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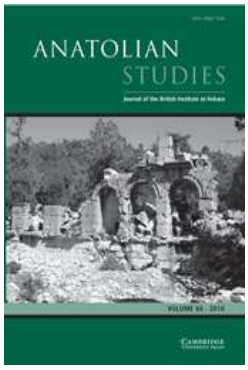

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The ground beneath their feet: building continuity at Neolithic Çukuriçi Höyük

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Abstract

A Neolithic structure was rebuilt three times at Çukuriçi Höyük, on the central Anatolian Aegean coast, despite its unfavourable location on unsettled fill. We draw upon this seemingly incongruous case to make inference about the siting of buildings in Neolithic times. Through detailed cross-comparison with other sequences of vertically superimposed buildings in Anatolia and the Aegean region, we retrace the contours of a Neolithic practice aimed at maintaining occupation in one place. Over time, building continuity transformed into a strategy by some households to claim authority over a place and appropriate it for their own benefit. With regard to the location of Neolithic buildings, we conclude that choices about location dominated over practical considerations. Once a commitment to place was made, there was no turning back, even when this meant living in an unstable house that needed to be rebuilt repeatedly.

Özet

Anadolu Ege kıyılarının merkezinde yer alan Çukuriçi Höyük'te, oturmamış dolgu toprak üzerindeki olumsuz konumuna rağmen, Neolitik yerleşim üç kez yeniden inşa edilmiştir. Neolitik dönemde binaların konumlandırılması konusunda bir çıkarım yapmak için bu aykırı görünen örnek üzerinde durmaktayız. Anadolu ve Ege'de dikey konumlandırılmış diğer yapı dizileriyle detaylı çapraz karşılaştırma sayesinde tek bir yerde yerleşimi sürdürmeyi amaçlayan Neolitik dönem uygulamalarının izini sürmekteyiz. Zamanla, yapı sürekliliği bazı haneler tarafından bir yer üzerinde hakimiyet iddia etmek ve kendi yararına uygun hale getirmek için bir stratejiye dönüşmüştür. Neolitik binaların konumu ile ilgili olarak, seçimlerin pratik hususlar üzerinde hakim olduğu sonucuna varmaktayız. Konum konusunda bir karar verildiği zaman, bu art arda inşa edilmesi gereken sağlam olmayan bir evde yaşamak anlamına gelse bile, bundan geri dönüş yoktu.

Models of Neolithic dispersals from the Near East into Europe increasingly acknowledge the role of practices in accommodating the shift to sedentary farming (Halstead 1996; Sherratt 1997; Bogaard 2004; Hodder 2007; Souvatzi 2008; Atakuman 2014; Özdoğan 2014). As resources changed, so did the practices of the people involved. One of the key markers of the intensification of sedentary practices appears to be the secular repetition of construction and land-use activities. In Anatolia and southeast Europe, one observes that buildings typically overlay each other through time; hence sites rose in height with each reconstruction (Chapman 1990; Bailey 1999; Tringham 2000; Steadman 2000; 2005; Verhoeven 2006). Explanations for such behaviour have been sought in the nature of land ownership and the passing of property from generation to generation, the avoidance of low load-bearing soils when laying out walls, such as swamps and marshes, and a concern for preserving the house as a social institution (Özdoğan, Özdoğan 1998; Düring 2005; 2013; Hodder, Pels 2011).

In this article, we report the unusual case of a sequence of three vertically superimposed buildings at Çukuriçi Höyük, on the Aegean coast of Turkey, constructed on unsettled fill, liable to subsidence. The wealth of imagination deployed by the inhabitants to atttempt to give successive structures stability, together with their apparent refusal to give up the parcel of land, highlight a remarkable entanglement with place, verging on the absurd. The act of superimposing buildings emerges as both a solution and part of the very problem which it sought to overcome. Our study demonstrates that the rigid adherence to a practice, widely in use during the Later Aceramic and Early Ceramic Neolithic periods in Anatolia and the Aegean, was the main factor deciding the location of buildings at Çukuriçi Höyük.

Building continuity in the Anatolian Neolithic

The Anatolian Neolithic is characterised by a remarkable investment in the sites of domestic structures, namely 'houses', which were potentially maintained for hundreds of years through the practice of vertically superimposing structures on them. When a house was no longer in use, its foundations were sometimes infilled and the walls left protruding immediately above the raised fill, so that the parcel could be redeveloped in much the same way; houses succeeded each other without break or change. This construction strategy was first described at Çatalhöyük (Mellaart 1967: 67) and was subsequently identified at Çayönü and Aşıklı (Özdoğan, Özdoğan 1998; Esin, Harmankaya 1999). Houses at Çatalhöyük were repeated in this manner up to seven times, with only minimal alterations to their structure, internal layout and organisation (Matthews, Farid 1996; Düring 2005; 2006; Hodder 2006; Farid 2007; Hodder, Pels 2011). The question of why people persevered in rebuilding houses in the same place, despite the apparent constraints of this method in terms of space and expansion opportunity, has been addressed in a number of publications (for example Düring 2005; 2013; Steadman 2005: 286), but it is worth raising this issue again in light of new evidence from Çukuriçi Höyük, which shows the curious and potentially counterproductive nature of this behaviour.

As pointed out by Bleda Düring (2013: 127–28), functional explanations for this pattern of construction are fraught with inconsistencies. Three explanations have been suggested: (1) the lack of space in agglutinated settlements, associated with a vertical buildup of the urban fabric; (2) the avoidance of low load-bearing soils; and (3) the rigid adherence to a system of (privately-owned) plots. The link established by some authors (for example Steadman 2000: 188, 194) between building continuity and a shortage of space on larger settlement mounds has been discounted, on the ground that this practice developed in a context in which houses were freestanding and located at some distance from each other (Baird et al. 2012: 234). At the ninth-millennium site of Boncuklu, for example, houses were continuously recut using the curvilinear footprints of disused and previously infilled houses, without the site showing evidence of agglutination or crowding (Baird et al. 2012). The same practice has been documented at Qermez Dere in northern Iraq and appears to have been widespread among Pre-Pottery Neolithic A and early Pre-Pottery Neolithic B societies of the Near East (Watkins et al. 1989; Watkins 1990).

At Çayönü, where buildings were constructed in such a way as to circumscribe or 'encircle' the sites of earlier buildings, there was no significant overlap between old and new wall sections (Özdoğan, Özdoğan 1998: 590). Hence buildings, despite being broadly repeated, did not lean or take advantage of the structural stability of extant wall sections. At any rate, it is worth stressing that in mud-brick architecture there was a functional advantage to building on stable walls rather than on an unsettled earthen fill, such as midden, with low load-bearing capacity; but this was not recognised from the outset (Hodder 2007). Houses built upon houses at Çatalhöyük were more durable than those built upon unsettled midden, which would cave in over time (Düring 2013: 127). On the other hand, at Ilıpınar, where the earlier architecture was dominated by timber, the inhabitants were still committed to a strict vertical superimposition of houses, even though the walls of succeeding houses had to be offset to avoid the stumps of earlier, rotten posts, which were left to decay in the ground (Roodenberg 1995: 38; Roodenberg et al. 2003: 21). It is tempting to assume that people were compelled to redevelop parcels in much the same way as we do today, for economic reasons in a system where land was privately owned and inherited (Gérard 2001: 198–99); but this explanation generally fails to explain why superimposed houses retained both the original character of the structure they replaced and the actual fabric of the disused house, carefully buried under their foundations (Matthews 2002: 95). At Aşıklı, for instance, hearths maintained a consistent location across multiple generations of buildings (Özbaşaran 1998), suggesting that people were keen to replicate the built environment on which their house was sited.

Although building continuity may have held different meanings for different Neolithic communities, one would still expect to find a coherence or guiding principle behind the remarkable continuum of this practice observed in Anatolia and beyond (Brami 2014). The explanation for building continuity may be sought in the fabric of farming communities and in their mode of social reproduction. There are two schools of thought on this issue: the first emphasises commitment to place, the second attachment to the buildings.

In the Balkans, where both Neolithic and Chalcolithic buildings were repeated to a significant extent, D.W. Bailey has linked building continuity to the construction of settlement mounds or tells, citing defence against seasonal floods as one potential explanation for this construction strategy (Bailey 1990: 30). Southeast European archaeologists have long noticed that the accumulation of three or more generations of mud-built houses in the same place, when properly managed (for this reason excess debris was deliberately kept and consolidated), eventually led to the formation of an artificial mound (Chapman 1990: 51–52). One implication of this is that building continuity was a deliberate strategy to accumulate a tell (Bailey 1990: 38–39; 1999: 97). This suggestion finds some support in the fact that many Anatolian tells

Fig. 1. Location of Çukuriçi Höyük and other excavated Neolithic settlements of Anatolia (© Barbara Horejs; map by M. Börner).

are situated upon natural rises in the landscape, influencing the form of the development to come (Steadman 2000: 175; Rosenstock 2009). Tells as a settlement form may have been preferred for the stability they symbolised, which was both real and artificially created, through the accumulation of extant resources, such as houses, heirlooms and dead ancestors (Verhoeven 2006). On the other hand, earlier Neolithic mounds in Anatolia show no major buildup of deposits, nor any significant effort to raise artificially the level of the village beyond its initial elevation. At Boncuklu, where buildings were semi-subterranean, newer buildings frequently cut into and obliterated the remains of older buildings, suggesting that, if strategy there was, it was not yet articulated in the way that would occur later on, for instance at Çatalhöyük (Baird et al. 2012).

Attachment to the buildings themselves provides another possible explanation. Scholars have used the 'house society' model of C. Lévi-Strauss (1982; 1987) to discuss the meaning of continuity in the Neolithic (for example Kuijt 2000; Borić 2003; 2007; 2008; Tringham 2000: 121; Hodder, Cessford 2004; Düring 2005; 2007; 2013; Hodder 2005; Hodder, Pels 2011). Lévi-Strauss has observed that, in some ethnographic and medieval societies, the house was a social institution, compounding features that were mutually exclusive, for instance matrilineal and patrilineal systems of descent, kinship and affinal ties (Lévi-Strauss 1982: 184; see also Carsten, Hugh-Jones 1995: 7–8). In house-based societies, the house as a political and economic unit makes a strategic use of the 'language of kinship [and/or] of affinity' to perpetuate itself and maintain its claim over a name, titles and an estate, including the material house (Lévi-Strauss 1982: 174). Relationships, in other words, are not grounded in blood, but in the common investment in a house estate and shared practices (Joyce 2000: 190; Hodder, Cessford 2004). Of particular interest here is the idea that houses have a distinct identity, which is asserted through competition with other houses (Gillespie 2000: 29). In the Neolithic of Anatolia, one observes that houses not only repeated themselves to a significant extent,

but also developed along independent trajectories (Hodder 2005). Houses which were rebuilt multiple times at Çatalhöyük were the largest in size, the most elaborate in decoration and the ones with the highest number of subfloor burials (Düring 2006: 107; Hodder 2012: 151). Consequently, it is worth asking if the 'house society' model can help resolve some of the contradictions outlined above. How far can this model explain building continuity at Çukuriçi Höyük? Are we dealing with commitment to place and/or attachment to the buildings?

A building repeated three times at Çukuriçi Höyük

Çukuriçi Höyük is a prehistoric mound on the Aegean coast of Turkey, 2km southwest of present-day Selçuk in the province of Izmir (fig. 1). The site is within walking distance of the ancient city of Ephesus. Geomorphological surveys have indicated that the Aegean Sea was much closer to Çukuriçi Höyük than the present-day shoreline in Neolithic and Bronze Age times, providing a wide catchment, not least for the procurement of Melian obsidian, which is ubiquitous at the site (Horejs 2012; 2016). Çukuriçi Höyük has been excavated since 2006 by an international team led by Barbara Horejs. The site consists of an artificial mound, ca 150m by 100m in size, rising 5m above the surface of the surrounding plain; another 3.8m of cultural deposits lie buried beneath the current surface, as drilling and ongoing excavations in the deep trench have revealed (Horejs et al. 2011; 2015; Horejs 2012). The mound rests upon a natural rise in the ground, which was presumably a prime driver in the selection of this location (Ehlers et al. 2014). In total, a surface of 1,003m^2 has been exposed, yielding remains from the Neolithic to the Early Bronze Age. The northern side of the mound, which was cut away by a bulldozer, has produced well-preserved Neolithic levels, immediately concealed beneath the surface of the plain. The remains under discussion here stemmed from the northern excavation area, trench N6 (fig. 2).

The sequence of building replacement in trench N6

Buildings C12, C6 and C21 were excavated during the 2011–2014 campaigns. Deposits associated with this sequence of buildings reached about 0.7m in depth. Due to restrictions imposed by the property owner, only the remains contained within the limits of the trench, as established at the beginning of the excavation, could be excavated. Nevertheless, we were able to uncover large sections of the buildings. Single context excavation and recording was used. The artefact contents of the buildings and their spatial distribution are still being studied by specialists; the results will appear in a separate article (Horejs et al. forthcoming). Chronologically, the buildings relate to a somewhat later horizon of the Neolithic at Çukuriçi Höyük, ÇuHö X–VIII, radiocarbon dated to between 6,600/6,500–5,900/5,800 cal. BC (for an overview of the chronology of the site, see Weninger et al. 2014; Horejs 2016). The stratigraphy and the site-wide chronology suggest a relatively long period of occupation, in the order of 400–600 calibrated years.

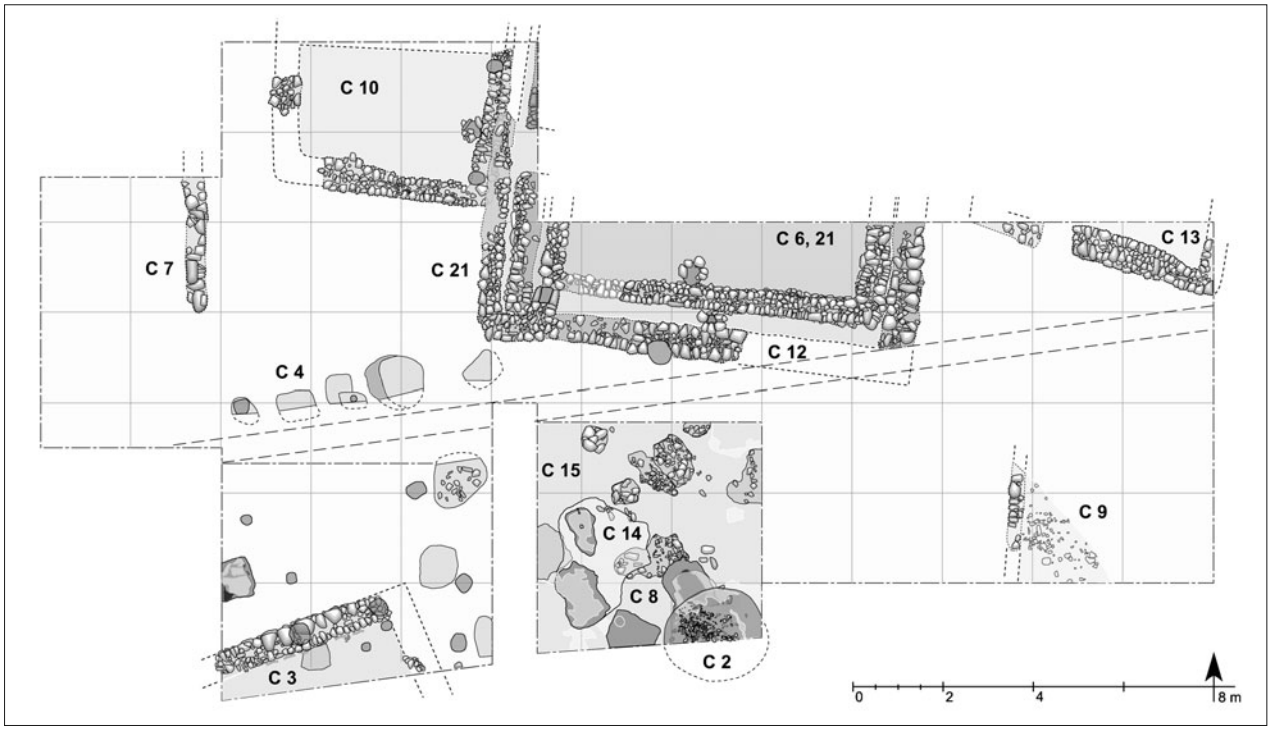

Fig. 2. Architectural remains of the Neolithic period, trench N6 (© Barbara Horejs; plan by M. Börner).

At present, it is not possible to determine how long individual buildings were in use, nor how much time elapsed between successive building episodes. Dirt floors inside the buildings are not normally plastered and they do not show the sort of lamination observed at other Neolithic sites (for example Çatalhöyük and Boncuklu), making any attempt to count them precisely difficult. Furthermore, charred grains, which are used as the main dating material at the site, are extremely rare in floated assemblages from inside the buildings. So far one ^{14}C date, MAMS-18745: 7095±26BP (6024–5909 cal. BC at 2σ), has been obtained from the oldest floor of Building C21, the latest building in the sequence, which correlates to radiocarbon-dated settlement phase ÇuHö VIII (6,100–5,900/5,800 cal. BC). Another two dates, MAMS-20524: 7002±36BP 26BP (5986–5795 cal. BC) and MAMS-18744: 7504±26BP (6438–6264 cal. BC), stem from stratigraphically related deposits outside the buildings.

The buildings under review were freestanding and rectangular in plan. They were constructed of stamped loam over a five- to six-course-high stone socle. The stone foundations consisted of two parallel rows of unworked stones (limestone, serpentine, schist) locked together with small irregular stones, carefully selected to fill the gaps. Stamped clay was applied against the inner and outer faces of the walls to improve stability. It is not clear at present how the buildings were spanned. Postholes lined with flat packing stones were recorded both inside and outside the buildings and suggest the use of a timber frame. The structures were aligned along a strict north–south axis. Entry to Building C12 was via a ground-level doorway in the middle of the western wall, reached by a narrow lane just wide enough to allow an adult to pass. The layout of the buildings was in keeping with the character of Neolithic domestic architecture in western Anatolia (Mellaart 1970; Umurtak 2000). Fire installations were found inside the buildings, embedded in stamped clay floors, and in inter-dwelling spaces. Both the walls and the floors of the buildings show extensive warping, which, we argue, started during the use-lives of the buildings and continued after they were buried. The phenomenon is especially acute in this section of Çukuriçi Höyük and cannot be related solely to the process of stratigraphic compression encountered elsewhere on the tell. In this case, the location of the centre of the area of subsidence can be clearly identified, as it runs in a straight course under the aforementioned buildings, causing important variations in settlement patterns from one side of the buildings to the other (see below).

The sequence of events leading to the stratification observed in trench N6 at Çukuriçi Höyük can be summarised as follows: Building C12 was the first building in a sequence of three vertically superimposed houses (from top to bottom, Building C21, Building C6 and Building C12; fig. 3). As a result of subsidence into a soil-filled feature, most likely an older ditch, Building C12 became unsafe and fell into disuse. Building C6 was subsequently inserted within the standing walls of Building C12, in such a way that new walls abutted – and presumably derived support from – old ones (fig. 4). This solution failed and Building C6 too sank into the ground. The abandonment of Building C6 is associated with a significant infilling event, which we regard as intentional. Building C21 was constructed upon the horizontally truncated fill, taking advantage of the stability of existing wall foundations, where possible, to erect new walls, and a doorway was created on the weakest load-bearing section of the building, presumably to relieve the weight placed upon it.

Building C12

The particular sequence under consideration began with the foundation in Phase X of Building C12 upon the slope of an artificial mound or tell. Our excavations suggest that the southwestern corner of the building was constructed 1.7m above a large linear feature – most likely the continuation of an older potential ditch or channel observed in an adjacent sounding, which had been filled after its use with soft unconsolidated material and had little or no surface expression. The northern profile of the deep trench shows surfaces sloping in the same direction as the underlying dip (fig. 5). As can be seen in figure 5, the southern wall of Building C12 slumps down sharply exactly where the deepest point of the depression is expected. Differential settlement associated with variations in the depth of fill led the western wall of Building C12 to lean inward at an unsustainable angle, threatening the integrity of the roof. The heavy load of the wall probably accelerated the compaction. Throughout this process, the footings for the eastern portion of Building C12 remained almost perfectly level. Cracks formed as a result of non-uniform settlement, especially in the middle of the southern wall.

In sum, it would appear that Building C12 became rapidly and irremediably unsafe, jeopardising long-term use. The section of the floor located near the western entrance of the building bowed in a fairly dramatic manner, forcing the inhabitants to take a step down to enter the building. The unsustainability of the building was aggravated by its exceptionally large size, 9.2m by 8.1m according to our reconstruction, which posed a significant challenge in regard to the roofing system. The final phase of the building was marked by a fire, associated with extensive fire traces over the last floor surface, including reddish-burned loam, charcoal and thick ash lenses. Remains of the superstructure were preserved as burned clay on top of the western stone socle. The origin of the fire is not known, but, given the nature of closure-related activities evidenced later on in the sequence (Building C6),

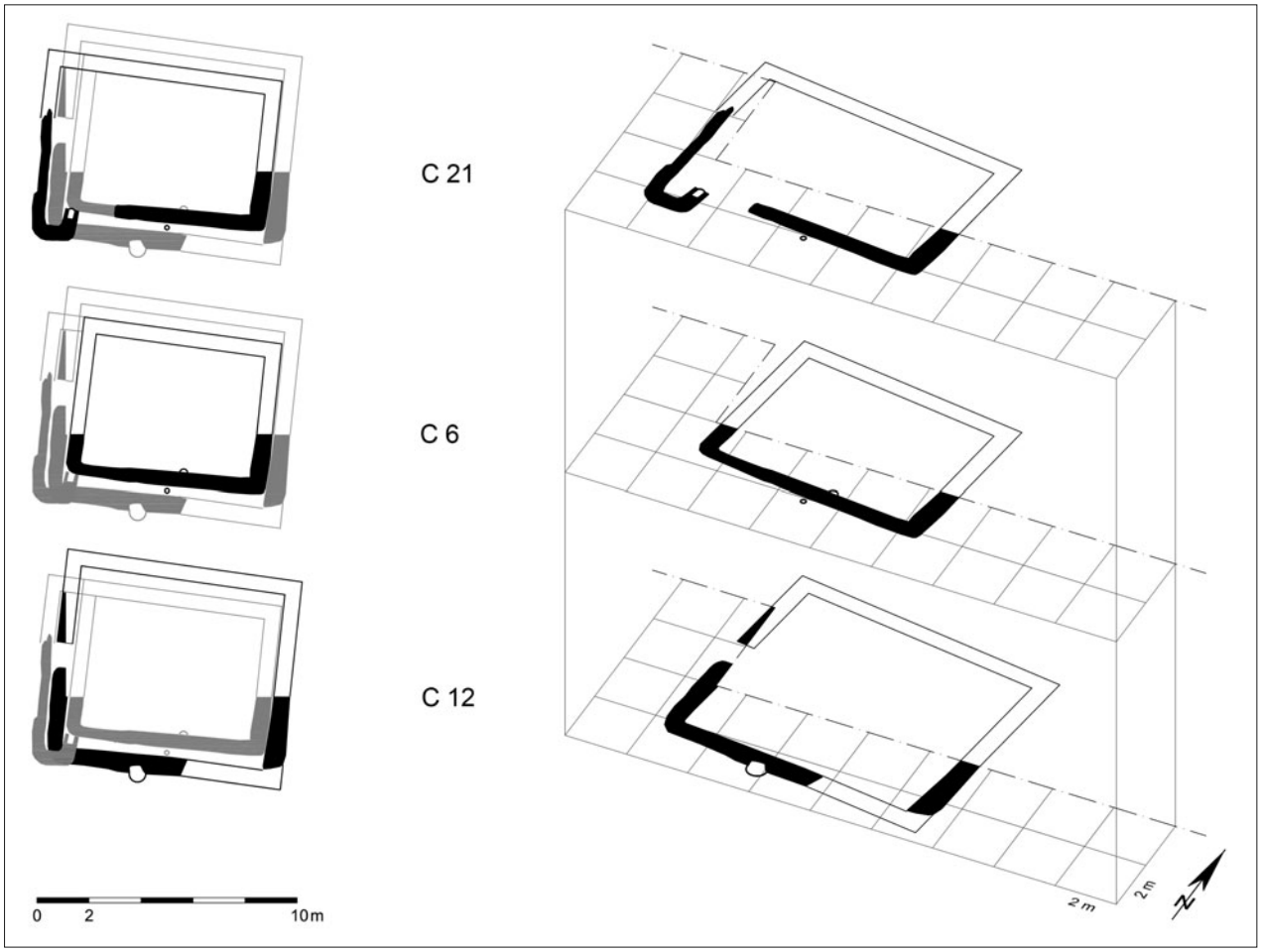

Fig. 3. Sequence of building replacement in trench N6, including, from top to bottom, Building C21, Building C6 and Building C12 (© Barbara Horejs; illustration by M. Börner).

we cannot exclude that it was intentional, perhaps to enhance the load-bearing capacity of the loam and facilitate the reconstruction effort.

Building C6

The construction of Building C6 over the remains of Building C12 coincided with the deposition of a virtually sterile sandy infill and large rocks in the western part of the building, apparently to compensate for the declivity of the slope. Stratigraphically, it is not clear if this event was related to the closure of Building C12 or if, as we argue here, it initiated a new cycle of construction. A floor was laid over the former disturbance, which we assume to have been initially flat. Levelling activities involved clearing the upper sections of the walls of Building C12, just above the stone foundations. Spaces left in the wall by missing stones suggest that some were retrieved, presumably to be reused in the foundations of Building C6. The new building was constructed upon a raised fill, within the perimeter wall of the old one. Consequently, the building surface decreased to ca 7.7m by 5.8m. New walls rested against the inner face of extant wall stumps on the eastern and western sides. On the southern side, a 0.4m-wide space was left between the Building C6 and Building C12 walls; this was filled with midden and covered with a lime-coated pebble floor or platform. Hence walls were doubled or tripled in thickness at the base. This heavy-duty structure was completed by two stone-lined postholes, one located against the middle of the southern wall inside Building C6 and the other in the narrow space between the Building C6 and Building C12 walls. It is not clear how the building was entered.

Although this architecture could potentially withstand considerable loads, it did not solve the problem of slumping described earlier. On the contrary, owing to its weight and its location, close to the fault's edge, the western wall of Building C6 sank deeper into the ground than that of Building C12. The lower section of the Building C6 wall can be seen to be leaning inward towards the centre of the room. This wall collapsed or was manually pulled apart at the end of the house's use-life, as indicated by upstanding slabs on the floor and abutting the

Fig. 4. Buildings C6 and C12, as seen from above (photograph by N. Gail).

Fig. 5. Sloping surfaces underneath Buildings C6 and C12, as seen from the deep trench (photograph by F. Ostmann).

upper section of the Building C6 foundations. Multiple floor renewals – at least seven could be counted – suggest, on the other hand, that the building was in use for several years. The floors, which were made of hard-tamped loam, were interspersed with thin layers of midden, including bones and shells, signalling domestic activities. Our excavations have documented a sequence of three fire-related installations, presumably hearths, shifting location across successive refloorings. These features consist of shallow depressions of circular or sub-circular shape, ranging in diameter from 0.3–0.6m, infilled with burned loam and charcoal. One of these possible hearths had a raised kerb and a shallow bowl.

The abandonment of Building C6 was perhaps triggered by renewed subsidence and fissuring. Besides the aforementioned collapse (or manual demolition) of the western wall, there is evidence to suggest that the abandonment followed a structured sequence, including: (1) the deposition of complete animal bones, in particular scapulae, on the last floor surface and in a recess in the southwestern corner of the building; (2) the burial of the lower part of a vessel, associated with a visible accumulation of charcoal, in a shallow pit cut through the latest floor; and (3) the infilling with soil and stones of the house, up to the top of the stone wall stumps. The last step in the sequence is particularly noteworthy. It consisted of at least one major depositional event, encompassing over 650 litres of distinctive sandy clay deposit for this section of the building alone (fig. 6). Large rocks were deposited in the western half of the building, alongside a remarkable collection of artefacts (over 30) – most complete and in pristine condition – including polished stone axes/adzes, clay sling pellets, bone awls, spatulae and the only articulated Neolithic necklace ever recovered at the site, showing an alternation of red and black beads, 61 in total. Necklaces are usually associated with burials and people in the Anatolian Neolithic, raising questions about the meaning of this artefact in an abandonment context. The location of the stones suggests they were placed there with the intention to level the uneven ground. In sum, it appears that Building C6 was deliberately infilled at the end of its use-life, both to achieve a form of (ritual) closure and to prepare the ground for a third superimposed house, Building C21.

Fig. 6. Abandonment deposits in Building C6 (photograph by S. Bosch).

Building C21

The construction of Building C21 involved the horizontal truncation of the Building C6 fill, immediately below the last row of stones (fig. 7). In this case, none of the stones appear to have been recycled. The eastern wall of Building C6 was integrated into the foundations of the new structure and at least one additional row of stones was erected upon the top of the old wall, without an overhang (fig. 8). To the west, in contrast, the floor of Building C21 stretched over the wall stumps of Buildings C6 and C12, which were no longer visible, and a new wall was constructed on the outside, in such a way as to encircle the former two. With the extension, the building reached a size of ca 9.0m by 7.3m. Door-jamb slabs firmly set between the walls of Buildings C6 and C12 indicate that a large unbuilt section in the middle of the southern wall was probably used as a doorway. This arrangement solved at once two problems: (1) the reduction of the floor space with each reconstruction and (2) the recurrent slumping, which was strongly attenuated. While the stones in the underlying fill helped to shore up the building, the location of the doorway relieved some of the pressure placed on this section of the structure.

The floors in Building C21 were renewed at least five times. No fire installations or features were recorded within the excavated area. The building appears to have been cleaned on a regular basis before each floor renewal. The infill upon the latest floor is only partially preserved due to destruction by Chalcolithic and later features. Although a final infilling is indicated, the infilling process and its assemblage can only generally be compared with that of the former building, C6. However, we assume a standard infilling process, also known from neighbouring building C10.

Discussion

The sequence of superimposed buildings at Çukuriçi Höyük can be seen as trying to compromise between two concerns: (1) the emulation of other Neolithic sites, by repeating houses, and (2) the particularly inauspicious nature of the lot, liable to subsidence. The result is a rather messy entanglement of walls, far removed from the neat stacks of rooms observed, for instance, at Çatalhöyük on the central Anatolian plateau (Hodder 2006). While both sites demonstrate an absolute conservatism regarding the

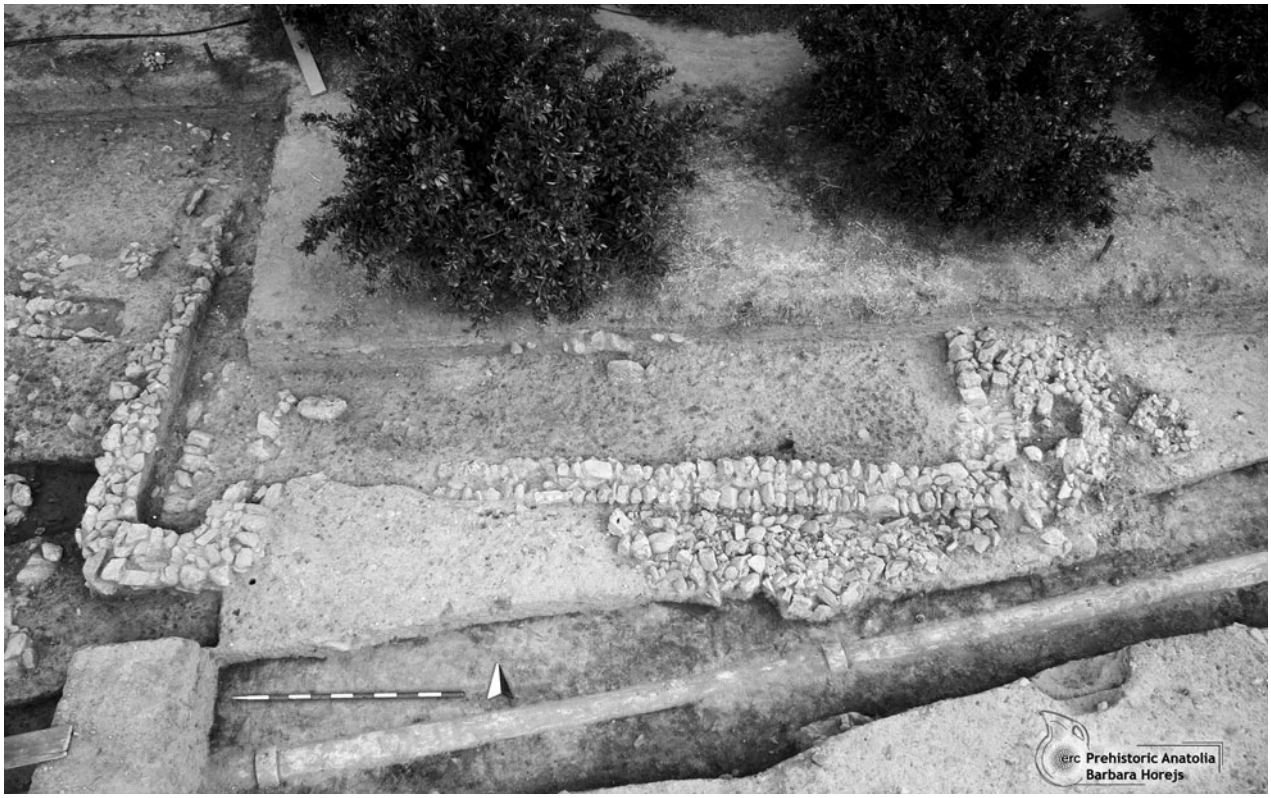

Fig. 7. Buildings C6 and C21, as seen from above (photograph by M. Börner).

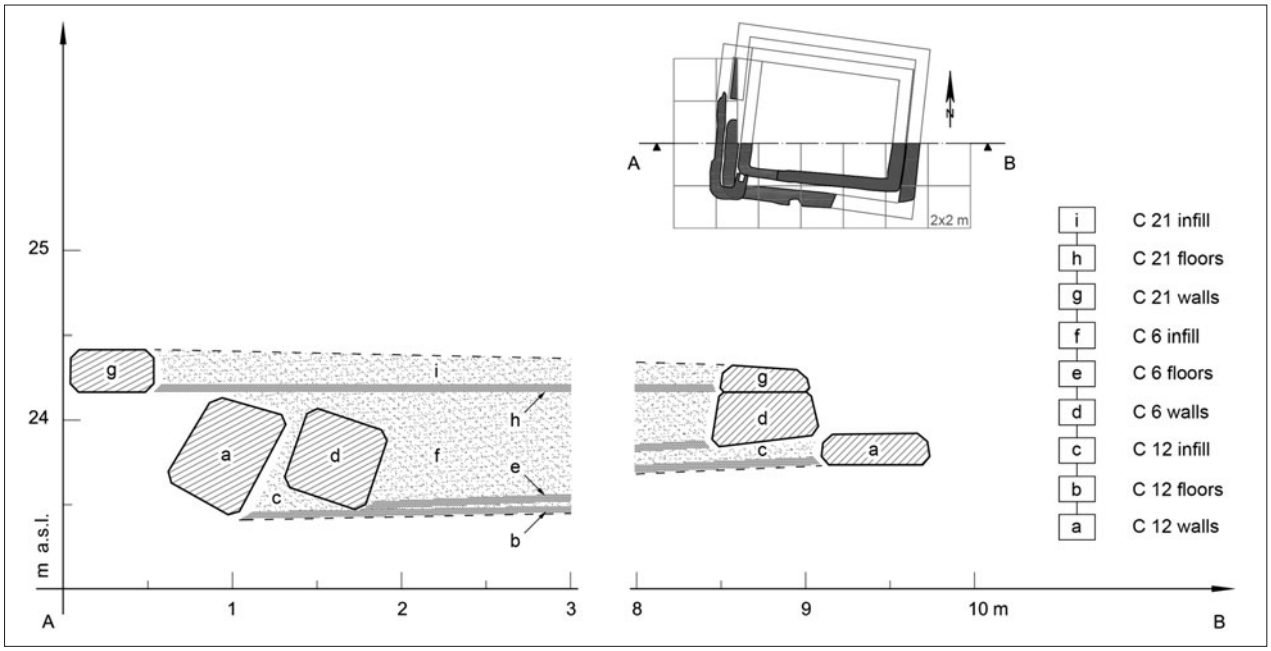

Fig. 8. Schematic section through the building sequence C6-C12-C21, as seen from the south (illustration by M. Börner).

location of houses, Çukuriçi Höyük shows more leeway in how buildings succeeded each other, suggesting that the land was at least as important a concern as the houses themselves. The following discussion explores the meaning of building continuity, first at Çukuriçi Höyük and then in a regional context.

Building continuity at Çukuriçi Höyük

The significance of Çukuriçi Höyük with regard to the question of building continuity during the Anatolian Neolithic is that it provides a somewhat extreme example, against which the meaning of the practice can be more readily evaluated, which sits outside the immediate region

(the central Anatolian plateau) where this question has been traditionally formulated. Why did people repeat houses at Çukuriçi Höyük, apparently at all costs? As suggested in the introduction, functional explanations for this building strategy ignore some important aspects of the problem; this concern is particular acute here, given that building continuity was neither cost effective nor optimal to address the gradual slumping of the buildings. In what follows, we suggest that building continuity at Çukuriçi Höyük was a meaningful practice. It cannot be reduced for instance to a simple matter of space availability. As can be seen in figure 2, buildings were constructed at some distance from each other and occupied in total no more than about half the space within the excavation area – this assuming they were all in use at the same time, which our excavations suggest they were not. There was no piecemeal rebuilding of houses either; only Building C12 was significantly repeated, suggesting that this house or the parcel on which it stood was afforded special status.

The second possibility is that people built upon C12 to take advantage of the stability of this building. In a sense, this is true, in so far as people seem to have consciously inserted C6 within the standing walls of Building C12, presumably to buttress it. The question is *not* however, why use earlier walls as upstanding bases or support for later walls, for this behaviour may be explained functionally by the avoidance of low load-bearing soils when laying out walls, such as recently deposited, unsettled, infill deposits (Hodder 1996: 364) – but, instead, why choose to build on top of an abandoned house in the first instance? This strategy was evidently ill-suited to this location at Çukuriçi Höyük, for it did not solve the problem of the slumping and may, on the contrary, have contributed to accentuating it, by increasing the weight placed on the ground.

There remains the possibility that people were compelled to redevelop this parcel in particular, because it was their property and they were not granted licence or could not afford to move. The problem with this theory, at Çukuriçi Höyük as at other sites (for example Çayönü; see Özdoğan, Özdoğan 1998), is that there is no reason to assume that people would not have made a more opportunistic use of the extant house, reusing for instance all of its stones after it was abandoned, especially when these were in the way, forcing a downsize of the habitation surface, from ca 55m^2 (C12) to 32m^2 (C6). There was, in other words, a taboo regarding the functional reuse of the dead house and its products once it had entered the soil matrix, and this condition alone speaks against a purely functional interpretation of the phenomenon. The deliberate infilling of Building C6, up to the top of the stone foundations, has good parallels at Çatalhöyük, where the upper sections of the walls of the buildings were frequently dismantled at 'closure' and the debris finely processed and redeposited across the foundations to turn the earlier house into an upstanding platform, which afforded greater stability for reconstruction (Matthews, Farid 1996: 294–97; Farid 2007). This operation was both practical and symbolic – the extant house being effectively sealed or 'buried' in this manner (Özdoğan, Özdoğan 1998).

On account of the evidence at Çukuriçi Höyük, structural explanations involving either (or both) commitment to place or an attachment to the building provide a more useful interpretive framework. The sequence of vertically superimposed buildings at the site is exceptional by the circumstances surrounding its conception. These structures referenced, knowingly or unknowingly, a particular spot in the landscape and the settlement area – the possible location of an earlier ditch – which they gradually sagged into. Why this plot in particular and no other within the settlement was targeted is not clear at present, but presumably this emphasis emerged from the reoccupation of tells and the sort of 'fossilised actions' which this form of settlement encapsulated (Chapman 2000). The buildings reflect the cumulative effort of several generations of inhabitants and their investment in a place, which they could use to claim authority from the past. The aim was not, however, to build a monumental tell or to make a visual statement in the landscape (Bailey 1999: 97); the sequence of buildings C12-C6-C21 lacks the time-depth typically encountered in central Anatolia (Hodder 2006). The way in which these buildings were constructed, with comparatively less mud in the superstructure and by insertion within the stone foundations of extant houses, did not lead to the sort of accumulation of deposit (in the order of 1m or more per generation of houses) observed at Aşıklı and Çatalhöyük (Esin, Harmankaya 1999; Matthews, Farid 1996: fig. 14.6; Hodder 2007: 113). It is not clear either if the intention was to maintain a link with the ancestral space (understood here as the space where the ancestors were buried; see Chapman 2000: 5), for human bones were completely absent within the excavated area. This is another major contrast with central Anatolia, where the dead were normally buried in a contracted position under floors (Özbaşaran 1998; Düring 2003; Hodder 2006).

The buildings themselves may have provided a fixed point of reference, to which the inhabitants could return to maintain a house identity. This explanation suffers at Çukuriçi Höyük from the fact that successive buildings were significantly different in size, shape and interior use of space. For instance, the entrance to the building shifted from the western wall in Building C12 to the southern wall in Building C21, and it is not clear how Building C6 was entered. Likewise, postholes and fire installations shifted location over time. Building C6 was elaborately infilled at

closure; this practice was not evident in Building C12, however, which showed evidence of burning instead. In other words, it was not exactly the same house being continuously repeated. This pattern can be contrasted with that at earlier sites, like Aşıklı and Çatalhöyük, where arrangements seem more fixed (Özbaşaran 1998; Düring 2006). As a note of caution, however, we should stress the limited size of the exposure at Çukuriçi Höyük. A larger sample of buildings may indicate that the variations described here are well within the range of variations observed in central Anatolia (Matthews 2002: 93). Another problem is that, owing to the absence of biological markers, there is as yet no conclusive evidence that particular groups were associated with such plots over several house rebuildings. Rebuilding activities may have been decided at household- or village-level, depending on the function of the buildings.

In sum, concerns with the buildings need not be exclusive of concerns with place, since both were involved in the continuity of Neolithic societies. As people were entangled with houses, so were houses entangled with place. Building continuity on an unsettled fill, as demonstrated at Çukuriçi Höyük, shows how important the initial situation of the building was, since, once it was fixed, it provided a rigid axis for the development of an entire sequence of buildings. Assuming there was such a thing as a 'house society' in the Neolithic, it was before all else grounded in a strong commitment to place or sense of place. Conversely, the act of building produced places (Heidegger 1951: 162). We are reminded of Lévi-Strauss' discussion of the Kwakiutl society, in which 'the basic units of social structure [seemed] shaped by a supposed descent from a mythic ancestor who built his home in a definite place' (Lévi-Strauss 1982: 164–65). Building continuity in the Anatolian Neolithic appears to be a very literal transposition of this model to a context – prehistoric agrarian societies – in which the land, which was valued and intensively cared for, was an important agent of permanence (Bogaard 2004; Barrett 2014: 27).

The practice in its regional context. House differentiation at Çukuriçi Höyük and Ege Gübre

The emergence of house-based societies involved, according to Lévi-Strauss, the gradual dissolution of the collective order (Lévi-Strauss 1982: 186–87). In time, some houses overstepped their role and claimed for themselves resources which belonged to the collective. Presumably a key commodity in Neolithic times was settlement land. By gaining privileged access or control over the land, some houses were able to strengthen their political and economic dominance over others. Building continuity is the material expression of this transition from collective to household identity (Düring, Marciniak 2006). Similarities in the patterns of the replacement of buildings in Anatolia may be understood in the context of this historical process, initiated towards the end of the aceramic Neolithic on the central Anatolian plateau (Düring, Marciniak 2006). We suggest that building continuity, as evidenced at Çukuriçi Höyük and other sites in the Aegean basin, represented the end-spectrum of this transition, characterised by increased differentiation of houses over time.

The sequence of building replacement at Çukuriçi Höyük has precise parallels at another site of the region: Ege Gübre (Sağlamtimur 2012). Alongside Ulucak and Yeşilova on the central Anatolian Aegean coast (Çilingiroğlu et al. 2004; 2012; Derin 2012), Ege Gübre and Çukuriçi Höyük have been ascribed to a seventh-millennium cal. BC Neolithic group, based on various similarities in technology, style, morphology, use of material culture, supply sources, subsistence strategies, weaponry and aspects of symbolism and rituals (Horejs 2016). The particular practice of building continuity discussed in this paper may be embedded in this strong regional network.

Ege Gübre is a flat extended site comprising both standard rectangular buildings and eight round structures, or *tholoi*, centred on an unbuilt space or courtyard (Sağlamtimur 2012). As with Çukuriçi Höyük, dry-stone walls or foundations were used throughout the settlement. We draw attention to a large rectangular building south of the central courtyard, DY1, excavated from 2004–2007 by a team from Ege University under the supervision of Haluk Sağlamtimur (fig. 9). The corners of DY1 were oriented to the four cardinal directions. Like Building C12 at Çukuriçi Höyük, DY1 was entered via a doorway in the middle of the western wall (Ozan 2012). These two buildings were fairly similar in size, 8.1m by 9.2m (according to our reconstruction) and 7.8–8.0m by 9.8m respectively; both were significantly larger than other Neolithic structures in their respective settlements. To give an idea of scale, Building C12 was about four times as large as its neighbour, Building C10, which was in use at the same time.

The sequence of building replacement at Ege Gübre is particularly noteworthy. Once DY1 fell into disuse, a new building, DY6, was inserted within its upstanding walls, thus downsizing the habitation surface from ca 47.5m^2 to 28m^2 (Ozan 2012). New walls simply abutted old ones without replacing them, following a sequence similar to that outlined earlier for Çukuriçi Höyük (Buildings C6 and C12). DY6 was provided with a fireplace (hearth?), opposite the main doorway in the middle of the eastern wall (Ozan 2012). To the south, the DY6 wall was set back from the DY1 wall, leaving a small compartment between the two walls, which was presumably infilled, like the space between Buildings C12 and C6. DY1 and DY6

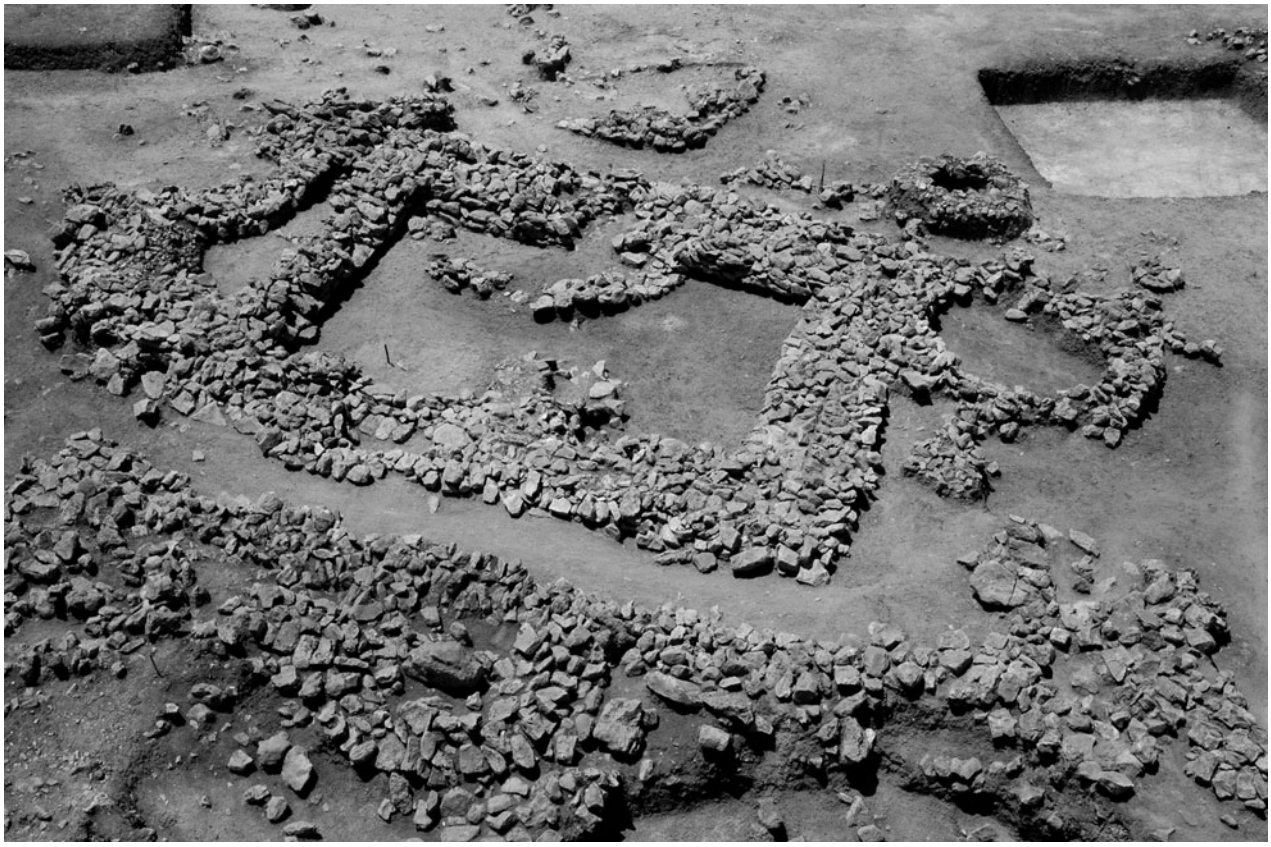

Fig. 9. Buildings DY1 and DY6, Ege Gübre (courtesy of the Ege Gübre Research Project).

belong to different subphases of Ege Gübre Level 3: 3b and 3a, radiocarbon dated to ca 6100–5700 cal. BC at two standard deviations (Ozan 2012). Thus, at roughly the same point in time and in the same region, two unusually large rectangular buildings were repeated at the same location by inserting a structure within the upstanding walls of a disused one.

What was the function of these buildings and, crucially, why were they different from other buildings? One hypothesis is that they assumed some sort of supra-household function, as central or communal houses. In effect, Building DY1 commanded a key position within the Ege Gübre enclosure, being as it was directly adjacent to the central yard and opening onto it (Ozan 2012). It was also the only building within the settlement which was significantly repeated. The situation is less clear at Çukuriçi Höyük, which was excavated on a smaller horizontal scale. There is little evidence at present that Building C12 was more elaborate than other buildings within the settlement, which were constructed of the same materials and in the same pattern. Preliminary artefact studies by the Çukuriçi team indicate no significant difference in the amount and quality of finds between Building C12 and Building C10. We stress again that Building C12 could not be excavated beyond the trench edge, so any statement about its contents remains subject to caution. The evidence suggests that we are dealing with slightly larger domestic structures, but not cult or public buildings in the sense of, for example, Building HV at Aşıklı, which was about 20 times the size of local houses and neatly separated from them by a paved road (Düring 2006: 101–02).

The evidence from Çukuriçi Höyük and Ege Gübre fits, on the other hand, the model of competing or 'autonomous households' postulated for central Anatolia, in which some houses gradually took precedence over others, challenging the collective identity of the group (Düring, Marciniak 2006: 182). At Çatalhöyük there is evidence that some houses – which were more repeated, marginally larger and the focus of multiple burials – served as historical foci, around which other buildings clustered (Düring 2006: 107; 2007; Hodder 2006: 152–61). A similar pattern has been observed in Neolithic Greece (Kotsakis 2006). At Sesklo, in southern Thessaly, K. Kotsakis has argued that both the tell (Sesklo A) and the flat extended site (Sesklo B) were occupied simultaneously by social groups organised in building compounds, including both smaller and larger houses (Kotsakis 2006: 211). Interestingly, only buildings on the tell were significantly repeated, suggesting there was a struggle for access to a key commodity – perhaps ancestral land itself (Kotsakis 1999; 2006). At Nea

Nikomedeia, in Greek Macedonia, the so-called 'shrine' (4-1) established its dominance over the course of three reconstructions punctuated by burning events (Souvatzi 2008: 70–71). The oldest building in the sequence was already remarkable in terms of its size – over 160m^2 – that is, larger than nearly any other Neolithic building in southeastern Europe (Pyke 1996: 22). The practice of inserting buildings within buildings observed in western Anatolia has strong parallels in Middle Neolithic Greece, suggesting that both sides of the Aegean basin shared the same social background. At Tsangli, for instance, House *R* was repeated twice in this manner (Wace, Thompson 1912: 115–17) and further inserted buildings can be observed at Halai (Furuya 2003) and Koutroulou Magoula (Papadopoulos et al. 2015: fig. 1).

Conclusion

Returning to the original question raised in this article, why did the Çukuriçi inhabitants persevere in rebuilding their house three times in the same location, seemingly against the odds? On account of the sequence of building replacement evidenced in trench N6 at Çukuriçi Höyük, purely functional explanations (such as a lack of space or the deliberate avoidance of low load-bearing soils) can be formally discounted. Economic reasons, such as the nature of land ownership in Neolithic times, likewise fail to explain the attention given to Building C6 at the end of its use-life, in particular its infilling up to the top of the stone foundations. On the other hand, one cannot exclude the possibility that the curious pattern of vertical superimposition of buildings demonstrated at Çukuriçi Höyük was simply a somewhat inadequate response to a poorly understood phenomenon; it aimed to shore up the sequence of buildings in the face of subsidence or a gradual sinking. However, contextual and comparative evidence outlined in this paper suggest that building continuity at Çukuriçi Höyük was part of a broader strategy by some households to maintain themselves and affirm their status over time.

A brief review of the regional context shows that buildings were frequently repeated in the Anatolian Neolithic and that choices about location dominated over practical considerations. In effect, the suggestion is that the Çukuriçi inhabitants were tied to a residential practice inherited from Later Aceramic Neolithic societies on the central Anatolian plateau and in the northern Levant. An old Pre-Pottery Neolithic practice appears to have been transferred to and transformed on the periphery of the Neolithic core area during the Pottery Neolithic period – a process which may be adequately captured by the concept of 'social memory' (Özdoğan 2014; see also Horejs et al. 2015). Building continuity, as it was practised at Çukuriçi Höyük, had a slightly different material expression – buildings were inserted within buildings – but it demonstrates the same essential transfer over time from communal to household identity; this is a process which can now be traced all the way from central Anatolia to Greece (Düring, Marciniak 2006; Kotsakis 2006; Hodder, Pels 2011).

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