Introduction

Çatalhöyük was first excavated by James Mellaart between 1961 and 1965. His excavations were mainly confined to the southwest corner of the Neolithic East Mound although he also dug on the Chalcolithic West Mound. Initially the importance of the East Mound was recognized as its large size (Çatalhöyük East is 13.5 ha and 21 m high) and complex art at an early date, and its location outside the supposed ‘cradle’ of civilization in the Middle East. Much has changed in our knowledge of the Neolithic in Anatolia since the 1960s. In some ways Çatalhöyük is no longer so exceptional. It is late in the Neolithic sequence, occurring at the end of the Aceramic Neolithic and continuing through the Ceramic Neolithic and into the Chalcolithic (the East Mound dates from 7400 to 6200/6000 cal BC, and the ensuing West Mound has dates in the early 6th millennium BC). Earlier major sites have been excavated in central Turkey at, for example, Aşıklı Höyük (Esin and Harmankaya 1999), and locally in the Konya Plain earlier precursors of Çatalhöyük have been excavated at Pınarbaşı and Boncuklu (Baird 2007). Earlier and to the east, elaborate and large sites with complex art have been discovered at, for example, Göbekli and Jerf el Ahmar (Schmidt 2006; Stordeur et al 2000).

But there are ways in which Çatalhöyük remains distinctive. The sheer amount of the art – its concentration in so many houses in one site – remains particular. Indeed, the main mystery of Çatalhöyük remains the question of why all this art and symbolism, this flowering of imagery, should occur in this place at this time. One factor concerns the depositional processes. Through much of its sequence, Çatalhöyük provides a richly textured record of the minutiae of daily life. Rather than making hard lime floors that could be used over decades (as in many aceramic
sites in Anatolia and the Middle East), at Çatalhöyük the floors were mostly made of a lime-rich clay plaster that remained soft and in need of continual resurfacing. Thus on an annual or even monthly basis, floors and wall plasters were resurfaced with extremely thin layers. Within 10 cms of floor or wall deposit it is possible to find up to 450 layers of replasterings. These provide a detailed record of daily life inside buildings. Middens too are finely layered, so that individual dumps of refuse from the hearth can be identified.

And then, on abandonment of a house, paintings were covered over, and ovens and other internal features were sometimes carefully filled with earth. The upper walls were demolished and the lower half of the house often carefully filled in with fairly clean soil. In these ways the lower parts of the house were well protected and preserved. A new house was constructed using the lower halves of the walls of an earlier house as a base for new walls. Gradually the 21 m high mound was built up as house was constructed on house. Together with the soil conditions that lead to good survival of carbonized plants, animal and human bone etc., these depositional processes result in a remarkably well preserved site with much detailed information covering long periods of time. Difficult to excavate because of its complexity, the rewards in terms of detailed information are high.

Mellaart’s large-scale work established the importance of the site (Mellaart 1967). He demonstrated the extraordinary density of buildings on the site, with houses built up against each other so that movement around the settlement was on the roofs of houses. Entrance into houses was through the same hole in the roof through which the smoke from hearths and ovens escaped.

One of the most remarkable aspects of Mellaart’s findings was the size of the Neolithic East Mound (Fig. 1). Population estimates vary between 3500 and 8000 for any one phase of occupation (Cessford 2005). There is little evidence so far of the internal specialization or differentiation of functions. There are houses, animal pens and areas of refuse at Çatalhöyük, but as yet, despite extensive survey work, no evidence of public buildings, industrial areas (except lime burning off the edge of the site), cemeteries (burial occurs within houses), ceremonial centers and so on.

On the whole, the recent field research at Çatalhöyük, which started in 1993, has corroborated the findings of Mellaart (Hodder 1996, 2000, 2005a, b, c, 2006, 2007). The more recent research has found much evidence of occupation even in the most elaborate buildings identified by Mellaart as ‘shrines’. We have termed all buildings at the site domestic houses although we recognize differences in the internal elaboration of houses (see the discussion of history houses below).

One indication of large-scale divisions of the Neolithic East Mound is a large dip or trough across the middle, dividing it into two hills (Fig. 1). The mound does seem to have developed in two halves. The southern, higher eminence continued to be occupied after the general abandonment of the northern hill. In addition we have found some differences in the genetic make-up of the humans buried in the two halves, and we have also found differences in consumption and sheep herding behavior.

As well as this large-scale division of the settlement into two, other groupings of houses have been identified. In the upper levels of the site Mellaart found some evidence of ‘streets’ winding between houses. In recent research we have also begun to find alleyways or boundaries between ‘sectors’ of the mound, each sector containing 10-50 houses (Fig. 2). There are yet smaller groupings of houses that seem to have both social and economic implications. Small groups of perhaps 3 to 6 houses often seem to be linked in that they use a common main house (perhaps corresponding to Mellaart’s ‘shrines’ and dubbed ‘history houses’ by the current team) for burial. History houses are those with more burials and more architectural elaboration as measured by numbers of platforms, pillars, installations and so on. History houses tend to be rebuilt over longer periods of time than other houses, but they do not control production or storage and they do not have more wealthy burials. Any social differentiation between history houses and non-history houses was very slight.
Living in the Çatalhöyük house

Much economic, social and ritual life was organized at the house level at Çatalhöyük. The houses through most of the sequence (the houses become multi-roomed complexes in the upper levels and in the West Mound) consist of a main room (eg Fig. 3) with 1-3 side rooms that are used for storage and food preparation. The main rooms have walls that are more frequently replastered and normally contain the entrance ladder or stairs on the south wall, with the oven and hearth beneath the ladder. The northern floors in the main room tend to be higher and whiter and cleaner, with more frequent replasterings. Paintings, sculptures, installations and burials occur above and beneath these northern platforms on the whole. (However, neonate and child burials sometimes occur near the ovens and hearths in the south parts of the main rooms.)

But what did it mean to ‘live’ in these houses. How much time did people spend in them, and what was it like? It is often said that the houses were dark inside. But an experimental house built at the site by Mira Stevanovic has shown that during the day so much light comes in from the ladder entry that the main rooms are quite bright. The white plastered walls were frequently renewed and often burnished and so they reflect light well. Even the side rooms receive some reflected light so that one’s eyes get used to the relative dark in them and activities can be carried out there. We know that people knapped obsidian near the ladder entries in the main rooms and that they stored obsidian in caches in the same location. Indeed, the location of the obsidian caches and the nearby working of obsidian may be related to the need for a light source.

But the rooms were probably smoky. This is clear from the layers of soot that are found on the plaster walls. The frequent (annual, seasonal and monthly – Matthews 2005) replastering of the walls may have been necessary to maintain the light reflection in the main rooms. Several individuals buried beneath the floors of houses who had carbon residues on their ribs (Andrews et al. 2005) are older people, and most old people had these residues. The carbon on the ribs has been interpreted in terms of the layers of soot identified on the plaster walls and the lack of architectural evidence for good air draughts in the houses – and in terms of the need to spend time in the houses over the harsh winters. The evidence can be interpreted in terms of the build up of residues of an indoor life, for both men and women. So certainly by their later years people spent a good amount of time indoors. On the other hand, some young people and children are buried in houses in significant locations, including special neonate foundation deposits by doors and burial by hearths. So both the old and the young, as we might expect, have an especially close relationship with the house.

So, as people lived their lives they spent part of it, especially when young and old, and especially in the winter, closely tied to the house. This immersing in the house provided an opportunity for socialization. How was the house organized internally so as to socialize the inhabitants into social roles? Was the house used to create routines and structures in the ‘town’ as a whole?

It has long been recognized (Mellaart 1967) that there was much repetition in the use of space inside houses. Matthews (2005) has shown that the main room in Building 5 had over 450 fine white silty clay plasters on the walls, whereas adjacent rooms were only plastered 3-4 times with orange and brown silt loam plasters. Other repeated patterns are well known. The floors of the main rooms are usually divided into platforms, or areas of different height, and the higher of these have a white plaster. The different floor areas are often demarcated by raised edges. These differences may also relate to floor covering – the white floors may have been more thickly covered so that no residues got through onto floors. In Building 1 phytolith evidence suggests different types of matting on the different platforms (Rosen 2005; Cessford 2007). There is also a link to burial. The main burial platforms seem to be those with white laid plaster floors. Few burials occur beneath occupation floors (the ‘dirtier’ floors with ash and small artefacts near ovens and hearths), although neonates may be buried here. Burials never contain pottery.

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 and more older individuals under
the central-east platform (Cessford 2007). 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 cattle heads with horns (bucrania) are most common on east and west walls. Vulture paintings only occur on north and east walls (Russell and Meece 2005). Burial is most common beneath platforms against the north and east walls, and since the vulture paintings also show headless corpses a spatial link between vultures and death is suggested.

It seems that the house at Çatalhöyük takes over many of the roles that were earlier associated with the community at large. Burial is less strongly associated with the house in earlier sites in Anatolia and the Middle East. Some burial occurs between buildings or in special buildings as at Çayönü. But at Çatalhöyük burial rarely occurs outside the house. Symbolism and ritual are also taken from public buildings (at Aşıklı Höyük, Çayönü, Göbekli Tepe and elsewhere) and centered in the house at Çatalhöyük. Food preparation and many productive activities that earlier had often taken place in public, open areas, become concentrated in the Çatalhöyük house.

The house was an important location for socialization into roles and behaviors at Çatalhöyük. But in the process, it can be argued that the house unit grew at the expense of the community at large. In the upper levels at the site there is some evidence of economic change and of some fragmentation of strong community-wide rules. House units came to act more independently, and the early cohesiveness of society began to be eroded (Düring 2001 and see below).

Architectural histories

As noted by Woodburn (1980), immediate return hunter-gatherer societies live in the present and have very little relationship with the past. But by the time of the delayed return systems of the Neolithic, people lived in a material world embedded in the past. The deep stratigraphy at Çatalhöyük, as house was built upon house, allows temporal processes to be examined in some detail (Fig. 4).

It was in the house that there was most concern to control the transmission of memory. Many houses were lived in for 50-100 years. The people of Çatalhöyük had great problems keeping the buildings standing for this long as the mud brick walls made of smectitic clay tended to lean and bend. Solutions included doubling the walls and placing one house immediately adjacent to the next so that the helped to hold each other up. Another solution was to place a horizontal wooden brace in the wall as is still done in many parts of Turkey today. In Figure 5 it is possible to see the slot in which the wooden brace had been placed in a 2.5 m high wall in Building 80. Mellaart had thought that the upright posts held up the horizontal beam but we can see in Figure 5 that the upright beam stops before it reaches the horizontal beam. The function of the horizontal and vertical wooden members was to stop the wall leaning over so that the building could be used over many generations.

When a building was finally abandoned, the abandoned lot was sometimes used for refuse deposition (eg Building 2). Other buildings were replaced in the same location, using the same layout of walls over 4-6 rebuilds. We have found empirically (see above) that the long-lived building sequences tend have more burials beneath their floors. While some houses have no burials, and while the average number of burials in a house is 5-8, Building 1 had 62 humans buried beneath the platforms, including parts of bodies interred as secondary burials – perhaps initially buried in other or earlier buildings. Building 1 is an example of a history house (see above).

There is much evidence of continuity of use of space in these history houses, so that histories were established in the repetitive use of space. There are also examples of the repetition of painting and relief sculpture from phase to phase and from level to level within buildings. Sometimes these seem too specific to be accidental products of site-wide preferences. For example, pairs of relief leopards are found in five buildings (Russell and Meece 2005), but in two cases, VII.44 and VI.44, they occur immediately above each other and they are both in a distinctive style. This seems like a clear case of commemorative memory.
The ‘history’ that was accumulated in these houses seems to have included human remains. This accumulation is seen in the concentration of primary and secondary burials beneath the house floors, but it is also seen in the retrieval and re-use of body parts. In recent work, Başak Boz has identified teeth taken from a skeleton in one house in the 65-56-44-10 house sequence and placed in the jaw of an individual in a later building in the sequence. In Building 49 the limbs and scapulae had been carefully removed from an otherwise complete and well-articulated skeleton. But it was mainly skulls that were kept and passed down. In a small number of instances we have discovered skulls removed from those buried beneath house floors. The skulls seem to have been kept and then placed at the base of house posts, or added to burials, or in abandonment deposits. In one case, the skull had been plastered to represent the flesh of the face. In Building 79 we found that the tops of the upright wooden pillars had been plastered to produce a ‘pillow-shaped’ capital (Fig. 6). Next to this capital in the burned rubble, we found a human skull. It may not be too fanciful to reconstruct the room as in Fig. 7, with the skull replaced on top of the capital.

The construction of ‘histories’ in place, in the repetition of houses and the passing down of human skulls, emerged early and was a long-term component of Neolithic societies in the Middle East (Hodder 2007). Others have made similar arguments in relation to the circulation and deposition of human skulls (eg Kuijt 2008). The role of the house in the construction and maintenance of memory at Çatalhöyük is also seen in the circulation of other types of head. Wild animal heads were also circulated. In Building 2, there is evidence of removal of something large from the west wall of the main room, possibly linked to a wild cattle horn found on the floor (Farid 2007). Mellaart (1967) records a frequent pattern of the destruction of the west walls of main rooms in order to remove sculpture. The heads and feet/hands of the relief figures with upraised arms (probably depicting bears) have always been removed before the infilling of buildings. In Building 1 there is clear evidence that a pit was dug down in order to retrieve sculpture (perhaps a plastered cattle skull?) from the west wall after the building had been abandoned and filled in, and after intermediary phases of occupation and infilling.

Figurines are often found with the heads missing (Meskell et al 2008). This pattern could easily be the result of normal breakage processes, since the neck is often the weakest part of a figurine. But in several examples, there is evidence of detachable heads, as have been found at Höyüçek. In some cases at Çatalhöyük there is evidence of special deposition of broken heads as in a hearth in Building 17 (Hodder 2006). However, in most cases clay and stone figurines at Çatalhöyük were deposited with refuse in middens – there is very little special structured deposition (Meskell et al 2008).

One of the most impressive images in some of the art scenes at Çatalhöyük is the wild bull, and a clue to the interpretation of such paintings is the discovery that wild bulls are used preferentially in feasting (Russell and Martin 2005). This claim is based on the association between the bones of male cattle (all of which are wild through most of the sequence at Çatalhöyük) and concentrations of large numbers of relatively complete large animal bones, often in contexts such as house foundations, house abandonment, or discard between house walls. There is no evidence as yet that such feasting deposits concentrate in the history houses, but on the other hand the elaboration of the history houses is often expressed in the presence of will bull horns set in pedestals (eg Fig. 3) or otherwise displayed in houses.

Transformation in the upper levels

However, the history house system declines in the upper levels of the site. The focus on elaborately plastered houses with bucrania, reliefs and paintings occurs mainly in the early levels (from Level XII to V). There is a decline in the occurrence of actual bull horns and other wild animal part installations in the upper levels of the site. While some bucrania continue, these are often made of plaster rather than real horns. There is much faunal evidence that hunting of wild cattle declined in the upper levels of the site – there may have been fewer wild bulls present in the landscape by this time. In contrast to the plain pottery found in the early part of the sequence (pottery is introduced by Level X), small symbolic bull heads are found from Level V as handles on pottery. Paintings showing the
teasing and baiting of wild animals including bulls occur from Level V onwards, and these have a clear narrative component. There seems to be a shift in ritual from the presencing of wild animals to their representation. The greater discursive component of religious life in the upper levels of the site is also seen in the emergence after Level V of stamp seals. These may have been used to stamp human or animal skin and they use a distinct array of codified signs (Türkcan 2005). These signs are abstract but some refer to hands and perhaps to navels, while there are a few examples which indicate a leopard and a bear.

In the lower levels of the site, as noted above, obsidian is presenced in hoards or caches below the floors. In the upper levels of the site these hoards cease. Pottery gradually becomes more diverse and more decorated from Level V onwards until by the time of Çatalhöyük West (Chalcolithic, from 6000 BC) it is heavily decorated with complex designs. By the time of the West Mound too, burial in houses of adults largely ends. It is presumed that burial occurs off-site and perhaps in cemeteries. Excavations in the uppermost levels of the East Mound by a team from Poznan, Poland (TP in Fig. 1) have uncovered changing burial rituals including collective burial in a decorated ‘tomb’, and associations of animal and human bones (not found in earlier levels). The rituals involved in the abandoning of houses also change. Now frequently houses are burned (from Level VI onwards on the Neolithic East Mound) before being re-used.

How can we account for these changes? A simple contributing impulse would have been the ‘hunting out’ of wild cattle that we seem to see in the upper part of the site. By the time of the West Mound, domesticated cattle are in use. It is likely that other wild animals (leopards, boar etc) were less present in the landscape than before and were thus less available for celebrating important feasts and for presencing powerful animal spirits. At the same time, in the upper part of the site centralizing tendencies are increasingly present in the increasingly complex and specialized pottery and obsidian production, and in the emergence of large houses based on integrated and more intensive production of domesticated plants and animals. After Level III there is evidence from age distributions for the secondary exploitation of sheep. This economic transformation seems to have been associated with an overall change in the layout of the town and the organization of houses. After Level VI/V, some parts of the site are abandoned and other parts are settled – the town becomes more dispersed and fragmented. Streets occur and street-level entrances into houses. Houses become much larger, and on the West Mound they become two-storey. They become rebuilt more frequently (Düring 2006). After Level III on the Neolithic East Mound, houses become larger and more multi-roomed. They have a large main room with central hearth. This trend continues onto the West Mound where the main rooms are surrounded by multiple smaller rooms. In order to keep these larger houses standing buttresses were added to the inside surface of walls.

All this could have come about as wild bulls were hunted out from the landscape, thus undermining a social system based on the building of history houses founded on the killing and feasting of those bulls. There may also have been an internal process whereby houses (history or not) were able to build up resources based on domestic animal and cereal production so that they could become more independent of an elaborate residence-ritual system. But it is undoubtedly the case that external factors may have been involved. Through much of the occupation of the Neolithic East Mound, was located in a wetland environment but towards the end of the East Mound’s occupation, cores in the surrounding alluvial deposits show a weakly developed buried soil, dated to 5800–6200 BC, marking the end of alluvial deposition and flooding and the establishment of a stable ground surface around the site (Roberts and Rosen 2009). The end of occupation on the East Mound also coincided with a major perturbation in global climate (Alley and Agustsdottir 2005, Clare et al 2008). This climatic event prompted drought conditions over much of Africa and Asia (Gasse 2000) around 6200 BC (Thomas et al. 2007), the same time as the flooding phase ended and dry conditions began at Catalhöyük. Clare et al (2008) and Roberts-Rosen (2009) have argued that this phase of drying may be associated with the changes observed at the end of the East Mound and the relocation to the West Mound.
Conclusions

There is limited evidence for specialized and differentiated economic, political and social functions at Çatalhöyük. Rather the effect of a ‘town’ (a large agglomeration of people living packed against each other) is produced by the repetition of social behavior within houses. Daily acts were heavily routinized and they reconfirmed the social order. People were brought up within daily routines through which they learned the roles and rules of society. In addition these rules and conventions were set within an elaborate symbolic system that centered around wild animals and the ancestors buried beneath the floors. So it may be the case that the two of the most distinctive aspects of Çatalhöyük were related. The relative lack of hierarchy and public ceremonial might be related to the elaborate symbolism in the house. Perhaps the social rules of society were learned and enforced within the house, and they were all the more powerful and meaningful because set within the performance of rituals embedded within myth and sanctioned by the ancestors. Rather than investing in centralized rituals, the people at Çatalhöyük invested in dispersed domestic cults and regulations of the body in the process of socialization. It was this alternative form of power that produced what is in effect a very large village.

As people wished to gain access to the rights and resources of the ‘house’ they needed to become part of the construction of its memories. They needed to be physically associated with its fabric, its burials, its symbolism, its history. We have little notion of how the site as a whole grew. My hypothesis for the moment is that houses clustered around history houses (those with many burials and a long period of re-use). Physical and spatial propinquity to these history houses ensured access to rights and resources. As the group of houses grew, expanded and fissioned, living near these ancestral homes remained significant. The end result was a dense packing of houses as people used up every available nook and cranny in order to be located close to the ancestral home and to participate in the transmission of its physical rights. Co-presence and co-history here equated with collective membership.

Through time, however, changes were encountered, part human-produced and part climate-related. Towards the upper levels in the site and the later part of the 7th millennium BC, there was an economic shift to more intensive use of domesticated plants and animals, and decreased reliance on wild animals. Rather than being central to a web of ritual and social relationships, houses came to be centers of production and consumption. The history house system began to break down and houses became larger, multi-room and multi-storey. Settlement dispersed at Çatalhöyük, and over the whole alluvial fan. Neolithic Çatalhöyük East stood alone on the Çarşamba Fan, but 6th millennium BC Çatalhöyük West is one of 15 similar small-to medium-sized Early Chalcolithic sites recorded on or near the fan (Baird 2005).

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Bibliograph

Gasse 2000 F. Gasse, “Hydrological changes in the African tropics since the Last Glacial Maximum”, Quaternary Science Reviews 19, 2000, 189-211.
Matthews 2005  

Mellaart 1967  

Meskell et al. 2008  

Roberts – Rosen 2009  

Rosen 2005  

Russell – Martin 2005  

Russell – Meece 2005  

Schmidt 2006  

Stordeur et al. 2000  

Thomas et al. 2007  

Türkcan 2005  

Twiss et al. 2008  

Woodburn 1980  
Fig. 1 The excavation areas on the East and West Mounds at Çatalhöyük. (Source: Çatalhöyük Research Project.)

Fig. 2 Agglomerated houses and possible 'street' beneath a shelter in the 4040 Area of Çatalhöyük. (Source: Jason Quinlan and the Çatalhöyük Research Project.)
Fig. 3  Building 77 was heavily burned during abandonment. Two pedestals with will bull horns are set around a burial platform in the northeast corner of the main room. (Source: Jason Quinlan and the Çatalhöyük Research Project.)

Fig. 4  Overall view of the excavations in the South Area at Çatalhöyük. (Source: Jason Quinlan and the Çatalhöyük Research Project.)
Fig. 5 The north and east walls of Building 80. The beam slot in the upper part of the northern wall can be clearly seen. (Source: Jason Quinlan and the Çatalhöyük Research Project.)

Fig. 6 ‘Pillow’ shaped plaster capital on top of wooden post in Building 79. (Source: visual reconstruction by Colleen Morgan.)

Fig. 7 Interpretation of Building 79 showing possible placement of human skull on ‘pillow’ capital in Building 79. The oven is shown in the foreground. (Source: Ian Kirkpatrick.)