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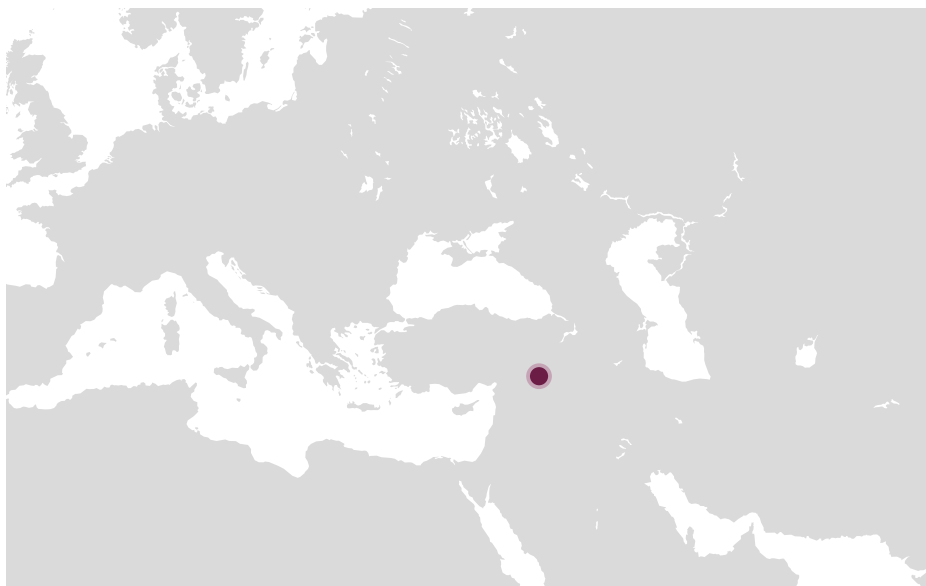
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BONCUKLU TARLA (MARDIN), TURKEY Near Eastern Neolithic Architecture (NENA). The case of Boncuklu Tarla



Season 2021

Istanbul Department of the German Archaeological Institute

by Moritz Kinzel



e-FORSCHUNGSBERICHTE DES DAI 2022 · Faszikel 1

Obwohl Architektur des vorderasiatischen Neolithikums eines der prägnantesten Elemente dieser Epoche darstellt, gab es bislang keine fest etablierte Gruppe von Forschenden, die sich damit auseinandersetzt. Dieses Desiderat hat uns dazu veranlasst, NENA zu initiieren, um sich über Befunde, Interpretationen, Terminologien, Technologien und Fundorte übergreifend austauschen zu können. Im Rahmen von NENA unterstützen wir auch die Dokumentation und Untersuchung neolithischer Bauten vor Ort. Im Sommer 2021 konnten wir die Grabungsarbeiten in einem früh-neolithischen Bauwerk in Boncuklu Tarla in der Südost-Türkei bauforscherisch begleiten.

Despite the fact that the architecture is one of the most prominent features of the Near Eastern Neolithic, there has not yet been a well-established research group dealing with it. This desideratum has prompted us to initiate NENA to exchange findings, interpretations, terminologies, technologies and sites. As part of NENA, excavation projects are supported in the field to document and study Neolithic architecture. In this framework an early Neolithic building at Boncuklu Tarla/Southeast-Turkey was investigated in 2021.

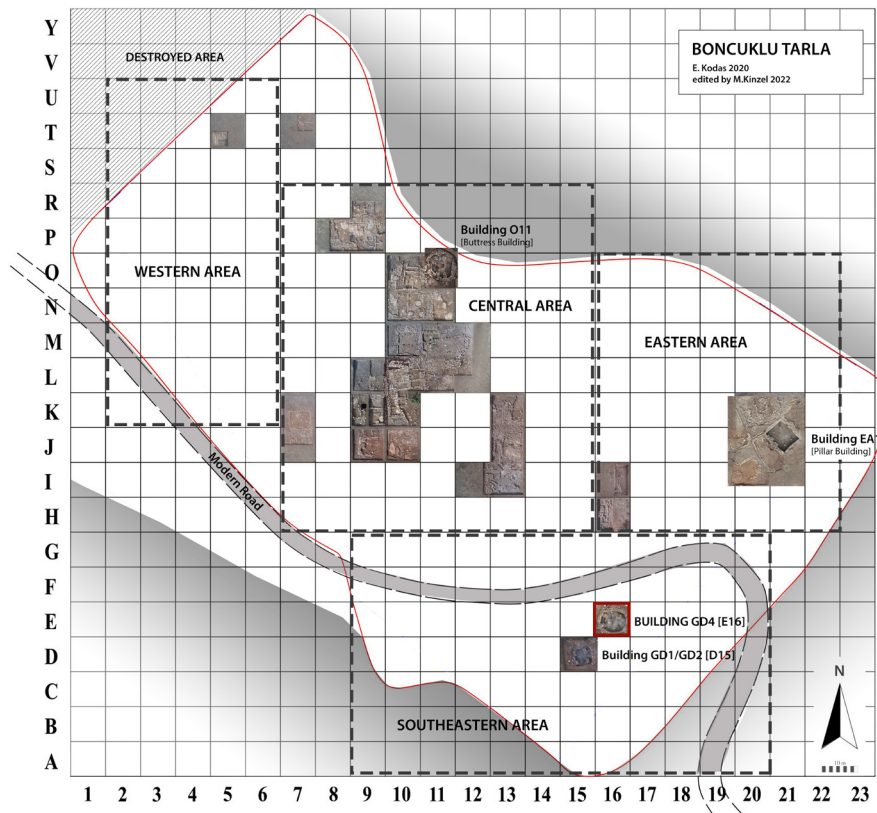
Cooperation partner: General Directorate of Cultural Assets and Museums; Mardin Artuklu University, Archaeology Department (E. Kodaş); Ministry of Culture and Tourism of Turkey.

Head of project: M. Kinzel, E. Kodaş.

- 1 In 2020, an initiative for interdisciplinary research and exchange of knowledge on Near Eastern Neolithic Architecture (NENA) has been launched by the building archaeology and heritage conservation unit of the Istanbul Department together with the Göbekli Tepe Project and in cooperation with several other Neolithic research projects [1]. Despite the fact that the architecture is one of the most prominent features of the Near Eastern Neolithic, there has not yet been a well-established research group dealing with it. This desideratum has prompted us to initiate NENA to exchange findings, interpretations, terminologies, technologies and sites. The fundamental idea of interdisciplinary exchange is to be completed by formats for the promotion of early career scholars.
- 2 One concern of the initiative is to establish a dialogue on fundamental questions of Neolithic building. What role do continuity and change play? How to understand and perceive space in the Neolithic? How did earthquakes and climate change influence the development of settlements and building construction? How were building processes organized? What building standards emerged during the Neolithic period? What design principles follow the buildings?
- 3 In autumn 2020, we were able to grant six DAI-short-term scholarships to early career scholars from Turkey [2], Israel, France [3], Finland and Spain to support their research on NENA related topics. The first international round table meeting with over twenty experts working interdisciplinary on NENA took place online organized by DAI Istanbul and the Göbekli Tepe Project in December 2020 offered the grant holders an opportunity to present some of their research results. In 2021, two international workshops were organized in the framework of NENA: firstly, on the archaeology of earthen architecture [4], which took place in Helsinki in cooperation with the Universities of Helsinki, Malmö and Holar supported by a Nordic Research Council grant, and secondly, an online expert round table on Neolithic plasters and mortars used in Neolithic architecture of Southwest Asia. Both workshops took place in November 2021 after this year's fieldworks were concluded.

Fieldwork at Boncuklu Tarla

- 4 A further component of NENA is to share and to profit from each other's expertise in the field of building archaeology and architectural analyses



1 Site plan of Boncuklu Tarla, area with building GD4 marked with red. (after [Kodaş 2020](#)[?], edited by Moritz Kinzel)

during the actual fieldwork. Based on a new cooperation between the DAI Istanbul and the Boncuklu Tarla Neolithic Project we were invited to join the archaeological fieldwork at Boncuklu Tarla directed by Ergül Kodaş from the Archaeology Department at Mardin Artuklu University. One focus of our work in 2021 was the study of the early Neolithic architecture in general and one newly exposed building in particular, which will be presented below in more detail. The cooperation will be continued in coming field seasons.

- 5 This year's field work at [Boncuklu Tarla](#)[?] concentrated on two areas on site (Fig. 1): in the central area of the site a series of burials located under the floors of »cell-plan« PPNB buildings were excavated, and in the south-eastern area a semi-subterranean round house structure (Building GD4) was excavated that can be dated to the PPNA ([3D-Model Building GD4](#)[?]).

Location and dating

- 6 The site of Boncuklu Tarla was discovered in 2008 and archaeological works started in 2012. It is located in the Mardin Province, south-eastern Turkey, approx. 2 km west of the Tigris river or the new Illisu dam and on the south bank of the Nevala Maherk River [5]. Close by on the banks of the river Tigris the Neolithic settlement of Çemka Höyük is situated [6].

- 7 According to available radiocarbon dates, the site was occupied from the late Epi-Palaeolithic until the Middle Pre-Pottery Neolithic B (ca. 10,3070 BCE–7,100 BCE) [7]. A later occupation phase cannot be ruled out at the moment. Boncuklu Tarla is well-known for its great variety in architecture, which resembles elements from different regions, e.g. the Northern Levant, Upper Mesopotamia and the Zagros [8].

Building GD4 – initial observations

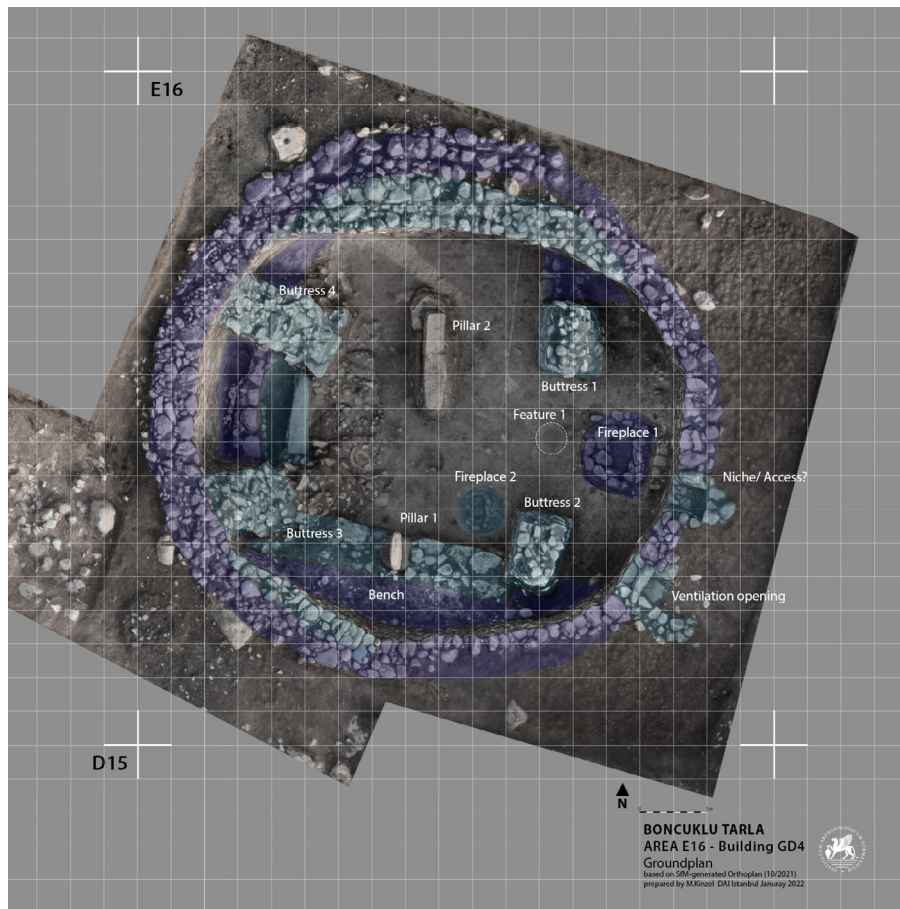
- 8 In 2021, Building GD4 was exposed in the south-eastern part of the site, close to the edge of the site (Fig. 2). It is just a few meters apart from Building GD1 and GD2, which were excavated in 2019 and 2020. All three structures resemble characteristics of buildings known from the Neolithic site at Nemrik 9 in nowadays Iraq further down the river Tigris [9]. Especially, house 1 and 4 in their latest phase could be seen as role models [10]. In



2 Boncuklu Tarla, Building GD4. State of excavation at the end of the fieldwork 2021. (Photo: Moritz Kinzel)

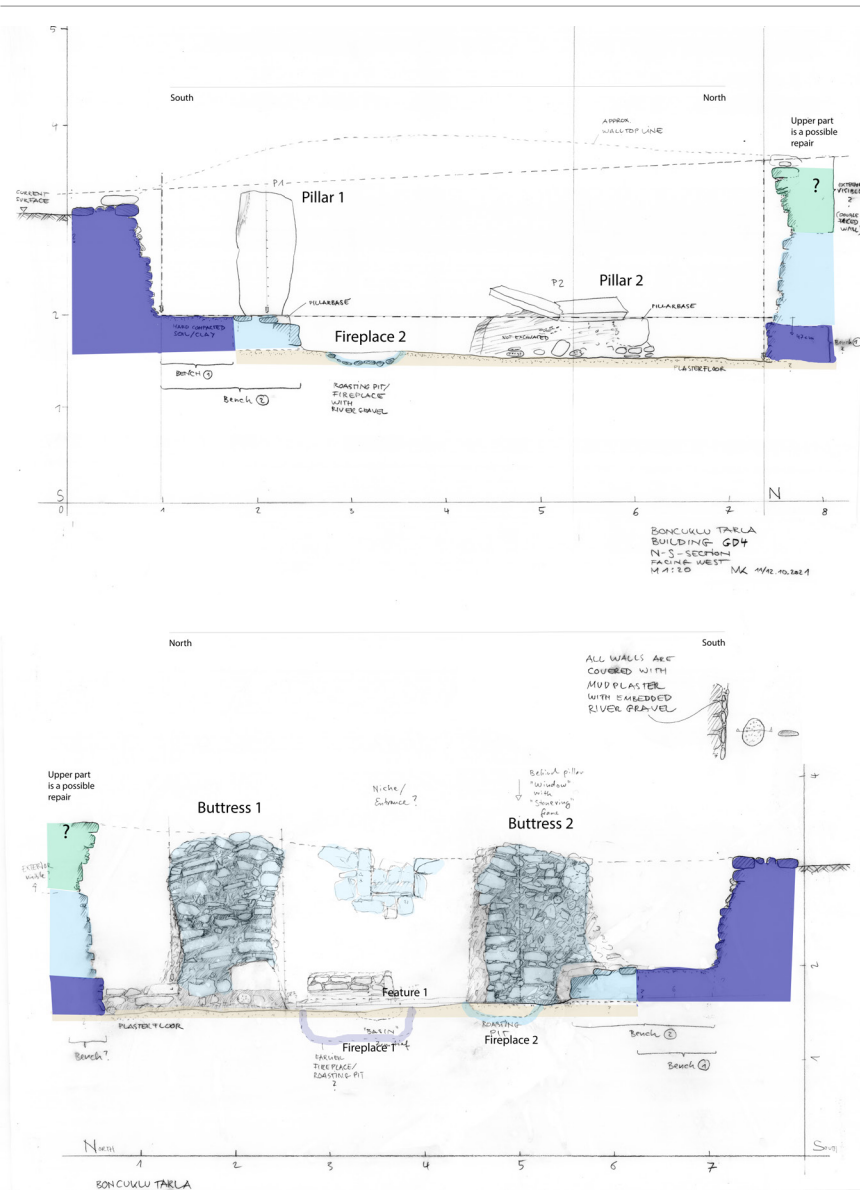
addition, there are some similarities in layout and conception to e.g. Structure 7 at Gusir Hüyük [11], the subsequent structures (3/267/298 /350) in area H12 at Hasankeyf [12] and structures 7, 8 and 15 at Gre Filla [13] from the Upper Tigris region as well as structure EA6 at Wadi Tumbaq 3 [14]. The masonry buttresses also resemble some spatial arrangements known from the PPNB structures of Kalavassos-Tenta on Cyprus [15].

- 9 In the current excavated state, building GD4 has an ellipsoid ground plan and is oriented on an east-west axis. At least two major building phases are attested (Fig. 3).
- 10 The interior measures approx. 7.25 m in east-west direction and about 6.25 m in north-south direction. The exterior measures around 8.90 m in east-west direction and about 8.60 m in north-south direction. The wall tops show an average width around 0.66 m. The walls are constructed as rubble stone masonry with granite river pebbles and smaller lime stone boulders. In the upper wall courses the wall is constructed as a double faced wall. So far, it is unclear if the entire wall is constructed that way or only the upper parts, which were initially visible from the outside. The walls are preserved up to a height of about 2.25 m above the floor surface. It can be assumed from the collapse material found inside the structure that they could have been initially around 20 to 30 cm higher. The inner wall surfaces were covered with a thick mud plaster. Flat river pebbles were placed into the plaster and were still visible like inlays. Those visible flat, round, and river polished pebbles could be seen as decorative elements. The wet in wet technique of mud plastering makes it very hard to distinguish between the wall core and the plaster with the embedded river pebbles as the materials blend smoothly in one another.
- 11 Along the southern, western and northern wall stretches an earthen bench, about 0.75 m wide. It was later made wider along the southern wall with a stone built extension of about 0.70 m. Making the bench in total over 1.40 m wide and at least 4.20 m long. In contrast, the preserved latest interior wall – on the opposite side of the building – was placed on top of the northern bench in a later building phase.



3 Boncuklu Tarla, Building GD4. Orthoplan based on 3D-SfM-recording in October 2021 with preliminary building phases: dark blue, earlier phase; light blue, later phase. (Plan: Moritz Kinzel)

- 12 The initial building might have had a more circular plan hinted by some wall features and lines. However, the last building phase is more ovoid or ellipsoid and clearly oriented east-westwards (Fig. 4). The interior of this final phase is dominated by two free-standing masonry pillars (Buttress 1 and 2) made of river pebbles and rubble stones, two vertically placed, free-standing lime stone slabs (Pillars 1 and 2) and two masonry buttresses (Buttress 3 and 4) built against the western exterior wall. The northern of the two stone slabs has collapsed towards south and is resting on accumulated sediment. Both stone slabs were originally placed in a slot/socket worked into a lime stone boulder – resembling features of the rock-cut podia for the »central« pillars at Göbekli Tepe [16].
- 13 It seems for now that the two masonry pillars (Buttress 1 and 2) in the east replace vertical placed stone slabs similar to the two remaining ones. Fragments of one of the former pillars seem to be placed inside the masonry of the latter as spolia. The other one was re-used horizontally placed to demarcate the bench between Buttress 3 and Buttress 4. The buttresses are an obvious late addition corresponding with the masonry pillars to carry most of the structural loads stemming from the roofing.
- 14 The floor of the structure shows a plaster-like surface. No further analyses have been conducted so far on the floor material, but are in preparation. A series of fireplaces, roasting pits, and »basins/pits« were identified in the floor, some of which were sealed off and replaced in later use-phases of the building (Fig. 5). The large roasting pit is placed directly against the eastern exterior wall and measures ca. 1.25 by 1.34 m. The pit was filled with rubble stones before it was sealed with a layer of mud and replaced by a smaller roasting pit/fire place in front of the southern bench.
- 15 Two very distinguished features are present in the eastern section of the exterior wall: 1) A central placed niche that could have served as a possible access to the structure and 2) a vertical placed portal-stone best known from Göbekli Tepe [17]. The function of the niche as an entrance is doubtful due to its location just east of the large roasting pit pointing possibly towards ventilation. Size and location are quite similar to the known examples from Aşıklı Höyük [18]. However, it would not be too far of a



4 Boncuklu Tarla, Building GD4. Top: N-S-Section facing East; bottom: N-S-Section facing West; preliminary phasing: dark blue, earlier phase; light blue, later phase; green, possible repair. (Graphic: Moritz Kinzel)

stretch to assume that this ›niche‹ feature was used for both purposes – access and air ventilation. In contrast, the opening of the portal-stone is with 0.28 m in diameter way too narrow to be used as an entrance or exit (Fig. 6). The function as an air circulation opening, which could easily be closed with a stone or wooden element, seems much more likely.

- 16 Until now, the actual function of the building is unclear. Equipped with roasting pits, fireplaces and benches it may have served a larger ›family‹ as a domestic structure. However, it may have been a multi-purpose building that turned into a more communal structure at times, or was used by a group of people (Fig. 7). The presence of vertical placed stone slabs may indicate some symbolic-ritual component, but does not imply that building GD4 could be called a ›special-, public, or communal building‹ [19]. All architectural features point so far towards domestic use. The building was obviously cleaned regularly and kept tidy. On the other hand, some animal remains deposited on a layer of river pebbles could hint towards ritual practise as the last activities taking place in the building. However, an accident related to the collapse of the roofing cannot be ruled out as the stone material could actually stem from the roof structure. Building GD4 may have had a communal function or was used by more than one group during its use-life. However, it had not only one solemn, specific function or purpose.

- 17 To gain a better understanding of Building GD4, we will need further analyses and architectural studies of the structure itself as well as its neighbouring structures to determine its biography, its use-history and possible functional changes. The continued building archaeological studies at Boncuklu Tarla will help to understand the development of early human building better in the regional and wider context or Near Eastern Neolithic architecture.

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5



6

- 5 Boncuklu Tarla, Building GD4. Detail photo of the large fire pit in the eastern part of the building. (Photo: Moritz Kinzel)
- 6 Boncuklu Tarla, Building GD4. Fragmented »portal-stone« in the eastern section of the exterior wall; possibly an air ventilation opening. (Photo: Moritz Kinzel)

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