BURÇIN ERDOĞU, 🖻 TANER KORKUT, 🖻 TURAN TAKAOĞLU, 🖻 NEJAT YÜCEL, 🖻 UYGAR OZAN USANMAZ 🖻 AND YASIN CEMRE DERICI 🖻

SPECIAL BUILDINGS AT NEOLITHIC GIRMELER, NEAR TLOS IN SOUTH-WEST ANATOLIA

Summary. Special buildings, or communal buildings, were ubiquitous in most Neolithic settlements in the Levant, Upper Mesopotamia, and Anatolia. Recently, remains of three special buildings with terrazzo floors dating to the early seventh millennium BC representing the Initial Neolithic period in west Anatolian chronology were unearthed in the basal layers of the mound located in front of the Girmeler cave in south-west Anatolia. The terrazzo floors in these three special buildings feature traces of red-painted linear and geometric decorations, while one also contains human burials. These special buildings may enhance our understanding of the symbolic and ritual behaviours of the Neolithic communities living on the south-west fringes of Anatolia. They may have been gathering places for ritual activities that helped create social memories and define group identities, as well as strengthen intra- and inter-societal relations among Neolithic groups. It is argued that the location of these special buildings adjacent to a natural hot spring before a cave with an impressive facade may have been one of the factors that eventually led Neolithic groups to form a gathering pattern here.

INTRODUCTION

The term 'special building' was first used by W. Schirmer in 1983 to refer to buildings that stand out from others uncovered at the pre-pottery Neolithic site of Çayönü in south-east Anatolia (Schirmer 1983). Most researchers who worked in several northern Mesopotamia pre-pottery Neolithic sites, however, generally preferred to use the term 'communal building', whose architectural features and construction techniques are different from other buildings. These communal buildings served a common purpose or were associated with unusual deposits with artistic and symbolic content (e.g. Richter *et al.* 2021). The term 'cult building' is also preferred by certain scholars (e.g. Özdoğan and Özdoğan 1998; Kornienko 2009). Referring to them as special, communal, or cult buildings does not alter the fact that they were an integral and important component of the first west Anatolian agricultural communities.

Check for updates



FIGURE 1 Location map of Girmeler.

Special or communal buildings have been discovered in pre-pottery Neolithic settlements in the Levant and northern Mesopotamia, some of which have terrazzo floors.¹ The earliest use of lime-plastered floors that involved pyrotechnology dates to around 12,000 cal. BC in the Levant (Kingery *et al.* 1988). At Göbekli Tepe, structures with terrazzo flooring appear at an early date, around the tenth millennium cal. BC (Schmidt 2012). Other well-known examples come from such sites as Çayönü, Nevali Çori, Ain Ghazal, and Yiftahel (Garfinkel 1987; Özdoğan and Özdoğan 1998; Rollefson 2000; Hauptmann 2011). Special buildings with terrazzo floors have also been documented at the pre-pottery sites of Aşıklı Höyük and Musular in central Anatolia (Özbaşaran 2003). In south-west Anatolia, special buildings with terrazzo floors appear simultaneously with the emergence of the first use of pottery at such sites as Bademağacı and Ekşi Höyük (Duru and Umurtak 2020; Dedeoğlu *et al.* 2023). Special buildings with lime plaster floors that could not be classified as true terrazzo also came to light at the pre-pottery Neolithic phase at Ulucak in central-west Anatolia (Çevik and Erdoğu 2020).

More recently, the remains of three special buildings with paint-decorated terrazzo floors have been discovered in the basal layers of the mound in front of the Girmeler Cave in south-west Anatolia. This paper presents the preliminary results of the excavation of these three special buildings. The hypothesis put forward in this paper is that these special buildings may have served as gathering places for ritual activities, based on the evidence that the terrazzo floors were 1468092, 2025, 1, Downloaded from https://oilineilbtary.wiley.com/doi/10.1111/jojon.12314 by Akdeniz University, Wiley Online Library on [1301/2025]. See the Terms and Conditions (https://oilineilbtary.wiley.com/doi/10.1111/jojon.12314 by Akdeniz University, Wiley Online Library on [1301/2025]. See the Terms and Conditions (https://oilineilbtary.wiley.com/doi/10.1111/jojon.12314 by Akdeniz University, Wiley Online Library on [1301/2025]. See the Terms and Conditions (https://oilineilbtary.wiley.com/doi/10.1111/jojon.12314 by Akdeniz University, Wiley Online Library on [1301/2025]. See the Terms and Conditions (https://oilineilbtary.wiley.com/doi/10.1111/jojon.12314 by Akdeniz University, Wiley Online Library on [1301/2025].

¹ The creation of terrazzo, a lime-based plaster with stone particles mixed throughout, requires considerable labour input and skill to manufacture, and its production represents a technological advancement in human prehistory.

specifically decorated with painted motifs for these kinds of occasions. It is hoped that this proposal will stimulate further discussion on the ritual and symbolic behaviours of early settled communities in west Anatolia.

SPECIAL BUILDINGS AT GIRMELER

The site of Girmeler consists of two caves with long galleries and a mound in front of the caves. The site is located on a small limestone hill in the Eşen valley, about 5 km north-west of the ancient Lycian city of Tlos (Fig. 1). There is a natural hot spring nearby. Almost seven-metres of the mound was removed from its top for the levelling of the space between the natural hot spring and the cave's mouth for the construction of a thermal centre here in the 1980s (Köktürk 2000; Korkut 2016, 131–8). Several trial trenches opened in front of the cave at the basal layers that remained after the destruction between 2011-2023 revealed archaeological evidence attesting to almost continuous habitation starting in the early twelfth millennium BC, giving the site an important place within prehistoric research in south-west Anatolia. Girmeler stands out as one of the promising sites that not only help us understand the Epi-Palaeolithic in the region but also the cultural transmission and transformation that occurred in south-west Anatolia between the Late Pleistocene and the Holocene (Erdoğu *et al.* 2021). Three radiocarbon dates from the Epi-Palaeolithic phase at Girmeler range from *c.*12,000 to 9600 cal. BC (Table 1). Additionally, transitional layers to the Early

Laboratory Reference	Period	Nature of Sample	Provenience	Date (BP) Uncalibrated	Calibrated Date at 1σ (68.2% probability)	Calibrated Date at 20 (95.4% probability)
Tübitak-1970	Epi-Palaeolithic	Charcoal	Trench E Sounding	11918± 44 BP	12036–11664 BC	12061–11657 BC
Tübitak-1527	Epi-Palaeolithic	Animal bone	Trench E Sounding	$10928\pm38 \text{ BP}$	10930-10816 BC	10958–10805 BC
Tübitak-extra1	Epi-Palaeolithic	Animal bone	Trench E Sounding	$10654\pm38 \text{ BP}$	10774–10680 BC	10784–10667 BC
Tübitak-extra2	Transition	Animal bone	Trench E Sounding	$9631\pm38 \text{ BP}$	9216-8868 BC	9232-8833 BC
Tübitak-3098	Transition	Charcoal	Trench E Sounding	$9615\pm37 \text{ BP}$	9162-8851 BC	9225-8824 BC
Wk-35609	Pre-Pottery Neolithic	Charcoal	Trench A Hearth	$8868\pm25~BP$	8197-7960 BC	8217–7877 BC
Wk-37966	Pre-Pottery Neolithic	Charcoal	Trench A Hearth	$8906\pm37~BP$	8216–7987 BC	8232–7961 BC
Wk-37967	Pre-Pottery Neolithic	Charcoal	Trench A Hearth	$8876\pm33~BP$	8199–7966 BC	8226–7846 BC
Tübitak-3077	Pre-Pottery Neolithic	Charcoal	Trench E Sounding	$8744\pm36~BP$	7936–7612 BC	7943–7606 BC
Beta-539762	Pre-Pottery Neolithic	Human bone	Trench C Grave	$8670\pm 30 \text{ BP}$	7682-7698 BC	7738–7597 BC
Tübitak-3096	Initial Neolithic	Sediment	Trench W6 Terrazzo Building 3	$7788\pm33~BP$	6651–6574 BC	6688–6506 BC
Tübitak-3097	Late Neolithic	Charcoal	Trench E Top layer	$7130\pm32~BP$	6053–5931 BC	6066–5921 BC

TABLE 1 Radiocarbon dates from Girmeler. (The gaps in the chronology are because the existing layers have not been dated yet)

Holocene dating back to c.9200-8800 cal. BC were also identified here. The trial excavations also yielded considerable evidence proving the pre-pottery Neolithic activities represented by a sedentary community engaged in intensive animal hunting and gathering of wild plant species between c.8200-7600 cal. BC (Takaoğlu *et al.* 2014; Erdoğu *et al.* 2021, 303). This locality was obviously the scene of activities by autochthonous local groups before the Neolithic mode of life was fully adopted in this part of Anatolia. Girmeler also emerges as one of the rare sites in the region where pottery was first used.

Excavations conducted on a low rocky hillock located nearly 25 m north of the mouth of the cave revealed the partially preserved remains of three of what appear to be quadrangular buildings with terrazzo floors lined up side by side (Figs. 2–4). Parts of these buildings, which lie directly over the bedrock, were unfortunately damaged during the above-mentioned removal of earth from this hillock (Fig. 3). Building 1 is a quadrangular structure lying on an east-west axis, with a maximum length of 6 to 7 m and a preserved width of 4 m (Figs. 4–5). The building's terrazzo floor is 3 to 4 cm thick and is made of burnt lime and small particles of stone. The walls' poorly preserved portions suggest that the *pisé* technique was used in this instance. Numerous post holes of various sizes are visible in the building's floor, which suggests that timber posts supported the roof. Alternatively, some of the holes may have marked a kind of wooden stelae with symbolic connotations appropriate for the building's special purpose.



FIGURE 2 Location and plan of special buildings in Girmeler.

BURÇIN ERDOĞU ET AL.



FIGURE 3 A reconstruction of three special buildings in relation to the mouth of the cave.



FIGURE 4 Image-based 3D model of three special buildings located side by side.

SPECIAL BUILDINGS IN NEOLITHIC ANATOLIA

A slightly raised red-painted terrazzo floor to the east and a lower, paint-decorated terrazzo floor at the west separated Building 1 into two sections. The terrazzo floor located in the west part of the building was decorated with red painted linear motifs. This part of the building is unfortunately severely damaged. Although intertwined V-shaped and semi-circular motifs are detectable, they are somewhat faded and worn (Fig. 6). In the eastern part of the building, on the other hand, there is a large burial pit, c.1.20 m x 0.80 m, dug into the red painted terrazzo floor (Fig. 5). It contains the



FIGURE 5 Building 1 with burials.



FIGURE 6 Motifs drawn on the terrazzo floors of Building 1 (right) and Building 3 (left).

skeleton of a young adult female buried in a flexed position on its left side, facing west. Just a skull and long bones, representing the disarticulated parts of an adult male, were present close to her head. It appears that the bones of this first burial were carefully moved aside to make room, and the second burial was placed in the pit before it was re-sealed. It seems that the life of this building came to an end following the making of this second burial. The burial's fill contained only a small conical worked bone piece and a fragment of a grinding stone. Additionally, a cranium representing an adolescent was also discovered in a posthole on the floor that had been painted red. Likewise, a human mandible that may be connected to this structure was found in a disturbed area of the surface inside the building. The behaviours of both burying the deceased in a pit dug into the red-painted terrazzo flooring and the placement of human skulls in a post hole in Building 1 at Girmeler have parallels in the Neolithic Çatalhöyük (Nakamura and Meskell 2013; Haddow *et al.* 2015). By using XRF analysis, the red paint used on the terrazzo flooring was determined to be ochre in its chemical composition.

The second structure with a terrazzo floor is Building 2, which is located immediately south of Building 1 (Fig. 4). Regrettably, over half of this building was destroyed when soil was removed from this place a few decades ago. It was probably a quadrangular structure as well, measuring 5 by 5.5 m (Fig. 7). The thickness of its wall, varying between 70 and 80 cm, was most likely related to the use of the *wattle-and-daub* technique in conjunction with rammed earth (*pisé*) footings and large wooden posts that were spaced regularly apart to support the walls. The wooden posts placed at the corners of the building. Debris containing daub scatters bearing negative impressions of wooden branches were identified over the terrazzo floor near the south-east corner of the building. The terrazzo floor in this building is between 4 and 5 cm thick, and it is thicker and firmer than the one from Building 1. Red-painted geometric designs and a checkerboard pattern adorned the terrazzo floor. These painted motifs are also a little worn and discoloured.

It seems that a flat, polished stone axe (Fig. 8) and a chipped stone tool assemblage composed of 17 quite narrow, thin, and fragile flint bladelets were intentionally placed on the floor before they were covered with the daub scatters of the building's eastern wall. These bladelets were made from greyish-black local flint using the pressure technique. According to Pelegrin's experimental study (2012), such blades could have been detached by pressure with a hand-held *baguette* (Mode 1). This discovery is important because the pressure technique was completely absent in west Anatolia before the seventh millennium BC (Guilbeau *et al.* 2019; Miliç 2019).



FIGURE 7 Building 2 (left) and Building 3 (right).



FIGURE 8 Polished stone axe found in Building 2 and rim sherds found in the fill of Building 3.

Building 3 is situated immediately south of Building 2 (Fig. 4). When compared to the other two examples, it is rather smaller in size. Its dimensions could be estimated to be around 3.5 by 3.5 m. (Fig. 7). Although the terrazzo floor of Building 3 is more lavishly decorated than the other two buildings, more than half of it unfortunately did not survive. Here it is embellished with a combination of geometric and linear designs (Fig. 6). Diamond-shaped quadrangles and

BURÇIN ERDOĞU ET AL.

V-shaped painted motifs dominate the preserved part. Four rudimentary pot sherds were discovered in the fill that covered the terrazzo floor. They are mineral-tempered, buff, reddish-buff-coloured, and burnished. One of the two rim sherds belongs to a mouth, and the other represents pieces from hemispherical bowls (Fig. 8). These sherds from Girmeler are comparable to the ones identified at the earliest level at Bademağacı located in the Lake District (Duru and Umurtak 2020). While terrazzo floors were a distinctive feature of pre-pottery Neolithic settings, the recovery of pot sherds in this context is not unexpected, as these types of terrazzo floors are also present in Neolithic communities that had just adopted the use of pottery into their lifeways.

That a relative date in the Initial Neolithic period could be offered for this building based on the appearance of the first examples of pottery is in accordance with the date obtained from a radiocarbon analysis of organic sediment taken from the floor of Building 3. This sample (TÜBİTAK-3096: 7788±33 BP) is dated to 6688–6506 cal. BC (95.4%). This single date is significant because no bone samples or carbonized substances suitable for radiocarbon dating were identified inside Buildings 1 and 2. All these three buildings were probably not built and used simultaneously in this part of the site; rather, one was likely erected after the other went out of use or was abandoned. The available excavated data does not allow us to hypothesize whether any form of closing ritual was involved the abandonment of each of these special buildings. If these special buildings represented different periods, then avoiding erecting a new structure on top of an abandoned one's remains may have something to do with preserving the memories that they had.

DISCUSSION AND CONCLUDING COMMENTS

The discovery of the remains of three special buildings with paint-decorated terrazzo floors side by side at Girmeler complements our understanding of the pre-pottery Neolithic sequences at the fringes of west Anatolia. These buildings may have well served as gathering places for ceremonial activities like feasts and rituals that were meant to bring the communities together at certain times of the year. Various scholars have argued that such ceremonial activities conducted in groups in or around certain types of special buildings, which were constructed with a joint effort and had several functions during rituals and rites during gathering, may have helped to maintain collective memory (e.g. Watkins 2004; 2005; Finlayson et al. 2011; Kinzel and Clare 2020; Richter et al. 2021). These buildings were also active constituents of society's behaviour, memories, values, and ideologies (Richards 1993). The emergence of special or communal buildings simultaneously with the advent of agriculture in south-east Anatolia may be related to the ideological shift toward a farmer's worldview. Such buildings, by bringing people together, may have helped to define a new form of social organization. They may have helped the earliest agricultural societies cope with the process of adaptation to farming and animal keeping. The atmosphere created by these special buildings during this period may have contributed to the improvement of social relations at both the inter-individual and inter-societal levels.

Architecturally speaking, the three buildings with terrazzo floors from Girmeler are comparable to other communal buildings identified at the sites of west and central Anatolia. What sets the Girmeler examples apart are mainly the painted decorations applied to the terrazzo floors and the presence of human burials in them. The only example of a building with a paint-decorated terrazzo floor in west Anatolia comes from the site of Ekşi Höyük, located nearly 150 km north of Girmeler. The terrazzo floor at Ekşi Höyük, which is noted for its geometric patterns, has been dated to 6680–6590 BC (Dedeoğlu *et al.* 2023). As in Building 1 at Girmeler,

the terrazzo floors of special buildings at the pre-pottery Neolithic sites of Aşıklı Höyük and Musular in Central Anatolia are all painted red (Özbaşaran 2003). The use of different colours in architecture has been argued to have a symbolic rather than an aesthetic meaning in discussions about the value of colour in archaeology (Jones and MacGregor 2002; Hovers *et al.* 2003). In prehistoric times, red pigment may have had symbolic significance for its association with such concepts as life, fertility, and vigour. It may have also symbolized 'blood', which stood for 'life' (Metcalf and Huntington 1992; Scarre 2002).

The motifs are in part reminiscent of the geometric and linear patterns seen in the wall paintings of Çatalhöyük (Hodder and Gürlek 2020). Although it is quite difficult to interpret the meaning of these motifs, they could be active components of society's memories, values, and ideologies, just like the building itself. They may also be connected to a rather complex inner world of contemporary society.

The artefactual evidence that could help us reconstruct the function of the special buildings at Girmeler is scarce. This may have to do with the structures' partial preservation due to the later activities carry out in this area. Only the floor of Building 2 yielded contextual evidence, including a polished stone axe and a small assemblage of flint blades made by the pressure technique. The stone axe and the flint bladelets may have been deliberately left behind when the building was abandoned. The thin and delicate blades could thus have had a symbolic rather than a practical function. Building 1 also presents some evidence regarding the symbolic acts of the users of these buildings. For instance, behaviours such as the burial of the deceased in a pit dug into the red-painted terrazzo floor, the placement of a human skull in a posthole, the removal of the skull, and the dismemberment of the mandible and cranium of a skeleton in what we call a special building may be linked to the creation of social memories and defining group identities. This statement is more or less in accordance with Kuijt's thinking, according to which remembrance helps construct intergenerational memory and structures of authority within communities (Kuijt 2008, 186). The individuals chosen for these mortuary behaviours in this way of thinking could have held memories, at least, of these special buildings. Arguably, existing biographies of the deceased were also important tools for creating social memory and social meaning, and the ancestors were probably ever present in living experiences and negotiations.

It is fair to say that the information derived from the recently discovered special buildings in the Initial Neolithic phase of Girmeler is consistent with what is known from central- and southeast Anatolian sites with similar terrazzo-floored buildings. The narratives that view the presence of buildings with terrazzo floors found outside the Levant, Upper Mesopotamia, and south-east Anatolia merely as imitations often ignore the contributions of local people. The innovative side of the Girmeler people in this case apparently led to the incorporation of new features into the special buildings, including the decoration of terrazzo floors with red-painted geometric patterns. To this, one may add the use of wooden stelae inside the buildings. As mentioned above, we believe that some of the postholes identified inside the buildings may have been for wooden stelae with symbolic connotations.

The placement of these special buildings close to a natural hot spring with healing properties in front of a visually impressive cave is not a coincidence. Because natural hot springs have therapeutic effects, many past societies regarded them as sacred. This may have been one of the factors that brought the Neolithic social groups living in the region together at Girmeler. This type of gathering that took place at certain times of the year could have facilitated strengthening both inter- and intra-societal ties, as well as improving solidarity and information exchange among both the region's sedentary and semi-sedentary groups sharing similar cultural traits. Special buildings,

like those at Girmeler, are constructed to anchor early agricultural communities in a location, a landscape, and social memory, generating strong perceptions of centrality.

Another reason for considering Girmeler as a gathering place during this stage of the Neolithic period is that south-west Anatolia has been mostly associated with the prominence of semi-sedentary lifestyles since prehistoric times. Several researchers have discussed this in the context of mobile prehistoric groups moving between the coastal and inland regions in a semi-sedentary landscape of the ancient region of Lycia (Yakar 1998; French 2008; Tiryaki 2023). Being in a landscape naturally endowed with diverse food resources, the location of Girmeler was ideal for those social groups that since the earliest periods of human history were moving along the routes that also included river valleys. Although demonstrating the presence of a semi-sedentary lifestyle also involves cross-cultural comparison and ethnographic research, we believe that the impressive façade of Girmeler Cave with its two openings and adjacent natural hot spring made this locality appealing to Neolithic social groups inhabiting this part of south-west Anatolia.

Acknowledgements

The excavation of prehistoric Girmeler was conducted as part of the Tlos Excavation Project led by Taner Korkut from Akdeniz University under the auspices of the Department of Antiquities and Museums of Turkey. The radiocarbon dating of prehistoric Girmeler was funded by the Turkish Academy of Science (TUBITAK project no: 123 K387).

(BE, TK, UOU, YCD) Department of Archaeology Akdeniz University Antalya TURKEY (Corresponding author) E-mail: berdogu@gmail.comburcinerdogu@akdeniz.edu.tr ORCID: https://orcid.org/0000-0003-3584-5313; ORCID: https://orcid.org/0000-0001-9810-231X; ORCID: https://orcid.org/0000-0002-7013-3023; ORCID: https://orcid.org/0000-0001-5631-9588

> (TT) Department of Archaeology Çanakkale 18 Mart University Çanakkale TURKEY ORCID: https://orcid.org/0000-0002-2236-9154

> (NY) Fahriye Hanım Street, No. 5, Maltepe Istanbul TURKEY ORCID: https://orcid.org/0000-0003-4674-3048

> > doi: 10.1111/ojoa.12314

REFERENCES

- ÇEVIK, Ö. and ERDOĞU, B. 2020: Absolute chronology of cultural continuity, change and break in West Anatolia between 6850–5460 cal. BC: the Ulucak Höyük case. *Mediterranean Archaeology and Archaeometry* 13 (1), 77–92.
- DEDEOĞLU, F., OZAN, A., KONAKÇI, E., TEMÜR, B., BOZ, B., MILIÇ, B., ILGEZDI-BERTRAM, G. and ERDALKIRAN, M. 2023: Archaeological and analytical investigation of a new Neolithic site in west Anatolia: Ekşi Höyük (Denizli, Turkey). Mediterranean Archaeology and Archaeometry 23(1), 1–29.
- DURU, R. and UMURTAK, G. 2020: Bademağacı Höyüğü Kazıları: Neolitik ve Erken Kalkolitik Çağ Yerleşmeleri, Vol. I (Istanbul).
- ERDOĞU, B., KORKUT, T., TAKAOĞLU, T., ATICI, L., KAYACAN, N., GUILBEAU, D., ERGUN, M. and DOĞAN, T. 2021: Late Pleistocene and Early Holocene finds from the 2020 trial excavation at Girmeler, southwest Turkey. *Anatolica* 47, 299–320.
- FINLAYSON, B., MITHEN, S.J., NAJJAR, M., SMITH, S., MARIČEVIĆ, D., PANKHURST, N. and YEOMANS, L. 2011: Architecture, sedentism, and social complexity at Pre-pottery Neolithic AWF16, southern Jordan. *Proceedings of the National Academy of Sciences* 108, 8183–8.
- FRENCH, D. 2008: Chalcolithic and Early Bronze Age pottery of southwest Anatolia. In ERKANAL, H., HAUPTMANN, H., SAHOĞLU, V. and TUNCEL, R. (eds.), *The Aegean in the Neolithic, Chalcolithic and the Early Bronze Age* (Ankara), 197–202.
- GARFINKEL, Y. 1987: Yiftahel: a Neolithic village from the seventh millennium B.C. in Lower Galilee, Israel. Journal of Field Archaeology 14, 199–212.
- GUILBEAU, D., KAYACAN, N., ALTINBILEK-ALGÜL, Ç., ERDOĞU, B. and ÇEVIK, Ö. 2019: A comparative study of the Initial Neolithic chipped-stone assemblages of Ulucak and Uğurlu. *Anatolian Studies* 69, 1–20.
- HADDOW, S.D., SADVARI, J.W., KNÜSEL, C.J. and HADAD, R. 2015: A tale of two platforms: commingled remains and the life-course of houses at Neolithic Çatalhöyük. In OSTERHOLTZ, A. (ed.), *Theoretical Approaches to Analysis and Interpretation of Commingled Human Remains* (New York), 5–29.
- HAUPTMANN, H. 2011: The Urfa region in the Neolithic in Turkey. In ÖZDOĞAN, M., BAŞGELEN, N. and KUNIHOLM, P. (eds.), New Excavations and New Research. The Euphrates Basin (Istanbul), 85–138.
- HODDER, I. and GÜRLEK, N. 2020: Creativity and innovation in the geometric wall paintings at Çatalhöyük. In HODDER, I. (ed.), *Consciousness, Creativity, and Self at the Dawn of Settled Life* (Cambridge), 190–206.
- HOVERS, E., ILANI, S., BAR YOSEF, O. and VANDERMEERSCH, B. 2003: An early case of color symbolism: ochre use by modern humans in Qafzeh Cave. *Current Anthropology* 44 (4), 491–522.
- JONES, A. and MACGREGOR, G. (eds.) 2002: Colouring the Past: The Significance of Colour in Archaeological Research (Oxford).
- KINGERY, W.D., VANDIVER, P.B. and PRICKETT, M. 1988: The beginnings of pyrotechnology, part II: production and use of lime and gypsum plaster in the Pre-Pottery Neolithic Near East. *Journal of Field Archaeology* 15 (2), 219–40.
- KINZEL, M. and CLARE, L. 2020: Monumental compared to what? A perspective from Göbekli Tepe. In GEBAUER, A.L., SORENSEN, A., TEATHER, A. and VALERA, C. (eds.), *Monumentalising Life in the Neolithic:* Narratives of Change and Continuity (Oxford), 31–50.
- кöктürk, н. 2000: New lights on prehistoric Lycia: finds from Girmeler Cave near Tlos. Lykia 3, 39-45.

KORKUT, T. 2016: Tlos. A Lycian City on the Slopes of the Akdağ Mountains (İstanbul).

- KORNIENKO, T.V. 2009: Notes on the cult buildings of northern Mesopotamia in the Aceramic Neolithic period. Journal of Near Eastern Studies 68, 81–102.
- KUIJT, I. 2008: The regeneration of life: Neolithic structures of symbolic remembering and forgetting. *Current* Anthropology 49(2), 171–97.
- METCALF, P. and HUNTINGTON, R. 1992: Celebrations of Death: The Anthropology of Mortuary Ritual (Cambridge).
- MILIÇ, B. 2019: Understanding (Early) Neolithic chipped stone production in north-west Aegean from an eastern Aegean perspective. *Eurasian Prehistory* 15(1–2), 213–32.
- NAKAMURA, C.M. and MESKELL, L. 2013: The Çatalhöyük burial assemblage. In HODDER, I. (ed.), Humans and Landscapes: Reports from the 2000–2008 Seasons (Los Angeles), 441–66.
- özbaşaran, m. 2003: Musular-Aşıklı ilişkisinde kireç tabanlı yapılar. İn özdoğan, m., HAUPTMNN, H. and BAŞGELEN, N. (eds.), Ufuk Esin'e Armağan. Köyden Kente, Yakın Doğu'da İlk Yerleşimler (İstanbul), 361–72.

BURÇIN ERDOĞU ET AL.

- ÖZDOĞAN, M. and ÖZDOĞAN, A. 1998: Building of cult and the cult of building. In ARESBÜK, G., MELLINK, M.J., and SCHIRMER, W. (eds.), Karatepe'deki İşık: Halet Çambel'e Sunulan Yazılar (Istanbul), 581–93.
- PELEGRIN, J. 2012: New experimental observations for the characterization of pressure blade production techniques. In DESROSIERS, P.M. (ed.), *The Emergence of Pressure Blade Making. From Origin to Modern Experimentation* (New York), 465–500.
- RICHARDS, C. 1993: Monumental choreography. In TILLEY C, (ed.), *Interpretative Archaeology* (London), 143–78.
- RICHTER, T., DARABI, H., ALIBAIGI, S., ARRANZ-OTAEGUI, A., BANGSGAARD, P., KHOSRAVI, S., MAHER, L., MORTENSEN, P., PEDERSEN, P., ROE, J. and YEOMANS, L. 2021: The formation of Early Neolithic communities in the Central Zagros: an 11,500-year-old communal structure at Asiab. *Oxford Journal of Archaeology* 40(1), 2–22.
- ROLLEFSON, G.O. 2000: Ritual and social structure at Neolithic 'Ain Ghazal. In I. KUIJT, (ed.), *Life in Neolithic Farming Communities. Social Organization, Identity and Differentiation* (New York), 165–90.
- SCARRE, C. 2002: Epilogue: colour and materiality in prehistoric society. In JONES, A. and MACGREGOR, G. (eds.), Colouring the Past: The Significance of Colour in Archaeological Research (Oxford and New York), 227–42.
- SCHIRMER, W. 1983: Drei Bauten des Çayönü Tepesi. In BOEHMER R.M. and HAUPTMANN, H. (eds.), Beitäge zur Altertumskunde Kleinasiens, Festschrift für Kurt Bittel (Mainz), 463–76.
- schmidt, к. 2012: Göbekli Tepe. A Stone Age Sanctuary in South-Eastern Anatolia (Berlin).
- TAKAOĞLU, T., KORKUT, T., ERDOĞAN, B. and IŞIN, G. 2014: Archaeological evidence for 9th and 8th millennia BC at Girmeler Cave near Tlos in SW Turkey. *Documenta Praehistorica* 41, 111–18.
- TIRYAKI, S.G. 2023: Living amidst the ruins: the Yuruks in the archaeology and history of Lycia. *Anadolu Araştırmaları/Anatolian Research* 28, 143–58.
- WATKINS, T. 2004: Building houses, framing concepts, constructing worlds. Paléorient 30, 5-23.
- WATKINS, T. 2005: The Neolithic revolution and the emergence of humanity: a cognitive approach to the first comprehensive worldview. In CLARKE, J. (ed.), Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean (Oxford), 84–8.
- YAKAR, J. 1998: Were the EBA inhabitants of Karatas-Semayuk semi-sedentary? An ethnoarchaeological view. In ARSEBÜK, G., MELLINK, M.J. and SCHIRMER, W. (eds.), *Light on Top of the Black Hill. Studies Presented to Halet Cambel* (Istanbul), 811–22.