

Society for American Archaeology

Daily Practice and Social Memory at Çatalhöyük

Author(s): Ian Hodder and Craig Cessford

Source: *American Antiquity*, Vol. 69, No. 1 (Jan., 2004), pp. 17-40

Published by: [Society for American Archaeology](#)

Stable URL: <http://www.jstor.org/stable/4128346>

Accessed: 15/04/2011 15:48

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=sam>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Society for American Archaeology is collaborating with JSTOR to digitize, preserve and extend access to *American Antiquity*.

<http://www.jstor.org>

DAILY PRACTICE AND SOCIAL MEMORY AT ÇATALHÖYÜK

Ian Hodder and Craig Cessford

This article is concerned with the social processes involved in the formation of large agglomerated villages in the Neolithic of the Near East and Anatolia, with particular reference to Çatalhöyük in central Turkey. The article aims to show that practice theories (dealing with how social rules are learned in daily practice within the house) can be used to interpret the patterning of recurrent construction and use activities within domestic space at Çatalhöyük. The regulation of social practices in the house created village-wide social rules, but it is argued that the habituated behavior was also commemorative and involved in the construction of social memory. Sitewide and house-based specific memories are documented at Çatalhöyük. The evidence for habituated practice and social memory at other sites is briefly discussed, and is argued to be relevant for the formation of settled agricultural societies.

Este artículo se refiere a los procesos sociales implicados en la formación de grandes aglomeraciones aldeanas en el neolítico del Cercano Oriente y de Anatolia, con particular referencia a Catalhoyuk en Turquía central. Se pretende mostrar que la teoría de la acción práctica (relacionada a la forma en que las reglas sociales pueden ser aprendidas en la práctica diaria dentro de las residencias) puede ser utilizada para interpretar patrones recurrentes de construcción y actividades de uso dentro de los espacios domésticos en Catalhoyuk. La regulación de prácticas sociales en espacios domésticos creó reglas sociales que funcionaban a nivel aldeano pero, se arguye, este comportamiento habitado era también conmemorativo e implicaba la construcción de la memoria social. Expresiones específicas de memoria son documentadas en las viviendas de Catalhoyuk y a nivel de sitio. Se discute brevemente la evidencia de prácticas habituales y memoria social en otros sitios y se argumenta sobre su relevancia en la formación de sociedades sedentarias y agrícolas.

It is often argued that some form of sedentism emerges during the Natufian of the Near East (e.g., Belfer-Cohen and Bar-Yosef 2000). Some of the following Pre-Pottery Neolithic A (PPNA, approximately 9300 to 8300 B.C.) and Pre-Pottery Neolithic (PPNB, 8300 to 6800 cal B.C.) pre-agricultural and early agricultural sites in the Near East and equivalent sites in Anatolia are large and/or densely occupied. By the time of the PPNB there are sites as large as Abu Hureyra (11.5 ha, but possibly as large as 16 ha—Moore et al. 2000:269–270), ‘Ain Ghazal (12 to 13 ha—Rollefson et al. 1992:444), Aşıklı Höyük (4 ha—Esin and Harmanakaya 1999:118), and Çatalhöyük (13 ha—Hodder 1996). For several decades, archaeologists working on the early prehistoric villages of the Near East have referred to the idea that agglomer-

ation of sedentary settlement is associated with conflicts that need regulation by centralizing or coordinating functions such as ranking, rituals, symbolism, and public space (e.g., Byrd 1994; Flannery 1972, 1993; Hole 2000; Wright 1984). For example, Rosenberg and Redding (2000) argue that as storage, sedentism, and group size increase, sociopolitical structures are needed that can resolve conflicts—these structures include increased hierarchy, feasting, public rituals, common symbols, etc. Or in the PPNB (the major phase of village agglomeration) in the Near East, “the emergence of incipient social hierarchies and ritual ideologies were necessary to regulate and codify increasingly complex interpersonal, intragroup, and intergroup relationships” (Goring-Morris 2000:106).

Certainly there is much evidence that in general

Ian Hodder ■ Department of Cultural and Social Anthropology, Stanford University, Stanford, CA 94305

Craig Cessford ■ Çatalhöyük Research Project, McDonald Institute for Archaeological Research, Cambridge, UK, CB2 3ER

terms the emergence of large settled villages in the period between the eleventh and seventh millennia B.C. is associated with these centralizing and coordinating functions. Early sites such as Hallan Çemi in eastern Anatolia have public open space and perhaps feasting in the late tenth millennium cal B.C. (Rosenberg and Redding 2000), and there are public structures from the PPNA and PPNB such as the tower and wall at Jericho, the skull house at Çayönü, and the “temples” at Göbekli Tepe and Nevalı Çori (Bar-Yosef 1986; Hauptmann 2002; Özdoğan and Özdoğan 1998; Schmidt 2001). The general increase in symbolism has been documented by Cauvin (1994). The evidence for ranking is more debated. Wright (1978) saw social stratification in Natufian burials in El-Wad, but this was questioned by Belfer-Cohen (1995) and Byrd and Monahan (1995; see also Weinstein-Evron 1998). For PPNA and PPNB, there is perhaps wider acceptance of some degree of ranking in the Near East (though see below for a different regional argument for central Anatolia), if often cross-cut by strong leveling or egalitarian processes (see Kuijt 2000 for a full review of the debate).

Such arguments appear to imply that power or centralization came about in order to deal with the need for regulation or coordination. These types of arguments have been widely critiqued in the social sciences and the debate in archaeology has also been well developed (McGuire 1992; Miller et al. 1989; Miller and Tilley 1984). At a theoretical level, one problem with such arguments is that they do not explain how power is accepted—how it is understood, made sense of, legitimated within non-elite groups, or in society as a whole. An alternative view argues that power is always embedded within meaning, knowledge, or discourse (Foucault 1977; Miller and Tilley 1984). According to this approach, focus switches to the ways in which increased power and centralized coordinating functions are produced or made possible within discourse (modes of communication and understanding).

More recent debate in archaeology and the social sciences has tended to move still further from power/knowledge wielded by dominant groups toward a consideration of daily practices (Barrett 1994; Bourdieu 1977; De Certeau 1984; Giddens 1984). Rather than focusing on discursive meanings constructed in relation to power, the empha-

sis is placed on the way that social rules, meanings, and relations of power are in tune with, or are embedded within, the mundane practices of daily life. So, rather than ask why centralized coordinating functions emerge, the concern is to explore how changes in the social practices of everyday life make centralized coordinating functions possible. Recent work on the household as the fundamental economic and social unit in society in the PPNA and PPNB of the Levant has done much to focus attention on the daily practices of life and how they relate to the centralization of power (Byrd 1994; Goring-Morris 2000; Kuijt 2000).

As one of the main champions of practice theories, Bourdieu (1977, 1990, 1991) has shown how daily routines in eating, sitting, sleeping, and moving in domestic space can be the mechanisms by which people are socialized into particular rules and orientations. As people go about their daily tasks, they may learn rules and constraints through the movements of the body. The rules become “embodied.” By this term we refer to the idea that social rules and dispositions become embedded within mundane bodily practices, often nondiscursively. As a child grows up within routinized domestic space, it learns that particular practices, movements, ways of holding oneself, deferential gestures, and so on are positively valued while others are not. The child learns social rules in the practices of daily life within the house. In this way daily practices become social practices—they have a dimension that relates to social structuring and restructuring. Archaeologists have taken from this the notion that by exploring how bodies would have moved around spaces within houses, as well as within monuments and landscapes, we can examine changing ways in which daily practices are linked to particular forms of relationship between people, and to particular forms of power (Barrett 1994; Thomas 1996; Tilley 1994).

So far we have referred to studies of social practice that have a spatial focus. But another component of the experience of daily life is temporality, and rhythm. An important dimension of social practices is relationships with the past, and the extent to which practices repeat earlier practices as a form of memory of them. There has recently been an increased engagement with time and memory in archaeology (e.g., Alcock et al. 2003; Bradley 2002; Hamann 2002), often responding to related debates

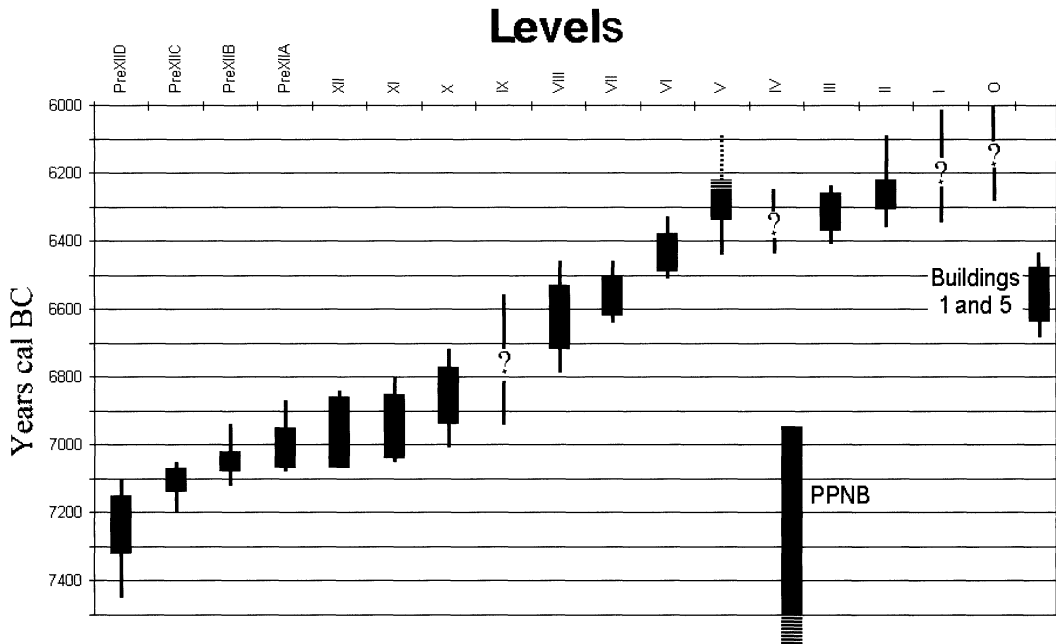


Figure 1. Radiocarbon dates for the levels at Çatalhöyük (Cessford 2004b).

in the social sciences (Connerton 1989; Le Goff 1992). The key themes of the Neolithic of the Near East, such as sedentism, agglomeration, and domestication, as well as more specific themes such as the treatment of the dead and the veneration of ancestors, all involve changes in temporality, memory, and relationships with the past. It is often argued (e.g., Bradley 2002; Byrd and Monahan 1995; Goring-Morris 2000; Kuijt 2001; Shanks and Tilley 1982; Tringham 2000; Whittle 1996) that early forms of power in the Neolithic of the Near East and Europe were linked to delayed return systems, links to ancestors, repetitive practices at monuments to the dead, and the construction of greater temporal depth to activities (as in the construction of lineages). To understand the daily social practices of the Neolithic we need to examine both their spatial and temporal dimensions.

The purpose of this paper is to stimulate a discussion of changing daily social practices and embodiment associated with the formation of settled villages in Anatolia and the Near East. We do not intend to conduct a summary of the relationship between sedentism, aggregation, centralized and coordinating functions, and mundane daily social practices as in our view such a summary would be premature given a lack of widely available relevant data. Rather, our aim is to use the

example at Çatalhöyük to explore some of the ways in which daily practices might be studied, in both the spatial and temporal dimensions. Only then will it be possible to examine whether long-term change in social practices is part of, or even the precondition for, centralization, sedentism, agglomeration, and domestication.

In turning to the particular case of Çatalhöyük in central Anatolia, it is important to recognize that the site is the product of a long period of domestication and settlement agglomeration. Dated from 7400 to 6200 cal B.C., it occurs at the end of the Aceramic Neolithic (PPNB in the Near East), and the four earliest (Pre-XII) levels at Çatalhöyük appear to be without pottery. But most of the sequence (Level XII upwards) is in the Ceramic Neolithic (for dated sequence see Figure 1). Throughout the sequence, cereals and sheep and goat are domesticated, but there is some dependence on wild resources, and cattle and pig appear not to be domesticated (Fairbairn et al. 2004; Russell and Martin 2004). Within Anatolia, and particularly within central Anatolia, there are local sequences that lead up to and prefigure Çatalhöyük. In southeast Turkey, the villages of Çayönü (Özdoğan and Özdoğan 1990) and Göbekli Tepe (Schmidt 2001) already show substantial agglomeration and elaborate symbolism in Aceramic

Neolithic contexts (Bıçakçı 1998). In central Anatolia (for a definition of the Aceramic Neolithic here see Gérard and Thissen 2002), Aşıklı Höyük has dense-packed housing in a 4-ha site in Aceramic levels dated from 8400 to 7400 cal B.C. (Esin and Harmanakaya 1999). There are many other sites contemporary, or partly contemporary, with Çatalhöyük that are known in central Anatolia and the adjacent Burdur-Lakes region (Duru 1999; French 1972; Gérard and Thissen 2002).

The central Anatolian region in which Çatalhöyük is located has a number of distinct characteristics. In a recent review comparing the “origins of farming” sequences in the Levant, eastern Anatolia and the upper Euphrates, and central Anatolia, Özdoğan (2002) has pointed to several social differences between central Anatolia and sites to the east in Upper Mesopotamia. One of the clear differences is that in central Anatolia there is less craft specialization and little in the way of specialized ritual. In addition, the degree of packing of houses (at Aşıklı Höyük, Çatalhöyük, and Can Hasan) is often rather greater than is found to the east. There are few streets and at Çatalhöyük access to houses and animal pens was over roofs of houses. The rules and constraints regulating the lives of the inhabitants in such dense agglomerations may have been particularly marked. These rules dealing with access to resources, the build-up of refuse, sanitation, social relations, ritual practices, and so on might have been particularly complex in such densely packed settlements. Such sites are at least partly dependent on delayed agricultural systems (as defined by Woodburn 1980), and all houses have some storage. There was thus the potential for conflict. But the conflict must have been well regulated in some way since these central Anatolian settlements were occupied over long periods of time, and there is remarkable continuity in their organization. At Aşıklı Höyük the dated deep-sounding sequence, which is over six meters deep, covers 250–530 years (68 percent probability) or 180–600 years (95 percent probability), excluding level 3, which is undated. (Analysis of dating was undertaken using BCal [Buck et al. 1999].) Through this time period there are six rebuildings of a house in exactly the same location and with the same location of hearths and midden (Esin and Harmanakaya 1999:Figure 9). At Çatalhöyük there is evidence of repetition of buildings, and a repe-

tition of internal arrangements of buildings (hearth, platform location, for example) over 500–1000-year time spans. This evidence suggests practices (cf. Sommer 2001) that were particularly rule-bound in central Anatolia. We wish to argue that people were socialized into social roles and rules in central Anatolia and Çatalhöyük by two primary mechanisms: first through the bodily repetition of practices and routines in the house, and second through the construction of memories in which the bodily practices were embedded. The evidence from Çatalhöyük may also be relevant to the study of the long-term process of settlement agglomeration and village formation that precedes it throughout Anatolia and the Near East, although confirmation of such a claim will have to await further studies.

Daily Repetition of Practices within the Çatalhöyük House

In terms of the question of how people were socialized or routinized into social roles, Hodder (1990, 1998) elsewhere emphasized the importance of the house in the Neolithic of the Near East and Europe—as metaphor and mechanism, linking the domestication of plants and animals with the domestication of people. He argued that the house acted as a symbolic focus that domesticated people through the *domus*—that is the idea and practice of domesticating the wild (the *agrios*). That argument was based in part on a reconsideration of Çatalhöyük. We wish in this paper to consider again the importance of the house at Çatalhöyük, but to accept the criticism (Parker Pearson and Richards 1994) that the importance of the house or *domus* does not need to be based on an opposition with the wild. In this paper we will discuss two aspects of socialization in the house—repetitive daily practices and social memory.

Çatalhöyük was first excavated by James Mellaart from 1961–1965 (Mellaart 1967), and renewed fieldwork began in 1993 (Hodder 1996, 2000). The mound is 21 m high (Figure 2) and contains probably 18 levels of occupation with well-preserved mud-brick houses densely packed together. The dates of the levels are shown in Figure 1. The number of houses varies by level (e.g., 59 in Level VI.B), depending on the area of the mound excavated by Mellaart at each level. There are few or no streets, and entry to the house is

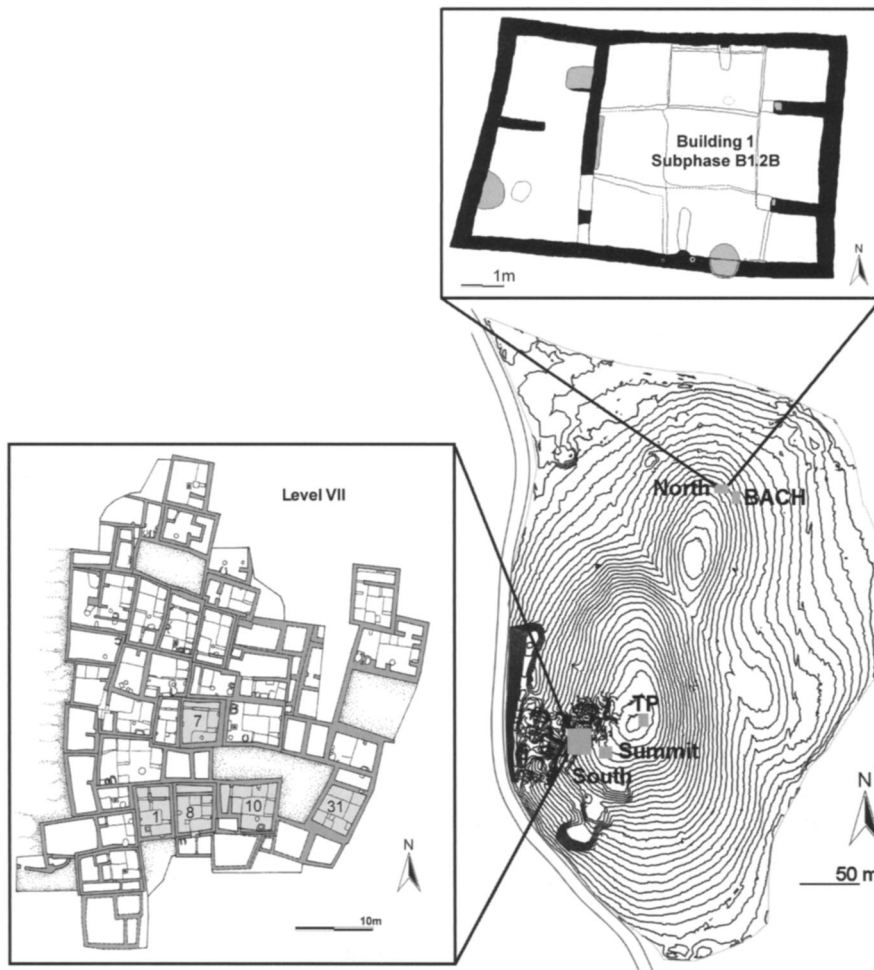


Figure 2. Excavated areas at Çatalhöyük and the locations of the buildings most referred to in the text. The buildings identified as “shrines” 1, 7, 8, 10, and 31 in Level VII are indicated. Buildings 6 and 17 occur in Levels VIII and IX respectively beneath “shrine” 10. Buildings 18 and 23 occur in Level X below “shrines” 8 and 1 respectively. Building 5 lies directly below Building 1.

through the roof. At the height of its occupation perhaps 3,500–8,000 people lived at the site, based upon extrapolations from the four percent of the site that has been excavated, and various forms of surface sampling (including geophysical techniques) in order to assess building density over the site as a whole (Cessford 2004a; R. Matthews 1996). During the Ceramic Neolithic occupation of Çatalhöyük (Level XII and above), regional survey has shown that there were no other large sites on the same alluvial fan in the Konya plain and that even small sites are probably rare (Baird 2002).

The importance of the house as an economic, social, and ritual unit has been amply demonstrated in the recent work at the site. Mellaart

(1967:77–130) had distinguished “shrines” from “houses.” But the more recent work has included systematic micromorphological analysis of the deposits on floors (W. Matthews 1996), and there is clear evidence that even the most elaborate of “shrines” contained a wide range of activities associated with food preparation, consumption, obsidian working, bone tool production, etc. All buildings acted as domestic houses with varying degrees of symbolic elaboration, and production, exchange, and consumption at Çatalhöyük seem to be largely organized at the domestic scale. For example, there is evidence for in situ obsidian working within houses (Carter et al. 2004), and most houses have their own cache of obsidian (Conolly

2003) traded from Cappadocia (Carter et al. 2004). Brick composition shows remarkable degrees of variation between houses, suggesting that clay and temper acquisition were organized at the house level (W. Matthews 1996; Tunc 2004). Every house has its own storage capacity in the form of small clay bins and baskets. Each house has its own oven, hearths and basins for food preparation.

A primarily domestic mode of production and consumption (Sahlins 1974) operated at Çatalhöyük, although there is some evidence of more specialized production of obsidian and figurines in some houses (Conolly 1996; Hamilton 1996). But the house was also an important social unit. Many houses contain the burials of a range of individuals (often up to six, but sometimes as many as 60). The broad representation of ages and sexes of these individuals placed below the platforms of the house during its use suggests a possible relationship between those buried beneath the floors and those occupying the building (or a group of related buildings). The houses are also foci of art and ritual (Last 1998), although some burial activity took place off site and there may have been bucrania (plastered cattle skulls) on house roofs (Stevanovic and Tringham 1999). All houses have some evidence of art or ritual. Even the least-elaborate houses contain some paintings, as in the case of the geometric paintings found in the small and simple house, Building 2 (Farid 2004). The amount of variation in the symbolism between houses suggests the possibility of house-based production and reproduction.

So the house is an important social, productive, and symbolic unit at Çatalhöyük, and we now want to argue that it was also the main mechanism for creating social rules. We have already noted a degree of centralization of power in Neolithic societies in Anatolia and the Near East, but nowhere is the degree of centralization of power well developed. Indeed, there is little evidence of large-scale public gatherings or rituals. Apart from Jericho, where the massive tower and walls may have had some public ritual or symbolic function, ritual buildings at Göbekli Tepe, Nevalı Çori, Çayönü (Özdoğan and Özdoğan 1998), 'Ain Ghazal, and elsewhere are too small to accommodate gatherings of more than 20 to 30 people. Apart from the plaza at Çayönü there is little evidence of public space other than these ritual buildings.

Instead of social rules being imposed by centralized authorities manipulating public rituals, we argue that at Çatalhöyük the reproduction of dominant groups (elders or lineage heads) was intimately tied to the construction of bodily routines that were repeated in daily house practices over days, months, years, decades, centuries, and even millennia. Since these practices involved productive, consumptive, social, and ritual spheres of life they constituted a *habitus* (Bourdieu 1977) and a set of social codes. There is much evidence for repetitive practice throughout the Ceramic Neolithic levels at Çatalhöyük (no buildings have so far been excavated in the Aceramic levels; only midden deposits have so far been encountered in these levels). For example, all central rooms in Çatalhöyük houses in all Ceramic Neolithic levels show repetitive replastering of walls, floors and platforms. Most buildings are used for 50 to 100 years before being rebuilt. In recent work, Matthews (2004) has used micromorphology to identify up to 700 "washes" and replasterings on one wall, over a period of 70 years. Annual replasterings made up of foundation and surface coatings occur routinely up to 50 to 100 times (Mellaart 1964:116–117, 1967:50). Certainly there are changes in oven and bin locations in houses through time, and sometimes wall plasters are painted. But the degree of repetition of plastering practices is remarkable. Platform and burial locations are remarkably constant through the replastering of buildings and their rebuilding. Ovens and hearths are usually in the south part of buildings, with art and burials to the north. The ladder is usually near the oven and major bucrania are usually placed on west walls. Obsidian caches always occur near hearths and ovens; pottery is never placed in graves. The burial platforms use different types of plaster and are whiter than other platforms and floor areas. All these spatial distinctions are experienced in the bodily practices of frequent repetitive replastering (as well as in other activities such as sweeping floors).

Movement around the houses at Çatalhöyük must always have involved care and restriction. The main rooms are rarely more than 5-x-5 m, and yet they are always divided by platforms, raised edges, and changes in height into 1.0–1.5-m squares (Figure 3). All these differences in floors restrict ease of movement. And the different areas also

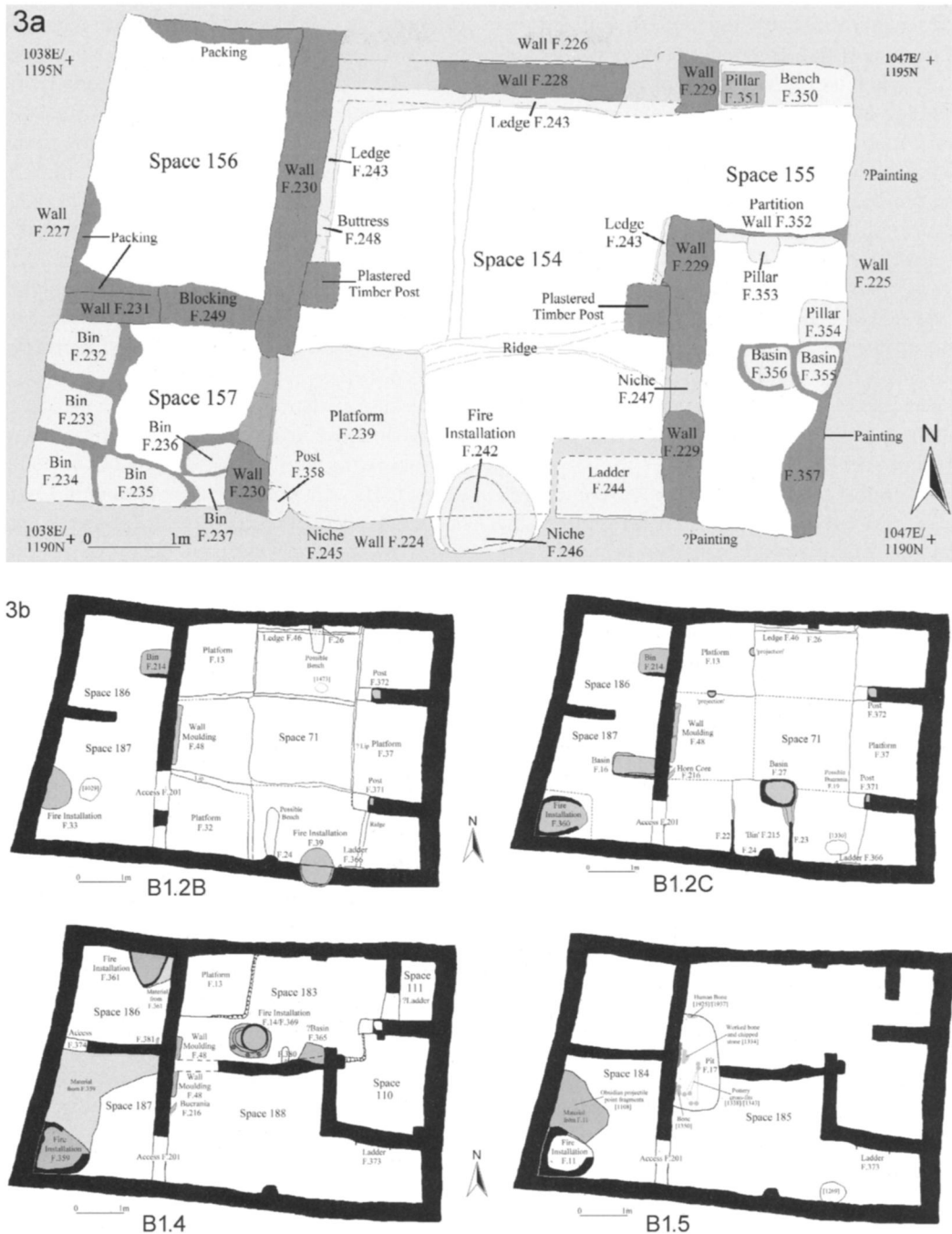


Figure 3. Phases of occupation of Building 5 (Figure 3a) and the house immediately above it, Building 1 (Figure 3b) at Çatalhöyük.

have different social meanings. There is a tendency for different categories of people to be buried under different platforms. For example, in Building 1 there are more young people buried beneath the

northwest platform F. 13 and more older individuals under the central east platform F. 37 (Cessford 2004b). The distribution of “art” and symbolism in the house also respects spatial divisions. Painting

and sculpture are rarely found in the southern area of the house, and large relief sculptures are especially common on west walls of main rooms. In Building 1 there is a possible spatial and temporal link between geometric art and burial, especially of younger people and children. In these socially and symbolically divided spaces, one activity that was carefully regulated was discard. In general terms, the floors at Çatalhöyük are remarkably clean. Apart from the last floor on which artifacts may be deposited during abandonment, it is rare to find artifacts of any size at all. On the other hand, the midden areas between houses, and within abandoned houses, contain the small sweepings and rake-out from houses and are artifact rich (W. Matthews 1996).

Given that the floors are kept so scrupulously clean, can variation in activities across floors be identified? Do the actual patterns of activity seem constrained by the highly segregated and compartmentalized space? In answering these questions, attention was focused on microartifacts that might have been trampled into soft plaster floors, so escaping sweeping activities. There is also much evidence from impressions and phytoliths of woven reed mats on at least some of the platforms and floors. These would have restricted the incorporation of all but the smallest artifacts into floor plasters. Studies of microartifact patterning are often based on the premise that microartifacts are more likely to represent traces of in situ activity than larger artifacts (Dunnell and Stein 1989; Fladmark 1982; Goldberg et al. 1993; Rainville 2000; Schiffer 1987). It is postulated that "depositional sets" are more directly related to "activity sets and areas" (Carr 1984:114) at the micro level than the macro level. Largely because of different conditions at different sites, there is no agreed methodology with regard to appropriate sample sizes, what sizes constitute upper and lower ranges of microartifacts, and which material types to consider (Dunnell and Stein 1989; LaMotta and Schiffer 1999).

The premise that microartifacts in and on floors relate to activities that took place on those surfaces needs to be rigorously investigated and critiqued on a site-by-site basis, rather than simply assumed (for a fuller discussion see Cessford 2003). At Çatalhöyük, all deposits excavated are sampled for wet screening/flotation, usually with a single 30-liter sample, although floors are often sampled more

extensively to look for evidence of spatial patterning. The heavy fraction or "heavy residue" (the material that does not float) from this process is then separated into four size ranges: greater than 4 mm (henceforth 4 mm), less than 4 mm and greater than 2 mm (henceforth 2 mm), less than 2 mm and greater than 1 mm (henceforth 1 mm) and less than 1 mm. The three larger fraction sizes are then sorted by hand and various types of material culture collected, mainly chipped stone (obsidian and flint), bone and charred plant material. These are then weighed to provide density figures expressed as grams per liter.

Because all deposits are sampled in this way, it is possible to contextualize the patterning on floors by comparing with densities in other types of deposit. The white plaster floors found at Çatalhöyük are visually similar to white plasters found on walls, and micromorphological examination indicates that both are made of similar white calcareous clay sediments (W. Matthews 1996:304). Given that microartifacts in wall plasters are unlikely to relate to in situ activities taking place on vertical surfaces, a comparison of these two deposit types should prove useful. Results from two excavation areas, North and South, are shown in Table 1, indicating the median densities (grams per liter) of chipped stone and bone at the three different fraction sizes. The wall plasters contain densities of material often similar to or even higher than those found in the white clay floors. This shows that at the very least a substantial percentage of such materials in floors are unlikely to relate to in situ activities.

Further information concerning this patterning can be obtained from a consideration of the material found in the wall and floor plasters. Detailed analysis of the faunal material in the wall plasters indicates in general low densities and small fragments, usually not exceeding 2 cm although sometimes as large as 5 cm. Beyond this general pattern there is much variation, with some wall plasters having digested bone indicative of dog feces. Some have very fresh bone while others have worn pellets. The profiles of the different wall plasters variously resemble assemblages from "clean" floors, "dirty" floors, "low traffic" floors, and "empty" fills, as well as other constructional material such as mudbrick, mortar, and packing. The general conclusion is that much of the material in the "floor

Table 1. Density (grams per liter) of Bone and Chipped Stone in White Clay Floors and Wall Plaster in the North and South Areas at Çatalhöyük.

	North Area white clay floor (48 Samples)	North Area wall plaster (12 Samples)	South Area white clay floor (34 samples)	South Area wall plaster (40 samples)
Bone 4 mm	.210	.262	.329	.138
Chipped Stone 4 mm	.001	.000	.005	.000
Bone 2 mm	.026	.038	.018	.020
Chipped Stone 2 mm	.002	.003	.002	.001
Bone 1 mm	.017	.011	.004	.015
Chipped Stone 1 mm	.000	.000	.001	.000

assemblages” derives from the floor construction material. In other words, it is “background noise” that gets into most construction material and has little to do with activities taking place on floors.

The relationship between microartifacts in floor deposits at Çatalhöyük and in situ activities is thus a problematic one. It could be argued that in excavation the microartifacts on floors should be separated from those in floors. The floors at Çatalhöyük are generally about 2–10-mm thick and within 5 cm of floor thickness there may be 10 to 20 floors—these are the replasterings referred to earlier. Under the microscope it may be possible to discern microartifacts lying on, rather than in, floors, and micromorphology has been used extensively to explore such patterning. W. Matthews (1996) used micromorphology to discern two types of floors in buildings based on the presence or absence of finishing coats of white plaster on the floors. Where such finishing coats occur, overlying occupation

deposits are very thin or absent. Where there are no laid white plaster layers on the floors, the overlying occupation deposits, while still only a few millimeters thick, are generally thicker and include a wider range of material such as burnt and unburnt organic and inorganic aggregates, small fragments of bone, charred cereal grain fragments, silicified plant remains, melted silica, charred wood, and calcitic ashes. But given the thinness and multiplicity of floors noted above, it is often impossible during excavation to separate individual floors from overlying lenses of occupation material. Thus the archaeological category “floor” includes clean plastered floors that may or may not have some use residues trampled into them, and floors without white plaster finishes that contain make-up and perhaps trample, but that also include thin occupation lenses above the floors. As a result, if we compare in Figure 4 the overall densities of lithic and faunal material (and the same is found with botanical

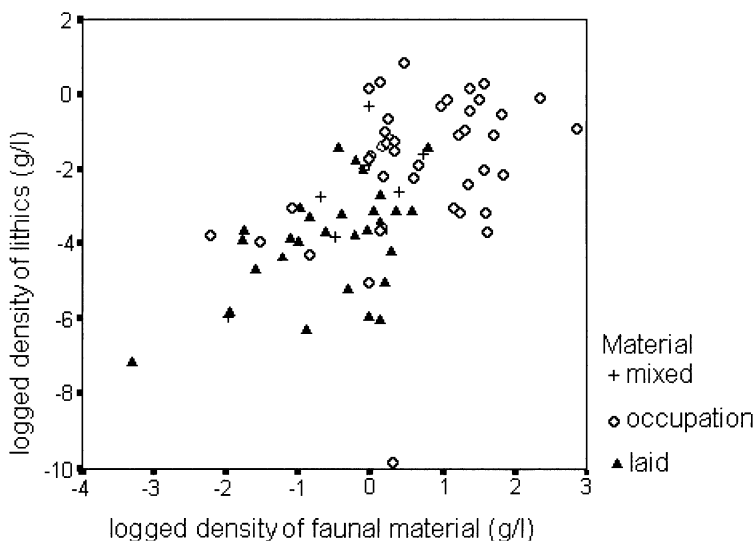


Figure 4. The densities of lithic and faunal material in relation to different types of floor at Çatalhöyük (Cross 2004).

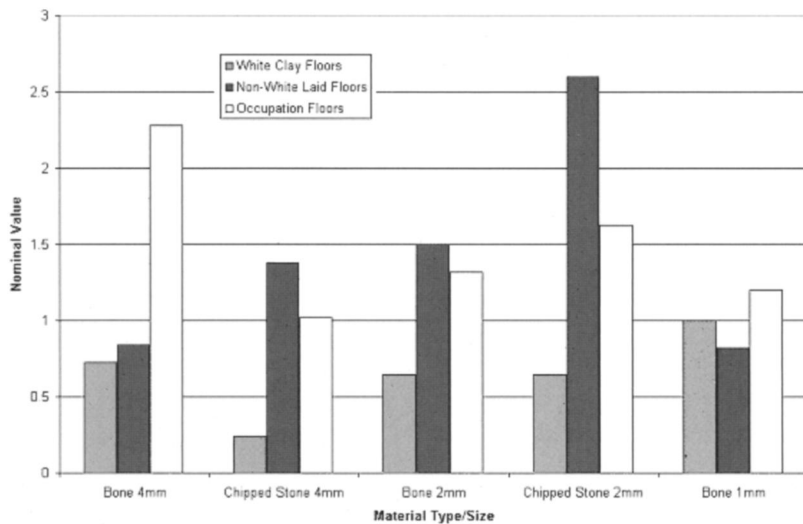


Figure 5. Median densities of bone and chipped stone in different types of floor in the North Area at Çatalhöyük.

material) in the laid white plastered floors and in the “occupation” floors without white plaster finishes, clear differences in density are observed (Cross 2004).

The densities in Figure 4 derive from all artifacts found in the excavation trench and in dry screening, as well as the >4-mm artifacts from the wet screen. By studying only the heavy residue data from the wet screen, we can explore further differences between categories of floor among the microartifacts. Figure 5 and Table 2 make the same distinction between white laid floors and occupation floors but add laid plastered floors without white plaster finishes. The differences in microartifact density between the laid floor categories probably result from both construction and use activities, and micromorphology is less frequently able to distinguish lenses of occupation on such floors. Differences in microartifact density are also

shown for other categories of floors in Table 3 and Figure 6.

There are very marked differences between the surfaces of the different platforms and floors in any one building. Near the ovens the floors (“occupation” floors) are rich in charcoal and a wide range of residues from obsidian knapping debris to animal bone scatter to potsherds and charred wood and basketry. Away from the hearths and ovens there are various types of laid, whiter, higher, and cleaner floors. It is probable that a large part of this variation derives from the use of different forms of construction material (containing different amounts and types of microartifact), although at least in the case of the denser “occupation” floors the on-floor material is sometimes thick enough to be distinguishable, at least under the microscope. As an example, in Figure 7 the “dirtier” occupation deposits could be distinguished in two areas asso-

Table 2. The Densities of Heavy Residue Material in Floors of Different Type in the North Area at Çatalhöyük.

	White Clay Floors (48 Samples)		Non-White Laid Floors (20 Samples)		Occupation Floors (42 Samples)		All Floors (176 Samples)	
Bone 4 mm	.210	.73	.241	.84	.653	2.28	.287	1.00
Chipped Stone 4 mm	.001	.24	.006	1.38	.004	1.02	.005	1.00
Bone 2 mm	.026	.65	.059	1.50	.053	1.32	.040	1.00
Chipped Stone 2 mm	.002	.65	.008	2.60	.005	1.63	.003	1.00
Bone 1 mm	.016	1.00	.013	.82	.020	1.20	.016	1.00
Chipped Stone 1 mm	.000	N/A	.000	N/A	.001	N/A	.000	N/A

Note: All densities are expressed in grams per liter. For ease of comparison, the overall median density value for all units can be expressed as a nominal value of 1.00 and the median values for specific types of units can be expressed as a second figure.

Table 3. Density of Bone and Chipped Stone in General Floors of Different Material Types in the South Area.

	Baked Floor (71 samples)		White Clay Floor (34 samples)		Non-White Laid Floor (97 samples)		Occupation Floor (188 samples)		Mixed Floor (85 samples)		All Floors (576 samples)	
Bone 4mm	.186	.33	.261	.46	.500	.88	1.062	1.86	.415	.73	.570	1.00
Chipped Stone 4mm	.00	.00	.00	.00	.00	.00	.035	5.84	.025	4.09	.006	1.00
Bone 2mm	.040	.30	.038	.29	.193	1.46	.290	2.19	.080	.60	.132	1.00
Chipped Stone 2mm	.00	.00	.003	.46	.002	.29	.020	2.89	.010	1.39	.007	1.00
Bone 1mm	.011	.19	.010	.18	.070	1.17	.140	2.33	.040	.67	.060	1.00
Chipped Stone 1mm	.00	.00	.000	.19	.002	.80	.005	2.08	.005	2.00	.002	1.00

ciated with ovens (in the normal southern location and in an unusual northern location). The material in these dense and thicker occupation deposits on some floor areas allows us to argue that a wide range of activities from obsidian knapping to bone tool production, cooking, and food preparation took place in the house. But it remains prudent to argue that for microartifacts in other floors, the clear overall spatial differences found within buildings may relate primarily to construction and secondarily to use.

The argument can be clarified by examining specific density variation in houses in relation to features such as hearths, ovens, and burials. As an example, patterning of microartifacts from heavy residues from individual buildings is shown for Building 1 (Subphase B1.2C) in Figure 8. The higher densities of small bone in food preparation and storage areas such as the western room and the

south of the main room around a grinding installation and storage bin contrast with the lower densities in other parts of the main room including the platforms used for burial. The platforms and floor segments associated with art (the western and northwestern) and burial (the northwestern, north central, and central east) all have low densities of small bone. Even if the patterning of heavy residues is partly the result of the use of different flooring materials, the distinctions in construction or use have a clear social significance. If we cannot talk with surety of repetitive social practices in terms of discard-producing activities for all floor types, we can talk of repetitive replastering activities with particular types of plaster chosen for different parts of floors, and we can talk of repetitive practices involving burial and the location of art, and we can certainly talk of repetitive sweeping practices.

Inductively coupled plasma atomic emission

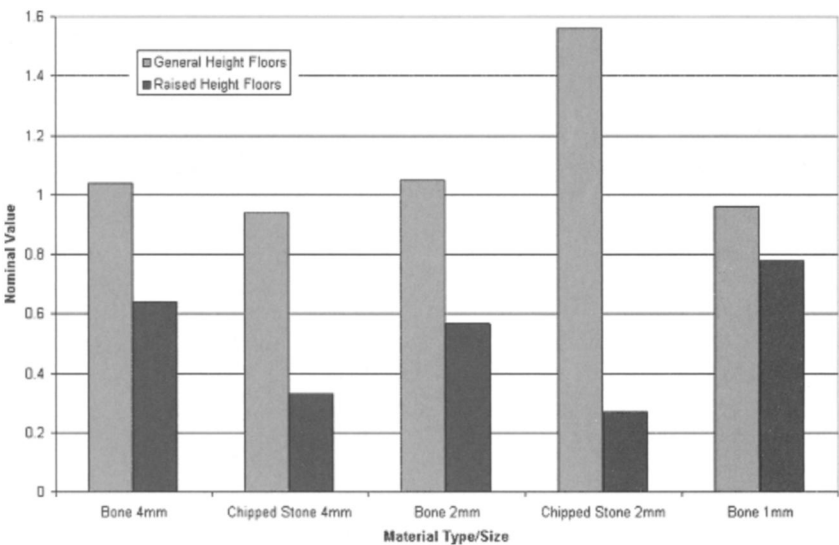


Figure 6. Densities of bone and chipped stone in general and raised height floors in the North Area at Çatalhöyük.

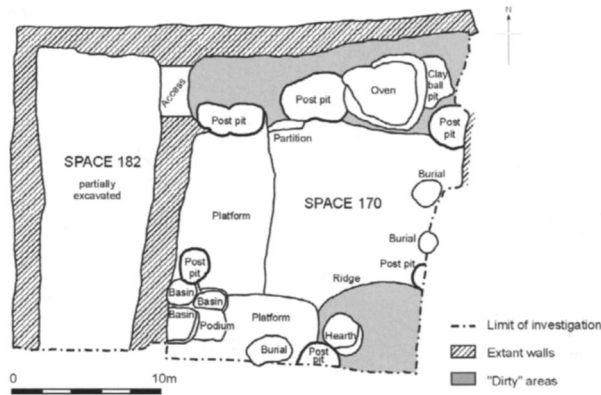


Figure 7. Two areas with “dirty” occupation floors in Building 17 at Çatalhöyük. These areas are well bounded and there is little “scuffing” onto adjacent floors (Farid 2004).

spectrometer analysis (ICPAES) of the elemental composition of floor deposits (Akyol and Demirci 2004; Middleton et al. 2004) shows clear differences between different floor areas (e.g., Figure 9). A multi-elemental characterization of floor sediments was undertaken, for example in Building 5. Multivariate numerical classification yielded spatially coherent groups. In particular, the northwest platform in the central room of Building 5 was distinctive, probably as the result of both the use of different floor materials in the construction of dif-

ferent areas, and as a result of differential use of different parts of the floor.

There is some evidence that these practices extended into the wider world. Fragments of roof in the fill of Building 5, probably derived from the structure itself, revealed mixed floor types, similar to those found inside buildings, and water-laid crusts indicate at least partial exposure to the elements. Charred plant remains and organic staining probably relate to domestic activities and fragments of oven plaster imply the presence of fire installations.



Figure 8. An example of heavy residue plots for microartifacts in and on floors in Building 1 (Subphase B1.2C, 2-mm bone) at Çatalhöyük.

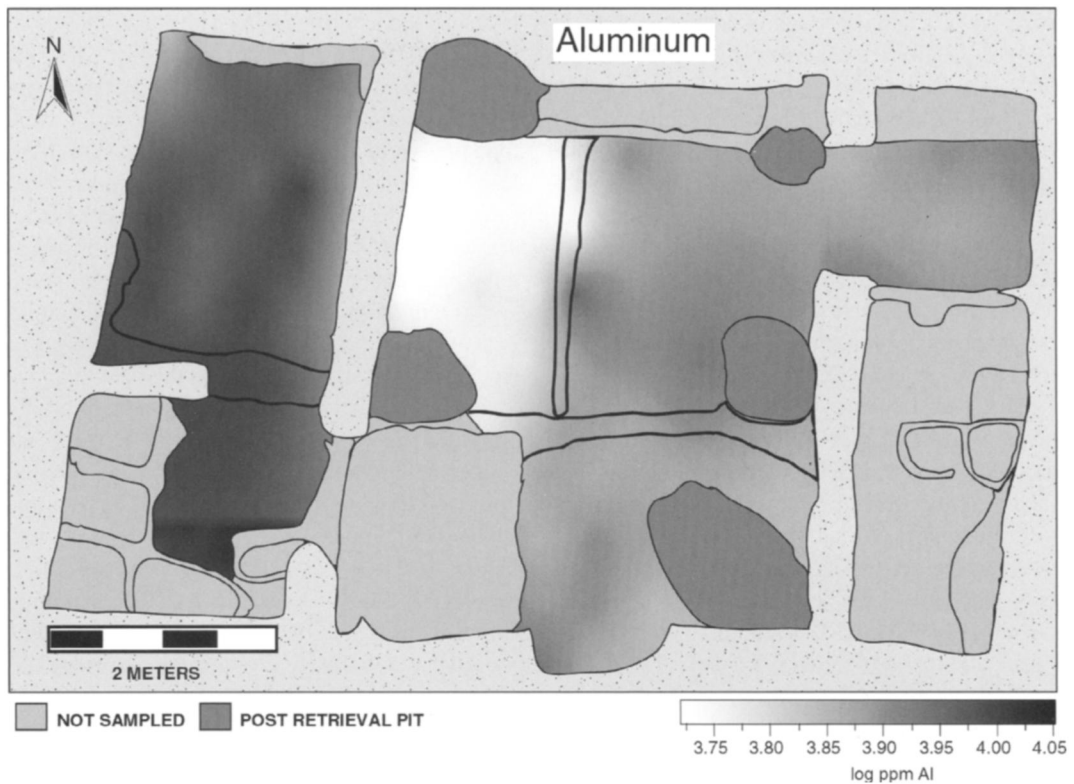


Figure 9. Example of plot of ICP AES analyses of the elemental composition of floor deposits from Building 5 (Middleton et al. 2004).

A more complete roof discovered collapsed into Building 3 in the BACH Area showed clear evidence of spatial distinctions between cleaner and more residue-rich areas, rather like the floors within the houses (Stevanovic and Tringham 1999).

But there are also contrasts as we move away from the house. The midden areas between houses and the middens in abandoned houses show a dense build up of a variety of materials including a wide range of macro and microartifacts, ash and charcoal. Traces of wall plaster and the overall nature of many of the small concentrations of discarded material suggest that some of this may be hearth sweepings and other sweepings from the house. Analysis of the bile acids of dung in the midden revealed a suite of fecal biomarkers indicative of a human origin (Bull et al. 2004). The midden is thus the end-product of the very careful regulation of daily practices inside the house, and it appears as its inverse—dense, artifact rich, and spatially unsegregated. There is sometimes evidence in the middens for spatially defined activities in the form of fire spots and rare burials, but these are not

repeated in the same place over time. There are other areas outside the house that also suggest less-disciplined behavior. Some of the art shows ritual baiting and hunting scenes in which human figures are shown jumping, leaping, beneath and over bulls and stags, their arms raised and their bodies active. Some of these scenes show rows of people, but others show little order. If these paintings depict actual activities, they must have taken place outside the settlement as they involve large animals and many people in open spaces. If we take “shrine” F.V.1 as an example we see cattle, deer, wild asses, boar, bears, wolf and lion, often associated with groups of 20 to 40 people (Mellaart 1966:184–91). The regulated practices in the house are very different from these glimpses of non-house activities.

We have identified repetitive patterning in the construction and use of buildings at Çatalhöyük. Our best evidence comes from Buildings 1 and 5, but we have referred to sitewide patterns in the 15 buildings in which floors have been excavated by the present project. Repetitive patterning in, for example, the location of art, burials, obsidian

hoards, ovens, and ladder-entries was identified in the over 200 houses excavated by Mellaart in the 1960s, but data were not collected at that time which would allow the study of artifact patterning on floors. Taking the past and present excavations together, there is evidence to suggest that as a child grew up in a house at Çatalhöyük, it would have learned that different types of people were buried beneath certain platforms, that different plasters were used for different platforms, and that refuse was swept up more carefully from some areas. Different symbols are often placed in different parts of the house. Because of the burial associations between different types of people and different parts of the house, it seems reasonable to assume that different people may have sat, eaten, and slept in different parts of the house. Social rules would have been learned through daily practice involving the movements of the body in the house. This is one way in which each individual would have learned and incorporated social rules.

Of course, all societies have rules to deal with the organization of space and discard, and it could be argued that the inhabitants of Çatalhöyük simply cleaned out their houses in order to prevent build-ups of refuse. Indeed, it is partly the arrangement of daily living practices at the site, with long-term reuse of buildings in the same location, and a high density of such buildings, that necessitates repeated cleaning-out practices. The social regulation is already there in the practical need to clean out houses so thoroughly and consistently. But at Çatalhöyük, there is more than just the regular dumping out of refuse. As with other activities in the house, refuse sweeping took place within a highly divided social space, marked and fragmented by platform edges, pillars, ledges, and so on. The body moved around this space cleaning up, but also replastering floors, burying the dead, painting the walls, moving up and down from platform to platform, preparing and cooking food, knapping obsidian, eating, and sleeping. All these movements of the body were constrained by platforms, edges, delicate ledges and pillars and relief sculptures sticking out from walls. All societies have rules about movement and discard in space and in houses, but at Çatalhöyük there is a particular emphasis on segmenting space in the house and regulating movement around that space. Çatalhöyük sees a particular emphasis on repetition, with layer upon

layer of replastering using similar divisions of space. The tidy ordering of domestic space and movements within that space are repeated over decades and centuries. Buildings 5 and 1 were together occupied for over a century; both Mellaart's "shrines" 10 and 31 continued in use from Level IX to Level VIA, which is a period of about 400 years. Mellaart did not excavate all levels in the same part of the mound and so only future excavation will be able to show whether some buildings at Çatalhöyük were rebuilt for large parts of the 1,200 years of occupation at the site.

But whose interests do these repetitive bodily practices serve? There is very little evidence of gender differentiation in the location and associations of burial, in diet as suggested by isotopic analysis of human bone and wear analysis of teeth (Andrews et al. 2004; Richards and Pearson 2004), and there is little evidence of status differentiation among burials. On the other hand, some houses seem more elaborate than others. These more elaborate houses were termed "shrines" by Mellaart (1967). More recently Ritchey (1996) and Düring (2001) have quantified the degree of elaboration of buildings in each level based on numbers of internal spaces, moldings, basins, pillars, posts, benches, and platforms. Gradual clines of variation from less to more elaborate buildings can be seen at all levels, and the more elaborate buildings are interspersed spatially among less elaborate buildings. Despite the fact that all buildings are houses with a full range of domestic activity, storage, and domestic production, there is some indication that fine bifacially flaked obsidian points are concentrated in the more elaborate buildings (Conolly 1996). The fact that obsidian cores also concentrate in the more elaborate buildings suggests some preferential access to or involvement in obsidian. The largest numbers of figurines come from very elaborate buildings (Hamilton 1996). But the notion that the more elaborate buildings were in some sense "dominant" is best supported by the evidence of burial. In the case of Building 1, around 60 individuals were interred in the structure during its construction and occupation. Of these at least 30 individuals must have been alive at the same point in time. This is too many to have actually lived in the building on a day-to-day basis, as it is unlikely that this exceeded 10 individuals based on the size of the building and probable

sleeping arrangements. This suggests that Building 1 acted as a focus for burial for a number of buildings. Building 1 could be defined as elaborate in terms of its bucrania, paintings, posts, numbers of platforms, and moldings. Some elaborate buildings excavated by Mellaart in the 1960s also contained large numbers of burials, although the records are imprecise (Hamilton 1996). The two buildings with most burials from the 1960s are “shrine” 10 which had 32 skeletons in Level VI, and “shrine” 31 which had 58 skeletons in Level VII. “Shrine” 10 occurs second in terms of Ritchey’s (1996) ranking of 59 buildings in Level VIB. “Shrine” 31 is the second-most elaborate building in his ranking of the 45 buildings in Level VII. At the other end of the scale, there are non-elaborate buildings such as Building 2 that have no burials. Overall it seems probable that certain buildings became preferential sites for burial. In this way they had a “dominance” in relation to access to previous lineage members.

There is some evidence that the dominant houses were more invested in the regulation of repetitive bodily practices. The more elaborate buildings such as Building 17 (this is a renumbering of Mellaart’s “shrine” 10 in Level IX, the first full level that could be excavated in this building by the present project) placed more emphasis on the maintenance of the internal floor scheme identified in this paper (Farid 2004). The distinctiveness of platforms and the degree of separation between floors with cleaner plasters and those with high densities of charcoal and hearth sweepings seem stronger in more elaborate buildings with burials, such as Buildings 1, 3, and 17 (see Figure 7) than in smaller buildings without burials such as Building 2 (and perhaps 18, 23, and 5). In Building 2, the ridges between the area near the oven and the more northerly whiter floors are ill-defined and there is overspill of charcoal-rich deposits across the ridges. This type of “scuffing” is less common in the more elaborate houses.

But the degree of dominance is slight and could even be reversed if one considered alternate criteria. Building 2, for instance, had two caches of chipped stone deposited in its foundations, totaling over 50 pieces. As already noted, Özdoğan (2002) sees much more evidence for social differentiation in eastern as opposed to central Anatolia. It is difficult to explain the overall emphasis on

repetitive practices in central Anatolia solely by referring to centralized power or the use of force. The overall repetition of practices must have been embedded in a wider discourse for it to have been so pervasive. People accepted the regulated and repetitive practices, presumably because they enabled social life. The rules would have enabled practical living in confined spaces and the carrying out of a multiplicity of tasks in those spaces. The practices created rules and a *habitus* (such as deference to elders) that could have helped in the negotiation of disputes over movement, access, and rights in the settlement as a whole. The regulation and the habituation would have allowed the growth of the long-term dependencies that are necessary for delayed-return economic systems (Woodburn 1980).

Social Memory

What was the social context in which the repetition of practices was made possible at Çatalhöyük, and what role did the more elaborate houses play? While it might be suggested that daily practice and social memory are distinct topics, we would argue that in this context they are inseparable in that regulation is not simply imposed at Çatalhöyük but is constructed through the habituation of practices. In societies without any form of writing, an important mechanism of social reproduction is through the construction of social memory. We use the term “memory” to take the discussion away from “tradition” and toward an active process of memorizing that is socially embedded. We do not just remember biologically (Ebron 1998). What we remember is selective and can thus be socially constructed and contested (Connerton 1989). So how were memories constructed at Çatalhöyük and how were they used in the interests of social regulation? We will argue that one important mechanism was again the house.

The notion that the house can act as a site for social memory has been widely recognized ethnographically and archaeologically (Carsten and Hugh-Jones 1995; Joyce and Gillespie 2000). In Levi-Strauss’s (1982:174) definition of “house societies” we see a move away from kinship classificatory models toward the “house” as a corporate body holding an estate that reproduces itself through the transmission of its name, goods, and titles. Particularly in more recent research (Carsten

and Hugh-Jones 1995; Joyce and Gillespie 2000), the materiality of the house, its practices and heirlooms are foregrounded. The transmission of houses, and of objects kept in houses, forges social memory and constitutes social units (Joyce 2000). In Polynesia, for example, an important component of the reproduction of the corporate group is the burial of ancestors and the transformation of houses into ritual temples (Kirch 2000).

The continuity in the layout of houses through time in the Neolithic tells of the Levant and south-eastern Anatolia has been identified as relevant to the discussion of social memory by Kuijt (2001; see also Banning and Byrd 1987; Kirkbride 1968:94). The construction of social memory has also been related to the widespread Near Eastern practice of removing and circulating skulls, including the plastering of facial features (Cauvin 1994; Garfinkel 1994; Goring-Morris 2000; Kuijt 2000; Stordeur et al. 1977). The specific social context of this activity seems to vary between individualized and collective memory construction (Kuijt 2001). Clearly not all mortuary ritual is about ancestral cults (Morris 1991), but equally, ancestral rituals may refer to both generic and specific ancestors (Whitley 2002).

We can see the importance of creating social memories at Çatalhöyük in that burial in houses is more prevalent here than in other sites in Anatolia and the Near East. But are we dealing here with specific or general ancestors (see also Parker-Pearson 1999:164)? We need to be able to demonstrate specific links to argue that particular house-based corporate groups are being constructed. We also have to distinguish habituated behavior, involving the repetition of acts, from commemorative events involving specific social memories (Connerton 1989). In the former case, ritual and other acts may become routinized and codified but there is no specific memory of events and histories, while in the latter case a link is remembered to a specific event or person. There may also be community-wide memories embedded in daily practices and rules (everyone knows that the hearth is in the south of the house) without there being any specific memory of an individual house in which the hearth was in the south. So the onus is on us to demonstrate specificity of memory construction if we wish to argue that memory was used to reproduce regulatory codes through the practices in the house.

We have already described how the continuity of houses is seen in the exact building of one house on the walls of the preceding house. We have also noted the remarkable degree of continuity of platforms and floor divisions through successive replasterings and rebuildings. Change does occur in the location of ovens, hearths, etc., and in terms of the overall cultural assemblage, but it is gradual and incremental. Earlier in this paper we described the sequences at Aşıklı Höyük and Çatalhöyük showing the repetition of house, platform, hearth, and midden location over hundreds of years. But all this evidence could be produced by habituated practices at the level of the site as a whole. What is the evidence of house-based memory construction?

All 15 houses excavated by the current project at Çatalhöyük show some form of founding or abandonment practices and rituals. An enormous emphasis is placed at abandonment on scouring out bins, filling in ovens, cleaning floors, dismantling timbers, and filling in rooms. It is important to recognize that these abandonment processes may have been set within a thoroughly practical logic. Structural timbers were probably removed so that they could be reused in a later house. Dendrochronology appears to support the idea that some posts were reused (Newton and Kuniholm 1999). Scouring of bin floors, house floors, and moldings may have occurred so that the fine plaster could be reused in later houses, especially if some forms of lime-rich muds and clays were difficult to obtain. The packing of ovens with clean soil and the filling in of rooms may also reflect a concern with attempting to provide as stable a base as possible for the next structure to be constructed. While this is true, the degree of "cleaning up" that occurs is remarkable, and the deliberate placing of artifacts (such as the upturned grinding stone placed on the floor in one phase of Building 1's abandonment, and the cattle scapulae placed on top of or near hearths in the final Building 1 abandonment and in Buildings 23 and 17) are less easy to explain fully in this way. In a number of cases foundation deposits have been found, such as the burial of three individual neonates, an adult woman with neonate and an old man in Building 1. Evidence of possible feasting (concentrations of large animal bones from large animals) has been found beneath some walls. In Building 17 in the southeast corner of the main room, a hearth was found that had been

rebuilt several times. In the sealing deposit of one of the hearths a broken figurine was placed with both head and torso present, but separate. The deliberateness of this act is reinforced by the faunal remains from the same context (*locus*) that suggests a single-event consumption of a young sheep. Two subphases of hearth reconstruction later, a broken figurine head was again deposited—directly over the earlier example. This head was very similar in appearance and size to the earlier one, and both were quite different from other figurines found at the site. This evidence of closure and re-enactment strongly suggests specific house-based memories.

One place where we have moderately good evidence for replacement of one house by another at Çatalhöyük is Building 1 and the house immediately beneath it, Building 5, although we did not excavate beyond the latest phase in Building 5 (Figure 3). In general terms the similarities between the successive buildings are striking and exceed what might be anticipated simply from general similarities between buildings at a sitewide level. It was immediately clear as we dug through below the floors in Building 1 that the main walls of the building continued down and were more or less continuous with the building below. In fact, it was often difficult to determine a boundary between the two buildings in time; they formed part of a continuous process of replacement.

The overall plan of Building 1, especially in its earliest phases, follows very much that of the earlier Building 5. The placing of the western rooms, and the entrance into them in the south, are the same. The oven is in much the same place in Building 1 Subphase B1.2B. The ladder emplacement is the same as before. Of course, some of these continuities result from the technical preference for locating later walls on the solid foundations of earlier walls rather than on softer fill. Other continuities (such as the oven and ladder locations) are part of a sitewide pattern. But there are also acts too specific to be explained in this way, as in the Building 17 example just provided.

An example of specific commemorative memory in the Building 5 to 1 sequence may be represented by the retrieval pits against the walls in the western parts of the main rooms. In Building 5, F.240 is a retrieval pit dug to remove a post from the eastern face of the west wall in Space 154. The retrieval pit contains two bone points and an obsid-

ian projectile point. This is one of only two Building 5 retrieval pits with substantial artifacts. F.240 is directly beneath Building 1 retrieval pit F.17. The latter was dug to remove or retrieve relief sculpture (only traces of which remained on the wall) from the east face of the west wall in the main room. This again contained “offerings” of three bone points, a bird bone and eight assorted pieces of obsidian and flint placed in a group in its fill. So there is perhaps a specific repetition of retrieval and closure acts involving bone and obsidian objects.

The retrieval pit just described in Building 1 (F.17) provides an example of commemorative memory maintained at both house and larger scales. The pit is dug down from the filled-in building, subphase B1.5B. And yet, whatever was on the west wall of this room had already been disturbed or even partially destroyed in phases B1.3 and B1.4 by the construction of wall F.18. Indeed, the sculpture on the west wall could only have been an integrated part of the room in Building 1 back in subphase B1.2C. Phases B1.3 to B1.5B probably lasted decades, based on the relative criteria of numbers of floors and oven bases. And so the retrieval pit implies a memory going back for some time. It might be seen to imply a precise social memory. However, there are difficulties beyond the uncertainty about the lengths of phases. We do not know what the relief sculpture was on the west wall of the main room in Building 1, and we do not know how the wall F.18 affected the sculpture although it is likely that it did damage it in some way. Both the relief sculpture and its relation to wall F.18 were destroyed by the retrieval pit itself. All we can say with certainty is that retrieval pit F.17 was dug down very carefully against the correct wall, in exactly the place where the sculpture was located. Given the large amount of erosion off the top of the mound that occurred in the millennia after the Neolithic occupation, we cannot know how deep these Neolithic “archaeologists” had to dig, but it was at least .7 m and probably substantially more. We do know that Building 1 had been filled and that any digging down implies a precise historical memory even if embedded within wider knowledge about where important sculptures were generally placed. Not all houses have major relief sculptures on the west walls of main rooms. Specific memory is also implied by certain burials in Building 1. While in some instances it was clearly permissible for later

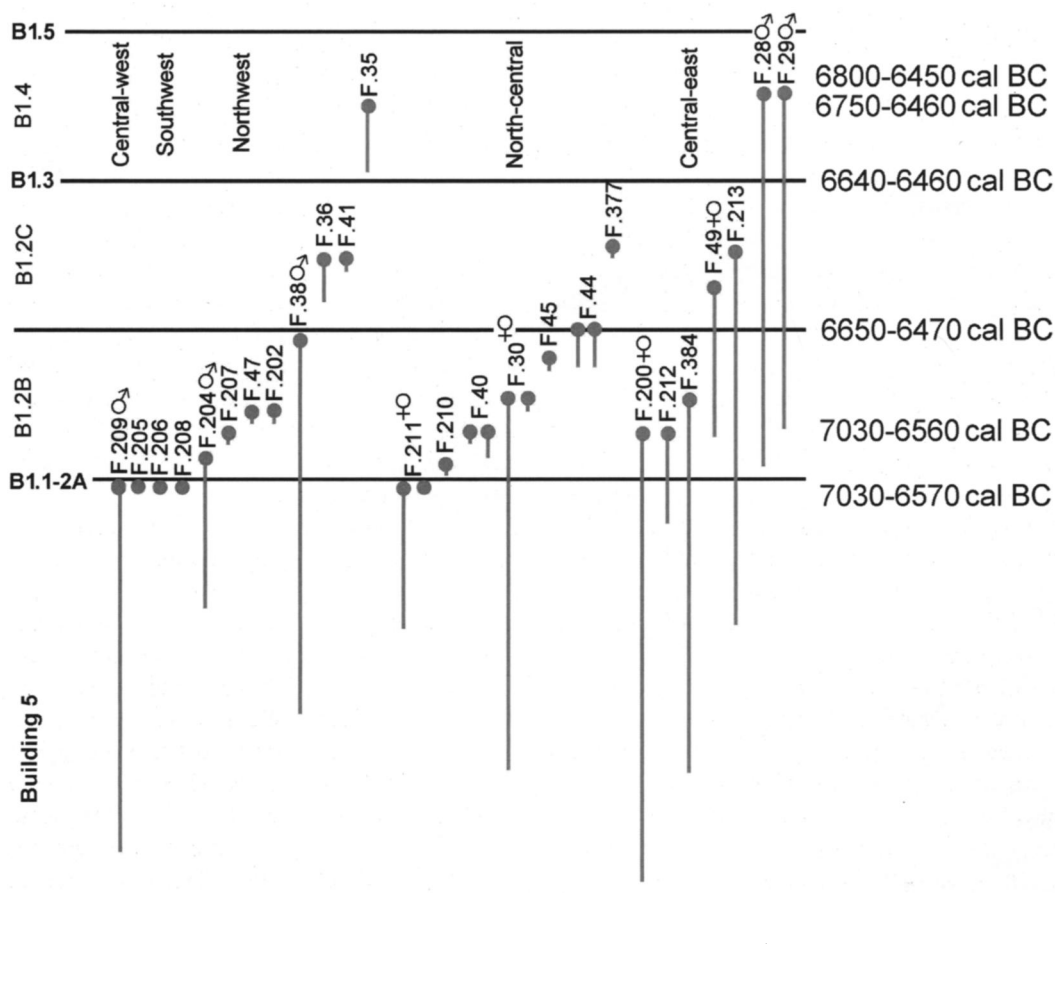


Figure 10. Life-spans of individuals buried in Building 1 in relation to selected absolute dates of phases of Buildings 1 and 5 (to two standard deviations) (Cessford 2004a).

interments to disturb earlier bodies, there are clear indications that the precise locations and nature of earlier burials were remembered years or even decades later.

Can we estimate how much overlap in population there could have been between Buildings 5 and 1? Were any of the nearly 60 people buried in Building 1 alive during the time of Building 5? Detailed AMS dating of these buildings based on 40 dates has allowed precise evaluation of the duration of occupation phases and dates of burials (Cessford 2004c, and Figure 10). Assessing phasing has also been helped by the apparent yearly replastering of main walls (corroborated in general terms against AMS and dendrochronology; see Newton and

Kuniholm 1999). Among some of the earliest burials in Building 1 were several old individuals who must have been alive for most of the lifespan of Building 5. An old man (F.209) buried during the construction of Building 1 was at least 50 years old and an elderly woman (F.200) buried during the earliest occupational subphase was around 60 years old. Although we cannot be certain how long Building 5 was occupied, wall plaster suggests that it may be around 70 years, which is broadly compatible with the overall site-dating sequence. This suggests that individuals F.209 and F.200 were alive for most if not all of the occupation of Building 5. A similar phenomenon can be observed for Building 1, where two males F.28 and F.29 buried toward the

end of the building's occupation were at least nearly as old as the structure itself.

The fact that the relief sculpture in Building 1 was not removed immediately, but after the house had been filled in, may suggest that time had to pass before it could be removed. This memory across several phases is seen in other examples. For example, Mellaart (1964:70) discussed the depiction of a bull in his "shrine" 8 in Level IX. "Once again the presence of a bull on the north wall of 'shrines' in this position should be noted, for this is the third in succession ('shrines' VI.8, VII.8, and IX.8)." Bulls are found elsewhere on northern walls, as in VI.10, but not on the eastern part of the north wall as in the "shrine" 8 sequence. What is also remarkable is that this specific memory in "shrine" 8 was retained across phases in which a totally different form of wall art was used. Despite a period in Levels VIII and part of VII with vulture paintings, the distinctive bull motif was returned to in Levels VII and VI. Memory of an earlier arrangement of the house was retained and returned to.

There is much evidence that not only the heads of wild animals, but also of people were used as part of the construction of specific social memories. In Building 2, there is evidence of removal of something large from the west wall of the main room, possibly linked to a large wild cattle horn found on the floor nearby. We have already noted the removal of sculpture from the west wall in the main room in Building 1, where remnants of its mudbrick core and a separate cattle horn had been left in the wall. Mellaart (1967:Figure 16) records a frequent pattern of the destruction of the west walls of main rooms in order to remove sculpture. We do not know what exactly the bucrania represented, but in the art the baiting of bulls and other wild animals is linked to group activities and probably represents initiation or other rituals. A possibly similar instance may be the placement of at least 13 wild goat horns from a minimum of eight animals in a group in Building 1. Such groups of wild animal skeletal elements are paralleled from the excavations by Mellaart in the 1960s. For example, 13 lower boar's jaws were mounted in VIA.8 (Mellaart 1967:69) and must either represent curated assemblages or material specifically obtained by a reasonably sized group at some distance from the site. It is possible to suggest that the heads and other cranial elements of such animals

when placed in houses created memories of significant events in the life cycles of the houses or the people in them.

In the same way that a pit was dug down to retrieve sculptures in Building 1 and other buildings (see above), so pits were also dug to retrieve the heads of selected humans. In both Building 1 and Building 6 a skeleton was found buried beneath the house floors with its head removed and with traces of cut marks on the upper vertebrae. Andrews et al. (2004) suggest, on the basis of the completeness of the skeletons and the condition of the bones, that the bodies were buried with their flesh on, and that the head was cut off after a period of decay. Headless human corpses are frequently shown in the wall art, but so far only two headless skeletons have been excavated by the current project. Most skeletons were found with heads intact. It is possible that some special status was associated with the headless burials as the skeletons have been treated in distinctive ways (in Building 6 an unusual layout of the body and the placing of a cloth and plank over the torso). How were these heads reused? In the recent excavations, detached human skulls were found in foundation deposits, in a post-retrieval pit in Building 17, and in structured abandonment deposits in Building 3 (Stevanovic and Tringham 1999). The removal and reuse of human heads suggests some attempt to construct links between social groups and specific ancestors, since heads were (perhaps a year) later removed from individuals who had been treated in special ways at death. It is the heads of these particular individuals that were chosen for head removal. It is these particular locations that were remembered.

The plastered skulls from Kösk Höyük (Silistreli 1991) are broadly contemporary with the later levels at Çatalhöyük and indicate a related but probably rather different phenomenon in central Anatolia. As in the Levant the plastering of features on skulls may reinforce the idea of specific memories. There is abundant evidence from Çatalhöyük of the construction of social memories, although many of these may be general and sitewide and be embedded in practices and routines rather than being conscious, specific, and commemorative. But there is some evidence that the politics of memory were at least partly based in the house at Çatalhöyük and that the house was central to the construction of social memory.

What was the role of the dominant, more elaborate houses in the politics of memory? There is some evidence that these dominant houses were particular guardians of the archive of memories, alongside their particular investment in the regulation of daily practices that we saw earlier. We have already seen that they have concentrations of burials, suggesting that the archive of lineal and/or affinal relations was constructed preferentially in the dominant house. There is also a clear link between houses with large numbers of burials and houses that are replaced through many levels. The current project has so far only excavated one building (Building 5) below Building 1 which has 62 burials, but deeper sequences were excavated by Mellaart. From his data, the two buildings with most burials ("shrines" 10 and 31, see above) in Levels VI and VII, were both rebuilt through five levels (IX to VIA). Other buildings with many burials ("shrines" 1, 7, 8 in Level VI) also continued across three to five levels. Adjacent less-elaborate buildings with few or no burials (such as Building 2 by "shrine" 10) are not replaced from level to level. The floors of "shrine" 10 (Buildings 17 and 6) in Levels VIII and IX are lower than surrounding buildings, suggesting that this more elaborate building may have been modified and rebuilt at a slower rate than surrounding buildings. Thus domestic houses used for large numbers of burials, and those houses which are more elaborate, may have been more closely tied to continuity and the preservation of a collective memory.

All this indicates that the politics of memory at Çatalhöyük were house based, and perhaps that dominant houses invested particularly in the construction and control of social memory. The construction of longer-term memories, both specific and general, would have been the basis for the social, ritual, and economic practices involved in delayed-return societies. The social memories helped create the repetition in which daily practices were embedded.

Conclusions

We have argued that at Çatalhöyük the house was an important mechanism for regulating daily practice, the embodiment of social rules, and the construction of social memory. We do not argue that the processes discussed here need be found outside the areas considered. Indeed, we have seen differ-

ences even between central and eastern Anatolia. For example, Özdoğan (2002:254) notes that architectural change in eastern Anatolia and Upper Mesopotamia is much faster (at sites like Hallan Çemi and Çayönü) than in central Anatolia (Aşıklı Höyük and Çatalhöyük), although these comparisons are made across large distances and expanses of time. Architectural change is also apparently more pronounced at sites to the west of Çatalhöyük in the Lake District (Duru 1999), on the Mediterranean coast and in Northwest Anatolia (Matthews 2002:96–97). Certainly there are a number of sites in central Anatolia that show long-term occupation with little change (e.g., Aşıklı Höyük 8400–7400 B.C., Can Hasan III 7650–6600 B.C.). This suggests that central Anatolia was particularly distinctive in terms of the maintenance of regulatory codes through daily practice and house-based memory. There may thus be a link between the great emphasis on internal divisions of space, the dense packing of houses, and the great continuity of house-based practices in central Anatolia, although more work is needed to see how internal activities were organized at sites other than Çatalhöyük.

The general themes of repetitive practices and social memory may be discussed as relevant to many delayed-return, early agricultural societies. In the central Anatolian Neolithic, the socialization and regulation allowed people to deal with the economic, social, sanitation, crowding, and access problems associated with living in particularly tightly packed agglomerations with limited centralization of power. The practices were productive, providing mechanisms to deal with these problems and to create longer-term social relationships and memories, and delayed return economic systems. But they also served the interests of dominant groups and the structures that supported them. Even if further work at Çatalhöyük discovers larger-scale centralization than so far identified, the question of how that power was embedded within daily practice will remain.

Acknowledgments. We are grateful to all the members of the Çatalhöyük project on whose work all the above is based. In particular we thank Shahina Farid and Duncan Lees for Figure 7 and Slobodan Mitrovic for his work on the heavy residue patterning. We also wish to thank Dusan Borić, Bleda Düring and various anonymous reviewers for specific comments on this paper. The abstract was translated into Spanish by Dante Angelo.

References Cited

- Akyol, Ali Akın, and Şahinde Demirci
2004 Phosphorus Analysis of Sediments. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Alcock, Susan, Ruth Van Dyke, and N. H. Keeble (editors)
2003 *Archaeologies of Memory*. Blackwell, Oxford.
- Andrews, Peter, Theya Molleson, and Başak Boz
2004 The Human Burials at Çatalhöyük. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Baird, Douglas
2002 Early Holocene Settlement in Central Anatolia: Problems and Prospects as seen from the Konya Plain. In *The Neolithic of Central Anatolia*, edited by Frédéric Gérard and Laurens Thissen, pp. 139–152. L Ege Yayınları, Istanbul.
- Banning, Edward B., and Brian F. Byrd
1987 Houses and the Changing Residential Unit: Domestic Architecture at PPNB 'Ain Ghazal, Jordan. *Proceedings of the Prehistoric Society* 53:309–325. London.
- Bar-Yosef, Ofer
1986 The Walls of Jericho: An Alternative Interpretation. *Current Anthropology* 27:157–162.
- Barrett, John
1994 *Fragments from Antiquity*. Blackwell, Oxford.
- Belfer-Cohen, Anna
1995 Rethinking Social Stratification in the Natufian Culture: The Evidence from Burials. In *The Archaeology of Death in the Ancient Near East*, edited by Stuart Campbell and Anthony Green, pp. 9–16. Oxbow Monograph 51, Oxford.
- Belfer-Cohen, Anna, and Ofer Bar-Yosef
2000 Early Sedentism in the Near East: A Bumpy Ride to Village Life. In *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation*, edited by Ian Kuijt, pp. 19–38. Kluwer Academic/Plenum, New York.
- Biçakçı, E.
1998 An Essay on the Chronology of the Pre-pottery Neolithic Settlements of the East-Taurus region (Turkey). In *Light on Top of the Black Hill: Studies Presented to Halet Çambel*, edited by Guven Arsebuk, Machteld J. Mellink, and Wulf Schirmer, pp. 137–150. Ege Yayınları, Istanbul.
- Bourdieu, Pierre
1977 *Outline of a Theory of Practice*. Cambridge University Press, Cambridge.
1990 [1987] *In Other Words: Essays towards a Reflexive Sociology*. Polity Press, London.
1991 [1984] *Language and Symbolic Power*. Harvard University Press, Cambridge, Massachusetts.
- Bradley, Richard
2002 *The Past in Prehistoric Societies*. Routledge, London.
- Buck, Caitlin E., J. Andrés Christen, and Gary N. James
1999 BCal: An On-line Bayesian Radiocarbon Calibration Tool. *Internet Archaeology* 7. Electronic document, http://intarch.ac.uk/journal/issue7/buck_toc.html, accessed January 21, 2003.
- Bull, Ian D., Mohammed M. Elhimmali, Vincent Perret, Wendy Matthews, David J. Roberts, and Richard P. Evershed
2004 Biomarker Evidence of Faecal Deposition in Archaeological Sediments at Çatalhöyük, Turkey. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Byrd, Brian
1994 Public and Private, Domestic and Corporate: The Emergence of the Southwest Asian Village. *American Antiquity* 59:639–666.
- Byrd, Brian, and C. M. Monahan
1995 Death, Mortuary Rituals and Natufian Social Structure. *Journal of Anthropological Archaeology* 14:251–287.
- Carr, Christopher
1984 The Nature of Organization of Intrasite Archaeological Records and Spatial Analytic Approaches to their Investigation. *Advances in Archaeological Method and Theory* 7:103–222.
- Carsten, Janet, and Stephen Hugh-Jones (editors)
1995 *About the House: Levi-Strauss and Beyond*. Cambridge University Press, Cambridge.
- Carter, Tristan, James Conolly, and Ana Spasojević
2004 The Chipped Stone. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Cauvin, Jacques
1994 *Naissance des Divinités, Naissance de l'Agriculture*. Centre Nationale de la Recherche Scientifique, Paris.
- Cessford, Craig
2003 Microartifactual Floor Patterning: The Case at Çatalhöyük. *Assemblage* 7. Electronic document, <http://www.shef.ac.uk/assem/issue7/cessford.html>, accessed January 21, 2003.
2004a Estimating the Neolithic Population of Çatalhöyük. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
2004b The North Area. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
2004c Absolute Dating at Çatalhöyük. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Connerton, Paul
1989 *How Societies Remember*. Cambridge University Press, Cambridge.
- Conolly, James
1996 The Knapped Stone. In *On the Surface: Çatalhöyük 1993–95*, edited by Ian Hodder, pp. 173–198. Monograph 22. McDonald Institute Monographs and British Institute of Archaeology at Ankara.
2003 The Çatalhöyük Obsidian Hoards: A Contextual Analysis of Technology. In *Lithic Studies for the New Millennium*, edited by Norah Moloney and Michael Shott, Archetype Books/Institute of Archaeology, London.
- Cross, Sarah
2004 Statistical Integration of Contextual Data. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- De Certeau, Michel
1984 *The Practice of Everyday Life*. University of California Press, Berkeley.
- Dunnell, Robert, and Julie K. Stein
1989 Theoretical Issues in the Interpretation of Microartifacts. *Geoarchaeology* 4:31–41.
- Düring, Bleda
2001 Social Dimensions in the Architecture of Neolithic Çatalhöyük. *Anatolian Studies* 51:1–18.
- Duru, Refik
1999 The Neolithic of the Lake District. In *Neolithic in Turkey*, edited by Mehmet Özdoğan and Nezih Başgelen,

- pp. 165–192. Arkeoloji ve Sanat Yayınları, İstanbul.
- Ebron, Paula
1998 Enchanted Memories of Regional Difference in African American Culture. *American Anthropologist* 100:94–105.
- Esin, Ufuk, and Savaş Harmanakaya
1999 Aşıklı in the Frame of Central Anatolian Neolithic. In *Neolithic in Turkey*, edited by Mehmet Özdoğan and Nezi̇h Başgelen, pp. 115–132. Arkeoloji ve Sanat Yayınları, İstanbul.
- Fairbairn, Andrew, Julie Near, and Danièle Martinoli
2004 Macrobotanical Investigation of the North, South and KOPAL Area Excavations at Çatalhöyük East. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Farid, Shahina
2004 The South Area. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Flandmark, Knut R.
1982 Microdebitage Analysis: Initial Considerations. *Journal of Archaeological Science* 9:205–220.
- Flannery, Kent
1972 The Origins of the Village as a Settlement Type in Mesoamerica and the Near East: A Comparative Study. In *Man, Settlement and Urbanism*, edited by Peter Ucko, Ruth Tringham, and Geoffrey Dimbleby, pp. 23–53. Duckworth, London.
- 1993 Will the Real Model Please Stand Up: Comments on Saidel's "Round House or Square?" *Journal of Mediterranean Archaeology* 6:109–117.
- Foucault, Michel
1977 *Discipline and Punish*. Vintage Books, New York.
- French, David
1972 Excavations at Can Hasan III. In *Papers in Economic Prehistory*, edited by Eric Higgs, pp. 181–190. Cambridge University Press, Cambridge.
- Garfinkel, Yosef
1994 Ritual Burial of Cultic Objects: The Earliest Evidence. *Cambridge Archaeological Journal* 4:159–188.
- Gérard, Frédéric Gérard, and Laurens Thissen
2002 *The Neolithic of Central Anatolia. Internal Developments and External Relations during the 9th–6th Millennia CAL BC*. Ege Yayınları, İstanbul.
- Giddens, Anthony
1984 *The Constitution of Society: An Outline of the Theory of Structuration*. University of California Press, Berkeley.
- Goldberg, Paul, David T. Nash, and Michael D. Petraglia (editors)
1993 *Formation Processes in Archaeological Context*. Monographs in World Archaeology, 17. Prehistory Press, Madison, Wisconsin.
- Goring-Morris, Nicholas
2000 The Quick and the Dead: the Social Context of Aceramic Neolithic Mortuary Practices as Seen from Kfar HaHoresh. In *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation*, edited by Ian Kuijt, pp. 13–36. Kluwer Academic/Plenum, New York.
- Hamann, Byron
2002 The Social Life of Pre-Sunrise Things: Indigenous Mesoamerican Archaeology. *Current Anthropology* 43:351–382.
- Hamilton, Naomi
1996 Figurines, Clay Balls, Small Finds and Burials. In *On the Surface: Çatalhöyük 1993–95*, edited by Ian Hodder, pp. 215–264. Monograph 22. McDonald Institute Monographs and British Institute of Archaeology at Ankara.
- Hauptmann, Harold
2002 Upper Mesopotamia in its Regional Context during the Early Neolithic. In *The Neolithic of Central Anatolia*, edited by Frédéric Gérard and Laurens Thissen, pp. 263–271. Ege Yayınları, İstanbul.
- Hodder, Ian
1990 *The Domestication of Europe*. Blackwell, Oxford.
- Hodder, Ian (editor)
1996 *On the Surface: Çatalhöyük 1993–95*. Monograph No 22. McDonald Institute Monographs and British Institute of Archaeology at Ankara.
- 1998 The Domus: Some Problems Reconsidered. In *Understanding the Neolithic of North-western Europe*, edited by Mark Edmonds and Colin Richards, pp. 84–101. Cruithne Press, Glasgow.
- 2000 *Towards Reflexive Method in Archaeology: the Example of Çatalhöyük*. Monograph No 28. McDonald Institute Monographs and British Institute of Archaeology at Ankara.
- Hole, Frank
2000 Is Size Important? Function and Hierarchy in Neolithic Settlements. In *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation*, edited by Ian Kuijt, pp. 191–210. Kluwer Academic/Plenum, New York.
- Joyce, Rosemary
2000 Heirlooms and Houses: Materiality and Social Memory. In *Beyond Kinship: Social and Material Reproduction in House Societies*, edited by Rosemary Joyce and Susan D. Gillespie, pp. 189–212. University of Pennsylvania Press, Philadelphia.
- Joyce, Rosemary, and Susan D. Gillespie (editors)
2000 *Beyond Kinship: Social and Material Reproduction in House Societies*. University of Pennsylvania Press, Philadelphia.
- Kirch, Patrick
2000 Temples as "Holy Houses": The Transformation of Ritual Architecture in Traditional Polynesian Societies. In *Beyond Kinship: Social and Material Reproduction in House Societies*, edited by Rosemary Joyce and Susan D. Gillespie, pp. 103–114. University of Pennsylvania Press, Philadelphia.
- Kirkbride, Diana
1968 Beidha 1967: An Interim Report. *Palestine Exploration Quarterly* 100:90–96.
- Kuijt, Ian
2001 Place, Death, and the Transmission of Social Memory in Early Agricultural Communities of the Near Eastern Pre-Pottery Neolithic. In *Social Memory, Identity, and Death: Anthropological Perspectives on Mortuary Rituals*, edited by M. S. Chesson, pp. 80–99. Archaeological Papers of the American Anthropological Association 10.
- Kuijt, Ian (editor)
2000 *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation*. Kluwer Academic/Plenum, New York.
- LaMotta, Vincent, and Michael Schiffer
1999 Formation Processes of House Floor Assemblages. In *The Archaeology of Household Activities*, edited by Penelope M. Allison, pp. 19–29. Routledge, London.
- Last, Jonathan
1998 A Design for Life: Interpreting the Art of Çatalhöyük. *Journal of Material Culture* 3:355–378.
- Le Goff, Jacques

- 1992 *History and Memory*. Columbia University Press, New York.
- Levi-Strauss, Claude
1982 *The Way of the Masks*. University of Washington Press, Seattle.
- McGuire, Randall
1992 *A Marxist Archaeology*. Academic Press, New York.
- Matthews, Roger
1996 Surface Scraping and Planning. In *On the Surface: Çatalhöyük 1993–95*, edited by Ian Hodder, pp. 79–100. Monograph 22. McDonald Institute Monographs and British Institute of Archaeology at Ankara.
- 2002 Homogeneity versus Diversity: Dynamics of the Central Anatolian Neolithic. In *The Neolithic of Central Anatolia*, edited by Frédéric Gérard and Laurens Thissen, pp. 91–103. Ege Yayınları, Istanbul.
- Mellaart, James
1996 Multiple Surfaces: The Micromorphology. In *On the Surface: Çatalhöyük 1993–95*, edited by Ian Hodder, pp. 301–342. Monograph 22. McDonald Institute Monographs and British Institute of Archaeology at Ankara.
- 2004 Micromorphological and Microstratigraphic Traces of Uses and Concepts of Space. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Mellaart, James
1964 Excavations at Çatal Hüyük, Third Preliminary Report, 1963. *Anatolian Studies* 14:39–119.
- 1966 Excavations at Çatal Hüyük, Fourth Preliminary Report, 1965. *Anatolian Studies* 16:15–191.
- 1967 *Çatal Hüyük: A Neolithic Town in Anatolia*. Thames and Hudson, London.
- Middleton, William, T. Douglas Price, and David C. Meiggs
2004 Chemical Analysis of Floor Sediments for the Identification of Anthropogenic Residues. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Miller, Daniel, and Christopher Tilley
1984 *Ideology, Power and Prehistory*. Cambridge University Press, Cambridge.
- Miller, Daniel, Michael Rowlands, and Christopher Tilley (editors)
1989 *Domination and Resistance*. Routledge, London.
- Moore, Andrew M.T., Gordon Hillman, and Anthony J. Legge
2000 *Village on the Euphrates: From Foraging to Farming at Abu Hureyra*. Oxford University Press, Oxford.
- Morris, Ian
1991 The Archaeology of Ancestors: The Saxe/Goldstein Hypothesis Revisited. *Cambridge Archaeological Journal* 1:147–169.
- Newton, Marianne, and Peter Ian Kuniyohm
1999 Wiggles Worth Watching—Making Radiocarbon Work: The Case of Çatal Hüyük. In *Studies in Aegean Archaeology Presented to Malcolm H. Wiener as he Enters his 65th year*, edited by Philip P. Betancourt, Vassos Karageorghis, Robert Laffineur, and Wolf-Dieter Niemeier. *Aegaeum* 20:527–537. Meletemata.
- Özdoğan, Mehmet
2002 Defining the Neolithic of Central Anatolia. In *The Neolithic of Central Anatolia*, edited by Frédéric Gérard and Laurens Thissen, pp. 253–261. Ege Yayınları, Istanbul.
- Özdoğan, Mehmet, and Aslı Özdoğan
1990 Çayönü. A Conspectus of Recent Work. *Paléorient* 15(1):65–74.
- 1998 Buildings of Cult and the Cult of Buildings. In *Light on Top of the Black Hill: Studies Presented to Halet Cambel*, edited by Guven Arsebuk, Machteld J. Mellink and Wulf Schirmer, pp. 581–601. Ege Yayınları, Istanbul.
- Parker-Pearson, Michael
1999 *The Archaeology of Death and Burial*. Sutton, Stroud.
- Parker-Pearson, Michael, and Colin Richards (editors)
1994 *Architecture and Order: Approaches to Social Space*. Routledge, London.
- Rainville, Lynn
2000 Microdebris Analysis in Early Bronze Age Mesopotamian Households. *Antiquity* 74:291–292.
- Richards, Michael, and Jessica Pearson
2004 Stable Isotope Evidence of Diet at Çatalhöyük. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Ritchey, Tim
1996 Note: Building Complexity. In *On the Surface: Çatalhöyük 1993–95*, edited by Ian Hodder, pp. 7–17. Monograph 22. McDonald Institute Monographs and British Institute of Archaeology at Ankara.
- Rollefson, Gary O., Alan H. Simmons, and Zeidon Kafafi
1992 Neolithic Culture at 'Ain Ghazal. *Journal of Field Archaeology* 19:443–70.
- Rosenberg, Michael, and Richard W. Redding
2000 Hallan Çemi and Early Village Organization in Eastern Anatolia. In *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation*, edited by Ian Kuijt, pp. 39–62. Kluwer Academic/Plenum, New York.
- Russell, Nerissa, and Louise Martin
2004 The Çatalhöyük Mammal Remains. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Sahlins, Marshall D.
1974 *Stone Age Economics*. Tavistock, London.
- Schiffer, Michael
1987 *Formation Processes of the Archaeological Record*. University of New Mexico Press, Albuquerque.
- Schmidt, Klaus
2001 Göbekli Tepe, Southeastern Turkey: A Preliminary Report on the 1995–1999 Excavations. *Paléorient* 26(1):45–54.
- Shanks, Michael, and Christopher Tilley
1982 Ideology, Symbolic Power and Ritual Communication: A Reinterpretation of Neolithic Mortuary Practices. In *Symbolic and Structural Archaeology*, edited by Ian Hodder, pp. 129–154. Cambridge University Press, Cambridge.
- Silistreli, Ugur
1991 1989 Köşk Höyük Kazısı. *XII Kazı Sonuçları Toplantısı* 1:95–104.
- Sommer, Ulrike
2001 'Hear the Instruction of the Father, and Forsake not the Law of the Mother': Change and Persistence in the European Early Neolithic. *Journal of Social Archaeology* 1:244–270.
- Stevanovic, Miriana, and Ruth Tringham
1999 The Bach Area 1999. *Çatal News* 6:6–8.
- Stordeur, D., D. Helmer, and G. Wilcox
1997 Jefrel Ahmar: un Nouveau Site de l'Horizon PPNA sur le Moyen Euphrate Syrien. *Bulletin de la Société Préhistorique Française* 94:282–85.
- Thomas, Julian
1996 *Time, Culture and Identity*. Cambridge University Press, Cambridge.

- Tilley, Christopher
1994 *A Phenomenology of Landscape*. Berg, Providence.
- Tringham, Ruth
2000 The Continuous House: A View from the Deep Past. In *Beyond Kinship: Social and Material Reproduction in House Societies*, edited by Rosemary Joyce and Susan D. Gillespie, pp. 115–134. University of Pennsylvania Press, Philadelphia.
- Tunc, Burcu
2004 A Preliminary Investigation of Mud Brick in Çatalhöyük. In *Çatalhöyük 1995–1999*, edited by Ian Hodder. McDonald Institute Monographs and British Institute of Archaeology at Ankara, in press.
- Weinstein-Evron, Mina
1998 *Early Natufian el-Wad Revisited*. Etudes et Recherches Archéologiques de l'Université de Liège 77.
- Whitley, James
2002 Too Many Ancestors. *Antiquity* 76:119–126.
- Whittle, Alasdair
1996 *Europe in the Neolithic. The Creation of New Worlds*. Cambridge University Press, Cambridge.
- Woodburn, James
1980 Hunters and Gatherers Today and Reconstruction of the Past. In *Soviet and Western Anthropology*, edited by Ernest Gellner, pp. 95–117. Duckworth, London.
- Wright, G. A.
1978 Social Differentiation in the Early Natufian. In *Social Archaeology, Beyond Subsistence and Dating*, edited by C. Redman, M. J. Berman, E. V. Curtin, W. T. Langhorne Jr., N. M. Versaggi, and J. C. Wanser, pp. 201–223. Academic Press, New York.
- Wright, Henry (editor)
1984 *On the Evolution of Complex Societies*. Undeena Publications, Malibu, California.

Received August 5, 2002; Revised June 4, 2003; Accepted June 7, 2003.