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The Origins of a Natufian 'Anomalous Giant': New Evidence from Wādī Hammeh 27

Introduction

Wādī Hammeh 27 is an Early Natufian site in northwestern Jordan, dating from 12,000 to 12,500 cal BC (Edwards 2013a). It is representative of the first large, openair, residential settlements to appear in the Levant, and more generally in the wider world. These settlements might be considered as the first villages, yet this label sits somewhat uncomfortably, reflecting lingering uncertainty about the interpretation of these sites. The larger Natufian settlements were founded by hunter-gatherers, whereas the term 'village' was originally associated with agricultural peoples. Thereby, Natufian sites have also been termed 'base-camps' (Bar-Yosef and Goren 1973) although this label seems to underplay the manner by which they overshadow the earlier small sites of the region. In recent theory, discussion has centred on unusually large urban and Neolithic settlements that have been variously

termed as 'anomalous giants' (Fletcher 2019), 'great anomalous places', and even 'big, weird sites' (Chapman and Gaydarska 2016). Compared to the earlier small, ephemeral Early and Middle Epipalaeolithic camps in Wādī al-Hammeh, Wādī Hammeh 27 can be thought of as such an anomalous giant on account of its great bulk of contents compared to the thin, diminutive, occupation layers that preceded it, its complex material cultures, and its novel arrays of clustered stone houses. The Natufian settlements entrenched the lithification of architectural practice. Geographically, too, Wādī Hammeh 27 remains an anomaly in the Mediterranean region of Jordan, since no other similar site has yet been discovered.

This paper outlines the results of a recent fieldwork project conducted from 2014 to 2016 called 'Ice Age Villages of the Levant: Sedentism and Social Connections in the Natufian Period'. It was designed to

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understand more about how Wādī Ḥammeh 27 was founded. Principal aims were to explore more of the basal deposits of Wādī Ḥammeh 27 in order to elucidate conditions pertaining at the time of the settlement's foundation. In the event of further human burials being discovered, we planned to characterise their biological and physical nature, to analyse their relationships through palaeogenetic studies, and to explore their geographic origins through strontium isotope analysis. We also intended to gain information on social connections with other regions by tracking the sources of key raw materials imported to the site.

The New Excavations

The original excavations at Wadī Hammeh 27, conducted between 1983 and 1990, cleared broad areas of the uppermost Phase 1 (Edwards 2013b). Only a small pit (the XX F Sondage) was sunk through the Phase 2 and 3 domestic occupations to Phase 4, which contained a burial (Edwards 2013c). The new excavations removed a larger volume of deposits within the perimeter wall of Structure 1 (Plot XX F), clearing down to the base of Phase 4. The XX F Sondage showed evidence of four constructional phases with a burial at the base, dug into natural rock. Next to the burial was a pit filled with superimposed layers of stone and burnt sediment. Later features were repeatedly built on this spot through all the later phases, as if marking the location of a significant place. The experience of the previous excavations, particularly of the XX F sondage stratigraphy, was used as a guide for the new excavations. This pit borders the northern half of Structure 1 (in Phase 1) and our excavation plan for the new venture was to strip back the layers, one by one, to its west.

Consideration of the main features of Structure 1 in Phase 1 is useful at this point to establish comparisons with features discovered in the lower phases. The periph-

eral wall of Structure 1 in its northern sector is substantial (FIG. 1). It broadens in its mid-section where stones are set into mud mortar. Two stone rings are prominent in this phase. One (Feature 8 [=F. 8]) was built against the interior face of Wall 1, which may also have functioned as a post support, and a second stone circle (F. 6) may have functioned as a work station, since a basaltic pestle was found inside it. Structure 1 also contained an oblong platform of limestone slabs and blocks (F. 7) to the south of these constructions. Feature 7 was set into a slightly raised base of clay, with some of the border stones set on edge. Excavation revealed an elongated pit underlying Feature 7, which did not feature any significant mortuary or artefactual finds.

A summary of the stratigraphic and architectural details of each phase (Phases 2, Upper 3, Lower 3, Upper 4, and Lower 4) are given in the following sections, accompanied by descriptions of some of the most significant artefacts and features unearthed in each phase. A comprehensive micromorphological analysis of the deposits is also underway (discussed by Lauren Prossor in this volume). Analysis of the great bulk of the finds—the flaked stone tool component—has been undertaken by Adam Valka (also in this volume).

The Phase 2 Settlement

The clearance of Phase 2 in Plot XX F revealed an earthen occupation surface extending over the entire excavated area (Edwards *et al.* 2018a), which lay about 0.20 metres below the Phase 1 floor of Structure 1 (FIG. 2). Several notable stone features were found and the encompassing deposit (Locus 2.5) produced a high density of finds, similar to the levels recorded for the uppermost Phase 1 (Edwards and Hardy-Smith 2013). The peripheral Structure 1 wall of Phase 1 was already utilised in Phase 2 at least in part. It is associated with Phase 2 occupation surfaces in Squares B2, B3,

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1. View west across the XX F sondage to the Phase 1 surface of Structure 1, during the 1980s excavations at Wādī Ḥammeh 27.



2. Phase 2, Plot XX F, Wādī Ḥammeh 27.

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B5, and C5 but not in Square B4, where its constituent stones are pedestalled above the Phase 2 floor. Two stone rings were built on the Phase 2 floor, predecessors to the similar ones built later in the same places in Phase 1 (Edwards 2013b: 73). Feature 7 (Square C3) in Phase 2 was built up two courses high. Feature 5 is a sinuous stone arrangement bedded in mud mortar and comprised of adjoining stone arcs, which open respectively to the north (Square C5) and to the south (Square C4). Feature 4 (Square D5) is an oblong stone platform found on the Phase 2 floor, apparently a predecessor to the platform in Phase 1, although displaced to the southwest of it. A flat stone placed at the centre of this feature may have functioned as a post-support.

Three deliberately placed caches of objects or 'artefact clusters' were found in the Phase 2 excavations. Seventeen such artefact clusters were found in the 1980s excavations—predominantly in Phase 1 (Artefact Clusters 1–17) with an eighteenth in Phase 2 (Artefact Cluster 18; Edwards and Hardy-Smith 2013: 105). From the new excavations, Artefact Cluster 19 (Square C3-1, Locus 2.5) consisted of a pair of large flint blades about 10 cm long; Artefact Cluster 20 (Square E3-2, Locus 2.5) comprised a stockpile of stone resources, including three lightly reduced and apparently heat-treated



 Artefact Cluster 21 (scatter of Dentalium shells) on the Phase 2 floor, Plot XX F, Wādī Hammeh 27. flint cores and two limestone cobbles; and Artefact Cluster 21 consisted of a cache of 138 Dentalium (*Antalis* sp.) fragments (not counting further fragments discovered in the sieve residues) overlying a pair of retouched blade tools, including a Helwan-retouched awl (FIG. 3).

Significant Finds from Phase 2

New types of basaltic pestles were recovered from Phase 2, including a zoomorphic pestle (RN 140049) and a phalliform type (RN 140053). Some basaltic handstones were also discovered, with two of them augmenting a previously attested association of this tool-type with pigmented earths. One example (RN 140059) was coated in yellow ochre, with stains covering nearly all the areas of both faces, whereas the margins are completely free of them. Another broken limestone handstone (RN 140024) also bore traces of yellow colouration. Three miniature basaltic bowls were excavated, adding to the corpus of this unusual artefact type which is largely restricted to Wādī Hammeh 27.

Four art items bearing both iconic (representational) and geometric motifs were recovered from Phase 2. Two of them concern the above-mentioned pestles. One (RN 140049) is a short pestle with a raised band around the shaft near the distal end and an obliquely shaped terminus, features which suggest an ungulate or equine hoof. The piece finds several parallels in objects from Mount Carmel and Western Galilee, such as a basalt pestle with concentric raised bands and a hoof-shaped terminal from El Wād (Garrod and Bate 1937: Pl. XV, 4; Major 2018: 146-7), as well as examples from Hayonim Cave (Belfer-Cohen 1991: Fig. 7:1, 3, 5). The other pestle (RN 140053) bears a raised band and groove near its distal end and the resulting form gives the impression of a phallic object. A long, shaped and tapered (33.5 cm), sub-conical piece of limestone (RN 140225) also indicates the



 Carved and incised bone animal head (RN 140226), Phase 2, Wādī Hammeh 27. 5.

intention to form a phallic symbol. A natural white colouration caps the thinner proximal end of the piece, whereas the rest of the object is light grey to dark grey.

A carved and incised bone animal head (RN 140226) is the likely remnant of a decorated sickle haft (FIG. 4). It was badly damaged by fire, as was the surviving zoomorphic piece. It forms the head of an ungulate animal, probably a gazelle (Robertson *et al.* 2019). RN 140226 has parallels with objects from Kebara Cave (Turville-Petre 1932) and El Wad Cave, Layer B (Garrod and Bate 1937: Pl. XIII, 3).

The Phase 3 Settlement

The principal feature of Phase 3 is an oval house (Structure 3) defined by the substantial stone Wall 9. This peripheral wall emerges from the south baulk of the trench in Square E6 and loops around in

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a semi-circle, returning to the south baulk in Square E2, further to the east (this part was discovered in the XX F Sondage in the 1980s). With its north-facing entrance, Structure 3 has a different orientation than the overlying Structure 1, which opens to the west. Phase 3 is divided into upper and lower sub-phases. Upper Phase 3 includes an upper floor in Structure 3 and associated external features and deposits to the north of the structure. Lower Phase 3 denotes the lowest floor associated with the establishment of Structure 3, plus external features and deposits outside to the north.

Upper Phase 3

The uppermost floor of Structure 3 (Locus 6.1) intercepts Wall 9 midway up its surviving height and so partially covers

its lower wall stones (FIG. 5). An entrance was positioned on the northern side of the structure; opposite this on the interior floor a stone cairn was placed on a raised clayey knoll (Feature 18 [F.18]). The Upper Phase 3 floor lay, on average, about 20 cm below the Phase 2 one (Edwards et al. 2018b). Two circular stone features occur to the north of Structure 3; firstly (in Square C5) there is a stone ring (Feature 17) built on the floor surface, positioned directly below a later circular feature (F. 5) in Phase 2. This feature was, in turn, positioned under a similar feature (F. 8) in the uppermost Phase 1. Feature 12 is a stone-ringed posthole, two courses high, located further east (Square C3). The two features seem to be placed symmetrically about the entrance to Structure 3.



5. Upper Phase 3, Plot XX F, Wādī Hammeh 27.



 Bone pendants from Upper Phase 3, Wādī Hammeh 27: RN 150007 (left) and RN 15005 (right).

Significant Finds from Upper Phase 3

Upper Phase 3 yielded several unusual items fashioned from limestone. One is a small, drilled 'bead' (RN 150015). There is also a limestone ball finished almost to a perfect sphere (RN 150020) and an unusual limestone cylinder (RN 150021) resembling an artist's crayon. In bone, new types of pendants emerged, including an ovoid type (RN 150007, FIG. 6), almost intact except for a damaged perforation, and a small, sub-rectangular example (RN 150054). Additionally, a bone piece (RN 150172) is decorated with a series of opposed short incised strokes, emanating from the left and right distal margins on the proximal section of the piece.

Lower Phase 3

The lowermost floor in Structure 3 (Locus 8.1) articulates with the base of the enclosing Wall 9 (FIG. 7). The excavation of the lower floor also established Feature 24 as a clear, north-facing entrance to the house (Edwards *et al.* 2018c). Clearance of the house's interior deposits confirmed that

the inner face of Wall 9 (F.z19) is lined by a row of shaped, rectangular limestone slabs (FIG. 8), first revealed during the excavation of Upper Phase 3, and standing almost vertically. The slabs are supported by a backing of small to medium-sized limestone pieces. Feature 19 is a precursor to the larger, decorated stone slabs of Phase 1 (Edwards 2013d: 28–9). The Natufian site of Shubayqa 1 in east Jordan also features naturally-shaped

basalt slabs erected vertically as part of a house wall (Richter *et al.* 2012), whereas the Wādī Ḥammeh 27 examples have been extensively worked to form a similar effect. Since the settlements are contemporaneous, it is interesting to consider whether there is a direct cultural link or borrowings to account for the two architectural traditions especially when we consider that both sites participated in an east-west exchange system, according to the evidence of Mediterranean Dentalium shells found in both sites.

The interior of Structure 3 is lower than its outside surface (Locus 9.1). A small stone-lined posthole (F. 22) lay at the interior of its entrance. Further inside, a stone construction (F. 21) directly underlay the larger stone cairn (F.18) founded on the Upper Phase 3 floor. A large stone circle (F. 25) was positioned on the exterior surface at the north-west extremity of the excavations, directly underneath Feature 17 built in the overlying Upper Phase 3. To the north-east of the excavation area, a short, single-coursed wall segment (F. 28) runs westwards from the easterly limit of excavation. This feature partially underlay an overlaying stone circle in Upper Phase 3 (F. 12). The largest external construction is Feature 20, an oblong stone platform. Feature 20 is the original version of similar platforms that were built over the top of it or nearby, in all succeeding constructional

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7. Lower Phase 3, Plot XX F, Wādī Ḥammeh 27.



8. View west across Phase 3, Plot XX F, Wādī Ḥammeh 27, during excavation.

phases. A large, roughly circular cavity occurs at its centre, and the provision of a curved, basaltic vessel fragment (RN 160249) to frame its south-easterly margin reinforces the likelihood that it served as a support for a sizeable post.

Significant Finds from Lower Phase 3

Several fossils were discovered in Phase 3, including an unusual fossil echinoid, or sea urchin (RN 160138). Weathering of the fossil has resulted in the abrasion of its surficial features, highlighting the sutures between the plates. The echinoid is likely to be a stomechinid type belonging to the genus *Leioechinus*. This taxon has not previously been recorded in a Natufian site or in a Levantine archaeological context.

The Phase 4 Settlement

Phase 4 includes the deposits and features positioned on and dug into the basal travertine rock layer.

Phase 4 has also been divided into upper and lower sub-phases, with Upper Phase 4 represented by the occupation surface below Phase 3. This surface overlies a series of pits and features, which constitute Lower Phase 4.

Upper Phase 4

The Upper Phase 4 surface (Locus 8.3) runs underneath the Structure 3 perimeter wall. Numerous stone features, isolated rocks, and large and small artefacts lay strewn across its surface (Locus 8.3). In the western corner of the plot, near the intersection of Wall 9 and the south baulk, a stone cluster (F. 30) formed a third, successive version of the overlying ones, Features 18 and 21 (of Upper and Lower Phase 3 respectively). Three new AMS radiocarbon dates from Upper Phase 4 are 12,290 ± 28 BP (Wk-46914; 12,166 –12,310 cal BC), 12,383 ± 29 BP (Wk-46912; 12,285–12,593 cal BC) and 12,438 ± 28 BP (Wk-46913; 12,434-12,765 cal BC).

Significant Finds from Upper Phase 4

Upper Phase 4 yielded interesting finds from a technological point of view: a lozenge of vesicular basalt (RN 160248) and an incomplete basaltic vessel (RN 160420). These objects are the first signs that basaltic artefacts were made on-site at Wādī Hammeh 27 and not always imported as finished pieces. Another novelty for the site is a bone fish-hook (RN 160278). The fishhook is a common type in more westerly sites but this example is the first one from Wādī Hammeh 27 in an assemblage of 550 bone artefact items.

Lower Phase 4

Lower Phase 4 comprises a number of pits and stone features dug into the natural travertine deposits. These features are primarily clustered underneath the later Structure 3 and three of them contain human skeletal remains (FIG. 9). Other significant features were located in the area outside Structure 3 (to its north). The chief one among them is the stone platform (Feature 20). Further excavation revealed it to be a deep, stone-lined pit with a significant infill of burnt sediment. This situation is reminiscent of the Feature 16 pit that accompanied the neighbouring F. 8 burial in the XX F Sondage (Webb and Edwards 2013). Feature 20 appears also to have been placed to mark the graves to its south (Features 29 and 32). Versions of the stone platform were then rebuilt throughout all the later phases of the settlement over a period of some 500 years.

The most important find emanating from the pits under Structure 3 was a double burial (F. 29) containing two primary, superimposed child inhumations. *Homo 9* was found overlying *Homo 10*. The latter individual was wearing a Dentalium necklace, and both individuals had been interred in individual containers of soft material. Human remains were also discovered in two other pits, but

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9. Lower Phase 4, Plot XX F, Wādī Hammeh 27.

time did not permit their excavation. A human vertebra was found in Feature 32. Additionally, a human maxilla was found on the northeastern slope of the large pit, Feature 35 (Bocquentin, in Edwards et al. 2018c). In this context, it is also notable that burnt fragments of human crania, originally found scattered throughout the Phase 1 sediments in the 1980s excavations (Edwards and Hardy-Smith 2013; Webb and Edwards 2013), have also been found in all of the lower phases during the new excavations. New AMS radiocarbon dates of 12,379 ± 30 BP (Wk-46916; 12,270-12,590 cal BC) and 12,404 ± 30 BP (Wk-46915; 12,350-12,680 cal BC) for Lower Phase 4 clarify the timing of the foundation of the settlement. Both determinations come from pits dug into the underlying bedrock.

Significant Finds from Lower Phase 4

The most noteworthy finds from Lower Phase 4 are five bone points, placed as a cluster in the burial pit, Feature 32. One specimen is a long, gracile point (RN 160365), measuring 19.5 cm in length, but only a few millimetres wide (FIG. 10). RN 160364 is a similar example, with a length of 15 cm. RN 160360 is a long, curved point, possibly made on a rib. All three of these objects are unique in the Wādī Ḥammeh 27 repertoire.

The Origins and Development of the Settlement

The new excavations at Wādī Hammeh 27 have provided an enhanced understanding of the establishment and

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 Gracile bone point (RN 160365) from Feature 32, Lower Phase 4, Wādī Hammeh 27.

development of the site. Around 12,500 BC its settlers founded a burial ground on the alluvial travertine sediments in lower Wādī al-Ḥammeh, digging pits into the bedrock. No specific habitations are indicated for this phase, yet the settlers had already developed all of the characteristic material forms of Early Natufian culture. Its inventories included diverse forms of flaked chert tools, bone tools and ornaments,

heavier artefacts in basaltic and limestone, and portable art pieces. The burials were bordered by two complex features that originated as deep pits filled with burnt materials. The features were capped with stone platforms, at least one of which framed a large posthole, possibly to hold erect a memorial post.

Relatively quickly, as far as we can discern from the evidence of the radiocarbon dates, a house (Structure 3) was built over the burials. The structure was rapidly reoccupied when a second floor was established. On the exterior, the marker features were continually renovated and embellished. To the north of the house, two stone circles were placed. Even after Structure 3 went out of use and the area was incorporated into a much larger house (Structure 1, Phases 1 and 2), the commemorative monuments and the stone circles were rebuilt and reused throughout the lifespan of the site, which ended around 12,000 BC. Thereby, memories of founding figures and their resting places were maintained until the end of the settlement's lifetime.

Community Connections: Analyses of Human Skeletal Remains

In order to examine the interrelationships of the community members, bioarchaeological and palaeogenetic analyses of the human skeletal remains are underway, the former undertaken by Fanny Bocquentin (aided by Marie Anton) and the latter carried out by Cristina Valdiosera. Isotopic studies of human bone by Louise Shewan are also continuing, in order to discover something of the geographic origins of the settlers at Wādī Hammeh 27. Strontium (Sr) isotope ratios in the human remains are being compared with a baseline reference map of bioarchaeological strontium, which Shewan has compiled in western Jordan. For these purposes, Shewan has collected over one hundred

samples of rock, soil, plants, and surface water in western Jordan (between the Syrian border and the southern margins of the Dead Sea). The range of Sr isotopic variability observed so far ranges from 0.70916 near Wādī al-Ḥammeh at Kufur Rākib to 0.70449 at Mukawir, further south by the Dead Sea (Shewan in Edwards *et al.* 2018b).

Social Connections: Tracking Raw Materials

This project also aimed to understand more about the social connections of Wadī al-Hammeh and other regions by tracking the sources of key raw materials imported to Wādī Hammeh 27. To investigate the origins of basaltic rock arriving at the site, John Webb undertook the first comprehensive mapping of basaltic rock sources in western Jordan, by portable X-Ray Fluorescence. Nine basaltic provinces were isolated and distinguished in western Jordan (between northern Jordan and the Dead Sea basin). Multiple samples of each source were taken in the field. Ratios of non-weathering trace elements (Yttrium/ Niobium and Zirconium/Niobium) were used to distinguish each source. Some of the sources overlap significantly, but there is also a clear trend of differentiation from south to north. Comparing the analyses of Wādī Hammeh 27 basaltic artefacts with the outcrop analyses shows that the artefacts were derived from a variety of outcrops. Most of the artefacts are similar to the nearby basalts at Umm Qays and Irbid, but several were obtained from basalt outcrops to the south around the Dead Sea (Webb, in Edwards *et al.* 2018b).

Chert (flint) cobbles are ubiquitous in the channels of Wādī al-Ḥammeh and chert veins outcrop widely in the eastern foothill of the Jordanian plateau. Chert was by far the most abundant and important daily resource utilised at Wādī Ḥammeh 27. Given the plentiful sources of chert located along the Jordan Valley margins, it is not necessarily the case that the material was imported from long distances, since there are plenty of local types available. Nevertheless, we have had little reliable knowledge of chert sources used in the Epipalaeolithic period in northwestern Jordan. To address this lacuna, Christophe Delage conducted a wide-ranging survey and analysis of chert sources in western Jordan. Delage has found that of all the many types of suitable flint available the occupants of Wādī Hammeh 27 strongly favoured a yellow/light brown chert of uncertain provenance which they collected as a series of secondary nodules (Delage in Edwards et al. 2018b).

Integrating Local Archaeology

Debates about the degree of sedentism practiced in the Natufian period often focus on the presentation of generalist behavioural models, or archaeological or scientific indicators which are often taken to be universally applicable. Thus, we have arguments derived from refuse disposal patterns (Hardy-Smith and Edwards 2004) and the association of commensal animals with Natufian settlements (Weissbrod *et al.* 2017). In conclusion, I digress from these interests and draw attention instead to some pertinent aspects of northwestern Jordan's archaeological record.

Wādī al-Ḥammeh forms a long, narrow valley, bounded by high hills. It extends from the Jordan Valley floor and rises to the Jordanian plateau 2.5 km to the east. The valley forms a natural passage from the lowlands to the highlands. Numerous microenvironments are contained within it and adjacent to it. They include the Mediterranean forests of the Jordanian plateau with their nut trees; the craggy sides of Wādī al-Ḥammeh—suitable for ungulates such as goats; the broad red soils of the of Ṭabaqat Faḥl plateau, forming an expansive home for wild cereals, and lastly the marshy embayment of Sayl al-Hammeh and its opening to the Jordan Valley. The communication routes along the valley were important to the inhabitants of Wādī Hammeh 27 (Edwards 2015).

The ahupua'a, a landholding unit of ancient Hawaii, offers some useful parallels to the east-west trending wadis that debouche into the Jordan Valley (Cordy and Kaschko 1980). The ahupua'a was often located as a slice of land running from the mountains to the seashore. Thereby it contained all of the resources necessary for life: a seashore for fishing, a river for irrigating farms, and forested uplands for timber and wild foods. Hawaiian polities excluded other communities from their home territories because a second polity in place would interfere with their access to critical resources and communication routes. A home settlement was positioned strategically within the ahupua'a in order to exercise control by good visibility over the holdings and maintain close proximity to resources.

Maintaining control in this fashion over the linearly positioned resources of Wādī al-Ḥammeh would have been important for the viability of the hunter-gatherers from Wādī Ḥammeh 27. The situation may have reinforced a growing sense of territorial ownership and the 'social tethering' (Ames and Maschner 1999) of the community to specific plots of land, leading to the decision to stay for the long term at the strategically located settlement of Wādī Ḥammeh 27. Wādī al-Ḥammeh has been intensively surveyed and it does not show traces of any other comparable Natufian sites.

We may trace the origin of the Natufian kind of social tethering to the nearby valley just 5 km to the north, to Wādī Ziqlāb and its remarkable Middle Epipalaeolithic site of 'Uyūn al-Ḥammam, dating *ca.* 15,300– 14,400 *cal* BC. 'Uyūn al-Ḥammam is an open-air burial ground, unassociated with any specific settlement or landmark. It has yielded eleven adult burials within eight graves, some with the remains of fox bones included among the grave offerings (Maher *et al.* 2011). Movement of bone elements from grave to grave indicate returns to, and maintenance of, the site over extended time periods. Wādī Ziqlāb is also a wellsurveyed valley, and other sites like 'Uyūn al-Ḥammam, which also lies in a strategic position in the valley, are not yet in evidence.

Some two thousand years later, a Natufian community also founded a burial ground at Wādī Hammeh 27, as a means of claiming a significant cultural place in their home territory. Yet, this time, they took the process a step further and built a house on top of their burial ground. As a signal of their determination to remain there for the long term, they took the trouble to build in stone. Although their settlement grew rapidly and was periodically reoriented, they continued to commemorate their founding kinsfolk. They may have been prompted to sedentize in reaction to the onset of a busier and more complex social world near the end of the Pleistocene, although this model is difficult to demonstrate. Still, the question of why people first settled down remains elusive to archaeology.

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