1 Introduction

1.1 The site

Oliver Dietrich and Klaus Schmidt †

Göbekli Tepe is located about 15 km to the northeast of Şanlıurfa, a provincial capital in south-eastern Türkiye[5]. The site's name means as much as ›belly mountain‹, which quite aptly evokes its shape seen from afar. Whilst exhibiting an approximately central depression, the site rises high in an exposed position and dominates a drawn-out limestone plateau on the Germuş crest. Göbekli Tepe is a red-brown projection of about 300 m diameter. It clearly distinguishes from the surrounding limestone tables. The site consists of both the tertiary limestone plateau extending into all directions and the elevation made up of anthropogenic accumulations (figs. 1. 2)[6]. The mound's height is about 15 m above the terrain of the surrounding plateau[7]; it mainly consists of architectural remnants and their fill debris. The plateau's lateral outcrops had once served as the quarries for the site's megalithic structures[8].

Göbekli Tepe was first recognized as an archaeological site in 1963 during a joint project by the University of Chicago and the Istanbul University under the direction of Robert Braidwood and Halet Çambel.

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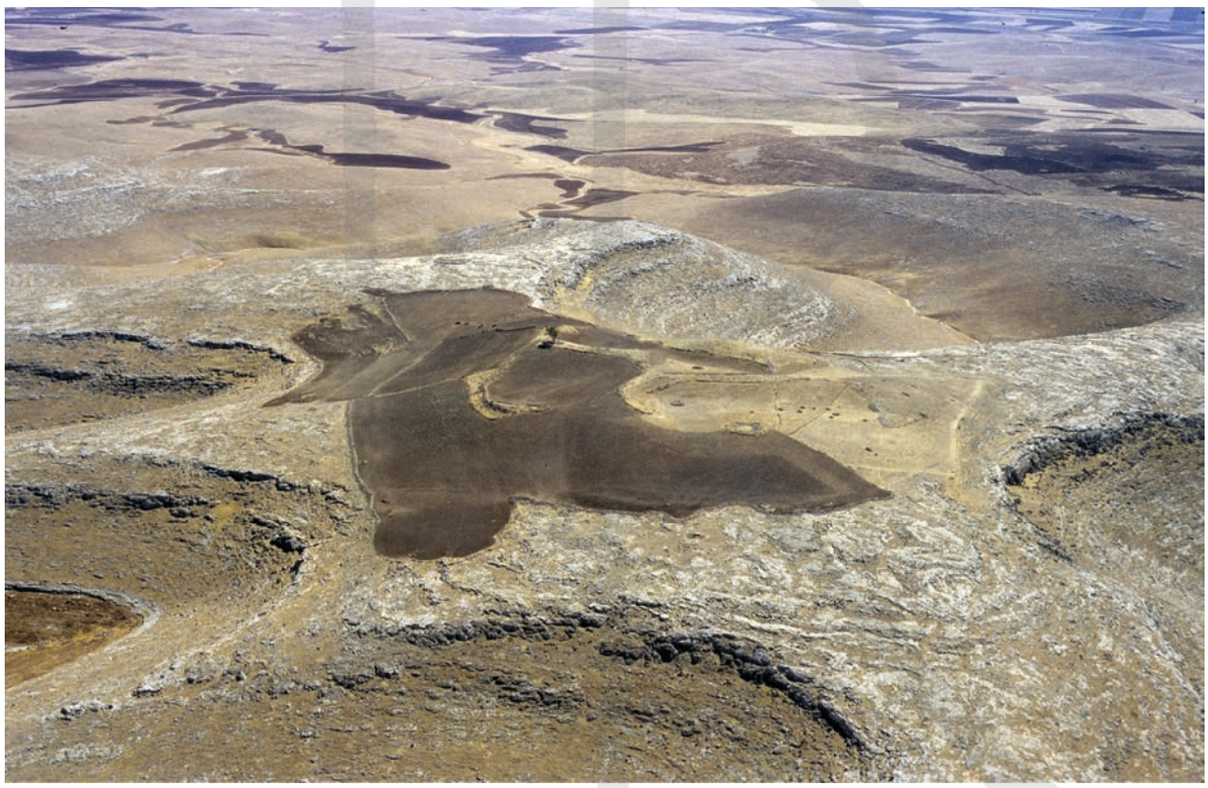
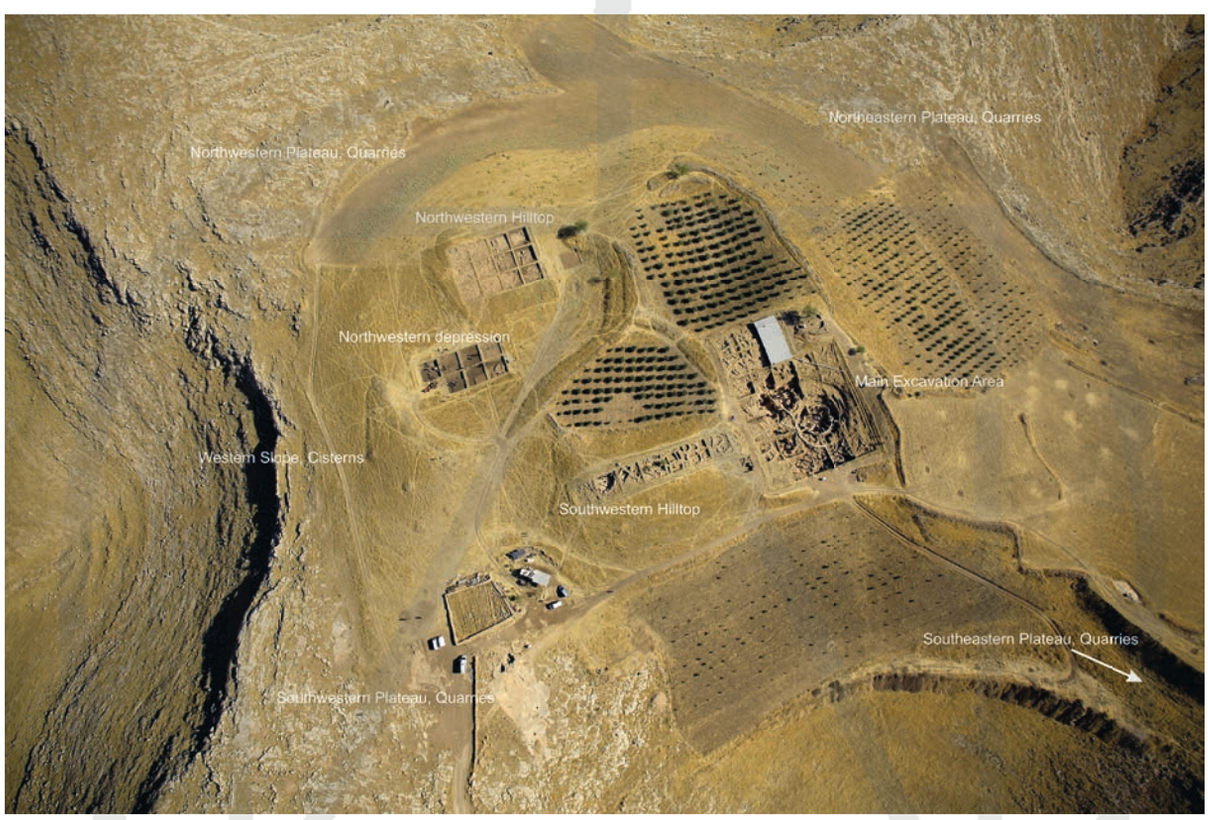


1 Aerial view of Göbekli Tepe before the excavations, seen roughly from the south west (1995)



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In his account on his visit at the site, Peter Benedict described its surface to be formed of elevations of red soil separated by depressions whose slopes were reported to be littered with flint artefacts[9]; also, small Islamic period cemeteries[10] concentrating around the site's two highest elevations were described. The aerial photographs that were taken just before the launching of the archaeological excavations reflect this description (fig. 1). However, the implications of the site were not noticed during the early visits. It was not until 1994 that Göbekli Tepe's true potential was recognized by Klaus Schmidt during a systematic inspection of the region's Neolithic sites[11]. His longstanding experience from the fieldwork at Nevali Çori under Harald Hauptmann helped him to identify surface finds as fragments of Neolithic T-shaped pillars[12] and large-format limestone sculptures, as just recently recorded at Nevali Çori[13]. Fieldwork at Göbekli Tepe began in 1995 under the direction of Adnan Mısır from the Şanlıurfa Museum and Harald Hauptmann from the German Archaeological Institute's Istanbul Department, and Klaus Schmidt as the field director. Schmidt continued to pursue annual systematic investigations, since 2007 as the director of the *Bakanlar Kurulu kararlı kazı* at Göbekli Tepe, until his untimely passing in 2014. The Göbekli Tepe project has been funded by the German Archaeological Institute (DAI) since 1995 and the German Research Foundation (DFG) since 2004[14]. In 2010, a long-term DFG research initiative, *The Prehistoric Societies of Upper Mesopotamia and Their Subsistence* (Project Number 165831460), was launched and is set to conclude in 2025.

Originally led by Klaus Schmidt (SCHM 657/1-6) until his passing in 2014, the project coordination then transferred to Ricardo Eichmann (EI 438/12-3-4), with support from Lee Clare, who assumed leadership in 2020. The final funding phase has continued with bioarchaeological research under Joris Peters (PE 424/9-1, 2, and 10-1, 2, 3, 4), alongside contributions from physical geography under Brigitta Schütt (SCHU 949/15-3, 4).

After an initial survey and prospective soundings at the site slopes as well as investigations of some features on the plateaus[15], work soon began to concentrate within the south-eastern depression (figs. 2. 3 pl. 1). Still during the first excavation campaign, one of the landowners uncovered the upper parts of two in situ T-pillars hindering his plough. Attempts to clear the field led to the partial destruction of the pillar heads (see below, pillars 1 and 2). Schmidt managed to stop agricultural work in the area, and in the following year he opened two excavation areas leading to the discovery of two T-pillars standing in the middle of a monumental structure which was designated as building[16] A (chap. 3.1, fig. 4 pl. 1). The excavations soon led to the discovery of three more monumental round buildings in the vicinity (B–D, chaps. 3.2–3.4)[17], dated between the Early and Middle Pre-Pottery Neolithic (PPN)[18], i. e., between the 10th and 9th millennia BC (figs. 5–7 pl. 1).

The four buildings (A–D) revealed to be laid out according to a basic pattern that essentially comprises large T-shaped monoliths weighing several tons arranged in a circle or ellipse while held in place by stone walls as well as ›benches‹ in the intervals[19]. A pair of similar but much taller monoliths with heights of up to 5.5 m (figs. 4–7) stands freely in upright position in the structures' middle. The inner diameter of the buildings varies between 10 and 20 m. Seen from the side,

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4 Building A during the 1996 campaign

Schmidt recognised the pillars' particular T-shape as a stylised reference to the human body, as also suggested by the occasional occurrence of low reliefs depicting arms, hands, as well as belts and hanging loincloths (see chap. 2.2). Traces of another round building (E) were found on the western plateau (fig. 8)[20]. Neither the pillars nor the walls have been preserved here, but the negative imprints of the structures once lowered into the bedrock betray the location and layout of a former building[21]. The rock floor had been carefully reduced to a flat and smoothed ovaloid, almost square surface of about 9 m diameter. In the middle two oval platforms or pedestals had been hewn out from the rock, each displaying an approximately rectangular socket which in case of the better preserved, western pedestal is about 10 cm deep. Both had served as anchors for the central pillars. The outer limits of the building are indicated by a ledge to the natural limestone surface. It is impossible to assess to which extent this area had formerly been covered by sediments[22].

During the excavations Schmidt preliminarily ascribed the large structures to an earlier layer III, which, according to the finds and radiocarbon dates, was thought to date to the PPNA and probably also to the early PPNB[23]. His layer II was considered to be more recent; it is characterised by smaller rectangular buildings[24]. Direct stratigraphic overlays between the architecture of layer III and that of layer II were

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24 Schmidt 2008a, 228–235; Kurapkat 2015, 18–22.

5 Building B, view between the two central pillars with a megalithic porthole stone roughly in the building's center

6 Building C, aerial view after completion of excavations in 2011 with fragments of the two central pillars still in the building – whether the stone rows in the southern part of the building constitute walls/interior subdivisions is doubtful

7 Building D, after excavations in the western part of the building were completed in 2011 and the central pillars were secured in their original upright positions by steel cables

8 Building E on the south western plateau (upper part of the image) – all that remains of the building are two pedestals for the central pillars and the finely straightened and smoothed floor area; in the foreground two deep bedrock pits, remains of Neolithic quarry activities and a field of cup marks

observed in only few locations. The most evident sequences in this respect were the ones observed around the southern wall of building B, near pillar 6 and to the north of building A[25], as well as to the west of building D[26]. In the main excavation area in the south-eastern depression, the space taken in by the monumental buildings deliberately had been spared from later overbuilding, as demonstrated by a delimiting so-called terrace wall (pl. 1)[27].

Layer II after Schmidt is characterised by significantly smaller rectangular structures with ›terrazzo-like‹ lime plaster floors containing lime grit[28], not unlike floors observed at contemporary Neolithic sites[29]. If at all present, the size and the number of pillars significantly decrease in this layer. In general, only the two central pillars were maintained, the largest ones reaching heights between 1.5 m and 2 m. The most impressive architectural representative of this layer contained numerous spoils and was initially referred to as the ›lion pillar building‹ after the large felines depicted the two central pillars (figs. 9. 10). In the meantime, however, the ›lions‹ have been reconsidered to leopards, which would lead to the necessity of the structure's retagging to ›leopard pillar building‹, although the sense of such labels for buildings may be generally debatable[30]. This is the only rectangular building whose pillar images reveal more than just arms, hands or ›stole bands‹ (chap. 2.2); the structure was already exhaustively discussed by D. Kurapkat[31].

The main criterion for the definition of the above-mentioned layers, which initially served as a rough reference for classifying finds and features during the excavations, was the change from round to rectangular buildings, analogous to architectural developments observed elsewhere at Early Neolithic sites presenting long occupation sequences in south-eastern Türkiye[32], as for instance Çayönü[33]. The nomenclature therefore hardly claims to be an accurate reflection of the stratigraphic sequence, but rather points to ›architectural horizons‹ which will require more scrutiny in the forthcoming study of the site's stratigraphy (chap. 1.2). It also became clear at an early stage that the radiocarbon data pointed to partial simultaneities between the buildings of layers II and III[34]. There is currently no evidence of the presence of hearths or kilns whether in- or outside the buildings of layer II[35]. However, numerous in situ finds of grinding stones and limestone basins set into floors would suggest food processing activities, contrary to earlier assumptions of a non-domestic character of the rectangular buildings[36]. At least for a certain period the monumental buildings seem thus to have been surrounded by dwell-

25 Schmidt 2000, 18 f.; Schmidt 2008a, 128. 228.
26 Kurapkat 2015, 81 f.
27 Schmidt 2010c.
28 This interpretation is based on Schmidt's macroscopic comparisons with floors at other early Neolithic sites. Chemical and petrographic analyses will be presented in due course.
29 For a summary on findings from other sites, see Garfinkel 1987; Hauptmann – Yalcin 2000.
30 Chap. 2.3.1. Denominations like ›snake-pillar-building‹, ›boar-pillar-building‹ etc., sometimes found in the older literature, are therefore avoided here.
31 Kurapkat 2015, 30–38.
32 Özdoğan 2017.
33 Özdoğan 2010; Erim-Özdoğan 2011.
34 Dietrich 2011.
35 This also applies to the monumental buildings. Regular use of fire, on the other hand, is confirmed by ash bands and clusters, burnt or charred bones, burnt flint, etc.
36 L. Dietrich et al. 2019; L. Dietrich et al. 2020b; L. Dietrich 2021.

ing houses. Several locations at the site revealed to contain small, curvilinear features, especially in the deep soundings west and north of building D, but also in the northeast of the main excavation area, and in deep soundings on the north-western elevation. Schmidt provisionally attributed them to a Layer IV (›Nukleustell‹), into which the monumental buildings, particularly buildings C and D, would have been dug[37]. More detailed stratigraphic investigations will have to establish the sequential relationship between these structures found at different depths and the monumental buildings[38]. The possibility remains that they were dwelling houses associated with the monumental buildings' earlier phases[39]. To which degree the site may have been permanently occupied still needs further study[40], but as opposed to earlier assumptions, the monumental buildings at Göbekli Tepe probably had been standing at no stage as isolated structures without surrounding architecture. The uppermost, disturbed horizon was designated as Layer I, consisting of the thick deposits which formed at the mound's foot through erosive processes, and the plough horizon[41].

To verify whether the high concentration of special architecture was a feature only of the south-eastern depression or characteristic for the whole site, compre-

9 The now so-called leopard pillar building, space 38

10 Pillars I and II in the ›leopard pillar building‹ – displaying large male felines. The lack of a mane and the shape of the tail, which also lacks a tuft, identify these images as leopards

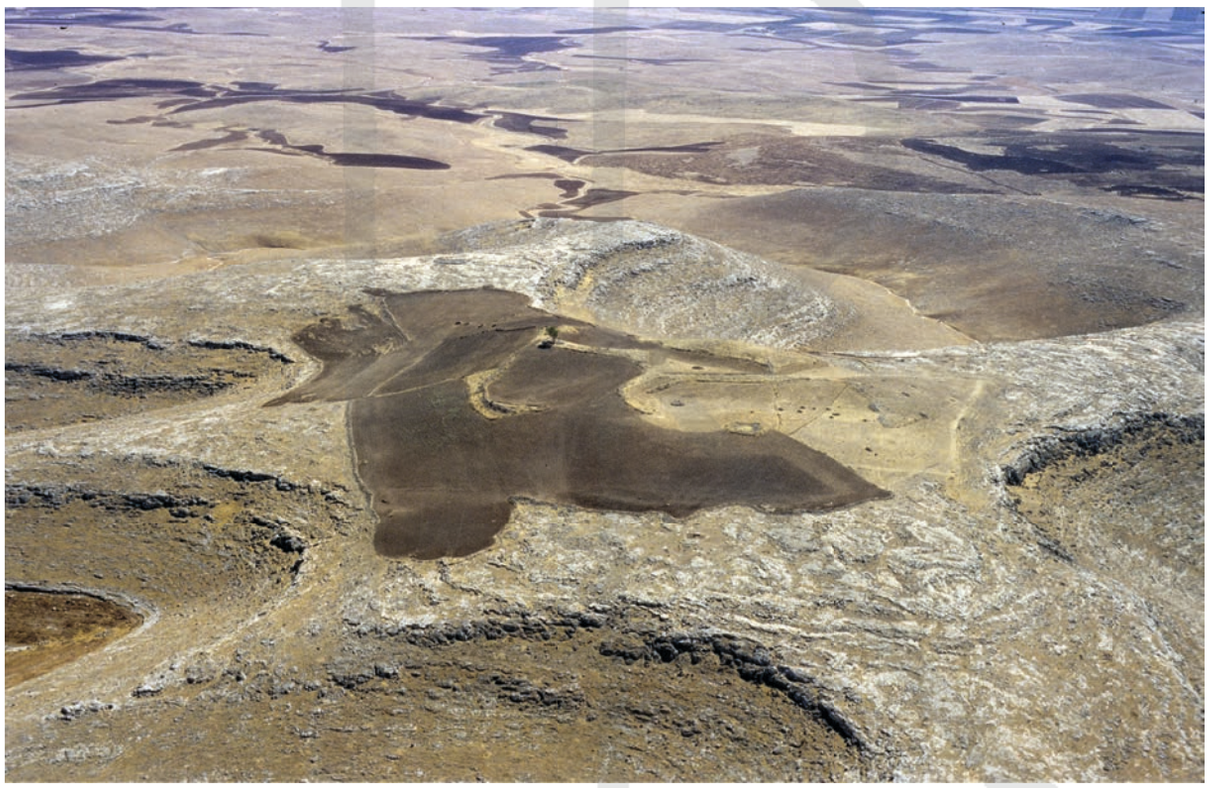
37 Schmidt 2011c, 47 f.

38 In the northeast of the main excavation area as well as near building G, circular buildings lie directly below the plough horizon. But they also occur in deep soundings in squares L9-58, 69, and 78 in the northwest, north and northeast near building D. Radiocarbon data from these layers and areas tentatively point to the PPNA (Dietrich et al. 2013a).

39 Kinzel – Clare 2020.

40 Much hints at seasonality of site occupation: Dietrich – Dietrich 2024; on seasonal presence of animals see Lang et al. 2013.

41 For further studies of Layer I see Schönicke 2021; Schönicke, in preparation.



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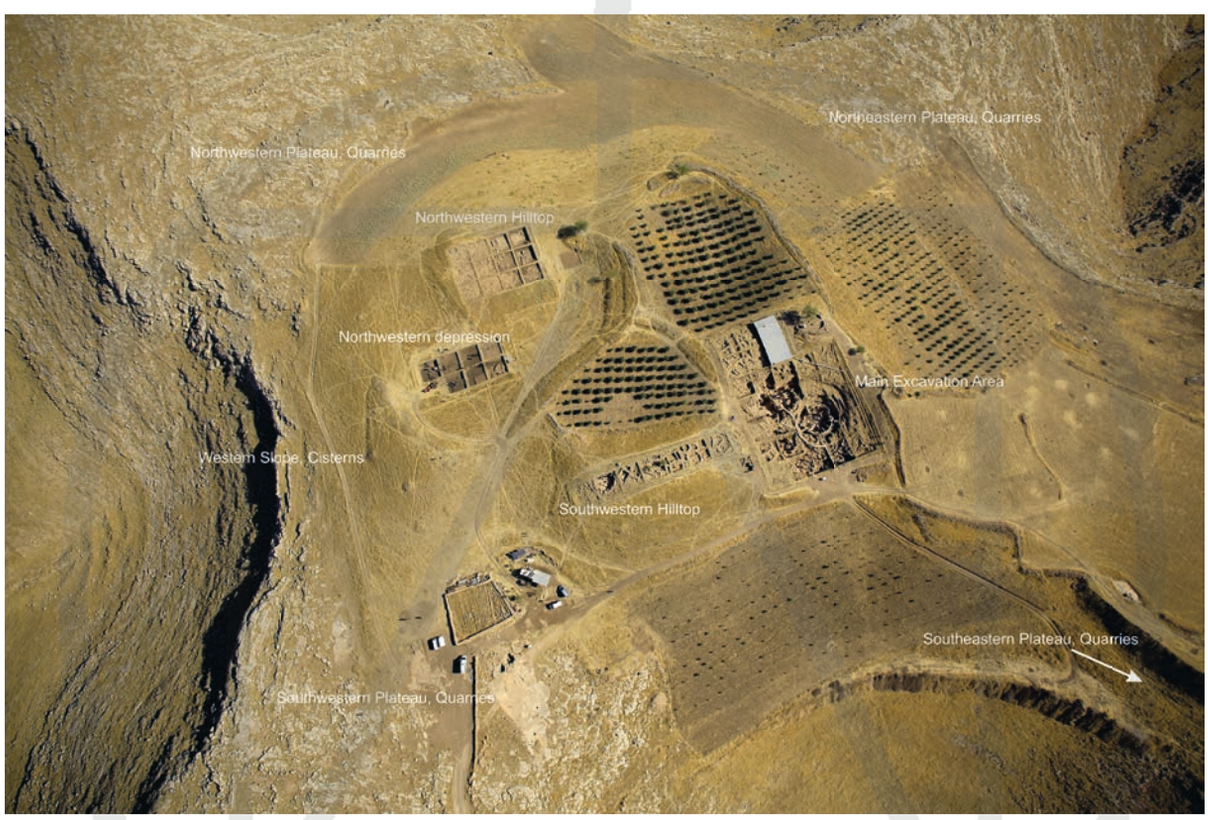

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24 Schmidt 2008a, 228–235; Kurapkat 2015, 18–22.

5 Building B, view between the two central pillars with a megalithic porthole stone roughly in the building's center

6 Building C, aerial view after completion of excavations in 2011 with fragments of the two central pillars still in the building – whether the stone rows in the southern part of the building constitute walls/interior subdivisions is doubtful

7 Building D, after excavations in the western part of the building were completed in 2011 and the central pillars were secured in their original upright positions by steel cables

8 Building E on the south western plateau (upper part of the image) – all that remains of the building are two pedestals for the central pillars and the finely straightened and smoothed floor area; in the foreground two deep bedrock pits, remains of Neolithic quarry activities and a field of cup marks

observed in only few locations. The most evident sequences in this respect were the ones observed around the southern wall of building B, near pillar 6 and to the north of building A[25], as well as to the west of building D[26]. In the main excavation area in the south-eastern depression, the space taken in by the monumental buildings deliberately had been spared from later overbuilding, as demonstrated by a delimiting so-called terrace wall (pl. 1)[27].

Layer II after Schmidt is characterised by significantly smaller rectangular structures with ›terrazzo-like‹ lime plaster floors containing lime grit[28], not unlike floors observed at contemporary Neolithic sites[29]. If at all present, the size and the number of pillars significantly decrease in this layer. In general, only the two central pillars were maintained, the largest ones reaching heights between 1.5 m and 2 m. The most impressive architectural representative of this layer contained numerous spoils and was initially referred to as the ›lion pillar building‹ after the large felines depicted the two central pillars (figs. 9. 10). In the meantime, however, the ›lions‹ have been reconsidered to leopards, which would lead to the necessity of the structure's retagging to ›leopard pillar building‹, although the sense of such labels for buildings may be generally debatable[30]. This is the only rectangular building whose pillar images reveal more than just arms, hands or ›stole bands‹ (chap. 2.2); the structure was already exhaustively discussed by D. Kurapkat[31].

The main criterion for the definition of the above-mentioned layers, which initially served as a rough reference for classifying finds and features during the excavations, was the change from round to rectangular buildings, analogous to architectural developments observed elsewhere at Early Neolithic sites presenting long occupation sequences in south-eastern Türkiye[32], as for instance Çayönü[33]. The nomenclature therefore hardly claims to be an accurate reflection of the stratigraphic sequence, but rather points to ›architectural horizons‹ which will require more scrutiny in the forthcoming study of the site's stratigraphy (chap. 1.2). It also became clear at an early stage that the radiocarbon data pointed to partial simultaneities between the buildings of layers II and III[34]. There is currently no evidence of the presence of hearths or kilns whether in- or outside the buildings of layer II[35]. However, numerous in situ finds of grinding stones and limestone basins set into floors would suggest food processing activities, contrary to earlier assumptions of a non-domestic character of the rectangular buildings[36]. At least for a certain period the monumental buildings seem thus to have been surrounded by dwell-

25 Schmidt 2000, 18 f.; Schmidt 2008a, 128. 228.
26 Kurapkat 2015, 81 f.
27 Schmidt 2010c.
28 This interpretation is based on Schmidt's macroscopic comparisons with floors at other early Neolithic sites. Chemical and petrographic analyses will be presented in due course.
29 For a summary on findings from other sites, see Garfinkel 1987; Hauptmann – Yalcin 2000.
30 Chap. 2.3.1. Denominations like ›snake-pillar-building‹, ›boar-pillar-building‹ etc., sometimes found in the older literature, are therefore avoided here.
31 Kurapkat 2015, 30–38.
32 Özdoğan 2017.
33 Özdoğan 2010; Erim-Özdoğan 2011.
34 Dietrich 2011.
35 This also applies to the monumental buildings. Regular use of fire, on the other hand, is confirmed by ash bands and clusters, burnt or charred bones, burnt flint, etc.
36 L. Dietrich et al. 2019; L. Dietrich et al. 2020b; L. Dietrich 2021.

ing houses. Several locations at the site revealed to contain small, curvilinear features, especially in the deep soundings west and north of building D, but also in the northeast of the main excavation area, and in deep soundings on the north-western elevation. Schmidt provisionally attributed them to a Layer IV (›Nukleustell‹), into which the monumental buildings, particularly buildings C and D, would have been dug[37]. More detailed stratigraphic investigations will have to establish the sequential relationship between these structures found at different depths and the monumental buildings[38]. The possibility remains that they were dwelling houses associated with the monumental buildings' earlier phases[39]. To which degree the site may have been permanently occupied still needs further study[40], but as opposed to earlier assumptions, the monumental buildings at Göbekli Tepe probably had been standing at no stage as isolated structures without surrounding architecture. The uppermost, disturbed horizon was designated as Layer I, consisting of the thick deposits which formed at the mound's foot through erosive processes, and the plough horizon[41].

To verify whether the high concentration of special architecture was a feature only of the south-eastern depression or characteristic for the whole site, compre-

9 The now so-called leopard pillar building, space 38

10 Pillars I and II in the ›leopard pillar building‹ – displaying large male felines. The lack of a mane and the shape of the tail, which also lacks a tuft, identify these images as leopards

37 Schmidt 2011c, 47 f.

38 In the northeast of the main excavation area as well as near building G, circular buildings lie directly below the plough horizon. But they also occur in deep soundings in squares L9-58, 69, and 78 in the northwest, north and northeast near building D. Radiocarbon data from these layers and areas tentatively point to the PPNA (Dietrich et al. 2013a).

39 Kinzel – Clare 2020.

40 Much hints at seasonality of site occupation: Dietrich – Dietrich 2024; on seasonal presence of animals see Lang et al. 2013.

41 For further studies of Layer I see Schönicke 2021; Schönicke, in preparation.