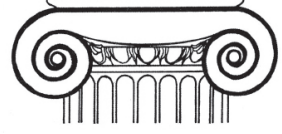




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EDEBİYAT FAKÜLTESİ YAYINLARI



# ARKEOLOJİ DERGİSİ

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Sorumlu Müdürü: E.Ü. Edebiyat Fakültesi Arkeoloji Bölümü adına Prof. Dr. Eşref Abay

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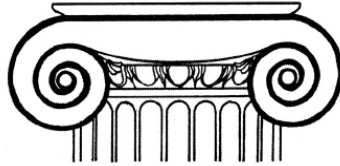
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# Kendale Hecala on The Ambar Çay in The Upper Tigris Region: The First Preliminary Report on the 2018-2019 Excavations

[YUKARI DİCLE HAVZASI AMBAR ÇAY KIYISINDA YER ALAN KENDALE HECALA 2018-2019 KAZI SEZONLARINDA YÜRÜTÜLEN ÇALIŞMALARA İLİŞKİN ÖN RAPOR]

Şakir CAN - Şeyma ÇİFTÇİ

## Anahtar Kelimeler

Kendale Hecala, Ambar Çay, Geç Neolitik, Erken Ubeyd, Orta Çağ, Yukarı Dicle Havzası.

## Keywords

Kendale Hecala, Ambar Çay, Late Neolithic, Early Ubaid, Medieval Period, Upper Tigris Basin.

## ÖZET

Bu çalışma, Mezopotamya'nın en kuzey kesiminde yer alan ve Ambar Barajı Kurtarma Kazıları kapsamında kazılan küçük ve çok dönemli yerleşim yeri olan Kendale Hecala'nın 2018-19 yıllarına ait ön sonuçlarını ve geçici kronolojisini sunmaktadır. Kendale Hecala, ilk olarak Geç Neolitik dönemde (yaklaşık MÖ 7200) yerleşime sahne olmuş ve ardılı Erken Ubeyd (yaklaşık MÖ 5200/5100-4800) dönemde de iskân edildiği boyalı kap parçalarından anlaşılmıştır. Uzun bir süre terk edildikten sonra Orta Çağ'da yeniden iskân edilmiştir (yaklaşık MS 8-14 yüzyıllar). Pisé duvarlarıyla temsil edilen Geç Neolitik dönem, şimdiye kadar yalnızca bir açmada belgelenmiştir. Erken Ubeyd mimarisi, bir veya iki odalı binaların taş temelleri ile karakterize edilmektedir. Orta Çağ tabakaları, taş temeller ve benzersiz çömlek mezarları şeklinde kalıntılarla temsil edilmektedir.

## ABSTRACT

This study offers preliminary results and a tentative chronology of Kendale Hecala, a small multiperiod site located in the northernmost part of Mesopotamia and excavated in 2018-19 as part of Ambar Dam Rescue Excavations. The site was initially settled in the Late Neolithic period (ca. 7200 BC) with subsequent occupations dated to the Early Ubaid period (ca. 5200/5100-4800 BC), as indicated by characteristic decorated pottery, and in the Medieval period (ca. 8th-14th centuries AD). The Late Neolithic period, represented by pisé walls, is thus far only documented in one trench. The Early Ubaid architecture is characterized by the stone foundations of one or two-room buildings. The Medieval levels produced architecture in the form of stone foundations and unique pot burials.

## Introduction

The rescue excavations at Kendale Hecala,<sup>1</sup> a ru-

ral settlement in northernmost Mesopotamia, aim to explore the settlement patterns of the region during the Late Neolithic and Early Ubaid periods, ca. 7000-4500 BC, and cultural connections across northern Mesopotamia. Kendale Hecala<sup>2</sup>

<sup>1</sup> The ongoing rescue excavations are conducted within the scope of Ambar Dam Rescue Excavations since 2018 on behalf of the Ministry of Culture and Tourism by Diyarbakır Museum and Prof. Dr. A. Tuba ÖKSE from Kocaeli University Department of Archaeology. Excavations are simultaneously conducted at Gre Filla (coordinates: lat. 38.26316111, long. 40.45820556), another site that will also be affected by the Ambar Dam located on the opposite bank and 700m as the

crow flies in the northeast of Kendale Hecala; and at Ambar Höyük (coordinates: lat. 38.26630833, long. 40.45678889) whose eastern skirt only will be affected (Fig. 1) (Ökse et. al., 2019; Ökse, 2020).

<sup>2</sup> The mound is called Gre Haci by the local villagers but

is a small site on the right bank of the Ambar Çay, in the northern Upper Tigris Basin. The site lies ca. 5 km west of the Kocaköy district, within Diyarbakır Province, in southeastern Turkey (Fig. 1). The north Upper Tigris Basin has received little archaeological attention until the Diyarbakır Small Streams Archaeological Survey identified several sites in the region during the 2000s (Peasall, 2004). Ambar Höyük is recorded as Büyük ('Big') Ambar Höyük, and Gre Filla as Küçük ('Little') Ambar Höyük (Peasall, 2004: 30-31). However, Kendale Hecala was not identified at this point. It was not until plans for the construction of the Ambar dam were drawn up in 2017 that Kendale Hecala was identified. In this regard, the spatiotemporal significance of Kendale Hecala, which is considered to have had cultural interactions with its contemporaries across northern Mesopotamia, offers plenty of opportunities for shedding light on the cultural characteristics of a rural settlement.

Based on the current stratigraphy, Kendale Hecala was occupied during three periods, Periods I-III (Tab. 1). It should however be noted that as the excavations are still ongoing, the architectural levels of each period are recorded from Level 1 onwards. Period I corresponds to the upper three architectural levels and provides strong evidence for the existence of Medieval Period occupation (ca. 8<sup>th</sup> - 14<sup>th</sup> centuries AD). Period II currently includes two architectural levels (Levels 1-2) dating to the Early Ubaid period (ca. 5200-4800 BC); Period III includes three lower levels (Level 1-3) that provide the Late Neolithic period (ca. 7000-5200 BC).

### Settlement Patterns and Micro-Environmental Reconstruction

The mound covers an area of ca. 0.65 ha, and its highest point has an altitude of 707.90 m. Being established on the flood plain, the mound has 4.5 meters of cultural deposit and is surrounded by agricultural lands. The first architectural level dating to the beginning of the Late Neolithic (ca. 7000 BC) in Kendale Hecala was established on a swampy area of

the Holocene terraces. It may also be possible to identify the 'Shelmo Formation'<sup>3</sup> which consists of the Mio-Pliocene deposits of conglomerate, sandstone, and siltstone between the base of the Tigris River Valley and the mountainous belt. The Shelmo Formation is reached beneath the bottom of a Medieval Period pit in Trench L8 (see below). According to core drilling results, the settlement, especially in the north and west was partially buried sometime during the Holocene period by a 2-3 m thick fluvial fill carried by the Ambar Çay and a seasonal stream in the north that flows into Ambar Çay. It is also evident that the settlement, particularly its southern margin, was established on ca. 1 m thick humid sediments which were deposited on the Shelmo Formation.

To the northeast of the site, a seasonal stream known as Harem Deresi flows into the Ambar Çay. Surveys and geomorphological observations carried out around the Ambar Çay revealed that fertile soils favorable for cultivation and the presence of rich water sources are probably two fundamental reasons for the establishment of the settlement in this spot. In this regard, the region offers more humid and temperate local climate conditions compared to its surroundings, as the depression of the Ambar Çay, which flows in a northwest-southeast direction prevents scorching heat introduced from the south during summers and the cold effects from the north during winters.

Work at the site has focused on two sectors, with so far, the excavation of a total surface of 1400 m<sup>2</sup> of archaeological deposits being exposed. In the northern part of the mound, where prehistoric levels are uncovered in 10 trenches of 10x10 m, in the southeast, an area of 400 m<sup>2</sup> has been investigated in 4 trenches of 10x10 m (Fig. 2).

Two seasons of work have shown that the prehistoric levels are located just below the surface soil in areas close to the edge of the mound, whereas the Medieval Period remains were mostly found in the north-central, and eastern parts of the mound. Nearly all the architectural remains of all levels appear to have been damaged heavily by natural forces such as weather conditions after abandonment and/or human activities such as damaging the lower level or levels by digging

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was officially registered as Kendale Hecala (Coordinates x: 38.256467, y: 40.461550, z: 707 m). The name Kendale Hecala is, in fact, the name of a perpendicular cliff located 250m south of the mound.

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3 Bolgi 1961

foundations for new structures, and in particular, by modern mechanized agriculture. As suggested by several stone piles on the surface, the upper levels were swept away during these activities.

### **Period I (Medieval Period *ca.* 8<sup>th</sup>-14<sup>th</sup> Centuries AD)**

This period is identified in three different levels (Period I-Levels 1-3). These levels are represented by stone foundations belonging to four different buildings, stone piles, and pits. Although these layers are mainly characterized by medieval material and architectural remains, digging pits and/or foundation ditches appear to have disturbed the earlier deposits. Thus, Medieval deposits contain mixed material dating to Early Chalcolithic and Late Neolithic periods.

At Kendale Hecala, the historical context of Period I is mainly defined by pottery and small finds. The entire ceramic repertoire, including relief-moulded Raqqa pottery, green-glazed Islamic pottery and oil lamps, and unglazed sherds, dates the settlement between approximately the 7th-13th centuries AD. Among the small finds, a terracotta stamp is recovered from the same level as the aforementioned potsherds. The square-shaped seal has a Byzantine cross, usually defined as Eucharistic stamps applied on bread in Christianity (Fig. 4b). Such stamps suggested to be used for ceremonial purposes are known in Greco-Roman<sup>4</sup> and Byzantine cultures<sup>5</sup>. In addition, the appearance of an Abbasid period lead seal is dated between 750-1250 A.D (Sümer, 1979).

#### **Level 1**

The uppermost level documented in the northern area of the mound is located immediately beneath the surface at a depth of just 10 cm (Fig. 3). It is mainly represented by fragmentary stone foundations and stone debris, across trenches J-K7, J-L8, and K-L9. Three stone foundation walls belonging presumably to a square room (J7/002/M, K7/004/M, and K8/007/M) in trenches J7, K7, and K8, continue into trenches J7, J8, K7, and K8 (Fig. 3). These are defined as Building 1. While the southern and eastern walls of this room are preserved at a height of *ca.* 35-40 cm, the

northern and western walls in trench K7 appear to have been destroyed by modern agricultural activities. Excavated in the westernmost part of the southern wall is an in-situ door pivot made of limestone supported by small vertical limestones. Below these remains, vertically placed pebbles covering an area of approximately 3x1 meters, suggest that the entrance to this room was from the southeast. On the floor of this room, a green glazed oil lamp (Fig. 4a), an obsidian pendant (Fig. 11a), spindle whorls (Fig. 11b), and an obsidian point were found (Fig. 20a). Aside from the oil lamp, all other finds are Early Ubaid in date, suggesting a mixed context. Additionally, an Abbasid period lead seal was found in the debris area of Building 1 (Fig. 4i).

In the southeastern corner of Trench K9, a room surrounded by a single rounded wall includes a heavily damaged jar burial of an infant (Fig. 3). In the trenches K-L8 and L9, a multi-room structure was excavated (Building 2), presumably separated by two inner walls running in northeast-southwest directions, that appears to be surrounded by exterior walls; only two of these walls are preserved (Fig. 3). Besides the surviving walls stone debris were unearthed in the uppermost levels of all trenches. It, therefore, seems clear that the appearance of partially surviving walls and the wall debris scattered through all of the trenches suggest damage caused by agricultural activities.

#### **Level 2**

The architectural remains of level 2 are only documented in the trenches J7, J8, and K9 (Fig. 5). This level is characterized by several damaged stone foundations, some belonging to a multi-room structure (Building 3) situated in a north-south direction, mostly uncovered in Trench J8 (Fig. 5). The western extent of this structure, indicated by several stone piles and partially survived stone rows, is also documented in the northeast part of Trench J7. To the south of these walls, the remains of a compacted clay floor were documented in Trench J7. The same texture of the earthen floor that seems likely to be a part of the other floor was also recovered in the north-western part of Trench J8.

Although pebble stone was mostly preferred as the building material of almost all levels, the structure mentioned above is unusually built

<sup>4</sup> *cf.* Kakish 2014: 20

<sup>5</sup> Galavaris 1970: 152

with medium-sized limestones. According to the surviving inner walls, the structure seems to have had at least four rooms. The structure appears to have a narrow corridor aligned with rooms on the eastern and western sides. The threshold on the western side is built with small limestones (Fig. 5).

The remains of Building 3 were destroyed during the construction of Building 1. The preserved walls are built in at least three stone rows, and the inner walls survive partially. Moreover, the presence of a partly surviving compacted clay floor in the corner of Room 2 (J8/005/T) shows the extent of the destruction. In Room 4, basalt pestles (Fig. 11d) and an iron nail are found. Furthermore, on the floor of the corridor (J8/006/M) defined as a disturbed context, the fragment of a rectangular box-shaped miniature cup has been found (Fig. 11e). The fragment is decorated with impressed dots, characteristic of the Late Neolithic period.<sup>6</sup> In the same context, a metal needle (Fig. 4f), a broken bone awl (Fig. 11f), and a loom weight (Fig. 11g) were also found. The overall material remains and ruined stone foundations demonstrate a disturbed context belonging to different periods, rather than a homogenous level.

In Trench K9, a rectangular structure (Building 4) with a buff-colored compacted clay floor has been uncovered (Fig. 6). Only the western wall of the single-roomed structure consisting of two rows of pebble stones survives. A tandoor was built on the southern edge, where the floor ends. One of the spectacular finds is a jar burial with an infant skeleton (K9/012/G) (Fig. 6) recovered just beneath the northern edge of the buff-colored floor (K9/009/T). The bones were seriously damaged and no burial goods in or around the jar were found. Remarkably, the jar was surrounded by medium-sized limestones.

Apart from these finds, a pit (L8/016/Ç) excavated in the southwestern part of Trench L8 provided evidence defining the stratigraphic sequence (Fig. 7). While the upper strata contained Medieval Period potsherds along with a stone axe and a basalt ground stone artifact, the lower strata yielded no materials, and the soil texture displayed a sifted character. Secondly, although

the virgin soil has been reached at a 703.63 m altitude, the pit floor was not found.

### Level 3

This level, which destroyed the lower prehistoric strata to a certain extent, comprises the final stratum of the Medieval Period. Aside from several stone piles in Trench J8, a stone pavement, probably belonging to a street was exposed in trenches K9, L8, and L9 (Fig. 8).

In the northern part of Building 5, a stone floor paved with various-sized stones covers a vast area including trenches L8 and L9. Due to its narrowness, this paved surface presumably corresponds to a street rather than to an open courtyard. One of the most spectacular finds is a group of three pot burials found underneath the remains of a street in trenches L9 and K9. One of these pots was covered with a large burnt ceramic plate, which was found broken (Fig. 9a). Though no artifacts were found in the two pots recovered in Trench L9 except infant skeletons, some human dental probably belonging to an infant, and several stone beads (Fig. 9b) were extracted from the fill of the third pot, suggesting an infant burial (L9/047/G). It is unclear whether the plate was deliberately burnt. The absence of bones inside one of these pots can be associated with the scarcity of calcium in the infant's body.<sup>7</sup> In addition to these, in another pot burial (K9/013/G) uncovered in the east of Trench K9, largely splintered bones belonging to an infant are identified (Fig. 9c).

Apart from the finds given above, a metal dagger was in the mixed debris of Building 5 (Fig. 4d). In the outer area to the east of Building 5 were found a metal spear (Fig. 4e), and a decorated miniature cup (Fig. 4c).

### Period II (Early Ubaid Period *ca.* 5200-5000/4900 BC)

Based primarily upon the painted ceramics, Period II is dated to the end of the 6th millennium BC. So far, this period has at least two levels (Period II-Levels 1-2). Most of the buildings have one or two rooms and were oriented northeast-southwest. In addition to buildings, narrow open spaces between buildings, postholes for supporting roofs of the buildings, fire installations e.g.,

<sup>6</sup> Ökse in press

<sup>7</sup> Haentjens 2000: 260



tandoors and hearths, and freestanding storage units were also excavated both inside the buildings or in external spaces close to the buildings.

### Period II-Level I

In the intersection area of trenches K8-9 and L8-9, a stone buttressed building, which was heavily destroyed by the Medieval construction activities, was covered (Fig. 10). Consisting of two partly preserved buttresses in the southern and northern walls, Building 5 was oriented in a northeast-southwest direction, and seems to have been divided into two rooms by a partition wall. It was observed that some parts of the western and northern walls of the building were wiped out by the Medieval residents.

The eastern wall of Building 5 appears to be curved, giving the impression of a warped wall, and then the upper stone row has fallen directly into the room (Fig. 10). The wall is inclined ca. 32% towards the room. Likewise, the 52% inclination of the northern wall towards the north seems to have been exposed to the same outcome. All the evidence raises the possibility of an earthquake. Inside the northern area of the building, a fire installation, probably an oven, was documented. Furthermore, to the east of the building, a spindle whorl (Fig. 11c), a broken loom weight (Fig. 11h), and a grinding stone (Fig. 11i) are recorded. From a bullet-shaped flint core (Fig. 20) found in the same area (length: 16,4 cm; weight: 6,63 cm; thickness: 5,85 cm), 13 blades were extracted, indicating that flint knapping took place. The core, dated to the prehistoric levels<sup>8</sup>, likely appears to have been detached from its context when the structure of the Medieval Period was being built.

A prehistoric figurine found to the south of Building 5 (Fig. 15i) is portrayed with a high and pointed head drawn backward, and covered with nail prints from the back to the neck; however, no facial details are given. Similar figurines have been uncovered in Hakemi Use<sup>9</sup> and Kenan Tepe<sup>10</sup> in the Upper Tigris Basin, and Yarım Tepe in the Middle Tigris Basin<sup>11</sup>. Another

figurine head found on the surface of Kendale Hecala in 2018 has eye details depicted by two thin lines (Fig. 15j). Parallels are found at Salat Camii Yanı<sup>12</sup> in the Upper Tigris Basin, Tell Sabi Abyad<sup>13</sup> in the Balikh Valley and at Tell Kurdu<sup>14</sup> in the Amuq Plain.

Beneath the surface in the southern part of Trench J7, a rectangular building with four well-preserved stone foundation walls, defined as Building 6 (J7/006/M), was partly uncovered (Fig. 12). The presence of another wall that converges with the southern wall suggests more room(s) in the unexcavated part of Trench I7. Likewise, the presence of another stone wall on the same axis as the eastern wall of the room suggests the existence of another unpreserved room, though no further walls corresponding to the eastern wall were found. Since the area between these two parallel walls is too narrow (half a meter) for a room, it is defined as a corridor or a street. In this area, a miniature cup has been found on the floor.

In the southern part of Building 6, two circular tandoors, one preserved badly, have been uncovered (Fig. 12). In the east of the room, two post-holes paved with medium-sized pebble stones are located on the north-south axis. A large flat stone in the east is suggested to be the threshold of the entrance. On the floor of the southwestern corner of the building, remnants of an infant cremation burial have been found, suggesting that along with its Early Ubaid contemporaries,<sup>15</sup> the inhabitants of Kendale Hecala practiced intra-mural burial tradition. Of particular significance is the evidence of cremation, similar to that evidenced at Tell Abada in the Hamrin Region of central Mesopotamia.<sup>16</sup> Miniature cups (Fig. 15 a), pestles (Fig. 15 k-l-o), and a broken shaft hole axe (Fig. 15 m) were found on the ground in the room. Outside, to the southwest of the room, an oval-shaped hearth (0,70 m dia.) with an inclined floor renewed twice, and dense ashy soil, has been uncovered. On the southern edge of the hearth, two grinding stones and a mortar along with three shells, as well as an obsidian blade have been found in situ. To the west of this area,

8 The bullet-shaped core was examined by Z. Beyza Ağırsoy

9 Tekin 2010: 695, fig.9

10 Parker et al., 2009: 152, fig.18j

11 Merpert and Munchaev 1993: 92, fig. 6.10.I

12 Miyake 2011: 148, fig. 23

13 Collet 1996: 413, fig. 6.3.2

14 Özbal 2010: 299, fig.16.6A

15 Akkermans 1989: 357

16 Hole 1989

a broken shaft hole axe was found (Fig. 15 n).

A rectangular two-room building was uncovered (Building 7), with two preserved exterior buttresses protruding from the eastern wall (Fig. 12). Although not fully excavated, the building appears to have two parallel inner walls running in a west-east direction in the northern part. The northern room is rectangular, while the southern room is a large square room with a stone-paved floor. The fill in the rooms contains ashy sediments and pisé debris. The presence of pisé debris among stone rows demonstrates that pisé walls were made on stone foundations. On the floor of the southern room, though species identification is still underway, in situ remains of burnt mammal bones, and burnt crab claws along with a heap of shells were recovered which are most certainly associated with food consumption. The shells and crab claws were presumably obtained from the Ambar Çay, ca. 90 m to the east of the site. The remains mentioned above suggest that this area of the building was used for fire-related activities and food preparation. In this regard, the presence of grinding stones in front of the oven indicates that this area was an open-air kitchen. An unelaborated wall parallel to the building has been unearthed outside, to the east of the building. Between the building and the wall, a floor paved with pebbles (1.20x1.00 m) and a post hole were identified. A radiocarbon sample is taken from a carbonized material in the burnt soil around this floor dated the building to 5925±32 BP (cal. 4896-4719 BC) (Fig. 21a). The finds from this area include a pestle, a miniature cup, and a piece of a bone awl. Since there was found burnt soil around the floor along with the remains, this area was probably used for daily activities.

In the southeastern part of Trench K8, ca. 25-30 cm beneath the surface and in a disturbed area, orange-coloured debris appeared; no architectural remains except for a few destroyed stone rows have been identified. During the excavations in this section, not only did the soil structure and texture change from mixed debris to ashy mud-brick debris, but the debris also expanded to cover a quarter of the trench (Fig. 13). The debris seems to have belonged at least to two sun-dried flat and oval platforms that were made of clay. Having been found in the Early Ubaid level, the platforms are roughly dated in the first quarter of the 5<sup>th</sup> millennium BC and there is no further

contemporary close example. Yet, two similar platforms unearthed at Tell Hamoukar that are dated to the 4th millennium BC were interpreted as kitchen installations.<sup>17</sup> The small finds around these platforms include a miniature cup (Fig. 15b), a terracotta sling stone (Fig. 15c), a spindle whorl (Fig. 15d), a painted Ubaid bowl fragments (Fig. 15e), a pestle, a ground stone fragment, a stone hammer, and a loom weight. The platforms together with the material remain suggest that this area was used for food preparation activities.

It is suggested that this area was heavily damaged by the Medieval Period levels, which is why the kitchen area initially appeared without any architectural remains along with the orange-coloured debris. However, after the removal of these finds, just ca. 20 cm below these platforms and related remains, several partially preserved walls defined as Building 8 were uncovered (Fig. 12). Thus, the platforms and related remains are also related to these fragmentary stone walls.

In the south-eastern part of Trench L8, a heavily damaged Building 9 was excavated (Fig. 12). While the eastern and western walls seem to have been reinforced by buttresses, that were later destroyed, the building appears to have been divided into two rooms by two partially preserved inner walls on the east-west axis. The space between these seems to correspond to a doorway connecting both rooms. A post hole in the middle of the southern room would have been the base of a post supporting the roof. The northern room is oblong in the plan while the southern room is rectangular. In this respect, the building, in terms of its plan, the buttresses, and the orientation, bears similarities with Building 7.

Of particular interest is the southern room of Building 9, containing a destroyed installation to the south, probably used for storage. The inner side of the surviving part of the installation is “crescent-shaped” and the burnt clay surface seems to be plastered, though burnt. In both rooms, several fragments of an unbaked clay vessel were recovered scattered on the floor of one side which was exposed to fire. As the vessel fragments are coarse, grit, and chaff tempered, and with outer surfaces black due to fire exposure, the vessel was used for cooking. To the northwest of the building, a two-phased circular outdoor

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<sup>17</sup> Reichel 2006:7, fig.6

hearth was placed just in front of the intersection of the western and northern walls. In the western outdoor space of the building, a clay female figurine was uncovered. While the head is missing, only a part of the bottom survives, which indicates that the figurine's bottom is supposed to have a disc-shaped form that would have enabled it to stand on a plain surface. A similar figurine was also found in the eastern part of Building 10 (see below). The figurines uncovered at Kendale Hecala have close affinities in terms of form and style with the 6th-5th Millennium BC figurines from Tell Arpachiyah<sup>18</sup> in the Middle Tigris region, Tell Sabi Abyad<sup>19</sup> in the Balikh Valley and the Amuq E phase of Tell al-Judaidah<sup>20</sup>.

In Trench K7, three parallel oblong rooms, one of which is partially survived, belonging to a structure defined as Building 10 have been uncovered immediately beneath the surface (Fig. 12). The building's walls were made of two rows of small size stones and rebuilt twice; the upper level is defined as "Building 10" and the lower level as "Building 13". Despite being very close to the surface, Building 10 is well-preserved. Based on the preserved walls, at least two rooms parallel to each other have survived. In these rooms, a hand axe, a grinding stone, a loom weight, and an animal figurine have been found. Moreover, to the south of this room, two postholes were found, along with a sling stone, a pestle, a spindle whorl, a ground stone, and a fragment of a miniature cup. As these rooms are disturbed, it is difficult to put forward any comment on their function. Neither can the material recovered from the rooms provide evidence for their function. Yet, considering the small dimensions of the preserved rooms 2-3 m (precise measurements: ca. 2,50x0,49 m-2,46x0,48 m), it is plausible that they were used for storage rather than as spaces for daily life.

The western extension of two walls belonging to Building 10 (K7/006/D and K7/011/D) has been unearthed immediately below the surface in Trench K6. Thus, also these walls suffered damage from modern agricultural activities. Additionally, three square units with almost the same dimensions (ca. 80x100 cm) have been

exposed to the west of Building 10. Being contemporary to the north of Building 10, Building 11 was oriented in the same direction and its several walls remain partially under the baulk of trenches K-L 7. The space (ca. 0,50-0,55 cm width) between both buildings is a narrow street (Fig. 12). Although the western extension of Building 11 located in Trench L6 was destroyed due to modern agricultural activities, the remains suggest that Building 11 had at least three rooms. The northern wall was converged upon by a few regular stone rows that are considered to be vaguely the extension of the inner walls. It is, therefore, presumed that the space in the middle of the wall might have been a doorway, although no evidence related to a threshold or pivot stone exists. Around the building, no remains are indicating fire-related activities. As suggested by the stronger walls and larger rooms, Building 11 is considered to have been used as a living space.

## Period II-Level 2

The architectural remains of Level 2, Period II comprise Building 12 (a multi-room building in the southeast of Trench J8), Building 13 (in the western part of Trench K7 and immediately underneath Building 10 of Level 1), a square planned single room known as Building 14, and a stone buttressed room in the west of Trench L8 (Fig. 14).

In the southeastern part of Trench J8, the stone foundations of a multi-room building (Building 12) were uncovered. The use of medium and small-sized stones for the foundations creates an architectural structure with weak foundations. The building continues into trenches I8 and J9 (unexcavated) (Fig. 14) and has at least three rooms (Rooms 1, 2, and 3). Building 12 is oriented southwest-northeast. The partially preserved walls were disturbed ±by the activity of Period I. Moreover, in the southwestern corner of Room 2, a fragmentary floor paved with small-sized pebbles (J8/043/T) was recovered. The structure is laid out as a long, narrow corridor lined with rooms on both sides. While Rooms 1 and 2 were presumably square, Room 3 is long and narrow. One of the remarkable finds is a potsherd with a stylized human figure in relief found in Room 3 (Fig. 15 f).<sup>21</sup>

18 Mallowan and Rose 1935: 83, Fig. 45 nos. 2, 3, 7

19 Collet 1996: 411, Fig 6.1; 10

20 Braidwood and Braidwood 1960: 205, Fig 160; 12 and 14

21 For further detail see also Ökse 2019.



A square kiln (J8/036/F) that remains mostly in the baulk of trenches J8-J9, and is therefore only partly uncovered, is the other substantial architectural feature of Trench J8 (Fig. 14). Its debris initially appeared at somewhat higher levels and continued lower levels. The kiln was situated on the same axis as the walls of Room 2 (J8/042/M) and was constructed from red-baked bricks. The kiln contained dense brick debris, ranging from orange to pink in colour. The kiln was used for baking bricks, as there were clay brick slags in and around the kiln. Furthermore, no evidence associated with metal or pottery production was identified. Nor were there animal bones linked to meat consumption activities in and around the kiln.

After the removal of Building 10 of Period II-Level 1, it is observed that the outer walls (K7/006/D, K/011/D, and K7/015/D) of Building 10 proceed downward (Fig. 14). In fact, these walls continued to be used as the outer walls of Building 13 of the Period II-Level 2, though a few minor shifts were applied. As for the differences, Building 13 comprises two rooms (3.65x1.70 to 3.15x1.25 m in dimensions) that are larger than Building 10's storage units. Inside the rooms were found loom weights, an awl fragment, and a part of an animal figurine. Additionally, medium size stones were preferred for the foundation walls to build a stronger structure. At first glance, two buildings (Building 10 and 13) were considered to be a two-storey structure, but further work has shown that two rooms and an inner wall of Building 13 were intentionally covered with pisé debris so that a new building level could be created. The fact that these walls are built in the same course suggests that there was a continuity of building sequence.

Beneath Building 8 of Period II-Level 1, there appeared three buff colour mud-brick walls (Building 14) that belong to Period II-Level 2 (Fig. 14). While three walls are in Trench K8, the fourth wall is uncovered in the baulk of Trench K8-9, though it was destroyed by Medieval activities. The walls are 0.60x0.70 m thick, and sometimes white mortar was applied between their mud bricks. Inside the building were a floor of compacted earth and fragments of a Dark-Faced Burnished Ware vessel, located on the floor in front of the southern wall.

In the west of Trench L8, a room (L8/017/M) belonging to Building 15 with stone foundations

has been discovered (Fig. 14). The stone foundations with a single row of stones are reinforced by two stone buttresses on the north and east walls. Both walls seem to have collapsed towards the room, probably associated with the sliding of the soil over time. During the 2018-19 seasons, only the upper stone rows have been observed, and the western extension of the room is considered to remain in Trench L7. The southern wall had been destroyed by the structures of Period I. A two-phased plaster (L8/023/T) uncovered in the southeastern part of the room might have belonged to the floor of the room. The fill excavated in the room has a black and burnt texture that is only limited to the room. This shows that the room was somehow exposed to fire. To the east of the building was found an inclined hearth with dense ashy soil around it.

All in all, the inhabitants of Period II appear to have used the space quite effectively as indicated by inclined hearths that were situated both inside and outside of the buildings. In terms of orientation inside of the buildings, the hearths were mostly leaned against the walls which are associated with presumably heating both themselves and their foods. In contrast, the hearths that were built in the open-air areas are considered to be used for different functions as indicated by the grey and dense ashy soil around them. They also preferred to place storage facilities inside the buildings, which also points to the effective usage of space.

On the other hand, the desire for more durable and long-term use of buildings seems to have increased the tendency towards buttresses as evidenced by outer buttresses attached to the walls of several buildings (see Buildings 7, 9, and 15). It should be highlighted that the buildings that were supported by buttresses were constructed with smaller size stones in a rectangular plan. In contrast, single-roomed buildings are square-planned, and larger stones were preferred for their construction. The spatial distribution of the architectural remains suggests that the residents of Period II mostly preferred to set the buildings up at a certain distance from each other.

### **Period III (Late Neolithic Period *ca.* 7200-5200/5100 BC)**

The architectural remains comprising only a few pisé walls and floors were encountered directly

beneath the Early Ubaid level of trench L8. Based on the preliminary results obtained from ceramic fragments and chipped stone data, this period is tentatively associated with the Late Neolithic period or Halaf-Ubaid Transition phase. Since the architectural remains were only identified in a small area (10x10 meters) and there is no further evidence, we are, for the time being, restricted by the relative dating (Fig. 16).

### Period III-Level 1

This level is only uncovered in a small area of the northern operation. Based on the current evidence, this period is represented only by a partly excavated room with three walls that extend towards adjacent trench L7. Inside the room except for a few ceramic fragments Dark-Faced Burnished Ware, Early Mineral Ware, and Standard Ware (sometimes DFBW, EMW, and SW), no other finds have been found so far. Having been surrounded by *pisé* walls, the room was uncovered immediately beneath the stone buttressed room of Building 15 located in the western part of Trench L8 (Fig. 16). These *pisé* walls run in the same axis as the preceding stone buttressed Building 16. The implementation of the same plan indicates the continuity of the occupation throughout both levels, though the earth was preferred as a building material rather than stone. The northern and eastern *pisé* walls are uncovered immediately underneath the stone foundations, whereas the southern wall appeared to the north of the stone rows corresponding to the inner part of the stone-buttressed Building 8.

### Period III-Levels 2-3

These levels are only uncovered in Trench L8, the deepest excavated trench at the site (Fig. 16). The architectural elements consist of partly uncovered rooms and compacted earthen floors in and around the building. The two rooms immediately north of Building 16 extend into the unexcavated areas therefore, their dimensions and function cannot be discerned presently. In the area where the compacted earthen floor was found, several *pisé* walls that enclose the floor were also uncovered. It appears that the floor was renewed at least three times. A radiocarbon sample is taken from a mud-brick provided a date of 6186 ±31 BP (cal. 5226-5032 BC) (Fig. 21b). The 2020 season will continue investigating the Period III levels.

### Ceramic Assemblage

Based on pottery sherds collected from a total of 14 trenches during the 2018-2019 seasons, the ceramic assemblage of Kendale Hecala comprises primarily two main groups<sup>22</sup>. The first group can be dated to between ca. 8<sup>th</sup>-14<sup>th</sup> AD and includes various forms of glazed and plain wares. The second group consists of the Late Neolithic-Early Ubaid pottery assemblage including Early Mineral Tempered Ware, Dark-Faced Burnished Ware, Standard Ware, Black Series, Halaf, and Ubaid sherds that can provide a relative chronology between ca. 7200 and 4800 BC. A small quantity of ceramic sherds attributed to the Halaf-Ubaid transition has also been collected (Tab. 2). Based on statistical analysis, the Medieval Period ceramic assemblage counts for 36% of the total assemblage, while the remaining 64% is of the Late Neolithic and Early Ubaid periods — Early Mineral Ware (39%), Standard Ware (36%), Dark-Faced Burnished Ware (16%), Black Series (8%) and both Halaf and Ubaid sherds less than 1%.

### Medieval Period

At Kendale Hecala, potsherds dating to the Medieval Period are almost exclusively unglazed (99%). Besides, there found a handful of relief-moulded Raqqa Ware sherds belonging to the same vessel. The remaining 1% is mainly green monochrome glazed sherds along with a few glazed examples of brown, blue, and yellow (Fig. 17a). Monochrome glazed examples consist mainly of various-sized pots, plates, and bowls, also including jugs and small-sized storage vessels. Based on the relative chronology, monochrome glazed vessels are used in the Islamic, Byzantine, and Early Ottoman periods.<sup>23</sup> A very small number of scraped (sgraffito) glazed sherds are among the glazed sherds. These can be roughly dated to AD 12<sup>th</sup>-13<sup>th</sup> centuries and have parallels at Yumuktepe<sup>24</sup>, Kinet Höyük<sup>25</sup>, Karatepe, Kumkale,<sup>26</sup> and Al Mina<sup>27</sup> in the eastern Mediterranean.

22 The pottery was studied by Memik Kereci (M.A.) (Period I) and Elif Bozkurt (M.A.) (Period II-III).

23 Wartburg 2007: 421; Tülek 2010: 641-642

24 Köroğlu 2007: 441-457

25 Blackman and Redford 2005: 101-103

26 Tülek 2010: 643

27 cf. Blackman and Redford 2005: 101-103

Belonging to the most common repertoire of the Medieval Period pottery at Kendale Hecala are unglazed sherds. Based on the observations and typological analyses, prominent clay groups seem to dominate the entire repertoire. One of the main outstanding groups contains fine chaff and fine-grit tempered vessels. These are hard and coreless fired vessels with plain surfaces and greenish beige paste. They are majorly represented by jugs and small vessels. The sherds associated with this paste group are also decorated with reliefs (Fig. 17a). This ceramic group bears close affinities with the glazed vessels of AD 12th-13th centuries in Mesopotamia, Iran, and Anatolia.<sup>28</sup> Thus far, potsherds can be attributed to a variety of forms including plates, jugs, amphorae, and handled lids. Furthermore, an oval-formed shallow tray with a slightly everted rim has a cross incised with a finger in the middle is attributed to Christianity (Fig. 17b).

### Early Ubaid Period

The Ubaid repertoire is represented by 155 sherds. They were mostly collected from external areas of Building 7, 10, 11, 12, 13, and 14, while a small quantity was found in Building 10, 13, and the narrow street between Building 10 and 11. They are mostly buff coloured and display painted decoration in the form of horizontal bands and wavy lines (Fig. 18). The small number of Ubaid sherds suggests that in comparison with typical Ubaid ‘culture’ sites, Kendale Hecala displays local traits (see below) as does its architecture.

### Late Neolithic Period

The pottery of this period is represented by diagnostic ware groups including Early Mineral Ware (EMW), Dark-Faced Burnished Ware (DFBW), Black Series (BS), Standard Ware (SW), and “Halaf” painted sherds (Fig. 19 a-e).<sup>29</sup> EMW is 39% of the Late Neolithic Period pottery. EMW comprises mainly handmade underfired vessels with heavy coarse grit temper and thick walls (Fig. 19a). Some sherds have a plain or burnished surface, decorated with fingerprints, and knobbed decoration; this group frequently has lugs.

Of particular interest are two sherds with stylized

human figures in relief (e.g., Fig. 15f). These body sherds were uncovered in trenches J8 and K7. The K7 sherd bears also an animal figure attached to the interior face, while the relief of the other sherd is applied on the outer surface. No indicators for gender are observed in these figures. The iconography of stylized human figures who raise their hands together with animal figures may be related to a dance performed at rituals before or after hunting.<sup>30</sup>

DFBW was initially defined during excavations in the Amuq.<sup>31</sup> Although there are earlier examples dated to the seventh millennium BC<sup>32</sup>, its use is widespread in the 6<sup>th</sup> millennium BC in the Near East. The DFBW represents 17% of the total assemblage at Kendale Hecala. These are handmade, simple vertical-rimmed vessels with black, brown and maroon slipped burnished surfaces (Fig. 19b). In Trench K8, a DFBW pot was recovered in situ on the floor of Room K8/017/M. Furthermore, miniature vessels and fragments of pots with short cylindrical necks are recovered. Knobs and fingerprints appear seldom on these vessels.

Black Series vessels, generally dated to the first half of the Late Neolithic, constitute 8% of the assemblage. This group is represented by a layered core occurring in the sand, mica, and lime tempered pastes by low firing temperatures (Fig. 19c). The handmade vessels are usually grey mottled on the outer surface; a few sherds are decorated with fingerprints and knobs.

Standard Ware is the second most common pottery ware group at Kendale Hecala at 35% of the site’s total pottery assemblage. The vessels are formed of coarse chaff-tempered paste and have mostly plain or self-slipped surfaces (Fig. 19d). Miniature cups are undecorated and, on some sherds, impressed or painted decoration as well as horseshoe-shaped attachments are observed. The presence of 55 Halaf-painted sherds may suggest the existence of a Halaf period village at Kendale Hecala (Fig. 19e).

### Lithic Assemblage

Based on the data recorded during the 2018-2019 seasons, 7,481 lithic tools were recovered,

<sup>30</sup> Ökse 2019

<sup>31</sup> Braidwood and Braidwood 1960

<sup>32</sup> Balossi-Restelli, 2012: 88

<sup>28</sup> Kozbe and Gök 2018

<sup>29</sup> Nieuwenhuys 2018: 44-133 and Tekin 2017

dating to the Late Neolithic and Early Ubaid periods.<sup>33</sup> Of key importance is the diversity of raw materials used including obsidian, flint, jasper, chalcedony, radiolarite, opal, and quartzite. The main toolkits consist of various sized blades (retouched, plunging, and backed blades), scrapers, end scrapers, stone borers, and retouched flakes. Apart from obsidian, the Shelmo Formation accounts for the diversity of raw materials. One possible flint source, the “Çoban İnişi Tepesi”, is located *ca.* 5.5 km to the north of the modern-day village of Ambar. According to macroscopic observations, the flint tools from Kendale Hecala were likely sourced from this location.

Obsidian appears to have been much preferred for tools, as 64.4 % of the total assemblage consists of obsidian. These include a significant number of various types of blades such as plunging, notched, retouched blades, borers, points, end-scrapers, flakes, and *pièces esquillées* (splintered tools) as well as a small number of the Çayönü tools (Fig. 20). Instead of easily accessed local flint and other durable raw materials, the tendency to use obsidian is a typical feature of Late Neolithic sites.<sup>34</sup> The XRF study of the lithic tools has shown that the inhabitants of Kendale Hecala supplied obsidian mainly from Bingöl B and Nemrut Dağ sources.<sup>35</sup>

One of the outstanding tool types in the settlement is the considerable number of microliths dated to the early stages of the Late Neolithic period (Fig. 20). In Kendale Hecala, microliths describe tools made on bladelets less than 10 mm wide, which were deliberately retouched. In other words, these tools can be defined as retouched bladelets. Although their size is less than 10 mm, there is no standard size for these tools at Kendale Hecala. Backed blades that could have presumably been attached to a handle are considered to be used as composite tools. Of particular interest are retouched blades and flakes with silica gloss, probably used as sickle elements. The considerable number of *pièces esquillées*, associated with the subsistence economy, appears to have been used for splitting and extracting the marrow from animal bones.

33 The lithic assemblage was studied by Z. Beyza Ağırsöy and İ. Berkan Erdem.

34 Shea 2013: 222

35 Muşkara and Konak 2022

## Concluding Remarks

The rich archaeological evidence of Kendale Hecala provides not only important data for the Medieval, Early Ubaid, and Late Neolithic periods of the region but also contributes to the data of related periods in the broader northern Mesopotamian region. Our preliminary studies highlight the potential for further studies in the region.

The settlement at Kendale Hecala appears to have been initially established on the geological stratum of the Shelmo Formation at the beginning of the 7<sup>th</sup> millennium BC, as indicated by the presence of EMW and DFBW ceramics. Based on the results obtained from core drillings, the settlement area seems to have been more extensive than observed from the surface, though at what period it was occupied on a larger scale could not be identified.

Represented by three occupational levels, the architectural remains of the Medieval Period (Period I) are simple stone foundations presumably representing simple domestic shelters. Although there is no explicit evidence concerning adult burial practices of this period, infant jar burials have been recovered in trenches J7, K9, and L9. Of particular significance among these burials are the jar burials entirely enclosed by stones. The presence of child jar burials in all three levels of Period I suggests an occupation either by the same community or by another community with the same tradition. At present, it is difficult to specify the temporal length of each level during the Medieval Period. Although no limestone quarry exists in the close environs of the site, the use of limestone in levels 2 and 3 of Period I deserves special attention. Limestone sources are abundant just *ca.* 1.3 km to the north of the site. On the one hand, the absence of any substantial construction demonstrates that the Medieval Period population of Kendale Hecala was small. On the other hand, it can be argued that such exploitation of limestone requires collective action when considering the distance and the size and amount of the limestones uncovered at the site, referring to a social organization. Therefore, the available data leave the questions about the population size and how they organized construction activities unanswered.

Period II architectural remains belong to the Early Ubaid, consisting principally of two building



types, either simple, single-room square-shaped buildings, or buildings, which were reinforced by buttresses and divided into two rooms with a thin wall made of two or three stone rows. The buildings are furnished with hearths and storage facilities. The Period II community seems to have undertaken domestic activities e.g., grinding, food preparation, or the like inside or just outside of the buildings. The clear tendency towards the architectural continuity between different settlement levels of the Early Ubaid period implies either person belonging to the same community lived for at least two generations in Kendale Hecala or the same people renewed their houses through time. At present, the absence of any true Ubaid characteristic “Tripartite Houses” or associated material culture e.g., clay mullers and nails, baked clay sickles (Stein, 2010: 23) demonstrates a strong Ubaid cultural influence. Despite a few similarities with the true Ubaid tradition, the sharp contrast in architecture can be associated with individual decision-making, as it has already been suggested in a recent study dealing with the adoption of the “Ubaid horizon style” by northern Mesopotamian communities showing regional variations.<sup>36</sup>

In Period II, hearths, several of which were renewed twice, were found both inside and outside these buildings. Their location relates to their function. While there is dense, grey, and ashy fill around the hearths of the open areas, there is no similar fill around those uncovered inside the buildings. Therefore, the external hearths seem to have been used for cooking and the internal hearths for heating. The absence of pottery workshops or pottery kilns indicates that the inhabitants either manufactured their vessels in another place and brought them to the site or they acquired vessels through the circulation of goods among individual entrepreneurs. In Period II deposits, animal bones were also found, which will be examined in due course.<sup>37</sup> The presence of clustered shells inside Building 7, some of which were burnt, and considerable amounts of crab claws indicate that the inhabitants benefited substantially from the aquatic resources of the Ambar Çay. Ground stone tools constitute the most significant number of finds, including

grinding stones, pestles, mortars, flat axes, loom weights, hammers, and shaft hole axes.

Even though ceramic sherds dating to the Early Ubaid are few, according to several radiocarbon samples, the site was occupied between 5300-4800 cal. BC. The settlement during this period occupied an extensive area. The presence of Late Neolithic pottery assemblage in a substantial quantity shows that the successors of the Late Neolithic inhabitants continued to occupy the site during the Early Ubaid period, and obtained the painted Ubaid vessels presumably through an inter-site exchange.

The only architectural remains related to the Late Neolithic period (Period III) have been uncovered in Trench L8. Based on the current evidence, clay was much more preferred as a construction material than stone. The overall ceramic data predominantly reflects the Late Neolithic tradition. Moreover, there appeared a few sherds ascribed to the Halaf-Ubaid Transition phase. Since the architectural remains that can be dated to the Late Neolithic period have not yet been reached in all excavated areas, the current dating is mostly based on the relative chronology. Therefore, a precise date for this period will become clear in the following seasons.

All in all, the house plans display a local form continuing from the Late Neolithic period onwards, rather than showing the characteristic “Tripartite Plan” of the Ubaid culture.<sup>38</sup> Thus, Period II represents an indigenous site implementing its architectural character also during the influence of the northern Ubaid culture in the Upper Tigris Valley.

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<sup>36</sup> Stein 2010: 23

<sup>37</sup> Animal bones will be studied by Assoc. Prof. Dr. Der-ya SİLİBOLATLAZ BAYKARA

<sup>38</sup> Jasim, 1985: fig. 9 and Roaf, 1989: fig 1

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Fig. 1. The location of Kendale Hecala (Adapted from QGIS)

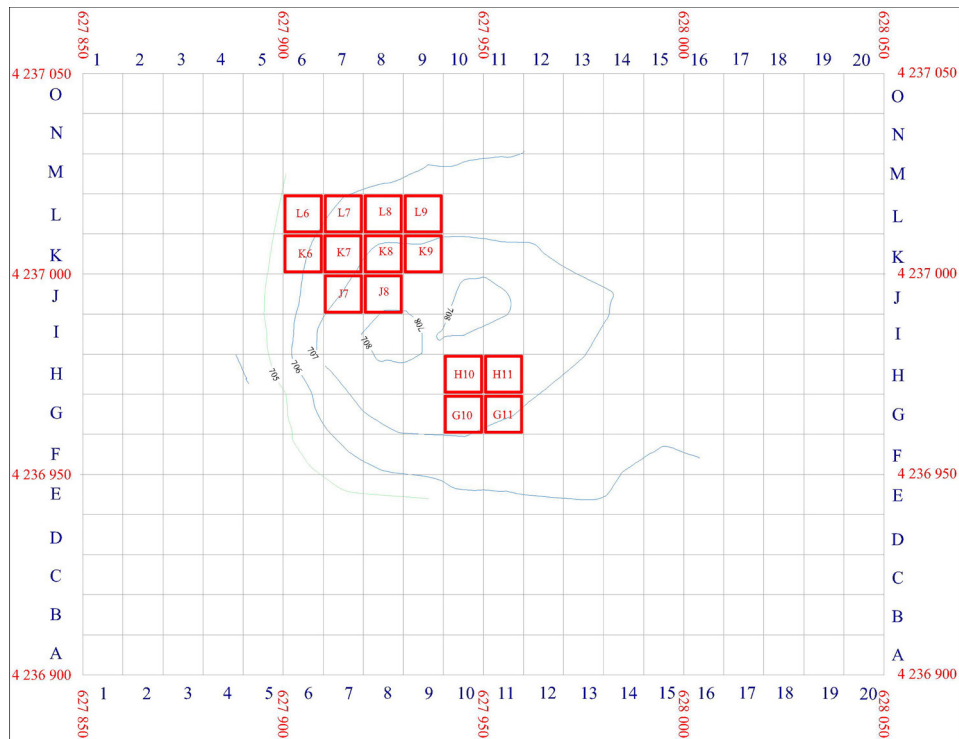


Fig. 2. Excavated areas during the 2018-19 seasons (Excavation Archive)

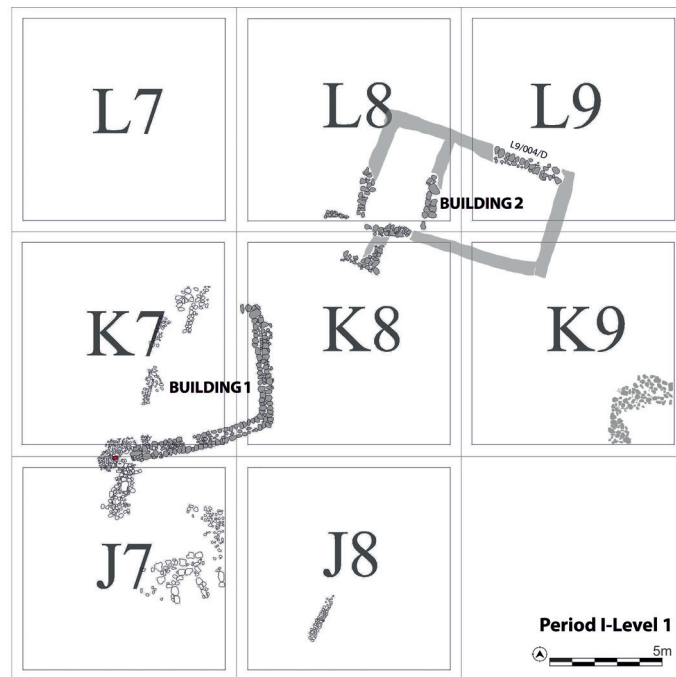


Fig. 3. Architectural remains of Period I-level 1 (Excavation Archive)

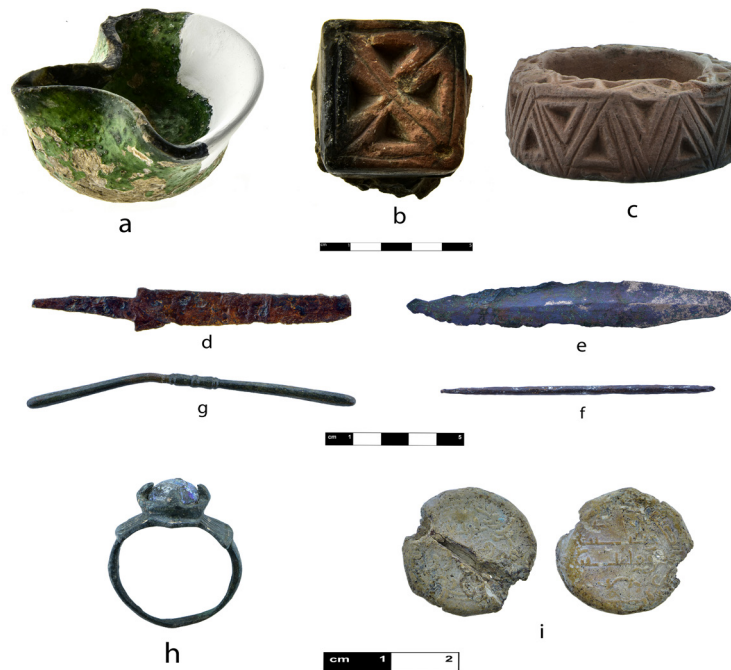


Fig. 4. The main material remains of the Medieval Period (a: oil lamp; b: Eucharistic bread stamp, c: decorated miniature cup, d: metal dagger, e: metal spear, f: metal needle, g: hairpin, h: ring)

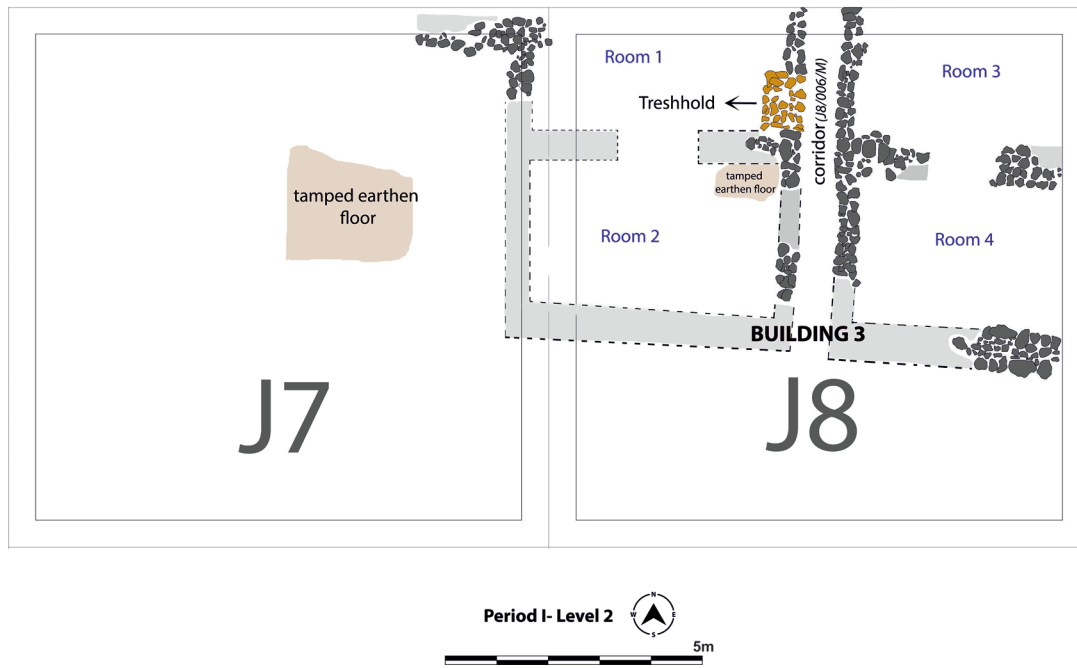


Fig. 5. Architectural plan of Building 3 (Excavation Archive)

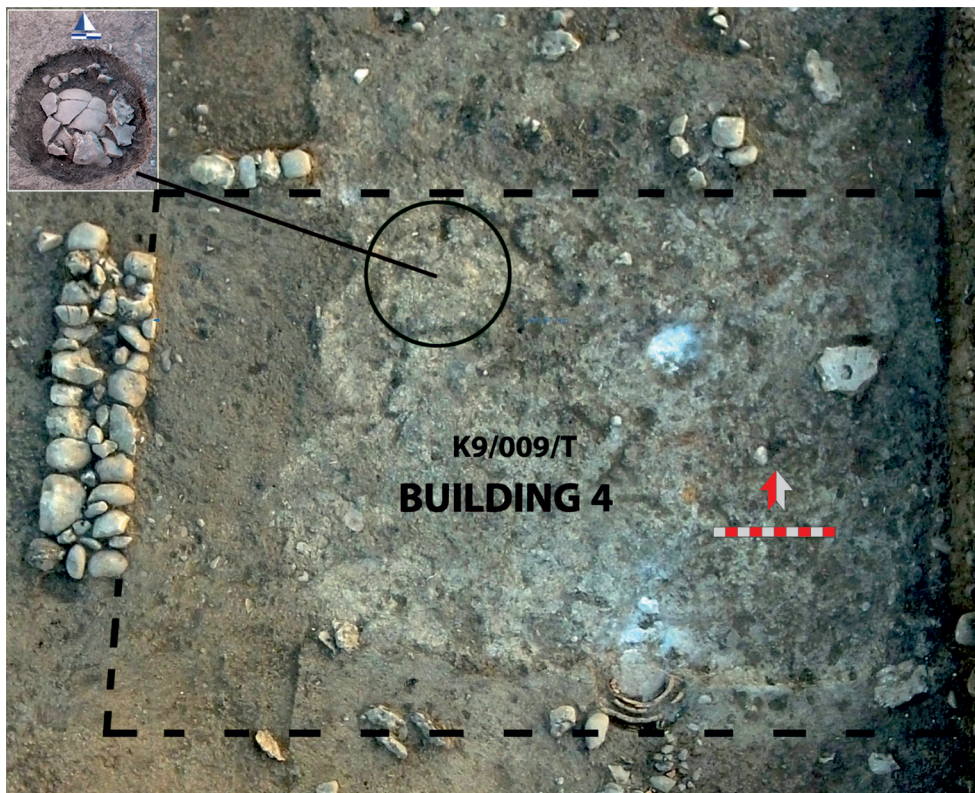


Fig. 6. The aerial image of the buff-coloured compacted earthen floor in Building 4 and the burial (Excavation Archive)

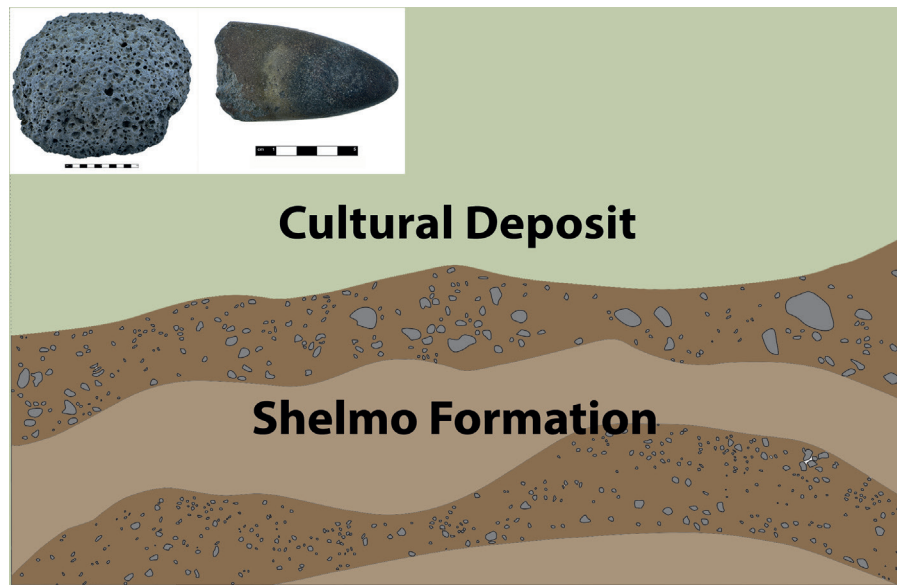


Fig. 7. Drawing showing the Shelmo Formation on the section of L8/016/Ç and the stone axe along with a ground stone uncovered inside the pit (Excavation Archive)

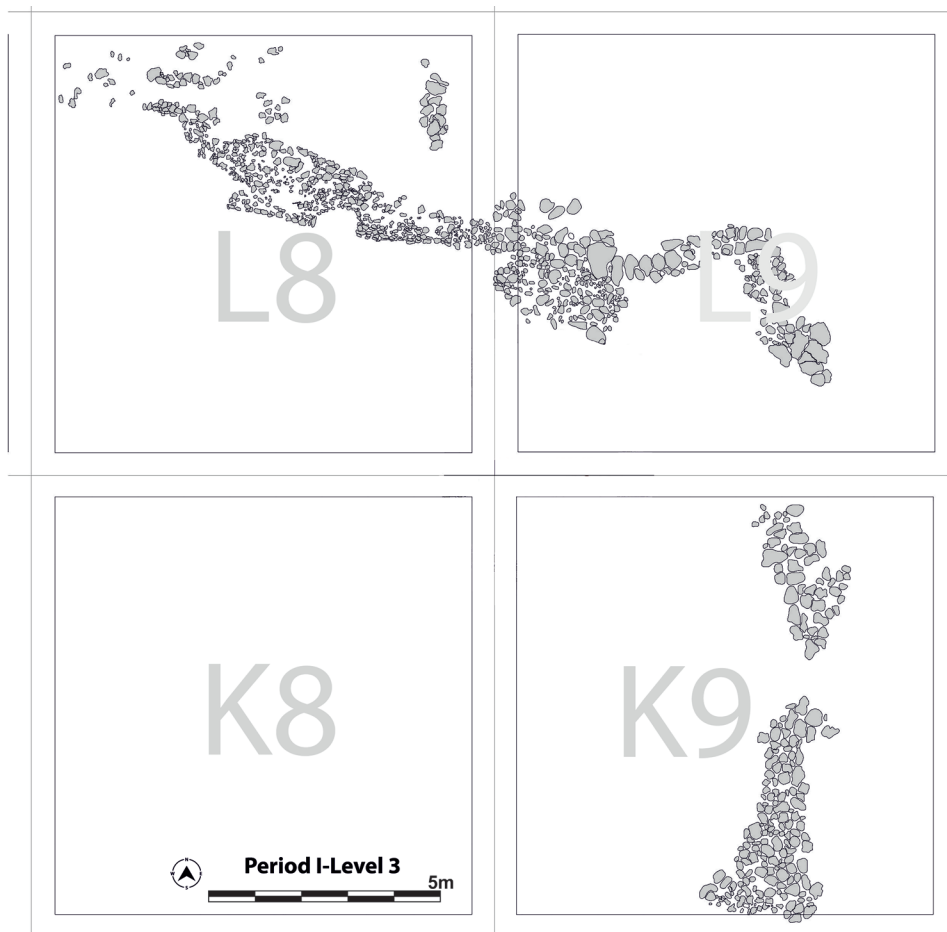


Fig. 8. Architectural remains of Period I-Level 3 (Excavation Archive)



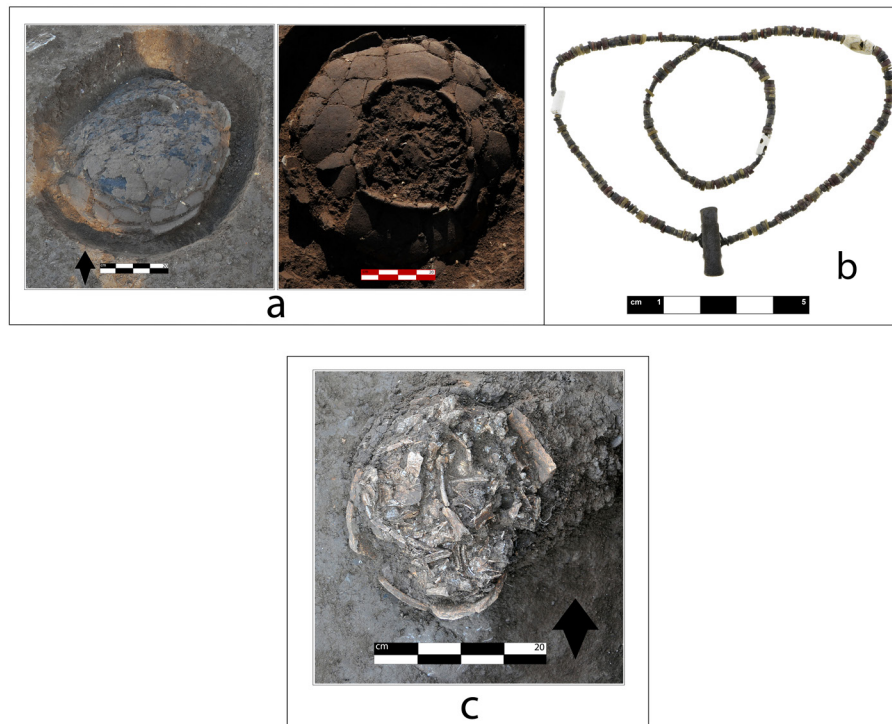


Fig. 9. The jar burials; a: the burnt plate covering the pot; b: the beads gathered from the flotation process; c: the bones belonging to a child burial recovered in trench K9

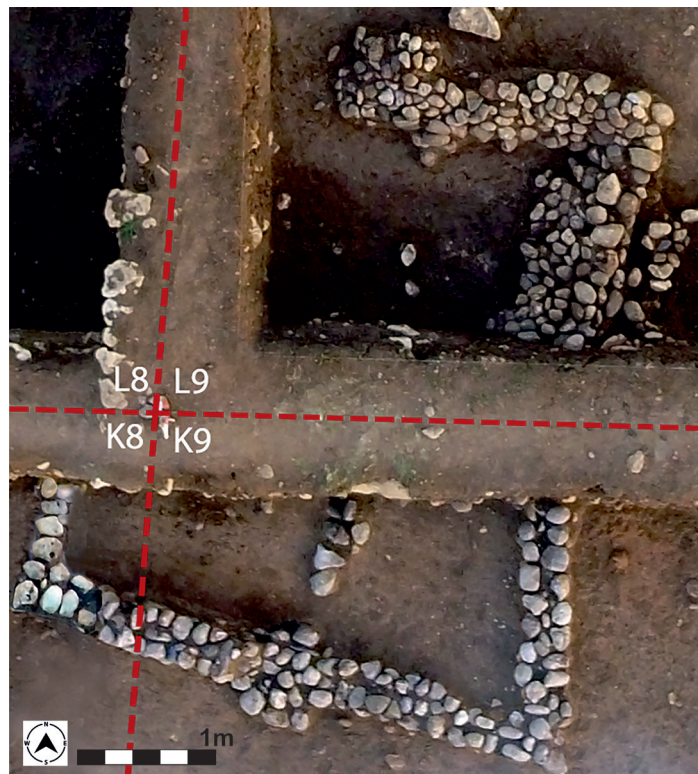


Fig. 10. The aerial image of the stone buttress space and the warped eastern wall of Building 5 (Excavation Archive)

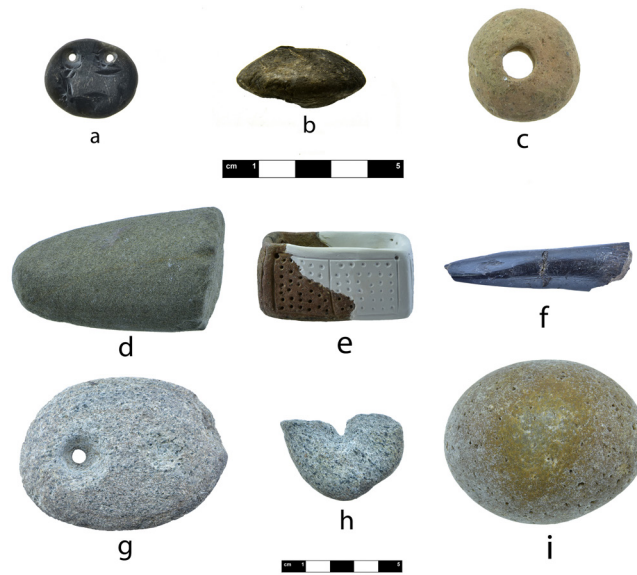


Fig. 11. The main material remains that were uncovered out of context in Medieval Period levels: (a: obsidian pendant, b-c: spindle whorls, d: basalt pestles, e: punched dot miniature cup, f: broken bone awl, g-h: loom weights, i: grinding stone)

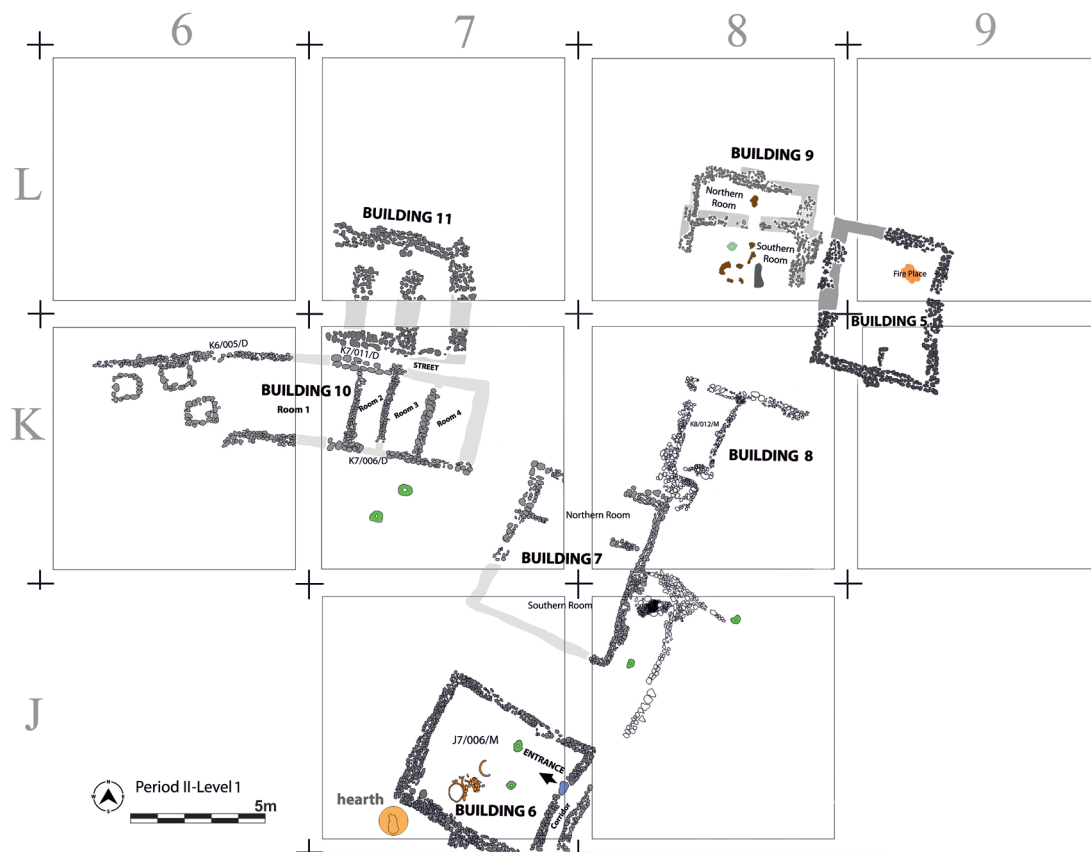


Fig. 12. The architectural remains of Period II-level 1 (Excavation Archive)

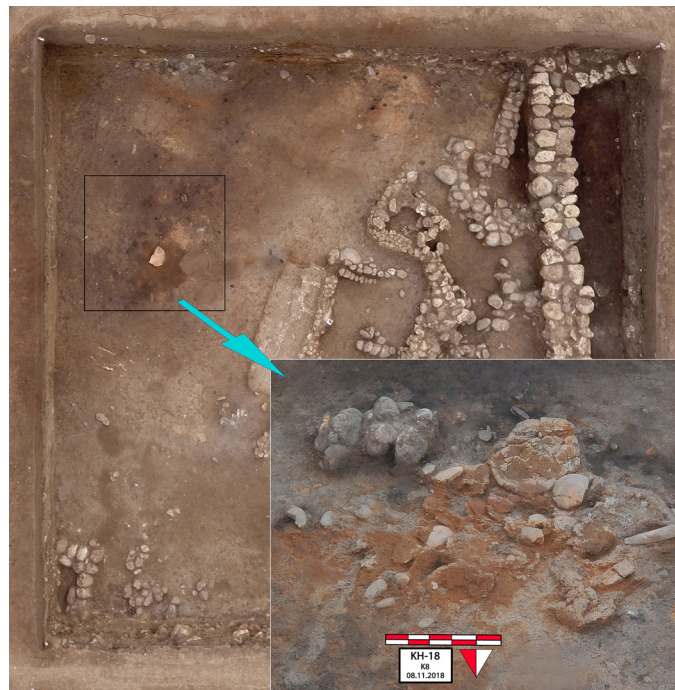


Fig. 13. The detailed view of the cooking and food-preparing area (Excavation Archive)

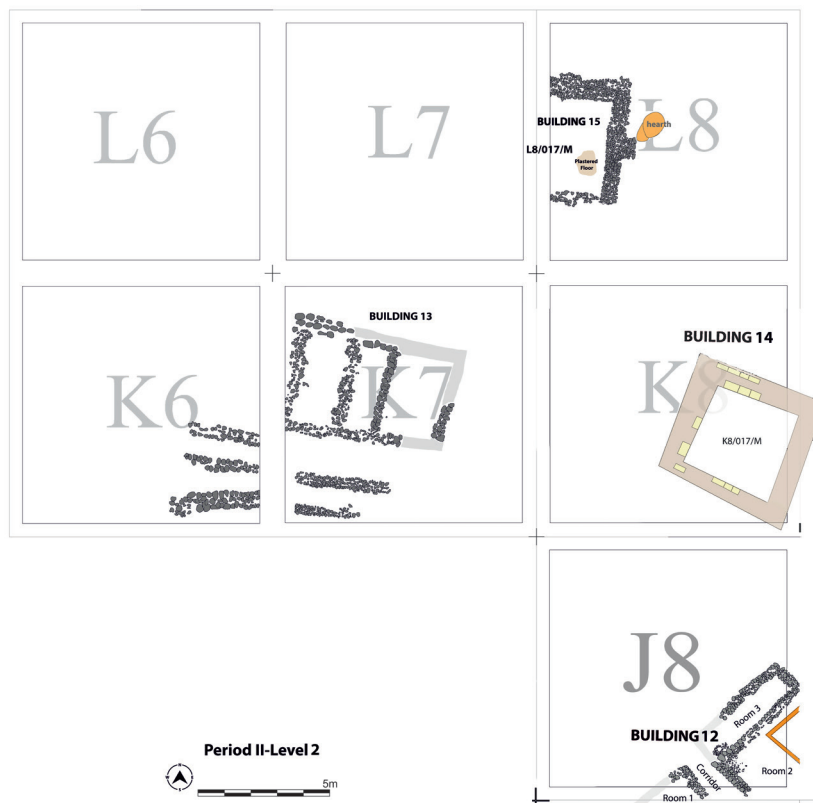


Fig. 14. The architectural layout of Period II-Level 2 (Excavation Archive)





Fig. 15. The main material remains that were uncovered in Period II-level 1 (a-b: Miniature cups, c: sling stone, d: spindle whorl, e: Ubaid bowl, f: relief ceramic sherd, g-j: figurines, k-l-o: pestles, m-n: broken shaft hole axes)



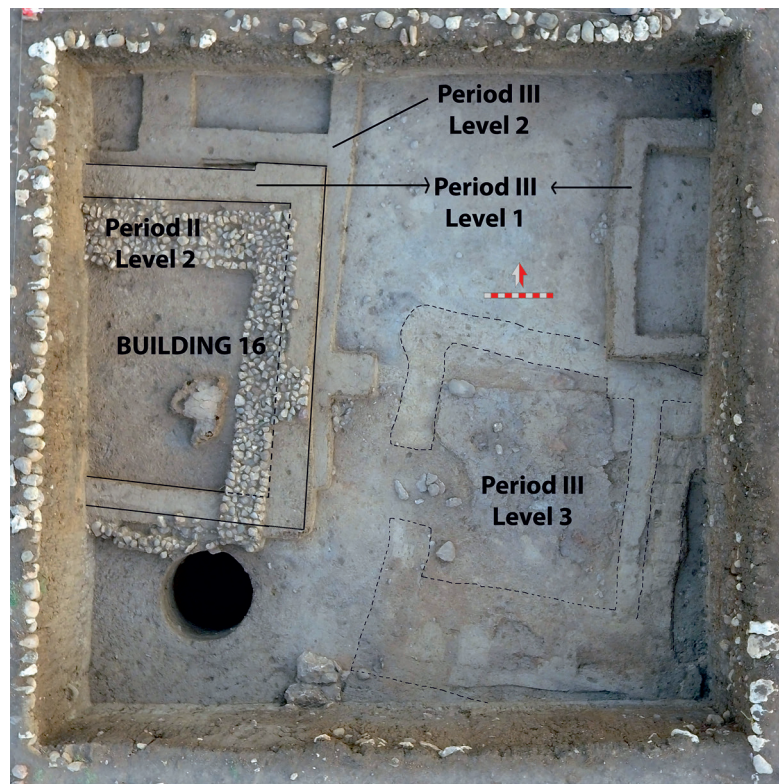


Fig. 16. The aerial image showing the Period III-levels 1-3 in trench L8 (Excavation Archive)

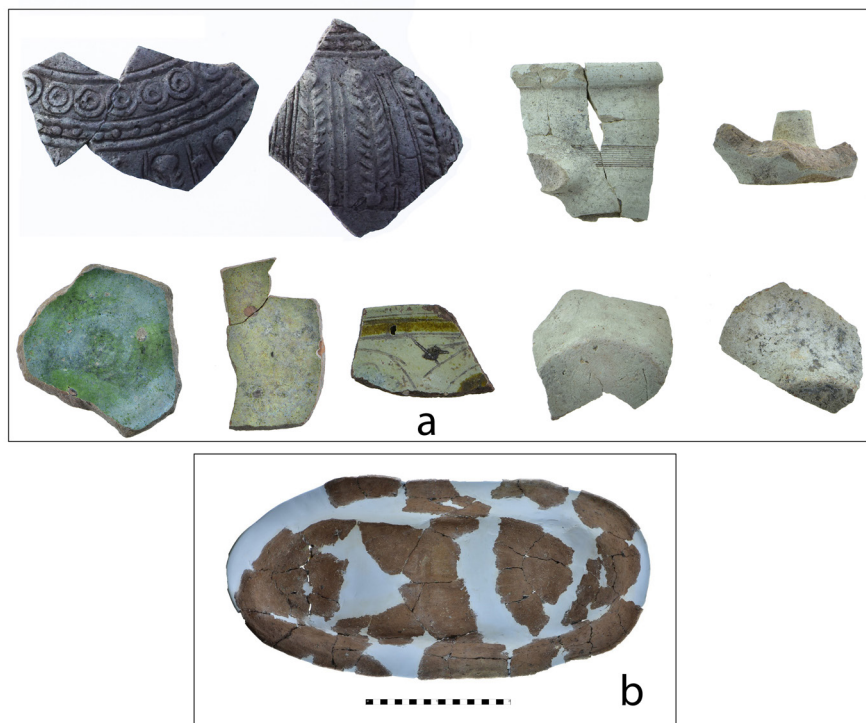


Fig. 17. The selected pottery assemblage of the Medieval Period (Excavation Archive)



Fig. 18. The selected pottery assemblage of the Early Ubaid period (Excavation Archive)

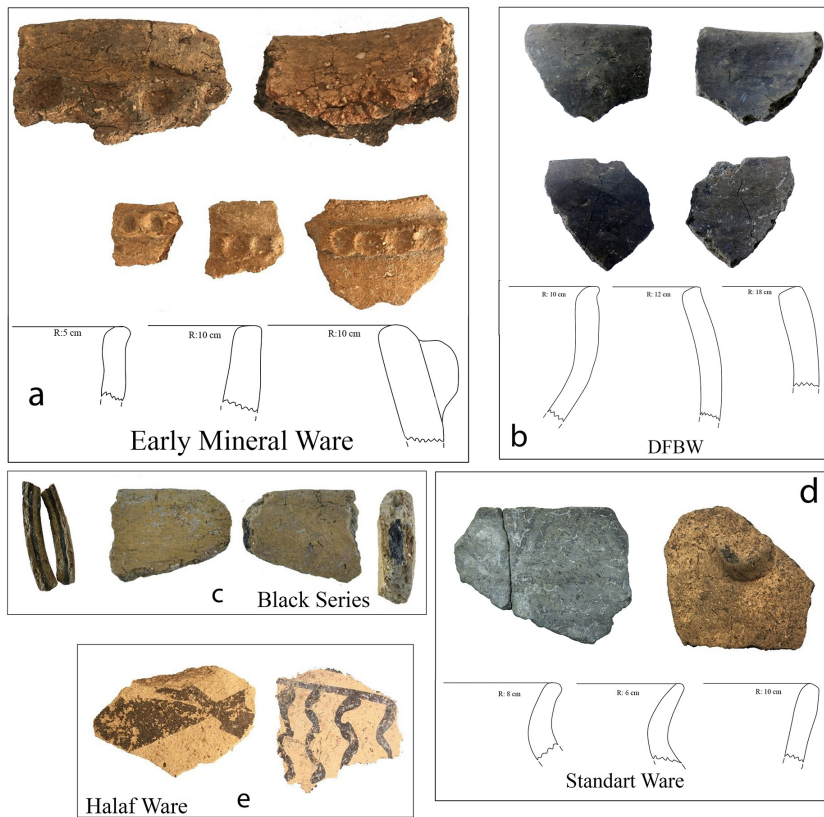


Fig. 19. The selected pottery assemblage of the Late Neolithic (a: Early Mineral Ware, b: Dark-Faced Burnished Ware, c: Black Series, d: Standard Ware, e: Halaf Ware)

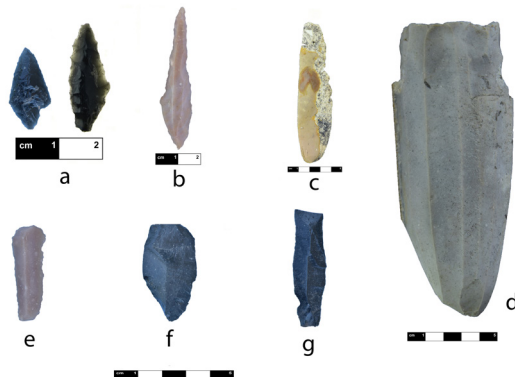


Fig. 20. The selected lithic assemblage from various levels (a: point, b: borer, c: blade, d: bullet-shaped core, e: end-scrapers, f: pièces esquillées, g: notched blade)

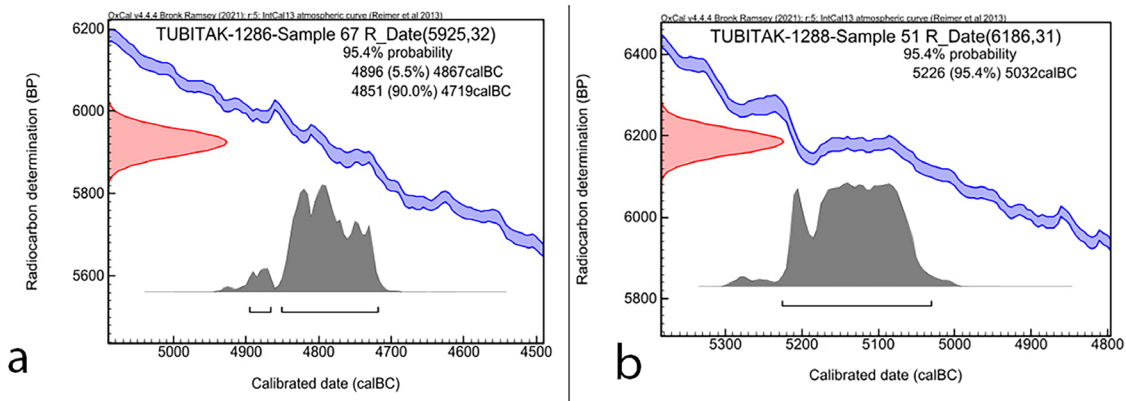
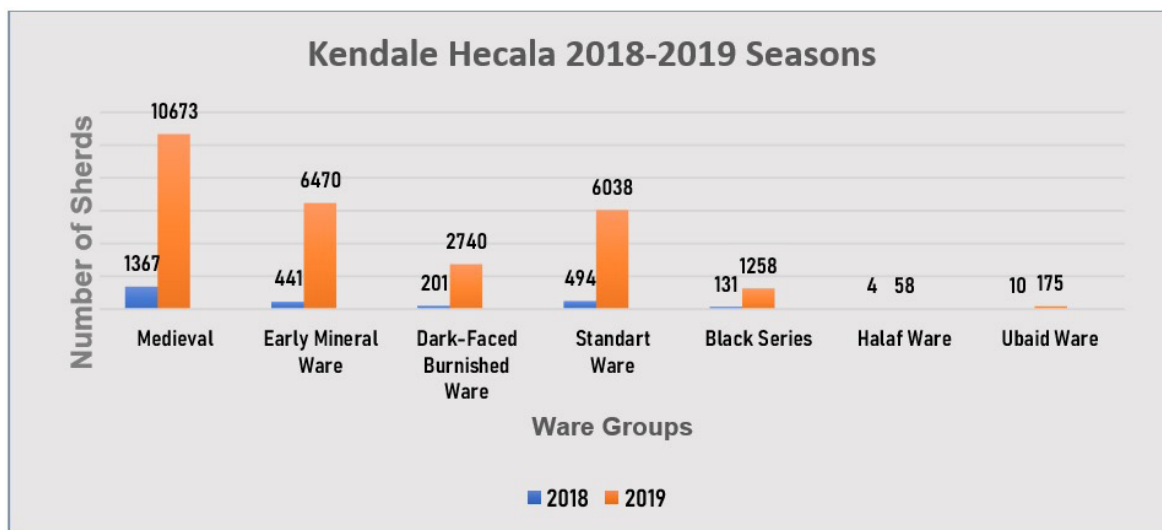


Fig. 21. Calibrated radiocarbon date tables (Samples were dated by TUBITAK Marmara Research Center).

Site-Period	Level	Period	Relative-Date	Absolute-Date
Period-I	1-3	Medieval-Period	ca. 800-1400-AD	cal. 764-902
Period-II	1-2	Early-Ubaid	ca. 5200-4800-BC	cal. 4896-4719
Period-III	1-3	Late-Neolithic	ca. 7000-5200-BC	cal. 5226-5032

Tab. 1: (After Tekin, 2017: 238, table 2; 358 table 3).



Tab.2: The number of Neolithic, Chalcolithic, and Medieval period sherds gathered during the 2018-19 seasons.