005; Grier 2017; Lightfoot et al. 2013; Lightfoot and Cuthrell 2015; Trant et al. 2016) and Australian Aboriginal aggregation and place-making through rock art and fire (Bird et al. 2008; Head 1994; McDonald and Veth 2012; Veth et al. 2017). Thus, we can ask several questions regarding linkages between hunter-gatherer aggregation sites and landscapes to connect the dots, including: How do hunter-gatherer aggregation sites fit into (or, more likely, complicate) the dichotomous picture of mobile hunter-gatherer camps and settled farming villages? How does this influence our reconstructions of human-environment interactions for these societies, where aggregation sites have a very obtrusive presence in the landscape? How can we reconstruct landscape use and social interactions at the local or regional level if we focus on activities within sites? In other words, how can we incorporate what happens at known sites with the spaces and places in between?

Hunter-Gatherer Homes in Southwest Asia and Western Europe

An artificial divide—a cultural gulf—between Paleolithic and Neolithic societies is often emphasized over the continuity and

blurred boundaries now evident in the material culture record of these regions (see also Belfer-Cohen and Goring-Morris 2011; Finlayson and Warren 2010; Maher, Richter, and Stock 2012). Literature abounds with terms that acknowledge, but implicitly downplay, the nuanced, complex, symbolic, and socially interconnected and constructed landscapes of huntergatherer groups. Instead, we more commonly see huntergatherers as living in huts found at campsites (although see Yellen 1977b for the hut as symbolic and marking private residential space) within demarcated and socially bounded territories. These hunter-gatherer localities are generally small and of low archaeological visibility (i.e., lithic scatters). They occur within landscapes composed of many small and isolated sites disconnected from each other and with large empty spaces in between, or connected primarily by economic (least cost) considerations of movement.

In contrast, later Neolithic groups built houses and homes aggregated into villages and communities within larger social interaction spheres (Bar-Yosef and Belfer-Cohen 1989a). Emphasis is placed on their permanence, and thus they are imbued with symbolic meaning within a social landscape—despite the fact that these communities, or at least part of them, must have been mobile at least some of the time to participate in these long-distance trade and interaction networks, such as the Pre-Pottery Neolithic B (PPNB) "interaction sphere" connecting sites throughout the Levant on the basis of shared material practices and material culture exchange (see also Asouti 2006). Yet, in both Southwest Asia and Europe, aggregation, prolonged (or, at least, repeated) occupation, and long-distance trade and interaction are well-documented for many millennia before anyone ever planted their first field of wheat or barley, or built a stone house, simultaneously tying hunter-gathers to a place and also involving them in a connected landscape for access to material items and, arguably more important, dynamic social relations (Aubry et al. 2003; Conkey 1980; Gamble 2013; Maher 2016; Olszewski and al-Nahar 2016).

Langley (2013) provocatively suggests that one key feature defining humans was the creation of, references to, and engagements with "storied landscapes." She notes a distinction between social landscapes (the connections between huntergatherer groups over space) and landscape socialization (the interaction between an individual or group and the natural environment, incorporating how the latter is part of a worldview) and argues that it was changes to the way people interacted with their landscape, imbuing it with symbolism and sociality, that made us "us." Although one might argue about whether prehistoric peoples made a distinction between these two things (or the notion that Neanderthals lacked a storied landscape), this approach is extremely useful in framing how we, as archaeologists, can approach a reconstruction of huntergatherer landscape use. This approach reminds us that sites on a landscape were connected to each other physically by a multitude of pathways and trails that were meandering (to us), variable, and complicated by kinship, alliances, resource distributions, and social contracts (see also Gamble 1993). The processes of enacting social landscapes and landscape socialization can be thought of as a form of landscape learning (Rockman 2013), transmitted by individuals and groups through movement and aggregation. Notably, this alternate treatment of movement in a landscape is also seen in the work of others examining hunter-gatherer landscape use across the globe and throughout a wide range of timescales (Brody 1982; Gamble 1993, 2013; Ingold 1996, 2000; McDonald and Veth 2012; Migliano et al. 2017; Murietta-Flores 2010; Whitridge 2004).

Building on the foundations of hunter-gatherer research in both areas, we present two case studies as evidence that hunter-gatherer structures-tents, huts, or whatever you would call them-were imbued with a variety of meanings, including symbolic ones, regardless of their permanence, as were the landscapes they were found within. In this respect, they are "homes." Furthermore, at aggregation sites like Kharaneh IV, where there is evidence for entangled domestic and symbolic activities within these structures, and there are several structures, these homes are part of fluid hunter-gatherer communities as groups congregate at and disperse from the site (Maher 2016). At Peyre Blanque we see the structuring of a built environment onsite and with clear material ties to nearby sites in the area. In each example, the site discussed is but one of many places connected to others across a complex landscape of hunter-gatherer communities.

Case Study 1: Epipaleolithic Southwest Asia

In Southwest Asia, researchers recognize the complex, entangled, and multifaceted economic and social transition(s) from hunter-gatherer to farmer (e.g., Asouti and Fuller 2013; Finlayson and Makarewicz 2013; Goring-Morris and Belfer-Cohen 2011; Snir et al. 2015; Watkins 2013). Yet we still make important distinctions between them, usually on the basis of economy, technology, permanence of settlement, symbolic behavior, social organization, and contributions to a built environment (e.g., Grosman and Munro 2016; Munro and Grosman 2010; Nadel et al. 2013; Verhoeven 2004; Weissbrod et al. 2017). The latter of these is often less explicit but nonetheless suggests that farming societies structured activities around highly symbolic architectural spaces (Watkins 2004, 2012). Hunter-gatherer huts, temporarily put up during regular movements about a landscape, are rarely preserved, and thus the data thought necessary to imbue them with symbolic significance is scarce, even though their potential for such roles is acknowledged (Goring-Morris and Belfer-Cohen 2002; Watkins 1990, 2010). Certainly, there is less evidence of hunter-gatherers taming the wild and creating a built environment in the way described by Hodder (1990), Watkins (2004), or Sterelny and Watkins (2015) for the Neolithic. However, the result is a picture of hunter-gatherers as adapting to a changing environment until some external or internal driver propels them to farming (Byrd 2005; Verhoeven 2004). Although limits are placed on interpretations of symbolic behavior as a result of preservation and research intensity (Goring-Morris and BelferCohen 2002; Maher 2010), recent work at an Early and Middle EP aggregation site discussed below suggests some intriguing insights into hunter-gatherer landscape use and "place-making" (Maher 2016; Ramsey et al. 2016).

Much EP hunter-gatherer research in Southwest Asia focuses on approaches to material culture variability that greatly shape our current cultural-chronological frameworks (Maher 2010). Spanning from approximately 23,000 to 11,500 cal BP, the EP period has been subdivided broadly into Early (23–18 ka), Middle (ca. 18-14.5 ka), and Late (14.5-11.5 ka) phases, but each is further divisible into numerous industries and facies defined by spatial and temporal differences in material culture and behavior. Over several decades of research, the most persistent defining archaeological features of this period have been enumerated in many ways, including site size, thickness of cultural deposits, duration of occupation of sites, and the presence or absence of storage pits, nonportable artifacts, a bone tool and art industry, formal cemeteries, semipermanent (stone) architecture, and the type and intensity of plant and animal use, recognizing a multitude of different and divergent pathways, trajectories, paces of change, and choices made by hunter-gatherer groups. Rather than review the evidence for these features individually here, we refer the reader to several extremely useful syntheses (Bar-Yosef and Valla 2013; Goring-Morris and Belfer-Cohen 2010; Goring-Morris, Hovers, and Belfer-Cohen 2009; Maher, Richter, and Stock 2012). Although debates remain regarding how much variability is meaningful in reconstructing past groups of people, there is general consensus that ignoring variability in hunter-gatherer settlement and landscape use leads to skewed and monolithic interpretations of diverse hunter-gatherer lifeways.

As elsewhere, working with an incomplete record means we are often forced to focus on sites as nodes of occupation with tangible material traces of specific behaviors. Sometimes, sites that do not fit our cultural-chronological expectations are considered unique or atypical. Here that includes large, dense sites or those with traces of architecture or symbolic activities that predate the Late EP Natufian, such as Ohalo II, Neve David, Uyyun al-Hammam, Kharaneh IV, Jilat 6, and Ein Qashish (Garrard and Byrd 2013; Maher et al. 2016; Nadel 2000; Yaroshevich et al. 2016; Yeshurun et al. 2015), until repeated occurrences at multiple sites suggest broader patterns of behavior. Although a site-based approach is not limited to prehistoric hunter-gatherers, the impact is arguably greater because we assume these groups were at least somewhat mobile and, thus, extensively using off-site areas. Yet an exclusively site-based approach does not easily allow us to recognize that a hunter-gatherer home is not just the structured use of space within sites (huts), but that this home could be extended to include an entire landscape (albeit with poorly defined boundaries), certain landscape features, or an aggregate of features such as smells, vistas, climate, vegetation, or topography (e.g., Bradley 2000). Of course, this landscape as home was every bit as experiential and constructed as that of Natufian or later farming groups. We disagree with Feinman (2015:656) that "the sites of foragers are generally less accessible through settlement and landscape approaches than are the ancient settlements that were inhabited for longer durations (especially when ceramics were used)." Pre-Natufian sites are not always transitory, ephemeral, or unobtrusive occupations. In fact, we posit that it is exactly through a nuanced approach to landscape—one that integrates concepts of dwelling, microscale examination of the organization of space (on- and off-site), reconstructions of daily practice, life history approaches to objects (Gosden and Marshall 1999; Hoskins 1998; Kopytoff 1986) and places (Ashmore 2002), social networks, and landscape-level data sets—that we are better able to understand hunter-gatherer place-making.

Hunter-Gatherer Aggregation at Kharaneh IV

Kharaneh IV is a 20,000-year-old EP site in eastern Jordan that forces a reconsideration of the ephemerality of huntergatherers on the landscape. As an aggregation site, it was a community, filled with homes, connected to other sites in the region, and these connections were situated within a larger social landscape not unlike the so-called interaction spheres of the PPNB (Asouti 2006; Bar-Yosef and Belfer-Cohen 1989a). Kharaneh IV is, in this sense, much like a Neolithic village site: preserving a complicated, yet high-resolution, record of the activities and practices of daily life that have accumulated over hundreds of years. The discovery of brush hut structures, caches, and other evidence of place-making here and elsewhere are, thus, not unique, but indicative of practices common to huntergatherers of this time and place.

Kharaneh IV is located in the Azraq Basin, a drainage system that was an attractive location for human settlement throughout the Paleolithic (e.g., Garrard and Byrd 2013; Maher 2017). First tested in the 1980s by M. Muheisen (1988), renewed work at the site by the Epipalaeolithic Foragers in Azraq Project (EFAP) commenced in 2008 and remains ongoing. Details of this work have been published elsewhere, so we focus here only on aspects of the site relevant to our discussion. In contrast to today's stark desert landscape, occupation of the site occurred within a lush environment with freshwater wetlands, streams and playas, an abundance of diverse plant species, and a rich diversity of associated animals (Jones et al. 2015, 2016; Maher 2016, 2017; Maher et al. 2016; Ramsey et al. 2016).

Kharaneh IV covers more than 21,000 m², making it the largest known hunter-gatherer site in the region (fig. 1). Repeated occupation led to the formation of a complicated, high-resolution stratigraphic record containing evidence for hut structures, hearths, postholes, symbolic and mundane caches, flint-knapping activities, food processing, consumption and disposal areas, and human burials (Maher 2016; Maher, Richter, Macdonald, et al. 2012). The immense size of the site, as well as its richness in stone tools, fauna, worked bone objects, ocher, marine shell beads, and archaeobotanical remains, provides excellent evidence that technological innovation, food surpluses (involving storage and feasting), and caching of utilitarian and

symbolic objects by hunter-gatherer groups were taking place at Kharaneh IV (Maher 2016; Maher et al. 2016). The presence of at least four hut structures provides a rare opportunity to investigate the intersection of domestic and symbolic activities and the organization of space in and around these structures, and to address questions of changing hunter-gatherer lifeways and novel human-environment interactions prior to the origins of villages and agriculture.

Occupied between 19,800 and 18,600 years ago, Kharaneh IV spans the Early and Middle EP. In this 1,200-year span, multiseason, prolonged, and repeated habitation created this extraordinary aggregation locale, a focal point on the landscape where people congregated to participate in diverse economic, social, technological, and symbolic or ideological activities (Maher 2016). Aggregation sites function as community-building places, occupied repeatedly, and sometimes for prolonged periods, by numerous hunter-gatherer groups at the same time, as part of an aggregation/dispersal mobility pattern (e.g., Conkey 1980). Previous work at the site on the movement of material objects and technological knowledge to and from Kharaneh IV suggests these hunter-gatherer groups were involved in long-distance exchange networks enacted in an intensively used social landscape (Maher 2016; Maher et al. 2016).

Our most recent work at the site has revealed evidence for at least four (and we expect more) structures during the Early EP occupations (fig. 2). Structure 1, the only hut fully excavated to date, is just over 2 m × 3 m in size and shows a complex sequence of construction, maintenance, use, and destruction events, where the hut was burnt after its last evidence of use (Maher et al. 2012; Ramsey et al. 2018; fig. 2). Placed on top of the burnt superstructure was a large flat stone and three distinct caches of pierced marine shells, each containing several hundred Mediterranean and Red Sea shells and accompanied by a large chunk of red ocher. The burnt structure and its associated caches was then covered over by a distinctive and largely sterile orange sand, suggesting it was intentionally destroyed and sealed after abandonment. Below the burnt superstructure, on each of the hut's three distinct floors, EFAP excavated a high density of artifacts intentionally placed on these otherwise notably "clean" and maintained surfaces (Maher 2018), including several in situ caches of groundstone, bone points, small cobbles, marine shell, macrolithic flint tools, ocher, and articulated remains of fox, hare, tortoise, and aurochs (fig. 2). All of these items are notably less common outside of these structures and indicate a clear spatial organization and the performance of specific activities within these well-defined spaces. Analyses of the distributions of materials on each floor and in spaces outside the hut remain ongoing, but show clear differences. For example, microliths are notably absent from the hut floors, whereas larger blade tools like scrapers used for hide processing are common.

In 2015 and 2016 excavations exposed part of another structure, Structure 2. The sequence of deposits associated with the structure show that, like Structure 1, the hut was burnt after abandonment and capped with a near-sterile orange sand.

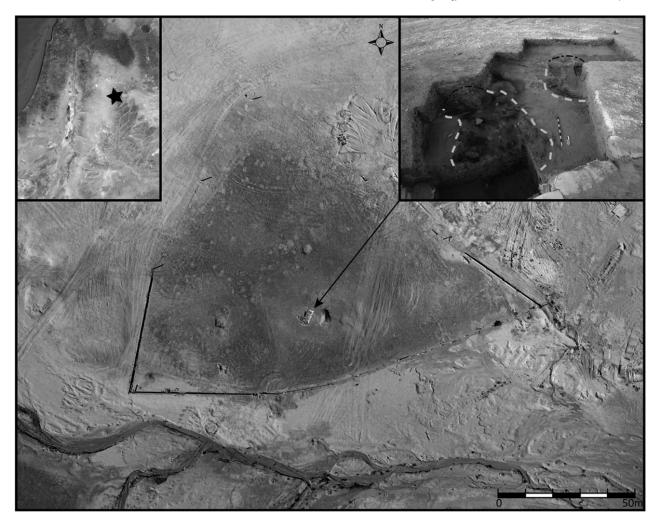


Figure 1. Aerial photograph of the Early and Middle Epipaleolithic site of Kharaneh IV (courtesy of Fragmented Heritage Project, University of Bradford), located in eastern Jordan. The site is the dark gray area in the center of the photograph, standing out as a small mound above the surrounding terraces and covered in a pavement of flint artifacts. The Wadi Kharaneh is seen in the foreground, draining eastwards (to the right) towards the Azraq Oasis 40 km away. The left inset is a Google Earth 2013 map of the southern Levant region with Kharaneh IV marked by a star. The right inset is a photograph of the Early EP excavation area (Area B) showing structures 1, 2, and 3. A color version of this figure is available online.

On the uppermost floor of the burnt hut was a human burial, in a tightly semiflexed position (fig. 2). This individual was placed inside the hut prior to burning, as the remains are partially burnt but not fully cremated. The individual is an adult female of relatively advanced age (over 50 years) and of small stature, suffering from notable osteoarthritis and a healed radial fracture (J. Stock, conversation, 2016). It is possible that the treatment of this individual at the end of her life is mirrored in the treatment of the hut structure; perhaps she was placed in her home and the end of life of the home and its former occupant were symbolically marked by burning and burial together. Early work at the site had recovered two human burials (Rolston 1982), and the renewed excavations suggest these were located under the sequence of floors of Structure 1 (al-

though it is unknown if the burials predate the structure, or were placed under the floors).

We are now starting to see a clearer pattern of human remains in association with structures prior to the Neolithic. For example, at the Early EP site of Ein Gev I, an adult female was found buried underneath a paved surface interpreted as the floor of a structure (Arensburg and Bar-Yosef 1973). At Ohalo II three hut structures are clustered in one area of the site with several nearby hearths and middens, as well as one burial of an adult male whose grave was marked by large cobbles (Nadel 1995). Huts at Ohalo II demonstrate specific structured domestic activities performed within the Early EP structures (e.g., Nadel 2002; Nadel, Weiss, and Tschauner 2011), but the burial of a person inside Structure 2 at Kharaneh IV provides

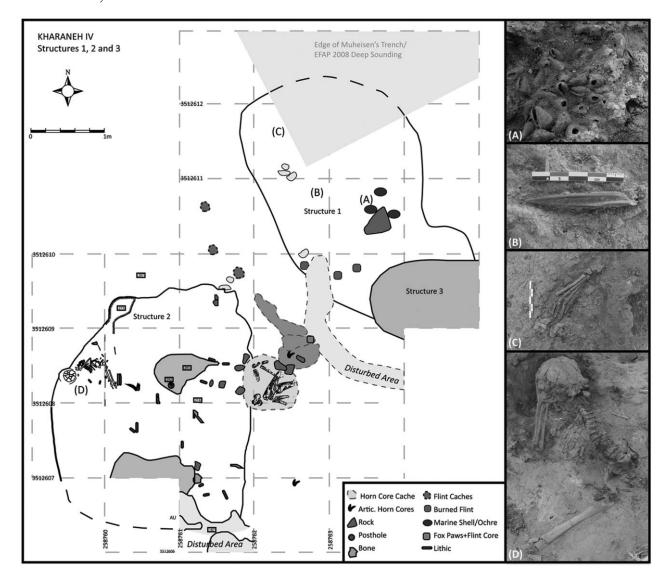


Figure 2. Kharaneh IV: Plan view of Structures 1, 2, and 3 (unexcavated), with a close-up of some of the objects found in the deposits of Structure 1, including (*A*) marine shell caches and ocher placed on top of the burnt superstructure, (*B*) a worked bone point found on the surface of the uppermost floor, (*C*) an articulated and burnt fox paw from the uppermost floor, as well as (*D*) the human burial discovered immediately under the burnt superstructure of Structure 2. A color version of this figure is available online.

clear evidence for a symbolic aspect to these structures predating the well-known association of burials and houses during the Neolithic (e.g., Bar Yosef and Valla 2013; Croucher 2012; Kuijt 1996; Twiss 2007). The richness of Structures 1 and 2, and similarities between them in construction, use, and destruction—two examples among several more structures not yet excavated—indicate the enormous potential of Kharaneh IV for yielding insights into domestic and nondomestic spatial organization within hunter-gatherer sites and the important connections these groups made to particular places at multiple scales.

In both structures, it is clear that the daily lives of inhabitants involved a multitude of domestic and nondomestic (ritual, symbolic, etc.) practices related to caching, disposal of the dead, and the destruction of "home," suggesting that there

was likely little, if any, differentiation between these spheres. Given the enmeshed social, economic, and technological practices occurring in and around these structures, repeatedly, and ones notably different from other on-site areas, it seems that EP groups did invest in these structures as more than simple shelters (see Goring-Morris and Belfer-Cohen 2002, 2008; Watkins 1990, 2010). At Kharaneh IV these structures show a complex "life history of place" (Ashmore 2002). They (a) represent organized places with patterned differences in activities performed inside and outside and with boundaries demarcating activity areas, (b) exhibit evidence for preparation and maintenance that suggest reuse, as well as intentional destruction, and (c) include installations and features such as caches.

In contrast to the discrete and well-defined features (hearths, hut structures, caches) characterizing the Early EP occupations, excavations in the Middle EP component of the site have unearthed a series of horizontally extensive and poorly bounded occupation surfaces, each associated with hearths (sometimes overlapping) and multiple postholes, all of which are artifactrich. These surfaces (interpreted as open or outside areas) are identifiable on the basis of their compact, clayey texture, associated hearths and postholes, flat-lying artifacts, middens, and partially articulated animal remains. The posthole features are primarily concentrated around the hearths and are very small in diameter, suggesting that they were structures around or beside fireplaces, perhaps as cooking, meat-drying, or smoking racks, with meat either stored or, given the high densities of gazelle, possibly eaten in mass consumption events (Spyrou 2015). Radiocarbon dates place the occupations here between 18,800 and 18,600 cal BP, providing some of the oldest dates for the Middle EP (Richter et al. 2013). Analysis of the faunal assemblage, although overwhelmingly dominated by gazelle, shows a wide range of species were available and exploited by site occupants. Mortality profiles of gazelle also suggest wholeherd culling that could have resulted from the use of hunting blinds or drives in communal hunting efforts that would have been quite effective in winter when goitered gazelle form large, mixed herds (Martin, Edwards, and Garrard 2010). Isotopic analyses, cementum analyses, and dental wear patterns of gazelle also show they were hunted year-round, even within individual occupation events. Thus, during some aggregations, occupation of the site could have extended through several seasons (at least for some years), with aggregations of people sustainable year-round and especially during winter months, and may have included activities such as specialized gazelle hunting (Henton et al. 2017; Jones 2012).

Notably, modified marine shell from the Mediterranean and Red Seas and worked bone and stone objects are more common during the Middle EP phases of occupation (Maher 2016). The chipped stone assemblage here shows both a high degree of diversity in microlith tool forms (more so than other Middle EP sites) and strong similarities in tool types to several sites within and outside the Azraq Basin (Maher and Macdonald 2013). Debates concerning the meaning of variability in EP microliths are ongoing; however, there is general acceptance that despite issues of interobserver error, sample size, or life-history changes in tool form, there are clear differences in the occurrence of microlith forms in space and time, with most sites exhibiting a clear preference for making one or a few types, and similar sites spatially clustered together (e.g., Bar-Yosef 1991; Belfer-Cohen and Goring-Morris 2002; Macdonald 2013; Olszewski 2006, 2011). Use-wear studies demonstrate no correlation between the type of microliths and a particular function; indeed, most used pieces seem to have served multiple functions (Macdonald 2013; Richter 2007; Yaroshevich et al. 2010). Thus, these differences are thought to relate to some form of social expression or tradition and considered implicitly or explicitly stylistic (Wiessner 1983; Wobst 1977).

Maher and Macdonald (2013) have used the types, numbers, and widths of trapezes at Kharaneh IV, and elsewhere, to make the point that, if differences in geometric types and sizes are indicative of lithic traditions, then the presence of such a wide range of geometrics at Kharaneh IV substantiates the idea of aggregation and interaction of many groups here. As an aggregation site, one should expect to see the material traces of many different groups (from near and far) congregating, interacting, sharing, and exchanging both material objects and knowledge. If marine shell was moved large distances and exchanged, it is not surprising that lithic technological knowledge and tradition was also shared during these congregations.

Although only a fraction of the site has been excavated, soundings at various locations across the mound indicate that both the Early and Middle EP phases of occupation were extensive, complex, and repeated, with Early EP occupations underlying Middle EP ones in several areas. The large size of the site and its density, in both Early and Middle EP phases, begs questions about the nature, size, and duration of occupation at any one point in time. These are, of course, the most difficult issues to resolve. It is clear that some occupations at the site, especially in the Early EP, represent repeated visits by small groups (perhaps the same groups at some points, and different groups at others), whose activities were focused in slightly different parts of the site each visit. Thus, there is a certain palimpsest effect to these occupations; however, throughout its use, there are clear differences between small-scale and (presumably) shorter term occupations, and much more substantial ones in terms of the thickness of deposits, their material culture richness and diversity, as well as the nature of features within these occupations (Maher 2016, 2017; Maher and Macdonald 2013). The ability to refit materials, especially lithics, within and between deposits and associated features gives us at least some measure of relative contemporaneity. In addition, the sheer amount of material (several million lithics to date) in comparison to Natufian sites, whose chronologies suggest equally lengthy occupations, suggests that substantially denser occupation is required to produce the amount of material documented within each occupation horizon at Kharaneh IV. With such excellent stratigraphic preservation, it becomes hard to explain the contents of individual occupations. If it were the same small social groups returning to the site repeatedly, then why do we see such a great range of microlith "types" being produced each time—a pattern exactly opposite to other EP sites in the region, excepting Jilat 6 (another proposed aggregation site, also located in eastern Jordan)? Why was only this group so well connected to others in the region? Or, if each occupation represented different, mutually exclusive groups, then why do the same lithic variants appear in successive occupations, and why would individual occupations exhibit as much internal variation in lithic production as between occupations? Excepting caches, in the Middle EP layers particular types of microliths that might be indicative of individual groups are not concentrated within, or in any other way spatially segregated from each other. Instead, individual occupation layers show a wide range of trapeze/rectangle variants (Muheisen and Wada 1995), with parallels to other areas within that same occupational phase. The notion of aggregating groups is supported by the clearly multiseasonal use of the site demonstrated by the faunal data, as well as the importation of marine shell and evidence for multiple lithic traditions. On the basis of similar highresolution data, but with stone architecture instead of brush huts, we easily accept Natufian villages as being occupied permanently or semipermanently (see also Boyd 2006), and we should as easily accept the same for even larger and denser sites of the Early and Middle EP.

This recent work is focused on unraveling the social life of the site's occupants by exploring the use of these architectural structures or, we argue, "homes" and the spaces in between them. Expanding from this, we can gain insights into the creation of a larger EP social landscape. As an aggregation site, Kharaneh IV was a significant place in a social landscape where hunter-gatherer groups from the wider region came together repeatedly and for prolonged periods of time for a variety of economic, social, and ideological reasons (Maher 2016; Maher and Macdonald 2013). In the faunal record, for example, there are clear shifts between the Early and Middle EP occupations in hunting strategies and food processing to communal foodrelated activities (Maher et al. 2016). Analyses of plant resources highlight the intentional use of grasses, but also particularly of wetland resources that may evidence an alternative plant use strategy to those proposed during "Neolithization" (Ramsey et al. 2016, 2018).

The Hunter-Gatherer Landscape beyond Kharaneh IV

As an aggregation site, Kharaneh IV served as a social hub of interaction for hunter-gatherer populations from throughout the region and was a focal point for a larger, fluid community composed of many different social groups who variably participated in diverse activities on-site during periods of aggregation and maintained connections to each other through longdistance exchange networks enacted during periods of dispersal (fig. 3). Through the abundance of marine shells in all phases of occupation, it is clear that the occupants of Kharaneh IV, especially in the Middle EP, were interacting with hunter-gatherer groups located between the site and the Mediterranean and Red Seas, either traveling directly themselves or participating in down-the-line trading and exchange (Maher 2016; Richter et al. 2011). These connections appear corroborated by analysis of microlithic stone tools that show clear parallels to sites in southern Jordan, the Negev, the coastal plain of Israel, the Jordan Valley, and southern Syria and Lebanon (Maher and Macdonald 2013). These other sites show less variability in the range of microlith forms represented at each site indicating geographical clustering of tool types (e.g., denticulated trapezes in the Negev [Goring-Morris 1987], triangles in the Jordan Valley [Edwards 2001], and rectangles at Uyyun al-Hammam [Maher et al. 2011] and the coastal plain of Israel [Bar-Yosef 1970]). Yet, Kharaneh IV shows an incredible diversity of tools, representing "types" known from all these areas, and reinforcing the notion that the site was a node of aggregation for otherwise potentially disparate hunter-gatherer groups. Raw material studies confirm that flint material from the site was obtained locally, even when it is clear that the tradition of making particular tool types was not, suggesting the movement of people themselves. Through this material, paths and networks can be constructed to understand wider social networks and how hunter-gatherers constructed landscapes through regional interaction spheres (e.g., Coward and Knappett 2013; fig. 3).

Although we start with Kharaneh IV as one, albeit large, dot on a map to talk about connections between sites and bring attention to the pathways in between sites, it is important to note that there are many other dots on this prehistoric landscape contemporary with Kharaneh IV, including other probable aggregation sites. For example, Ohalo II (Early EP), Ein Gev I (Early EP), and Neve David (Middle EP) all contain evidence for brush and stone structures and installations, with Ohalo II's three excavated huts showing repeated use and clearly differentiated use of space, as well as human burials (Arensburg and Bar-Yosef 1973; Nadel et al. 2011; Nadel and Werker 1999; Yeshurun et al. 2015). Newly discovered Ein Qashish exhibits a dwelling structure, caches, and three incised plaquettes (one depicting a bird) in its Early and Middle EP phases (Yaroshevich et al. 2016). Ayn Qasiyya (Early EP), Wadi Mataha (Middle EP), and Uyyun al-Hammam (Middle EP) all have human burials, the latter with elaborate and complex mortuary practices that include human-animal burials and showing repeated use of the site as both as occupation site and burial ground (Maher et al. 2011; Richter et al. 2010; Stock et al. 2005). The persistent use of specific places tied to marshlands in other areas of Jordan also attests to repeated patterns in landscape use (Olszewski 2016). Finally, Early EP Jilat 6 is another likely aggregation site with traces of architectural remains (ocher-stained floors), a "variant" microlithic assemblage, and an abundance of marine shell like Kharaneh IV (Garrard and Byrd 2013; Richter et al. 2011).

This reconstruction of a landscape of interaction is not intended to downplay the material culture variability between sites clearly documented throughout Southwest Asia (Goring-Morris and Belfer-Cohen 2010; Goring-Morris, Hovers, and Belfer-Cohen 2009; Maher, Richter, and Stock 2012). Indeed, the region is characterized by localized variability, particularly in stone tool technologies, with spatially bounded clusters of similar sites often structured as different social groups. However, the nature of these boundaries—or interaction between groups across so-called boundaries—remains largely unknown, and the nature of material culture variability as marking social affiliation or ethnicity remains highly debated (Maher 2010; Olszewski 2006, 2011). Overarching similarities in material culture and site organization within Early EP and Middle EP sites across the region show that the evidence for social interaction and place- and home-making from Kharaneh IV is actually indicative of broader trends in hunter-gatherer behaviors and connects this aggregation site to other large and smaller sites

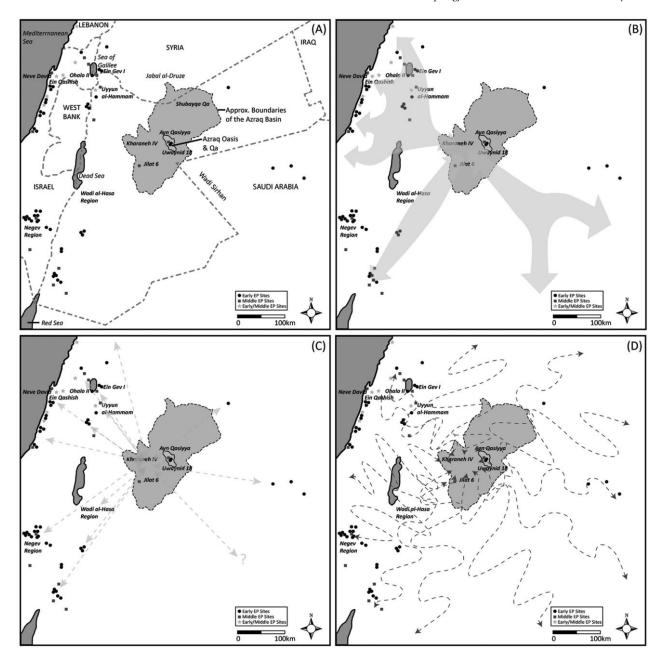


Figure 3. Maps of Southwest Asia showing (from left to right, top to bottom) the locations of Early and Middle EP sites, with (*A*) sites discussed in the text labeled, (*B*) probable connections between Kharaneh IV and contemporary sites in the region on the basis of sourced marine shell from the Mediterranean and Red Seas as well as the Indian Ocean, (*C*) probable connections between Kharaneh IV and contemporary sites in the region on the basis of similarities in microliths tool types, and (*D*) probable pathways and movements of hunter-gatherer groups to and from Kharaneh IV, highlighting that these movements were likely meandering considering a variety of landscape features (i.e., rivers, Lake Lisan, mountains, deserts, etc.) and social factors. A color version of this figure is available online.

across the landscape. Kharaneh IV, occupied over multiple seasons (perhaps sometimes even year-round) and serving as a regional node for interaction, is not unique. These aggregations of hunter-gatherer groups with complicated social networks, long-distance exchange in objects and knowledge, and symbolic ties to "places" were part of hunter-gatherer lifeways several millennia before the Natufian and Neolithic. Further, it seems

that sedentism and home-making are not markers of "becoming Neolithic." Like many Natufian sites that were also "places" with prior or subsequent use as burial grounds (Goring-Morris and Belfer-Cohen 2002), Ohalo II, Ein Gev I, Kharaneh IV, Wadi Mataha, and Uyyun al-Hammam, with burials and burial grounds, make it clear that the idea of creating place-based memory and returning to certain places connected with the

dead and "ancestors" may have a long history discernible in pre-Natufian contexts.

It is not argued here that Kharaneh IV, or other EP sites, are the same as later Neolithic villages (or even Natufian sites) with stone architecture, communal buildings, and other supposed hallmarks of Neolithic farming village life (e.g., Goring-Morris and Belfer-Cohen 2010, 2011; Twiss 2007; Watkins 2013; Weissbrod et al. 2017). Rather, we suggest that our current approach that highlights the differences between these periods grossly overshadows continuities. For example, when we speak of Neolithic interaction spheres, we really mean people trading and moving great distances; establishing and maintaining these interactions requires movement. Even though we assume high mobility for hunter-gatherers, we don't discuss these movements in terms of wide-ranging social networks, focusing instead on subsistence, resource procurement, and territorial boundaries. Emphasis should be placed on the movements of people throughout a landscape that is created and transformed over time by those who dwell in these places, not just in sites within them. Perhaps our approach instead should be that huntergatherer "home" is a much more inclusive landscape, with communal sites, structures, elaborate systems of exchange/ trade, and symbolic use of space. At Kharaneh IV the occupants spatially structured activities, and some of these structured spaces were imbued with both quotidian and symbolic meaning, such as women's work, home shrine, or both. Taken further, the site was clearly connected to others across a dynamic social landscape.

Case Study 2: UP Europe

Out of the Cave?

In comparison with what we have discussed for Southwest Asia, the situation for the UP (and beyond) for much of Europe has both similarities and differences. We discuss here only two aspects. First, although southwest Europe is less burdened by the origins of agriculture, it has experienced the tyranny of the origins and ongoing production/disappearance of art that has, as its necessary corollary, a cave-centered archaeology. Even some open-air sites are better known for their portable art than for their architectured spaces that attest to investment in a built environment, such as at Gönnersdorf (Bosinski and Bosinski 2011), where the engraved plaquettes are more widely known than the probable hut structures and long-distance lithic raw material sources (Bosinski and Bosinski 2007; Jöris, Street, and Turner 2011). In addition to the nineteenth-century discoveries of portable art, once cave wall art was accepted in 1902 as being of considerable antiquity, the search was on. Because of the long-standing preferred focus on well-preserved "art" in the limestone caves of France, Spain, and, more recently, southwest Germany, the "mentalité de la grotte" (Sackett 1999) has characterized much research.

Second, despite a sideways glance away from the caves (especially where there are none, such as in the Paris Basin or

Central Europe) to open-air manifestations and sites, which are themselves among the richer locations for exploring sociospatial relations (Gaudzinski-Windheuser 2011; Julien and Karlin 2014; Pigeot 2004; Vasil'ev, Soffer, and Kozłowski 2003), there is a similar problem of representation, as dots on a map. As in Southwest Asia, the dots-on-the-map view is despite the presence of well-known aggregation or super-sites like those of Le Mas d'Azil in France (Bahn 1982), the long-distance movement of materials/goods, and most likely of at least some people—all of which suggests that life was one of movement through pathways and "making tracks" (Gamble 1996). In fact, as Gamble (2013) compellingly argues, it is the very connectivity, the very evidence for a "release from proximity" or for the "imaginative ability to go beyond" the immediacy of social life that set the stage for humans to be such effective world settlers. With many UP peoples of Europe being grounded in caves (with or without art), there has been an unwarranted privileging of the areas with caves as the heartlands of prehistory and an unwarranted overemphasis on how the "civilizing process" (of the Neolithic) was yet to come (David and McNiven 2017).

Even for pre-UP times, this representation belies the well-documented mobility and connectivity between and among sites (e.g., Féblot-Augustins 1999). More importantly, however, is that this very mobility—which must have been a defining, not an ancillary, pattern of life—has not been adequately pursued; it actually requires not merely a new way of visualizing Paleolithic landscapes but a fundamental reconceptualization of Paleolithic lifeways—albeit beyond the scope of this paper but not unrelated to how structures that have been documented have been interpreted (Close 2000; Murietta-Flores 2010).³

In fact, there has been an inherent interpretive tension between acknowledgment of Paleolithic mobility (and hence the terms and images to describe and represent empirical or inferred structures—such as their being temporary encampments, seasonal, portable, often "merely" tents, etc.) and the sitecentered archaeology that has been less (if at all) concerned with distributions across the landscape. Even lithic raw material linkages (Rensink 1995) can be pushed further into social and symbolic domains (e.g., Lacombe and Conkey 2008). Connectivity (e.g., Bahn 1982) tends to be lines drawn site-to-site rather than thinking about the veritable pathways (Gamble 1993) or, more expansively, conceptualizing the "landscape as a series of stories" (McBryde 1997, 2000) or "storied landscapes" (Langley 2013), including how the landscape itself could have been home, with its smells, vegetation, animal tracks, topographic features, known locales of resources, and other cosmological and symbolic associations.

3. We need to "decenter and defetishize" our archetypical concepts and representations, while simultaneously developing both methodological and epistemological strategies "that foreground questions of location, intervention and the construction of situated knowledges" (Gupta and Ferguson 1997:4–5).

The grotto-centric history and, thus, accumulation of what must be a nonrepresentational database of UP settlement has limited the expectations, imaginations, and interpretations of archaeologists. Among the reasons that cave or rock-shelter sites are preferred is because there is not much debate about the extent or boundaries of the site or preservation contexts. When this is coupled with what is decided to be archaeologically "visible," accessible, or preferred in specific (and limited) ways, it is no surprise that most research effort has gone into the kind of archaeology that has produced dots on the map.

The cave site focus, furthermore, has perhaps also limited our understanding of what kinds of structures or architecture, in the broadest sense of the term, these UP people might have developed and employed.4 It was perhaps not always expected, or looked for, that there could be architectured features inside caves or rock-shelters, such as the use of stone slabs to serve as a work surface and/or to define the use(s) of space, such as at Le Tuc d'Audoubert (Bégouën et al. 2009). As a result, internal structuring and marking of space and place may have been overlooked, especially by earlier (late nineteenth and early twentieth centuries) excavations or cave visits that focused on art. And certainly, the recent documentation of such prehistoric practices as "sticking" bone fragments in cracks or cave floors (Clottes 2009), especially in cave art sites, attests that close forensic probing beyond the art references wider symbolic or ritual (sensu latu) practices within the caves. Traditional excavation methods, especially for cave and rock-shelter sites, favored trenching methods for resolving stratigraphic relationships more so than the decoupage method used so successfully at open-air sites (e.g., Leroi-Gourhan and Brézillon 1973).

Although some internal structuring of cave and rockshelter sites has certainly been documented for Abri Castanet (White 2008), Abauntz (Utrilla, Mazo, and Domingo 2003), and Le Flageolet (Simek 1984), among others, it is not surprising that it has been in the open-air settings that most of the structures, dwellings, encampments, habitations, cabanes, or huts have been identified, for example, at Molodova (Ukraine); Mezhirich; Mal'ta; Poskari; at Pincevent, Etiolles, and others in the Paris Basin; the Isle Valley and Neuvic sites in France; the Neuchâtel Lake (Switzerland) sites; or even at Peyre Blanque (see below and fig. 4). Although there are multiple relatively unknown or, more correctly, relatively unheralded examples of spatial organizations and possible sheltering features inside caves and rock-shelters, such as the "longhouse" at Abri Pataud or the "structure" inside of Cueva Morin or at La Garma (Arias et al. 2011), we note here only two questions to pursue that can best be taken up by the open-air sites. First, how can we move from a foyer stricte (a hearth-based feature or "structure de

4. Architecture, with its myriad of definitions, is seen here as the use of sets of abstractions and models of an environment, a problem space or domain, either physical or logical, with a set of associated views into that domain to provide for multiple functions, uses, communication, and/or cosmological coherence. combustion") to *foyer sociale* (a more "hearth-and-home" concept)? And, secondly, why the resistance to more than a "gimme shelter" imagination for the UP?

Foyer Stricte/Foyer Sociale

To a certain extent, the ways in which many open-air structures, cabanes, huts, or tents have been inferred or documented have been hearth-dependent. In one of the bolder and more innovative approaches to site structure as living space or as "domesticity unraveled," Zubrow et al. (2010) are nonetheless explicit that it is the fireplace or the foyer that sets the foundation for the inference of Magdalenian households. As well, it has been the presence of such hearths (and activities around them) that precipitated the primarily inferential use of the term "tents" (e.g., the Pincevent tents). For an archaeologist, of course, a hearth is a gold mine: not only for the charcoal for dating, but for the often-associated artifacts and fauna (if preserved) as well as, where possible, some spatial structuring of activities (Stapert 2003; but see Aldeias et al. 2012). Indeed, the examination of "combustion features" has been extremely fruitful for reconstructing particular activities (Mallol et al. 2007; Mentzer 2014). And although one can presume that the hearth is a magnet for social interactions, relatively little has been done to consider the hearth as more than primarily a perfunctory focus for daily basics, with notable exceptions, such as at Etiolles or elsewhere (Leesch et al. 2010). Hearths have not led many researchers to consider it also as the home part of hearth and home, or to consider that there could be other foci for social life and culturally imbued place-ness. Drawing upon her extensive ethnoarchaeological work, Wiessner (Wiessner 2014) reminds us of the social "work" that goes on after dark, around the fire, often through storytelling; these are aspects of the hearth that actually make it even more crucial in the maintenance and perpetuation of the social group than in serving as a source of heat, light, and food preparation. The archetype of "the hearth" has perpetuated a particular notion of hunter-gatherer localities as unlikely foci for activities beyond just a camp, a processing location, or resting place.

Beyond "Gimme Shelter"

Although it may not be as feasible to infer specific structured and somewhat contemporaneous activities at such sites as the Molodova structures because they are veritable palimpsests of repeated occupations, this feature of repeated occupations itself should be a positive basis for characterizing the huntergatherers here as having some attachments to place, as having invested in the location that has more potential significances than "just" shelter. The same could be said for Gönnersdorf in northern Germany, the interesting site of a more modest kind of aggregation that was occupied by what appears to be three distinct groups who with each return visit brought stone tools made from their "own" and differing lithic raw materials (Bosinski and Bosinski 2007; Gaudzinski-Windheuser 2015;

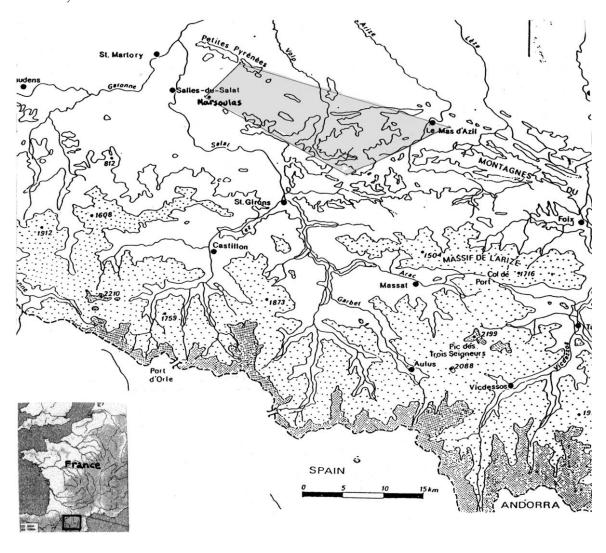


Figure 4. Map showing location of "Between the Caves" study zone (rectangular overlay between Le Mas d'Azil (east) and Marsoulas (west) in the Midi-Pyrénées region of southern France. The site of Peyre Blanque is within this zone, some 12 km east of Marsoulas (map adapted from Bahn 1979). A color version of this figure is available online.

Jöris et al. 2011). Another intriguing example to think about is Langley's (2013) suggestion that the two Pyrenean Magdalenian sites, located across a narrow valley from each other and linked in the uses of shared pigment recipes, Niaux (with cave art, but no occupation remains) and La Vache (with no cave wall art, but a rich corpus of portable art and occupation remains), might together be an aggregation location such that the valley itself rather than a single site drew people together here. The role of rock art in establishing ties to place and in relation to aggregation sites has been well studied in Australia (e.g., McDonald and Harper 2016). Such examples, and others, should mobilize us to think more broadly about what constitutes (their) localities. This is but a start to a much-needed current synthesis of the many UP sites with structured spaces, built environments, pavements, "latent structures," and/or with repeated occupations that attest minimally to a place of return, a place of meaning, and a place of memory (e.g., Orp East, Andernach, Gönnersdorf, Hostim, Peyrugues, Le Tuc d'Audoubert, Solvieux, Les Cerisiers, La Garma, Cueva Morin, and El Mirón).

Hunter-Gatherer Homes at Peyre Blanque

The site of Peyre Blanque is located in the Ariège region of the Central Pyrenees foothills in France, and is an open-air site that can be attributed to the early Middle Magdalenian around 19,000 cal BP. It is unique not only in that it is the only known intact open-air UP site in this cave-rich area, but also in that the excavations undertaken since 2007 have revealed a number of remarkable features and artifacts. For the purposes of this discussion, perhaps the most striking find is the presence of a structure or set of structures created out of locally available

sandstones (fig. 5). To date, the arrangement of at least four different kinds of sandstone and some very large limestone blocks extends at least 10 m in an east–west direction, oriented roughly parallel with the ridge upon which the site is located, and extends up to 5 m in its north–south direction at its widest extent. This is of an imposing size in relation to other documented structures, huts, or dwellings for the Magdalenian (and earlier) time periods in Europe. In other words, the Peyre Blanque structures make a good case for inquiring into a Magdalenian built environment that can justifiably be understood in terms of a home.

The Magdalenian is a geographically widespread chronocultural period in Western and Central Europe at the end of the UP, extending from Portugal to Poland over perhaps as many as 7,000 years. It is often characterized by a florescence of cave and portable art and a cultural richness that has attracted much attention for well over a century, with varied attempts to define and redefine the many internal "stages." Several recent compendiums of research on topics relevant to understanding settlement and regional relationships exist, including those for Central Europe (Maier 2015) and generally on Magdalenian settlement (Straus, Terberger, and Leesch 2012). Long associated with the L'Age du Renne (Lartet and Christy 1875), and despite much evidence of site structuring documented through horizontally extensive intrasite spatial analyses (e.g., Pigeot 2004, among others), the Magdalenians are depicted as mobile hunter-gatherers/foragers who followed reindeer and other large herbivores, relocating camps in the process in a gradual recolonization of deglaciated northern areas. Many Magdalenian sites from southwestern through central Europe attest the revisiting of sites in both caves/rock-shelters and in multiple open-air locations, often with what researchers identify as huts or dwellings (Gaudzinski-Windheuser 2015; Gaussen 1980; Olive and Valentin 2006; Ontañón 2003).

The site of Peyre Blanque in the foothills of the Central Pyrenees of France has been reported on annually (Conkey et al. 2011; Lacombe, Sterling, and Conkey 2014) and published in detail with particular attention to the specifics of the lithic assemblage (Lacombe et al. 2015). More than 12,000 chert artifacts have been recovered over the 80 m² excavated so far, whereas organic materials, save for a few objects in antler and possibly ivory, are notably less well preserved. The preservation of the site itself at the top of a 500+ m ridge is due to the underlying carbonate-cemented sandstone and limestone strata that have, at least in one section of the ridgetop, trapped the archaeologicallyrich sediments, inhibiting tendencies to downslope erosion, even if the site itself has understandably been affected by various localized processes of bioturbation (e.g., worms, roots).

The site was discovered in 2006 within the framework of the ongoing Between the Caves open-air survey project, directed by M. Conkey, itself an attempt to integrate localities and pathways between well-known caves in the immediate region from Le Mas d'Azil to Marsoulas (fig. 5). The site setting along the ridgetop in what is today a lightly wooded setting was,

however, strikingly different from the survey project's focus on ploughed fields from which thousands of Paleolithic lithic artifacts have been recovered. The survey has generated the empirical support for a much greater presence of Paleolithic activities and movements around and across the landscapes of the 260 km² study area than has previously been known or imagined (but see Simonnet 1981). In fact, so many locations attested multiple visits and revisits over the millennia that we have referred to them as persistent places or "places of many generations" (Conkey, Dietrich, and Lacombe 2003). The site of Peyre Blanque thus can be situated in a wider landscape of human presence than had it been discovered without the context of this landscape archaeology survey project (Sterling 2014). As we propose below, there may well be evidence for linkages across the landscape between Peyre Blanque and the cave art site of Marsoulas some 12 km to the west. It is very clear that one attraction to the Peyre Blanque location is the chert source some 300 m downslope to the west of the site, such that the area excavated so far could be thought of as a so-called provisioning site. As the description of the structure will attest, the occupants of the site who constructed it clearly sought out and brought to the site materials both for the structure (several different kinds of local sandstones) and for other uses (quartzite blocks, pigments, and nonlocal chert raw materials). Abundant pigments are also found at the site, and although some are local, others were likely gathered from an area of unknown but probably small radius.

Because details of the materials (especially lithics) recovered have been published (Lacombe et al. 2015), only a few of the most relevant aspects of the site will be presented here, and most attention will be on the structure(s) as a material focal point for the consideration of a possible dwelling structure and a structuring of the landscape for various activities and practices. The structure designated as N31 is impressive for its state of preservation, its imposing dimensions, and its originality within the scope of other known stone constructions in southwest Europe that are often more like pavements that, for example, formed the floor for superstructures that have not survived (Gaussen 1980, Sackett 1999).

The site itself can be described as a place of multiple activities, perhaps complementary working, dwelling, and living spaces; we will not use the attribution of it as a "domestic" site, for various terminological (Sterling 2015) and artifactual reasons. Although there are notable differences among some of the distinct excavation areas (labeled as the Western, Central [east and west] and Eastern [the structure] Secteurs), so far it is a unique and chrono-culturally homogeneous archaeological level exhibiting a unity in both the lithic typology and technologies. It is not yet possible to demonstrate if the archaeological materials were deposited from repeated visits to the site given the relatively shallow depth (between 25 and 40 cm below the contemporary surface) of the materials recovered, but, if so, the revisiting occupants were likely to be in many ways culturally related and/or carrying out similar activities and site uses, given the similar practices that generated such a homog-



Figure 5. The sandstone structure at Peyre Blanque, viewed from the south. Photogrammetry taken at its most recent exposure in July 2015. Note the exposed bedrock at the uppermost (north) and left (west) of the structure, as indicated by the arrow, is sloping up toward the ridgetop that is within a meter from this exposed bedrock. A color version of this figure is available online. (Photo, M. Conkey)

enous "identity" of the material remains and their structured locations across the site (Lacombe et al. 2015). That is, the uses of the intrasite locations attest to structured repetition, a repetition that allows us to invoke consideration of it as a meaningful place, one of possible return, reuse, and demarcated activities and practices.

The recovered artifacts (primarily lithics) are not spread evenly or continuously across the 80 m² of the site that have been excavated so far, but one can infer complementary working areas in zones of substantial concentrations. Thus, they range from a likely "dump" or toss area from extensive chert knapping that attests to the entire *chaîne opératoire* (unlike in cave sites) in the Central Secteur East, to a possible (but not yet confirmed) hide-processing area (Central Secteur West) characterized by scrapers and more open spaces and lacking evidence for any in situ flint knapping, to the Western Secteur that appears to be where some of the nonlocal cherts were knapped for subsequent redistribution to other areas of the site (e.g., to the structure area). It is important to stress that the area being called the site may not be isomorphic with what could have originally been some sort of bounded site, given

that similar artifacts are found distributed in various spots across the ridgetop, including possible concentrations several hundreds of meters to the west, with surface artifacts no more diagnostic than UP. Much of the eastern extension has not yet been surveyed or explored, given its woods and the dense shrubbery of the contemporary landscape. In fact, the cadastral map place name of "Peyre Blanque" is so far more of a locality than a site in the traditional bounded sort of way. The entire ridgetop of several hundred meters warrants further systematic exploration for prehistoric materials, with its spectacular views facing almost due south to the impressive chain of the Pyrenees, and which drops somewhat steeply to the north, but overlooking a small vallon, where, one might imagine, animal herds could have grazed. Just to the west of the excavated area one has an excellent view of the Plains of Toulouse to the north, and several extant springs surround the area being excavated. As well, the geological setting of sandstone or sandy limestone, today often degraded into a sandy matrix, and proximity to several variants of chert are characteristic of the several other preserved UP localities recorded in the Between the Caves survey.

That said, although the material richness of Peyre Blanque does not compare with that described above for Kharaneh IV due, at least in part, to preservation conditions, there are similarities between the sites in terms of our exploration here of the concept of "homes" for mobile hunter-gatherers that are simultaneously located or grounded, but also networked to the immediate landscape and across far wider geographic domains. The possibility at Peyre Blanque of different construction events leading to what we see today as structure N31, when situated in the context of the remains and spatial structuring across the site as excavated to date, provides a related set of insights into the idea of home as an inclusive landscape for these late Pleistocene hunter-gatherers. As can be seen in figure 6, structure N31 is composed of large and smaller blocks, and abundant sandstone plaquettes, but not evenly distributed. As noted, these construction components were, for the most part, brought in to this location from natural outcrop sources within no more than 100 m, but of at least four different types of sandstone and limestone, indicating differing degrees of deterioration (Lacombe et al. 2015). These different "types" of stone were mobilized for different architectural goals.

What we see today is a slightly curved arrangement that could be interpreted as a closed-off and defined space. A working hypothesis with much to recommend it is that this structure was orchestrated to create space up against the then-exposed bedrock along the ridgetop, especially toward the west of the structure. Studies of landscape evolution at this part of the site are underway to better confirm what the landscape looked like at the time of Magdalenian occupation. The structuring of the now-architectured space has created what appear to be several semicircular (south-facing) areas (see fig. 6), and "empty

zones" (Bentsen 2010). Although no definitive hearth areas have been located, most likely as a result of the spread and dispersion of charcoal through the actions of bioturbation and standing water, there are some sandstones that evidence discolorations that (as on-site experiments have shown) are consistent with direct exposure to fire. As described more fully in Lacombe et al. (2015), there is a somewhat domed structure to the sandstone plaquettes in the more eastern end of the structure that has numerous possibilities for use, whereas the central and especially the western end include more diverse internal structuring of spaces with stone arrangements. Most of the blocks are shallowly placed, although some to the north are deeper and may be related to the possible architectural goals of constructing up against the then-exposed bedrock. Because excavation has yet to remove most of the blocks, we are not sure of stacking or other architectural actions.

Alternate taphonomic processes suggested to account for many Paleolithic structures (Kolen 1999) cannot be invoked at Peyre Blanque. There is no cave here with roof fall, no size-sorting of artifacts by water flows, no casual, opportunistic use of extant blocks or rock outcrops (even if some blocks or the ridgetop outcrop were used as part of the structure, built up against them), no delimited use of a few blocks to create hearth areas, no simple pushing aside of locally occurring stones and blocks (Kolen 1999:151). Rather, the structure could only have been built of stones that were intentionally collected from the wider surroundings and then transported to the spot (after Kolen 1999:151). Further, as Kolen argues, whereas many Middle Paleolithic, and some Aurignacian, structures can be shown to have been the result of an "ordering of space outwards from a central position and the arrangement of materials accord-

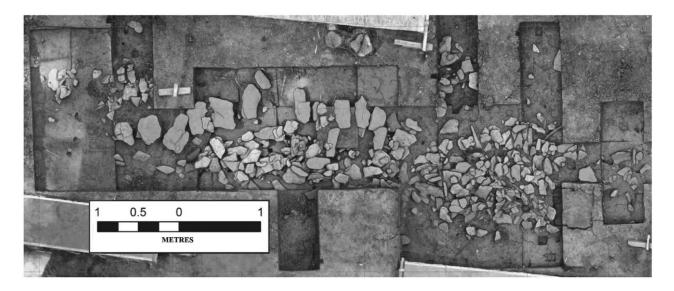


Figure 6. The sandstone structure at Peyre Blanque indicating (in blue) some of the large stone blocks in sandy limestone (Type D) especially in the western part of the structure. Note that these very large blocks each have a grossly rectangular form with their longer sides fairly well adjoined (with some minor deviations). In two places, it appears that a kind of semicircular open space is created (center of image), some sort of "logette" or work space? (drawing by S. Lacombe on a photogrammetry base image by Mark Willis, 2014). A color version of this figure is available online.

ingly" (152), the Peyre Blanque structure was established from the outside to create structured uses of space even if not covered somehow with a tent-like structure to be placed up against the presumably exposed bedrock (e.g., Gelhausen et al. 2004), a practice for which we do not yet have any solid evidence.

The artifacts recovered within the structure include several pieces of decomposing antler points but are, as for the rest of the site, almost exclusively lithics of the same general typotechnological homogeneity as across the site: most made from local chert, but including a notable black nonlocal chert (perhaps from Couteret chert 10 km to the west) found especially in the Western Secteur, and at least one tool in Bergéraçois chert (200 km to the north), a blade that was probably used to work sandstone, perhaps for engravings. Both hematite and manganese pigments have been recovered, as well as some lithics with residues that are being tested as possible hafting adhesives. Most of the objects are found along the outer southern edge of the structure, again suggestive of a more open spacing "inside."

The presence of nonlocal cherts, the import of different kinds of quite local sandstones, the import of quartzite, most likely from the riverbed of the Volp River a few kilometers to the east, for varied uses, and the selection and import of ochers (more than 150 such pigment objects have been found so far across the site) for potential coloring and other uses (some processed on site and/or evidencing use-wear striations) allow us to contextualize the movements of the site's occupants within larger social landscapes, tiered out from, or brought into, the site. That some pigments may be locally eroding from the sandstone adds to the potential draw to the site as a provisioning place. As at Kharaneh IV, Peyre Blanque attests organized spaces with patterned differences in activities; evidence for the preparation and maintenance of tools and objects that suggest reuse; the presence and uses of installations and features for socio-spatial practices. We can ask the same questions at Peyre Blanque as at Kharaneh IV, despite the geographic and environmental distances: Were these hunter-gatherers settling into certain sites, constructing homes and even communities? Did these structures have what we might differentiate into mundane, quotidian, and ritual functions, and can we infer the entanglement of social practices? The latter, a combination of both the functional and the symbolic, may be inferred from an unusual find (Lacombe et al. 2015) of a sandstone block used on one side as an anvil and worked on the other side, with deliberate and intentional removals and use of a natural fissure, to evoke the head of a horse, in proportions that anticipate the standardized proportions of the well-known Middle Magdalenian contour découpés (usually made out of the throat bone of the horse and often depicting a horse head). How might we continue, as at Kharaneh IV, to better understand the different uses of space across the site and any boundedness that might be expressed socio-spatially, technologically, and materially?

Although the materials (especially the lithics) from Peyre Blanque allow a wide comparison of sites to the east, west, and south (Lacombe et al. 2015), suggesting some participation in wider material practices expressed as "styles," a strong case can be made for somewhat of a particularity of socio-technical practices in the area of Peyre Blanque so far excavated, with the stone structure(s) standing out as unique among those known for the Magdalenian. Several lines of evidence are suggestive of a relationship between the occupants at Peyre Blanque and those at the nearby cave site of Marsoulas, especially in terms of lithic traditions common to both, and the presence/use of a manganese pigment (for cave wall images at Marsoulas) from a similar source (Walter and Rousselière, cited in Lacombe, Sterling, and Conkey 2012). As well, both sites seem to evoke material similarities to sites along the Cantabrian coast (e.g., El Mirón). Perhaps, as previously suggested for the Pyrenean Magdalenian sites of Niaux and La Vache (Langley 2013), Peyre Blanque and Marsoulas might be hypothesized as a multicomponent aggregation locale for specific, yet varied, group activities.

Could the stone structure(s) at Peyre Blanque be a way of marking (and perhaps even mythologizing) the landscape? Could this structure and our hypothesized then-exposed bedrock at the ridgetop be visible as "white stone" (i.e., pierre blanc or Peyre Blanque, its local place name) from below in a treepoor landscape? Certainly, the very existence of the structure(s) structured movement and social relations on-site. Although this likely made the landscape more familiar culturally, these "markers," as Taçon has suggested, also "transformed it into a set of places that are home or not home, restricted or not restricted, in or out-of-bounds, permissible to visit or not permissible unless there was a change of circumstances" (Taçon 1994:124-125). This kind of marking of place with fairly permanent materials suggests that individuals or groups may well be expressing an ongoing association with a place, and this, in turn, may be used to invoke obligations to place.

As noted for Kharaneh IV, it is not that the regional approaches to the UP in much of Europe have not recognized that people were "on the move" but that, as Gamble (1993, 1998) has long suggested, the social dimensions of movement have been missing from the action. It is the subsistence/resource procurement and territorialities aspects that have taken center stage in considerations of mobility; none of which could have taken place without social actors engaged in social relations within socialized places. Although there is much to yet be learned (and excavated) at Peyre Blanque, it is already a testament to the concept of a hunter-gatherer home as an inclusive landscape that is grounded in a material investment in dwelling and living space. Both sites (among many) attest to private and communal spaces, elaborate or at least extensive systems of materials and knowledge circulation, and meaningfully structured uses of space and place. Although we recognize that much early hunter-gatherer research in both regions necessarily focused on the tangible aspects of economy, technology, and so forth because of their comparative ease of identification and not because hunter-gatherers were not social beings, we are now better equipped to tackle these less tangible aspects of human behavior with recent advances in techniques to uncover these less tangible traces (i.e., micromorphology) and theoretical developments in practice theory and materiality that view objects and archaeological contexts as embodying social relations that relate the life history of objects and places to specific practices.

Future Directions for Understanding Hunter-Gatherer Landscapes as Homes

Our point here has been to examine several things more closely before capitulating to the archetypes that have been constructed about the lifestyles and meaning-makings of hunter-gatherers regarding their localities and their cultural productions. In both regions we have looked at briefly there is abundant and varied evidence for mobility, connections/connectivity, and far-reaching social networks, begging the questions of why we still have such site-centered archaeology and how do we do (and represent) an archaeology that combines socialized landscapes and landscape socialization (sensu stricto; Langley 2013)? Recent work at some Magdalenian sites, for example, challenges the traditional, yet simplistic, model of settlement patterning as having more complex sites as aggregation locales and seasonally restricted, smaller sites as hunting camps (Gaudzinski-Windheuser 2011). Some sites can only be understood as part of regional mobility practices; practices that were, however, anchored in time, in space, and in memory, if not also in myth.

A Locality as a Lived Experience

In both Southwest Asia and Europe, there is varied and substantive evidence for investments in place and locality that are not limited to mere shelter or to stopping points in a life of being on the move. Instead, both sites and landscapes are places extensively lived in. Too rarely are existing sites, or dots on the map, conceptualized in terms of having been nodes of interaction or as intersections of pathways (after McBryde 2000) within a social landscape full of pathways and trails and other features as important as that of the site itself; the site is not a distinct and separate phenomenon from the landscape within which it existed. Although there is no doubt that "the site" is easier to detect, define, and document, it doesn't mean that the past landscape is entirely elusive or unknowable. We can focus on why, for example, the different groups that came to the site of Gönnersdorf (Germany) selected that location for a gathering/aggregation. Did the marking of place through the structures there indicate that there would be a repeated visit there and not elsewhere? From where did they come and what routes did they travel? We acknowledge there are histories of research in both regions (and elsewhere) that have promoted a notion of "site" and enabled certain kinds of knowledge while marginalizing others (the core-periphery model of culture change based on site densities, types, and locations is but one example). But current work is starting to change these perspectives. Some sites previously typed as hunting sites have now, after detailed and "domestic-sensitive" analyses, been shown to be more complex, such as in the case of Verberie (France), an open-air Magdalenian site with a suite of maintenance activities and an inferred diversity of occupants (such as children/youth) not

usually associated with a traditional hunting camp (Zubrow et al. 2010).

To make much more from the evidence at hand, we still need to defetishize our outdated characterizations of these huntergatherer peoples in Southwest Asia and Europe as highly mobile and grant them—because the data do warrant it, as do studies elsewhere—a more complex and nuanced set of relationships to each other and to spaces and places. "Homes for hunters" should not be exceptional in terms of how we conceptualize and understand hunter-gatherer behavior, and whatever "huts" may be about on their own, they are surely just as integral to a landscape of action, agency, travel, mobility, the "sensorial envelope" (after Freiman and Gillings 2007) of being in the world as is the home of a settled farmer.

Conclusions

We have tried here to make a fairly straightforward point that although we often associate "house and home" with sedentism and agriculture, hunter-gatherers likely also created "homes" and, in this regard, we need to consider not only their habitation sites but also the broader landscapes in which they lived their lives as socially mediated/constructed "homes" in all senses of the word. The implications of this are that those of us who study hunter-gatherer archaeology should be more explicit about these aspects of hunter-gatherer behavior (i.e., by not avoiding terms like "house," "home," and "community") that force us to rethink traditional interpretations of hunter-gatherer behaviors (e.g., Lee and DeVore 1968). In Southwest Asia and Europe, we attempt to push the envelope of what we currently call homes and communities through detailed studies of material culture within sites and evidence of interconnections/interactions between sites.

Returning to our discussion of the materiality of home, it is not enough simply to say that hunter-gatherers had homes too. We hope to have demonstrated through two similar, yet geographically disparate, regional inquiries that the evidence for home-making, even in its most limited and materialist form, is present prior to the construction of permanent architecture and should encompass a much broader concept than that of an individual dwelling. UP and EP structures do remain rare in the archaeological record on a global scale; however, even our limited excavations and the analyses of materials within and between structures show the promise of these structures, and all localities situated within a larger hunter-gatherer landscape, for shedding light on the concept of home; how a home is made, maintained, transformed, and, in some cases, destroyed. In our view, hunter-gatherers do have homes: sometimes these are easily recognizable to the archaeologist as bounded and structured spaces within sites, and sometimes these are fluid and dynamic communities and landscapes that extend over large spaces and encompass many places. This brings us back to hunter-gatherer homes within the larger landscape and our consideration of dwelling at these two scales. We emphasize a more encompassing view of house and home as dwellings where,

Dwelling . . . is more than physically erecting a home, as it also involves interrelated cultural and cosmological concepts, norms and values. It not only relates to the house or home base in particular, but also to spatial experience in general, and in this sense has wider geographical connotations. This all means that viewing early humans as dwellers at the same time is attributing to them underlying spatial, social and symbolic notions. (Kolen 1999:141)

Then, this leaves us with the most salient point of this paper for archaeologists: how to identify dwelling and "home" in the archaeological record of the distant past. On-site and off-site traces of human activity are increasingly detectable through high-resolution excavations and analyses of material culture and the traces of repeated activities preserved in archaeological deposits that can be seen themselves as artifacts of human behavior (Shahack-Gross 2017). Given our discussion above, we tentatively suggest that some, but not necessarily all, of the following features would be relevant at the level of a "site" (broadly defined): (1) organized space with differences in activities inside and outside of these spaces, and often with boundaries demarcating activity areas; (2) clearing, cleaning, preparing, and maintaining space; (3) installations and features that suggest future use, such as caches and containers; (4) reuse, revisits, repetition, repurposing, rejuvenation; (5) probable palimpsest assemblage; (6) some kind of patterns inside the space as contrasted to the outside; (7) being able to demonstrate that patternings are beyond the "centrifugal living" activities that have been inferred for many Middle Paleolithic sites (e.g., Kolen 1999).

We make here one final point regarding the identification of homes in the archaeological record. Prevailing frameworks often privilege Neolithic "homes" over hunter-gatherer "huts," in part because great weight appears to be placed on the greater quantity of Neolithic homes. Neolithic sites often have lots of dwellings, whereas hunter-gatherer sites have few, and this, we think, has been taken to imply that Neolithic sites can be described as communities, whereas hunter-gatherer sites are "just" camps. We emphasize here that the nature of aggregation, as well as construction, use, and even destruction of huntergatherer huts discussed here, clearly tells us that it is not the number of dwellings that makes a home or a community.

At the level of the landscape, we are clearly not able to set out as specific a set of research expectations in a short space and without reference to particular contexts other than to call for an expansion of the conceptual frameworks that we bring to hunter-gatherer research, thus adding to ongoing and recent research (see above) that does take seriously some of these concepts and their manifestations (e.g., McNiven, David, and Barker 2006; Veth et al. 2008, 2018). That is, to turn from such an overemphasis on the site, to understand and probe how huntergatherer site(s) are surely embedded in mobility, movements, distributions, and sensorial engagements within a broader range of places. It is no longer quite so simple to differentiate between mobile and sedentary (e.g., Boyd 2006; Weissbrod et al. 2017).

We can begin to access some of this expanded dimension through such ongoing research foci as the movement of material objects, including raw materials, but also through many new methods and theoretical frameworks increasingly available to archaeologists, such as explorations of landscape "affordances" (Llobera 2001; Murietta-Flores 2010) or landscape learning (Rockman 2013). Homes themselves may even be better understood as containers for myths and memories (Chesson 2003; Mills and Walker 2008), and concepts of home for hunter-gatherers themselves were likely as varied as their imaginations and experiences took them.

Acknowledgments

We first presented the ideas in this paper as a joint endeavor at the 2013 SAA annual meetings in Honolulu. This paper is also the result of discussions with many of our colleagues over the past few years, too many to name individually here, as well as valuable insights provided by audiences from two Archaeology Research Facility Brownbag Seminars (University of California [UC] Berkeley). A few people did feature prominently in our ponderings on this topic, however, and so we owe gratitude to the insights and opinions of Kevin Gibbs, Sébastien Lacombe, Danielle Macdonald, Tobias Richter, Kathleen Sterling, and Ruth Tringham. Funding for fieldwork at Kharaneh IV was provided by grants to L. Maher from the Stahl Endowment of the Archaeological Research Facility and COR Research Enabling Grant (UC Berkeley), Wenner-Gren Foundation, Hellman Fellows Fund and CBRL, as well as contributions from the AHRC Fragmented Heritage Project. Funding for the excavations at Peyre Blanque has been provided by the Class of 1960 Endowed Chair of Anthropology and the Stahl Endowment of the Archaeological Research Facility (UC Berkeley), Binghamton University, the French Ministry of Culture via the Service Regional de l'Archéologie, Midi-Pyrénées (Toulouse), and the Departément of the Ariège (France). We are indebted to several anonymous reviewers whose insights and comments provided by careful reading of this article greatly improved its quality. However, any errors or omissions within are entirely our own.

Comments

Françoise Audouze

CNRS, ArScAn laboratory (Ethnologie préhistorique team), Maison René Ginouvès, 23 allée de l'Université, 92023 Nanterre Cedex, France (francoise.audouze@cnrs.fr). 13 III 18

Maher and Conkey's paper introduces us to two fascinating sites that lead them to explore the concepts of home, dwelling, and social landscape in prehistory. Relying upon the wide coverage of research published on these topics, the authors want to extend the concept of home to socialized landscapes. Although I understand the need to express the sense of belonging of prehistoric people to these spaces and their interrelation-

ships, I would have preferred they created a specific term rather than home. There is indeed a continuum from the smallest unit to the largest space hunter-gatherers consider as more or less home. Homeland meaning territory seemed to me a good enough word for the socialized landscape; it even takes a particular meaning in the context of Israelian archaeology, but territory may not be its main meaning. If we change the perspective and introduce people's interrelations in this socialized landscape, it becomes necessary to keep the concept of home for this smaller place (hut, tent, house) where the family unit (whether cellular or extended, but with a mix of generations) finds a physical shelter, a locus for domestic activity and a place to interact and maintain its ties among its present members. Its impermanent location does not change its physical, social, and symbolic function. It is useful to have a word for the smallest "us" unit. Moreover, I am not sure that connection to ancestors takes place in this unit in European UP, where the living and the dead do not coexist spatially, unlike in Natufian villages and, at a lesser degree, EP people from Kharaneh IV.

Is it home where you reconnect with people or memories? In the meaning Maher and Conkey give to this word, certainly, but home then is no more concerned with the household living place and this introduces a semantic shift and a partial loss in signification. Between English and French the semantic divides are the same for dwelling: either habitation (living place, house, hut) without any connotation of home, or habitat (territory, landscape, a geographical, ecological, meaningful space). This connects the two meanings advocated by Conkey and Maher. In French un Foyer is much more than a hearth, it is a family unit with its social and symbolic characteristics and it does need to be related to a place, as is the household. But tradition has clearly stressed the importance of the domestic hearth as the place where the social unit foyer exists and perpetuates. Un feu (fire) is the old name for the living place of a foyer. Have French archaeologists lost the concept of home on the way? It remains implicit mostly because it is a subjective notion. But in the case of the Magdalenian sites of Pincevent, Verberie, and Etiolles (Zubrow et al. 2010), we may assume the multiple reoccupations of these seasonal residential hunting camps where several generations lived together were home for their inhabitants.

If, instead of focusing on the relations between dwellers and their social space, we focus on relations between people, there may exist discontinuities and mental limits between "us" and "them." These discontinuities operate at different scales, from the family cell to more and more distant kin to aliens. In the last publication on Pincevent level IV20, Julien and Karlin have demonstrated a differential social proximity of the several "foyers domestiques/homes" according to the spatial proximity and the intensity and nature of exchanges (Julien and Karlin 2014). Given the homogeneity of the manufactured artifacts, aggregation most probably took place there within an extended kinship. Aggregation sites are places where different sorts of social discontinuities can be found according to the kinship distance existing among the people who come there. Part of them or all

may be part of a larger "us," but aggregation sites may also be places to meet "them."

Kharaneh IV seems to be an exemplary case of aggregation site, with the presence of contemporaneous material culture components of various and far-off origins and by standing out from the other contemporary sites by the larger diversity of these components. The presence of partly nonutilitarian structures in the early phase of the EP, and their repeated occupation and deliberate destruction, introduces a suggestive symbolic dimension to the activity performed at the spot. It would be really interesting to know how the components of different origins are spatially distributed and located in respect to the structures or specialized areas. This could help to build hypotheses about the social proximity or distance among the inhabitants.

Peyre Blanque, located within walking distance to the Marsoulas cave in the French Central Pyrenees, stands apart by its quite unusual pavement of large limestone blocks, the combination of locally made flint tools and projectile barb types of different origins, and the presence of more than 100 pigment objects. The only comparison I can think of is the hut II pavement at Gönnersdorf in Western Germany (Bosinski and Bosinski 2007), but portable art is still to be found at Peyre Blanque though the extraordinary collection of pigment material introduces a connection to cave painting. The pavement prevents us from interpreting Peyre Blanque only as an extraction site for flint and pigment material visited by groups of different origin. Relating it to the nearby Marsoulas cave is an interesting hypothesis needing to be tested on the basis of pigments used at Marsoulas, and of the lithic industry recovered in cave excavations. If both sites were part of the same socialized landscape, shouldn't their lithic industry exhibit the same composite assemblage?

Anna Belfer-Cohen and A. Nigel Goring-Morris

Institute of Archaeology, The Hebrew University of Jerusalem, Mount Scopus, Jerusalem 91905, Israel (belferac@mscc.huji.ac.il). 21 II 18

This is a thought-provoking paper presenting a broad theoretical background of pivotal issues relating to "hunter-gatherer home-making and the construction of socialized landscapes." Our comment is offered through the prism of the Levantine "story," with which we are most familiar.

Some of the statements are fairly self-evident. Still, a feeling of "home" does not necessarily relate to permanency. From the very beginnings, in the late nineteenth century, of the anthropological research, it has been a given that "permanence" (however ill-defined) is indeed in the eye of the beholder and that the hunter-gatherer considers his/her hut no less a "home" than does a Neolithic farmer or a modern city dweller (Spencer and Gillen 1904). It is of interest to note, though, Yellen's

(1977a) observations on the !Kung San regarding investment in the constructed environment (i.e., huts) relating to the envisaged length of occupation, and that no matter how flimsy, the huts define private, personal space.

Archaeologically, it is easier to observe the link between sedentism, permanence, and "home" later in human evolution, namely with the onset of the Neolithic, as reflected in the retrieved/observed cultural material remains. But how those tie in with inner feelings, emotions, and social beliefs, which are at best speculative, is a different kettle of fish, and current prehistoric research is more than aware of this. The issue here is how to rise above conjecture to identify the "settlement and house . . . in a network of bestowed places, sacred sites, and mythical paths and tracks" in the archaeological record, if it does not include the actual material evidence.

Moreover, although ethnographic studies reflect mobile hunter-gatherer feelings of permanence and stability regarding their interactions with their surroundings, we believe that caution should be exercised in relating to the entire landscape exploited by them as "home." It seems to dilute the meaning of the term, mixing the issue of "home range" in the landscape as opposed to concepts of "home" and "homey"—which are defined differently among different societies.

If the archaeological case study is supposed to be the sounding board for the theoretical issues raised, the Levantine data presented here are rather diffuse. There is a basic terminological discrepancy, as use is made of time periods (i.e., Early and Middle Epipaleolithic) in describing cultural phenomena rather than that of the archaeological (cultural) entities, each defined by archaeological cultural attributes confined in time and space (rather surprising given the use of "Magdalenian," a cultural definition, for the European case study). The very separation between the two phases observed at Kharaneh (the Early Epipaleolithic [EEP] and the Middle Epipaleolithic [MEP]) is actually based on material cultural criteria, which accordingly justify the separation of the chronological sequence into two distinct units. The data pertaining to this separation are missing, illustrating the absence of a middle range approach. It is unclear why both phases are lumped into one sequence, treated as unified, and describe a 1,200-year continuous sequence of an "aggregation site," with little reference to the differences observed and described in the paper itself. Clearly, there is a significant difference between the occupation phases in each of the two tested areas of the site, as reflected in the presence/absence of structures, different faunal exploitation patterns, differences in the lithics, and the range of stylistic variability within the same tool categories.

This also illustrates another caveat of the paper, as there are no clear criteria for the definition of an "aggregation site." Still, from the little one can assume from the content, it appears that most of the criteria employed (size, clear indications of the presence of varied human groups through the material culture) apply only to the MEP phase on-site. Indeed, the discussion on aggregation activities is limited to the description of the MEP area, whereas when describing the EEP it focuses upon the

individual structures and activities within and outside, as in any other "regular" site, including funerary behaviors.

So, how are "aggregation" sites defined? Are they indeed "imagined communities"? No mention is made as to their function, widely accepted in research, of sustaining mating networks to retain a viable genetic pool for the relevant mega-groups. One of the authors originally defined "aggregation sites" as "community-building places, occupied repeatedly, and sometimes for prolonged periods, by numerous hunter-gatherer groups at the same time, as part of an aggregation/dispersal mobility pattern" (Conkey 1980). But how can we recognize this in Kharaneh IV if there is no presentation of the actual material culture remains? How can "prolonged periods" or "numerous hunter-gatherer groups" be recognized in pragmatic terms?

Among others, differences between the EEP and MEP at Kharaneh IV likely relate to the nature of the areas sampled and how they are spatially (dis)connected. Given the huge extent of the site, could it simply be that the EEP area investigated happened to be an area including structures, whereas the sampled MEP area only exposed external activity areas?

As an aside, it should be noted that an almost identical MEP hearth feature (unfortunately not illustrated here) with associated postholes (and interpreted as a meat drying/smoking rack) was described at the relatively ephemeral Geometric Kebaran camp at Lagama North VIII in Northern Sinai (Bar-Yosef and Goring-Morris 1977).

Ultimately, here we are only talking about what was happening within the (small) areas sampled at Kharaneh IV—but, what about the wider territories exploited, and with what other sites does it articulate? Almost no information is provided, although it is pertinent to note the recent GIS study of foraging territories and ranges on Azraq Basin sites including Kharaneh IV (Byrd, Garrard, and Brandy 2015).

In summary, although we do believe that Kharaneh IV was a major aggregation locality (among others) in the south Levant, one cannot see it from the description offered herewith. The use of chronological terms, neglect of cultural associations, and lack of contextual data, at both the intrasite level as well as within the wider landscape, prevent the reader, in our opinion, from considering the case of Kharaneh IV as an apt example of the theoretical discourse it was intended to illustrate.

Brian Boyd

Department of Anthropology, Columbia University, 1200 Amsterdam Avenue, 956 Schermerhorn Extension, New York, New York 10027, USA (brian.boyd@columbia.edu). 2 V 18

The pre-"Neolithic transition" periods in both Europe and Southwest Asia are invariably regarded through the retrospective lens of the Neolithic itself rather than in their own terms and with their own internal characteristics and historical trajectories independent of their seemingly inevitable Neolithic

destination. But the human communities of the pre-Neolithic inhabited a world where there was no prior knowledge of plant and animal domestication, sedentism, agriculture, and so on, developments that took place hundreds or thousands of years into their future. As Lisa Maher and Margaret Conkey acknowledge in their timely and welcome article, the pre-Neolithic world was one of "being hunter-gatherer" (or however that condition anthropologists call "hunter-gatherer" may have been apprehended by those people in their own particular historical circumstance). Thinking about nonretrospective, non-Neolithic, ways to view such contexts clearly presents a considerable interpretive challenge for archaeologists in the twentyfirst century: How can we conceptualize pre-Neolithic ontologies and alterities that in all probability differed, often dramatically so, from the contemporary sociopolitical categories relating to place, space, landscape, and "home" that characterize so much of the contemporary capitalism-inflected world? Maher and Conkey offer a robust comparative study, persuasively arguing that still often-regarded "temporary," "ephemeral" dwelling structures and, crucially, the "in-between" places and spaces of social landscapes, constitute notions of "home" just as much as (what are generally perceived by archaeologists as) "permanent" residential places. I restrict my comments here to theoretical issues, and to the material with which I am most familiar, the Epipaleolithic of Southwest Asia. In particular, I focus on the authors' key notions of home-making, the construction of socialized landscapes, and community. I argue here that the development of theoretically nuanced archaeologies of home and place-making among pre-Neolithic hunter-gatherer communities of Southwest Asia are impeded by a continuing adherence to outmoded perspectives that emphasize as their primary analytical foci the central importance of the origins and consequences of sedentism, agriculture, and domestication ("becoming Neolithic"), and to the (Western) philosophical foundation of such perspectives, the nature/culture dichotomy. Alternatively, the hunter-gatherer landscapes of the pre-Neolithic must be considered, even if not subjectively understood, in the terms of the everyday lives of the communities who inhabited them.

Maher and Conkey emphasize that any coherent conceptualization of home must encompass not only individual architectural elements such as dwellings but also consideration of "a landscape of attachment, connection, familiarity, and belongingness." The processes through which such qualities become ascribed—the inhabitation of/dwelling in particular placesare formed through hunter-gatherer memory and history. For example, it has become quite clear that in Late Epipaleolithic (Natufian) landscapes, most places embellished with stone architecture were also those places with prior use as places for burial of the dead. There are very few Natufian places with stone architecture that do not have a deep history, sometimes of many centuries, involving placing the dead in the ground long before any architectural projects were initiated (a few sites in the Naqab/Negev are the exception). Over decades, centuries, lifetimes, and generations, Epipaleolithic hunter-gatherers gradually embellished those places in the landscape, places long connected with the dead. In this way, some architectural projects became dwellings, maintained, repaired, rebuilt, over many years on repeated visits. Archaeologists routinely regard the material "end point" of these historical processes—stone houses/ shelters—as representing evidence for emerging sedentism and permanent occupation. As Stewart Brand (1994) has noted, "the whole idea of architecture is permanence" (2). Pre-Neolithic hunter-gatherer histories of place and home remain largely untold, subsumed into the Neolithic social evolutionary narrative, and conceptually underpinned by the nature/culture dichotomy: hunter-gatherers with their ephemeral huts are a fleeting component, standing in contrast to acculturated, bounded and permanently settled, stony Neolithic cultivators/agriculturists/domesticators on the inevitable evolutionary road to early city-states. Perhaps, like Heidegger's animals, prehistoric hunter-gatherers are not fully historical beings, categorized as "poor in the world." They are not "world-forming" or "placemaking." They are home-less.

Alternatively, we could consider the deep history of how the relations between the living, the living and the dead, the human and the nonhuman are entwined in the social processes of place and home construction, and in the search for community. Materials, memories, and histories constitute a community's sense of place, and a commitment to place is reproduced and maintained through the harnessing of such material and immaterial agencies. A present sense of home is thus maintained through social relations stretching down through time. Understanding homes as significant places means that we must look beyond the house/structure in our archaeological inquiry because, as Maher and Conkey argue, homes are networks of social relations.

Taking up Maher and Conkey's call, the expansion of conceptual frameworks for understanding prehistoric huntergatherer connections with place and home must surely include engagement with critical social theory and philosophical ideas relating to place, space, home, household, community, and so on. One can mention here Bachelard's (1964) poetics of space and "the significance of the hut," Merleau-Ponty's highly influential (and much-critiqued) phenomenology, and Heidegger's concept of "being-in-the-world." Much European and American prehistory (often via human geography) has been enriched through this engagement over the past 40 years, but Southwest Asian prehistoric hunter-gatherer research has no comparable tradition of direct involvement with sociologically informed theory. This means that speculative explanations based on generalized forms of ethnographic and/or historical analogy, and the use of certain concepts, are often substitutes for theory-informed interpretation. To take but one such example, Maher and Conkey point out that the liberal use of the term "homeland," when used to describe geographical areas of densest hunter-gatherer occupation, often serves to marginalize equally densely inhabited landscapes of home outside archaeologically constructed "core areas." "Homeland" is a term associated with capitalism, often with nation-state created territories, and largely irrelevant for prehistoric hunter-gatherer modes of spatial understanding, identity, and belonging. It could of course be argued that inquiry into the non-Western prehistoric conceptions of home via Western social theory is (or was) a Euro- or ethnocentric endeavor. But when using terms such as "homeland," which itself has roots in colonial discourse, then a rigorous postcolonial perspective on language use becomes necessary as a means to critically evaluate our endeavors. To paraphrase human geographer Derek Gregory, the discourse of archaeology is wider than the discipline.

Bill Finlayson

Department of Archaeology, Reading University, Whiteknights PO Box 227, Reading RG6 6AB, United Kingdom (b.finlayson@reading.ac.uk). 25 IV 18

Maher and Conkey draw extensively on existing literature to consider notions of home, house, hut, and dwelling to examine the functions of huts and tents in prehistoric hunter-gatherer societies. They achieve this in large part by drawing attention to the contrast between the common association of "house" and "home" with sedentary, agricultural societies and a reluctance to use such terms describing more mobile hunter-gatherer societies. There are potential risks in such a comparison, not least of oversimplifying the general state of the debate regarding the nature of both hunter-gatherers and Early Neolithic societies. More insidious are the problems that use of everyday words such as house and home can create when we ascribe them with more precise anthropological or archaeological meaning. I am concerned that Maher and Conkey have not delved quite deeply enough, or perhaps have missed their target.

Maher and Conkey are concerned that archaeology denies hunter-gatherers the sophistication of having houses, or homes, or communities, and observe that many social institutions appear in the literature as Neolithic creations. However, this observation needs to be nuanced. The point Bradley (1984) was making when he stated that "Neolithic farmers had social relations with one another, while their Mesolithic forager predecessors had ecological relations with hazel nuts" (11) was at least partially exasperation that archaeologists studying prehistoric hunter-gatherers focused heavily on subsistence rather than society. The literature that Maher and Conkey cite is testimony that research has moved on. As they note, many of us have argued for a long and complex process leading to the emergence of farming societies. This long process does not solely place the "origins" of Neolithic traits earlier into the past, but also their completion further forward in time. As part of this argument, I have argued against using such terms as "house" and "village" in the Early Neolithic, contrary to Maher and Conkey, who wish to use such terms to describe hunter-gatherer sites.

The term "house" is a particular problem. There have been attempts to define what we should recognize as a house ar-

chaeologically, generally minimal definitions invoking a hearth, the importance of a relatively standard form replicated over a site, and that we know one when we see it (Schmidt 2005). In a sense, of course that is so. "House" is a common, colloquial term; culturally we all know what a house is. "House" means more than shelter, or somewhere to sleep, and authors such as Wilson (1988) and Watkins (1990) argued that the house was redefined in the Neolithic, ceasing to be utilitarian, becoming the home and expression of family. "House" is absolutely domestic, domus is a house, and if the Neolithic is the moment of domestication, not only of plants and animals, but of people and the world as a whole, then of course "house" is de facto a Neolithic concept. But "house" is also a word that invites circular logic: it is the Neolithic, so people live in houses, and because they live in houses, it is the Neolithic, with further confusion between Neolithic "houses" and Lévi-Straus's (1982) "house-societies." I am not convinced that such structures emerge everywhere as part of the earliest Neolithic (Finlayson et al. 2011). I am even less convinced that we should describe huts, tents, or windbreaks with associated hearths as houses.

There is no doubt the conflation of "house" and "home" in literature on the Early Neolithic ignores the importance of the concept of "home" to nonsedentary societies—not just of hunter-gatherers, but in Southwest Asia to the contemporary Bedouin and their black tents. But "home" is not used accidentally or carelessly in Neolithic research; it is a rhetoric intended to emphasize the difference between the wild and the domestic. "Home" is as bucolic and safe, in a modern romantic view of rural life, as village (Finlayson 2013). The "last homely house" in Tolkien's The Hobbit is the redoubt of all that is safe and comfortable against the wild, a culturally deep concept, a children's bedtime story. This is part of the message driven by scholars such as Cauvin (2000), Renfrew (2003), and Watkins (2005)—the Neolithic is about people like us; hunter-gatherers, whether noble or savage, are the other. Hunter-gatherer, in the ethnographic present, was in part a definition born out of a colonial enterprise (Barnard 2002); it was, and is, a deliberate "othering," and Guenther (2007) brings this to the fore, relating marginal and dispossessed societies to hunter-gatherers. This is the underlying debate that the paper does not reach.

Is the point Maher and Conkey are really making not that we should "allow" hunter-gatherers to have homes, but that hunter-gatherers are people like us? They state, "The implications of this are that those of us who study hunter-gatherer archaeology should be more explicit about these aspects of hunter-gatherer behavior (i.e., by not avoiding terms like house, home, and community) that force us to rethink traditional interpretations of hunter-gatherer behaviors (e.g., Lee and De-Vore 1968)." This is not a trite observation, but anthropology has long since moved on from such interpretations (e.g., Bird-David 1990). Anthropology accepts that no modern huntergatherer subsistence economy is entirely dependent on hunting and gathering. Archaeology has drawn more immediate and sharp boundaries and maintains the subsistence divide, for example, Bar-Yosef's (2011) argument that the management of

wild resources as if you were farming is enough to make you a farmer. Smith's intermediary category of "low-level food producers" is a better fit to the extended period of Neolithic development, and reduces the dichotomy between hunting and gathering and farming (Smith 2001). The community dwelling in a landscape is a concept that seems to have much less of an inbuilt rhetorical cultural value, and the deeply enculturated landscapes of hunter-gatherers are matched by farming landscapes. Both are constructed, modified, lived in, very human.

Maher and Conkey argue: "Our point here has been to examine several things more closely before capitulating to the archetypes that have been constructed about the lifestyles and meaning-makings of hunter-gatherers regarding their localities and their cultural productions." One of the strengths of archaeology should be to look at the great diversity of lifeways that have existed, and we should be enormously careful not to conceal these under contemporary terms such as house, home, village, and even hunter-gatherer.

Michelle C. Langley

Australian Research Centre for Human Evolution, Environmental Futures Research Institute, Griffith University, Nathan, Australia (m.langley@griffith.edu.au). 8 II 18

Now, I Know I'm Home

That "home" is much more than a roof over your head is a concept with which all of us are familiar. That this feeling of location-tied belonging, comfort, and ease of understanding your immediate surroundings likely has an antiquity well beyond the advent of permanent (usually) stone-built houses is the central concern of Maher and Conkey's preceding paper. They cogently argue that the focus on single-site—usually enclosed cave and/or rock-shelter—localities in archaeology has distracted researchers from considering that the home of huntergatherers is much more than the place they lay their head. Instead, "home" likely encompassed the surrounding landscape, its resources, and its people. I would like to take the opportunity to expand on the fact that "home" can also be found in comfortable familiarity with tastes, smells, and ways-of-doing-all of which come together alongside landscapes and their dwellings to form the social construct of an individual's "home."

Sticking to the Magdalenian context for examples, let's consider the well-studied bilaterally barbed points—previously known as *harpons* (harpoons). The widespread similarity in the form and decoration of these points is a widely discussed topic in the literature (e.g., Bahn 1982; Gonzalez Sainz 1989; Julien 1982; Lefebvre 2011; Straus 1992). In terms of how these similarities were maintained over distances greater than 1,000 km (north to south), Jochim, Herhahn, and Starr (1999:134) have suggested that "active visiting and exchange, and an ongoing emphasis on cultural ties, may have been used to counteract the

effects of distance." Examples of these weapons are shown in figure 7.

Ethnographic data, explored elsewhere (Langley, forthcoming), finds that a multitude of information can be and is stored and shared in projectile points through a process best described by information exchange theory. In short, "styles" of projectile points are used to convey messages to viewers, and can include anything from identity, affiliations, and ranks to intent toward those approaching, and are advantageous in reducing stress between first meetings of strangers. An ethnographic example of this situation was given by Wiessner (1983:269), who reported that although the San were afraid of strangers, it was "said that if a man makes arrows in the same way, one could be fairly sure he shares similar values around hunting, land rights, and general conduct" whereas "stylistic difference [in projectile point design] may signal another set of values and practices, if the two groups are known to each other, or if not, that its maker is foreign and his behaviour is unpredictable." This example effectively demonstrates how such material items have the ability to bind groups together into communities. Familiarity of tool form can, and often does, signal a "territory"—which, to an individual, would be their "home."

I would argue that the strong morphological and decorative similarities in Magdalenian barbed points may have acted to tie regionally dispersed groups together—the binding of a community. These particular points were not only capable of containing emblemic style (through overall morphology of barb, shaft, base, and decoration), they appear to have been more carefully curated than their unbarbed counterparts (Langley 2015), and required significantly more work to create and maintain than the unbarbed types. Furthermore, although a variety of barbed forms were technically available to the Magdalenian artisans, only a very restricted range of types (in terms of barb shape, shaft section, point dimensions, etc.) and decoration techniques and motifs were selected. Similarly, remarkably simpler barbed point forms would have functioned just as effectively in hunting either terrestrial or aquatic game, with experiments demonstrating that self-barbed points (for example), which take significantly less time, effort, and skill to produce, were extremely effective weapon tip forms. With more time- and energy-efficient projectile point forms available to the Magdalenians, why were such distinct and carefully crafted items produced if not to act to hold and transmit social information?

Similarly, the unusual find of an object made of cetacean bone at a site close to Gönnersdorf, Andernach-Martinsberg (both located in the German Central Rhineland), allowed for an insight into Late Magdalenian life not usually available (Langley and Street 2013). With the source of whale-bone items appearing to be in the vicinity of Isturitz, Pyrenees (Pétillon 2013), alongside the additional find of a lifelike engraving of a seal back at Andernach-Martinsberg (suggesting firsthand knowledge of these animals), we were able to suggest that someone had either traveled the 1,000 km south before return-

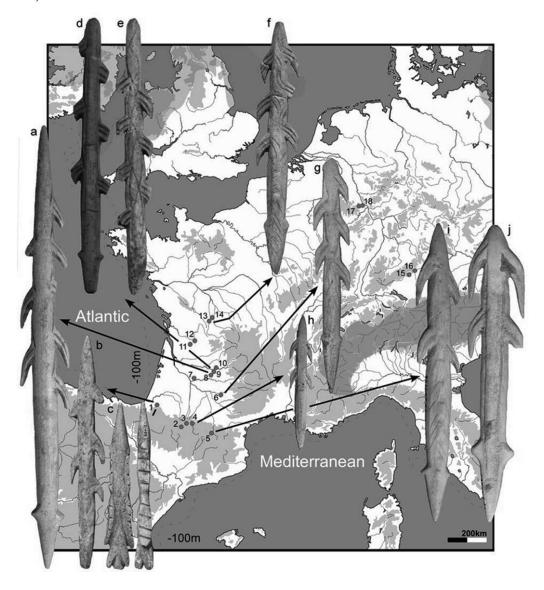


Figure 7. Examples of bilaterally barbed points and their recovery locations: (1) Isturitz; (2) Aurensan; (3) Lorthet; (4) Gourdan; (5) La Vache; (6) Courbet; (7) Montastruc; (8) Laugerie-Basse; (9) La Madeleine and Lyveyre; (10) La Tulière; (11) Chaire-à-Calvin; (12) La Placard, Abri de Fieux, and Grotte de l'Abbé; (13) Grotte du Bois-Ragot; (14) La Piscine, Grotte de La Marche, Fadets, and La Tannerie; (15) Hohle Fels; (16) Vogelherd; (17) Gönnersdorf; (18) Andernach-Martinsberg. A color version of this figure is available online.

ing north again, or had simply moved north (possibly following the Rhône and Rhine Rivers). In light of Maher and Conkey's work, this singular find might be argued to represent someone taking a bit of "home" with them.

Such items, as alluded to by Maher and Conkey in their paper, can then be used to explore the geographical extent of a hunter-gather's home, but also the individual aspects which may have come together to build this construct around them. Through higher-resolution analyses of individual items or artifact categories with concepts such as "home" and "community" in mind, archaeologists should be able to begin to understand what "home" meant to different people at different times throughout prehistory. Through such work, we will be

able to get far closer to prehistory than we have ever before, and perhaps even experience a little of a "home" before ours.

Dani Nadel

Department of Archaeology, Zinman Institute of Archaeology, University of Haifa, Haifa 3498838, Israel (dnadel@research.haifa .ac.il). 18 II 18

This paper highlights aspects not always directly addressed by archaeologists working in both studied areas. The suggestion that the home of hunter-gatherers is not different from the home of sedentary Neolithic farmers is indeed challenging, in terms of reconstructing past lifeways and documenting continuity and changes during the end of the Pleistocene.

I will limit my comments to four main points. The first relates to the choice of sites, beyond the fieldwork focus of the two authors. If the built (and thus also visible to archaeologists) sites and features are a key issue here, it would have been interesting to address—as much as possible—the mammoth bone structures (dwellings) from central and east Europe, some of which are contemporaneous with the sites discussed here (Leonova 2003; Shipman 2015; Soffer 1987, 2003; Vasil'ev et al. 2003). The structural remains of these sites are more numerous—both as sites and as individual structures—than any other contemporaneous examples. Furthermore, the use of bones of dozens of mammoths per structure, their seasons of occupation, their function, and their postulated role as home within the social landscape provide an excellent example of the complexity and innovative nature of Upper Paleolithic groups (Bar-Yosef 2002).

The second relates to the EP of the southern Levant. At Ohalo II, six burnt brush huts were found: four were fully excavated and two were largely sampled. Only in one hut could we clearly identify more than one floor. A grave of an adult male was found and a small stone feature was adjacent to it, and several hearths and middens were also studied (Nadel 2006). As all preserved features at the site were very shallow (mostly 20-40 cm thick), there is no evidence for many repeated visits. Although on a lush lakeshore with a wide range of available food and raw materials resources, it seemingly did not develop into a large aggregation site; however, it was used year-round and still no stone walls or stone floors were found. Even in Middle EP sites stone architecture in the Mediterranean Levant is scarce, and thus worth mentioning in addition to the sites discussed in the paper are two Jordan Valley sites-Ein Gev III (Martin and Bar-Yosef 1979) and Haon III (Bar-Yosef 1975) and Iraq ez-Zigan (Mount Carmel; Olami 1984:42 [site 42]; Wreschner and Ronen 1975). It would be of much interest to return to any of these sites and conduct large-scale excavations; this is exactly what we are currently doing at Neve David (Yeshurun et al. 2015).

Returning to the issue of home, both as a built structure in a village as commonly referred to in the Neolithic research sphere and as the landscape home as discussed here for EP communities, there are conceptual similarities and differences between the two, which although well known should still be stressed here. Beyond the well-presented view provided by Maher and Conkey, the private/individual/family (or any smallest basic social unit) home was a built structure. During the Levantine Early EP the structure was always built of perishable materials; in the Middle EP some structures were also built of flimsy stone foundations or stone floors; in the Late EP (Natufian), stone walls became very common. However, during this period of several millennia no apparent change in the shape is discernible—all are variations of round and oval outlines. This is also true for most dwelling structures of the Pre-Pottery Neolithic A (PPNA). It is only by the end of the PPNA and especially in the

Pre-Pottery Neolithic B (PPNB) that one observes a dramatic shift to orthogonal structures (Kuijt and Goring-Morris 2002; Watkins 1990, 2010). Thus, looking only at the built home, the two major innovations/revolutions occur at the beginning of the Natufian (stone structures) and at the end of the PPNA (orthogonal).

My third point presents a Natufian example from Lower Nahal Oren (Mount Carmel, Israel). Here, within a radius of 300 m from the main Late Natufian (LN) Nahal Oren site, there are five additional LN sites. The geographically central open-air site includes more than 40 excavated burials and a central large stone-lined hearth (Noy 1989; Stekelis and Yizraeli 1963); the use of deep boulder mortars is particularly common here (Rosenberg and Nadel 2014). Around this cemetery are five cave and rock-shelter sites with LN remains. No excavations were carried out in these (except for one), radiometric dates are not available, and dating was based on typology of bedrock features in all and lunates in one (Nadel and Rosenberg 2011). However, this may be a small local example of a LN social landscape where one community was using the Lower Nahal Oren caves, rock-shelters, and other natural features in a patterned way with "sites" located within shouting distance from each other. The large graveyard was in the middle of this complex. Furthermore, the proceeding PPNA cultural phase is well represented here with the only known PPNA dwelling structures in Mount Carmel (Stekelis and Yizraeli 1963), and there are two additional nearby PPNA sites (less than 300 m away). Accordingly, Lower Nahal Oren served continuously as a focal place, and a home during both the LN and the PPNA. It encompassed a central location with a large cemetery during the LN and a unique PPNA hamlet with surrounding smaller activity places (Nadel and Rosenberg 2011).

The fourth point addresses the morphological variability of geometric microliths from Kharaneh IV: when an assemblage includes thousands of specimens of the same general type, some of the variation may reflect the number of knappers but not necessarily their different geographical origins. As this aspect has been used to construct long-distance connections across the region, with Kharaneh IV as a focal center, more quantitative data in the form of frequencies of specific types and subtypes in their original areas and at Kharaneh IV would have been helpful.

In sum, the degree of material and conceptual change/continuity during the Levantine EP is still of much debate; however, this paper adds a fresh and very important framework for future research and syntheses.

Deborah I. Olszewski

Department of Anthropology, Penn Museum, University of Pennsylvania, 3260 South Street, Philadelphia, Pennsylvania 19104, USA (deboraho@sas.upenn.edu). 21 II 18

Maher and Conkey highlight a fundamentally underappreciated and underserved perspective on the conceptualization of

hunter-gatherers and their "places" in the landscape. Speaking as someone who studies these prehistoric groups in the Epipaleolithic Middle East, I admit that I rarely think about the sites that I investigate as being "homes" rather than "camps." This is due in part to the seeming lack of structures (except occasionally for an informal hearth or two) and the indications that my sites likely were visited (repeatedly) only for short periods at a time. So, it is instructive to have Maher and Conkey's views advocating changes in how we regard hunter-gatherers. I think this "bias" toward camps rather than homes has roots not only in the dichotomies that Maher and Conkey present (e.g., privileging the Neolithic over the Epipaleolithic in the Middle East, and comparing cave sites/art sites to open-air sites in the European Upper Paleolithic), but also in the biases of modern life. We today primarily live in settlements that we think of as homes and communities and thus we apply this perspective to the past, that is, hunter-gatherers are not like us because most do not have settled lifestyles and we therefore fail to think of their "places" as homes or communities. We might see the same effect when we think of displaced persons today whom we characterize as living in refugee camps (not refugee homes) because their structures are tents (temporary/impermanent) and/or they are expected eventually to return to "home."

With respect to the hunter-gatherer landscape (as part of home and community), Maher and Conkey describe this as entangled (pathways, trails, tracks, localities that all are integrated into a worldview) and note that we often have only "dots on a map." This, of course, results from at least two archaeological biases, the first of which is the desire to dig "good sites"—sites with the potential to yield lithics, fauna, absolute chronology, and a host of other cultural materials, sometimes including structures. The second is how we traditionally do archaeological survey, which is to focus on recording only those localities that we define as sites. In both instances, we cannot do other than end up with "dots on a map." Instead, our surveys should be designed also to record the spaces between sites (nonsites), as advocated decades ago (Dunnell 1992; Dunnell and Dancey 1983; Foley 1981, among others), but engaged in only occasionally (Banning, Hawkins, and Steward 2011; Barton et al. 2002; Gonçalves et al. 2017; Olszewski et al. 2010, among others). This aspect of what the landscape is also affects what we know about the landscapes of non-hunter-gatherers (e.g., see Banning 2017 for comments on the Iron Age landscape in the Wadi al-Hasa, Jordan).

The two case studies (Kharaneh IV and Peyre Blanque) provided by Maher and Conkey are described at one level as aggregation sites. Not surprisingly, given the different geographies and habitats (Middle East vs. Europe), how these are defined as aggregations differs in some respects. Maher, for example, notes (among other things) the diversity of seemingly different types of microliths as representing different groups coming together at Kharaneh IV, whereas Conkey has a uniformity of lithic types at Peyre Blanque but potential connections to relatively nearby sites (e.g., Marsoulas) that might constitute a notion of several linked sites as aggregations of communities across the land-

scape. In both cases, despite definitional nuances, the context of thinking of these as "home" remains predominant.

That these aggregations are persistent (repeated visits) and represent large groups is based in part on the thickness of deposits present at the sites, particularly the thickness of layers. At Peyre Blanque, for example, a layer of 25-40 cm is described as shallow, thus making it difficult "to demonstrate if the archaeological materials were deposited from repeated visits to the site." But, shallow is a relative term; is the shallow level at Peyre Blanque "shallow" because the context of comparison is to cave layers? In contrast, a 25-40 cm layer in most Middle Eastern Epipaleolithic sites would not be considered particularly shallow, but quite substantial. At any rate, I am not entirely convinced that greater thickness correlates very easily with substantial numbers of people as opposed to numerous repeated visits, although Maher and Conkey acknowledge the difficulties of this terminology in their footnote 2. One would need a careful evaluation (if possible) of the rate of sedimentation vis-à-vis artifact deposition and/or possibly deflation rates to assess this more completely, in addition to the aspects they mention (site size, density of materials, multiseasonality, length of occupations based on chronology, etc.). Even instances of refitting lithics do not necessarily mark a general level of contemporaneity across areas of a site, as people do pick up and reuse things (potentially hundreds of years later). Sites themselves are repositories of useful raw materials, and we do not necessarily know for how long any particular site surface remained accessible to later visitors (Dibble et al. 2016).

Finally, the notion of the costs of persistent places is an interesting factor in the use of places in the landscape. Morgan et al. (2018), for example, assess the construction of various features (house pits, storage pits, rock rings) and structures (wickiups, house floors) for a hunter-gatherer site in Wyoming. They experimentally examine labor costs and digging costs and conclude that a single family camp can be built in about 8 hours with a kilocalorie cost of 2,500 for each family member. Thus, the initial investment is not particularly high, but what is intriguing is that, once built, the features and structures may serve as an attractor for future visits, as they would not need to be built again at a different locale. The multiple floors in the hut structures at Kharaneh IV and the sandstone slab delineated areas at Peyre Blanque, as discussed by Maher and Conkey, spring immediately to mind as such attractors to place (and thus persistence of use) as home.

Tobias Richter

Center for the Study of Early Agricultural Societies, Department of Cross-Cultural and Regional Studies, University of Copenhagen, Karen Blixens Plads 8, Søndre Campus, Building 10-4-53, 2300 København S, Denmark (richter@hum.ku.dk). 1 III 18

Maher and Conkey's central argument is that Paleolithic huntergatherers in Southwest Asia and Europe (and I suppose else-

where) did not just build structures for shelter, but that these dwellings also created a sense of place and made these places hunter-gatherer homes. Mundane, everyday practices and construction activities, but also funerary rituals and ceremonies at particular locales or nodes within the landscape created attachments to place and made them homes. At the same time they stress that we must also consider how not just sites, but the landscape as a whole, shaped such experiences and contributed to a sense of home and belonging. Their argument draws on the critique of the often dichotomous terminology that is applied to Paleolithic and Neolithic architecture (huts, hamlets, and camps in the Paleolithic versus houses, villages, and settlements in the Neolithic). This continues a long-running critique of the dichotomization between how archaeologists have interpreted the archaeological signatures of Paleolithic and Mesolithic huntergatherers versus those of farmers (Gamble 2004; Gamble and Gittins 2004; Wobst 2000). Whereas the former are usually studied from ecological and evolutionary perspectives, symbolism, social relations, and cosmology play a much more important role in the study of the latter. This dichotomy is still perfectly captured in Richard Bradley's (1984) old adage that "successful farmers have social relations with one another, while hunter-gatherers have ecological relations with hazelnuts" (11).

Their point is well made and on the whole I agree with their critique and argument, having made similar points about huntergatherer place-making and social interaction in the context of the Epipaleolithic of Southwest Asia less eloquently myself (Richter 2009). Their call for a more nuanced and less stereotypical view of Paleolithic communities also resonates with broader critiques of overarching social evolutionary metanarratives. It is indeed puzzling why many archaeologists working in the Paleolithic continue to be overly concerned with only looking at environment, resources, and technology, but not with the social and meaning-creating activities of the people they study.

Reading their article did leave me wondering, however, whether the concept of "home" generally is a useful one. Maher and Conkey rightly criticize the use of this term when it comes to the Neolithic, where it is applied uncritically to sites with "houses" (although to be fair, its use is not widespread). At the same time, if we can be critical of its use in the Neolithic, should we not also be aware of its pitfalls when expanding the use of this term to the Paleolithic? Maher and Conkey rightly acknowledge that the concept of home is ambiguous and difficult to pin down. But therein lies a problem: "home" encompasses such a wide range of culturally specific meanings that its usefulness as a cross-cultural concept might be problematic (see papers in Benjamin et al. 1995). Although some of the connotations "home" evokes are probably less culturally dependent, most conceptualizations of home will, I would expect, be difficult, if not impossible, to translate from one sociocultural context to the next. I do not imagine that Maher and Conkey would disagree that place-making and home-making are also culturally specific and contingent. However, if we accept this then we ought to also ask whether or how far the concept of home can or should be understood as a human universal. We

ought to also be aware how far the concept of home might encapsulate specific notions stemming from Western experience and romantic notions of belonging. Moreover, at a time of refugee and mass migration "crisis," and increasing social inequality, we must also pay attention to the political dimension of what it means to have or not have a "home."

Another danger I see is that by extending this concept to the hunter-gatherers of the deep past, are we not dismissing the fundamental "otherness" of these societies, by linking them more to a concept that is, arguably, quite central to how we define our experience in the modern West? There is no doubt that the use of the concept of home is problematic when it is only applied to the Neolithic, but notwithstanding Maher and Conkey's valid criticisms of how Paleolithic societies are generally interpreted as less imbued with social meaning, I worry that extending this concept even further does not fully solve the issue. It has been argued repeatedly that archaeological interpretations of the Neolithic have been influenced by linking the "origins of agriculture" in a long social evolutionary narrative to the modern, Western experience, neglecting the fundamental otherness of Neolithic societies (e.g. Edmonds 2002; Thomas 1991a, 2002, 2004). We should therefore also be mindful not to extend this narrative back even further by creating generalized continuities that make these societies appear to be more similar to our own than they likely were. A deeper discussion on the concept of home, and a nuanced definition, is therefore necessary to avoid creating a notion of sameness that ignores or conflates the fundamental differences in social and cultural experience that undoubtedly characterized Paleolithic societies.

In sum, I applaud Maher and Conkey for their analysis and contribution, and hope that my comments may serve to continue and expand the debate on home-making in early human societies somewhat.

Silvia Tomášková

Department of Anthropology, University of North Carolina, Chapel Hill, 301 Alumni Building, Chapel Hill, North Carolina 27599-3115, USA (tomas@unc.edu). 24 II 18

Maher and Conkey rightfully point out that Old World archaeologists continue to adhere to the notion of prehistoric mobility that negates attachment to a place. The archaeological sites presented here force us to expand our thinking about both movement through and dwelling in a landscape. The authors aim to nudge us away from progressivist narratives of history, where the Paleolithic would simply be a way station en route to settled farmers and magnificent civilizations. They suggest that hunters and gatherers occupied places for possibly extended periods of time, and they ask that we think of these aggregation sites as "homes." The notion of "home" has too complicated a history for a short comment, and that of homeland even more so in many parts of the world (see, e.g., Jensen 2015; Rybczynski

1986). I therefore focus on the issue of mobility that the authors question. As Conkey herself has noted, the concept of "aggregation sites," semipermanent larger sites of hunters and gatherers, has been with us for quite a few decades without the serious sort of interrogation that most archaeological keywords receive (M. Conkey, personal communication). Thus I suggest that the Magdalenian and Epipaleolithic sites discussed here may provide a good starting point for an inquiry into what archaeologists imagine when they evoke movements or aggregations of people in the distant past. Is everyone, old and young, weak and strong, changing domicile en masse? How often would such moves occur and for what reasons? Household archaeology may be methodologically challenging in studies of mobile groups, but even considering such an approach would force archaeologists into a definitional mode. A description of what makes a prehistoric group, a household, or a family might get us closer to an idea of who may be moving places and who may stay behind. The compelling archaeological evidence of Peyre Blanque and Kharaneh IV inspired me to turn again to ethnographic accounts of people who lived by gathering, hunting, and fishing. The Arctic has long been used as an analogy for Ice Age in ecological terms, part of its enduring power over the imagination stemming from its unfamiliarity as a landscape to the urban mind of the present. This was the setting that Marcel Mauss and his collaborator Henri Beuchat described in the essay "Seasonal Variations of the Eskimo: A Study in Social Morphology," published in the Année Sociologique in 1906. Mauss was interested in a sociological question with a particular import for archaeological research: the degree to which kinship and social structure varied, based on seasonal patterns of settlements. He documented individualized, loose, scattered settlements during the summer, as contrasted with large collectives in winter houses linked to communal spaces. The comprehensive literature that the essay draws upon details seasonally changing relationships between both people and land. Specifically, Mauss cites the geographer Friedrich Ratzel, who

distinguished between the *geographical volume* and the *mental volume* of societies. The geographical volume is the space actually occupied by a particular society; its mental volume is the geographical area that the society succeeds in encompassing in its thought. . . . As a result the Eskimo, even those who have not made these trips, have a traditional knowledge of extremely distant areas. (Mauss and Beuchat 1979 [1906]:51)

Mauss argued that familiarity with the ecological resources was not the central concern here; as a matter of fact, he was pushing against ecological determinism. Rather, he underscored the importance of dwelling in a larger, familiar landscape, located in multiple places, each significant and marked. A child would get a particular name related to spirits of ancestors if born in a summer hunting location, and it would also get another winter name, which anchored it to a different, extended and collective family and place. Women owned the *umiaks* (kayaks), whereas men's possession was the winter sled; each providing

mobility but at different times with specific viewsheds, connections, and a reach of people and places. The implication of the essay for the archaeological cases at hand is that Peyre Blanque or Kharaneh IV may represent less a fixed and constant relationship to a particular place than a mobile and variable one, a sense of dwelling in a larger landscape. Mobility in such understanding is a relational way of being in the world, a connection of people and places. It also suggests that archaeologists should give greater thought to the specificity of movement, investigating various possibilities of who from a group might go, who might stay, and the duration of any of such movements. In a comparison of use wear on lithics from Dolní Věstonice and Willendorf, I suggested that the difference between the two sites was most likely not "ethnic" or "cultural" but rather seasonal (Tomášková 2000). Specifically, I argued that Dolní Věstonice was likely occupied year-round, whereas Willendorf appeared a place of summer and fall activities. However, the similarity and the difference of the archaeological materials from both sites lead me to consider the possibility that they may have been connected through larger movements and being in the landscape in Central Europe; perhaps some people went to the banks of the Danube while others stayed behind at the foothills of the Moravian hills. Dunnell once noted that "in spite of critiques that date to the early 1970s the notion of site is as ubiquitous as any archaeological concept in the current literature. Archaeologists look for, and find sites; they record sites; they collect and/or excavate sites, they interpret sites; and incredibly, they even date sites" (Dunnell 1992:21). His words resonate with the case studies presented here, suggesting that an investigation of mobility might move its gaze beyond given sites, spectacular as these examples may be. Maher's Azraq Project and Conkey's "Between the Caves" are exactly the approaches these research questions need: attention to paths, trails, and places further away, seen with eyes of people both moving and staying in places they make their own.

Graeme Warren

School of Archaeology, University College Dublin, Newman Building, Belfield, Dublin 4, Ireland (graeme.warren@ucd.ie). 23 II 18

For those of us who study the lifeways of prehistoric huntergatherers, finding "Homes for Hunters" is an important task, and Maher and Conkey are to be thanked for opening out this debate in such stimulating fashion. As they argue, all too often black-boxed assumptions about the relative importance of structures and places to the lives of farmers and foragers structure our approaches to the material remains of past societies. The pursuit of the "first hut" has been shown to be a search for a point of rupture; with the first imposition of architectural form seen to mark a distinction between the evolutionary development of humans and their engagement with a historical trajectory of directed change (Ingold 2000:181–185). As with so many different notions of supposedly key human

achievements or characteristics (religion, hierarchy, villages, etc.), these origin myths are imposed onto models of change in subsistence: the origin of agriculture as the origin of our shared humanity: "The first people to be fully human, to share the humanity that is common to human societies in the world today, came into existence at the beginning of the Neolithic in southwest Asia" (Watkins 2005:85). A house, an imposition of a particular, repeated architectural form as a marker of our cultural agency and our distance from nature, is therefore reserved for people like us.

This, of course, will not do. Rich ethnographies show the depths of engagement between hunter-gatherers, their land-scapes, the places they live, the structures they build, and the complexity of how the material forms of these structures expresses worldviews (for review, see Finlayson and Warren 2010: chapter 5). As Bird-David puts it: "Even though a structure is temporary, it embodies a permanent way of dwelling for those that occupy it" (Bird-David 2017:40). The evidential basis left in the archaeological record for these relationships may sometimes be different for mobile and sedentary communities, but it is our responsibility to engage with this problem: in Maher and Conkey's words, "how to identify dwelling and 'home' in the archaeological record of the distant past."

The case studies presented highlight these possibilities well, and provide valuable perspectives on aggregation sites. These complex palimpsests provide particular methodological challenges, and key issues remain in engaging with the different temporal perspectives such sites require. The discussion of Kharaneh IV is especially useful, demonstrating clearly that dwelling through, among other things, aggregation, long-term occupations of locales, marking of place, and carefully structured acts of deposition is not new in the Neolithic, or does not only take place as part of a historical process of change that leads to the Neolithic. Maher and Conkey rightly ask why huntergatherer archaeology in some parts of the world has made little overall contribution to our overall study of hunter-gatherers. The dominance of models of transition research is a large part of this problem, but our role as consumers of analogical frameworks is another reason that we often fail to speak to the broader community of hunter-gatherer research. Working through our materials in new and innovative ways, as presented here, enables a contribution of wider relevance to be made.

It is interesting to reflect on these arguments in the context with which I am most familiar—the Mesolithic of Europe. Here, it appears, "houses" do appear in hunter-gatherer contexts: the index for a recent synthesis includes 22 references for house, and only two for huts (Bailey and Spikins 2008)—although there are interesting regional variations in this usage that would repay investigation. The buildings on some Mesolithic sites, such as Lepenski Vir, for example, have long been called houses. In fact, the nature and changing character of symbolic activities within and around them has been extensively discussed, including consideration of whether they are best described as houses or shrines (Bonsall 2008), accepting that this may not be a meaningful distinction. Increasingly, we also recognize the

nature of monumentality within the Mesolithic landscape—and the ways in which this differs from Neolithic monumentality. We have long explored the importance of "persistent places" in the Mesolithic landscape in enabling these forms of dwelling (Barton et al. 1995). Reconsidering this rich material record in the light of the arguments presented by Maher and Conkey would be stimulating. At the same time, a more comparative regional approach to the archaeology of hunter-gatherer dwelling and home may reveal interesting aspects of the histories of our disciplines in different regions.

Maher and Conkey rightly try and move our focus away from buildings to think about the spaces between them and the broader context of dwelling. This is important, but comes with the slightly ironic result that we are offered very little detail of the "brush hut structures" at Kharaneh IV. Accepting the problems of cross-cultural generalizations about the numbers of people who might habitually use spaces of particular sizes, understanding the material reality of buildings can provide insights into aspects of "home" life. My own research has included manufacturing reconstruction Mesolithic houses, providing important insights into the possibilities of space, and the communities of practice and scales of community required to build and maintain such structures.

There is much to commend in this article. But there are some areas, however, where a little more analytical precision may help the development of the argument. Arguing that homes should not be equated with buildings is important, but there is a risk that extending the concept of home to the landscape as a whole may stretch the concept too far. Home is ambiguous and has a particular history as a concept: "The discussion of universalistic assumptions about a human drive for being 'at home' involves very heterogeneous forms of belonging, alienation, or indifference towards a 'home'" (Hauschild 2001:155). This may have been unpacked more in this discussion. Taken simplistically, the notion of home implies an emotional connection, an ontological grounding that may not be equally present in all parts of a landscape. To phrase the question in another way: Does every act of dwelling create a home? And does everyone feel equally at home?

Trevor Watkins

School of History, Classics and Archaeology, University of Edinburgh, William Robertson Wing, Old Medical School, Teviot Place, Edinburgh EH8 9AG, United Kingdom (twatkins@exseed .ed.ac.uk). 6 II 18

Population Aggregation and Cumulative Culture

Although I have been impressed to learn from Margaret Conkey's work in southwest Europe, I must comment from the region that I know better, Southwest Asia. I agree with Lisa Maher that the Epipaleolithic of the Levant, especially the early and middle subphases, has been overshadowed by the historical

majority interest in the Pre-Pottery Neolithic and close questions of the domestication of plants and animals and the beginnings of farming. I have come to recognize that we will not be able to give a convincing account of the cultural, social, and economic transformation that culminated in the Neolithic period unless we take a long-term, cultural evolutionary perspective. At the least, we should take an arbitrary starting point at the beginning of the Epipaleolithic, because it was at that time that the archaeological evidence for change gathers force and pace.

We have had plenty of isolated clues over the years that there are aspects of the early-middle Epipaleolithic in the southern Levant that (a) distinguish the cultural and social lives of its people from the preceding Upper Paleolithic and its classic mobile foraging way of life, and (b) prefigure elements of the better-known Late Epipaleolithic Natufian and the earliest Holocene Pre-Pottery Neolithic. Maher notes these in the context of her case study of Kharaneh IV (large, open-air sites, sites where people stayed for much, most, or all of the year, sites with significant stratigraphic depth, sites with built structures, intramural and ritualized burials, harvesting, storing, and processing of grasses, cereals, pulses, and other plant-food resources, localized and rapidly changing chipped stone traditions, social exchange networks made visible in valued and exotic materials).

What is added to the mix is the description of Kharaneh IV as an extraordinary aggregation site, supported by a clear summary of the evidence for the presence of large numbers of people from closely related but significantly differentiated cultural communities, and their engagement in the sharing and exchange of things made from valued exotic materials. As the authors say, long-distance exchange networks were not new in the Epipaleolithic of Southwest Asia or the Late Upper Paleolithic of Western Europe; what we can see is that there was a crescendo in the extent and the intensity of social exchange, beginning before the Upper Paleolithic and continuing through the Pre-Pottery Neolithic in Southwest Asia (Watkins 2008; Watkins, forthcoming). The innovation of the Early and Middle Epipaleolithic aggregation site shows us a potent medium for the intensification of social and cultural interaction, sharing and exchange, beyond what was possible for the typical Paleolithic fission-fusion way of life of mobile foraging bands (Grove, Pearce, and Dunbar 2012).

Why were such opportunities for increasing the intensity of interaction, sharing, and exchange important? Central to the recent publications of a number of researchers interested in cultural evolution is the idea that the evolutionary trajectory of the hominin line has been driven by the gene-culture coevolution of cumulative culture (Boyd 2017; Henrich 2015; Laland 2017; Sterelny 2011). Henrich (2015), for example, argues that "cultural evolution became the primary driver of our species' genetic evolution" (57; cf. Laland 2017:29–30), so that from an early stage in hominin evolution the growth and expansion of culture became an autocatalytic process. Cumulative culture is a complex business, but two essential components are the scale of the community that shares a culture, and the mechanisms

for observing, imitating, learning, communicating, and teaching that sustain (and develop) a culture across the generations. All of those researchers and the groups that they represent, along with the Lucy to Language research group (Dunbar, Gamble, and Gowlett 2014; Gamble, Gowlett, and Dunbar 2014), take the long view of human cultural evolution; but they all also recognize a key turning point around 10,000 years ago. The new information about aggregation sites and what large numbers of people engaged in there will help greatly to rebalance the story of "Neolithization" into a pivotal, final Paleolithic-Neolithic transformation.

Reply

We thank the many colleagues who have taken the time and care to read the article, and we were especially pleased to see how many of them brought in a variety of observations and points that we had ourselves considered, but had to limit or edit out due to length limitations. For example, we had originally included a short paragraph about the concepts of Heidegger regarding "being-in-the world," which, among other key perspectives, was brought in by the astute and important comments by Brian Boyd. As well, the terminological conundrums of the term "home" as brought out by Françoise Audouze were much discussed by us, especially in regard to the challenges of meanings in different languages, as she points out for the French term, foyer. In the following responses, we will try to attend to many of the key comments and critiques from the different commentators, although, given the scope of both the original article and what has been brought in by these comments, it seems almost as if we should have planned this study as a small monograph to be able to cover with more depth such issues as definitions of terms (e.g., home, aggregation site), more of the relevant data for both sites (Kharaneh IV and Peyre Blanque), a more extended development of the conceptual frameworks or theoretical reframings as suggested by Boyd, or of mobility, as suggested by Tomášková. But, as we point out again, one key objective has been to provoke further discussion and, hopefully, to intervene into the often-unquestioned and problematic assumptions about the lives of hunter-gatherers and their worlds. Many of these comments show how one can push further in these directions.

We have organized our response to these comments along several themes: (1) terminology; (2) a call, in some instances, for more data or specifics; (3) conceptual framework and theoretical implications, including some "cautions"; (4) topics we could not attend to here; and (5) welcome additions. As noted already, the very term of "home" brought out a variety of important issues, beginning with Françoise Audouze's suggestion that perhaps a separate term, other than "home," would have been more satisfying. Although we considered this, we felt a new term might be more confusing than helpful, given that it

was as much what the concept of "home" implies that mattered in making it an explicit part of hunter-gatherer lifeways, as that we could somehow identify specific sites or places that we would label "homes." And although we also agree that it could be useful to try to find a term for what she refers to as the smallest "us" unit, what that unit might have been in varied circumstances is itself a challenge. In addition, concerns about the term "home" were raised importantly as to a possible conflation with "permanence." However, we would agree that home and permanency are not the same, nor does one imply the other automatically, despite the fact that other scholars, especially writing about the so-called settled villages of the Neolithic, often tend to allow this conflation. Finlayson adds to this observation in his highlighting that the term "home" is not carelessly or accidentally used for the Southwest Asia archaeological record, but that such usages are intentional. He is also concerned that house and home could be conflated and, as he suggests, rather than eliminate (or try to eliminate!) the use of terms like home and village for the Early Neolithic, we would agree that it might be easier to go the other way. That is, to make the point that if we must have these (and other broad and problematic terms) as our terms, then we must insist that their usage is not exclusionary for hunter-gatherers as it seems to be, at least for Southwest Asia. And Richter gets to perhaps the key concern here, namely, that such a term has modern connotations that mean we are casting such an inclusive net over the past and the peoples that, ontologically as well as interpretively, are made to be more "like us." Instead, perhaps we should focus on recognizing and probing the genuine differences (as Boyd also suggests). One of the more salient problems with such a modern term is that the contemporary world places such a high positive value on "home"—especially in contrast with the more negatively coded term "homeless" (Zimmerman 2016), a term highly relevant today in global discussions on mobility-that we are too readily capitulating to the same values (as we pointed out regarding the positive value on sedentarism versus the negative value on mobility).

The other term that many raised for further clarification and discussion is that of an aggregation site. Although it is the case that we did not go into much detail about what our socalled criteria are for one, we implicitly drew on that developed by Conkey (1980). Yet, as Tomášková points out in her comments, that this nearly 40-year-old article has not received much further elaboration, critique, and discussion is a concern. We thank her for bringing back to the table the insights of the article by Mauss and Beuchat (1979 [1906]) that was one original inspiration for Conkey (1980) and has valuable lessons for our article at hand. There is an important contribution here for someone to make. Yes, Olszewski reminds us that, in a perfect world, one would be able to measure sedimentation rates (or, as is being tried at the Peyre Blanque site, to measure soil production rates) and greater resolution in support of aggregations, or not. But, we are not there yet! Estimating sedimentation rates as a proxy for duration of occupation only works in relatively accretionary contexts, and the changing patterns of rapid burial, slow sedimentation, deflation, and massive erosion at Kharaneh IV preclude this approach. Lastly, we are intrigued by Audouze's suggestion that we might extend the concept of an aggregation site to think that it would not only be a place where "connected social groups" come together, but "may also be places to meet 'them.' "How to recognize this archaeologically would be fascinating to develop.

Our second theme refers to those who asked for more data or more specifics. Audouze suggests that we might better substantiate the hypothesized link between the Peyre Blanque site and that of Marsoulas (12 km away) by testing such things as the lithics from both, and we hasten to add that such links are being pursued, not only with the lithics but also with the pigments (see Walter in Lacombe et al. 2012) and other material culture. More substantively, Belfer-Cohen and Goring-Morris are concerned that details are lacking for the presentation of the site of Kharaneh IV, which was intentional for several reasons. First, we have been constrained in the length of this article, but we intentionally provided significant numbers of citations to existing publications. We were not attempting to blur or lump together the intricacies of the archaeological record preserved at Kharaneh IV. We give an overview of the site, but in the context of this paper focus primarily on the EEP occupations (EEP: 19,830-18,730 cal BP; MEP: 18,850-18,600 cal BP). We would agree that there are significant differences between these two occupations, including the presence/ absence of structures, different faunal exploitation patterns, and differences in the lithics and the range of stylistic variability within the same tool categories, for example. And, as for the comments that are motivated by the fact—something that applies to perhaps hundreds of archaeological sites around the world—Kharaneh IV, at 21,000 m², is not 100% excavated (nor is it likely to ever be, especially when targeted, meticulous, microscale excavation techniques are favored over opening up large areas), we would be the first to admit that for any such site surprises could come; hypotheses could be rejected and new ones established. But at present, as shown in over a decade of work at the site, we feel there are enough data and analyses to warrant the current hypothesized activities, functions, uses, and regional relationships, even with the understanding that they will likely be refined or change as new data are obtained. And although we did not develop much on the Natufian of Southwest Asia, we appreciate the added data and examples brought in by Nadel in his comments.

Our third theme is the conceptual framework for the paper that is especially attended to by the comments of Brian Boyd. We could not agree more with his arguing that approaches such as what we have attempted here—to develop a theoretically nuanced archaeology of home and place-making, along with some specific archaeological examples—has been "impeded by a continuing adherence to outmoded perspectives" on the importance (if not centrality) of sedentism, agriculture, and domestication. We would have liked to include his entire commentary in the paper itself, and, as mentioned above, we did originally have a short section about what theorists like Hei-

degger could offer as a conceptual framework for this kind of a research question. Tomášková also brings some conceptual issues to bear, by focusing on the mobility dimensions that are inevitably just as central to any understanding of the lifeways of hunter-gatherers. Others point out that they are somewhat uncomfortable with the extension, however, of the concept of home to the wider landscape. We understand this, if only because this makes an archaeology of landscape-as-home/homeas-landscape more of a challenge. Yet, we would still insist that as part of our efforts to intervene into prevailing dichotomies (hunter-gatherer/farmer-herder; mobile/sedentary; campsite/ home; etc.) and ontologies, this is a realistic extension: to simultaneously recognize the home and place-making practices of hunter-gatherers and that home is more than the materiality of a structure allows for the possibility of a more sensorial archaeology. It has been the case that for the two areas where we both work, the idea of a wider lived-in landscape has not featured prominently in theory or in analyses. Research in the Mesolithic of Europe has been, for the last few decades, already dealing well with this and other relevant approaches. We were delighted to have at least one set of comments from the Mesolithic perspective, even if he also cautions about the extension of home to landscape (Warren).

Of course, there are some suggestions and ideas that we could not include, unless we go on to develop a sequel or monograph. Finlayson had an especially useful point that we did not delve into here; that is, the underlying debate about huntergatherers and marginalization. We are arguing for a greater time depth for home and a greater breadth for consideration of what parts of the landscape are considered home—based on what we know about ethnographic hunter-gatherer experiences and archaeological data sets. Of course, Neolithic farmers and Epipaleolithic hunter-gatherers are highly simplified ends of a continuum, and each of these ends never met each other in time or space—at least in the way we have constructed these typologies. Even during the Late Epipaleolithic and Early Neolithic, when archaeological data sets suggest hunting and gathering primarily, perhaps with some domestication, we don't have the data resolution to say anything about "dispossession." Thus, unless we have vastly misunderstood the point Finlayson is making here, we do not feel that we can make a claim for inclusion or marginalization between hunter-gatherers within the Epipaleolithic, and certainly it seems inappropriate to do so by comparing Epipaleolithic hunter-gatherers and Neolithic farmers or hunter-gatherers. We do argue, however, that the evidence for extensive occupation of all areas of the region during the Epipaleolithic suggests the idea of core and periphery is misguided; a point made also by Richter (2014) elsewhere.

Last, some (of many) welcome additions include not only the theoretical perspectives offered by Boyd, the additional Natufian data from Nadel, the reminder about the details (not just mentioning) of the impressive mammoth bone structures on the Eurasian Plain, the urge to interrogate mobility and, overall, the clarification of terms, but several directions to go in future research by us or others. Michelle Langley reminds us of the

ways that hunter-gatherers of these times and sites had effected various ways to stay connected without face-to-face relations (see also Gamble 1998, 2013), how community is not dependent on living together in one location, and that social distance (or proximity) can be independent of our notions of geographic distance. Overall, we take seriously the caveat from Brian Boyd that what is needed is more (theorized) attention to dimensions of hunter-gatherer history and memory, as these are the processes through which a landscape of attachment, connection, familiarity, and belongingness are ascribed.

—Lisa A. Maher and Margaret Conkey

References Cited

Aldeias, V., P. Goldberg, D. Sandgathe, F. Berna, H. L. Dibble, S. P. McPherron, A. Turq, and Z. Rezek. 2012. Evidence for Neandertal use of fire at Roc de Marsal (France). *Journal of Archaeological Science* 39:2414–2423.

Ames, K. M., and H. G. Maschner. 1999. Peoples of the northwest coast: their archaeology and prehistory. New York: Thames & Hudson.

Anderson, K. 2005. Tending the wild: Native American knowledge and the management of California's natural resources. Berkeley: University of California Press

Anschuetz, K. E., R. H. Wilshusen, and C. L. Schieck. 2001. An archaeology of landscapes: perspectives and directions. *Journal of Archaeological Research* 9:157–211.

Arensburg, B., and O. Bar-Yosef. 1973. Human remains from Ein-Gev I, Jordan Valley, Israel. *Paléorient* 1:201–206.

Arias, P., R. Ontañón, E. Alvarez-Fernández, M. Cueto, M. Elorza, G. A. García-Moncó, M.-J. Iriarte, L. Teira, and D. Zurro. 2011. Magdalenian floors in the lower gallery of La Garma. In Site-internal spatial organization of hunter-gatherer societies: case studies from the European Palaeolithic and Mesolithic. S. Gaudizinski-Windheuser, O. Jöris, M. Sensburg, M. Street, and E. Turner, eds. Pp. 31–51. Mainz: Verlag des Römisch-Germanischen Zentralmuseums.

Ashmore, W. 2002. "Decisions and dispositions": socializing spatial archaeology. American Anthropologist 104:1172–1183.

Ashmore, W., and A. B. Knapp. 1999. Archaeologies of landscape: contemporary perspectives. Malden: Blackwell.

Asouti, E. 2006. Beyond the Pre-Pottery Neolithic B interaction sphere. Journal of World Prehistory 20:87–126.

Asouti, E., C. Kabukcu, C. E. White, I. Kuijt, B. Finlayson, and C. Makarewicz. 2015. Early Holocene woodland vegetation and human impacts in the arid zone of the southern Levant. *Holocene* 25:1565–1580.

Asouti, E., and D. Fuller. 2013. A contextual approach to the emergence of agriculture in Southwest Asia: reconstructing Early Neolithic plant-food production. *Current Anthropology* 54:299–345.

Aubry, T., F.-X. Chauviere, X. Mangado Llach, and J. D. Sampio. 2003. Constittion, territoires d'approvisionnement et function des sites de la basse vallée du Côa (Portugal). In Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia. S. A. Vasil'ev, O. Soffer, and J. Kozłowski, eds. Pp. 83–92. BAR International Series 1122. Oxford: British Archaeological Reports.

Bachelard, G. 1964. *The poetics of space*. Maria Jolas, trans. New York: Orion. [BB] Bahn, P. 1979. The French Pyrenees: an economic prehistory. PhD dissertation, University of Cambridge.

Bahn, P. G. 1982. Inter-site and inter-regional links during the Upper Palaeolithic: the Pyrenean evidence. Oxford Journal of Archaeology 1:247–268.

Bailey, G., and N. Galanidou. 2009. Caves, palimpsests and dwelling spaces: examples from the Upper Palaeolithic of south-east Europe. World Archaeology 41:215–241.

Bailey, Geoff, and Penny Spikins, eds. 2008. *Mesolithic Europe*. Cambridge: Cambridge University Press.

Balée, W. 2006. The research program of historical ecology. Annual Review of Anthropology 35:75–98.

Banning, E. B. 2010. Houses, households, and changing society in the Late Neolithic and Chalcolithic of the southern Levant. *Paleorient* 36:49–87.

— 2017. Going over old ground: archaeological survey in Jordan then and now. In Walking through Jordan: essays in honor of Burton MacDonald.

- M. Neeley, G. Clark, and P. M. M. Daviau, eds. Pp. 265-279. Bristol, CT: Equinox. [DIO]
- Banning, E. B., A. L. Hawkins, and S. T. Steward. 2011. Sweep widths and the detection of artifacts in archaeological survey. *Journal of Archaeological Science* 38:3447–3458. [DIO]
- Barnard, A. 2002 Hunter-gatherers: seventeenth or eighteenth-century invention. Archaeological Dialogues 9(2):119–122. [BF]
- Barrett, J. 1999. Chronologies of landscape. In The archaeology and anthropology of landscape: shaping your landscape. P. J. Layton and R. Ucko, eds. Pp. 21–30. New York: Routledge.
- Barton, C. M., J. Bernabeu, J. E. Aura, O. Garcia, and N. La Roca. 2002. Dynamic landscapes, artifact taphonomy, and landuse modeling in the western Mediterranean. *Geoarchaeology* 17:155–190. [DIO]
- Barton, C. M., J. Bernabeu, J. E. Aura, O. Garcia, S. Schmich, and L. Molina. 2004. Long-term socioecology and contingent landscapes. *Journal of Archaeological Method and Theory* 11:253–295.
- Barton, Nick, P. J. Berridge, Michael Walker, and Richard Bevins. 1995. Persistent places in the Mesolithic landscape: an example from the Black Mountain Uplands of South Wales. Proceedings of the Prehistoric Society 61:81–116. [GW]
- Bar-Yosef, O. 1970. The Epipalaeolithic cultures of Palestine. PhD thesis, Hebrew University, Jerusalem.
- 1975. Les gisements "Kébarien Géométrique A" d'Haon, Vallée du Jourdain, Israël. Bulletin de la Société préhistorique française 72(1):10–14. [DN]
- ——. 1991. Stone tools and social context in Levantine prehistory. In Perspectives on the past: theoretical biases in Mediterranean hunter-gatherer research. G. A. Clark, ed. Pp. 371–395. Philadelphia: University of Pennsylvania Press.
- 2002. The Upper Paleolithic revolution. Annual Review of Anthropology 31:363–393. [DN]
- . 2011. Climatic fluctuations and early farming in West and East Asia. *Current Anthropology* 52(S4):S175–S193. [BF]
- Bar-Yosef, O., and A. Belfer-Cohen. 1989a. The Levantine "PPNB" interaction sphere. In People and culture change: proceedings of the Second Symposium on Upper Palaeolithic, Mesolithic and Neolithic Populations of Europe and the Mediterranean Basin. I. Hershkovitz, ed. Pp. 59–72. BAR International Series 508. Oxford: British Archaeological Reports.
- . 1989b. The origins of sedentism and farming communities in the Levant. *Journal of World Prehistory* 3:447–498.
- Bar-Yosef, O., and A. N. Goring-Morris. 1977. Geometric Kebaran A occurrences. In *Prehistoric investigations in Gebel Maghara, Northern Sinai*. O. Bar-Yosef and J. L. Phillips, eds. Pp. 115–148. Jerusalem: Monographs of the Institute of Archaeology, Hebrew University. [AB-C and ANG-M]
- Bar-Yosef, O., and F. R. Valla. 2013. Natufian foragers in the Levant: Terminal Pleistocene social changes in Western Asia. International Monographs in Prehistory 19. Ann Arbor, MI: International Monographs in Prehistory.
- Basso, K. 1996. Wisdom sits in places: landscape and language among the Western Apache. Albuquerque: University of New Mexico Press.
- Bégouën, R., C. Fritz, G. Tosello, J. Clottes, A. Pastoors, and F. Faist. 2009. Le Sanctuaire Secret des Bisons. Il y a 14,000 ans, dans la caverne du Tuc D'Audoubert, Montesquieu-Avantès. Association Louis Bégouën. Paris: Somogy.
- Belfer-Cohen, A., and O. Bar-Yosef. 2000. Early sedentism in the Near East: a bumpy ride to village life. In *Life in Neolithic farming communities: social* organization, identity, and differentiation. Fundamental Issues in Archaeology. I. Kuijt, ed. Pp. 19–37. New York: Kluwer Academic/Plenum.
- Belfer-Cohen, A., and N. Goring-Morris. 2002. Why microliths? microlithization in the Levant. In *Thinking small: global perspectives on microlithic technologies*, vol. 12. R. G. Elston and S. L. Kuhn, eds. Pp. 57–68. Arlington, VA: American Anthropological Association.
- 2007. A new look at old assemblages: a cautionary tale. In *Systèmes techniques et communautés du Néolithique précéramique au Proche-Orient* [Technical systems and Near Eastern PPN communities]. L. Astruc, D. Binder, and F. Briois, eds. Pp. 15–24. Antibes: Éditions APDCA.
- ——. 2011. Becoming farmers: the inside story. Current Anthropology 52: S209–S220.
- Bellwood, P. 2004. First farmers: the origins of agricultural societies. Malden: Blackwell.
- Bender, B. 1999. Subverting the Western gaze: mapping alternative worlds. In
 The archaeology and anthropology of landscape: shaping your landscape. P. J. Layton and R. Ucko, eds. Pp. 31–45. New York: Routledge.
- . 2001. Landscapes on-the-move. Journal of Social Archaeology 1:75–

- Benjamin, D. N., D. Stea, and E. Arén. 1995. The home: words, interpretations, meanings and environments. Avebury: Aldershot.
- Bentsen, S. E. 2010. A sound of silence? interpreting empty areas at Pincevent. In *The Magdalenian in Central Europe: new finds and concepts.* M. Poltowicz-Bobak and D. Bobak, eds. Pp. 47–52. Rzeszów: Collectio Archaeologica Ressoviensis, Tomus XV.
- Bettinger, R. L., R. Garvey, and S. Tushingham. 2015. *Hunter-gatherers: ar-chaeological and evolutionary theory*. New York: Springer.
- Bird, C., M. B. Mitchell, A. Ross, and F. Hook, eds. Forthcoming. The archaeology of Australian Aboriginal stone arrangements. Access Archaeology Series. Oxford: Archaeopress.
- Bird-David, Nurit. 1990. The giving environment: another perspective on the economic system of gatherer-hunters. *Current Anthropology* 31:189–196. [BF]
- ———. 2017. Us, relatives: scaling and plural life in a forager world. Berkeley: University of California Press. [GW]
- Boivin, N. 2000. Life rhythms and floor sequences: excavating time in rural Rajasthan and Neolithic Catalhoyuk. World Archaeology 31:367–388.
- Bonsall, Clive. 2008. The Mesolithic of the Iron Gates. In Mesolithic Europe. G. Bailey and P. Spikins, eds. Pp. 238–279. Cambridge: Cambridge University Press. [GW]
- Borck, L., B. J. Mills, M. A. Peeples, and J. J. Clark. 2015. Are social networks survival networks? an example from the Late Pre-Hispanic US Southwest. *Journal of Archaeological Method and Theory* 22:33–57.
- Borić, D., and J. Robb, eds. 2008. Past bodies: body-centered research in archaeology. Oxford: Oxbow.
- Bosinski, G. 2011. Femmes sans tête. une icône culturelle dans l'Europe de la fin de l'époque glaciaire. Paris: Editions Errance.
- Bosinski, G., and H. Bosinski. 2007. Gönnersdorf und Andernach-Martinsberg. Späteiszeitliche Siedlungplätze am Mittelrhein: Archäologie an Mittelrhein und Mosel 19.
- Botigué, L., S. Song, A. Scheu, S. Gopalan, A. Pendleton, M. Oetjens, A. Taravella, T. Seregély, A. Zeeb-Lanz, and R.-M. Arbogast. 2017. Ancient European dog genomes reveal continuity since the Early Neolithic. *Nature Communications* 8:16082.
- Bourdieu, P. 1977. *Outline of a theory of practice*, vol. 16. Cambridge: Cambridge University Press.
- Boyd, B. 2006. On sedentism in the Later Epipalaeolithic (Natufian) Levant. World Prehistory 38:164–178.
- Boyd, R. 2017. A different kind of animal: how culture transformed our species. Princeton, NJ: Princeton University Press. [TW]
- Bradley, R. 1984. The social foundations of prehistoric Britain. London: Longman. [BF, TR]
- . 2000. An archaeology of natural places. London: Routledge.
- 2012. The significance of monuments: on the shaping of human experience in Neolithic and Bronze Age Europe. London: Routledge.
- Brand, S. 1994. How buildings learn: what happens after they're built. New York: Penguin. [BB]
- Brody, H. 1982. Maps and dreams: Indians and the British Columbia frontier. New York: Pantheon.
- Brooks, J. 1995. Sing away the buffalo: faction and fission on the Northern Plains.
 In Beyond subsistence: Plains archaeology and the post-processual critique.
 P. Duke and M. C. Wilson, eds. Pp. 143–168. Tuscaloosa: University of Alabama Press.
- Byrd, B. 2005. Reassessing the emergence of village life in the Near East. *Journal of Archaeological Research* 13:231–290.
- Byrd, B., A. N. Garrard, and P. Brandy. 2015. Modeling foraging ranges and spatial organization of Late Pleistocene hunter-gatherers in the southern Levant—a least-cost GIS approach. *Quaternary International* 396:62–78. [AB-C and ANG-M]
- Cauvin, J. 2000. The birth of the gods and the origins of agriculture. New Studies in Archaeology. Cambridge: Cambridge University Press.
- Chabot-Hanowell, B., and E. A. Smith. 2012. Territorial and nonterritorial routes to power: reconciling evolutionary ecological, social agency, and historicist approaches. Archeological Papers of the American Anthropological Association 22:72–86.
- Chapman, J. 1988. From "space" to "place": a model of dispersed settlement and Neolithic society. In *Enclosures and defences in the Neolithic of Western Europe*.
 C. Burgess, M. Maddison, C. Mordant, P. Topping, eds. Pp. 21–46.
 BAR International Series 403. Oxford: British Archaeological Reports.
- Chesson, M. S. 2003. Households, houses, neighborhoods and corporate villages: modeling the Early Bronze Age as a house society. *Journal of Mediterranean Archaeology* 16:79–102.

- Close, A. E. 2000. Reconstructing movement in prehistory. *Journal of Archaeological Method and Theory* 7:49–75.
- Clottes, J. 2009. Sticking bones into cracks in the Upper Palaeolithic. In *Becoming human: innovation in prehistoric material and spiritual culture*. C. Renfrew and I. Morley, eds. Pp. 195–211. Cambridge: Cambridge University Press.
- Collar, A., F. Coward, T. Brughmans, and B. J. Mills. 2015. Networks in archaeology: phenomena, abstraction, representation. *Journal of Archaeolog*ical Method and Theory 22:1–32.
- Conkey, M. 1980. The identification of prehistoric hunter-gatherer aggregation sites: the case of Altamira. Current Anthropology 21:609–630.
- Conkey, M., W. Dietrich, and S. Lacombe. 2003. Places of many generations: persistent places in Paleolithic landscapes of the French Midi-Pyrénées. Poster presented at American Anthropological Association annual meeting, Chicago.
- Conkey, M., S. Lacombe, K. Sterling, and W. Dietrich. 2011. Site de Peyre Blanque (Fabas, Ariège) Rapport de synthèse de fouille programmée, 2009–2011. Service Régional de l'Archéologie.
- Conneller, C., N. Milner, B. Taylor, and M. Taylor. 2012. Substantial settlement in the European Early Mesolithic: new research at Star Carr. Antiquity 86:1004– 1020.
- Conolly, J., S. Colledge, and S. Shennan. 2008. Founder effect, drift, and adaptive change in domestic crop use in Early Neolithic Europe. *Journal of Archaeological Science* 35:2797–2804.
- Coward, F., and C. Gamble. 2008. Big brains, small worlds: material culture and the evolution of the mind. *Philosophical Transactions of the Royal Society B* 363:1969–1979.
- Coward, F., and C. Knappett. 2013. Grounding the net: social networks, material culture and geography in the Epipalaeolithic and Early Neolithic of the Near East (~ 21,000–6,000 cal BCE). In *Network analysis in archaeology: new regional approaches to interaction*. C. Knappett, ed. Pp. 247–280. Oxford: Oxford University Press.
- Cresswell, T. 2006. On the move: mobility in the modern Western world. New York: Taylor & Francis.
- Croucher, K. 2012. *Death and dying in the Neolithic Near East*. Oxford: Oxford University Press.
- Crumley, C. L. 1994. Historical ecology: cultural knowledge and changing landscapes. School of American Research Advanced Seminar Series. Santa Fe, NM: School of American Research.
- David, B., and I. McNiven. 2017. Toward an archaeology and anthropology of rock art. In *The Oxford handbook of the archaeology and anthropology of rock art.* B. David and I. McNiven, eds. Oxford: Oxford University Press.
- David, B., and J. Thomas. 2008. Landscape archaeology: introduction. In Handbook of landscape archaeology. J. Thomas and B. David, eds. Pp. 27–43. Walnut Creek, CA: Left Coast.
- d'Errico, F., C. Henshilwood, G. Lawson, M. Vanhaeren, A.-M. Tillier, M. Soressi, F. Bresson, B. Maureille, A. Nowell, and J. Lakarra. 2003. Archaeological evidence for the emergence of language, symbolism, and music—an alternative multidisciplinary perspective. *Journal of World Prehistory* 17(1):1–70.
- Descola, P. 2013. Beyond nature and culture. Chicago: University of Chicago Press. Dibble, H. L., S. J. Holdaway, S. C. Lin, D. R. Braun, M. J. Douglass, R. Iovita, S. P. McPherron, D. I. Olszewski, and D. Sandgathe. 2016. Major fallacies surrounding stone artifacts and assemblages. Journal of Archaeological Method and Theory 23(2). doi:10.1007/s10816-016-9297-8. [DIO]
- Dobres, M. A. 2000. Technology and social agency: outlining a practice framework for archaeology. Oxford: Blackwell.
- Dobres, M. A., and C. R. Hoffman. 1992. Social agency and the dynamics of prehistoric technology. Journal of Archaeological Method and Theory 1:211–258.
- Dunbar, R. I. M., C. Gamble, and J. A. J. Gowlett. 2014. Lucy to language: the benchmark papers. Oxford: Oxford University Press. [TW]
- Dunnell, R. 1992. The notion of site. In Space, time, and archaeological landscapes. J. Rossignol and L. Wandsnider, eds. Pp. 21–41. New York: Plenum. [DIO. ST]
- Dunnell, R. C., and W. Dancey. 1983. The siteless survey: a regional scale data collection strategy. *Advances in Archaeological Method and Theory* 6:267–287. [DIO]
- Edmonds, Mark. 2002. Ancestral geographies of the Neolithic: landscapes, monuments and memory. New York: Routledge. [TR]
- Edwards, P. 2001. Nine millennia by Lake Lisan: the Epipalaeolithic in the East Jordan Valley between 20,000 and 11,000 years ago. In *Studies in the history and archaeology of Jordan VII*. G. Bisheh, ed. Pp. 85–93. Amman: Department of Antiquity of Jordan.
- Erlandson, J. M., T. C. Rick, and C. Peterson. 2005. A geoarchaeological chronology of Holocene dune building on San Miguel Island, California. *Holocene* 15:1227–1235.

- Fano, M. Á., A. García-Moreno, A. Chauvin, I. Clemente-Conte, S. Costamagno, I. Elorrieta-Baigorri, N. E. Pascual, and A. Tarriño. 2015. Contribution of landscape analysis to the characterisation of Palaeolithic sites: a case study from El Horno Cave (northern Spain). *Quaternary International* 412:82–98.
- Féblot-Augustins, J. 1999. Raw material transport patterns and settlement systems in the European Lower and Middle Paleolithic: continuity, change and variability. In *The Middle Paleolithic occupation of Europe*. W. Roebroeks and C. Gamble, eds. Pp. 193–214. Leiden: University of Leiden Press.
- Feinman, G. 2015. Settlement and landscape archaeology. In *International encyclopedia of the social and behavioral sciences*. 2nd edition. J. D. Wright, ed. Pp. 654–658. New York: Elsevier.
- Fernández, E., A. Pérez-Pérez, C. Gamba, E. Prats, P. Cuesta, J. Anfruns, M. Molist, E. Arroyo-Pardo, and D. Turbón. 2014. Ancient DNA analysis of 8000 BC Near Eastern farmers supports an Early Neolithic pioneer maritime colonization of mainland Europe through Cyprus and the Aegean Islands. PLoS Genet 10:e1004401.
- Finlayson, B. 2013. Imposing the Neolithic on the past. Levant 45:133-148.
- Finlayson, B., I. Kuijt, S. Mithen, and S. Smith. 2011. New evidence from southern Jordan: rethinking the role of architecture in changing societies at the beginning of the Neolithic process. *Paléorient* 37(1):123–135. [BF]
- Finlayson, B., and C. Makarewicz. 2013. Neolithic stereotypes: has South-west Asian archaeology outlived the Neolithic? *Levant* 45:119.
- Finlayson, Bill, and Graeme Warren. 2010. Changing natures: hunter-gatherers, first farmers and the modern world. Duckworth Debates in Archaeology. Bristol: Bristol Classical.
- Foley, R. A. 1981. Off-site archaeology: an alternative approach for the short-sited. In *Pattern of the past: studies in honour of David Clarke.* I. Hodder, G. Isaac, and N. Harmond, eds. Pp. 157–183. Cambridge: Cambridge University Press. [DIO]
- Friesem, D. E. 2016. Geo-ethnoarchaeology in action. Journal of Archaeological Science 70:145–157.
- Friesem, D. E., G. Tsartsidou, P. Karkanas, and R. Shahack-Gross. 2014. Where are the roofs? A geo-ethnoarchaeological study of mud brick structures and their collapse processes, focusing on the identification of roofs. *Archaeological and Anthropological Sciences* 6:73–92.
- Gamble, C. 1993. People on the move: interpretations of regional variation in Palaeolithic Europe. In *Cultural transformations and interactions in Eastern Europe*. J. Chapman and P. Dolukhanov, eds., Pp. 37–55. Avebury: Aldershot.
- ——. 1996. Making tracks: hominid networks and the evolution of the social landscape. In *The archaeology of human ancestry: power, sex and tradition*. J. Steele and S. Shennan, eds. Pp. 253–277. London: Routledge.
- ——. 1998. Palaeolithic society and the release from proximity: a network approach to intimate relations. World Archaeology 29:426–449.
- 2004. Social archaeology and the unfinished business of the Palaeolithic. In Explaining social change: studies in honour of Colin Renfrew. J. F. Cherry, C. Scarre, and S. Shennan, eds. Cambridge: McDonald Institute Monographs. [TR]
- ———. 2013. Settling the Earth: the archaeology of deep human history. Cambridge: Cambridge University Press.
- Gamble, C., W. Davies, P. Pettitt, L. Hazelwood, and M. Richards. 2005. The archaeological and genetic foundations of the European population during the Late Glacial: implications for "agricultural thinking." *Cambridge Ar*chaeological Journal 15:193–223.
- Gamble, C., and E. Gittins. 2004. Social archaeology and origins research: a Paleolithic perspective. In A companion to social archaeology. L. Meskell and R. W. Preucel, eds. Oxford: Blackwell. [TR]
- Gamble, C., J. Gowlett, and R. Dunbar. 2014. Thinking big: how the evolution of social life shaped the human mind. London: Thames & Hudson. [TW]
- Garcia-Moreno, A. 2013. To see or be seen . . . is that the question? An evaluation of Paleolithic sites' visual presence and their role in social organization. *Journal of Anthropological Archaeology* 32:647–658.
- Garrard, A., and B. Byrd. 2013. Project background and the Late Palaeolithic—geological context and technology., vol. 1 of Beyond the Fertile Crescent: Late Palaeolithic and Neolithic communities of the Jordanian Steppe. CBRL Levant Supplementary Series 13. Oxford: Oxbow.
- Gaudzinski-Windheuser, S. 2011. An introduction to living structures and history of occupation at the Late Upper Paleolithic site of Oelknitz (Thuringia, Germany). In Site-internal spatial organization of hunter-gatherer societies: case studies from the European Paleolithic and Mesolithic. S. Gaudzinski-Windheuser, O. Jöris, M. Sensburg, M. Street, and E. Turner, eds. Pp. 127–140. Mainz: Verlag des Römisch-Germanischen Zentralmuseums.

- 2015. The public and private use of space in Magdalenian societies: evidence from Oelknitz 3, LOP (Thuringia, Germany). *Journal of Anthro*pological Archaeology 40:361–375.
- Gaussen, J. 1980. Le Paléolithique Supérieur de plein air en Périgord (industries et structures d'habitat): Secteur Mussidan-Saint-Astier, moyenne Vallée de l'Isle. XIV supplément à Gallia Préhistoire. Paris: Éditions du Centre national de la recherche scientifique.
- Gelhausen, F., J. F. Kegler, and S. Wenzel. 2004. Latent dwelling structures in the Final Paleolithic. Niederbieber IV, Andernach-Martinsberg 3, Berlin-Tagel IX. Notae Praehistoricae 24:69–79.
- Germonpré, M., M. Lázničková-Galetová, and M. V. Sablin. 2011. Palaeolithic dog skulls at the Gravettian Předmostí site, the Czech Republic. *Journal of Archaeological Science* 39:184–202.
- Giddens, A. 1984. The constitution of society: outline of the theory of structuration. Berkeley: University of California Press.
- Gieryn, T. F. 2002. What buildings do. Theory and Society 31:35-74.
- Gjesfjeld, E. 2015. Network analysis of archaeological data from hunter-gatherers: methodological problems and potential solutions. *Journal of Archaeological Method and Theory* 22:182–205.
- Gonçalves, C., A. Gomes, M. Raja, N. Bicho, and J. Haws. 2017. Applying systematic sampling survey to evaluate Stone Age settlement in the Elephant River, Limpopo Basin, SW Mozambique. Abstract presented at the Paleoanthropology Society 2017 meeting, Vancouver, April. [DIO]
- Gonzalez Sainz, César. 1989. El Magdaleniense superior final de la región Cantábrica. Unpublished PhD dissertation, Universidad de Cantabria. [MCL]
- Goodman-Elgar, M. 2008. The devolution of mudbrick: ethnoarchaeology of abandoned earthen dwellings in the Bolivian Andes. *Journal of Archaeological Science* 35:3067–3071.
- Goring-Morris, A. N. 1987. At the edge: Terminal Pleistocene hunter-gatherers in the Negev and Sinai. BAR International Series 361. Oxford: British Archaeological Reports.
- Goring-Morris, A. N., and A. Belfer-Cohen. 2002. Symbolic behaviour from the Epipalaeolithic and Early Neolithic of the Near East: preliminary observations on continuity and change. In Magic practices and ritual in the Near Eastern Neolithic, studies in Early Near Eastern production, subsistence, and environment, vol. 8. H. G. K. Gebel, G. B. D. Hermansen, and V. C. Hoffman-Jensen, eds. Pp. 67–79. Berlin: ex oriente.
- 2003. Structures and dwellings in the Upper and Epi-Palaeolithic (c. 42–10k BP) Levant: profane and symbolic uses. In *Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia*. S. A. Vasil'ev, O. Soffer, and J. Kozłowski, eds. Pp. 65–81. BAR International Series 1122. Oxford: British Archaeological Reports.
- 2008. A roof over one's head: developments in Near Eastern residential architecture across the Epipalaeolithic-Neolithic transition. In *The Neolithic demographic transition and its consequences*. J. P. Bocquet-Appel and O. Bar-Yosef, eds. Pp. 239–286. New York: Springer.
- 2010. Different ways of being, different ways of seeing. . . changing worldviews in the Near East. In *Landscapes in transition: understanding hunter-gatherer and farming landscapes on the early Holocene of Europe and the Levant*. W. Finlayson and G. Warren, eds. Pp. 9–22. London: CBRL Monographs.
- _____. 2011. Neolithization processes in the Levant: the outer envelope. Current Anthropology 52:S195–S208.
- Goring-Morris, A. N., E. Hovers, and A. Belfer-Cohen. 2009. The dynamics of Pleistocene and Early Holocene settlement patterns and human adaptations in the Levant: an overview. In *Transitions in prehistory: essays in honor of Ofer Bar-Yosef, American School of Prehistoric Research Monographs*. J. Shea and D. Lieberman, eds. Pp. 185–252. Oxford: Oxbow.
- Gosden, C., and Y. Marshall. 1999. The cultural biography of objects. World Archaeology 31:169–178.
- Grosman, L. 2003. Preserving cultural traditions in a period of instability: the Late Natufian of the Hilly Mediterranean Zone 1. Current Anthropology 44:571–580.
- Grosman, L., and N. D. Munro. 2016. A Natufian ritual event. Current Anthropology 57:311–331.
- Grove, M., E. Pearce, and R. I. M. Dunbar. 2012. Fission-fusion and the evolution of hominin social systems. *Journal of Human Evolution* 62(2):191–200. [TW]
- Guenther, M. 2007. Current issues and future directions in hunter-gatherer studies. Anthropos 102:371–388.
- Haak, W., O. Balanovsky, J. J. Sanchez, S. Koshel, V. Zaporozhchenko, C. J. Adler, C. S. Der Sarkissian, G. Brandt, C. Schwarz, and N. Nicklisch. 2010. Ancient DNA from European Early Neolithic farmers reveals their Near Eastern affinities. *PLoS Biol* 8:e1000536.

- Haakanson, S., Jr., and P. Jordan. 2011. "Marking" the land: sacrifices, cemeteries, and sacred places among the Iamal Nenetses. In *Landscape and culture in Northern Eurasia*. P. Jordan, ed. Pp. 161. Walnut Creek, CA: Left Coast.
- Hauschild, Thomas. 2001. Home, anthropology of. In *International encyclopedia of the social and behavioral sciences*. 2nd edition. J. Wright, ed. Pp. 155–158. Oxford: Elsevier. [GW]
- Head, L. 1994. Landscapes socialised by fire: post-contact changes in Aboriginal fire use in northern Australia, and implications for prehistory. Archaeology in Oceania 29(3):172–181.
- Hendon, J. A. 2000. Having and holding: storage, memory, knowledge, and social relations. American Anthropologist 102:42–53.
- 2004. Living and working at home: the social archaeology of house-hold production and social relations. In *A companion to social archaeology*. L. Meskell and R. Preucel, eds. Pp. 272–286. Malden: Blackwell.
- ———. 2009. Houses in a landscape: memory and everyday life in Mesoamerica. Durham, NC: Duke University Press.
- Henrich, J. 2015. The secret of our success: how culture is driving human evolution, domesticating our species, and making us smarter. Princeton, NJ: Princeton University Press. [TW]
- Henton, E., L. Martin, A. Garrard, A.-L. Jourdan, M. Thirlwall, and O. Boles. 2017. Gazelle seasonal mobility in the Jordanian steppe: the use of dental isotopes and microwear as environmental markers, applied to Epipalaeolithic Kharaneh IV. *Journal of Archaeological Science: Reports* 11:147–158.
- Hillier, B., and J. Hanson. 1984. The social logic of space. Cambridge: Cambridge University Press.
- Hirsch, E., and M. O'Hanlon, eds. 1995. *The anthropology of landscape: perspectives on place and space.* Oxford: Clarendon.
- Hodder, I. 1990. The domestication of Europe. Oxford: Basil Blackwell.
- ———. 2012. Entangled: an archaeology of the relationships between humans and things. Chichester: Wiley.
- Hoskins, J. 1998. Biographical objects: how things tell the stories of people's lives. New York: Routledge.
- Hutson, S. R. 2009. Dwelling, identity, and the Maya: relational archaeology at Chunchucmil. Archaeology in Society Series. Lanham, MD: AltaMira.
- Ingold, T. 1993. The temporality of the landscape. World Archaeology 25:152–174
- ——. 1995. Building, dwelling, living: how animals and people make themselves at home in the world. In Shifting contexts: transformations in anthropological knowledge. M. Strathern, ed. Pp. 57–80. New York: Routledge.
- ———. 1996. Hunting and gathering as ways of perceiving the environment. In *Redefining nature: ecology, culture and domestication*. R. Ellen and K. Fukui, eds. Pp. 117–155. Oxford: Berg.
- ———. 2000. The perception of the environment: essays on livelihood, dwelling and skill. New York: Routledge.
- Ingold, T., and J. Vergunst, eds. 2008. Ways of walking: ethnography and practice on foot. Anthropological Studies of Creativity and Perception. New York: Routledge.
- Isaac, G. L. 1976. The activities of early African hominids: a review of archaeological evidence from the time span two and a half to one million years ago. In *Human origins: Louis Leakey and the East African evidence*. G. Isaac and E. McCown, eds. Pp. 483–514. Menlo Park, CA: Benjamin.
- Jensen, S. 2015. This house is not my own! Temporalities in a South African homeland. *Journal of Southern African Studies* 41(5):991–1004. [ST]
- Jochim, Michael A., Cynthia Herhahn, and Harry Starr. 1999. The Magdalenian colonization of southern Germany. American Anthropologist 101:129–142. [MCL]
- Jones, A. 2005. Lives in fragments? Personhood and the European Neolithic. *Journal of Social Archaeology* 5:193–224.
- Jones, J. 2012. Using gazelle dental cementum studies to explore seasonality and mobility patterns of the Early-Middle Epipalaeolithic Azraq Basin, Jordan. *Quaternary International* 252:195–201.
- Jones, M., L. Maher, T. Richter, D. Macdonald, and L. Martin. 2016. Humanenvironment interactions through the Epipalaeolithic of eastern Jordan. In Correlation is not enough: building better arguments in the archaeology of human-environment interactions. D. Contreras, ed. Pp. 121–140. New York: Routledge.
- Jones, M., L. A. Maher, D. A. Macdonald, C. Ryan, C. Rambeau, and T. Richter. 2015. The environmental setting of Epipalaeolithic Kharaneh IV. *Quaternary International* 396:95–104.
- Jordan, P. 2011. Landscape and culture in northern Eurasia. Walnut Creek, CA: Left Coast.

- Jöris, O., M. Street, and E. Turner. 2011. Spatial analysis at the Magdalenian site of Gönnersdorf (Central Rhineland, Germany): an introduction. In Siteinternal spatial organization of hunter-gatherer societies: case studies from the European Palaeolithic and Mesolithic. S. Gaudizinski-Windheuser, O. Jöris, M. Sensburg, M. Street, and E. Turner, eds. Pp. 53–80. Mainz: Verlag des Römisch-Germanischen Zentralmuseums.
- Julien, M. 2003. A Magdalenian base camp at Pincevent (France). In Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia. S. A. Vasil'ev, O. Soffer, and J. Kozłowski, eds. Pp. 105–112. BAR International Series 1122. Oxford: British Archaeological Reports.
- Julien, M., and C. Karlin. 2014. Un Automne á Pincevent. Le Campement Magdalénien au Niveau IV20. Mémoire 57. Paris: Societié Préhistorique Français.
- Julien, Michèle. 1982. Les Harpons Magdaléniens. Supplement a Gallia Préhistoire 17. Paris: Editions du Centre National de la Recherche Scientifique. [MCL] Kelly, R. 1992. Mobility/sedentism: concepts, archaeological measures and ef-
- Kelly, R. 1992. Mobility/sedentism: concepts, archaeological measures and effects. Annual Review of Anthropology 21:43–66.
- Kelly, R. L. 2013. The lifeways of hunter-gatherers: the foraging spectrum. Cambridge: Cambridge University Press.
- Kent, S. 1995. Ethnoarchaeology and the concept of home: a cross-cultural analysis. In *The home: words, interpretations, meanings, and environments*.
 D. N. Benjamin, D. Stea, and E. Aren, eds. Pp. 163–180. Avebury: Aldershot.
 ———. 1996. Cultural diversity among twentieth-century foragers: an African
- perspective. Cambridge: Cambridge University Press.
 Kirch, P. V. 2007. Hawaii as a model system for human ecodynamics. American Anthropologist 109:8–26.
- Knapp, A. B., and W. Ashmore. 1999. Archaeological landscapes: constructed, conceptualised, ideational: introduction. In Archaeological landscapes: contemporary perspectives. W. Ashmore and B. Knapp, eds. Pp. 1–30. Oxford: Blackwell
- Knappett, C. 2011. An archaeology of interaction: network perspectives on material culture and society. Oxford: Oxford University Press.
- Kolen, J. 1999. Hominids without homes: on the nature of Middle Palaeolithic settlement in Europe. In *The Middle Palaeolithic occupation of Europe*. W. Roebroeks and C. Gamble, eds. Pp. 139–175. Leiden: University of Leiden Press
- Kopytoff, I. 1986. The cultural biography of things: commoditization as process. In *The social life of things: commodities in cultural perspective*, vol. 68. A. Appadurai, ed. Pp. 70–73. Cambridge: Cambridge University Press.
- Kuijt, I. 1996. Negotiating equality through ritual: a consideration of Late Natufian and Prepottery Neolithic A period mortuary practices. *Journal of Anthropological Archaeology* 15:313–336.
- 2002. Life in Neolithic farming communities: social organization, identity and differentiation. New York: Kluwer Academic.
- Kuijt, I., and N. Goring-Morris. 2002. Foraging, farming, and social complexity in the pre-pottery Neolithic of the southern Levant: a review and synthesis. *Journal of World Prehistory* 16(4):361–340. [DN]
- Lacombe, S., and M. W. Conkey. 2008. Séjours pérennes entre les grottes: une archéologie de répartition et du paysage dans la région Midi-Pyrénées (France). Préhistoire, art et sociétés 83:93–108.
- Lacombe, S., K. Sterling, and M. Conkey. 2012. Aux Origines des Derniers Chasseurs du Paléolithique. Le Magdalénien de Peyre Blanque (Fabas, Ariège) Rapport de synthèse de fouille programmée annuelle. Toulouse: Service Regional del'Archéologie.
- 2014. Le site Magdalénien de Peyre Blanque (Fabas, Ariège). Deuxième rapport intermédiaire de fouille programmée trisannuelle. Toulouse: Service Régional de l'Archéologie.
- Lacombe, S., K. Sterling, M. Conkey, and W. Dietrich. 2015. Le site de plein air de Peyre Blanque (Fabas, Ariège): Un jalon original du Magdalénien dans le sud-ouest de la France. Bulletin de la Société Préhistorique Française 112:235–268.
- Laland, K. N. 2017. Darwin's unfinished symphony: how culture made the human mind. Princeton, NJ: Princeton University Press. [TW]
- Langley, Michelle C. 2013. Storied landscapes makes us (modern) human: landscape socialisation in the Palaeolithic and consequences for the archaeological record. *Journal of Anthropological Archaeology* 32:614–629.
- 2015. Investigating maintenance and discard behaviours for osseous projectile points: a middle to late Magdalenian (c. 19,000 to 14,000 cal. BP) example. *Journal of Anthropological Archaeology* 40:340–360. [MCL]
- Forthcoming. Reflecting Magdalenian identities: considering a functional duality for middle to late Magdalenian antler projectile points. In Wild things: recent advances in Palaeolithic and Mesolithic research 2. D. T. G. Clinnick and J. W. P. Walker, eds. Oxford: Oxbow. [MCL]

- Langley, Michelle C., and Martin Street. 2013. Long range inland-coastal networks during the late Magdalenian: evidence for individual acquisition of marine resources at Andernach-Martinsberg, German Central Rhineland. *Journal of Human Evolution* 64:457–465. [MCL]
- Lartet, E., and H. Christy. 1875. L'Age du Renne: Reliquae Aquitanicae, being contributions to the archaeology of Périgord and adjoining provinces of southern France. London: Williams & Norgate.
- Latour, B., ed. 2005. Reassembling the social: an introduction to actor-networktheory, vol. 1. Oxford: Oxford University Press.
- Lazaridis, I., D. Nadel, G. Rollefson, D. C. Merrett, N. Rohland, S. Mallick, D. Fernandes, M. Novak, B. Gamarra, and K. Sirak. 2016. Genomic insights into the origin of farming in the ancient Near East. *Nature* 536:419–424.
- Lee, R. B. 2006. Commonalities and diversities in contemporary hunter-gatherers: from settlement archaeology to development ethnography. *Archeological Papers of the American Anthropological Association* 16:157–169.
- Lee, R. B., and I. DeVore. 1968. Problems in the study of hunters and gatherers. In *Man the hunter*. R. B. Lee and I. DeVore, eds. Pp. 3–12. Chicago: Aldine.
- Leesch, D., J. Bullinger, M.-I. Cattin, W. Müller, and N. Plumettaz. 2010. Hearths and hearth-related activities in Magdalenian open-air sites: the case studies of Champréveyres and Monruz (Switzerland) and their relevance to an understanding of Upper Paleolithic site structure. In *The Magdalenian in Central Europe: new finds and concepts*. M. Poltowicz-Bobak and D. Bobak, eds. Pp. 53–70. Rzeszów: Collectio Archaeologica Ressoviensis, Tomus XV.
- Lefebvre, A. 2011. Les Pointes Barbelées Magdaléniennes. Étude typologique, géographique et Chronologique. Unpublished PhD dissertation, Université Toulouse le Mirail, Toulouse. [MCL]
- Leonova, N. 2003. Dwellings in the eastern steppe zone. In *Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia*.
 S. A. Vasil'ev, O. Soffer, and J. Kozłowski, eds. Pp. 17–24. BAR International Series 1122. Oxford: British Archaeological Reports.
- Leroi-Gourhan, A., and M. N. Brézillon. 1973. Fouilles de Pincevent: essai d'analyse ethnographique d'un habitat magdalénien (la section 36). Paris: Centre national de la recherche scientifique.
- Lévi-Strauss, C. 1966. The savage mind. Chicago: University of Chicago Press.
 ———. 1982. The way of the masks. Sylvia Modelski, trans. Seattle: University of Washington Press.
- Lightfoot, K. G., and R. Q. Cuthrell. 2015. Anthropogenic burning and the Anthropocene in late-Holocene California. Holocene 25:1581–1587.
- Lightfoot, K. G., R. Q. Cuthrell, C. J. Striplen, and M. G. Hylkema. 2013. Rethinking the study of landscape management practices among hunter-gatherers in North America. American Antiquity 78:285–301.
- Littleton, J., and H. Allen. 2007. Hunter-gatherer burials and the creation of persistent places in southeastern Australia. *Journal of Anthropological Ar*chaeology 26:283–298.
- Llobera, M. 2001. Building past landscape experience with GIS: understanding topographic prominence. *Journal of Archaeological Science* 28:1005–1014.
- Lourandos, H. 1997. Continent of hunter-gatherers: new perspectives in Australian prehistory. Cambridge: Cambridge University Press.
- Madella, M., G. Kovacs, B. Kulcsarne-Berzsenyi, and I. B. I. Godino. 2013. *The archaeology of household*. Oxford: Oxbow.
- Maher, L. 2010. People and their places at the end of the Pleistocene: evaluating perspectives on physical and cultural landscape change. In *Landscapes in transition: understanding hunter-gatherer and farming landscapes in the early Holocene of Europe and the Levant.* G. Warren and B. Finlayson, eds. Pp. 34–44. London: CBRL Monographs.
- 2016. A road well-travelled? Exploring Terminal Pleistocene hunter-gatherer activities, networks and mobility in eastern Jordan. In Fresh fields and pastures new: papers presented in honor of Andrew M. T. Moore. M. Chazan and K. Lillios, eds. Pp. 49–75. Leiden: Sidestone.
- 2017. Late quaternary refugia: aggregations and palaeoenvironments in the Azraq Basin. In *Quaternary environments, climate change and humans* in the Levant. O. Bar Yosef and Y. Enzel, eds. Pp. 679–689. Cambridge: Cambridge University Press.
- Maher, L., E. B. Banning, and M. Chazan. 2011. Oasis or mirage? Assessing the role of abrupt climate change in the prehistory of the southern Levant. *Cambridge Archaeological Journal* 21:1–29.
- Maher, L., and D. Macdonald. 2013. Assessing typo-technological variability in Epipalaeolithic assemblages: preliminary results from two case studies from the southern Levant. In *The state of stone: terminologies, continuities and contexts in Near Eastern lithics*. Studies in Early Near Eastern Production, Subsistence and Environment 14. F. Borrell, M. Molist, and J. J. Ibanez, eds. Pp. 29–44. Berlin: ex oriente.

- Maher, L., T. Richter, D. Macdonald, M. Jones, L. Martin, and J. T. Stock. 2012. Twenty thousand-year-old huts at a hunter-gatherer settlement in eastern Jordan. PLoS ONE 7:e31447.
- Maher, L., T. Richter, and J. Stock. 2012. The pre-Natufian Epipalaeolithic: long-term behavioral trends in the Levant. Evolutionary Anthropology 21:69–81.
- Maher, L. A. 2018. Persistent place-making in prehistory: the creation, maintenance and transformation of an Epipalaeolithic landscape. *Journal of Archaeological Method and Theory* 25:1–86.
- Maher, L. A., D. A. Macdonald, A. Allentuck, L. Martin, A. Spyrou, and M. D. Jones. 2016. Occupying wide open spaces? Late Pleistocene hunter-gatherer activities in the eastern Levant. *Quaternary International* 396:79–94.
- Maher, L. A., J. T. Stock, S. Finney, J. J. N. Heywood, P. Miracle, and E. B. Banning. 2011. A unique human-fox burial from a pre-Natufian cemetery in the southern Levant (Jordan). PLoS ONE 6(1):e15815.
- Maier, A. 2015. The Central European Magdalenian: regional diversity and internal variability. Dordrecht: Springer.
- Mallol, C., F. W. Marlowe, B. M. Wood, and C. C. Porter. 2007. Earth, wind, and fire: ethnoarchaeological signals of Hadza fires. *Journal of Archaeological Science* 34:2035–2052.
- Martin, J., and O. Bar-Yosef. 1979. Ein Gev III, 1978. Paléorient 5:219–220. [DN] Martin, L., Y. Edwards, and A. Garrard. 2010. Hunting practices at an eastern Jordanian Epipalaeolithic aggregation site: the case of Kharaneh IV. Levant 52:107–135.
- Matthews, W. 2012. Defining households: micro-contextual analysis of Early Neolithic households in the Zagros, Iran. In *Household archaeology: new perspectives from the Near East and beyond*. B. Parker and C. Foster, eds. Winona Lake: Eisenbrauns.
- Matthews, W., C. A. I. French, T. Lawrence, D. F. Cutler, and M. K. Jones. 1997. Microstratigraphic traces of site formation processes and human activities. World Archaeology 29:281–308.
- Mauss, M., and H. Beuchat. 1979 (1906). Seasonal variations of the Eskimo: a study in social morphology. London: Routledge. [ST]
- McBryde, I. 1997. "The landscape is a series of stories." Grindstones, quarries and exchange in Aboriginal Australia: a case study from the Cooper/Lake Eyre Basin. In Siliceous rocks and culture: proceedings of the VI International Flint Symposium. A. Ramos-Millan and M. A. Bustillo, eds. Pp. 587–607. Grenada: Madrid University.
- 2000. Travellers in storied landscapes: a case study in exchanges and heritage. Aboriginal History 24:152–174.
- McDonald, J. 2016. Discontinuities in arid zone rock art: graphic indicators for changing social complexity across space and through time. *Journal of Anthropological Archaeology* 46:53–67.
- McDonald, J., and S. Harper. 2016. Identity signalling in shields: how coastal hunter-gatherers use rock art and material culture in arid and temperate Australia. Australian Archaeology 82:123–138.
- McDonald, J., and P. Veth. 2012. The social dynamics of aggregation and dispersal in the western desert. In *A companion to rock art*. J. McDonald and P. Veth, eds. Pp. 90–102. Chichester: Wiley.
- McFadyen, L. 2008. Building and architecture as landscape practice. In *Handbook of landscape archaeology*. B. David and J. Thomas, eds. Pp. 307–314. Walnut Creek, CA: Left Coast.
- McGlade, J. 1995. Archaeology and the ecodynamics of human-modified landscapes. *Antiquity* 68:113.
- McNiven, I. J., B. David, and B. Barker. 2006. The social archaeology of Indigenous Australia. In *The social archaeology of Australian Indigenous societies*. B. David, B. Barker, and I. J. McNiven, eds. Pp. 2–19. Canberra: Aboriginal Studies Press.
- Mentzer, S. M. 2014. Microarchaeological approaches to the identification and interpretation of combustion features in prehistoric archaeological sites. *Journal of Archaeological Method and Theory* 21:616–668.
- Migliano, A., A. Page, J. Gómez-Gardeñes, G. Salali, S. Viguier, M. Dyble, J. Thompson, N. Chaudhary, D. Smith, and J. Strods. 2017. Characterization of hunter-gatherer networks and implications for cumulative culture. Nature Human Behaviour 1:0043.
- Mills, B. J., J. M. Roberts Jr., J. J. Clark, W. R. Haas Jr., D. Huntley, M. A. Peeples, L. Borck, S. C. Ryan, M. Trowbridge, and R. L. Breiger. 2013. The dynamics of social networks in the Late Prehispanic US Southwest. In Network analysis in archaeology: new approaches to regional interaction. C. Knappett, ed. Pp. 181–202. Oxford: Oxford University Press.
- Mills, B. J., and W. H. Walker. 2008. Memory work: archaeologies of material practices. Santa Fe: School for Advanced Research Press.

- Mithen, S. 2011. After the ice: a global human history, 20,000–5000 BC. London: Weidenfeld & Nicolson.
- Moore, H. L. 1986. Space, text and gender: an anthropological study of the Marakwet of Kenya. Cambridge: Cambridge University Press.
- Moore, J. 2000. Placing home in context. Journal of Environmental Psychology 20:207–217.
- Moore, J. D. 2012. The prehistory of home. Berkeley: University of California Press. Morgan, C., D. Webb, K. Springeler, M. Black, and N. George. 2018. Experimental construction of hunter-gatherer residential features, mobility, and the costs of occupying "persistent places." Journal of Archaeological Science 91:65–76. [DIO]
- Movius, H. L., Jr. 1977. Excavation of the Abri Pataud, Les Eyzies (Dordogne): stratigraphy. American School of Prehistoric Research Bulletin 31. Cambridge, MA: Peabody Museum Press, Harvard University.
- Muheisen, M. 1988. The Epipalaeolithic phases of Kharaneh IV. In *The prehistory of Jordan: the state of research in 1986*. A. Garrard and H. Gebel, eds. Pp. 353–367. BAR International Series 396. Oxford: British Archaeological Reports.
- Muheisen, M., and H. Wada. 1995. An analysis of the microliths at Kharaneh IV phase D, square A20/37. *Paléorient* 21:75–95.
- Munro, N., and L. Grosman. 2010. Early evidence (ca. 12,000 BP) for feasting at a burial cave in Israel. Proceedings of the National Academy of Sciences 107:15362–15366.
- Murietta-Flores, P. 2010. Traveling in a prehistoric landscape: exploring the influences that shaped human movement. In Making history interactive: Computer Applications and Quantitative Methods in Archaeology (CAA): Proceedings of the 37th International Conference in Williamsburg, Virginia.
 B. Frischer, J. Webb Crawford and D. Koller, eds. Pp. 249–267. BAR International Series S2079. Oxford: Archaeopress.
- Nadel, D. 1995. The visibility of prehistoric burials in the southern Levant: how rare are the Upper Palaeolithic/Early Epipalaeolithic graves? In *The archaeology of death in the ancient Near East*. Oxbow Monographs 51. S. Campbell and A. Green, eds. Pp. 1–8. Oxford: Oxbow.
- 2000. Brush hut floors, hearths and flints: the Ohalo II case study (19 Ka, Jordan Valley, Israel). *Journal of Human Evolution* 38:A22–A23.
- 2002. Indoor/outdoor flint knapping and minute debitage remains: the evidence from the Ohalo II submerged camp (19.5 KY, Jordan Valley). *Lithic Technology* 26:118–137.
- 2006. Residence ownership and continuity from the Early Epipalaeolithic into the Neolithic. In *Domesticating space: construction, community, and cosmology in the Late Prehistoric Near East.* E. B. Banning and M. Chazan, eds. Pp. 25–34. Berlin: ex oriente.
- Nadel, D., A. Danin, R. C. Power, A. M. Rosen, F. Bocquentin, A. Tsatskin, D. Rosenberg, R. Yeshurun, L. Weissbrod, and N. R. Rebollo. 2013. Earliest floral grave lining from 13,700–11,700-y-old Natufian burials at Raqefet Cave, Mt. Carmel, Israel. Proceedings of the National Academy of Sciences 110-11774, 11778.
- Nadel, D., D. Piperno, I. Holst, A. Snir, and E. Weiss. 2012. New evidence for the processing of wild cereal grains at Ohalo II, a 23 000-year-old campsite on the shore of the Sea of Galilee, Israel. *Antiquity* 86:990–1003.
- Nadel, D., and D. Rosenberg. 2011. Late Natufian Nahal Oren and its satellite sites: some regional and ceremonial aspects. *Before Farming* 3:article 1. [DN]
- Nadel, D., E. Weiss, and H. Tschauner. 2011. Gender-specific division of indoor space during the Upper Palaeolithic?: a brush hut floor as a case study. In Site-internal spatial organization of hunter-gatherer societies: case studies from the European Palaeolithic and Mesolithic. S. Gaudzinski-Windheuser, O. Jöris, M. Sensburg, M. Street, and E. Turner, ed. Pp. 263–273. Mainz: Verlag des Römisch-Germanischen Zentralmuseums.
- Nadel, D., and E. Werker. 1999. The oldest ever brush hut plant remains from Ohalo II, Jordan Valley, Israel (19,000 BP). *Antiquity* 73:755–764.
- Nowell, A. 2006. From a Paleolithic art to Pleistocene visual cultures. *Journal of Archaeological Method and Theory* 13:239–249.
- Noy, T. 1989. Some aspects of Natufian mortuary behaviour at Nahal Oren. In People and culture in change. I. Hershkovitz, ed. Pp. 53–57. BAR International Series 508. Oxford: British Archaeological Reports. [DN]
- Olami, Y. 1984. Prehistoric Carmel. Jerusalem: Israel Exploration Society, M. Stekelis Museum of Prehistory. [DN]
- Olive, M., and N. Pigeot. 2006. Reflexions sur le temps d'un séjour á Etiolles (Essonne). Bulletin de la Societé Préhistorique Française 103:673–682.
- Olive, M., and Y. Taborin, eds. 1989. *Nature et fonctions des Foyers Préhistoriques. Actes du Colloque International de Nemours, 1987.* Memoires du Musée de Préhistoire d'Île de France. Nemours: Edition de l'Association pour la promotion de la recherche archeologique en Île de France.

- Olive, M., and B. Valentin. 2006. Variabilité des habitats tardiglaciaires: perspectives palethnologiques et paléohistorique. Bulletin de la Societé Préhistorique Française 103:667–780.
- Olszewski, D. 2011. Lithic "culture" issues: insights from the Wadi al-Hasa Epipalaeolithic. In *The state of the stone: terminologies, continuities and contexts in Near Eastern lithics*. E. Healy, S. Campbell, and O. Maeda, eds. Pp. 51–65. Studies in Early Near Eastern Production, Subsistence, and Environment 13. Berlin: ex oriente.
- 2016. Late Upper Paleolithic and initial Epipaleolithic in the marshland: a view from Tor Sageer, Wadi al-Hasa. In Fresh fields and pastures new: papers presented in honor of Andrew M. T. Moore. K. Lillios and M. Chazan, eds. Pp. 41–53. Leiden: Sidestone.
- Olszewski, D. I., and M. al-Nahar. 2016. Persistent and ephemeral places in the Early Epipaleolithic in the Wadi al-Hasa region of the western highlands of Jordan. *Quaternary International* 396:20–30.
- Olszewski, D. I., H. L. Dibble, S. P. McPherron, U. A. Schurmans, L. Chiotti, and J. R. Smith. 2010. Nubian Complex strategies in the Egyptian high desert. *Journal of Human Evolution* 59:188–201. [DIO]
- O'Neill, S. 2014. Exploring hunter-gatherer-fisher complexity on the Pacific Northwest Coast of North America. In *The Oxford handbook of the archaeology and anthropology of hunter-gatherers*. V. Cummings, P. Jordan, and M. Zvelebil, eds. Pp. 991–1009. Oxford: Oxford University Press.
- Ontañón, R. 2003. Sols et structures d'habitat du Paléolithique Supérieur, nouvelles données depuis les Cantabres: la Galerie Inférieure de La Garma (Cantabrie, Espagne). L'Anthropologie 107:333–363.
- Ortner, S. B. 2006. Anthropology and social theory: culture, power, and the acting subject. Durham, NC: Duke University Press.
- Parker, B. J., and C. P. Foster, eds. 2012. New perspectives on household archaeology. Winona Lake, IN: Eisenbrauns.
- Pétillon, Jean-Marc. 2013. Circulation of whale-bone artefacts in the northern Pyrenees during the late Upper Paleolithic. *Journal of Human Evolution* 65:525–543. [MCL]
- Pigeot, N. 2004. Les Derniers Magdaléniens d'Etiolles. L'Unité d'habitation Q31. Perspectives Culturelles et Paléohistoriques. Supplements á Gallia Préhistoire, No.37. Paris: Centre National de la Recherche Scientifique.
- Price, T. D., and O. Bar-Yosef. 2011. The origins of agriculture: new data, new ideas: an introduction to supplement 4. *Current Anthropology* 52:S163–S174.
- Ramsey, M., L. Maher, D. Macdonald, D. Nadel, and A. Rosen. 2018. Sheltered by reeds and settled on sedges: construction and use of a twenty thousand-year-old hut according to phytolith analysis from Ohalo II, Israel and Kharaneh IV, Jordan. *Journal of Anthropological Archaeology* 50:85–97.
- Ramsey, M. N., L. A. Maher, D. A. Macdonald, and A. Rosen. 2016. Risk, reliability and resilience: phytolith evidence for alternative "Neolithization" pathways at Kharaneh IV in the Azraq Basin, Jordan. PLoS ONE 11:e0164081.
- Renfrew, C. 1990. Archaeology and language: the puzzle of Indo-European origins. Cambridge: Cambridge University Press.
- . 2003. Figuring it out. London: Thames & Hudson. [BF]
- 2009. Situating the creative explosion: universal or local? In *Becoming human: innovation in prehistoric material and spiritual culture*. C. Renfrew and I. Morley, eds. Pp. 74–94. Cambridge: Cambridge University Press.
- Rensink, E. 1995. On Magdalenian mobility and land use in north-west Europe. Archaeological Dialogues 2:85–119.
- Richter, T. 2007. A comparative use-wear analysis of late Epipalaeolithic (Natufian) chipped stone artefacts from the southern Levant. Levant 39:97–122.
- 2009. Marginal landscapes? the Azraq Oasis and the cultural landscapes of the final Pleistocene Levant. Doctoral thesis, University College London, Institute of Archaeology, London. [TR]
- 2014. Margin or centre? The Epipalaeolithic in the Azraq Oasis and the Qa'Shubayqa. In Settlement, survey and stone: essays on Near Eastern Prehistory in honour of Gary Rollefson. B. Finlayson and C. Makarewicz, eds. Pp. 27–36. Berlin: ex oriente.
- Richter, T., A. Garrard, S. Allcock, and L. Maher. 2011. Interaction before agriculture: exchanging material and shared knowledge in the Final Pleistocene Levant. *Cambridge Archaeological Journal* 21:95–114.
- Richter, T., and L. Maher. 2013. Terminology, process and change: reflections on the Epipalaeolithic of Southwest Asia. Levant 45:121–132.
- Richter, T., L. A. Maher, A. N. Garrard, K. Edinborough, M. D. Jones, and J. T. Stock. 2013. Epipalaeolithic settlement dynamics in Southwest Asia: new radiocarbon evidence from the Azraq Basin. *Journal of Quaternary Science* 28:467–479.
- Rockman, M. 2013. Apprentice to the environment: hunter-gatherers and landscape learning. In Archaeology and apprenticeship: body knowledge,

- identity, and communities of practice. W. Wendrich, ed. Pp. 99–118. Tucson: University of Arizona.
- Rolston, S. L. 1982. Two prehistoric burials from Qasr Kharaneh. Annual of the Department of Antiquities of Jordan 26:221-222.
- Rosenberg, D., and D. Nadel. 2014. The sounds of pounding: boulder mortars and their significance to Natufian burial customs. *Current Anthropology* 55(6):784–812 (with comments and reply). [DN]
- Rowley-Conwy, P. 2011. Westward ho! the spread of agriculture from Central Europe to the Atlantic. *Current Anthropology* 52:S431–S451.
- Rybczynski, W. 1986. Home: a short history of an idea. New York: Viking. [ST]
- Sackett, J. 1999. The archaeology of Solvieux: an Upper Paleolithic open air site in France. Monumenta Archaeologia 19. Los Angeles: Cotsen Institute of Archaeology.
- Sassaman, K. E. 2004. Complex hunter-gatherers in evolution and history: a North American perspective. *Journal of Archaeological Research* 12:227–280
- Schmidt, K. 2005. Ritual centers and the neolithisation of Upper Mesopotamia. Neo-Lithics 2(5):13–21. [BF]
- Sept, J. 2011. A worm's eye view of primate behavior. In Casting the net wide: papers in honor of Glynn Isaac and his approach to human evolution. J. Sept and D. Pilbeam, eds. Pp. 169–192. Oxford: Oxbow.
- Shahack-Gross, R. 2017. Archaeological formation theory and geoarchaeology: state-of-the-art in 2016. *Journal of Archaeological Science* 79:36–43.
- Shahack-Gross, R., R. M. Albert, A. Gilboa, O. Nagar-Hilman, I. Sharon, and S. Weiner. 2005. Geoarchaeology in an urban context: the uses of space in a Phoenician monumental building at Tel Dor (Israel). *Journal of Archaeological Science* 32:1417–1431.
- Shillito, M., W. Matthews, M. Almond, and I. Bull. 2011. The microstratigraphy of middens: capturing daily routine in rubbish at Neolithic Catalhoyuk, Turkey. Antiquity 85:1024–1038.
- Shipman, P. 2015. How do you kill 86 mammoths? Taphonomic investigations of mammoth megasites. *Quaternary International* 359–360:38–46. [DN]
- Simek, J. 1984. Integrating pattern and context in spatial archaeology. *Journal of Archaeological Science* 11:405–420.
- Simonnet, R. 1981. Carte des gîtes à silex des pré-Pyrénées. In La Préhistoire en Quercy dans le contexte de Midi-Pyrénées. Actes du XXIe Congrès préhistorique de France (Montauban, Cahors, Figeac, 3–9 septembre 1979). Pp. 308–323. Paris: Société Préhistorique Française.
- Smith, B. D. 2001. Low-level food production. Journal of Archaeological Research 9:1-43. [BF]
- Snir, A., D. Nadel, I. Groman-Yaroslavski, Y. Melamed, M. Sternberg, O. Bar-Yosef, and E. Weiss. 2015. The origin of cultivation and proto-weeds, long before Neolithic farming. *PLoS ONE* 10:e0131422.
- Soffer, O. 1987. Upper Paleolithic connubia, refugia, and the archaeological record from Eastern Europe. In *The Pleistocene old world: regional per*spectives. O. Soffer, ed. Pp. 333–348. New York: Plenum.
- 2003. Mammoth bone accumulations: death sites? kill sites? dwellings? In Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia. S. A. Vasil'ev, O. Soffer, and J. Kozłowski, eds. Pp. 39–46. BAR International Series 1122. Oxford: British Archaeological Reports
- Spencer, B., and F. J. Gillen. 1904. The Northern tribes of Central Australia. London: Macmillan. [AB-C and ANG-M]
- Spyrou, A. 2015. Animal procurement and processing during the pre-Natufian Epipalaeolithic of the Southern Levant: zooarchaeological and ethnographic implications of meat and nutrient storage and social organization. PhD dissertation, University College London, London.
- Stapert, D. 2003. Towards dynamic models of Stone Age settlements. In *Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia*. S. A. Vasil'ev, O. Soffer, and J. Kozłowski, eds. Pp. 5–16. BAR International Series 1122. Oxford: British Archaeological Reports.
- Stekelis, M., and T. Yizraeli. 1963. Excavation at Nahal Oren. Israel Exploration Journal 13:1–12. [DN]
- Sterelny, K. 2011. The evolved apprentice: how evolution made humans unique. Cambridge, MA: MIT Press. [TW]
- Sterelny, K., and T. Watkins. 2015. Neolithization in Southwest Asia in a context of niche construction theory. Cambridge Archaeological Journal 25:673-691
- Sterling, K. 2014. Social landscapes of the Late Palaeolithic: marking meaning in the Magdalenian. *European Journal of Archaeology* 18:380–401.

- ——. 2015. The concept of "domesticity" in Magdalenian life. Paper presented at the 80th annual meeting of the Society for American Archaeology, San Francisco.
- Stock, J. T., S. K. Pfeiffer, M. Chazan, and J. Janetski. 2005. F-81 skeleton from Wadi Mataha, Jordan, and its bearing on human variability in the Epipalaeolithic of the Levant. American Journal of Physical Anthropology 126:453– 465
- Straus, Lawrence G., Thomas Terberger, and Denise Leesch. 2012. The Magdalenian settlement of Europe: an introduction. Quaternary International 272–273:1–5.
- Straus, Levi G. 1992. Iberia before the Iberians: the Stone Age prehistory of Cantabrian Spain. Albuquerque: University of New Mexico Press. [MCL]
- Taçon, P. S. 1994. Socialising landscapes: the long-term implications of signs, symbols and marks on the land. Archaeology in Oceania 29(3):117–129.
- Thomas, J. 1991a. Rethinking the Neolithic. Cambridge: Cambridge University Press. [TR]
- ——. 1991b. Understanding the Neolithic. New York: Routledge.
- . 2002. Understanding the Neolithic. London: Routledge. [TR]
- . 2004. Archaeology and modernity. London: Routledge. [TR]
- Tilley, C. 1994. A phenomenology of landscape: places, paths, and monuments. Oxford: Berg.
- Tomášková, Š. 1991. Building homes in the past: archaeological interpretations of Dolní Vestonice. Berkeley: Department of Anthropology, University of California.
- Tomášková, S. 2000. The nature of difference: history and lithic use-wear at two Upper Paleolithic sites in Central Europe. Oxford: Archaeopress. [ST]
- Trant, A. J., W. Nijland, K. M. Hoffman, D. L. Mathews, D. McLaren, T. A. Nelson, and B. M. Starzomski. 2016. Intertidal resource use over millennia enhances forest productivity. *Nature Communications* 7:12491.
- Tresset, A., and J. Vigne. 2007. Substitution of species, techniques and symbols at the Mesolithic-Neolithic transition in Western Europe. *Proceedings of the British Academy* 144:189–210.
- Tringham, R. 1995. Archaeological houses, households, housework and the home. In *The home: words, interpretations, meanings, environments*. D. N. Benjamin, D. Stea, and E. Arén, eds. Pp. 79–108. Aldershot: Avebury.
- . 2000. The continuous house. In Beyond kinship: social and material reproduction in house societies. R. A. Joyce and S. Gillespie, eds. Pp. 15–134. Philadelphia: University of Pennsylvania Press.
- Twiss, K. C. 2007. The Neolithic of the southern Levant. Evolutionary Anthropology 16:24–35.
- Ucko, P. J., and R. Layton. 2003 (1999). The archaeology and anthropology of landscape: shaping your landscape. One World Archaeology 30. New York: Routledge.
- Utrilla, P., C. Mazo, and R. Domingo. 2003. Les structures d'habitat de l'occupation magdalénienne de la grotte d'Abauntz (Navarre, Espagne). L'organisation l'espace. In *Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia*. S. A. Vasil'ev, O. Soffer, and J. Kozłowski, eds. Pp. 25–38. BAR International Series 1122. Oxford: British Archaeological Reports.
- Valkeapää, N.-A., and P. H. Nordgren. 1994. *Trekways of the wind*. Tucson: University of Arizona Press.
- Van Dyke, R. M., and S. E. Alcock, eds. 2003. Archaeologies of memory. Malden: Blackwell.
- Vasil'ev, S. A., O. Soffer, and J. K. Kozłowski. 2003. Perceived landscapes and built environments: the cultural geography of Late Paleolithic Eurasia. BAR International Series 1122. Oxford: British Archaeological Reports.
- Verhoeven, M. 2002. Ritual and ideology in the Pre-Pottery Neolithic B of the Levant and southeast Anatolia. *Cambridge Archaeological Journal* 12:233–258.
- 2004. Beyond boundaries: nature, culture, and a holistic approach to domestication in the Levant. *Journal of World Prehistory* 18:179–282.
- Veth, P., C. Myers, P. Heaney, and S. Ouzman. 2018. Plants before farming: the deep history of plant-use and representation in the rock art of Australia's Kimberley region. *Quaternary International* 489:26–45.
- Veth, P., M. Smith, and P. Hiscock. 2008. Desert peoples: archaeological perspectives. Chichester: Wiley.
- Veth, P., I. Ward, and K. Ditchfield. 2017. Reconceptualising Last Glacial Maximum discontinuities: a case study from the maritime deserts of northwestern Australia. *Journal of Anthropological Archaeology* 46:82–91.
- Watkins, T. 1990. The origins of house and home? World Archaeology 21:336-
- 2004. Architecture and "theatres of memory" in the Neolithic of Southwest Asia. In Rethinking materiality: the engagement of mind with the

- material world. C. Gosden, ed. Pp. 97–106. Cambridge: McDonald Institute for Archaeological Research.
- 2005. The Neolithic revolution and the emergence of humanity: a cognitive approach to the first comprehensive world-view. In *Archaeological perspectives on the transmission and transformation of culture in the Eastern Mediterranean.* J. Clarke, ed. Pp. 84–88. Levant Supplementary Series 2. Oxford: Oxbow and Council for British Research in the Levant. [BF, GW]
- ——. 2008. Supra-regional networks in the Neolithic of Southwest Asia. Journal of World Prehistory 21(2):139–171. [TW]
- 2010. Changing people, changing environments: how hunter-gatherers became communities that changed the world. In *Landscapes in transition*. B. Finlayson and G. Warren, eds. Pp. 106–114. London: Oxbow.
- ——. 2012. Household, community and social landscape: building and maintaining social memory in the Early Neolithic of Southwest Asia. In "As time goes by?": monuments, landscapes and the temporal perspective. M. Furholt, M. Hinz, and D. Mischka, eds. Pp. 23–44. Bonn: Verlag.
- ———. 2013. The Neolithic in transition—how to complete a paradigm shift. Levant 45:149–158.
- Forthcoming. Was the Neolithic new? Extensive networks of sharing and exchange from the African MSA to the Neolithic of Southwest Asia. In Prehistoric networks in the longue durée: Palaeolithic innovations enabling the Neolithic Revolution. S. Hansen, F. Klimscha, and J. Renn, eds. Berlin: Edition Topoi. [TW]
- Weissbrod, L., F. B. Marshall, F. R. Valla, H. Khalaily, G. Bar-Oz, J.-C. Auffray, J.-D. Vigne, and T. Cucchi. 2017. Origins of house mice in ecological niches created by settled hunter-gatherers in the Levant 15,000 y ago. Proceedings of the National Academy of Sciences 114(16):4099–4104.
- Whallon, R., W. A. Lovis, and R. K. Hitchcock. 2011. *Information and its role in hunter-gatherer bands*. Los Angeles: Cotsen Institute of Archaeology Press.
- White, R. 2008. Abri Castanet, Nouveau Secteur. Rapport de Fouille Programmé, Années 2006–2008. Bordeaux: Service Régional de l'Archéologie, Ministère de la Culture.
- Whitridge, P. 2004. Landscapes, houses, bodies, things: "place" and the archaeology of Inuit imaginaries. *Journal of Archaeological Method and Theory* 11:213–250.
- Whittle, A. W. 1996. Europe in the Neolithic: the creation of new worlds. Cambridge: Cambridge University Press.
- Wiessner, Polly. 1983. Style and social information in Kalahari San projectile points. *American Antiquity* 48:253–276. [MCL]
- . 2014. The embers of society: firelight talk among the Ju/'hoansi bushmen. *Proceedings of the National Academy of Sciences* 111(39):14013–14014
- Wilk, R. R., and W. L. Rathje. 1982. Household archaeology. American Behavioral Scientist 25:617–639.
- Wilson, M. C. 1995. The household as portable mnemonic landscape: archaeological implications for Plains stone circle sites. In *Beyond subsistence: Plains archaeology and the post-processual critique*. P. Duke and M. C. Wilson, eds. Pp. 169–192. Tuscaloosa: University of Alabama Press.
- Wilson, P. J. 1988. The domestication of the human species. New Haven, CT: Yale University Press. [BF]
- ——. 1991. The domestication of the human species. New Haven, CT: Yale University Press.
- Wobst, H. M. 1977. Stylistic behavior and information exchange. In *Papers for the director: research essays in honor of James B. Griffin*, vol. 61. C. Charles, ed. Pp. 317–342. Ann Arbor: Museum of Anthropology, University of Michigan.
- 2000. Agency in (spite of) material culture. In Agency in archaeology. Marcia-Anne Dobres and John Robb, eds. Pp. 40–50. London: Routledge. [TR] Wreschner, E., and A. Ronen. 1975. Iraq ez-Zigan 1975. Israel Exploration Journal 25:254–255. [DN]
- Yaroshevich, A., O. Bar-Yosef, E. Boaretto, V. Caracuta, N. Greenbaum, N. Porat, and J. Roskin. 2016. A unique assemblage of engraved plaquettes from Ein Qashish South, Jezreel Valley, Israel: figurative and non-figurative symbols of Late Pleistocene hunters-gatherers in the Levant. PLoS ONE 11: e0160687.
- Yaroshevich, A., D. Kaufman, D. Nuzhnyy, O. Bar-Yosef, and M. Weinstein-Evron. 2010. Design and performance of microlith implemented projectiles during the Middle and the Late Epipaleolithic of the Levant: experimental and archaeological evidence. *Journal of Archaeological Science* 37:368–388.
- Yellen, J. E. 1977a. Archaeological approaches to the present: models for reconstructing the past. New York: Academic. [AB-C and ANG-M]
- 1977b. Long term hunter-gatherer adaptation to desert environments: a biogeographical perspective. World Archaeology 8:262–274.

- Yeshurun, R., D. Kaufman, N. Shtober-Zisu, E. Crater-Gershtein, Y. Riemer, A. M. Rosen, and D. Nadel. 2015. Renewed fieldwork at the geometric Kebaran site of Neve David, Mount Carmel. *Journal of the Israel Prehistoric Society* 45:31–54.
- Zeder, M. 2011. The origins of agriculture in the Near East. Current Anthropology 52:S221–S235.
- Zimmerman, Larry J. 2016. Homeless, home-making and archaeology: "to be at home wherever I find myself." In *Elements of architecture: assembling archaeology, atmosphere and the performance of building spaces.* Mikkel Bille and Tim Flør Sorensen, eds. Pp. 256–272. New York: Routledge.
- Zubrow, E., F. Audouze, and J. G. Enloe. 2010. The Magdalenian household: unraveling domesticity. Albany, NY: SUNY Press.