Editorial

Dialogue

The Early Neolithic Origin of Ritual Centers

Keynotes

G.O. Rollefson, Southern Levant K. Schmidt, Upper Mesopotamia

Comments

A. Belfer-Cohen & N. Goring-Morris, B. Boyd, H.G.K. Gebel, B.D. Hermansen, F. Hole, Z.A. Kafafi, I. Kuijt, T.E. Levy, D. Schmandt-Besserat, M. Verhoeven, D.A. Warburton, T. Watkins

Replies to Commentators

G.O. Rollefson, K. Schmidt

NEO-LITHICS 2/05

The Newsletter of Southwest Asian Neolithic Research

Contents

Editorial	2
Dialogue The Early Neolithic Origin of Ritual Centers	
Introductory Note	3
Keynotes	
Gary O. Rollefson: Early Neolithic Ritual Centers in the Southern Levant Klaus Schmidt: "Ritual Centers" and the Neolithisation of Upper Mesopotamia	3 13
Comments	
Anna Belfer-Cohen and Nigel Goring-Morris: Which Way to Look?	
Conceptual Frameworks for Understanding Neolithic Processes	22
Brian Boyd: Some Comments on Archaeology and Ritual	25
Hans Georg K. Gebel: On PPN Ritual Centralities	27
Bo Dahl Hermansen: Ritual as Function, Ritual as Social Practice?	29
Frank Hole: Arguments for Broadly Contextualizing Ritual	30
Zeidan A. Kafafi: Stones, Walls, and Rituals	32
Ian Kuijt: The Materiality of Ritual on the Social Landscape: Questions and Issues	35
Thomas E. Levy: The View from the End of the Trajectory	37
Denise Schmandt-Besserat: About "Hieroglyphs" – A Neolithic System of Sacred Symbols	39
Marc Verhoeven: The Centrality of Neolithic Ritual	40
David A. Warburton: Early Neolithic Ritual Centers	42
Trevor Watkins: Ritual Centers for Socio-Cultural Networks	47
Replies to Commentators	
Gary O. Rollefson	50
Klaus Schmidt	52
Masthead	54

Editorial

For the second time *Neo-Lithics* is publishing a thematic issue. The dialogue on The Early Neolithic Origin of Ritual Centers is a challenge in two directions. It suggests on the one hand that there were no ritual centers in the Near East before the Early Neolithic, and it also implies that the centralized Near Eastern ritual is rooted in the Early Neolithic. We are well aware what evidence is neglected by this formulation of the topic, both for the non-Neolithic periods as well as for the Neolithic itself. We took this risk for the sake of provoking a diversity of arguments. Therefore we organized a forum for as many different views as possible. We wish to thank all participants for their effort and commitment. We regret that we were unable to receive more contributions from colleagues specialized in the Chalcolithic, or from historians of religion. Nevertheless, we consider this dialogue a starting point for further discussion of ritual centrality and of centrality vs. ritual practice. We may recall that until recently the topic was not appreciated much by many Near Eastern archaeologists. But evidence became overwhelming, and we had to redirect the debate from site-bound levels onto the Near Eastern research agenda. This includes a call to the Ancient Near Eastern research disciplines to extend their origin discussion of city and state-based ritual to the Neolithic periods.

Hans Georg K. Gebel and Gary O. Rollefson

P.S. We kindly inform you that the deadline for the next issue, *Neo-Lithics* 1/06, will be earlier than usual: March 31, 2006, instead of May 15.

Dialogue on The Early Neolithic Origin of Ritual Centers

Introductory Note

The Dialogue section in *Neo-Lithics* aims to promote the necessary exchange on topics that are vital for either theoretical progress or for the understanding of research results that might have the potential to make us rethink positions we have held hitherto. Our first experience with organizing a dialogue, devoted to discuss Cyprus as a PPN interaction sphere, had a very positive result (*cf. Neo-Lithics* 1/04).

A *Neo-Lithics* dialogue starts with pointed or provocative statements on a controversial topic submitted by one or two researchers. Then other colleagues are invited to reply, to which the original author(s) might again answer with a final statement.

Recently, the editors received some clear-cut notes by Gary O. Rollefson and Klaus Schmidt on *The Early Neolithic Origin of Ritual Centers* for opening a dialogue on the possible emergence of ritual centers in the PPN. The essays/theses separately refer to evidence from the North (Schmidt) and the South (Rollefson).

The editors forwarded Rollefson's and Schmidt's keynotes to 28 colleagues, all of them specialists in certain aspects of the subject under discussion. 16 scholars responded positively to our letter of invitation, and 13 finally participated in the discussion by sending comments.

On the pages below the reader now may follow this dialogue as it developed among the authors.

Jürgen Baumgarten

Keynote

Early Neolithic Ritual Centers in the Southern Levant

Gary O. Rollefson

Department of Anthropology, Whitman College, Walla Walla <rollefgo@whitman.edu>

Introduction

The discovery of the astonishing "cult buildings" at Nevalı Çori and Göbekli Tepe in the late 1980s and 1990s (e.g., Hauptmann 1999; Schmidt 2003; this volume) drew world-wide attention to Anatolia as the region where the earliest forms of ritual architecture were constructed, adding to the importance of buildings constructed specifically to house religious ceremonies that had earlier been unearthed at Çayönü (cf. A. Özdoğan 1999: 46-47).

It is the purpose of the following essay to examine the evidence for ritual architecture and other aspects of ritual centers in the southern Levant and to propose some ideas concerning changes in ritual activity during the PPN of the region.

The Southern Levant in the PPNA Period

Pre-Neolithic ritual structures are not well-documented, if they existed at all (But see Goring-Morris 2000: Table 1 under the "cultic structures" column for a different view). Mallaha, for example, has numerous structures of varying sizes and perhaps different functions, but

beyond the presence of subfloor burials in some of the buildings (Valla *et al.* 2001: 96-99), nothing seems to argue for one special ritual structure. The large buildings at Wadi Hammeh 27 also do not appear to differ from each other except for the presence of engraved silt-stone slabs in one of them (Edwards 1991: 133).

While communal architecture was exposed in the 1950s at PPNA Jericho, it is still not clear what purpose(s) the tower and wall complex (Kenyon 1981: 20 ff.) at Jericho served. Kenyon believed they represented parts of an elaborate political-military defensive system (1979: 26-27), a view that was challenged by Bar-Yosef, who suggested that the PPNA walls and tower had different functions: the walls provided protection from occasional catastrophic flash floods and mudflows, while the tower was the center for public activities, perhaps of a ritual nature (Bar-Yosef 1986: 161).

Ronen and Adler offer a different, post-processual interpretation for the wall: while physically monumental, the walls did indeed provide protection for the inhabitants of Jericho, but against supernatural spirits, not floods or human enemies (Ronen and Adler 2001). Naveh looks at all three explanations and argues that all of them could

Theses Associated with the Evidence for Ritual Centers in the Southern Levant

- 1. Social identity among mobile hunter-gatherers centered on small groups of both consanguineal and affinal relatives.
- 2. With the emergence of sedentism, corporate identity intensified, concentrating on unilineal identity tied to territory. This identity was celebrated through ancestral ties with mythical founder groups by the practice of the skull cult, selecting one member of each generation (perhaps on a primogeniture bases) as the link between the present generation and those of the past, regardless of age or sex.
- 3. Each household in the MPPNB (and perhaps in the PPNA) observed this link in the house itself by burying the connecting person beneath the house floor, re-exposure to retrieve the skull, and the recreation of the face of the dead using plaster. Thus the house was both a dwelling and a ritual center.
- 4. Beyond the household, the unilineal corporate group was represented by images of mythical ancestors in the form of statuary. These statues, which were periodically replaced, were on display (at least occasionally) in a corporate ritual building.
- 5. As long as farming village populations remained reasonably low, competition for local resources among the different unilineal groups did not threaten community solidarity.
- 6. The abrupt change in settlement pattern in the mid-9th millennium calBP witnessed a mass migration of populations from Israel and the Jordan Valley into the highlands of Jordan, where competition of farmland around permanent sources of water became more and more severe during the LPPNB.
- 7. Although unilineal corporate identity remained important in the LPPNB, as indicated by the continued burials beneath domestic structures and the presence of cult buildings in the vicinity of domestic structures at 'Ain Ghazal, the centrifugal forces on the community had to be assuaged by a strong shift to a communal ritual focus. This is reflected in the construction of religious buildings that embraced all of the corporate groups of the settlement (in the central Levant, at least).
- 8. But eventually, no ceremonial and religious bonds could cope with the devastating local effects of large populations on the fragile ecosystem, and there was widespread population decline and even settlement abandonment at the beginning of the 8th millennium calBP.

be correct: that the impressive magnitude of the walls and tower has a strong symbolic dimension in addition to providing physical protection against both natural and human threats. For Naveh, whoever controlled the labor force necessary to construct the massive structures also controlled experience, understanding, and knowledge of the local populace (Naveh 2003: 88, 90). The huge wall-tower system also declared to residents and strangers alike the unique, special and powerful character of the community itself (Naveh 2003: 93), which made Jericho a ritual center that itself contained ritual centers.

The Middle PPNB

Jericho

In some ways, particularly in terms of ritual, the MPPNB period might be regarded as the "classic" part of the Neolithic period in view of the skull cult and what might be the actual beginning of the construction of buildings solely for the purpose of holding ritual ceremonies. Jericho provided such information first. Kenyon describes one building in Trench I as a rectangular structure with curved annex

es, completely unlike the redundant floor plans of all other buildings at Jericho. "It can be assumed that the use was not domestic. The neatly constructed basin suggests a ceremonial use ... It therefore seems a reasonable hypothesis that the structure was a cult centre or temple" (Kenyon 1981: 74).

Square E at Jericho produced another building with special characteristics. An older structure had been starkly renovated by enclosing a small space (ca. 2.5 x 1.5 m) of what was once much more extensive (cf. Kenyon 1981: 305-307 and Plate 308 a-c). This new single room was then paved with slabs of green clay 12 cm thick, and "The insertion of such an unusual flooring material suggests some sort of ceremonial, perhaps a purification of the floor" (1981: 306). In a later structural phase the interior face of the blocking wall was thickened while at the same time leaving a small curved niche into which a flat stone (24 x 20 x 7 cm) was placed atop a thin "pillar of earth" above the green clay; "The stone slab was clearly intended to serve as a pedestal for something which stood in the niche" (Kenyon 1981: 307; Plate 172a), and indeed, a suitably-sized column of bituminous limestone was found in the destruction fill of the building. The column, which stood 45 cm high, had been brought from a distance of ca. 27 km and was shaped to a lenticular cross-section. "The whole history of the room is ... highly complex. The alterations are none of them suggestive of ordinary domestic use, and they may be evidence of elaborate ritual practices" such as a shrine or house chapel (1981: 307).

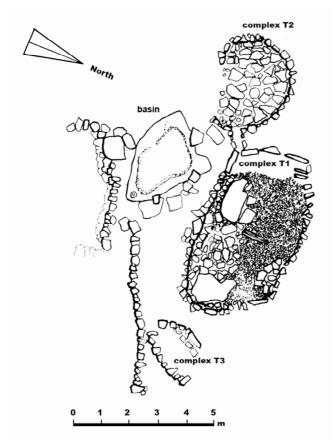


Fig. 1 The sanctuary area at Beidha (after Kirkbride 1968: 94).

Beidha

Kirkbride's excavations at Beidha in the 1967 season produced a minimum of three curvilinear, partly subterranean structures (T1, T2 and T3) in the southeast "sanctuary" section of the site (Fig. 1). T3, the smallest of the three (ca. 2.5 x 1.5 m) and the one farthest east from the village proper, is also the least complex. The architectural feature that sets it apart from the domestic buildings in the village lies in the flooring of "fine, very clean gravel" that had been laid across "a thick deposit of iron [sic] resembling rust" (Kirkbride 1968: 95), a mineralization that was confined to the "sanctuary" area. Structure T2 was also curvilinear, but it was significantly larger than T3, measuring almost 3 m in diameter. Its floor was of "large flagstones, carefully laid and unlike any hitherto found at the site", and like T3, the surface was "absolutely clean" (1968: 93).

Oval structure T1 is the largest of the trio, with a major axis of ca. 6 m and a minor axis of nearly 3.5 m. T1 also is more complex: the floor "was paved with 'metalling,' small angular pieces of stone purposely broken and carefully laid" (1968: 95)² and, like the other two structures, clean of artifacts and rubbish except for some shell beads strewn among the stones. In the center of the building was a large, flat sandstone slab (ca. 100 x 70 x 25 m) set on the long edge perpendicular to the long axis of the building. Two other large sandstone slabs were laid flush with the floor, one in each of the "halves" delineated by the upright slab. As was the case for T3, the floor of T1 was also laid on a hard rusty mineralization. A subfloor probe near the center of the building revealed an earlier oval structure with a similar east-west orientation of probably more than 4 m in maximum dimension, with walls of upright sandstone slabs.

Noting that all three buildings represented a different design and scale of effort in construction, Kirkbride remarked that she "was forced, nevertheless, to submit that these carefully built edifices with their huge flat stone slabs and basins have to do with some religious observance" (Kirkbride 1968: 96).

A major problem concerning the "sanctuary" area has to do with its chronological relationship with the main village. Post-Neolithic terracing (probably Nabataean) had severely damaged the area between the T-complex and the main village, and efforts to make a stratigraphic connection between the two Neolithic sectors were "abandoned as being unlikely to produce anything in a stratified context" (Kirkbride 1984: 11). Nevertheless, the curvilinear shapes and semisubterranean character indicate that the unique buildings are more likely related to the earlier phases (VI-V; or Phase A in Byrd's assessment [Byrd 1994]), which are radiocarbon dated to the MPPNB. Byrd did not address the T-complex in his analysis of the architecture at Beidha. Instead, he compared buildings in the main village area in terms of size, floor features, presence of burning on floors, and the presence of in situ artifacts on floors in order to examine changes in architectural patterning through Phases A (lowest) through C (highest stratigraphically) (Byrd 1994). For the oldest phase, he identified 17 structures that averaged 3,9 m² in floor area for six structures, 10.6 m² for 11 buildings, and a single large building with an area of 32.6 m² (Byrd 1994: Table 3). The two smaller clusters he interpreted as domestic buildings of one kind or another (dwellings or storage facilities), but the largest building stood out from the rest, and not just because it was more than twice the size of the rest. "The building included a unique stone cobble floor ... and no in situ artifacts were recovered from the floor" (1994: 649). This led Byrd to conclude

In Phase B there were fewer buildings with sufficient preservation for analysis, but the general pattern of Phase A was repeated. Eight structures that averaged 6.9 m² in floor area were dwarfed by three others whose mean stood at almost 35 m². Phase C also demonstrated major differences in size (and associated floor aspects) that paralleled Phases A and B, with dramatic increases in the "large" building category: floors in medium-sized dwellings averaged 12.8 m², while large non-domestic buildings rose to an average of 71.4 m² (and one that measured 105 m²) (Byrd 1994: Table 3). "These distinctive nondomestic buildings [in all phases] were interpreted as corporate or integrative buildings ... as [venues] for conducting suprahousehold and decision-making activities, and possibly related ceremonial or ritual activities" (Byrd 1984: 557).

Tell Aswad and Tell Ramad

that this was a "non-domestic" building.

At Tell Aswad, the recent unearthing of human remains, including plastered skulls, from a "funerary area" indicates that there is a portion of land adjacent to the village consigned to the disposal of at least some of the dead, although the extent of the investigated area is too small to provide reliable conclusions of this interpretation (Stordeur 2003a: 109, fn. 4).

In this mortuary sector the excavators uncovered a circular building with low walls made of earth and small pieces of basalt. Inside were five groups of human skeletons and crania (including four modeled skulls bearing red ochre) that all appear to have been placed in the structure over a short period of time (Stordeur 2003a: 110). Also in and around the structure were hearths and burned animal bones (especially young gazelle crania) as well as burned plant remains including Pistacia atlantica, which Stordeur suggests represent funerary offerings (2003a: 110). Since the modeled skulls appear to depict individually distinctive personalities, Stordeur proposes that they represent an ancestor cult (2003a: 114), and one might conclude, then, that the structure itself is a "hall of ancestors".

Three groups of secondary interments were recovered at Tell Ramad in the 1960s (Contenson 2000), and among them was a relatively large number of plastered skulls³. The total number of individuals included 11 females, six males, nine subadults, and one unsexed and unaged individual (Bonogofsky 2001: 65-70). The largest group of 15 adult females, males, and children was found in small clusters within an irregular semisubterranean chamber measuring ca. 1.8 m in maximum dimension x 0.95 m at right angles to the long axis, delimited by a row of dried mudbricks. Stordeur sees parallels between the situations at Tell Aswad and Tell Ramad (Stordeur 2003: 110); this-

would not be surprising, seeing that the two sites are in close proximity. On the other hand, Contenson remarked that the plastered skulls were "clustered in nests close to the pisé huts" (Contenson 1971: 281), so the parallels with Tell Aswad are not particularly close⁴.

'Ain Ghazal

MPPNB ritual architecture at 'Ain Ghazal is implied by indirect evidence only, possibly a consequence of the limited excavation area for this period (just over 200 m²). During the excavation of the first plaster statuary cache in 1983, conservator Kathy Tubb noted that the armature of reeds that made up the interior of at least one of the statues ("Statue B" in Rollefson 1983: Fig. 1) penetrated through the flat bottom of foot of one leg for a distance of approximately 20 cm. Evidently, the reed bundle, which bore evidence of minor plastering below the bottom surface of the foot, were "extensions [that], when embedded in a floor, would have provided an anchorage for the figures lending them stability when standing but also rendering them stationary (Fig. 3)" (Tubb and Grissom 1995: 440). A floor with multiple sockets to receive the extensions of 12-13 full-standing statues from the 1983 cache has not been found, but it is unlikely that the statues (and the 12-13 busts) would have been stationed in a domestic structure.

Kfar HaHoresh

Of all the MPPNB sites in the southern Levant, Kfar HaHoresh stands out as a unique location of human activity. Instead of a habitation site, Kfar HaHoresh appears to be a small (1-2 ha) ceremonial center devoid of domestic residences, acting as a regional focus of ritual activity focused on mortuary practices for settlements in the surrounding area of the Lower Galilee (Goring-Morris et al. 1998: 4). This is reminiscent of the older ceremonial center at Göbekli Tepe (Schmidt 2003) and of Ein Gedi from the much later Chalcolithic period (Ussishkin 1980); there is also a ritual-specific analogy with Nahal Hemar of the M/LPPNB (Bar-Yosef and Alon 1988). Although there are three separate activity areas at Kfar HaHoresh, the midden deposits and production/maintenance sectors are subordinate to an elaborate funerary complex that includes human burials (including three plastered skulls [Goring-Morris et al. 2001: 215]) associated with animal offerings and a combination of human and animal bones that defines a "collage or depiction of an animal in profile" (Goring-Morris et al. 1998: 2 and Fig. 3). There are architectural remains at the site, including rectilinear and curvilinear walls, plaster surfaces, postholes and post supports, "stelae" (perhaps analogous to the slabs in the T1 structure at Beidha), and hearths, but none of these elements combine to reflect any long-term habitation (Goring-Morris et al. 1998: 4).

Nahal Hemar

The stratigraphy in the cave in Nahal Hemar shows that there was remarkable Neolithic presence in the lower two of the four distinguishable strata, with Layer 4 attributable to the MPPNB based on radiocarbon dates, and Layers 3B and 3A dating to the MPPNB and LPPNB (Bar-Yosef and Alon 1988: 2-5). Unfortunately, it is not clear in the primary report where the ritual material (skulls modeled with collagen, bone figurines, stone masks, molded plaster statue fragments [Bar-Yosef and Schick 1989]) came from. Since decorated skulls and plaster statuary appear to come primarily from the MPPNB period, one might conclude that the Nahal Hemar specimens came from Layer 3B, which had a radiocarbon date of 8690 ± 70 uncalbp (Bar-Yosef and Alon 1988: 5; 9698 ± 110 calBP [Weninger *et al.* n.d.]).

There was no evidence of architecture in the cave, but clearly the cave itself was a ritual structure, where ritual artifacts were at least stored, although the surface area of the cave (ca. 32 m²) would have

been sufficient to have hosted ritual activity as well (Bar-Yosef and Alon 1988: 2). The excavators conclude that Nahal Hemar was a "sacred locale", serving as a religious center and marker for a large territory in which no appreciable evidence of farming villages are known (Bar-Yosef and Alon 1988: 28).

The LPPNB

The dramatic change in settlement patterns in the southern Levant at ca. 9500 calBP witnessed the wholesale abandonment of farming settlements in the Jordan Valley and Palestine, and much of the dislocation of these populations resulted in mass movements to the highlands of Jordan (Rollefson 1989: 136-137; Nissen et al. 2004: 23-25). MPPNB settlements in northern Jordan such as 'Ain Ghazal underwent substantial population increases, probably within a couple of generations, expanding in area to 14-15 hectares (Rollefson 2001: 97), reaching "megasite" proportions in comparison to MPPNB settlement sizes. Areas of limited MPPNB occupation, such as the region of the Wadi Mujib and farther south, underwent colonization by migrants from the west (and north?), resulting in newly founded megasites such as es-Sifiya (e.g., Mahasneh 2003) in the Wadi Mujib, al-Basît in the Wadi Musa, near Petra (Rollefson 2002), Basta ca. 30 km SE of Wadi Musa (Nissen et al. 2004), and 'Ain Jammam near Ras en-Naqb (Waheeb and Fino 1997).

Changes in Ritual Patterns

With populations jumping from ca. 500 or 1,000 in the MPPNB to 3,000-4,000 in the LPPNB within a few hundred years, it is not unexpected that the social organization in the older and newer Jordanian population centers experienced severe stresses that were not common in the smaller, earlier (MPPNB) settlements, and that alterations in the organizational fabric were necessary to maintain social integration. One of the most effective ways to maintain social unity, at least in the short term, evidently involved major changes in religion.

In contrast to the highly standardized burial practices in the southern Levantine MPPNB, where only decapitated skeletons were placed beneath house floors (cf. Rollefson 1983: 19-20; 1986: 50-51), a more varied situation appears to pertain to the LPPNB. At es-Sifiya, three subfloor burials retained their skulls, although there were still six decapitated skeletons (Mahasneh 20001: 122). At Ba'ja, the circumstances are unclear due to the repeated disturbance of deposits in small house rooms designed to be "burial chambers" (Gebel and Hermansen 2000: 22; 2001: 17-18), although it is possible that both intact and decapitated burials occurred (cf. Gebel and Hermansen 2004: 15-16). At 'Ayn Jammam only one burial was recovered (from a small burial chamber much like at Ba'ja), and the skull remained articulated to the skeleton (Bonogofsky n.d.). At Basta there were burials with skulls and without skulls (Gebel et al. 1988: 116-

117; Nissen *et al.* 1991: 17-18). 'Ain Ghazal produced at least three LPPNB burials with skulls intact with the body, but none of these burials came from beneath house floors (Rollefson and Kafafi 1996: 22). Altogether, this more liberal variety might indicate a weakening of the skull cult and the decreasing importance of ancestry.

One major change involves the apparent end of statue construction that probably represented deities (Schmandt-Besserat 1998: 14) or ancestors/ancestor deities (Rollefson 2000: 183-184); at least, no reports of such statuary have been reported from LPPNB excavations. Although the cave in Nahal Hemar continued in use well into the LPPNB, it remains unclear how stable or volatile were ritual activities that were carried out there.

Finally, the practice of skull caching, which Kuijt argues was a major integrating force that bound communities together by depositing skulls from different households/lineages into collective pits (Kuijt 2000: 155), has not been reported from any LPPNB site (with the possible exception of Tell Ramad and Tell Aswad).

LPPNB Ritual Architecture

Despite concentrated investigation on LPPNB sites in the past two decades in Jordan, only one site has produced definitive ritual architecture: 'Ain Ghazal. Here, domestic architecture, as elsewhere in Jordan, had taken on a "pueblo"-like organization (Gebel and Hermansen 2000: 20), with structure blocks that housed multiple families in contrast to the single-family dwellings of the MPPNB (Rollefson 1997). Against this backdrop of dwellings, other buildings stand out in several important details, signaling special functions that are most likely associated with religion.

Apsidal and Circular Buildings

There are two kinds of ritual structures at 'Ain Ghazal. One of them is small (ca. 12-16 m²) and distinguished by the presence of an apse at one narrow end of the building (Fig. 2). Six of these have been identified at 'Ain Ghazal and are present in the vicinity of the much larger and more complex domestic buildings (*cf.* Rollefson 1998: 45-48), and this possible association of the apsidal structures with family dwellings suggests that each special building may have served as a ritual center for one or more houses that were occupied by related families. If this was the case, then the special buildings may have maintained some degree of ancestral importance.

One of the apsidal buildings at 'Ain Ghazal underwent several rebuilds and design changes, leading from a "typical" apsidal building to a rectilinear structure and finally to a circular room with a rectilinear anteroom adjacent to the south (Fig. 3). The presence of a large hole in the center of the floor in the final circular phase⁵ is a strong argument for ritual activity, since it is likely that subfloor air ducts fed air into a raised fireplace (Rollefson

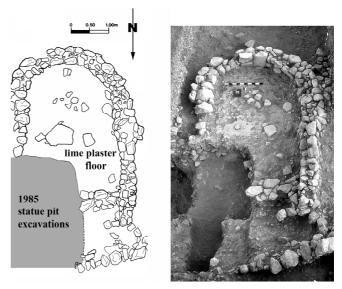


Fig. 2 The apsidal structure in the Central Field at 'Ain Ghazal

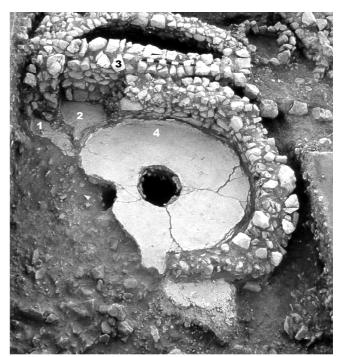




Fig. 3 The four-stage evolution of the apsidal to circular building (above) and the "twin" circular structure (below) in the North Field at 'Ain Ghazal.

1998: 47 and Figs. 3, 5). Five meters to the south, a "twin" circular structure, complete with a central hole (but no subfloor air channels) was hastily constructed, possibly because the northern "twin" had suffered structural damage associated with subsidence. The more recent

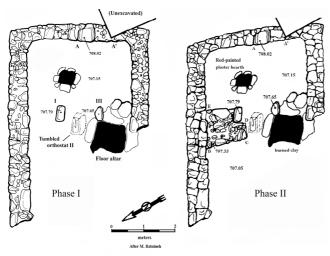


Fig. 4 The large ritually associated building from the upper region of the East Field at 'Ain Ghazal. A-A' indicates the location of a blocked doorway.

circular building included a fine plaster floor poured directly on the earthen surface (with one reflooring episode), which produced very fragile and necessarily transient surfaces.

Large Ritually Associated Buildings

The second kind of ritual structure is relatively larger, although erosional damage to both examples at 'Ain Ghazal makes determination of the floor areas difficult. One can say, on the other hand, that the smaller of the two was at least 20m² in area (Fig. 4), while the other entailed a minimum of 27 m² (Rollefson 1998: 48-53). Both were located in the East Field, across the Zarqa River from the main site. Each consisted of two rooms, with either a wall or other construction limiting access into the room with ritual furniture. Completely distinct from residential buildings, both of these structures had floors made of clean clay, and the only presence of plaster was a small floor hearth in each of the ritual rooms, and each hearth was surrounded by seven limestone flagstones. One feature in each building was interpreted to be an altar (Rollefson 1998).

The larger of the two yielded a radiocarbon sample from the floor, presumably burned roofing debris when the building caught fire or was intentionally fired; the date was 8966 ± 132 calBP, or near the transition from the LPPNB to the PPNC. By the time of its construction, residential buildings may have been abandoned in the East Field, for the removal of deposits to create a flat platform for the construction of the ritual building cut through more than two meters of earlier LPPNB houses. A retaining wall at least 2.5 m high and greater than 20 m in length protected the large ritual structure from erosional danger from the steep hill behind the east wall of the building (Fig. 5). When the eastern wall began to collapse inwards, the building was abandoned, and a new wall using immense limestone blocks was con-



Fig. 5 The large ritually associated building in the lower area of the East Field. The black line in the photo traces a temenos wall for more than 20 m from north (left) to south.

structed over the altar along the interior of the east wall, similar in effect to the burial of special buildings at Çayönü (*cf.* Özdoğan 1995: 84-87).

Discussion

The concept of "ritual centers" involves several aspects of consideration, for "center" has different connotations under different conditions. The location of any repeated activity might be taken to be a particular center for that activity, and in this regard the iterated burials beneath house floors or in courtyards indicate that dwellings (or sections of them) can be viewed as "domestic ritual centers" that can be traced back into Epipaleolithic times and that continued into the PPNC period. Put another way, there were "family ritual centers" at the household level.

The interpretation of the apsidal, circular, and "large ritually associated buildings" as structures related to religious practices (based on Renfrew's [1985] criteria) has appeared elsewhere (Rollefson 1998: 55-57) and won't be revisited here. But there is a proposed relationship between religion/ritual observances and social structure that should be investigated in order to understand why these kinds of buildings make their appearance in the southern Levant during the LPPNB.

The nature of these family ritual centers – especially in connection with the MPPNB skull cult – has been a focus of debate recently as to whether the plastered skulls represent ancestors (and consequently, that the decapitated skulls are also ancestors) or the manifestation of some other ritual principle. The leading voice against the ancestor cult, at least as represented by the modeled skulls, is Schmandt-Besserat, who has stated bluntly that "in the Ancient Near East, one simply did not honor ancestors by cutting off their heads" (Schmandt-Besserat 2003: 24). Bonogofsky has also raised the issue that

among the decapitated skeletons and recovered skulls, both males and females are represented, including subadults too immature to have been ancestors at all (Bonogofsky 2004: 118). Instead of ancestral veneration, Schmandt-Besserat contends that, "consistent with the Near Eastern belief that the human skull held healing and divinatory powers" the "plaster skulls had apotropaic and prophetic functions" (Schmandt-Besserat 2003: 24).

It seems possible that the extreme views represented by an ancestor cult on the one hand, and the points of view of Schmandt-Besserat and Bonogofsky on the other hand are not mutually exclusive. For Bonogofsky's charge that some skulls/ decapitated skeletons are too young to be considered ancestors at all, one should consider that many and famous progeny are not necessarily the key to the importance of ancestry. Instead, through rules such as primogeniture (or some other socially defined criterion), the eldest child of a household is granted special treatment because that person is the critical link to past lineage relatives (cf. Rollefson 2004: 169-170). And this person, regardless of age or sex, might also be regarded as being someone with very special spiritual powers, including those of healing, divination, protection from evil, and prophecy that must be revered by the living, fulfilling the ideals delineated by Schmandt-Besserat.

Although skull removal (and perhaps even modeling at Tell Aswad and Tell Ramad) continued in the LPPNB, there appears to have been a reduced importance on the ancestral aspect after the close of the MPPNB. As Stordeur noted, the treatment of skulls was varied across the southern Levant in terms of local canons of stylistic expressions, even between sites as geographically close as Tell Aswad and Tell Ramad, as well as Jericho, 'Ain Ghazal, Beisamoun, and Kfar HaHoresh, and perhaps specific rituals persisted in some outlying parts of the region in contrast to altered observances in other parts. If (and I stress this) the ancestral cult continued into the earlier part of the LPPNB in the northern reaches of the southern Levant, around Damascus, this may reflect differences in stress (or the lack of it) between the areas that received the greatest influx of refugees from the Jordan Valley and Israel in the Syrian plain compared to the highlands of Jordan, where most of the western populations probably relocated.

Kuijt has observed that "under different conditions specific mortuary practices can have different political and social impacts upon the individual, household, and community," and "In small-scale social groups, ... household level relationships are negotiated on real or perceived reciprocity and are frequently reaffirmed through ... reciprocal participation in household ritual events, such as mortuary rituals" (Kuijt 2000: 139) with "implications for the scale of social action" (Kuijt 2000: 155). I would suggest that the conditions of the MPPNB villages in the southern Levant were considerably differ-

ent from those that pertained in the LPPNB megasites in highland Jordan, and that in view of the greatly increased complexity of the social fabric as the result of major population compaction and the sudden competition for what quickly became scarce resources (e.g., farmland, pasturage, access to springs or other permanent sources of water), the "negotiations" on the former small-scale level took on a very different tenor.

Whatever integration had been facilitated by MPPNB community-wide participation in such events as skull caching (Kuijt 2000: 151-159), perhaps this became too weak in the face of new population levels that now were 3-5 times as large as during the MPPNB. If ancestral linkage was an important element of MPPNB social identity, the enlarged settlements such as 'Ain Ghazal and Wadi Shu'eib and the newly founded megasites including Basta and 'Ain Jammam faced new challenges. A focus on lineage/clan identity represented by the skull cult became divisive and centrifugal in terms of community integrity because of the enormous pressure on local availability of necessities: where rituals such as skull caching of a relatively few kinship groups had become complex, and self-serving motives may have become strong threats to community solidarity under former integrative systems.

It would seem that the size of the community is critical in terms of the effectiveness of social integration. While we do not know the criteria for the selection of individuals to represent lineages/clans, it might have become difficult and unreliable in the huge megasites to schedule skull caching ceremonies: suitable representatives may not have died since the last integrative caching ceremony was held, and this could be the reason that skull caching disappeared in the LPPNB⁶.

A clue as to how the problem of the persistent potential fission of middle and later LPPNB communities was resolved might be seen in the sudden appearance of new ritual buildings like those at 'Ain Ghazal. To combat the centrifugal forces of corporate lineage/clan concerns, adaptations to the prevailing social structure may have been facilitated by a restructuring of the socio-religious sphere, at least in some of the LPPNB megasites. One example might be reflected in the final MPPNB statuary cache at 'Ain Ghazal, where two-headed busts appear. A minimum of three two-headed busts was recovered from a badly disturbed cache in 1985 (Grissom n.d.), and these unique iconographic expressions are, of course, open to considerable speculation. But one aspect of this literal and figurative duality could well relate to the stresses of late MPPNB settlements in the western part of the southern Levant, and that the two heads of each of the statues refer to a resident 'Ain Ghazal population and a population of closely related immigrant consanguineous families.

Under this assessment, the social need for lineal/clan identity was maintained through the meeting places of

socially identified relatives in the smaller apsidal/circular buildings that celebrated family rites of passage, including, for example, announcements of "baptism" (cf. Rollefson 2000: 170-171), marriage, births, deaths, etc. But the larger ritual buildings at LPPNB 'Ain Ghazal served a much different function: instead of acknowledging the special nature of lineage/clan identity, the "temples" across the river from the main settlement at 'Ain Ghazal stood as consolidating foci of community identity. The apsidal/circular buildings at 'Ain Ghazal seem to be associated with domestic dwelling blocks, but the "larger ritually associated buildings" are set apart from the residential areas, which contributes to a communal rather than residentially specific locations.

The appearance of special ritual buildings may be related to the broken threshold of manageable ceremonial scheduling that was characteristic of the smaller MPPNB settlements. Although religion is notably very conservative and resistant to change, the community-wide aspect of skull caching may have been replaced by a different form of ceremony altogether. (But decapitation and skull modeling could have been maintained by lineage/clan groups at their discretion). The smaller ritual buildings at 'Ain Ghazal might have been used for the furtherance of lineage/clan identity and solidarity, while the larger ones became the locus of community integration rites that involved living representatives of the corporate units in the towns and villages⁷ instead of dead ones.

One last aspect of "centers" deals with settlements that were geographic centers of ritual observances. Ceremonial centers such as Kfar HaHoresh have not been reported for the LPPNB in the southern Levant, but the megasites themselves may have incorporated regional ceremonial foci into the population centers. One characteristic of the LPPNB in the southern Levant is the presence of one major settlement in each of the prominent wadis in Jordan (with the exception of the Wadi el-Hasa), with what appear to be vast unexploited farmland between the wadis. This is probably an incorrect interpretation, despite survey information that has been systematically collected over the past couple of decades. Small hamlets and even farmsteads may have existed near small springs on the wadi flood plain above and below the wadis' major population centers and even on the plateaus above the valley floors, but in many places subsequent erosion and urban development have destroyed or obscured the archaeological record⁸. Thus, the megasites may also have served some of the nearby populations in certain scheduled ceremonies.

There are exceptions to the LPPNB megasite phenomenon in the southern Levant besides Tell Ramad and Tell Aswad. Ba'ja is one example, occupying 1.5 ha or less (Gebel and Hermansen 2004: 15), and no megasites are known at all in Wadi el-Hasa, only relatively small sites such as Khirbet Hammam (ca. 3 ha; Peterson 2000: 4) and el-Hemmeh (ca. 1 ha; cf. Makarewicz and Goodale

2004). It is unlikely that such sites were subordinate to any others, so each small LPPNB settlement served as its own ritual and residential center.

Terminological Problems

What to call the "special buildings"? What terms should be used to identify patterned, distinguishable structures such as the apsidal, circular, and "large ritually associated buildings" that obviously (?) have different functions than domestic structures, but that also appear to have functioned differently from each other? Hole has noted the "[interpretation] as 'shrine', "temple' or, more ambiguously, "public" (2000: 204) and finishes, perhaps with some humor, with heads of households "meeting in 'shrine-like' buildings" (Hole 2000: 207).

There are several considerations to ponder when selecting identifying tags for ritual architecture. "Shrines", for example, can be found in modern houses all across the world, although there are also shrines isolated from domestic contexts that vary in size from a small plaque attached to a post along a roadside to buildings several hundred square meters in floor area. Similarly, temples and shrines seem to overlap in terms of size, interior ritual paraphernalia, and associated numbers of spirits or deities. There are Bronze Age temples, Iron Age temples, Roman and Nabataean temples that served different religions in the Near East (but curiously, no one has suggested naming pre-Christian or pre-Islamic ritual architecture "churches" or "mosques").

The terms "non-domestic" and "public" are, as Hole says, "ambiguous." Once such identifications have been made, is it possible to go beyond these bland words and venture into a daring socio-ritual arrangement of identifying words based on deduced function and hierarchical organization? The apsidal and circular non-domestic buildings at LPPNB 'Ain Ghazal are not necessarily public if the intention was to celebrate kin-based rites, so perhaps a word like "shrine" is appropriate in this context; "kinship cult building" is a possible alternative. And the "large ritually associated buildings", if they served to integrate the large communities, might qualify as pan-cult religious centers, acting as unifying ritual centers much a "temples" do today; again, a less provocative term might be "communal cult building", as Gebel has suggested (personal communication). The time is at hand to resolve the terminological problem.

Concluding Remarks

The energy invested in ritual activity became very noticeable in the late Epipaleolithic period, but the fluorescence of this aspect of cultural life increased in complexity during the PPNA and accelerated even more during the MPPNB and LPPNB. Changes in ritual activity are probably related to changes in environmental con-

ditions, including as elements of that environment the increase in people within a community and an increase in communities within a given territory. The change from the MPPNB to the LPPNB corresponded to the tumultuous abandonment of farming villages in the Jordan Valley and Israel, and while the change is tantamount to "punctuated equilibrium" in some population centers, the ritual adaptation would eventually lose its applicability for maintaining large, complex populations as social units because of the dramatic impact such large populations made on the landscape.

The population implosion after the LPPNB in the southern Levant has not been well documented, but ritual activity in the PPNC underwent considerable deflation. Courtyard and subfloor burials at PPNC 'Ain Ghazal continued, but there is no indication of any ritual buildings at all, despite the much larger area of excavation for the PPNC period.

Of course, the ritual "glue" that held societies together during the MPPNB and LPPNB can hardly be characterized as "failures". MPPNB rites maintained communal integrity for about a thousand years, and the LPPNB survived social and environmental pressures for 500 years.

Notes

- ¹ Kirkbride emphasized that the hard orange-rusty material was confined to the subfloor areas of T1 and T3 and did not extend beyond the walls of the structures Kirkbride 1984: 10).
- ² Kirkbride noted that one of the circular domestic houses in the village had a floor paved "with flat, irregular stone slabs, the only example of its kind yet found at Beidha" (Kirkbride 1967: 8).
- ³ Bonogofsky notes that it is not clear in Ferembach's (1969) report precisely how many skulls were plastered (Bonogofsky 2001: 67), but after visiting the National Museum in Damascus, Schmandt-Besserat reported that 23 were coated with plaster (Schmandt-Besserat 2003: 20, fn.).
- ⁴ It should be pointed out that the plastered skulls from Tell Ramad are dated to the LPPNB, which would make them the only known examples from so late a period. Stordeur has not yet been able to firmly date the funerary structure from Tell Aswad to either the MPPNB or to the LPPNB (Stordeur 2003a: 109; 2003b). For the sake of convenience I have included both sites in the MPPNB section).
- ⁵ The final circular room phase of the building had eight reflooring episodes, each directly atop the earlier floor).
- ⁶ The continuation of the skull caching practice at Tell Ramad and Tell Aswad might be explained in part by the continued small size of these settlements compared to the megasites farther south. Tell Ramad was only 2 ha in size (Contenson 2000: 1), and Tell Aswad was just over 6 ha (Stordeur 2003: 8). Under these conditions, the threshold of Kuijt's "scale of social action" may not have been exceeded.
- ⁷ This might also explain how ritual buildings of only 20-30 m² could have served for "community-wide public ceremonies" (Hole 2000: 203)
- 8 Urban sprawl has virtually taken over the entire region around 'Ain Ghazal, which is one reason for the apparent non-existence of "smaller 'hamlets' or support sites" in the area (Simmons 2000: 217).

References

Bar-Yosef O.

1986 The Walls of Jericho: An Alternative Interpretation. Current Anthropology 27(2): 157-162.

Bar-Yosef O. and Alon D.

1988 Nahal Hemar Cave. 'Atiqot 18: 1-81.

Bar-Yosef O. and Schick T.

1989 Early Neolithic Organic Remains from Nahal Hemar Cave. National Geographic Research 5(2): 176-190.

Bonogofsky M.

- 2001 An Osteo-Archaeological Examination of the Ancestor
 Cult During the Pre-Pottery Neolithic B Period in the
 Levant. Unpubl. Doctoral Dissertation, Dept of Near
 Eastern Studies, University of California at Berkeley. Ann
 Arbor: University Microfilms.
- 2004 Including Women and Children: Neolithic Modeled Skulls from Jordan, Israel, Syria and Turkey. Near Eastern Archaeology 67(2): 118-119.
- n.d. A Neolithic Burial from 'Ain Jammam. Unpublished Field Report, August 1998.

Byrd B.

1994 Public and Private, Domestic and Corporate: The Emergence of the Southwest Asian Village. *American Antiquity* 59(4): 639-666.

Contenson H. de

2000 Ramad. Site Néolithique en Damascène (Syrie) aux VIIIe et VIIe Millénaires avant l'Ère Chrétienne. Beirut: IFAPO.

Edwards P.

1991 Wadi Hammeh 27: An Early Natufian Site at Pella, Jordan.
 In O. Bar-Yosef and F. Valla (eds.), *The Natufian Culture in the Levant*: 123-148. Ann Arbor: International Monographs in Prehistory.

Ferembach D.

1969 Étude anthropologique des ossements humains néolithiques de Tell Ramad (Syrie). *Annales Archéologiques Arabes Syriennes* 19: 49-70.

Gebel H.G.K. and Hermansen B.D.

- 2000 The 2000 Season at Late PPNB Basta. Neo-Lithics 2-3/00: 20-22.
- 2004 Ba'ja 2003: Summary on the 5th Season of Excavation. *Neo-Lithics* 2/04: 15-18.

Gebel H.G.K., Muheisen M. and Nissen H.J.

1988 Preliminary Report on the First Season of Excavations at Basta. In A. Garrard and H.G. Gebel (eds.), *The Prehistory of Jordan: The State of Research in 1986*: 101-134. British Archaeological Reports – International Series 396. Oxford: B.A.R.

Goring-Morris N.

2000 The Quick and the Dead: The Social Context of Aceramic Neolithic Mortuary Practices as Seen From Kfar HaHoresh. In I. Kuijt (ed.), *Life in Neolithic Farming Communities: Social Organization, Identity and Differentiation*: 103-136. New York: Kluwer Academic/Plenum Publishers.

Goring-Morris N., Boaretto E. and Weiner S.

2001 Radiometric Dating of the PPNB Mortuary Site of Kfar HaHoresh, Lower Galilee, Israel: Problems and Preliminary Results. *Journal of the Israel Prehistoric Society* 31: 213-217.

Goring-Morris N., Burns R., Davidzon A., Eshed V., Goren Y., Hershkovitz I., Kangas S. and Kelecevic J.

1998 The 1997 Season of Excavations at the Mortuary Site of Kfar HaHoresh, Galilee, Israel. Neo-Lithics 3/98: 1-4.

Grissom C.A.

n.d. Conservation of Neolithic Limeplaster Statues from 'Ain Ghazal. Unpubl. Progress Report (1995) on file,
 Conservation Analytical Laboratory, Smithsonian Institution, Washington, D.C.

Hauptmann H.

1999 The Urfa Region. In M. Özdoğan and N. Başgelen (eds.), Neolithic in Turkey: The Cradle of Civilization: 65-86. Istanbul: Arkeoloji ve Sanat Yayınları.

Hole F.

2000 Is Size Important? Function and Hierarchy in Neolithic Settlements. In I. Kuijt (ed.), *Life in Neolithic Farming Communities. Social Organization, Identity and Differentiation*: 191-209. New York: Kluwer Academic/Plenum Publishers.

Kenyon K.

 1979 Archaeology in the Holy Land. London: Ernest Benn Ltd.
 1981 Excavations at Jericho. Vol. III. London: British School of Archaeology in Jerusalem.

Kirkbride D.

1968 Beidha 1967: An Interim Report. *Palestine Exploration Quarterly*: 90-96.

1967 Beidha 1965: An Interim Report. *Palestine Exploration Quarterly*: 5-14.

1984 Beidha 1983: An Interim Report. *Annual of the Department of Antiquities of Jordan* 28: 9-12.

Kuijt I.

2000 Keeping the Peace: Ritual, Skull Caching, and Community Integration in the Levantine Neolithic. In I. Kuijt (ed.), Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation: 137-164. New York: Kluwer Academic/Plenum Publishers.

Mahasneh H

2001 The Neolithic Burial Practices in Wadi al-Mujib during the Seventh Millennium BC. Studies in the History and Archaeology of Jordan 7: 121-141

2003 Archaeological Investigations at the Neolithic Site of es-Sifiya / Wadi Mujib, Jordan. Adumatu 7: 7-28.

Makarewicz C. and Goodale N.

2004 Results from the First Excavation Season at el-Hemmeh: A Pre-Pottery Neolithic Site in the Wadi el-Hasa, Jordan. Neo-Lithics 2/04: 5-11.

Naveh D

2003 PPNA Jericho: A Socio-Political Perspective. *Cambridge Archaeological Journal* 13(1): 83-96.

Nissen H.J., Muheisen M. and Gebel H.G.K.

1991 Report on the Excavations at Basta 1988. *Annual of the Department of Antiquities of Jordan* 35: 13-40.

2004 Basta I: The Human Ecology. bibliotheca neolithica Asiae meridionalis et occidentalis. Berlin: ex oriente.

Özdoğan A.

1995 Life at Çayönü during the Pre-Pottery Neolithic Period. Readings in Prehistory: Studies Presented to Halet Çambel: 79-100. Istanbul: Graphis.

1999 Çayönü. In M. Özdoğan and N. Başgelen (eds.), Neolithic in Turkey: The Cradle of Civilization: 35-63. Istanbul: Arkeoloji ve Sanat Yayınları.

Peterson J.

2000 Test Excavations at PPNB/PPNC Khirbet Hammam, Wadi el-Hasa, Jordan. Neo-Lithics 1/00: 4-6.

Rollefson G.O.

1983 Ritual and Ceremony at Neolithic 'Ain Ghazal (Jordan). Paléorient 9/2: 29-38.

1986 Neolithic 'Ain Ghazal (Jordan): Ritual and Ceremony II. *Paléorient* 12/1: 45-52.

1989 The Aceramic Neolithic of the Southern Levant: The View From 'Ain Ghazal. *Paléorient* 15/1: 135-140.

Changes in Architecture and Social Organization. In
 H.G.K. Gebel, Z. Kafafi and G.O. Rollefson (eds.), *The Prehistory of Jordan II: Perspectives from 1997*: 287-307.
 Berlin: ex oriente.

2000 Ritual and Social Structure at Neolithic 'Ain Ghazal. In I. Kuijt (ed.), *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation:* 165-190. New York: Kluwer Academic/Plenum Publishers.

2001 Jordan in the Seventh and Sixth Millennia BC. Studies in the History and Archaeology of Jordan 7: 95-100.

2002 Additional Information and Observations of Neolithic al-Basît, Wadi Musa, Southern Jordan. *Annual of the Department of Antiquities of Jordan* 46: 93-106.

Where are the Dead? Some Points to Consider. In H.-D.
 Bienert, H.G.K. Gebel and R. Neef (eds.), Central
 Settlements in Neolithic Jordan: 157-175. Berlin: ex oriente.

Rollefson G.O. and Kafafi Z.

1996 The 1995 Season at 'Ayn Ghazal: Preliminary Report. Annual of the Department of Antiquities of Jordan 40: 11-28.

Ronen A. and Adler D.

2001 The Walls of Jericho Were Magical. *Ethnology and Anthropology of Eurasia* 2(6): 97-103.

Schmandt-Besserat D.

1998 'Ain Ghazal "Monumental" Figures. *Bulletin of the American Schools of Oriental Research* 310: 1-17.

2003 Stone Age Death Masks. *Odyssey* March/April: 19-27.

Schmidt K.

2003 The 2003 Campaign at Göbekli Tepe (Southeastern Turkey). *Neo-Lithics* 2/03: 3-8.

Simmons A.H.

2000 Villages on the Edge: Regional Settlement Change and the End of the Levantine Pre-Pottery Neolithic Period. In I. Kuijt (ed.), Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation: 211-230. New York: Kluwer Academic/Plenum Publishers.

Stordeur D.

2003a Des crânes surmodelés à Tell Aswad de Damascène (PPNB-Syrie). Paléorient 29/2: 109-115.

2003b Tell Aswad. Résultats préliminaires des campagnes 2001 et 2002. Neo-Lithics 1/03: 7-15.

Tubb K.W. and Grissom C.A.

1995 'Ayn Ghazal: A Comparative Study of the 1983 and 1985 Statuary Caches. Studies in the History and Archaeology of Jordan 5: 437-447.

Ussishkin D.

1980 The Ghassulian Shrine at En Gedi. Tel Aviv 7: 1-44.

Valla F., Valentin B., Khalaily H., Marder O., Samuelian N., Rabinovich R., March R., Le Dosseur G., Bocquentin F., Dubreuil L. and Belfer-Cohen A. 2001 Le Natoufien final de Mallaha (Eynan), deuxième rapport préliminaire: les fouilles de 1998 et 1999. *Journal of the Israel Prehistoric Society* 31: 43-184.

Waheeb M. and Fino N.

1997 'Ayn el-Jammam: A Neolithic Site Near Ras en-Naqb, Southern Jordan. In H.G.K. Gebel, Z. Kafafi and G.O. Rollefson (eds.), *The Prehistory of Jordan II: Perspectives from 1997*: 215-219. Studies in Early Near Eastern Production, Subsistence, and Environment 4. Berlin: ex oriente

Weninger B., Danzeglocke U. and Jöris O. n.d. Online CalPal. http://www.calpal-online.de/

Keynote

"Ritual Centers" and the Neolithisation of Upper Mesopotamia

Klaus Schmidt

German Archaeological Institute, Berlin <kls@orient.dainst.de>

Since 1995, Göbekli Tepe has been the focus of archaeological research carried out by members of the Museum of Şanlıurfa and the German Archaeological Institute (Schmidt 2003, 2004). After ten campaigns of excavations, many ambiguities and unanswered questions about the site remain. Nonetheless, it indisputably opens a new conceptual territory in the study of the Neolithisation of the Near East. The majority of the 10th and 9th millennium BC structures discovered at Göbekli Tepe cannot be classified as residential. The raised topographical situation of the site, which clearly created a landmark visible from great distances, and the monumentality of the architecture indicate that this place served other functions than those of a village settlement.

In a recently published essay, this author explored the phenomenon of cult centers that existed long before the emergence of sedentism (Schmidt 2005). These sites were referred to as "central places." Although in their prehistoric setting they do not fit within Christaller's Central Places (1934), they are arguably at the very least distant relatives. Moreover, alternate terms that might be proposed, such as "nodal points", generate other ambi-

guities. The argument being evoked here follows the hypothesis formulated by Lewis Mumford in The City in History (1961), in which he contends that a city arises at the point where a permanent sedentary population establishes itself around a central shrine. The city thus has from its inception fundamentally different functions than those belonging to the primarily agricultural village. Continuing Mumford's reasoning, one may add that there are activities carried out in this "central place" that would never occur in the village, at least not the same way or in these concentrations, and not even in, for example, PPN (Pre-Pottery Neolithic) mega-villages. Large gatherings and special cult services took place in such places, presumably in conjunction with a certain control and domination of those present, naturally not without an element of attractive "performance" or the festive decoration of the site with "art," and often with an emphasis on monumentality. Many examples from later historical periods illustrate how cities develop out of religious sites. In these periods, specialists live permanently at the site and develop a community life differing from that found in a village.

Theses

- 1. Ritual Centers existed significantly before the emergence of sedentary communities.
- 2. Ritual centers continued to play a fundamental role for early sedentary communities.
- 3. Ritual centers can be clearly differentiated from settlements by their distinct geographical setting and by the overall archaeological evidence.
- 4. They fulfill tasks that resemble those of central places of later periods.
- 5. Through its dissemination of Neolithic ways of life, the ritual center served as a cultural catalyst.
- 6. Göbekli Tepe represents such a ritual center.

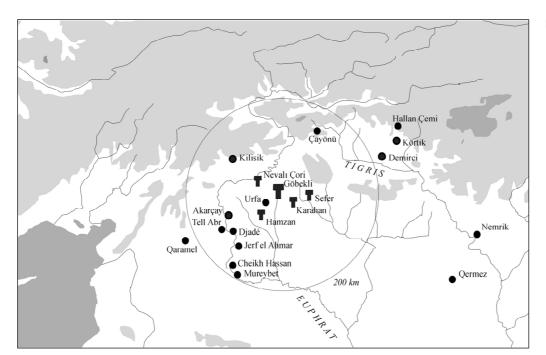


Fig. 1 Map of important PPN sites in Upper Mesopotamia.

The function of Stone Age centers, outside of their religious role, included being a locus for exchange among various groups – of ideas, goods, and people. In extreme cases, these centers were situated in otherwise completely uninhabited sites, whose position was known only to a particular community and only had to offer space for larger groups on special occasions. That these centers possessed a religious character seems to be the rule. Following this, it seems evident that ritual centers existed long before sedentary communities and are considerably older than villages. They fulfilled a function for a hunting and gathering population, who sought at least to fulfill the most elementary need for exchange – that of verbal communication.

It should be emphasized at this point that, although we may be permitted to make some assumptions with regard to the activities at Göbekli Tepe, a detailed identification of them is not yet possible. It is not necessary however, to enter into a basic discussion of whether or not the stone circle ought to be interpreted at all as a "cult" installation, for we know what the settlements and houses look like from this period. Given the monumental pillars and stone circles, as well as the sort of sculpture and reliefs found there, it could hardly be classified as anything other than a sacred site. It is not yet possible to say definitively whether the stone circles designated a space that was forbidden ground for the majority of the people at that time, or whether the area around these pillars was bustling with activity. It is certain only that the pillars could not have been constructed without a large supply of labor, which in turn demanded that a certain amount of planning and organization be devoted to its accomplishment. The building logistics necessary for the construction of Göbekli Tepe provide a simple, but clearly recognizable basis for the idea that during the 10th and 9th millenium BC – a period in which "Neolithisation"

had yet to occur – there was a consensus of several otherwise independent groups that assembled the manual labor for the creation of the complex.

The T-shaped pillars at Göbekli Tepe are given pronounced importance through numerous elements that make them recognizable as stylized, humanoid creatures. Whether these anthropomorphic pillars embody gods, ancestors, or even malevolent spirits, it seems clear that their presence played an important role in the life of the people who built Göbekli Tepe. The geomagnetic survey confirmed what the archaeological evidence suggested: in addition to the four monumental enclosures discovered in situ, there are at least fifteen others. Since each of these enclosures contains on average 12 pillars in the walls of the enclosure and 2 in the center, it can be assumed that more than 200 megalithic pillars were erected at Göbekli Tepe in all (at present, 39 of them have been excavated; most of these only partially unearthed).

As already stated, the work required to quarry the stone, transport and install the monoliths – which weighed up to ten metric tons – and to execute the careful work on the limestone pillars, most of which are finished on all sides, could not have been carried out by only a few people. It was a task that may have been as vast in scale as the construction of the Obelisks in Pharaonic Egypt. If Göbekli Tepe can be seen as a "ritual center" in the sense of a "central place," then not in the sense that a population was settled here, carrying out the functions of daily life and generating innovations. Göbekli Tepe was a place where people from surrounding settlements came together on specific occasions in order to complete a common project. These people came from Çayönü, Nevalı Çori, Tell 'Abr, Mureybet, Jerf el-Ahmar, Tell Qaramel and certainly many other places that are still unknown. These places describe a radius of approximately 200 km around

Göbekli Tepe. Such a catchment area seems to be confirmed not only by the discovery of a material culture in these places which is in essence upper Mesopotamian PPN, but also by the discovery of symbols at these other sites, often in miniature form, which are found on a monumental scale at Göbekli Tepe (cf. Stordeur and Abbès 2002).

The most significant archaeological sites are listed below and indicated on a map (Fig. 1):

Turkey:

Akarçay: Arimura et al. 2001; Balkan-Atlı et al. 1999, 2002, 2004; Özbaşaran et al. 2004.

Çayönü: A. Özdoğan 1995, 1999; M. Özdoğan 1995, 1996.

Demirköy: Rosenberg and Peasnell 1998. Hallan Cemi: Rosenberg 1999a-b.

Hamzan Tepe: Çelik 2004; Kürkçüoğlu and Karahan Kara 2003. Göbekli Tepe: Peters and Schmidt 2004; Schmidt 2001, 2003,

2004, 2005.

Karahan: Çelik 2000b; Kürkçüoğlu and Karahan Kara 2003.

Kilisik: Hauptmann 2000; Verhoeven 2001.

Körtik Tepe: Özkaya 2004; Özkaya and San 2002, 2003, 2004;

Özkaya, San and Yıldızhan 2002.

Nevalı Çori: Hauptmann 1993, 1999.

Sefer Tepe: Kürkçüoğlu and Karahan Kara 2005.

Urfa-Yeni Yol: Bucak and Schmidt 2003; Çelik 2000a; Hauptmann

2003.

Syria:

Jerf el-Ahmar: Stordeur and Abbès 2002; Stordeur et al. 2001.

Mureybet: Stordeur and Abbès 2002. Tell 'Abr 3: Yartah 2001, 2004, 2005.

Tell Qaramel: Mazurowski 2000; Mazurowski and Jamous 2001;

Mazurowski and Yartah 2002.

Sheikh Hassan: Cauvin 1980; Nierlé 1982.

Sites in Iraq with similarities to the sites of the Urfa Region:

Nemrik: S.K. Kozlowski 2002; Mazurowski 1997.

Qermez Dere: Watkins 1990, 1995; Watkins et al. 1991.

Hallan Çemi (10200–9200 BC) is an indication of the potential chronological depth of Göbekli Tepe, whose oldest layers are still unknown. The monumental stone circles of Göbekli Tepe date to the PPNA/EPPNB. A more recent building phase with significantly smaller pillars set in rectangular formation dates to the MPPNB. The characteristics of Urfa-Yeni Yol, Karahan, Sefer Tepe and Hamzan Tepe as settlements and their more exact chronological classification remain obscure. We may possibly be dealing here too with places like Göbekli Tepe, which had primarily a religious significance, but which lack the scale and certainly the significance of Göbekli Tepe. The objects excavated at Kilisik do not provide any solid evidence as to their site context.

The following list of object groups and their iconographical motifs demonstrate the close connections among the specified sites. Since all the itemized elements are also found at Göbekli Tepe, that site is not named separately in this list. The places that have so far been identified as having T-shaped stone pillars (1.5-2 m long) are located at a distance of 15–60 km from Göbekli Tepe.

Small T-shaped pillars: Nevalı Çori, Karahan, Hamzan, Sefer Tepe.

Large stone sculptures: Urfa-Yeni Yol, Nevalı Çori, Karahan, Kilisik, Jerf el-Ahmar.

Reliefs und large, figurally decorated stone slabs: Nevalı Çori, Çayönü, Tell 'Abr.

Small stone slabs and shaft-straighteners with grooved symbols: Nevalı Çori, Körtik, Akarçay Tepe, Jerf el-Ahmar, Mureybet, Çayönü, Sheik Hassan, Tell Qaramel, Tell 'Abr 3.

Stone scepter of the Hallan Çemi type: Hallan Çemi, Körtik, Nemrik.

Grooved stone vessel of the Hallan Çemi type: Nevalı Çori, Çayönü, Demirköy, Körtik, Hallan Çemi, Jerf el-Ahmar, Tell 'Abr 3.

Spacer beads: Nevalı Çori, Çayönü, Mureybet.

Important iconographical motifs: "Four-footed reptile": Jerf el-Ahmar, Tell 'Abr; Quadrupeds und Snakes: Jerf el-Ahmar; Cluster of snakes: Tell Qaramel; Spiders and scorpions: Jerf el-Ahmar, Körtik, Demirköy.

Identified at Göbekli Tepe but only rarely found at other sites are the following objects, or artifact groups:

Monumental stone circles (Fig. 2).

Large T-shaped pillars (Fig. 3); the northern central-pillar of the terrazzo building at Nevalı Cori is of a similar scale, but those found elsewhere are significantly smaller.

Large decorated pillar (Fig. 4), with the exception of the Nevalı Çori "totem pole".

Megalithic U-stones (Fig. 5).

Large stone rings (Fig. 6).

Door-like stone frames (Fig. 7), seen sporadically also in Karahan, a miniature in Nevalı Çori.

Large basalt slabs bifacially worked (Fig. 8).

Buttons of the Göbekli Tepe type (Fig. 9), one specimen known from Nevalı Çori.

The discovery of additional sites with T-shaped pillars in the Urfa province, the increasing concentration of archaeological finds in this area, together with the absence of similar T-shape pillar sites in other regions merits a small digression. In Greek history, cult communities were known as "amphictyonies." The original meaning of the word is not completely clear, but it contains something of the notion "to dwell around." Originally, the concept referred only to the "sacred league," whose central shrine was the temple of Apollo in Delphi. However, already during the ancient period the concept was broadened to refer to other associations. Modern historians have suggested, for example, that amphictyonic structures existed for the Sumers, Philistines and Israelites. The essential element of the amphictyony is a central shrine. First and foremost a cult organization, the amphictyony could also encompass social, ethnic and military facets (Freedman 1992: entry "Amphictyony"; Cancik and Schneider 1996: entry "Amphiktyonia").

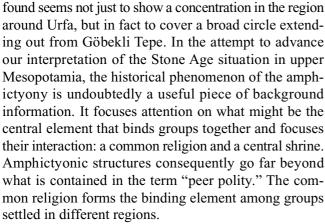
Is it possible that Göbekli Tepe represents a central shrine for a "Stone Age amphictyony"? An attempt to derive a definitive answer to this question would demand more than the available sources. However, the geographical area in which sites with T-shaped pillars are



Fig. 2 Göbekli Tepe. Enclosure D.



Fig. 3 Göbekli Tepe. T-shaped pillar, in situ in quarry.



If we accept that in the upper Mesopotamian PPN, there existed cultic communities with amphictyonic structures in at least the broadest sense of the term, many questions about the networks of interaction between PPN groups answer themselves. The question is no longer whether there was an all-dominating center – as in a diffusionist perspective – or whether there were "hundreds of centers" (*cf.* Gebel 2004). Whatever the number of communities that actually existed – each of them probably organized on the level of "segmentary societies" and connected to each other through a ritual center – it is not necessary to know how many competing alliances



Fig. 4 Göbekli Tepe. Pillar 9 in Enclosure B.

existed simultaneously, each with their own centers, to see that a ritual center of this kind offers an ideal forum for the interaction and organization of common activities. Such activities would have ranged from the construction of large stone circles to advanced hunting practices covering an expansive terrain, resembling large-scale land management. This management of the land could mark the beginning of intentional cultivation of grain, an agricultural economics not in the sense of garden agriculture, but indeed the cultivation of large land areas, whose potential harvests must have required protection from the competing nutritional needs of grassing animals.

The main achievement of such alliances is that they make possible a new concentration of the skills and knowhow amassed and acquired by each of the participating groups. Technical challenges like the production and transport of megalithic building elements were met and methods refined, resulting in monumental architectures that would have been impossible for individual groups alone to produce. This exchange, of course, also entailed shared spiritual values; and it promoted – and ultimately demanded – the use of a symbolic system. Many pillars at Göbekli Tepe are marked with series of abstract signs and animal representations. These are not fleet-

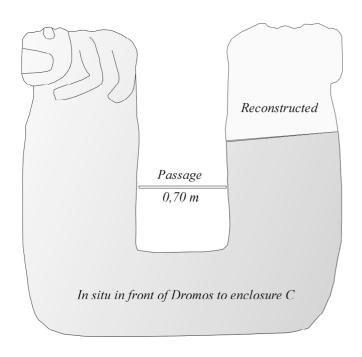


Fig. 5 Göbekli Tepe. U-shaped monolithic limestone, entrance to "dromos" of Enclosure C.

ingly scratched signs but bas-reliefs. Particularly frequent are H-shaped forms such as snakes and quadrupeds standing upright and turned 90°. Several of the signs and combinations of signs reappear at a much smaller scale as engravings on small stone slabs and shaft-straighteners. The use of the word "hieroglyphics" here may pose the danger of diverting attention to "hieroglyphic writing" in the sense of a phonetically readable script, a possibility that can be discarded with a high degree of certainty. Nonetheless, the term "Neolithic hieroglyphs" in the sense of "sacred signs" seems appropriate to designate a series of objects that show a succession of signs in a monumental scale and recurring manner. That these signs are also applied to anthropomorphic pillars may perhaps suffice as evidence for the use of the word, "hierós".

Jacques Cauvin (1997) pointed in the right direction with the "revolution of symbols," but he was unable to incorporate the more recent research into the range of examples that inform his argument. Current findings resist categorization in his iconographic framework of "the woman and the bull." Especially at Göbekli Tepe, it is evident that the world of the 10th and 9th millennium BC encompasses a much broader symbolic spectrum and more mythological substance (Peters and Schmidt 2004) than can be expressed in the small-scale figurines of the Khiamian or the PPNA known to Cauvin. It also seems doubtful that it was indeed first in Early Holocene society that this "revolution of symbols" occurred, or



Fig. 6 Göbekli Tepe. Large ring made of limestone. Diameter: ca. 0.60 m.

whether the findings from this period might reflect a significantly older inheritance from the Palaeolithic Age.

The "revolution of symbols" in Cauvin's sense and its focus on the "woman and the bull" seems in any case to be an overinterpretation of the evidence available at that time, in the same way that the Levant was elected the most significant "corridor" for the distribution of the Neolithic in the Near East. This is a symptom of the state of research as it has developed, and the field is only now beginning to recognize the full scope of its sources and scholars start to focus their research on the region between Upper Euphrates and Upper Tigris (e.g., Watkins 2004). The case of Cyprus can offer another instructive example of this, given that its spectacularly early settlement date has been recognized only in the past ten years (see *Dialogue* in *Neo-Lithics* 1/04).

When one considers what seem to be vast new sources of information about the Early Neolithic in the Near East, it seems that the cultures of the Upper Palaeolithic Age have not really been taken into account until now, at least not beyond the geographical area of the Kebarian and Natufian cultures. Throughout the Near East, the Upper Paleolithic era has only been minimally explored, and requires a brief glance to distant Europe for parallel examples. There is no shortage in this area of either women or bull motifs from the Upper Paleolithic period. The area in which "Venus" statuettes from the middle Upper Paleolithic have been found reaches from the Pyrenees almost to the Ural (Bosinski 1987: 60 Ill. 54),



Fig. 7 Göbekli Tepe. Door-like stone frame made of limestone.

and the women depicted in the reliefs at Angles sur l'Anglin appear almost life-sized (Iakovleva and Pinçon 1997). The cave paintings of Franco-Cantabrian areas are full of bulls, even if it is often a bison being represented and not an aurochs. In the shaft scene of Lascaux, we see an ithyphallic man falling before a Bison, and a bird on a staff-shaped object below. The deep symbolic value contained in this representation cannot be denied. The art of the Ice Age is moreover full of bracket, lattice, and ladder signs, and club-shaped, broom-shaped, bellshaped and triangular or trapezoidal shaped signs (Bosinski 1999). Small stone slabs have been found with additive, complex representations, like those from Jerf el-Ahmar, Tell Qaramel and from Göbekli Tepe, and there are predecessors as early as the Palaeolithic (e.g., J.K. Kozlowski 1992: 176, fig. 126). Hardly anything in the material culture of the PPN is really new in comparison to the Upper Paleolithic, not even sedentarity and the construction of residential buildings. One salient fact remains: we know all this rather from the far reaches of Europe, but almost nothing from the Upper Palaeolithic cultures of the Near East.

It is difficult to imagine a monument like that of Göbekli Tepe existing without any "prehistory" that reaches back to the Old Stone Age. One can thus concur with the perspective that claims, "Göbekli Tepe should thus most likely be viewed as the culmination of final Paleolithic developments rather than as the initiation and emergence of new ideas" (Goring-Morris and Belfer-Cohen 2002: 73). The Upper Paleolithic of upper Mesopotamia remains all but unknown up to the present day. It has been said that a true comprehension of the Neolithisation of the Near East must await a more adequate investigation of the late Upper Paleolithic history between the Tigris and Euphrates. The key to this period may indeed lie here, and not in the Natufian culture of the southern Levant, which may actually turn out to have been a marginal region. This is not to suggest that the appearance of the late Upper Paleolithic and of the Epipaleolithic in upper Mesopotamia can be expected to connect seamlessly

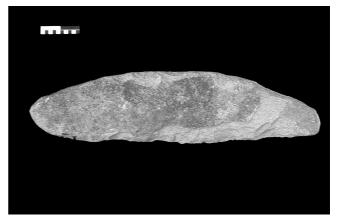


Fig. 8 Göbekli Tepe. Large basalt artefact of unknown function. Length: ca. 0.75 cm.

with the southern Levant. It is quite unclear how this gap in the research will eventually be filled in.

The land between the upper courses of the Tigris and Euphrates rivers forms an area which has been figuratively described as the "belly" of the Fertile Crescent, or the Golden Triangle" or "triangle d'or" (Aurenche and Kozlowski 1999). It is a massive area that has barely been explored by archaeologists. For historical reasons, the research first described the beginnings of a

Neolithic way of life in the southern Levant, in the western wing of the Fertile Crescent, which was thus identified as the birthplace of the Neolithic. However, the available sources – above all those sites in the Urfa region and here especially Göbekli Tepe – indicate that the process of Neolithisation can be reconstructed in a modified form in upper Mesopotamia as well.

Increasingly, Neolithic innovations are being identified in the upper Mesopotamian region, such as the introduction of Helwan points (Gopher 1994), or the domestication of einkorn wheat (Willcox 2002; *cf.* Colledge, Conolly, and Shennan 2004 and discussion). The earliest origins of the Megalithism can be located among these developments. Monumental architecture, part of external symbolic storage as Watkins pointed out (2004), renders power visible – not necessarily in the sense of a hierarchical ordering, but in the sense that, "it ... seems evident that there must have been some sort of a control mechanism monitoring all that was happening" (Özdoğan 2002: 157).

The reason why building activity at Göbekli Tepe came to an end in the MPPNB cannot yet be determined. As G. Rollefson's discussion of the southern Levant in the PPNB in this volume illustrates, ritual centers may have begun to be established within settlements during this period. This could indicate that at least some specific ritual activities were being shifted increasingly into settlements themselves. Perhaps developments of this kind were responsible for the end of Göbekli Tepe. On the other hand, it may be that the settlement of 'Ain Ghazal, the main basis for Rollefson's discussion, was built on



Fig. 9 Göbekli Tepe. Button-shaped pendant made of green stone.

an older sacred site. Therefore, the appearance of ritual buildings might simply represent the continuation of an existing tradition. It may well be that rituals that had always been carried out in living quarters and not associated with any particular location were then placed in an architectural setting. In any case, the ritual complexes within settlements are found in upper Mesopotamia as early as the PPNA, for example, in Jerf el-Ahmar and in Tell 'Abr 3. A more thoroughgoing investigation of this point falls outside of the framework of this discussion. However the ritual complexes within settlements may have developed, it seems very probable that at least in Upper Mesopotamia, the people of the early villages were indeed familiar with ritual centers located far away from their settlements.

The model of a Stone Age cultic community sketched out here combines diffusionist and polycentric elements. New achievements were brought out in the "market" of community gatherings into the ritual centers and became known and more broadly disseminated in this fashion. In these places, a confluence of society's innovative potentials occurred. Taken as a whole, the evidence seems to justify the notion that ritual centers were predecessors to the Central Places of later periods, given that many elements contained in ritual centers anticipate the essential features of the latter. The use of the word "hieroglyph" here – in the literal sense of "holy sign" – will certainly not go without misunderstanding, as discussed above. Nonetheless, in the face of the new and spectacular findings in upper Mesopotamia its use seems completely appropriate.

There must have existed numerous "ritual centers" in the Stone Age. The archaeological evidence suggests that Göbekli Tepe was one of them. It was a "Theatre of Memory" ... "in which the essentials dramas, rituals and myths could take their meaning" (Watkins 2004: 19).

References

- Arimura M., Balkan-Atlı N., Borell F., Cruells W., Duru G., Erim-Özdoğan A., Ibañez J., Maeda O., Miyake Y., Molist M. and Özbaşaran M.
- 2001 Akarçay Tepe kazısı, 1999 Akarçay Tepe Excavations, 1999. In N. Tuna, J. Öztürk, and J. Velibeyoğlu (eds.), Ilisu ve Karkamiş Baraj Gölleri Altında Kalacak Arkeolojik ve Kültür Varlıklarını Kurtarma Projesi 1999 Yılı Çalışmaları Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs. Activities in 1999: 309-357. Ankara.

Aurenche O. and Kozlowski S.K.

1999 La naissance du néolithique au Proche Orient ou le Paradis Perdu. Paris: Editions Errance.

Balkan-Atlı N., Erim-Özdoğan A. and Özbaşaran M.

- 1999 Akarçay Tepe, 1998 araştırması Akarçay Tepe: Research in 1998. In N. Tuna and J. Öztürk (eds.), Ilisu ve Karkamiş Baraj Gölleri Altında Kalacak Arkeolojik Kültür Varlıklarını Kurtarma Projesi 1998 Yılı Çalışmaları Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs. Activities in 1998: 63-80. Ankara.
- Balkan-Atlı N., Borell F., Buxó R., Duru G., Ibañez J.J., Maeda O., Molist M., Özbaşaran M., Piquet R., Sana M. and Wattez J.
- 2002 Akarçay Tepe 2000. In N. Tuna and J. Velibeyoğlu (eds.), Ilisu ve Karkamiş Baraj Gölleri Altında Kalacak Arkeolojik ve Kültür Varlıklarını Kurtarma Projesi 2000 Yılı Çalışmaları – Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs. Activities in 2000: 287-318. Ankara.
- Balkan-Atlı, N., Borell F., Duru G., Ibañez J.J., Maeda O., Miake Y., Molist M. and Özbaşaran M.
- 2004 Akarçay Tepe 2001 yılı çalışmaları Akarçay Tepe 2001 Season. In N. Tuna, J. Greenhalgh and J. Velibeyoğlu (eds.), Ilısu ve Karkamiş Baraj Gölleri Altında Kalacak Arkeolojik ve Kültür Varlıklarını Kurtarma Projesi 2001 Yılı Çalışmaları Salvage Project of the Archaeological Heritage of the Ilısu and Carchemish Dam Reservoirs. Activities in 2001: 227-250. Ankara.

Bosinski G.

- 1987 Die Große Zeit der Eiszeitjäger: Europa zwischen 40000 und 10000 v.Chr. *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 34: 3-139. Mainz.
- 1999 Die Bilderhöhlen des Ural und in Südwesteuropa einige Vergleiche. In V.E. Scelinskij and V.N. Sirokov, Höhlenmalerei im Ural. Kapova und Ignatievk: Die altsteinzeitlichen Bilderhöhlen im südlichen Ural: 139-166. Sigmaringen: Thorbecke.

Bucak E. and K. Schmidt

2003 Dünyanın en eski heykeli. Atlas. Aylık coğrafya ve keşif dergisi, sayı 127, ekim 2003: 36-40.

Cancik H. and Schneider H. (eds.)

1996 Der Neue Pauly, Vol. 1: "Amphiktyonia".

Cauvin J.

- 1980 Mureybet et Cheikh Hassan. In J. Margueron (ed.), Le Moyen Euphrate, zone de contacts et d'échanges: 21-34. Strasbourg.
- 1997 Naissance des divinités, naissance de l'agriculture. La revolution des symboles au Néolithique. Paris.

Celik B.

- 2000a An Early Neolithic Settlement in the Center of Şanlıurfa, Turkey. *Neo-Lithics* 2-3/00: 4-6.
- 2000b A New Early Neolithic Settlement: Karahan Tepe. *Neo-Lithics* 2-3/00: 6-8.
- 2004 A New Early Neolithic Settlement in Southeastern Turkey: Hamzan Tepe. *Neo-Lithics* 2/04: 3-5.

Christaller W.

1934 Die zentralen Orte in Süddeutschland: Eine ökonomischgeographische Untersuchung über die Gesetzmäßigkeit der Verbreitung und Entwicklung der Siedlungen mit städtischen Funktionen. Jena.

Colledge S., Connolly J. and Shennan S.

2004 Archaebotanical Evidence for the Spread of Farming in the Eastern Mediterranean. *Current Anthropology* 45: Supplement 35-58.

Freedman D.N. (ed.)

1992 The Anchor Bible Dictionary, Vol. 1: "Amphictyony".

Gebel H.G.K.

2004 There Was No Center: The Polycentric Evolution of the Near Eastern Neolithic. Neo-Lithics 1/04: 28-32.

Gopher A.

1994 Neolithic Arrowheads of the Neolithic Levant. Winona Lake: Eisenbrauns.

Goring-Morris N. and Belfer-Cohen A.

Symbolic Behaviour from the Epipalaeolithic and Early Neolithic of the Near East: Preliminary Observations on Continuity and Change. In H.G.K. Gebel, B.D. Hermansen, and C.H. Jensen (eds.), Magic Practices and Ritual in the Near Eastern Neolithic. Studies in Early Near Eastern Production, Subsistence, and Environment 8: 67-79. Berlin: ex oriente.

Hauptmann H.

- 1993 Ein Kultgebäude in Nevalı Çori. In M. Frangipane et al. (eds.), Between the Rivers and over the Mountains:

 Archaeologica Anatolica et Mesopotamica Alba Palmieri
 Dedicata: 37–69. Rome.
- 1999 Frühneolithische Steingebäude in Südwestasien. In K.W. Beinhauer, G. Cooney, C.E. Guksch and S. Kus (eds.), Studien zur Megalithik. Forschungsstand und ethnoarchäologische Perspektiven. Beiträge zur Ur- und Frühgeschichte Mitteleuropas 21: 227-238.
- 2000 Ein frühneolithisches Kultbild aus Kommagene. In J. Wagner (ed.), *Gottkönige am Euphrat: Neue Ausgrabungen und Forschungen in Kommagene*: 5-9. Mainz: Philipp von Zabern.
- 2003 Eine frühneolithische Kultfigur aus Urfa. In M. Özdoğan, H. Hauptmann and N. Başgelen (eds.), Köyden Kente. Yakındoğu'da *Ilk Yerleşmiler* From Village to Cities: Early Villages in the Near East. Ufuk Esin'e Armağan Studies Presented to Ufuk Esin: 623-636. Istanbul: Arkeoloji ve Sanat Yayınları.

Iakovleva L. and Pincon G.

1997 Angles-sur-l'Anglin (Vienne). La Frise sculptée du Roc-aux-Sorciers. Réunion des musées nationaux. Paris.

Kozlowski J.K.

1992 L'art de la préhistoire en Europe Oriental. Paris.

Kozlowski S.K.

2002 Nemrik: An Aceramik Village in Northern Iraq. Swiatowit Supplement Series P: Prehistory and Middle Ages, Vol. 8, Institute of Archaeology, Warsaw University. Warschau.

Kürkçüoğlu A.C. and Karahan Kara Z.

- 2003 Harran: The Crossroad of Civilizations. Harran District Governorship Publications, Urfanın Sesi. Şanlıurfa.
- 2005 Adım Adım Viranşehir, Viranşehir Kaymakamlığı Kültür ve Turizm Yayınları. Şanlıurfa.

Mazurowski R.F.

- 1997 Nemrik 9: Ground and Pecked Stone Industry in the Pre-Pottery Neolithic of Northern Iraq, Wydawnictwa Instytutu Archeologii. Warschau.
- 2000 Tell Qaramel. Excavations 1999. *Polish Archaeology in the Mediterranean. Reports* 11: 285-296.

Mazurowski R.F. and Jamous B.

2001 Tell Qaramel. Excavations 2000. Polish Archaeology in the Mediterranean. Reports 12: 327-341.

Mazurowski R.F. and Yartah T.

2002 Tell Qaramel: Excavations, 2001. Polish Archaeology in the Mediterranean. Reports 13: 295-307.

Mumford L.

1961 The City in History: Its Origins, Its Transformations, and Its Prospects. London: Secker & Warburg.

Nierlé M.C.

1982 Mureybet et Cheikh Hassan (Syrie). *Cahiers de l'Euphrate* 3: 177-216.

Özbaşaran M., Duru G., Balkan-Atlı N., Molist M. and Bucak E. 2004 Akarçay Tepe 2002. In *Kazı Sonucları Toplantısı* 25.1, 2003: 303-310. Ankara.

Özdoğan A.

- 1995 Life at Çayönü During the Pre-Pottery Neolithic Period (According to the Artifactual Assemblage). In *Readings in Prehistory: Studies Presented to Halet Çambel:* 79-100. Istanbul.
- 1999 Çayönü. In M. Özdoğan and N. Başgelen (eds.), Neolithic in Turkey: The Cradle of Civilization: 35-63. Istanbul: Arkeoloji ve Sanat Yayınları.

Özdoğan M.

- Neolithization of Europe: A View from Anatolia. Part 1:
 The Problem and the Evidence of East Anatolia. Porocilo o razkovanju paleolitika, neolitika in eneolitika v Sloveniji 22, 1994: 25-61. Ljubliana.
- 1996 From Huts to Houses: "Firsts" in Architecture. In Y. Sey (ed.), *House and Settlement in Anatolia*. HABITAT II: 19-30
- 2002 Redefining the Neolithic of Anatolia. A Critical Overview.
 In R.T.J. Cappers and S. Bottema (eds.), *The Dawn of Farming in the Near East*. Studies in Early Near Eastern Production, Subsistence, and Environment 6: 153-158.
 Berlin: ex oriente.

Özkaya V.

2004 2002 yılı Körtik Tepe kazısı. In *Kazı Sonuçları Toplantısı*25, 2003 1. Cilt: 103-116. Ankara.

Özkaya V. and San O.

- 2002 Körtik Tepe Arkeolojik kazıları. In Kazı Sonuçları Toplantısı 23, 2001 2. Cilt: 423-434. Ankara.
- 2003 Körtik Tepe 2001 kazısı. In Kazı Sonuçları Toplantısı 24, 2002 2. Cilt: 423-436. Ankara.
- 2004 2001 Körtik Tepe kazıları 2001 Excavations at Körtik Tepe. In N. Tuna, J. Greenhalgh, and J. Velibeyoğlu (eds.), Ilisu ve Karkamiş Baraj Gölleri Altında Kalacak Arkeolojik ve Kültür Varlıklarını Kurtarma Projesi 2001 Yılı Çalışmaları Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs. Activities in 2001: 669-693. Ankara.

Özkava V., San O. and Yıldızhan H.

2002 Körtik Tepe 2000 kazıları – Excavations at Körtik Tepe 2000. In N. Tuna and J. Velibeyoğlu (eds.), *Ilisu ve Karkamiş Baraj Gölleri Altında Kalacak Arkeolojik ve Kültür Varlıklarını Kurtarma Projesi 2000 Yılı Çalışmaları – Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs. Activities in 2000:* 739-758. Ankara.

Peters J. and Schmidt K.

2004 Animals in the Symbolic World of Pre-Pottery Neolithic Göbekli Tepe, South-Eastern Turkey: A Preliminary Assessment. *Anthropozoologica* 39.1: 179-218.

Rosenberg M.

- 1999a Hallan Çemi. In M. Özdoğan and N. Başgelen (eds.), Neolithic in Turkey: The Cradle of Civilization: 25-33. Arkeoloji ve Sanat Yayınları.
- 1999b Hallan Çemi and the Beginnings of Settled Village Life in Eastern Anatolia. In Çağlar boyunca Anadolu'da yerleşim ve konut uluslararsı sempozyumu International Symposium on Settlement and Housing in Anatolia Through the Ages, Istanbul 1996: 359-371. Istanbul: Ege Yayınları.

Rosenberg M. and Peasnell B.L.

1998 A Report on Sounding at Demirköy Höyük: An Aceramic Neolithic Site in Eastern Anatolia. Anatolica 24: 195-207.

Schmidt K.

- 2001 Göbekli Tepe and the Early Neolithic Sites of the Urfa Region: A Synopsis of New Results and Current Views. Neo-Lithics 1/01: 9-11.
- 2003 The 2003 Campaign at Göbekli Tepe (Southeastern Turkey). Neo-Lithics 2/03: 3-8.

- 2004 Frühneolithische Zeichen vom Göbekli Tepe Ilk Neolitik Göbekli Tepe Betimlemeleri. *TÜBA-AR*. *Türkiye Bilimler Akademisi Arkeoloji Dergisi* 7: 93-105.
- 2005 Die "Stadt" der Steinzeit. In H. Falk (ed.), Wege zur Stadt: Entwicklung und Formen urbanen Lebens in der alten Welt. Vergleichende Studien zu Antike und Orient 2: 25-38. Bremen.

Stordeur D. and Abbès F.

2002 Du PPNA au PPNB : mise en lumière d'une phase de transition à Jerf el Ahmar (Syrie). Bulletin de la Société Préhistorique Française 99: 563-595.

 Stordeur D., Brenet M., Der Aprahamian G. and Roux J.-C.
 2001 Les bâtiments communautaires de Jerf el Ahmar et Mureybet. Horizont PPNA, Syrie. *Paléorient* 26.1: 29-44.

Verhoeven M.

2001 Person or Penis? Interpreting a "New" PPNB Anthropomorphic Statue from the Taurus Foothills. Neo-Lithics 1/01: 8-9.

Watkins T.

- 1990 The Origins of House and Home. World Archaeology 21.3: 336-347.
- 1995 (ed.), Qermez Dere, Tel Afar; Interim Report No. 3. University of Edinburgh, Department of Archaeology, Project Paper No. 14.
- 2004 Building Houses, Framing Concepts, Constructing Worlds. *Paléorient* 30.1: 5-24.

Watkins T., Betts A., Dobney K. and Nesbitt M.

1991 Qermez Dere, Tel Afar: Interim Report No. 2, 1989.
 University of Edinburgh, Department of Archaeology,
 Project Paper No. 13.

Willcox G.

2002 Geographical Variation in Major Cereal Components and Evidence for Independent Domestication Events in Western Asia. In R.T.J. Cappers and S. Bottema (eds.), *The Dawn of Farming in the Near East*. Studies in Early Near Eastern Production, Subsistence, and Environment 6: 133-140. Berlin: ex oriente.

Yartah T.

- 2001 Tell 'Abr 3 et la néolithisation en Syrie du nord, Mémoire de DEA, Université Lyon 2.
- 2004 Tell 'Abr 3, un village du néolithique précéramique (PPNA sur le Moyen Euphrate. Première approche. Paléorient 30.2: 141-158.
- 2005 Le bâtiments communautaires de Tell 'Abr 3. *Neo-Lithics* 1/05: 3-9.

Which Way to Look? Conceptual Frameworks for Understanding Neolithic Processes

Anna Belfer-Cohen and Nigel Goring-Morris

Institute of Archaeology, Hebrew University of Jerusalem <belferac@mscc.huji.ac.il>

Introduction

Notwithstanding the truly spectacular nature of Neolithic discoveries in the Near East over the past 25 years our frames of reference remain very tenuous. Ultimately, we are provided with only an opaque window in terms of the nature and meanings of the observed phenomena. In the following note we relate very briefly, in general terms, to just a few of the broader issues raised by Schmidt and Rollefson in their respective accounts. This appears to be more constructive than focusing on the specifics, some of which we agree with and some of which we would interpret or emphasize differently.

The Nature of Neolithic Changes

Perhaps the most significant issue concerning the Neolithization process is the fact that it encompassed a combination of Palaeolithic phenomena together with events and procedures that had never been previously experienced or addressed. In this sense the origins of the Neolithic represent both 'ends' and 'beginnings', but with little obvious canonization, which contribute to make matters extremely difficult to generalize about. We should remember that what can be observed in the archaeological record is not always the straightforward equation of 'the larger' equals 'the central' in terms of overall importance (and see below). It seems that early Neolithic socio-cultural belief systems can be characterized primarily by their flexibility, and the lack of standardized hierarchical practices. In this we concur with Schmidt's observation concerning the continuation of the 'old, shamanistic order' (as opposed to Cauvin's 'new order') being the more appropriate approach given our present state of knowledge.

Terminology and Frames of Reference

Our perception of the Neolithic is frequently marred by modern geography. Here we have in mind the terminological 'minefield' of place names commonly employed in various papers, such as "Mesopotamia", "Anatolia", "Turkey", "Syria", "Israel", "Jordan", and "Palestine", all problematic in one way or another. Thus, following the recent suggestion of Gebel (Neo-Lithics meeting in Fréjus, February 2004) we believe it is preferable to use

topographic and phytogeographic zones as basic terms of reference. Within this context we believe that the entire area south of the barrier of the Taurus and Zagros mountains should be related to as part of a single, comprehensive geographical continuum, which for want of a better term, we can call the 'Levant'. Within the Levant, we observe four main provinces – in the south, the Mediterranean province (including the Damascus Basin), bordered on the south and east by the arid province; and, to the north, the Middle Euphrates and the Upper Tigris provinces.

Furthermore, the terminology applied to observed socio-cultural and cosmological phenomena is commonly influenced by post-Neolithic paradigmatic frameworks. We are thus 'knowledgeable' and 'comprehend' the observed phenomena in retrospect. Yet, one should bear in mind that time can and does change the meaning of things that superficially appear similar, never mind the dramatic appearance of phenomena not observed earlier. The nature and significance of 'high place' or 'ritual locality' can and demonstrably do change through time, e.g., the long-lasting cultic areas of Tell Megiddo ('Armageddon'), or the "Dome of the Rock" in Jerusalem, both of which have been loaded with a series of differing belief systems tied in with the same specific location. Here, one may also refer to long-lasting symbols such as the 'swastika', the 'star of David', and even monolithic stelae (masseboth), the meaning and symbolic connotations of which changed radically through time. Of course, we are also cognizant that ritual localities can eventually die out and be completely forgotten, e.g., various Megalithic monuments in Europe, etc.

For historical reasons most comparisons and analogies of Near Eastern Neolithic cultic phenomena have centered on later local entities – Dynastic Egypt, Sumerian and Assyrian Mesopotamia, Biblical narratives, etc. While these are undoubtedly valid, perhaps we should also consider wider ranging comparisons where the beginnings of sedentism, expanding communities, and subsistence changes are all relevant. Indeed in-as-much as we may discuss hierarchies of ritual/cultic phenomena, we should nevertheless remember that they operated within specific contextual settings. Thus, frames of reference can be drawn from Neolithic and Megalithic Europe (see, e.g. Thomas 1999; Jones 2005; Renfrew 2001; Whittle 1985, 1997). The American Southwest, beyond the recent-

ly popular 'pueblos' similarities and comparisons (Stordeur 2000, Stordeur *et al.* 2001), can also be used to provide further insights into aspects of the Near Eastern Neolithic archaeological record, *e.g.*, the LPPNB ritual round structures at 'Ain Ghazal may be viewed as the equivalent of North American 'sweat lodges'.

Location of Central Places

The archaeological evidence for the scale of various Neolithic phenomena remains open to speculation. While we concur that Göbekli Tepe was most definitely a central place in terms of the northern Levant, we really do not know whether it was the central place, as intimated by Schmidt. Göbekli is, indeed, situated in a prominent watershed location at the headwaters of the Balikh Valley and another, northward flowing tributary of the Euphrates. Yet, a mere 50 km away, the still to be systematically investigated site of Karahan Tepe is also located in a watershed situation between the Balikh and Khabur Valleys; the site is reputed to feature some 250 T-shaped pillars on the surface (Celik 2000). This raises the possibility that ritual 'territories' (for want of a better word) were more tightly packed than some researchers have hypothesized. This, of course, is without a priori making direct comparisons as to the specific functions of both sites within the broader system, and indeed whether the system functioned at all within a hierarchical, or 'optimal' framework.

Concerning the claimed singularity of the Delphic amphictyony (see Schmidt herein), one should bear in mind that, initially, there were at least six amphictyonies reported in historical Greece (an 'amphictyony' comprises "a body composed of dwellers around..." or "a league of neighboring communities centered around a sacred locale"); some were contemporaneous for various spells of time, so that their geographic 'packing' was originally much tighter than Schmidt allows for (see also Belfer-Cohen and Goring-Morris 2002 concerning analogies with the concept of the Greek amphictyony). Being aware of this, we may question the validity of the 12,000 km² religious 'catchment' area around Göbekli proposed by Schmidt in his exposition.

Furthermore we should note that 'central places' do not necessarily have to be geographically central or indeed even prominent in the landscape. Many such ritual/cultic localities are associated with natural phenomena, whether prominent or secluded in the landscape, such as 'high places', caves, springs and the like. Sometimes elements of both can be observed in the same locality – e.g., Upper Palaeolithic Franco-Cantabrian decorated caves, PPNB Nahal Hemar cave, as well as sub-recent examples from Australian aboriginal and South African Khoisan sacred localities. One should remember that the location of any particular 'ritual locality' may relate to both public and private rituals (and see below).

Function of Central Places and Rituals

It appears that archaeologists are prone to 'flights of imagination' while trying to reconstruct the causes for spiritual activities, sometimes forgetting or ignoring the ultimately 'pragmatic' reasons underlying such behaviours. Thus, for example, the repeated, annual aggregation of groups engaged in ritual activities at certain locales can be best explained as a mechanism for the retention of a viable genetic pool, and the need to maintain a specific population size. Indeed Schmidt refers to Palaeolithic/Epipalaeolithic aggregation sites (even though he does not use the term – see Conkey 1980; Hovers et al. 1988) without considering their being the means to propagate the genetic pool, which undoubtedly reflects a more pressing underlying need than simple social 'communication'. The main achievements of such 'alliances' (forged through blood ties, common ancestors, shared beliefs, etc.) coming into the open in 'central localities' lie in their representing mating systems which ultimately provide a biological security web; we are sure that such nets existed already from at least the Upper Palaeolithic. Of course, we concur that there were also other important side benefits, such as the exchange of information, rare materials, gifts and technical knowhow.

In the final analysis it is the central locations themselves that were important, more than the actual 'shrine' or 'temple' associated with that particular locale. Concrete evidence for gods inhabiting their 'houses' (i.e. temples) appears only much later; and we actually do not know whether the beginning of this belief coincided with the Neolithization process. Since we are discussing the earliest beginnings of what perhaps later became central places in the sense of 'sacred precincts' and canonized religious practices, we need to be especially cautious of the terms employed. For it is by no means obvious that all early Neolithic ritual behaviours ended up being directly incorporated within the later religious frameworks (Belfer-Cohen and Goring-Morris 2004).

Concluding Remarks

It is fascinating to observe the presence of pictograms and associated symbols which provide an indication of how early Neolithic communities almost 'made it' into the realm of canonized religion and religious institutions (Goring-Morris and Belfer-Cohen 2005). We agree that there were clearly more than the bucrania and the mother goddess (Cauvin 2001), although one should constantly be aware of regional and chronological variability throughout the PPN Levant. Indeed, the PPN symbolic lexicon in the northern Levant differs significantly from that in the south. We definitely do not see a single pan-Levantine centre of innovation from which all influences emanated, whether cultural, economic, social or ritual.

Most of the issues raised in the papers by Schmidt and Rollefson directly pertain to the ritual-cum-protoreligious aspects of the Neolithic and their interrelationships with other archaeologically observed (or inferred) phenomena. Still, various areas of research are bidding their time, such as the influence of the domestication process on the human outlook concerning her/his universe and his/her place in the natural order of things (e.g., Valla 1990, 1999, 2002). How did changes from nuclear to extended family residences (and perhaps back again) impact the role of private and public ceremonies and the hierarchies of ritual activities and locales? We know little, if anything concerning the changes communities, groups and individuals underwent in their concepts of 'personhood' and 'society' (e.g., Fowler 2004, and references therein).

The plethora of new data available is truly astounding, providing room for speculation and flights of imagination. Yet ultimately, we should resign ourselves to the limits to which we can really comprehend the mindsets and frames of reference of early Neolithic societies in the Near East. It is imperative to remain flexible and open-minded – we cannot cross the 'tees' ('t') and dot the 'eyes' ('i') when it comes to reconstructing the spiritual realms of the emerging Neolithic societies.

References

Belfer-Cohen A. and Goring-Morris A.N.

2002 Recent Developments in Near Eastern Neolithic Research. Paléorient 28(2):143-148.

2004 Approaches to Studying the Initial Neolithic in the Near East: Why it is so difficult to deal with the PPNA, and what should be done about it... Paper presented at the SAA Montreal, Canada.

Cauvin J.

2000 The Birth of the Gods and the Origins of Agriculture. Cambridge: Cambridge University Press.

Çelik B.

2000 A New Early Neolithic Settlement: Karahan Tepe. *Neo-Lithics* 2-3/00: 6-8.

Conkey M.W.

1980 The Identification of Prehistoric Hunter-Gatherer Aggregation Sites: The Case of Altamira. *Current Anthropology* 21(5): 609-631.

Fowler C.

2004 The Archaeology of Personhood: An Anthropological Approach. London: Routledge.

Goring-Morris A.N. and Belfer-Cohen A.

2002 Symbolic Behaviour from the Epipalaeolithic and Early Neolithic of the Near East: Preliminary Observations on Continuity and Change. In H.G.K. Gebel, B.D. Hermansen and C.H. Jensen (eds.), Magic Practices and Ritual in the Near Eastern Neolithic: 67-79. Studies in Early Near Eastern Production, Subsistence, and Environment 8. Berlin: ex oriente.

2005 The Loss of Innocence or the Fall of the Early Neolithic in the Near East. Paper presented at the SAA Salt Lake City, Utah.

Hovers E., Horwitz L.K., Bar-Yosef D.E. and Cope-Miyashiro C.
 1988 The Site of Urkan-E-Rub IIa: A Case Study of Subsistence and Mobility Patterns in the Kebaran Period in the Lower Jordan Valley. *Journal of the Israel Prehistoric Society – Mitekufat Haeven* 21: 20-48.

Jones A.

2005 Lives in Fragments? Personhood and the European Neolithic. *Journal of Social Archaeology* 5(2): 193-224.

Renfrew C.

2001 Production and Consumption in a Sacred Economy: The Material Correlates of High Devotional Expression at Chaco Canyon. American Antiquity 66(1): 14-25.

Stordeur D.

2000 New Discoveries in Architecture and Symbolism at Jerf el-Ahmar (Syria), 1997-1999. Neo-Lithics 1/00: 1-4.

 Stordeur D., Brenet M., Der Aprahamian G. and Roux J.-C.
 2001 Les bâtiments communautaires de Jerf el-Ahmar et Mureybet. Horizon PPNA (Syrie). *Paléorient* 26(1): 29-44.

Thomas J.

1999 Understanding the Neolithic. London: Routledge.

Valla F.R.

1990 Le Natoufien: une autre façon de comprendre le monde? Journal of the Israel Prehistoric Society – Mitekufat Haeven 23: 171-175.

1999 The Natufian: A Coherent Thought? In W. Davies and R. Charles (eds.), *Dorothy Garrod and the Progress of the Palaeolithic:* 224-241. Oxford: Oxbow.

Une urgence: donner du sens. Des sacrifices dans le Natoufien et l'horizon PPNA du Proche Orient Levantin?
 In J. Leclerc and C. Masset (eds.), Sens Dessus Dessous – La Recherche du Sens en Préhistoire: 205-218. Chalonsen-Champagne: Revue Archéologique de Picardie.

Whittle A.

1985 *Neolithic Europe: A Survey.* Cambridge: Cambridge University Press.

Whittle A.

1997 Sacred Mounds, Holy Rings: Silbury Hill and the West Kennet Palisade Enclosures. Oxford: Oxbow.

Some Comments on Archaeology and Ritual

Brian Boyd

Department of Archaeology and Anthropology, University of Wales Lampeter <b.boyd@lamp.ac.uk>

In this brief response to the articles by Gary Rollefson and Klaus Schmidt, I wish to focus primarily on the use of the concept of ritual and, secondarily, on the reasons why researchers working in the prehistoric archaeology of the Levant have turned to the concept in recent years.

The two papers presented here are welcome for the important reason that "ritual" needs to be regarded as a legitimate and serious area of research in Levantine prehistory, and not simply used as shorthand for material that does not fit with archaeologists' perceptions of "domestic", or as a nebulous term for material that we do not recognise or understand.

The last decade or so has seen increasing emphasis being placed on "social" and "symbolic" factors, such as ritual, in explanations of how and why sedentism, agriculture and domestication came about. Why should this be? The answer partly lies in the nature of the archaeological material encountered at a number of Epipalaeolithic, Prepottery Neolithic and Pottery Neolithic sites from across the Levant and Anatolia. We could mention here Kfar HaHoresh (Goring-Morris 2000), with its extraordinary range of mortuary deposits, or Jerf el-Ahmar's architecture and carved stone pebbles (Stordeur 2000). Similarly, the remarkable lime plaster statues from 'Ain Ghazal (Rollefson 2000), the massive stone monuments of Göbekli Tepe (Schmidt 2001), the animal symbolism of Çatalhöyük (Hodder et al. 2000), and the burials and architecture from Mallaha/Eynan (Valla et al. 2002). These discoveries – and others mentioned by Rollefson and Schmidt – have led to some difficult interpretive challenges in recent years. In a Levantine archaeology still dominated by functionalism, social evolution and processual perspectives (Flannery 1998) – just how is this material to be interpreted?

Some researchers have turned to structuralist-influenced perspectives similar to those developed by André Leroi-Gourhan and Jacques Cauvin to address the apparent "symbolic" and "ritual" elements represented at these sites. For instance, Valla has argued that "the Natufian saw domestication as an appealing way in which to introduce the animal into society. They thereby opened the way to the unlimited expansion of the 'humanized' world at the expense of nature" (Valla 1995: 187). Similarly, Belfer-Cohen and Goring-Morris observe, "This was the time when humans took upon themselves not only the domestication of plants and animals, but also the domestication of the landscape – nothing remained 'natural' or

immutable anymore. While places within the landscape were most probably also previously imbued with symbolic significance, there were now conscious efforts to tame and/or influence localities within the landscape that were not necessarily beneficial in terms of the purely functional mechanisms of optimal foraging" (Belfer-Cohen and Goring-Morris 2002: 144) and, "...the mechanisms that helped to resolve the resulting tensions imposed by sedentism. There is a wide-ranging consensus that the search for these mechanisms should be focused in particular on the ritual and symbolic aspects of the archaeological record" (ibid.).

So, there seems to be some measure of agreement that ritual, after many years of neglect and/or wary treatment, should be a focus of archaeological study, hence the articles under discussion here. But what exactly do prehistorians working on this Levantine material mean by "ritual"? In the two papers under discussion here – and in the Epipalaeolithic/Neolithic literature in general – there is little consideration of what defines "ritual" beyond a tacit assumption that it equates with deposits that archaeologists regard as "symbolic". It appears unproblematic to refer to architecture, landscapes and artefacts as "symbolic" or "ritual", as if such things have meaning prior to, or autonomy from, human agency and social practice. But there can be no such thing as a "symbolic landscape", a "ritual object", a "ritual site", or a "ritual structure". Ritual is a social practice not a material form. Ritual is made up of actions, not things. Even a cursory reading of the social anthropological literature and the mature and theoretically sophisticated debates on ritualization (e.g. Bell 1992; Connerton 1989; Goody 1977; Humphrey and Laidlaw 1994; Lewis 1980) makes this clear. Further, I am concerned with Rollefson's view that "changes in [PPN] ritual activity are probably related to changes in environmental conditions", as if ritual practice is some kind of adaptive strategy. While changes in ritual knowledge and practice may indeed occur when the material conditions which they inhabit are altered, this cannot be reduced to a simple correlation.

Similarly, "symbolism" is an embodied act or process of metaphorical or metonymical association. Landscapes, architecture and objects can have no meaning prior to their involvement in human agency, whether that is a particular perception of a landscape or the deployment of an object in a particular social practice. Ritual practice may make reference to landscapes, objects, people

(both living and dead), animals, trees, rivers and buildings, as well as non-material phenomena such as histories and memories, by using symbolic associations, but none of these things are ever "ritual" or "symbolic" in their own right. Such interpretations also serve to reproduce the Cartesian separation of nature/culture, sacred/profane, mind/body. Given the now substantial anthropological critique of this dichotomous "Western" form of interpretation, it appears increasingly inappropriate for social transformations that occurred in the distant past, and tells us more about modern ways of thinking about the world than those of the people who inhabited the worlds we are trying to study.

Where does this leave the notion of "ritual centers"? The term itself perpetuates the Western "ritual/domestic" dichotomy. It is important to realize that places where rituals are carried out, and the objects used, will also be encountered in the daily routines of life. Those routines may be organized with reference to, for instance, gods, spirits or ancestors, they may reproduce ideas of gender and identity, or they may express divisions of status between people. The organization of sites and archaeological deposits are therefore likely to be structured according to particular cultural values without actually deriving from ritual practices. Indeed, many societies do not distinguish ritual practice from secular/domestic practice, and what anthropologists routinely identify as ritual is generally considered practical and effective action by its practitioners. In other words, ritual knowledge is built out of the same material conditions as everyday life. It cannot be analysed as though it somehow has a life of its own. So, for example, although there are no "domestic residences" at Kfar HaHoresh or Göbekli Tepe, the ritual practices carried out at these places would have been informed by the knowledge and structures of everyday life. In this way, the two are socially and culturally embedded.

Finally, it is worrying that Rollefson describes Ronen and Adler's 2001 article, "The walls of Jericho were magical" as a "post-processual interpretation". The lack of familiarity with postprocessual approaches that this statement shows, indicates a failure to engage with the one body of archaeological writing which has actually grappled with questions of ritual and ritual practice for more than two decades now. This is exemplified by the use of the term "religious" by both authors. "Religion" carries with it a number of theoretically thorny issues. Yes, we may be able to identify elements of a dominant symbolism at any given period or site (e.g., representations of animals), but to label this "religion" in the prehistoric context would require some very sophisticated reasoning, not simply speculative claims for the existence of "mythical founder groups", "skull cults" or "ancestor deities". Where do these terms come from? And how can the existence of such constructs be demonstrated rather than asserted?

The archaeology of the Epipalaeolithic and Neolithic Levant is currently undergoing fundamental changes. It has long been apparent that environmental and socioeconomic models are inadequate for the task of interpreting the type of material discussed in Rollefson's and Schmidt's papers, and it should now be faced that cultural ecology and human behavioural ecology cannot account for the nature of the archaeological evidence coming from these sites. The interpretive challenge now facing us is how to construct adequate theoretical perspectives with which to think through the complex relationships between the structures of everyday life and the structures of ritual practice (Bradley 2005; Boyd 2005) which resulted in the organization of the archaeological material we now see before us.

Acknowledgements. Thanks to the editors of Neo-Lithics for the kind invitation to join the dialogue, and to Zoë Crossland for helpful comments.

References

Belfer-Cohen A. and Goring-Morris N.

2002 Recent Developments in Near Eastern Neolithic Research. *Paléorient* 28(2): 143-148.

Bell C.

1992 Ritual Theory, Ritual Practice. Oxford: Oxford University
Press

Boyd B.

2005 Agency and Landscape: Abandoning the "Nature/Culture" Dichotomy in Interpretations of the Natufian and the Neolithic Transition. In C. Delage (ed.), *The Last Hunter-Gatherers in the Near East:* 119-136. Oxford: British Archaeological Reports International Series 1320.

Bradley R.

2005 Ritual and Domestic Life in Prehistoric Europe. London: Routledge.

Connerton P.

1989 *How Societies Remember*: Cambridge: Cambridge University Press.

Flannery K.V.

1998 Introduction to Second Edition. In T. Levy (ed.), The Archaeology of Society in the Holy Land: xvii-xx. London: Leicester University Press (2nd edition).

Goody J.

1977 Against "Ritual": Loosely Structured Thoughts on a Loosely Defined Topic. In S. Moore and B. Meyerhoff (eds.), *Secular Ritual*: 25-35. Amsterdam: Van Goricum.

Goring-Morris N.

2000 The Quick and the Dead: The Social Context of Aceramic Neolithic Mortuary Practices as Seen from Kfar HaHoresh. In I. Kuijt (ed.), Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation: 103-136. New York: Kluwer Academic/Plenum Press.

Hodder I. et al. (eds).

2000 Towards Reflexive Excavation Method in Archaeology: The Example of Çatalhöyük. Cambridge: McDonald Institute of Archaeology.

Humphrey C. and Laidlaw J.

1994 The Archetypal Actions of Ritual. Oxford: Clarendon Press.

Lewis G.

1980 Day of Shining Red: An Essay on Understanding Ritual.
Cambridge: Cambridge University Press.

Rollefson, G.A.

2000 Ritual and Social Structure at 'Ain Ghazal. In I. Kuijt (ed.), Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation: 165-190. New York: Kluwer Academic/Plenum Press. Schmidt K.

2001 Göbekli Tepe and the Early Neolithic Sites of the Urfa Region: A Synopsis of New Results and Current Views. Neo-Lithics 1/01: 9-11.

Stordeur D.

2000 New Discoveries in Architecture and Symbolism at Jerf el-Ahmar (Syria), 1997-1999. *Neo-Lithics* 1/00: 1-4.

Valla F.R.

1995 The First Settled Societies – Natufian (12,500-10,200 BP). In T. Levy (ed.), *The Archaeology of Society in the Holy Land:* 169-187. London: Leicester University Press.

Valla F.R., Khalaily H., Samuelian N. and Bocquentin F.

2002 From Foraging to Farming: The Contribution of the
Mallaha (Eynan) Excavations 1996-2001. *Bulletin du*Centre de Recherche Français de Jérusalem 10: 71-90.

Comment

On PPN Ritual Centralities

Hans Georg K. Gebel

Department of Near Eastern Archaeology, Free University of Berlin hggebel@zedat.fu-berlin.de

Introductory Remarks

Both keynotes argue that various sorts of ritual centrality became a characteristic of ritual life in the increasingly territorial PPN communities. Implicitly, they explain that - on the one hand - the PPN agglomeration and domestication of spiritual spaces and spheres led to the existence of ritually specialized places, and – on the other hand – that ritual practice and daily life were not separated to the extent we know from modern times. The keynotes distinguish little between ritual centrality and ritual centers, and hardly speak about the nature of the otherworldly powers addressed in ritual. Both keynotes use a number of concepts and perceptions (e.g., ancestral/skull cult, ritual center = cultural catalyst, amphictyonies) as well as making statements on findings (e.g., communal religious buildings) to prove the various forms of ritual centrality, which sometimes overreaches the archaeological evidence (e.g., when special and unexplainable features or groundplans become a subject of ritual in interpretation).

While one may not accept certain views or interpretations in the keynotes, one must state that their reflections go in the right directions, for many aspects of the archaeological evidence occurring the past 25 years point to ritual centrality as a major key in the comprehension of the Early Neolithic developments. Before a dialogue is continued on individual ritual findings, a basic approach needs to be made for the general and hopefully mutual

understanding of the character of the processes in which Early Neolithic ritual centrality was embedded. I see five aspects relevant for this discussion, for which I present my considerations while having both keynotes in mind:

Reflection 1: On Agglomeration

Agglomeration was the motor and impetus of PPN ritual centrality; they caused the domestication of ritual, its regional diversity and temporal variability, and created increasingly varied ritual and magical practices in space, time and non-material spheres. While we have to expect that its Epipalaeolithic ritual substratum was characterized by supra-regional traditions, we must understand that these were dissolved in a hitherto unknown differentiation of ritual life in the PPN. This does not mean that religious differentiation and strong ritual identities did not exist in pre-PPN times: reduced or missing archaeological evidence of ritual for mobile bands should not make us underestimate the quality of and need for ritual identity in the Epipalaeolithic: they did not express ritual identity in ways sedentary people do.

Secure food resources allowed all sorts of agglomeration processes, and agglomeration processes were the adaptive answer to secure food resources. Many different concepts helped in this framework to form corporate identities, characterized by progressive population dynamics and new ways in the exploitation of natural and human resources. Progressively developed corporate structures

also needed to be supported by beliefs and spiritual values on which they agreed to function. Purely socioeconomic identities would not have been sufficient to regulate the new intra- and intersite conflict levels occurring within these agglomeration processes. We need to expect that religion became more – if not the most important – binder for corporate identities beyond any social or economic levels.

Whatever the concepts were – expressing in ritual locations, ritual family understanding, ritual performance of life cycles including the otherworldly cycles, – they had the goal of providing a corporate identity in creating and mastering agglomeration. An important aspect of helping Early Neolithic agglomeration processes is the continuous differentiation of social status. This differentiation is acquired or accomplished or is ascribed by values and products mutually understood and accepted.

Reflection 2: On Domestication

The term domestication – in its non-scientific meaning – appears to be an appropriate understanding for approaching all sorts of early house and village-based ritual expressions. To domesticate the dead by burying them in the inhabited house, to control and exchange with otherworldly powers by giving them a place in the houses and settlements: this characterizes the fundamentally new ritual behavior at the beginning of settled life. It involves the personification of otherworldly powers and the direct exchange with them through stable locations. Simply put: ritual became domesticated, and ritual centrality is an expression of that.

Reflection 3: On Regional Diversity

From the beginning, we observe a considerable regional diversity in ritual expression. Regional diversity and temporal variability cannot be separated in reconstructing ritual interaction spheres through time and across geographical zones. In general, and with the information we have so far, we can possibly expect a higher degree of joint band-/ group- oriented ritual identities in the north of the Levant and family-based ritual centrality in the south of the Levant. This does not mean that ritual centers in the north were sites and in the south were houses (note that this reflection contains the difference between ritual centers and ritual centrality). As the site of Kfar HaHoresh (M-LPPNB) shows, we may have had also (mortuary and) cult sites shared by surrounding communities in the south, giving evidence that the south was not restricted to ritual family centers supporting exclusively the regional continuity of practices and religious understanding. It is astonishing to observe that regional diversity is even accompanied by local diversity. For example, completely different mortuary practices are observed in the roughly contemporary sites of Ba'ja and Basta, where family burials (Ba'ja) contrast with individual burials (Basta), witnessing different postmortem family concepts on a local scale.

Reflection 4: On Temporal Variability

So far our understanding of ritual development and thus of ritual centrality is based on a few open windows for a period of some 4 to 5 millennia. Much guesswork is involved in interpretation, but without the acceptance of a necessarily preliminary character of statements we would not progress in discussion. Findings like Göbekli Tepe will require a lot of testing of our hypothesis, even basic reconsiderations of the interpretative accesses and frameworks used, until we reach closer to historical truth. So far we can only expect that the Göbekli evidence witnesses a glance on the temporal variability of the Near Eastern ritual centrality. But we should be careful with expecting too much shifting in ritual basics and principles: more we have to expect such shifts in the human ritual expression. There might be a stronger continuity in ritual thinking between the Epipalaeolithic and Protohistoric times than the ritual performance in the archaeological record shows. Specifically, we should consider that the early sedentary religions of the Near East prepared the ground for the later religious traditions, a matter still ignored in Near Eastern archaeology.

Sedentary foragers should not be mistaken as representing Epipalaeolithic ritual life (keynote Schmidt), but instead they should be understood as having developed a site-bound incipient Early Neolithic ritual life using an Epipalaeolithic heritage. Large parts of Göbekli Tepe are not known yet, and many Göbeklis remain to be discovered: What if Göbekli has a residential PPNA nucleus *tepe* (for which the settlement debris appears to exist) that hosted group sanctuaries of local or sub-regional importance? What if many Göbeklis hosted buildings serving individual group identities under the umbrella of a supra-regional belief in a Late Epipalaeolithic tradition? Would that understanding meet more what we have to expect from an Epipalaeolithic substratum rather than the amphictyony concept borrowed from later religious developments?

For the south, or better: for LPPNB 'Ain Ghazal, I consider central sanctuaries used by all inhabitants of a settlement still a matter of debate, since some of the archeological interpretations can be questioned. But one may say that this hypothesis is more than likely to become confirmed. Such a stage of development would go along with the strong indications that we deal in 'Ain Ghazal already with a cone-shaped chiefdom, which we seem not to have in the other mega-sites (flat-topped chiefdoms). The mega-sites phenomenon (to which also sites like Ba'ja and Ghwair I belong as part of their settlement systems and interaction sphere, contrary to what Gary

Rollefson expresses in his keynote) could have witnessed both: the family ritual center (house shrines) as well as the community ritual center (settlement sanctuaries).

Reflection 5: On Ritual Practice

In the archaeological record of ritual we mostly deal with mortuary practices, magical practices and ritual architecture. A thorough comparative analysis of the many practices would help to identify shared ritual spheres, and to isolate centrality features from the more general ritual expression. While magical practices appear not to be relevant for the centrality discussion, mortuary practices and architectural expression are. The problem of using ritual practice as an aid to identify ritual centrality comes from the fact that evidences of ritual practice as of now still appear as mostly isolated or incomparable findings. Thus, ritual practice is addressed here just as a possible future source of understanding ritual centrality.

Comment

Ritual as Function, Ritual as Social Practice?

Bo Dahl Hermansen

Carsten Niebuhr Institute, University of Copenhagen <bodahl@hum.ku.dk>

Many thanks to the editors for inviting me to participate in this dialogue about "The Early Neolithic Origin of Ritual Centers" in Western Asia. In the invitation it is stated that during the early Neolithic the "increasing socio-economic complexity of the PPN, triggered by the various aggregation processes of a progressive sedentism, also used ritual and symbolic identities to support the corporate behaviour. This need for aggregation and new sedentary corporate identities created regional, collectively maintained and frequented centers promoting ritual unity. This ...is the view offered for wider discussion in the discipline". Here, definitions of 'ritual' and 'center' are apparently assumed to be clear. A similar attitude is found in the two key papers by Schmidt and Rollefson. At least both papers appear to take a common understanding of 'ritual' for granted. This is not entirely unproblematic, considering the recent (and no longer so recent) problematization of this concept within the scholarship of religion (e.g., Bell 1992), as well as in archaeology (e.g., Brück 1999; Christensen & Warburton 2002; Verhoeven 2002a, 2002b). Instead of problematizing 'ritual' and, hence, 'ritual centers', in light of recent scholarly debate, the key papers implicitly promote a view of 'ritual' as:

- 1) a social mechanism, the function of which is to glue together multiple 'segmentary societies' in an *Amphictyony*-like corporation with common ritual identity and corporate strategies of land use, hunting *etc.* (Schmidt); or
- 2) as a special kind of activity that facilitated social integration within an evolutionary trajectory (Rollefson).

In both cases, of course, this is with reference to 'religion'. With this view, 'ritual centers' become understood as foci of such activities, and their appearance and dis-

appearence is explained in terms of whether particular 'ritual practices' or 'ritual centers' at various levels of social integration fulfill their integrative purpose or not.

This is hardly a contribution to theoretical advance in the discipline. However, the two papers do offer useful reviews of empirical evidence, diagnostic of 'ritual centers' at various levels of integration. They also offer interpretations that may stimulate some, including myself, to rethink previously held views. However, they do not really help us to approach an understanding of 'ritual' or 'ritual centers' beyond function, or how these came into being. Perhaps, therefore, in light of recent developments in archaeological thinking, it is time to expand our quest, and ask if it is not possible to understand 'ritual' as social action and to subject it, as such, to archaeological enquiry. Such an understanding of ritual has been most pointedly formulated by Catherine Bell. In Ritual Theory, Ritual Practice (1992), Bell deconstructed the concept of ritual, rejected it as a universal category of 'sacred' as opposed to 'profane' or 'utilitarian' activity, and questioned its interest as a research topic. In contrast she introduced the concept of 'ritualization', denoting a strategic way of acting by which some practices in a given social system distinguish themselves vis à vis other practices as privileged, 'more important or powerful' (p. 90). Hence, ritualization can only be understood in its specific cultural context (p. 93). Marc Verhoeven has recently offered a helpful discussion and archaeological operationalization of these concepts, and a framework for analysis and interpretation which can help archaeologists to understand 'ritualization' as a strategic way of acting, 'rituals' or 'ritualized' activities as social practices in context, and to approach the study of such social dynamics in prehistory archaeologically (Verhoeven

2002a). This involves the mechanism of 'ritual framing' (p. 26f) which sets up contrasts between the activity in question and other social practices within the system by "creating a special place, a special time, and by the use of uncommon objects" (p. 27). Whereas such a framework should not be raised to iconic status, it certainly already has produced interesting results (*e.g.*, Verhoeven 2002b).

With this in mind, I feel tempted to ask if it might not be interesting to begin to reinterpret the archaeological evidence, reviewed in the two key papers, in terms of such recent approaches. This would shift the focus of investigation from function to social dynamics in context, and perhaps allow us to understand the reviewed material, not merely as indicators of 'ritual' or 'ritual centers', but in terms of the way it helped to mediate social differentiation in early Neolithic societies.

References

Bell C.

1992 *Ritual Theory, Ritual Practice*. New York/Oxford: Oxford University Press.

Brück J.

 1999 Ritual and Rationality: Some Problems of Interpretation in European Archaeology. European Journal of Archaeology 2.3: 313-344.

Christensen E.B. and Warburton D.A.

Theories, Definitions, and Goals: Obstacles and Openings for the Understanding of Neolithic Ritual. In: H.G.K.
 Gebel, B.D. Hermansen and C.H. Jensen (eds.), Magic Practices and Ritual in the Near Eastern Neolithic: 163-173. Studies in Early Near Eastern Production,
 Subsistence, and Environment 8. Berlin: ex oriente.

Gebel H.G.K., Hermansen B.D. and Jensen C.H. (eds.)

2002 Magic Practices and Ritual in the Near Eastern Neolithic.

Studies in Early Near Eastern Production, Subsistence, and
Environment 8. Berlin: ex oriente.

Verhoeven M.

2002a Ritual and its Investigation in Prehistory. In: H.G.K.
 Gebel, B.D. Hermansen and C.H. Jensen (eds.), Magic
 Practices and Ritual in the Near Eastern Neolithic: 5-40.
 Studies in Early Near Eastern Production, Subsistence, and Environment 8. Berlin: ex oriente.

2002b Ritual and Ideology in the Pre-Pottery Neolithic B of the Levant and Southeast Anatolia. Cambridge Archaeological Journal 12.2: 233-258.

Comment

Arguments for Broadly Contextualizing Ritual

Frank Hole

Yale University <frank.hole@yale.edu>

A Social Context for Göbekli Tepe – A Response to Klaus Schmidt

Göbekli Tepe is the clearest example of a site with structures signifying nondomestic social activities. The enormous labor of extracting the pillars from bedrock, shaping them, and lifting them into position is unprecedented for the PPN, let alone any other period for some thousands of years. What is equally remarkable is that a series of such structures was built, suggesting that they were sequential and that construction itself was the ritual. Once built, the structures – perhaps deliberately buried – were replaced with another building. In other words, one building was in use at any given time, and a new one was built according to some determined period of elapsed time or event. An alternate view is that several buildings were in simultaneous use, implying that more than one social unit met and interacted at Göbekli Tepe.

Both the physical location atop the highest local hill and the extraordinary nature of the buildings leave little doubt that they were intended to impress, but whether gods or man we cannot say. Clearly these structures could have served a number of roles, for examples as meeting places or for ceremonies or rituals. One can imagine huntergatherers meeting to organize a collective hunt and residing at the site for some time while they worked on a building. I see no way that work on one building, let alone, the dozen reported existing, could have been accomplished without large numbers of people over a period of many months if not years. Consequently, there should be evidence of this, although perhaps not on the hill itself. There are, for example, dozens of bedrock mortars (compare Natufian El Wad) at Göbekli Tepe and at Karahan, suggesting a lot of food processing (seeds or nuts) by many people. This evidence suggests an occupation in late spring when the wild cereals were ripe. I suggest that this may have been the terminal season of occupation that began during the early spring while the weather and working conditions for heavy labor were optimal, and foods were abundant.

Göbekli Tepe seems not to have had antecedents in the late Paleolithic of the region, insofar as it is known. This is not surprising because much of southeastern Anatolia was still rebounding from the Late Glacial Maximum.

In particular, it may have been too cold and arid to sustain a locally rich fauna and flora suitable for human exploitation. However, following the Younger Dryas, in the Climatic Optimum, there were optimal conditions for the spread of vegetation and with it, herds of herbivores. In this context one might see Göbekli Tepe as a celebration of seasonal abundance as herds of animals moved north with the ripening vegetation, available for slaughter by hunters massed for the occasion. The forms depicted on the stelae may have reflected the complexity of these periodic surges of wildlife. Wildlife also included ripening grasses which required massive labor over short periods to harvest efficiently. One may regard the structures as religious in nature, but equally they could just reflect the ebb and flow of life itself and provide the arenas for dancing and telling tales of hunts and times past. If large harvest had been undertaken, the structures may have been used, in part, for the storage of grain and perhaps dried meat.

There is a parallel to these ideas in the hunters of the American West, admittedly far removed in time and culture from Göbekli Tepe. The hunters congregated in camps that included hundreds of household units during the late summer when the bison were in their prime. Using tightly regulated hunts, the Indians slaughtered hundreds of bison that were immediately skinned and stripped of meat while they lay in the field. Taking advantage of the high temperatures, low humidity and strong wind, the Indians dried strips of meat for use throughout the winter. In preparation for the hunt and in celebration of its success they held dances and a religious ceremony known as the Sun Dance which was carried out in a circular enclosure that had a tall pole in the center to which celebrants attached themselves by cords inserted through their skin.

The circular form of ritual spaces and meeting houses is found in many cultures, as monuments like Stonehenge and Indian buildings of the American Southeast, or the kivas of the Southwest attest. The circular form is also commonly found in the late Epipaleolithic and the earliest Neolithic, so one may see the form as natural, even if the buildings at Göbekli Tepe are unusually elaborate.

The idea that there may have been an ancient amphictyony is interesting, especially as it incorporates notions of geographic space with cultural practices. All societies have geographic limits, often coincident with dialectic communities which, in turn, are likely to comprise an interacting, intermarrying population. Over the long-term, if they are to maintain biological viability, such groups must comprise a minimum of 400-500 people, well within the range where humans can recognize individuals as part of the group. My point is that if a central place existed, one would expect each such grouping to

have one. It would be interesting in this connection to try to chart the potential geographic range out from each center, using resource availability as one guide. Among settled farmers this might be a rather limited radius, say 30-50 km, whereas with hunters and gatherers it might be vastly larger, depending on seasonal shifts of resources whether game animals or ripening grain.

Ritual Centers in the Southern Levant – A Response to Gary Rollefson

Ritual architecture does not necessarily imply religion; for example, we construct "ritual" or "communal" architecture in which we play football or baseball. Rituals are sets of actions that are repeated at intervals according to strict formula which may entail ideas about spirits, gods, natural processes, or predictable order that ensures a desired outcome (as in games). I think it unwise, therefore, to link ritual inevitably to religion. Rollefson's suggestion of a two-part aspect to ritual – domestic and community – seems likely and while intuitively comfortable, is also empirically-based. It remains to be determined, however, whether this represents a sequence or is related to site size. There is no argument that the PPNB burials display elements of ritual. What is interesting, however, is that there are far from enough bodies to account for the populations at the sites. Where are the other bodies and what does their absence say about those who were treated through in-site burial?

Monumental architecture inspires awe and is often done in a competitive milieu where there is more than one player. The problem with the Jericho wall and tower is that there is no apparent "adversary" with the means to retaliate in kind or that inspired the Jericho wall. In short, one either thinks of aberrant individual megalomania or something more mundane, such as protection against floods. It is hard to find a context for a structure that is a sample of one. In this sense, we are better able to assess the Göbekli Tepe-type structures because they lack domestic features, occur at more than one site and there are some possible antecedents.

Terminology can only be resolved when we can identify function. Until then, "non-domestic structures" may be the most suitable designation. In a preoccupation with structures one should not ignore non-domestic and potentially ritual spaces, such as plazas. Clearly, where there is evidence of burial crypts or storage or caching we need not equivocate, but in many cases "non-domestic" should serve. This does not preclude making allusion to parallels, such as *kivas* that, depending on size, may serve either a family/clan or the community. 'Ain Ghazal's circular/apsidal structures resemble kivas, structures that serve a range of activities beyond religious ones.

Stones, Walls, and Rituals

Zeidan A. Kafafi

Institute of Archaeology and Anthropology, Yarmouk University, Irbid <zeidank@yahoo.com>

The two papers discussed below study the origins of the ritual centers in the Ancient Near East. Before starting to discuss the information presented by Gary Rollefson and Klaus Schmidt, it may be suggested that the whole concept of "ritual centers" which were established during the Neolithic should be questioned. This is the aim of this dialogue. Moreover, several questions and inquiries must be raised, such as: why were the Neolithic people the initiators of building up such ritual centers? What were the reasons behind such an ideological change? Did this new achievement have something to do with a change of way of life? Is it related to climatic or/and economic changes during the Neolithic period which had a very big influence on the survival of people? Could it be related to the development of the level of social life and thought? Can we describe it as an ideological change?

These questions need to be answered before starting discussing the origin of the Neolithic ritual centers.

Moreover, even if the participants in this dialogue agreed upon having Neolithic "ritual centers", one would still suggest that those built up in Anatolia were different from those in the Levant, not only in date and the way of construction but perhaps also in the concept behind building such structures. This is due to the facts: first published by the excavators of the Neolithic sites at Urfa region (Schmidt 2001; Özdoğan and Başgelen 1999) and repeated by Schmidt (cf. his paper under review). The buildings assigned to hunters and gatherers excavated at Hallan Çemi, Göbekli Tepe and Nevalı Cori are earlier in date than those found at all Neolithic sites that yielded ritual building belonging to farming communities and excavated in the Levant (cf. Rollefson's paper herein). Thus, and due to the differences in time, type of economy and social level, it may be deduced that the ideology of the Anatolian Neolithic builders of such buildings is in a way or another different from the ideology behind those in the Levant.

To enforce their idea that "ritual centers" were established during the Neolithic, the authors tried to compile pieces of several archaeological evidence published by the excavators of the Natufian and Neolithic sites excavated either in the Levant or in Anatolia. For example, Schmidt writes that there is no evidence of ritual centers belonging to a period earlier than the 10th millennium BC, and what has already been explored in Anatolia belongs to the Neolithic period. Actually, Rollefson also

denies the idea of having any cultic structure found at a Natufian site in the Levant.

Let us now discuss each of the two papers separately:

Rollefson

According to Rollefson, a "cult building" is the one that housed religious ceremonies. In his study he examines the changes in ritual activity starting from the Natufian to the end of the LPPNB, and bases his discussion on studying the changes in architectural styles, burial practices, and art objects. He tries to correlate these three factors with the social change that took place in the Levantine Neolithic societies.

As regards the Natufian, Rollefson denies that either Mallaha or Wadi Hammeh 27 produced a building that may be described as a "cultic center". If this is true, then what about the artistic objects excavated at several Natufian sites such as Umm Zweitineh and the decorated decapitated skulls found at Mallaha? (Cauvin 1994, 1978). We think that such artistic objects are indirect indicatives for some kind of ritual practices rather than exhibiting only artistic skills.

To turn to the PPNA ritual centers, Rollefson presents a study of the communal architecture which was unearthed at Jericho. He mentions what Bar-Yosef published concerning the exposed tower at the same site which was perhaps of a ritual nature (Bar-Yosef 1986: 161). However, and as Rollefson assures in his study, this claim is still debatable and under examination.

Rich information about rituality which has been obtained from the excavated MPPNB sites spread all over the Levant is presented by Rollefson. This richness is reflected in the architectural remains, burial practices and customs, and artistic objects. Some architectural features which have been excavated at Jericho and Beidha and were published as non-domestic buildings by the excavators are discussed.

We assume that Rollefson is completely right by using the plastered skulls excavated at several MPPNB sites in the Levant as an indication of ritual practices. However, to add to what has been suggested by Schmandt-Besserat and Bonogofsky, it may be proposed that those skulls belonged to high-ranking people in the society or heroes regardless of their sex.

Several artistic objects such as the masks excavated at the sites of 'Ain Ghazal, Basta and Nahal Hemar should

be considered as clear evidence of some kind of ritual activities or even cults.

Despite the fact that Rollefson offers MPPNB archaeological evidence of ritual practices, we are not completely convinced that those sites served as ritual centers. If they were centers, then several other contemporaneous sites must be found in the vicinity of those centers. For example, the excavated major MPPNB sites in Jordan are very few in number ('Ain Ghazal, Abu el-Hudhud, Wadi Rum, Beidha, and Shekaret Mes'ied), and as far as we know there are no other MPPNB sites found in their surroundings. Thus, the use of the term "sacred on-site buildings" seems more acceptable for such sites excavated in the Levant dating from the MPPNB.

Nevertheless, we argue that the presence of ritual centers in the Levant became clearer during the LPPNB. Based on the archaeological evidence belonging to this period, most of the information offered by Rollefson is deduced from the results of the 'Ain Ghazal excavations. There, curvilinear, rectilinear and apsidal buildings defined as ritual buildings were uncovered (Rollefson and Kafafi 1996). We agree with Rollefson that the excavated curvilinear structures in the North Field at 'Ain Ghazal give the impression that they were not built for domestic use. But it must be noted that unfortunately no archaeological objects described as cultic or ritual objects were found inside those buildings.

Our own personal observation suggests that, in the southern Levant (Jordan and Palestine) villagers used to and are still building special houses in which they gather in the evenings, known as *diwan* or *madhafa*. In this room a fire-place is built in the center of the floor and people use to sit around it and chat about all kind of subjects. Also, it should be mentioned that each clan of the village has its own *diwan* or *madhafa*. It is worth noting here that it has been suggested that the site of 'Ain Ghazal was occupied by several clans during the LPPNB (Kafafi 2004).

Usually this room does not contain any household equipment except those used to make tea or coffee, as well as carpets and mattresses for sitting. However, sometimes and especially in the winter people used to pray inside the *diwan* instead of going to the mosque. Therefore, it may be argued that the excavated nondomestic houses in the Levant may have had a socio-ritual function. If this was the case at 'Ain Ghazal, it means that the site was never used as a ritual center in the strict sense of the term.

Schmidt

Klaus Schmidt, the excavator-in-chief of Göbekli Tepe, mentions that the majority of the excavated 10th and 9th millennia structures cannot be classified as residential and the site never served as a village settlement.

In describing a Neolithic "ritual center", Schmidt argues that it is clearly different from other settlements because of their distinct geographical setting and the type of the excavated archaeological material inside them. The T-shaped pillars carved with several figures found at Göbekli Tepe represent a clear indication of an ideology that may be explained as ritual. This type of monoliths reminds us of the *menhirs* or *messebots* which are dated to the historical periods. Scholars argue that these upright erected stones have had a ritual function. For example, Early Bronze Age (ca. 3500-2000 BC) people in Canaan used to visit the places were these *menhirs* were built and perform their prayers in front of these megalithic stones (Worschech 2002; Körber 1994; Grässer 1972; Albright 1934). Furthermore, those Early Bronze megalithic features were built in areas outside the settlements and were visited by people who lived in their vicinities (Zarins 1977). This may support Schmidt's argument that the site of Göbekli Tepe has to be seen as a "ritual center". As Schmidt notes, "ritual centers" in Anatolia started as early as the 10th millennium BC at Hallan Çemi. Furthermore, ritual buildings were also excavated at Catal Hüyük which is dated to the end of the 7th and the 6th millennia BC. The excavator of Çatal Hüyük proposed that it might have served as a ritual center for its surrounding regions (Hodder 1996; Hodder and Mathews 1998; Mellaart 1967).

The term "amphictyony" used by Schmidt to identify isolated temples or ritual buildings fits very well with the site of Göbekli Tepe. Isolated temples are also known from the Late Bronze Age period (ca. 1550-1200 BC) in Jordan. Best examples may be offered from the Amman Airport temples in the vicinity of the modern city of Amman (Herr 1983, 1977a-b, 1976) and Al Mabrak (Yassine 1988).

The area between the upper courses of the Tigris and Euphrates rivers has become during the last decades a target for scholars studying the Neolithic period. The results of excavations conducted at several sites such as Göbekli Tepe and Nevalı Çori have produced considerable archaeological evidence of the first steps of an ideological change amongst the Neolithic communities who lived in that region. Instead of carving "Venus" figurines or painting the walls of caves as in the Upper Palaeolithic of Europe, people in the Upper Tigris and Euphrates region had their own "ritual centers" in the 10th millennium BC. In the meantime, the Natufians of the southern Levant continued to produce human and animal figurines that may indicate ritual practices. This leads us to the question: Did people worship GOD(S) before knowing what "God" means?

To sum up, we agree with Rollefson and Schmidt that people had always performed ritual practices in different ways and styles. But when it comes to the use of the term "ritual centers" it may be suggested that it differed in Anatolia from what it was in the Levant in the way of

understanding it. To explain, we assume that in the Urfa region, it is clearly evident that sites like Göbekli Tepe might have served as a regional ritual center, while 'Ain Ghazal functioned only as a local one.

It should be acknowledged that the information presented by Rollefson and Schmidt is of great importance and opens new doors for scholars studying the Neolithic and the Neolithisation. We would like to seize this opportunity to congratulate both colleagues on their sincere efforts in following a scientific approach and making available all this information for scholars to consider, and the people in charge of the newsletter *Neo-Lithics* for publishing all information related to the Neolithic.

References

Albright W.F.

1934 Sounding at Ader. Bulletin of the American Schools of Oriental Research 53: 13-18.

Bar-Yosef O.

1986 The Walls of Jericho: An Alternative Interpretation. *Current Anthropology* 27 (2): 157-162.

Cauvin J.

1994 Naissance des divinités, naissance de l'agriculture. Paris.
1978 Les premiers villages de Syrie-Palestine du IXème au VIIème millénaire avant J.-C. Lyon.

Graesser C.F.

1972 Standing Stones in Ancient Palestine. *Biblical Archaeologist* 35: 34-63.

Herr L.G. (ed.)

1983 The Amman Airport Excavations, 1976. Annual of the American Schools of Oriental Research 48.

Herr L.G.

1977a Amman Airport Destroyed. *Biblical Archaeologist* 40: 135.

1977b The Amman Airport "Temple", 1976. Newsletter of the American Schools of Oriental Research 2: 1-4.

1976 The Amman Airport Excavations, 1976. *Annual of the Department of Antiquities of Jordan* 21: 109-111.

Hodder I. (ed.)

1996 On the Surface: Çatalhöyük 1993-95. Cambridge and London: McDonald Institute for Archaeological Research and British Institute of Archaeology at Ankara.

Hodder I. and Matthews R.

1998 Çatalhöyük: The 1990s Seasons. In R. Matthews (ed.),

Ancient Anatolia: Fifty Years' Work by the British Institute
of Archaeology at Ankara: 43-51. London: The British
Institute of Archaeology at Ankara.

Kafafi Z.

2004 The 'Collapse' of the LPPNB Settlement Organization: The Case of 'Ain Ghazal. In H.-D. Bienert, H.G.K. Gebel and R. Neef (eds.), Central Settlements in Neolithic Jordan: 113-118. Studies in Early Near Eastern Production, Subsistence, and Environment 5. Berlin: ex oriente.

Körber C.

1994 Monolithic Pillars in Jordan and the 1992 Excavations at Dhra'. In S. Kerner (ed.), The Near East in Antiquity: Archaeological Work of National and International Institutions in Jordan, Vol. IV: 65-75. Amman: German Protestant Institute for Archaeology. Al Kutba Publishers.

Mellaart J.

1967 *Çatal Hüyük: Neolithic Town in Anatolia.* New York: McGrew-Hill.

Özdoğan M. and Başgelen N.

1999 Neolithic in Turkey: The Cradle of Civilization. New Discoveries. Ancient Anatolian Civilizations Series 3.
 Istanbul: Arkeoloji ve Sanat Yayınları.

Rollefson G. and Kafafi Z.

1996 The 1995 Season at 'Ayn Ghazal: Preliminary Report.

Annual of the Department of Antiquities of Jordan 40:
11-28.

Schmidt K.

2001 Göbekli Tepe and the Early Neolithic Sites of the Urfa Region: A Synopsis of New Results and Current Views. Neo-Lithics 1/01: 9-11.

Worschech U.

2002 Cromlechs, Dolmen und Menhire. Beiträge zur Erforschung der antiken Moabitis (Ard el-Kerak).
 Theologische Hochschule Friedensau. Frankfurt/M.: Peter Lang.

Yassine K.

1988 Archaeology of Jordan: Essays and Reports. Amman: University of Jordan.

Zarins J.

1977 Rajajil: A Unique Arabian Site from the Fourth Millennium BC. *Atlal* 3: 73-77.

The Materiality of Ritual on the Social Landscape: Questions and Issues Ian Kuijt

Department of Anthropology, University of Notre Dame <ikuijt@nd.edu>

The authors are to be congratulated for directing renewed attention towards the spatial organization of ritual and social organizations on the Neolithic landscape. Detailed discussion and analysis of the Neolithic social landscape are long overdue, as our reconstructions have tended to be settlement-based, with limited consideration of the potential interconnections within and between communities. At the core of these two essays are a series of critical unexplored questions. First, there is the question of whether or not ritual centers existed in the Neolithic? Second, if ritual centers did exist in the Neolithic, then what criteria can be used by archaeologists to identify them? Third, what were the social, ritual, and political contexts in which such centers were situated?

Criteria: How Do Archaeologists Identify and Define Ritual Centers?

How do we identify and define ritual centers, structures and activity areas? In his essay Klaus Schmidt explores what makes a settlement a ritual center. In Gary Rollefson's essay the central debate is what makes a structure a "family ritual center at the household level", or to put it another way, how do we identify ritual activities within a settlement? These are, without question, the critical material foundations upon which any discussion of ritual centers must be initially situated. It is, in fact, the task of individual excavators using these terms to explicitly outline for other experts how a specific pattern differs from other known patterns at the site they are excavating, and just as importantly, why this patterning is sufficient to support arguments to warrant the labeling of a structure or site as being ritually focused. The two authors, needless to say, provide important first steps in moving us towards this goal.

It is very helpful, for example, when Schmidt presents an explicit list of objects and iconographical motifs that he views as important to understanding possible shared relationships between Göbekli Tepe and other settlements. Clearly similar material culture highlights the past existence of some form of social and economic interface between people within many of these communities. Having noted this, I am not convinced that these shared practices support the argument that Göbekli Tepe was a regional ritual center. He notes that none of this would have been possible without significant control of labor: a point that I strongly agree with. I agree, moreover, that

these patterns reflect social connections, but it remains to be demonstrated that such materiality (especially the similar use of imagery noted) support a model of a seasonal pulsing of people into and out of Göbekli Tepe as a regional ritual center, rather than shared artistic, iconographic and architectural styles. Along other lines Schmidt argues, "Given the monumental pillars and stone circles, as well as the sort of sculptures and reliefs found there, it could hardly be classified as anything other than as a sacred site". If I understand his argument correctly, it is the issue of scale of structures and imagery that sets Göbekli Tepe apart from other settlements. Does this mean it is not a residential site? Why should it not be both? Although largely focused at a much smaller scale, Rollefson also provides an understanding of how architectural differences in Levantine Neolithic communities, and specifically 'Ain Ghazal, can potentially be used to identify the past location of ritual activities. In many ways this is a more complex challenge because at times the architectural differences are subtle and may be related to changing building function.

Tracking Ritual: Scale and Context

Depending upon how you read the two papers, the two authors focus our attention on ritual at two very different scales: structural and regional. The fact that their discussions flow between the regional to structural scale is entirely understandable and should not unnerve the reader. This, in fact, accurately reflects debate among researchers today as to the materiality of ritual. So what are the materials correlates for ritual? Under what conditions should we be looking at the scale of material objects, distinct activity areas, structures, individual settlements or the scale of the region? Rollefson spends major portions of his essay addressing how individual structures at different settlements, such as 'Ain Ghazal, Beidha and Jericho, were the focus of ritual activity. For example, he argues that at 'Ain Ghazal the six apsidal buildings may have served as "a ritual center for one or more houses that were occupied by related families". Elsewhere Rollefson (1998) notes how these buildings differ from other structures within the settlement. What remains elusive, however, is an understanding of what kinds of activities occurred in these buildings, why we should label them as ritual versus domestic structures, and perhaps critically, if more rigid and formal terms

such as 'temple' can be applied to Neolithic structures.

Schmidt focuses on a very different scale of analysis: the site as a regional center for social and ritual life. Schmidt shifts the focus of discussion back to the importance of intra-site patterning, and understandably devotes considerable time to the question of how this helps us understand the current situation. From his perspective Göbekli Tepe was a place where people came together on specific ritual occasions, presumably seasonal, and that this form of ritual economy had a catchment of 200 km radius around Göbekli Tepe and involved many of the most important Neolithic sites known.

I am sure that Rollefson is correct when he argues that specific buildings are different in organization, design, and building materials. I believe that further study is required, however, before arguing that differences are sufficient to determine that a specific structure was built and used for dedicated ritual purposes, let alone applying terms such as temple. Should these be termed 'ritual structures'? Or be viewed as domestic dwellings? Alternatively, should we devote time to develop models that envision how people in the past used space in a flexible integrated manner? To his credit, Rollefson does address some of these issues elsewhere (Rollefson 2004), and I think that it is critical that in the future researchers move forward in their considerations of how we can develop integrated social models of Neolithic ritual practices, and how or if such practices are observable through material culture.

Ritual Centers? Where Is the Center and Where Is the Outside?

In adopting the term 'ritual center' we are invoking an interpretative model of opposition between core-periphery zones, or as Schmidt points out, a central place model. My question is very simple: central to what? Similar to Gebel's (2004) discussion of the LPPNB mega-sites, I think that to be convincing arguments for a ritual center, be it Göbekli Tepe or Kfar HaHoresh, must both employ explicit criteria for identification, as well as articulate the social, economic, and ritual relationships of these settlements versus other ones. If some of the sites discussed by the two authors are ritual centers, then what did things look like outside of these settlements? This is a critical consideration, one that has only recently received attention by researchers (see Bienert 2004; Gebel 2004; Hole 2000; Kuijt 2004; Rollefson 2004; Simmons and Najjar 2004 for important considerations of related topics).

How might ritual and social systems change through time? And can this be seen on the landscape? This is, needless to say, a topic beyond that asked of Rollefson and Schmidt, and they are not to be held accountable for this. Having noted this, I want to briefly draw our attention to this question and argue that until demonstrated otherwise, we need to assume that ritual and social systems were dynamic, changing, and likely different for different periods of time. Contrary to the monolithic social and ritual model of Cauvin (2000), we need to demonstrate regional continuity through time in social and ritual practices, rather than assume that it existed. This is particularly important when thinking about regional ritual, political and economic systems through different periods. I have previously argued (Kuijt 1994) that there was sufficient archaeological evidence to recognize a form of settlement hierarchy in the PPNA. While overstated on some levels (I now believe that there was considerable economic and political independence within and between regional settlements), I still believe that part of this argument is on the money: select settlements in the PPNA, such as Jericho, probably existed as a regional focal point for social and ritual practices. Does this mean that Jericho served as a 'ritual center'? As Hole (2000) points out, this is a more difficult question and depends on what criteria are employed and how one defines this term. Whatever position one takes on this, it is clear that we have to be very careful in using these terms for different periods let alone geographical areas. We need, in short, to build interpretive models for individual periods and places.

In many ways the core premises to this forum is that ritual centers existed in the past. I wonder, however, to what extent we have gotten ahead of ourselves in the search for ritual centers. Do we have a solid understanding of regional settlement systems through time? To what extent are we focused on the process of labeling ritual, rather than developing interpretative models that recognize the co-existence and integration of ritual, economy, and residence in Neolithic life? While my view on these questions appears to differ from Schmidt and Rollefson, their direct discussions of these issues are to be applauded for advancing our understanding and debate in several important ways.

References

Bienert H.D.

2004 The Pre-Pottery Neolithic B (PPNB) in Jordan: First Steps Towards Proto-Urban Societies? In H.D. Bienert, H.G.K. Gebel and R. Neef (eds.), Central Settlements in Neolithic Jordan: 21-40. Studies in Early Near Eastern Production, Subsistence, and Environment 5. Berlin: ex oriente.

Cauvin J.

2000 The Birth of the Gods and the Origins of Agriculture. Cambridge: Cambridge University Press.

Gebel H.G.K.

2004 Central to What? The Centrality Issue of the LPPNB Mega-Site Phenomenon in Jordan. In H.D. Bienert, H.G.K. Gebel and R. Neef (eds.), Central Settlements in Neolithic Jordan: 1-19. Studies in Early Near Eastern Production, Subsistence, and Environment 5. Berlin: ex oriente.

Hole F.

2000 Is Size Important? Function and Hierarchy in Neolithic Settlements. In I. Kuijt (ed.), Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation: 191-209. New York: Kluwer Academic/Plenum Press.

Kuijt I

1994 Pre-Pottery Neolithic A Period Settlement Variability: Evidence for Sociopolitical Developments in the Southern Levant. *Journal of Mediterranean Archaeology* 7(2): 165-192.

2004 When the Walls Came Down: Social Organization, Ideology and the "Collapse" of the Pre-Pottery Neolithic. In H.D. Bienert, H.G.K. Gebel and R. Neef (eds.), Central Settlements in Neolithic Jordan: 183-199. Studies in Early Near Eastern Production, Subsistence, and Environment 5. Berlin: ex oriente.

Rollefson G.O.

2004 The Character of LPPNB Social Organization In: H.D. Bienert, H.G.K. Gebel and R. Neef (eds.), Central Settlements in Neolithic Jordan: 145-155. Studies in Early Near Eastern Production, Subsistence, and Environment 5. Berlin: ex oriente.

Simmons A.H. and Najjar M.

2004 Regionalism During the Neolithic: An Essay on the Case for Diversity in Jordan. In H.D. Bienert, H.G.K. Gebel and R. Neef (eds.), *Central Settlements in Neolithic Jordan:* 233-240. Studies in Early Near Eastern Production,
Subsistence, and Environment 5. Berlin: ex oriente.

Comment

The View from the End of the Trajectory

Thomas E. Levy

Department of Anthropology, University of California, San Diego <tlevy@ucsd.edu>

Both Gary Rollefson and Klaus Schmidt are to be commended for their research commitment concerning the early Neolithic in two markedly different regions of the eastern Mediterranean. Their discoveries have markedly changed traditional scholarly understanding of 'what happened' during the Neolithic period in the Middle East. My comments are made from the perspective of research conducted at the tail end of the process that led to the rise of ritual centers in the eastern Mediterranean – namely, the Chalcolithic period (ca. 4500-3600~BC) in the southern Levant.

When comparing the 10th and 9th millennium BC Neolithic from the two research areas – Rollefson working in the southern Levant, and Schmidt's work in Anatolia – one is struck by the profound differences between the material culture record that characterizes these areas. Everything in Anatolia is on a larger scale than what is found in the southern Levant – whether we are considering the village size, production, or evidence for ritual architecture. Anatolia and its achievements seem to dwarf the southern Levant in much the same way that the Ottoman Empire towered over the polities of their southern neighbors during the historic 15th to early 20th centuries. This seems to be the case for the entire archaeological record of Anatolia compared to that of the southern Levant. The new evidence from Göbekli Tepe for 'megalithic' scale architecture with ritual reliefs and symbolic decoration are unequivocal – large numbers of people were required to build and erect the T-

shaped pillars at this site on a scale that dwarfed social projects in the preceding period. While Schmidt suggests this kind of social project 'may have been as vast in scale as the construction of the Obelisks in Pharaonic Egypt,' a more sober and appropriate general parallel would be the construction of megalithic monuments in Europe, and in particular, those in Neolithic Wessex at places such as Stonehenge and Avebury (Renfrew 1973). Unlike the Wessex sites, which have been mapped and excavated for over 200 years, explorations at Göbekli Tepe are still in their infancy. Thus, the jury is still out as to whether there is or there is not evidence of domestic habitation at the site. To tackle this problem, a rigorous excavation sampling design is needed to explore the site in a systematic manner. Clarifying the question of domestic space at Göbekli Tepe will have a profound impact on Schmidt's (2005 and this volume) assertion that early Neolithic ritual centers evolved before the emergence of sedentism and all the social reconstructions that go with it.

With the exception of PPNA Jericho, the kind of monumental architecture unequivocally linked to ritual activity observed in Early Neolithc Anatolia is absent in the southern Levant. Thus it is much more difficult to find the kind of Early Neolithic evidence for regional integration, so apparent at sites like Göbekli Tepe in Anatolia, in the southern Levant in the PPNA through PPNC sequence. There is a consensus amongst researchers that "non-domestic" buildings and spaces existed at south

Levantine Early Neolithic villages such as Beidha (Byrd 2005), 'Ain Ghazal (Rollefson 2000), and others. What these non-domestic spaces were used for is up for interpretation but they seem to have functioned on the local village level. While Rollefson admits his suggestions for ritual architecture at 'Ain Ghazal in the MPPNB are based on extremely small excavation samples (ca. 200 m²), his suggestion that there is evidence of 'definitive ritual architecture' in the LPPNB is still open to question. From the published reports, it seems that the 'Ain Ghazal buildings identified with ritual activities were found void of ritual objects. Without the discovery of unequivocal ritual remains on the floors or in the fills associated with buildings identified as cultic or ritual, the leap from the profane to the sacred can not be made without serious caveats. The spectacular plaster statues from 'Ain Ghazal have not been found in clear contextual proximity to the buildings identified as ritual. This is a problem. At my own excavations at Chalcolithic Gilat (Levy in press), following Renfrew's (1985) suggestions for an 'archaeology of cult,' rooms were only interpreted as cultic if they were found with demonstrably argued ritual objects such as figurines, ritually defined ceramics, 'incense' burners, and other objects. In the Chalcolithic context at Gilat, using petrography and source identification, hundreds of the small ritual objects were shown to come from a wide range of source areas throughout southern Israel and Jordan - over a 200 km radius from Gilat. Based on these data for inter-regional interaction, it is possible to build a model of panregional ritual integration, that I believe, is not yet possible for the Early Neolithic as it is for the Chalcolithic period.

As Alan Simmons (2000) points out, with the growth of the LPPNB 'mega-sites' such as 'Ain Ghazal, there is an apparent non-existence of 'smaller "hamlets" or support sites.' He and others relate the growth of these huge sites to the process of population agglomeration in the context of population movement from the west into Jordan. Similarly, according to Rollefson and others (this volume and Gebel & Hermansen 2000: 20), LPPNB domestic architecture, at 'Ain Ghazal and other Jordanian sites, had taken on a "pueblo"-like organization, with structure blocks that housed multiple families in contrast to the single-family dwellings of the MPPNB (Rollefson 1997). The pueblo analogy seems most appropriate for characterizing the LPPNB and perhaps the MPPNB as well. The conundrum for south Levantine prehistorians researching PPN social organization (and the structure of ritual organization is deeply linked to this), is the seeming absence of the smaller hamlets or satellite sites surrounding the PPN mega-sites. Long ago, Carneiro (1981) observed that regional polities or chiefdoms were organized along political principles, markedly different from the autonomous village sites and characterized by two-tier settlement hierarchies with centers that coordinated economic, ritual, and political life. The absence of PPN two-tier settlement hierarchies and local ritual practice that focused on the 'skull cult' and plaster ancestor figures suggests that the rise of the PPN south Levantine mega-sites arose not as inter-regional ritual or socio-political centers (something that might be argued for Early Neolithic Anatolia), but as Simmons and other have suggested, centers of refuge for populations from the west. The kind of rank political organizations that evolved in the following Chalcolithic period, were not achieved during the LPPNB when people were coping with the influx of larger populations over a punctuated period of time.

References

Byrd B.F.

O05 Early Village Life at Beidha, Jordan: Neolithic Spatial Organization and Vernacular Architecture. British Academy Monographs in Archaeology. Oxford: Council for British Research in the Levant / Oxford University Press.

Carneiro R.L.

1981 The Chiefdom: Precursor of the State. In G.D. Jones and R.R. Kautz (eds.), *The Transition to Statehood in the New World:* 37-79. Cambridge: Cambridge University Press.

Gebel H.G.K. and Hermansen B.D.

2000 The 2000 Season at Late PPNB Basta.

Neo-Lithics 2-3/00: 20-22.

Levy T.E. (ed.)

in press Archaeology, Anthropology and Cult: The Sanctuary at Gilat, Israel. London: Equinox.

Renfrew C. (ed.)

1985 *The Archaeology of Cult: The Sancturary of Phylakopi.*London: The British School of Archaeology at Athens,
Thames and Hudson.

Renfrew C.

1973 Monuments, Mobilization and Social Organization in Neolithic Wessex: in C. Refrew (ed.), *The Explanation of Culture Change: Models in Prehistory*. London: Duckworth.

Rollefson G.

Changes in Architecture and Social Organization. In H.G.K. Gebel, Z. Kafafi and G.O. Rollefson (eds.), *The Prehistory of Jordan, II: Perspectives from 1997:* 287-307.
 Studies in Early Near Eastern Production, Subsistence, and Environment 4. Berlin: ex oriente.

Rollefson G.

2000 Ritual and Social Organization at Neolithic 'Ain Ghazal.
 In I. Kuijt (ed.), Life in Neolithic Farming Communities:
 Social Organization, Identity, and Differentiation:
 165-190. New York: Kluwer Academic/Plenum Press.

Schmidt K.

2005 Die "Stadt" der Steinzeit. In H. Falk (ed.), Wege zur Stadt: Entwicklung und Formen urbanen Lebens in der alten Welt. Vergleichende Studien zu Antike und Orient 2: 25-38. Bremen. Simmons A.H.

2000 Villages on the Edge: Regional Settlement Change and the End of the Levantine Pre-Pottery Neolithic. In I. Kuijt (ed.), Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation: 211-230. New York: Kluwer Academic/Plenum Press.

Comment

About "Hieroglyphs" - A Neolithic System of Sacred Symbols

Denise Schmandt-Besserat

Center for Middle Eastern Studies, University of Texas at Austin dsb@mail.utexas.edu

Klaus Schmidt's discussion of "Neolithic hieroglyphs" - in the sense of Neolithic sacred signs - reminds me of a conversation with I. J. Gelb, the author of A Study of Writing, during a visit to the Oriental Institute of the University of Chicago in the late 1970s. Gelb was of the opinion that tokens might not be the only precursor of the cuneiform script but that other parallel symbolic systems could have converged to create writing. At that time there was no evidence to support Gelb's view. Namely, the systematic studies of pottery motifs by Perkins (1963) and of glyptic designs by Frankfort (1971) had failed to show any convincing link to cuneiform signs. Indeed this remains true in the light of latest pottery and glyptic studies. (Collon 1987). However, the recent identification of "Neolithic hieroglyphs" repeatedly found in a ritual context in different sites, drawn in the same technique, form and style and in recurring clusters, suggests that the Neolithic cultures created at least two major symbolic systems. The first to be studied was the token system, which from the 8th millennium BC served to count and record concrete, daily life units of staple goods (Schmandt-Besserat 1996). Now it has become apparent that a second parallel symbolic system existed to express the intangible. This new discovery might well prove Gelb's insight to be right.

When writing appeared, ca. 3200-3000 BC lists of goods transacted including farm products (grain and animals), raw materials (wool, wood, metal), finished products (oil, bread, perfume), as well as manufactured goods (furniture, tools, textiles) were entered on the Uruk tablets with signs that derived from 4th Millennium urban tokens, and ultimately from the age-old Neolithic tokens. In my forthcoming book, *After Writing*, I will show that, ca. 2700 BC, writing finally reached beyond accounting to serve funerary, votive and dedicatory functions. As con-

ceived by Gelb, the signs necessary to fulfill these new religious roles could conceivably have been drawn from repertories of symbols that also had their roots deep in prehistory.

A systematic catalogue of the abstract and animal designs left in the Neolithic cult centers will be necessary to probe this hypothesis. Perhaps André Leroi-Gourhan's exhaustive study of Paleolithic wall art in France and Spain, which not only records the shape of individual signs but also their associations, context and location, can provide a valuable model.

References

Collon D.

1987 First Impressions: Cylinder Seals in the Ancient Near East. London: British Museum Publications.

Frankfort H.

1971 Cylinder Seals. London: McMillan & Co.

Gelb I.J.

1952 A Study of Writing. Chicago: University of Chicago Press.

Leroi-Gourhan A.

1971 Prehistoire de l'Art Occidental. Paris: Editions d'Art Lucien Mazenod.

Perkins A.L.

1963 The Comparative Archaeology of Early Mesopotamia. Studies in Ancient Civilization 25. Chicago: University of Chicago Press.

Schmandt-Besserat D.

1996 How Writing Came About. Austin: University of Texas Press.

forthcoming After Writing: The Interface between Writing and Art. Austin: University of Texas Press.

The Centrality of Neolithic Ritual

Marc Verhoeven

The University of Tokyo <marcverh@um.u-tokyo.ac.jp>

Introduction

Ritual and religious practices and associated material symbolism, be it in an anthropological or an archaeological context, are among the most fascinating aspects of human society. Perhaps this is foremost because it is in ritual and religion that we often enter very strange worlds and come upon objects that defy direct functional explanations, inviting us on intellectual travels that can be extremely rewarding. Therefore, it is a pleasure to enter into dialogue with two colleagues who have extensively excavated at and published about, respectively, 'Ain Ghazal and Göbekli Tepe. Their important work has provided valuable and fascinating evidence of aceramic Neolithic ritual and symbolism, furthering our understanding of early Neolithic society in the southern Levant and Upper Mesopotamia, respectively. Mainly taking these key sites as points of departure, Rollefson's and Schmidt's papers present clear overviews of probable ritual centers in these regions, enriched by (hypo)theses concerning the roles of such places. This review will first present comments regarding both papers, followed by some general remarks about the role of ritual in the Near Eastern Neolithic.

The Southern Levant

Rollefson presents us with a clear and convincing diachronic overview of 'special' buildings in the southern Levant. Obviously, these buildings are different from surrounding contexts and have a number of special – non-domestic – features which suggest ritual functions. He also provides an intricate analysis in which ritual practices and changes therein are related to socio-economic developments in the various aceramic Neolithic periods. A number of important interpretative issues raised invite the following comments and remarks.

First, although Rollefson points out that the manipulation of human skulls in the Pre-Pottery Neolithic could have had various – not mutually exclusive – meanings, he explains these practices in his analysis almost solely in terms of ancestor veneration. It is indeed very likely that detached, decorated, cached, etc. human skulls referred to ancestors, but there is much archaeological and anthropological evidence indicating that there was/is more to human skulls. Thus, it could be argued that, while ancestors, as mythical persons, were probably wor-

shipped in the Pre-Pottery Neolithic, human skulls, plastered as well as unplastered, were perhaps especially honoured because they were the seat of life-force, which could be used to ensure fecundity – to the fields, domesticated animals and women – and well-being (Verhoeven 2002b). Moreover, apart from ancestors, skulls may have been selected for special treatment because some persons were regarded as cultural heroes (perhaps successful hunters). And what about the links between human and animal skull manipulations at Kfar HaHoresh? In sum, Rollefson is most likely on the right track, but it would seem that the traditional ancestor interpretation could be developed further to get more out of it. Also, other explanations for the manipulation of human skulls could be explored.

Second, in Rollefson's account Late PPNB 'megasites' feature prominently in explaining the emergence of ritual centers. The idea is that ritual buildings at these sites, believed to have housed very considerable populations, served to integrate communities which lived in times of social and economic stress. Elsewhere (Verhoeven in press), I have critically assessed the 'megasite phenomenon', and found that, at the moment, there is no secure evidence to argue for the existence of huge settlements and related large populations. If we look, for instance, at the excavated areas of these large sites, it appears that 'only' around 0.04 % (Wadi Shu'aib) to 2% ('Ain Ghazal) at the most has been exposed. Nevertheless, megasite reconstructions seem to be based on the implicit suppositions that (1) the type and density of the structures in excavated areas is representative of the site as a whole, and (2) the horizontal extent of cultural materials for each site is representative of the actual extent of the site while occupied, and (3) occupation density is constant in all areas of the site. These are problematical assumptions. For one thing, they lead to an underestimation of open areas. Moreover, it can be argued that instead of constant occupation density in all areas of the site, occupation shifted from one area to another in the course of time. Ultimately this resulted in a large occupied area, a megasite. Thus, the site as we see it today may never have been entirely covered with architecture and populated at one point in time. What is more, precise dating of surface material to indicate contemporaneous occupation in different parts of sites is hazardous. It is beyond doubt that there were very large sites in the Late PPNB, but as yet it is not clear whether they were occupied over

their entire surface at one point in time. As a result, it cannot be assumed at present that the megasites were the homes of thousands of people, who lived there on a year-round basis. We should make a clear distinction between *sites* and *settlements*. In fact, there are many more problems with the megasites concept, which I can obviously not go into now. The main problem, however, is that megasites are at the basis of interpretations about important socio-economic issues, including over-exploitation of resources, social and economic stress, population decline, widespread site abandonment, and the social functions of ritual centers. It seems that as yet that basis is far from secure.

Third, we should be cautious about the public nature of rectangular 'communal ritual buildings'. From a reconstruction of the estimated number of persons in PPNB ritual buildings at 'Ain Ghazal, Nevalı Çori, Çayönü, and Göbekli Tepe (Verhoeven 2002b, table 6) it appeared that these could contain limited numbers of people only, perhaps not more than twenty at the most. Clearly, not the entire community could participate in rituals carried out in these buildings. As Rollefson suggests for 'Ain Ghazal, it is indeed likely that, if these buildings were communal, groups ('corporate units') sent representatives.

Fourth, Rollefson's hypothesis, like the majority of reconstructions of the role of ritual in the Neolithic, is derived from a functional perspective. In these views, ritual served to counterbalance social stress by means of integrative practices of communal ritual, foremost (secondary) burial. While it is undoubtedly the case, as we know since Durkheim, that ritual has a very important part to play in societal regulation, this is not the only function. In fact, ritual is a multi-dimensional phenomenon, and, besides the functional perspective popular among many archaeologists, there are many alternative approaches which may be rewarding when applied to archaeological data (Verhoeven 2002a). Moreover, the functional perspectives as presented are much too general, and rather a-historical. They do not explain specific shapes, locations, functions, meanings, etc. of ritual features and artefacts. Rather, in a largely deductive fashion, these are slotted into convenient theoretical frameworks. Alternatively, various ritual dimensions (e.g., social function, ideology, aspects of performance, symbolic and structural meanings) could be explored in a more interactive deductive-inductive, or hermeneutical, manner.

Fifth, concerning problems of terminology ("What to call the special buildings"?), Rollefson may, without realizing it, have provided a satisfactory answer when writing "There are several considerations to ponder when selecting identifying tags for ritual architecture." Perhaps the latter term, or ritual buildings, provides the most 'value-free' designation. "Communal cult building" incorporates a notion about collectiveness that may not always be warranted.

Finally, I would be hesitant to suggest, as Rollefson does in his concluding remarks, that ritual was more important and complex in the Neolithic than in preceding periods. Certainly, from an archaeological point of view, it is more visible, but, to use a well-worn concept, absence of evidence is not evidence of absence. It is quite conceivable – actually to be expected, given ethnographic cases – that Palaeolithic hunter-gatherers were actively involved in many kinds of complex rituals, which not necessarily left any traces. Moreover, the presence of burials with possible gifts in the exceptionally well-preserved (waterlogged) Epipalaeolithic site Ein Gev I near the Dead Sea should remind us of the role of formation processes in generally not or weakly stratified Palaeolithic open-air sites.

Upper Mesopotamia

Schmidt's lucid paper concerning ritual centers and their role in neolithization in Upper Mesopotamia raises a number of interesting topics as well. Two general issues invoke comment. First, the ideas about a concentration of skills and know-how and about interaction and exchange at Göbekli Tepe make much sense and should perhaps have been presented in more detail (e.g., Ingold 2000). The same holds for the amphictyony or cult community concept. In particular, with regard to the central ritual function of Göbekli Tepe it would perhaps be rewarding to explore the ideas about totemism further. In this regard Peters and Schmidt (2004: 210) write: "... the presence of a series of broadly contemporaneous enclosures each with a unique iconography could imply that each space demarcated by pillars was frequented by one or more 'clans' (at different times?)." Clearly, the issue of contemporaneity is important here. Anyway, at Göbekli Tepe there may have been a contradictory situation, i.e., a communal site with separate structures. If so, would this indicate collectivity ("a common religion") and separation at the same time? This raises other questions: why would this be so? At what levels would this operate? And so on.

A second comment concerns Schmidt's proposal to investigate the deep – Upper Palaeolithic – history of the Neolithic. Although it is not very helpful to refer to the European Upper Palaeolithic, it is indeed important to incorporate a historical perspective. Current research is making it increasingly clear that the Early Neolithic is much less 'Neolithic' than originally thought, with basic traditional characteristics such as the domestication of plants and sedentism being quite late in the sequence. In general, the picture that now emerges is one of long-term continuities on the one hand and regional differentiation on the other. For instance, from a detailed analysis of the process of domestication in the Near East – in my view not only pertaining to plants and animals, but also to people, objects and supernatural beings – it appears that

this set of human manipulations probably started as early as the Epipalaeolithic Kebaran (Verhoeven 2004).

Neolithic Ritual

Finally, it is fitting to make a few brief and general comments about Neolithic ritual and ritual centers. First, for the PPNB as a whole, the notion of ritual centers presupposes a site hierarchy, consisting of (1) 'normal', domestic, sites where conspicuous ritual objects like ritual buildings or large statuary were absent, (2) settlement sites where ritual buildings, large statuary, *etc.* were present (*e.g.*, 'Ain Ghazal, Nevalı Çori, Çayönü), (3) special ritual sites, with no (*e.g.*, Göbekli Tepe) or restricted (*e.g.*, Kfar HaHoresh) domestic activities (Verhoeven 2002b). Of course, as Rollefson rightly points out, such typologies have to be made relevant to specific space and time frames.

Secondly, an inherent danger in using the term 'ritual centers' is that it supposes that outside of these centers ritual was 'peripheral', or of less significance. Rather, it seems that ritual played different roles in different contexts. For the PPNB at least, a distinction can be made between (1) individual rituals; (2) household rituals (Rollefson's houses as "family ritual centers") and (3) public rituals, each of different importance at different site types. To go a step further, it can be argued that ritual was central to the early Neolithic way of life. There is much evidence (e.g., burials under house floors, circulation of human skulls, animal depictions of anthropomorphic stelae) that Neolithic societies in the Near East did not make clear distinctions, as many of us do, between, e.g., nature and culture, people and animals, or sacred and profane spheres of life (Verhoeven 2004). It rather seems to be the case that they had a holistic outlook on life, in which humans, plants, animals, material objects and supernatural entities and beings were related, manipulated, giving meaning, and used in many different contexts, including what we now term ritual.

Note

¹ The concept of 'framing' (Verhoeven 2002a; 2002b) denotes this special character of ritual objects and contexts. One wonders, though, if the apsidal and circular buildings at 'Ain Ghazal had some special domestic/'industrial', rather than a ritual, function.

References

Ingold T.

2000 The Perception of the Environment: Essays in Livelihood, Dwelling and Skill. London/New York: Routledge.

Peters J. and Schmidt K.

2004 Animals in the Symbolic World of Pre-Pottery Neolithic Göbekli Tepe, South-eastern Turkey: A Preliminary Assessment. *Anthropozoologica* 39(1): 179-218.

Verhoeven M.

2002a Ritual and its Investigation in Prehistory. In H.G.K. Gebel, B.D. Hermansen and C.H. Jensen (eds.), Magic Practices and Ritual in the Near Eastern Neolithic: 5-40. Studies in Early Near Eastern Production, Subsistence, and Environment 8. Berlin: ex oriente.

2002b Ritual and Ideology in the Pre-Pottery Neolithic B of the Levant and South-East Anatolia. *Cambridge Archaeological Journal* 12(2): 233-258.

2004 Beyond Boundaries: Nature, Culture and a Holistic Approach to Domestication in the Levant. *Journal of World Prehistory* 18(3): 179-282.

in press Megasites in the Pre-Pottery Neolithic B: Evidence for 'Proto-Urbanism'? In M. Chazan and E.B. Banning (eds.), Domesticating Space: Landscapes and Site Structure in the Prehistoric Near East. Studies in Early Near Eastern Production, Subsistence, and Environment. Berlin: ex oriente.

Comment

Early Neolithic Ritual Centers

David A. Warburton

Department of the Study of Religion, University of Aarhus <dw@teo.au.dk >

These two papers represent two very different approaches to the question of the role of "ritual centers" in the early Neolithic. Rollefson's premises link processual and post-processual themes to social development, whereas Schmidt uses the conceptual case of a "ritual center" to approach "culture". Both arguments hinge on the problem of "identity". Schmidt contends that through their roles as "cultural catalysts" the "ritual centers" provided the foundations for shared identity and thus the basis

for sedentary society. Rollefson stresses the failure of an identity to emerge at the end of the process and assigns this to material causes. Obviously, the two approaches are both complementary and contradictory, and extremely important because they touch upon the crucial relationship between "culture" and "society" at the very dawn of sedentary society.

Schmidt

The very character and chronological priority of Göbekli Tepe assure it a decisive place in human history, and thus we allow ourselves to start here. In viewing Schmidt's theses, it is worth stressing that it would be almost impossible to distinguish these "theses" from an empirical list. The facts that Göbekli Tepe was a "ritual center" (6) and that its creation preceded "the emergence of sedentary communities" (1) are undisputed characteristics rather than theses (unless Schmidt himself revises the dates). Although open to discussion, one could forcefully argue that churches and temples confirm that such "ritual centers continued to play a fundamental role" (2) long after the early sedentary communities had been forgotten, and the same institutions force one to agree that "ritual centers served as a cultural catalyst" (5). Unless someone revises the understanding of the landscape at Stonehenge, one must also agree that "ritual centers can be clearly differentiated from settlements by their distinct geographical setting" (3). Thus, one can suggest that only nitpicking could find anything controversial here.

The only room for debate would be the concept that "ritual centers" served the same tasks as "those of central places of later periods" (4). Here it must be said that the purely empirical statements of the other theses (1-3; 5-6) fundamentally contradict this. According to Christaller – who invented the "central place" for all practical purposes – "central places" are related to towns and cities where goods and services are exchanged. For Christaller (1966), it was the convenience of exchange and the presence of an urban center with a surrounding rural population which served as the fundamental premise of a central place as he understood it. It is thus impossible for a central place as Christaller understood it to be "clearly differentiated from settlements by their distinct geographical setting" (3). Thus, we will take the liberty of assuming that Schmidt does not really mean this, but rather that such ritual centers continued to "fulfil" the same tasks through time. Since one cannot disagree with this, then we could assume that Schmidt's list of theses is simply a list of the characteristics which distinguish Göbekli Tepe and permit it to be identified as a major "ritual center".

However, Schmidt also introduces Mumford, and specifically refers to the distinction between a city and a village, with the suggestion that the shrines at Göbelki would permit it to be identified as an incipient "city". In his study of central places, Christaller (1966: 195-197) specifically stated that the exceptions to his methodology were to be understood as "deviations not explainable by economics". Thus Christaller's approach was purely material and discussed hierarchies dictated by economics in which cities did not play the essential role: villages, towns and cities were all part of a hierarchy of

"central places". In Mumford's approach, the city differs distinctly from other types of settlement.

Thus, effectively, the approaches of Mumford to cities and Christaller to central places are discussions of two different phenomena. They cannot legitimately be combined, for Mumford would permit Göbekli to be a central place without a settlement whereas Christaller would deny that it could be one of his central places since it would be a "deviation not explainable by economics". It need hardly be pointed out that Christaller's approach is dependent upon the existence of a large and ancient sedentary society, whereas the early Neolithic was the historical basis from which such a society arose. In this sense, one can argue that Mumford's approach is much more valuable for Schmidt's purposes (and for Near Eastern Archaeology as a whole) than Christaller's since it provides the basis for the emergence of the first cities before economics.

However, this lesson has nothing to do with Schmidt's central thesis, which is based on his empirical confirmation that Göbekli Tepe was a central place before sedentarism. Here, he posits that the "Stone Age centers" played a "religious role" and served as a platform for "verbal communication", meaning that they were places of exchange for "ideas, goods and people". However, he then steps back and admits that he cannot state what took place at Göbekli, and even specifically stating that it is unknown whether the buildings with the pillars were subject to limited access or whether in fact the buildings were "bustling with activity".

Such caution is warranted, but in doing so Schmidt actually oversteps the evidence. It should be evident that if there were "more than 200 megalithic pillars" at Göbekli alone, then the labourers and craftsmen required would rarely have had a moment of peace. And if the villages within a radius of 200 km around Göbekli all contributed to the construction, then the commotion will have been far from local, with constant movement between the villages and the center. In fact the later Mesopotamian and Biblical testimony suggests that the gods themselves would have been disturbed by the din. And this impression is enhanced by the information that there were in fact additional such centers in the Urfa province.

From here, Schmidt proceeds on to argue that this can serve as the basis for an amphiktyonia, and a shared symbolic system which might be a religion. He then revives the discussion about bull cults and the Venus figurines, and makes projections about Palaeolithic links. He can justly argue that "hardly anything in the material culture of the PPN is really new in comparison to the Upper Palaeolithic", and this allows him to share the view of Göbekli as "the culmination of final Palaeolithic developments rather than as the initiation and emergence of new ideas" (Goring-Morris and Belfer-Cohen).

Now, as far as the present author is concerned, the fact

that there is a major gap in the record for the Upper Palaeolithic in the Near East is the least of the problems with this approach, but let us move slowly.

Schmidt suggests that using the concept of an "amphiktyonia"- meaning something like a social organization in which a cult center which served the people who were living around it – might be premature. However, the suggestion is in fact justified by his own discussion. The term itself may not be useful - since it will attract etymological, philological, historical, and theological criticism - but one cannot possibly avoid recognizing that the structures at Göbekli and elsewhere were not simply created and erected by a couple of bored hunter-gatherers who happened to drop by the place once or twice in a century. This was obviously a communal effort of extraordinary dimensions and brought together several distinct communities. Furthermore, the very persistence of the pattern of monumental construction demands that one admit that it was widely accepted as a legitimate sanctuary, for otherwise the efforts would either have been abandoned or brought to an abrupt halt.

Whether one can legitimately conclude that the existence of a common sanctuary reflects the existence of a shared understanding which one could term "religion" is more difficult. It is also not entirely clear that this serves a useful purpose, since – like amphiktyonia – "religion" also has some precise definitions (all of which depend upon communication, discourse, etc.) and risk generating a discussion which neglects the principal features which Schmidt has in fact excavated, identified and named: a "ritual center" which relied upon some kind of shared ideology among a large group of people in a large region at the beginning of the history of sedentarism. Here it would be impossible to disagree with Schmidt's observations about both the requirements and the repercussions.

In closing this note, therefore, we will note that we contend that Schmidt's initial list is not a list of theses, but rather a simple confirmation of what he has discovered (confused by one misleading reference to central places). Instead, we suggest that Schmidt can actually argue a different set of theses.

The only crucial difference is that we would state that the structures at Göbekli are simply incompatible with the statement that "hardly anything in the material culture of the PPN is really new". One wonders exactly what he thinks that he has excavated??? We would state that Schmidt can argue that Göbekli was a ritual center, and that the existence of this ritual center led to the creation of social and village alliances, and to craft specialisation, and to the emergence of social hierarchies, and to a common sense of identity, and that these contributed to the emergence of a new economic system. In fact, Schmidt himself stresses exactly these points, but seemingly draws the opposite conclusion from that of the current author, who assumes that there is something dra-

matically new, whereas Schmidt seems to imply that it represents some kind of continuity.

However, the existence of the ritual center was dependent upon these same features: *i.e.*, Göbekli is itself an artefact testifying to a transformation in the behaviour of human societies. It also had an impact on societies all around it, for these gradually changed as well, ushering in the most important change in human history. It is utterly new and different and itself dependent upon new forms of social organization.

Neglecting this aspect and stressing continuity completely misses the change. It also allows Schmidt to suggest that the "ritual centers" of the "Stone Age" must simply be discovered. We would argue that his own discoveries are the proof that they cannot be discovered. Schmidt's work is the greatest contribution to date to the argument that archaeological evidence confirms that monumental cult centers are characteristic of humans since the PPN but not before. We would also argue that the same evidence suggests that the change was a fundamental social change without any economic or technological aspects. Yes, they were "Stone Age" in terms of technology and economy, but they were "modern" in the sense of mobilising a unity of purpose in a common and monumental endeavour. The origins of the state and of religion can be sought in this social transformation. Obviously these were still far off, but Göbekli brought them into sight. For us, at least.

Rollefson

Rollefson begins his list of theses with the contention that "social identity" among hunter-gatherers was based "on small groups" (1). This is what the current writer would view as the fundamental contrast with Schmidt's efforts to view Göbekli as related to the Palaeolithic since these small groups did characterize the age before the Neolithic, while villagers and larger groups are the hallmark of the Neolithic (and since). Needless to say, we are only too happy to note that Rollefson begins his paper with a remark that "pre-Neolithic ritual structures are not well documented, if they existed at all".

It is evident that for Rollefson, social changes and identity play the key role. The need for "corporate identity intensified" with sedentism (2), and was fortified by a dual system with the skull cults at household level (2-3) and an ancestor cult using statuary at the village level, with a "corporate ritual building" (4). Somehow, community solidarity emerged, and was not threatened by competition for resources during the early PPN (5). An exodus to the highlands brought people into rather more forbidding territory (6) and conflict ensuing from this apparently led to an increase in ritual and communal activity in the LPPNB (7). Ultimately, the rituals proved inadequate and the society collapsed. The character of these theses differs distinctly from that of Schmidt's

(where it was difficult to disagree), since each of them involves some rather heroic assumptions, of which Rollefson is completely conscious, as he argues his points in the paper.

The most important initial point is to stress that if our interpretation of Schmidt's material is correct, then we would argue that the value of a shared ideology was the premise upon which the subsequent economic revolution was founded. Without the social change, there would have been no economic change. It follows that Rollefson's argument – that the society collapsed when the rituals could no longer maintain peace – would seem to match the current author's line of thought. However, we would not necessarily argue that what was important in 10,000 B.C. was still decisive in 6500 B.C. A lot had changed, and let us look at Rollefson's view of these changes.

Rollefson begins his discussion in searching for the evidence of ritual structures in the PPN. Obviously it is much easier to argue that Göbekli was a ritual center than that the walls of Jericho represent a similar phenomenon. This is not to say that they may not have served a post-processual role, but they certainly look as if they might have performed some processual role. The arguments for other structures from most MPPNB sites appear to be strained, and Rollefson makes the prescient point that the only site which seems almost unequivocal in terms of interpretation, Kfar HaHoresh, does seem to continue the tradition evident from Göbekli. Under the circumstances, the evidence that the MPPNB statues from 'Ain Ghazal were probably put on display somewhere deserves attention – as does the absence of evidence of such statues in the LPPNB. The same applies to the "skull caching", which seems to go into decline.

Obviously, one must allow for the caveat that this may be the result of excavations, and that some changes can be expected, but it would appear that the LPPNB does represent a "dramatic change". The villages are much larger and there seems to have been a larger variety of burial customs – a sure-fire hint that "values" were not being maintained. By contrast, the evidence of the architecture in the village at 'Ain Ghazal suggests a decisive change in the communal ritual architecture, and Rollefson is correct to move on to the discussion of its social import.

Here, one must take some distance from the details of the matter. Clearly cutting off heads is not what we understand under "respect for our elders", and certainly special treatment assigned to the skulls of children cannot be construed as "ancestor worship" if that term is to have any specific meaning. We think Rollefson doth protest too much.

And, in fact Rollefson notes that there was some weakening in "whatever integration might have been facilitated by [Kuijt's] MPPNB community-wide [...] skull caching". In fact, the community stress levels of the MPPNB villages will have differed by several orders of magnitude from those of the LPPNB, and one wonders if this approach to "ancestor cults" as a specific form of communal ritual has really brought us closer to understanding events. If the skull caching was not maintained in the burgeoning communities of the LPPNB, there does not seem to be much reason to suggest that it played an important unifying communal role in the smaller villages either.

From here, Rollefson's remarks are closer to speculation than analysis, as we lack the data to confirm any of the assumptions about ancestor worship, statues, cults, etc. let alone the uses of the skulls or any hypothetical baptisms, etc. The evidence of the buildings at 'Ain Ghazal allows us to find a mooring post. Clearly, Rollefson is correct that these ritual buildings were important, and clearly they represent the crucial break with the past: "the broken threshold of manageable ceremonial scheduling". And clearly correctly, Rollefson notes that whatever long term inadequacies the rituals of the PPN revealed, they did seem to have served some purpose for several thousand years — which is not bad.

"Social" and "Cultural" "Meanings"

Whereas Rollefson focuses on the social issue of growing communities and the need for cohesion, Schmidt seems to assume that "alliances", "exchanges" and "communication" arise spontaneously. Obviously, the arguments of Kuijt and Rollefson are based at least partially upon the evidence of the collapse of the social system upon which the PPN was built, and view the emergence of the social system as a remarkable achievement. By contrast, Schmidt's use of the amphiktyonia model at least superficially gives the impression that the application of the model "explains" the phenomenon of Göbekli and thus allows any related social phenomenon to be dismissed. In effect, the argument that certain minor elements of the small arts represent cultural continuity from the Palaeolithic allows Schmidt to disregard the social and cultural importance of the architecture, which is certainly unprecedented. Rollefson has clearly viewed the emergence of this created communal ritual space as both a cultural and a social phenomenon, and linked this to social and cultural change.

Regardless of the details and the fact that certain aspects can easily be projected back to the Palaeolithic, it appears difficult for the present writer to assume that there were not major social changes taking place, and that these social changes led to cultural changes. The means by which ideas were communicated – the imagery, ritual activities, or less probably verbal metaphors – will obviously have relied on forms of expression inherited from the past. This does not permit one to speculate that the "meaning" remained constant – nor can one assume that there will have been any means of assuring that the different members of the communities shared any given "meaning" in a fashion recognizable to us. It is clear that

some kind of "social meaning" will have preceded the emergence of "cultural meaning".

These distinctions differ fundamentally from the different forms of "meaning" which would emerge in the following millennia (based upon *signifiant/signifié* or upon "etic/emic" approaches, etc.). It is extremely difficult for the current author to assume that "meaning" could be easily conveyed to and shared by even a small group of people at this time, when symbolic communication was still in its infancy. Were one to agree with Schmidt that Göbekli played some kind of role for all of those villages within a radius of 200 km, one would be confronted with the concept of a communication of ideas on a monumental scale.

Given some of the common shared elements in the PPNB assemblages from the region of the entire Near East, one would have to concede that there must have been some substantial sharing of some forms of symbolic expression. However, the mere existence of Göbekli allows such speculation to be dismissed, for it is inconceivable that it could possibly have been constructed and used unless appreciated and respected by a very large and necessarily heterogeneous group of people. The existence of the buildings simply demands that they were appreciated. However, this does not mean that we can project a consensus on a shared "meaning" into this distant past.

Even today, there is very seldom complete agreement on meanings (and one does not need to discuss Neolithic "ritual centers" to have fundamental disagreements: even clearly printed texts in a world with dictionaries and encyclopaedias give rise to misunderstandings and disputes, as someone who teaches in a theological faculty can testify). However, at that time in the PPN, it might have been very difficult to actually establish that someone else had a different understanding and thus disagreements may not have arisen and thus not inhibited interaction. This type of disparate and variant shared understandings of meaning would appear to be a reasonable possible explanation for the longevity of some of these PPN customs, and thus shared "meanings" may have played no role.

The current writer would suggest that the development of "social meanings" which contributed to social cohesion were the preconditions for the emergence of "culturally based shared meanings" which are clearly visible in the Bronze Age, but even at that time here were difficulties. Marik (2003) has suggested that a simple cultural misunderstanding lies at the center of a Sumerian myth, and one can easily imagine that cultural misunderstandings based upon radically different interpretations of symbols will have been a greater problem in the PPNA than later. For the current writer, Rollefson may be proceeding a bit too deep into the development of symbolic meanings (when suggesting that specific ceremonies may have had meanings comparable to our own)

whereas Schmidt does not seem to recognize the possibility that the PPN may have been the period which laid the foundations for "alliances".

Temples and Shrines

The current author would argue that the architecture here is highly informative about the emergence of "social meaning" and cohesion—and this can usefully be transferred to the specific terminology. Both of these papers deal with this terminological difficulty in a hesitant manner. One reason is certainly the result of the treatment of "cult" activity during the era of the dominance of the post-processual paradigm. Another is doubtless the idea that somehow the term "temple" is too laden with "meaning" for it to serve a useful purpose. The current writer would advocate that this legitimate hesitancy may not serve a useful purpose, since the buildings being discussed here are so obviously "cult buildings" that discussion can be justifiably transferred to another level.

Whatever else they may be, these buildings are evidently the link between the end of the early Neolithic and the historical periods. Since the time of 'Ain Ghazal, large ritual structures have been found within the settlements, and frequently at the same sites (to take the simplest example, one can refer to the Omayyad mosque in Damascus which lies on a site occupied by religious buildings for at least two millennia, and probably many more). This represents a very different phenomenon than the structures at Göbekli which were not erected within an urban context. Were we to take the amphiktyonia model – that Göbekli drew people from around it – then we can see that rituals created the social system, and that the social system created the economic system which followed. Once established, these rituals were pursued in communal buildings in the villages which arose as a result of the contacts emerging through exchanges.

According to this model, the actual architecture plays a far more important role than any specific ideas about the rituals or the possible content and meaning of any discourse. We would argue that terms such as "sanctuary", "temple" or "shrine" can justifiably and usefully be applied to these buildings. We would also argue that this is clearly a very different type of structure than the domestic houses used for skull caching or indeed the caves which served as cemeteries in the Palaeolithic. We would argue that it is here that we can see a crucial social difference.

It is also quite clear that Çatal Hüyük represents a different tradition which was apparently an anomalous dead end since the key to the ritual centers which created the basis for, and survived, the Neolithic was the concept of shared spiritual space (as temples and shrines) rather than that of the domestic ritual space at Çatal Hüyük.

At this point, it is worth stressing that the creation of this monumental ritual space was the key element for all

later forms of religious architecture. The rituals and the beliefs would change and their meanings were never fully established, but the concept of shared ritual space is the foundation of human society as we know it. In their analysis, Rollefson and Schmidt have struggled with some difficult issues and raised questions which one cannot answer. On some issues we disagree, and on some the discussion is still open, but on one matter we trust that there is room for agreement: the current writer would argue that in their work as excavators both Rollefson and Schmidt have made fundamental contributions to the understanding of the appearance of what later became religious space.

References

Marik T.

2003 Sex, Religion and Antimony: Zu einer apolitischen und ahistorischen Deutung von Inana und Sukaletuda. Wiener Zeitschrift für die Kunde des Morgenlandes 93: 147-166.

Two English translations from German originals in Schmidt's list:

Christaller W.

1966 Central Places in Southern Germany. Englewood Cliffs: Prentice-Hall.

Rhodes P.J.

2002 "Amphiktionia," *Brill's New Pauly* I: 600-601.

Comment

Ritual Centers for Socio-Cultural Networks

Trevor Watkins

Department of Archaeology, University of Edinburgh <t.watkins@ed.ac.uk>

Before reaching the two discussion papers, I find it necessary to take issue with the introductory paragraph. Those of us invited to participate were given the context within which we should approach the two discussion papers; we were advised that the "need for aggregation and new sedentary corporate identities created regional, collectively maintained and frequented centers promoting ritual unity". This account of the emergence of sedentary, village societies pre-supposes that the symbolic cultural elaboration of the early Neolithic, specifically the emergence of corporate ritual activities, provided the social "glue" necessary to hold together the new, permanently co-resident, large-scale social units that are represented by the settlement sites of increasing size.

Rollefson's paper pre-supposes the same notion. It forms a useful adjunct to his experience at 'Ain Ghazal and his interpretation of the excavation findings in terms of a rapid and dramatic expansion of population brought about by the arrival of groups from other disintegrating communities. In such circumstances, Rollefson asserts, new rituals with new meanings were required to provide the cohesiveness that would allow these greatly enlarged societies to hold together in the face of the increasing difficulties that they encountered in the management of their dwindling economic resources. The idea that religion constitutes the social "glue" that holds societies together is an old one, going back to Karl Marx, Friedrich Engels, Emile Durkheim, and Max Weber. However, (a) it is only one of six or seven theories concerning the function of religion in human societies, and (b) it is sub-

stantially discredited by those who make a special study of religious, religious practice and religious belief. Pascal Boyer, an anthropologist specializing in religious ideas, for example, convincingly de-constructs the cluster of functionalist theories of religion as necessary to society, or those who wield power in society (Boyer 2004: 26-31). James Thrower, who professes the history of religions, devotes one chapter to the discussion of religion as social construct while seven others consider other types of theory (Thrower 1999: 161-201). In short, we cannot assume that social functionalist theories of religion are the generally accepted understanding of the phenomenon. As Thrower points out, such theories have generally been proposed by those who are themselves non-religious or anti-religious; they are not views that have been generally espoused by theologians, or religious believers.

We can now observe that it is going to be difficult to explain the extraordinarily rich early Neolithic phenomena that relate to ritual, ceremony, symbolic architecture and visuo-symbolic representation. Even discussion of the phenomenon of 'The Early Neolithic Origin of Ritual Centers' is difficult at the present time for other, more archaeological reasons. Rollefson sketches in various kinds of evidence for visuo-symbolic representation, the treatment of the bodies, and in particular the heads, of selected dead persons, and sites where nonstandard, non-domestic, and therefore putatively communal buildings for religious ceremonies, can be identified. For the southern Levant, which is the best investigated area within southwest Asia, he can identi-

fy only one candidate for 'ritual center', the recently discovered and still-being-investigated Kfar Hahoresh (Goring-Morris et al. 1998). Nahal Hemar, too, is a nondomestic context where a number of objects can be identified as being primarily symbolic, but, as Rollefson says, it is hard to raise it to the level of being a ritual center. Schmidt, as the excavator of Göbekli Tepe, has no difficulty in defining that site as a ritual center, but no other similar center has so far come to light across the northern third of the hilly flanks zone. Whatever the territory of which Göbekli Tepe was the religious centre, it should not be unique. At present we simply do not know what other such centres look like, or how closely spaced or far apart such centres were. And Göbekli Tepe, like Kfar Hahoresh, is a recent discovery that is still being investigated. We can be sure that we do not yet know much of what the site contains. It would be easy to say that discussion and any attempt to reach conclusive ideas about these sites is premature. But we cannot wait until the information base at our disposal is ideal, because it never will be; and we do not move forward except through interrogating the evidence, trying out new questions, and discussing among ourselves the questions, the problems, and the evidence as we see it.

Schmidt suggests a different perspective for Göbekli Tepe from the social functionalism of Rollefson's proposal. There is a danger of circularity in his argument, for he hangs his thesis on the idea that cities first grew up around important shrines, citing Lewis Mumford who used it in *The City in History* (Mumford 1961). But Mumford himself had picked up the idea from the speculations of ancient Mesopotamian specialists. Schmidt therefore proposes that Göbekli Tepe is the prototype of a cult centre, dating millennia earlier than the classic Sumerian cities, synchronous with or even ante-dating the earliest sedentary village communities. The thesis needs some development if it is to be taken seriously, for there is an extensive gap between Göbekli Tepe and those proto-literate southern Mesopotamian settlements that lead on into the cities and great temple-institutions of the proto-historic period. There is an interesting and potentially helpful analogue, I think, in the spatial analysis of the ritual monuments of the Neolithic and Early Bronze Age of the central southern England that was tried by Colin Renfrew (1973). That prehistoric landscape is practically devoid of archaeologically visible settlement, but Renfrew used the chronology of the monumental burial mounds, henges and multi-vallate enclosures to chart the changing social systems. The problem with Schmidt's suggested territory for Göbekli Tepe is that it stretches out over 200 km from the supposed cult centre, and includes various settlements that each had different communal buildings that show evidence of ritual or ceremonial use and contain vivid pieces of visuo-symbolic representation of their own. Perhaps this is where Schmidt's import of central place theory might be usefully employed. The classic settlement landscape of central place theory contains urban centres surrounded by a series of secondary towns, each of which is a local centre for a series of still smaller, simpler settlements. Urban centres in Europe have their cathedrals, while smaller places have their lesser churches. But we should be wary of seeing parallels between social, economic and ecclesiastical hierarchies and the settlement landscape of the early Neolithic in southwest Asia. Central place theory, devised for the analysis of modern, western settlement patterns and their social and economic relationships, can have no place in the quite alien socio-cultural landscape of the Neolithic.

Later, Schmidt turns to yet another possible analogue, that of the ancient Greek amphictyony, the confederations of city-states which established their meeting-places at an important cult centre. And that leads Schmidt to allude to peer polity interaction spheres, though only to remark that amphictyonies "go far beyond" what is defined as an interaction sphere. However, he does not explain how or why an amphictyony should not be an example of a peer polity interaction sphere. For me, the peer polity interaction sphere provides a very useful model for the kind of nested networks of communities that I prefer to think of (Renfrew 1986; Watkins in press).

Schmidt points back into the Palaeolithic, at least the Upper Palaeolithic of Europe, for the origins of the visuo-symbolic representation that we see in such a rich concentration at Göbekli Tepe. But, in company with Jacques Cauvin, I am struck by the quantum leap in visuo-symbolic representation that seems to take place between the Epipalaeolithic and the early Neolithic. Within southwest Asia, the contrast between the Upper Palaeolithic and Epipalaeolithic on the one hand and the early Neolithic on the other is particularly stark. While the cognitive capacity to make and "read" two- and three-dimensional symbolic representations may begin to show itself among *Homo sapiens* in parts of Europe before 30,000 years ago, something of a different order became possible around 12,000 years ago in southwest Asia.

As some readers will already know, I prefer to formulate the story in terms of the cognitive and cultural coevolution of the human mind. Peter Wilson (1988) has elaborated the cognitive challenge that was posed to people who began to live in sedentary village communities (for southwest Asia, in the Epipalaeolithic period). As the numbers of co-resident inhabitants of these sedentary communities grew, they required new modes of thinking, imagining and representing in order that new kinds of community could be formed. It has been estimated that the modern human brain/mind is biologically capable of operating as long as the social group does not exceed 120-150 (Aiello & Dunbar 1993; Dunbar 1996, 2004). In communities that are larger than that, we need abstract constructs like "neighbour", "community" and so on, and we need to be able to recognize

who, beyond our immediate kin, we may trust. The anthropologist Anthony Cohen has described just how complex and abstract is the construction and maintenance of the concept of community (Cohen 1985).

Cohen's fundamental concern was to make the point that communities are symbolically constructed in the minds of their members (or recognized as different in the minds of members of other communities). The construct of community defined by co-residence became possible for humans only with the emergence of minds that were capable of operating in terms of symbolic culture. Cohen concludes that 'the consciousness of community has to be kept alive through manipulation of its symbols' (Cohen 1985: 15). Symbolic culture and minds capable of operating with systems of symbolic representation were obligatory for the formation and maintenance of communities in which trust and the ability to detect 'free-loaders' were essential (Dunbar 1999; Watkins 2003).

What is even more difficult to comprehend is why individual communities spent so much effort on the construction of higher levels of network (interaction spheres), but all the symbolic practices and symbolic representations that Schmidt and Rollefson refer to illustrate that over large areas communities engaged in wide-scale interaction. This is a subject that I have taken up in the lengthy essay that is now in press, and this is not the place to begin to repeating that discussion.

References

Aiello L. & Dunbar R.I.M.

1993 Neocortex Size, Group Size and the Evolution of Language. *Current Anthropology* 36: 184-193.

Boyer P.

2001 Religion Explained: The Human Instincts that Fashion Gods, Spirits and Ancestors. London: Heinemann.

Cohen A.P.

1985 The Symbolic Construction of Community. London: Routledge.

Dunbar R.I.M.

- 1996 Grooming, Gossip and the Evolution of Language. London: Faber and Faber.
- 1999 Culture, Honesty and the Freerider Problem. In R.I.M. Dunbar, C. Knight and C. Power (eds.), *The Evolution of Culture: An Interdisciplinary View:* 194-213. Edinburgh: Edinburgh University Press.
- 2004 The Human Story: A New History of Mankind's Evolution. London: Faber and Faber.

Renfrew C.

- 1973 Monuments, Mobilisation and Social Organisation in Neolithic Wessex. In C. Renfrew (ed.), The Explanation of Culture Change: Models in Prehistory: 539-558. London: Duckworth. (Reprinted 1984 in C. Renfrew: Approaches to Social Archaeology: 225-245. Edinburgh: Edinburgh University Press.)
- 1986 Introduction: Peer Polity Interaction and Social Change. In C. Renfrew and J.F. Cherry (eds.), *Peer Polity Interaction* and Social Change: 1-18. Cambridge: Cambridge University Press.

Thrower J.

1999 *Religion: The Classical Theories*. Edinburgh: Edinburgh University Press.

Watkins T.

- 2003 Memes, Memeplexes and the Emergence of Religion in the Neolithic. In H.G.K. Gebel and C.H. Jensen (eds.),
 Magic Practices and Ritual in the Near Eastern Neolithic:
 41-47. Studies in Early Near Eastern Production,
 Subsistence, and Environment 8. Berlin: ex oriente.
- 2004 Building Houses, Framing Concepts, Constructing Worlds. *Paléorient* 30(1): 5-23.
- 2005 Architecture and "Theatres of Memory" in the Neolithic of Southwest Asia. In E. DeMarrais, C. Gosden and C. Renfrew (eds.), Rethinking Materiality: The Engagement of Mind with the Material World. Cambridge: McDonald Institute for Archaeological Research.
- in press *The Emergence of Networked Communities*. In H.G.K. Gebel, K. Schmidt, M. Özdoğan and G.O. Rollefson (eds.), publication of the workshop 'Towards New Frameworks' at the 4th ICAANE, Berlin.

Wilson P.J.

1988 *The Domestication of the Human Species.* New Haven: Yale University Press.

Gary O. Rollefson

Department of Anthropology, Whitman College, Walla Walla <rollefgo@whitman.edu>

I would like to thank all of the participants in this dialogue for the comments and suggestions that they have made in this dialogue, and particularly to those directed at my contribution. The views represent a broad spectrum of insights that generally complement each other, but occasionally they also conflict; and the same might be said as to how they pertain to the views I expressed in my paper, although in a couple of instances the conflicts appear to be the result of a misinterpretation of what I was trying to convey. (The fault is therefore mine for not being clear enough).

There are a couple of themes that thread through some of the commentaries. One of these has to do with "center" and "centrality", and as Warburton noted, even with dictionaries, misunderstandings arise. Belfer-Cohen and Goring-Morris rightly point out that "large" and "central" are not necessarily correlated, but neither are they mutually exclusive under certain circumstances. The "central place" term as a ritual center used by Schmidt places Göbekli Tepe in the "middle" of something (although not necessarily in a modern hierarchical arrangement, as Watkins suggests), and this geographical location in a given territory or region has a different connotation than a "center" within a settlement that is primarily devoted to ritual observances. The LPPNB megasites in highland Jordan are settlements (population centers¹) in which ritual activities were probably celebrated in a hierarchy of ritual locations (ritual centers), including households, larger kinship units, and communal foci.

Another common point of contention is the meaning of "ritual" in a number of senses. For Boyd, ritual is only "social practice" (a view Hermansen would evidently support), and that there are no ritual "things". But "ritual things" do exist; there are places, structures, and objects that exist only because they are important in ritual performance; there is bread, which has no ritual significance, but there is also the communion wafer, which has no "value" beyond its ritual/religious meaning. Hole notes that ritual activity is not exclusively related to religious ritual, although it is also the case that sport competition in public settings often invokes religious overtones, as was the case among the Aztec and Maya. I also agree with Hole that some structures, such as kivas (and even the sweat lodges cited by Belfer-Cohen and Goring-Morris), might serve mundane purposes in addition to religious ones: churches, synagogues, and mosques across the world sponsor events in their religious settings that relate to fundraising for social purposes that are not directly related to religion, such as the recent efforts for tsunami and earthquake relief.

Other motifs crosscut some of the commentaries, but I would like to address some of these on a case-by-case basis since there is sometimes an obvious misunder-standing of what I intended to say.

Gebel's contribution has several important aspects, especially the concept of "domestication of ritual" (also alluded to in Belfer-Cohen and Goring-Morris), where ritual becomes directed towards a central focus of the community. Gebel notes that population agglomeration led to internal conflict as well as competition between population centers, and there was a concomitant personification of spiritual powers at the household and settlement levels and an inward communal focus that led to increasing regional diversity – not regional homogeneity, – a position also taken by Kafafi; Levy also notes that while Göbekli Tepe may represent regional integration, nothing of the sort appears in the southern Levant. Gebel mentions that I did not include Ba'ja as part of the megasite phenomenon; it is true I do not consider Ba'ja a megasite in terms of its small size, but its size does not place Ba'ja outside the megasite system of interaction²; indeed, the density of population within the confines of the mesita on which Ba'ja is located suggests that the pressures of population packing in sites such as Basta and 'Ain Jammam were just as severe at Ba'ja, with consequent equivalent pressures on social and economic organization.

Marc Verhoeven's lucid piece raises a couple of points to which I would like to reply. The first involves ritual complexity (also discussed by Kafafi), and while I am also a fan of the adage of absence of evidence and evidence of absence, I think there is a pretty clear indication that at least the Neolithic material expression of ritual does seem more intricately and intensively developed compared to the Epipaleolithic. Burials, including grave goods, are known from both ends of this cultural spectrum, and while there are instances of "rich grave goods" in the Epipaleolithic, there seems to be a progressive increase in ritual "elements" through time, particularly in the focus on skulls in the Late Epipaleolithic (Early Natufian) and subsequent frequencies in the PPNA and MPPNB, not to mention the "portraiture" involved with plastered skulls, as well as an increasing attention to animal and human figurines through time³. On a more specific note, I would also like to mention that the circular cult building at 'Ain Ghazal (Verhoeven's footnote) is unlikely to have been either a domestic or "indus-

trial" structure in view of the eight reflooring episodes, each of which was painted red. This degree of "reflooring intensity" is unmatched in any other structure, in cluding MPPNB buildings that witnessed as many as four new lime plaster floors superimposed directly atop each other (and interpreted as reflecting a minimum of three new floors over at least three subfloor burials).

Kuijt also calls a ritual interpretation for the various "public buildings" into question. Could the LPPNB apsidal buildings have been domestic structures? If so, they were the only dwellings that did not include floor hearths. In the same vein, the larger LPPNB "communal cult structures" at 'Ain Ghazal would have been the only domestic structures that did not include lime plaster floors. Were the apsidal and larger public buildings dedicated to ritual? As mentioned above, some activities unrelated to ritual may have taken place in all of these structures. But especially in view of the concentrated efforts in creating the large terraces/platforms before the erection of both of the larger edifices, it is most probable that community ritual was the principal focus for these buildings.

Boyd's concern that I equate changes in ritual activity with changes in the environment might result from taking my phrasing too literally, and I suspect he did not understand the importance I placed on the social environment that had changed with a doubling of population at 'Ain Ghazal in such a short time (a view supported to some extent by Belfer-Cohen and Goring-Morris). My appreciation of cultural change doesn't include sporadic alterations in wind direction, relative humidity, or mineral rights as individual or collective prime movers, but clearly the residents of LPPNB 'Ain Ghazal (and Basta, es-Sifiya, et al.) were suffering stresses (including pressures from the physical environment) greatly magnified compared to the MPPNB social environment. If there is a "correlation" between changes in ritual performances and physical environmental change, it would be at a level far removed from a direct cause-and-effect relationship; ultimately, there may have been an environmental calamity involving minor climatic changes that forced the translocation of large numbers of people into the highlands of Jordan, but this was not the immediate cause of a ritual change.

It would appear that David Warburton and I are essentially in agreement in many aspects of the dialogue, with exceptions in some points that involve opinions based on our personal interpretations of the information. But I would like to reply to the minor situation where I "protest too much". In fact, I'd like to protest some more: Obviously, children beneath the age of procreation could hardly be revered as ancestors! But the criteria for skull separation are not clear, and there are several options to identify a person (child or adult, male or female) suitable for selection as the vital connection to the ancestral

past. Primogeniture is only one option, and another important one could be the identification of a child who had reached some stage in a person's *rite du passage*, such as the family's first child to reach a naming ceremony after weathering the >30% infant mortality rate at 'Ain Ghazal (Rollefson 2004: 169-170).

Despite some odd statistics relating to the role of religion and whether one is a pro-religion person or not, I fully agree with Watkins' view that cognitive development is directly related to population size and density, and this is an important desideratum in recognizing reliable members of a community. In the courses I teach I stress that in communities of a couple of hundred people, there is intense familiarity with every member of that collection of people, and each person is well-known in terms of mutual rights and obligations, as well as reputation based on gossip. But this community intimacy breaks down with population growth, so that by the time there are a couple of thousand people in the village, there are also "strangers" about whom there can be much suspicion and distrust. It is in this sphere that I suggest the old MPPNB kin-based village structure became incapable of maintaining social cohesion, and that the ritual/religion sphere was one arena to maintain an otherwise increasingly conflicting collection of special interest groups.

Hermansen is clearly uncomfortable with a structural-functionalist interpretation of ritual, and he stresses that a concept of "ritualization" is more appropriate for understanding what transpires socially from the Late Epipaleolithic through the PPN. The situating of some practices apart as "more important or powerful" than others is, I think, subsumed under Verhoeven's "special place[s], special time[s], and the use of uncommon objects", all of which were included in my paper. The apsidal, circular, and large rectangular LPPNB structures at 'Ain Ghazal are ritual buildings (cf. Boyd) not simply because they differ substantially from contemporaneous domestic dwellings at 'Ain Ghazal, but because it is likely that important rituals were practiced in these unique settings. Simply because rituals may have had an eventual functional component in the interpretation doesn't preclude the likelihood that such ritual activities and objects and locations can be construed in other ways. But show us how.

Levy brings up the important notion that if structures don't contain ritual objects, those structures can't be regarded as cultic in nature. In the case of 'Ain Ghazal, ritual identification of the LPPNB structures would have been more secure if they had collapsed in some earth-quake-induced conflagration that sealed the building contents under a "destruction layer". Instead, all of the buildings seem simply to have been abandoned, and what ritually associated objects there may have been (aside from hearths and "altars") likely were disposed of "properly", just as the MPPNB statuary received a burial cer-

emony instead of being dumped unceremoniously on a rubbish heap.

I agree with both Simmons and Levy that the rise of LPPNB megasites was not due to some perceived "need" for a ritual center that dominated the local landscape by its size. Instead, it has been my contention that the sudden explosion in size and population of earlier MPPNB sites such as Wadi Shu'eib and 'Ain Ghazal, and the founding of large population centers such as Basta and 'Ain Jammam, was the consequence of massive migration of the residents from the deserted farming settlements in the Jordan Valley and the highlands and coastal plain to the west. That these population centers existed largely as a single-tiered settlement pattern (based on the quality and extent of current survey data) has not been explainable so far, but it is also entirely plausible that smaller LPPNB hamlets/villages did exist in proximity to the megasites, and that they have simply escaped detection in survey transects. This is a critical problem, as Kuijt observes in his call for a better understanding of settlement systems. What are described in survey reports as sites relating to the Neolithic often are restricted to broad categories such as "PPN" or "PN", and small sites in either of these categories are rarely investigated by excavations in Jordan, rendering survey data useless in terms of the specific problems we are addressing here.

In summary, there is an abundance of information in the archaeological record that seems to be related to ritual and religion and to an elaborate scheme of participation in such events right from the beginning of the Neolithic period in the eastern Mediterranean region. To understand these rites, locations/centers, associated material objects, and the effects on local (and regional?) populations is hardly an easy goal, and it is unlikely that a consensus on this objective will be achieved anytime soon. But exchanges such as this dialogue allow us all to put our cards on the table, showing what we have and suggesting where we can lead next.

Notes

- ¹ Verhoeven's questions concerning the "reality" of the LPPNB megasite (arbitrarily, a site larger than 6-8 hectares) phenomenon are acknowledged, but it must be admitted that nothing like a megasite situation existed at any time during the MPPNB or before, and after the collapse of the LPPNB megasites, they would not be witnessed again until Yarmoukian Sha'ar Hagolan at the earliest. Calculating population sizes is admittedly difficult, but the scale of structure size, configuration, and density far exceeds anything seen in the MPPNB.
- ² I did not include Ghwair I in the discussion of the LPPNB megasite system because all of the numerous radiocarbon dates from this site do not include any LPPNB occupations, despite the sophistication and "pueblo-like" arrangement of rooms and room blocks. While we might suspect an occupation that persisted long into the LPPNB period, we need more secure dates.
- ³ Granted, much of the ritual paraphernalia of the Epipaleolithic, including figurines, may have been fashioned in wood or on other organic remains, including animal skins, but the same applies to organically based ritual paraphernalia in the MPPNB and LPPNB, for which Nahal Hemar is a good example.

Reply to Commentators

Klaus Schmidt

German Archaeological Institute, Berlin <kls@orient.dainst.de>

First I would like to thank the numerous contributors who have commented on the papers presented by Gary Rollfeson and myself in the "Forum Dialogue" in *Neo-Lithics*. Every opinion, whether in agreement with our views or not, is helpful, as it is obvious that Near Eastern Neolithic research today faces a situation that is somewhat different from the state of research of the previous years with its well-ordered and established system of Early Holocene societies and its broad *opinio communis* about the developments from the hunter and gatherer societies of the Upper Palaeolithic to the village farming communities of the Neolithic period. Due to unforeseen circumstances I was not able to discuss every single comment in detail and ask the contributors and the readers for their understanding.

I never held my short synthesis of the results of the research done in the Urfa region, written in summer 2005

and published herein, to be more than a very preliminary statement. Several aspects will need to be elaborated and modified, for the excavations at the main site of the region, Göbekli Tepe, are far from being completed and the exploration of several other known sites in the vicinity such as Hamzan Tepe, Karahan or Sefer Tepe have not even begun.

But the preliminary character of my paper is not because there is need "to develop a rigorous excavation sampling design to explore the site in a systematic manner", as Thomas E. Levy calls for in his contribution. For him, the explorations at Göbekli Tepe are still in their infancy. Levy is kindly trying to excuse and to explain the immature status of research at Göbekli Tepe by comparing it with the prehistoric research in Western Europe, where our knowledge about sites like Stonehenge and Avebury is based on archaeological excavations done

for more than 200 years. In that point Levy is undoubtedly right. Stonehenge could be mapped without any excavations, for instance in the 19th century by the young Flinders Petrie, who became one of the most famous Egyptologists – as there was no need to undertake years of excavations to uncover the large stone circles of western Europe. That is the essential difference: the megalithic monuments of Göbekli Tepe had been invisible, unknown and unexpected until 1996. They had been completely buried in an artificial mound, and their discovery was not the result of a short survey or a little dig in an unexplored region, but of more than 20 years of archaeological research in the Middle Turkish Euphrates region of the German-Turkish "Urfa Project".

Some papers imply that the group working at Göbekli Tepe should just use the contemporary standards of excavation techniques, and all open questions would soon be resolved. But to me, the situation seems to be the contrary: some colleagues might need to update their knowledge about the situation in the Northern Fertile Crescent in the 10th and 9th millennia BCcal, which has changed in the last years in comparison to our knowledge about other regions of the Near East. In that regard I would like to stress one fact again: the enclosures at Göbekli Tepe are similar to Stonehenge with respect to their dimensions, both the diameter of the enclosures and the height of the standing stones (at Stonehenge the Sarsen stones are about 5 m high; the partially excavated central pillars of enclosure D at Göbekli Tepe are expected to be of the same height). But the stone circles at Göbekli Tepe are completely buried beneath an artificial hill. And there are not only the four large enclosures partially uncovered by the excavations so far. Geophysical mapping attested to about 20 large stone circles inside the mound of Göbekli Tepe, which is 300 by 300 m with a maximum height of 15 m. That is the problem facing the excavations. The excavation team working at Göbekli Tepe does not need to change its strategy how to excavate the site in a proper way and to understand what is domestic and what is not. Sometimes it has to adapt methods similar to those of mining companies.

A further aspect common to the stone circles at Göbekli Tepe and that of Stonehenge is that we don't have a lot of reliable information about their true function. It is only obvious that both sites belong to quite similar enigmatic and mythical spheres. Given the infancy of the status of work done at Göbekli Tepe, it is too early to wonder about the lack of validated knowledge – but at Stonehenge, after 200 years of research–?

The Urfa Project has been working in the region for slightly more than 25 years, starting in 1979 with Hans Georg Gebel's survey in the Middle Turkish Euphrates region and the discovery of the settlement of Nevalı Çori, which was excavated by Harald Hauptmann and Adnan Misir in the following years from 1983 to 1991, unearthing not only an Early Neolithic settlement but a building of ritual function as well as spectacular largescale limestone sculptures. After the flooding of Nevalı Cori when the Atatürk Dam reservoir was filled in winter 1991, the Urfa Project continued, first with a number of study seasons in the Urfa Museum. The excavations of the LPPNB settlement at Gürcütepe and at the site of Göbekli Tepe followed, beginning in 1995 with investigations done by the author in cooperation with the late Adnan Mısır, and since 1997 with Eyüp Bucak. Within eleven seasons, several thousand cubic meters of debris were removed at Göbekli Tepe, but it is still not enough to enable a better understanding of the site, for which we will need a few more years. The excavations at Göbekli Tepe will have to remove thousands and thousands more cubic meters of debris before we can understand the general layout of some of the enclosures.

As mentioned in the beginning, it lies outside my present intentions and the scope of this reply to discuss all contributions in detail. In closing, I would just like to repeat Schmandt-Besserat's reference to I.J. Gelb's insight that more than just a token system was behind the origins of writing in Sumer and Elam. Schmandt-Besserat's request that a systematic catalogue of the abstract and animal designs left in the Neolithic cult centers will be necessary to test whether the hypothesis is justified. Such a catalogue will hopefully be included in one of the following volumes on the Urfa Project, to be published in the near future. For the time being, a preliminary and quite popular description of the results of the Urfa Project has recently been published in my book "Sie bauten die ersten Tempel: Das rätselhafte Heiligtum der Steinzeitjäger – Die archäologische Entdeckung am Göbekli Tepe". München: C.H. Beck, 2006.

New books of ex oriente:

see next page

Masthead

Editorial Board Advisory Board

Co-Editors: Ofer Bar-Yosef, Harvard University
Gary O. Rollefson, Whitman College, Walla Walla
Didier Binder, C.N.R.S., Valbonne

Hans Georg K. Gebel, Free University of Berlin Marie-Claire Cauvin, Institut Préhistoire Orientale, Jalès

Frank Hole, Yale University

Peder Mortensen, Copenhagen University
Managing Editor: Hans J. Nissen, Free University of Berlin
Jürgen Baumgarten, Berlin Mehmet Özdoğan, University of Istanbul

Addresses of Neo-Lithics

Submissions NEO-LITHICS, Prof. Dr. Gary O. Rollefson, Department of Anthropology, Whitman College, Walla Walla,

WA 99362, USA. Email: rollefgo@whitman.edu

NEO-LITHICS, Dr. Hans Georg K. Gebel, Dr. Jürgen Baumgarten, ex oriente e.V., c/o Free University of Berlin, Hüttenweg 7, 14195 Berlin, Germany. Emails: baumgarten@mpib-berlin.mpg.de · hggebel@zedat.fu-berlin.de

Fax 0049 30 98 311 246 or 0049 30 83852106

Orders ex oriente e.V., c/o Free University of Berlin, Hüttenweg 7, 14195 Berlin, Germany

Email: ex-oriente@gmx.net · Fax 0049 30 98 311 246 or 0049 30 83852106

Subscription minimum subscription of three years = 6 issues, c. 40 pages each -- 52 Euro for 6 issues, postage included;

back issues available; members of ex oriente receive Neo-Lithics free of charge (ex oriente annual membership

fee: 40 Euro for employed members, 15 Euro for students/unemployed members)

Deadlines twice a year: 15th of May and 15th of November

Submission Guidelines

Text formats: in WORD; text, bibliography and caption styles: *cf.* current issue of *Neo-Lithics*; illustration formats: high resolution eps or tif.files – no illustrations embedded in the WORD text –, originals prefered (illustrations are required to the Berlin addresses, as well as hard copies of texts); please, keep bibliographic references to the utmost minimum necessary.

Subscription Information

In the upper right part of the address field (envelope) you will find the issue mentioned until which (included) you paid your subscription. If you find an invoice with this issue, a renewal of subscription is necessary for the next three years / 6 issues. If the invoice is not paid after two months it is understood that a prolongation of the subscription is not desired, and no further issues will be sent.

Neo-Lithics is published and distributed by ex oriente, Berlin, Germany
© ex oriente e.V., Berlin - ISSN 1434-6990

Printing House: digital business and printing gmbh, Berlin

To appear in Spring 2006:

Domesticating Space: Construction, Community, and Cosmology in the Late Prehistoric Near East

edited by

E.B. Banning and Michael Chazan

Studies in Early Near Eastern Production, Subsistence, and Environment 12 Berlin: ex oriente, 2006 [ISBN 3-9807578-3-8]

Contents:

E. B. Banning and Michael Chazan: Structuring interactions, structuring ideas: Domestication of space in the prehistoric Near East

Trevor Watkins: Architecture and the symbolic construction of new worlds

Dani Nadel: Residence ownership and continuity: From the Early Epipalaeolithic unto the Neolithic

Nicolas Samuelian, Hamudi Khalaily, and François R. Valla: Final Natufian architecture at 'Eynan ('Ain Mallaha): Approaching the diversity behind uniformity

Stefan Karol Kozlowski: The hunter-gatherer "villages" of the PPNA/EPPNB

Seiji Kadowaki: Ground-stone tools and implications for the use of space and social relations at 'Ain Abu Nukhayla, a PPNB settlement in southern Jordan

Hans Georg K. Gebel: The domestication of vertical space: The case of steep-slope LPPNB architecture in southern Jordan

Marc Verhoeven: Megasites in the Jordanian Pre-Pottery Neolithic B: Evidence for "Proto-Urbanism"?

Zeidan A. Kafafi: Domestic activities at the Neolithic site, 'Ain Ghazal

Marion Cutting: Traditional architecture and social organisation: The agglomerated buildings of Asikli Höyük and Çatalhöyük in Neolithic Central Anatolia

Yosef Garfinkel: The social organization at Neolithic Sha'ar Hagolan: The nuclear family, the extended family, and the community

Forthcoming:

Gesher: A Pre-Pottery Neolithic A Site in the Central Jordan Valley, Israel. A Final Report

edited by

Yosef Garfinkel and Doron Dag

With contributions by Shoshana Ashkenazi, Shmuel Belitzky, Gaëlle Le Dosseur, Liora K. Horwitz, Mordechai E. Kislev, Yoel Melamed, Henk K. Mienis, Orit Simchoni

bibliotheca neolithica Asiae meridionalis et occidentalis

Berlin: ex oriente, 2006 [ISBN 3-9807578-6-2]

Contents:

1. Introduction • 2. Late Pleistocene and Holocene Tectonic Deformation at Gesher • 3. Field Observations • 4. The Flint Knapping Industry • 5. The Stone Tools • 6. Beads and Decorated Items • 7. The Fauna • 8. The Local and Freshwater Molluscs • 9. The Bone Industry • 10. Plant Remains • 11. Discussion.