

KARKEMISH. REPORT ON THE INVESTIGATIONS IN THE AREA OF THE HALAF KILNS AT YUNUS

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1. INTRODUCTION¹

The site of Karkemish, located on the right bank of the Euphrates on the Turco-Syrian border, since 2011 is being investigated by a Turco-Italian Expedition led by Nicolò Marchetti (Marchetti 2014; 2015; Marchetti et al 2012). During the earlier British excavations at the site, Karkemish has yielded traces of the Halaf period both from the acropolis mound (Woolley and Barnett 1952: 227-8) and from the nearby plateau of Yunus, immediately North-West of the site beyond the Mill stream, where remains of a Halaf settlement were revealed (the so-called Yunus Kilns; Pl. I; Woolley 1934).

I report here on the Turco-Italian operations in the Yunus Kilns area, providing a general review of the Halaf-related material culture recorded during the 2017 and 2019 campaigns, as well as supplying a critical assessment of the documentation produced a century ago.

2. THE BRITISH MUSEUM EXCAVATIONS

The Euphrates valley and the hinterland around Karkemish are key areas for exploring late Neolithic settlements and material culture in Northern Mesopotamia (Lawrence and Ricci 2016). Indeed, sites such as Tell Amarna and Tell Halula along the Euphrates, Khirbet esh-Shenef and Damishliyyah in the Balikh valley, in addition to Tell Turlu, Coba Höyük (AKA Sakçe Gözü in literature), Domuztepe and Kazane Höyük in present Turkey, among others, provide relevant data regarding the Halaf horizon.

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At Karkemish, prehistoric pottery was first revealed in D.G. Hogarth's operations (subsequently taken over by C.L. Woolley) on the South-Eastern part of the acropolis, where two trenches were opened in a North-East direction from the center of the mound towards the Euphrates (Benati 2014: 59-61; Woolley and Barnett 1952: 205-10, fig. 84). The lowest levels of Hogarth's 1911 trenches (contours 18-20) yielded flint and obsidian flakes and tools together with prehistoric painted pottery (Falsone and Sconzo 2007: 73-75; Woolley and Barnett 1952: 227-8, pl. 66: b-c). The ceramics from the strata below contour 20, a "floor level of pebbles" (Woolley and Barnett 1952: 208 n.1), are described by T.E. Lawrence as sherds painted with black, brown or red geometric motifs, while others were polished (Woolley 1934: 160, pl. XXI: b). Woolley later dated the ceramics from these levels to a Neolithic horizon through comparisons with the pottery assemblages from Yunus Kilns and from sites such as Tell Halaf, Coba Höyük and Tell Arpachiyah (Woolley 1934: 162).

The bulk of the Halaf pottery at Karkemish, however, comes from the plateau of Yunus (i.e. his area called Yunus Kilns), an area lying North-West of the city, where the Iron Age cemetery was also located (Bonomo and Zaina 2014). Woolley's operations at Yunus Kilns in 1913 yielded a series of superimposed mudbrick structures which he interpreted as kilns and furnaces. As shown in the published plan and in Woolley's notebooks,² the kilns were almost all circular and built on pebble foundations, featured vent holes cut into the pavement and were surrounded by furnaces built in a radial pattern which were most likely demolished and rebuilt after their use. Such a short exploitation resulted in the formation of a series of floors separated by the ash and pottery discards (Fig. 1; Woolley 1934: 147-9).

Although it has been argued that some of the structures were regular tholoi-like Halaf buildings (Cruells, Molist and Tunca 2004: 12; Davidson 1977: 215), the great quantity of pottery discards, ash and the variety of stone implements suggests that this could have in fact been a production area. Indeed, the small finds brought to light in those strata included flint scrapers, knives, pounders, celts and other instruments possibly related to ceramic manufacturing, although the poor stratigraphic recording methods make interpretations tentative (Woolley 1934: pl. XXI: a).³ Unfortunately, no spatial data was included in Woolley's report, therefore the precise location of the Halaf settlement at Yunus has remained unknown until our own fieldwork.

The pottery from the Yunus Kilns is stored in the storerooms of the Near Eastern Section of the Archaeological Museum in Istanbul.⁴ Woolley published most of the diagnostic vessels while Dirvâna (1944) conducted a study of this assemblage providing regional comparisons. The group, dated to a Middle-Late Halaf phase (Davidson 1977: 215-22), consists primarily of body fragments, including parts of finely decorated walls

2 Woolley's original notebooks are kept in the Middle East Department of the British Museum. Nicolò Marchetti documented them and we are grateful to Jonathan Tubb, Keeper of the Middle East Department of the British Museum, for having allowed archival research on the Karkemish expedition. The digital copy of the notebooks relating to the Yunus Kilns was also reviewed by myself and I confirm that they were published almost verbatim by Woolley, as he himself states (Woolley 1934: 149).

3 Additional evidence of firing operations at Yunus Kilns derives from trench S-S' (Fig. 1) which ran across the site and was "[...] full of ashes and rich in pottery fragments [...]" suggesting that it was used for the "[...] wasters resulting from the firing of a separate batch of pots [...]" (Woolley 1934: 147).

4 23 Halaf sherds were also documented by the Turco-Italian team in the Anatolian Museum of Civilizations in Ankara in a box in the Castle storeroom with three sherds labeled as coming from "Cerabulus, Kar". It is almost certain that this material does not derive from the British Museum 1911-14 and 1920 excavations but rather from later operations at the site of Karkemish (Gallerani, Vacca and Zaina 2017: 1-3).

with geometric patterns and animal motifs, while complete shapes are few.⁵ The vessels can be linked to assemblages from Middle-Late Halaf levels at sites including Tell Turlu (Breniquet 1991), Khirbet esh-Shenef (Akkermans 1993) and Tell Amarna (Cruells 1998; Cruells, Molist and Tunca 2004), in addition to hallmark late Neolithic settlements such as Tell Halaf, Tell Arpachiyah and Tell Aqab, among others (Davidson 1977; Mallowan and Rose 1935; von Oppenheim and Schmidt 1943).⁶

3. SEARCHING FOR WOOLLEY'S KILNS

During the 2017 field season and again in 2019, the Turco-Italian team surveyed the fields South and North of the main road which leads to the modern Yunus cemetery located more to the East (the area is now locally called Eminlik, see Marchetti 2014: 23, fig. 2). A sizable sample of fine painted pottery with geometric and animal designs suggested a late Neolithic occupation in the South field, therefore a small 2×2 m sounding (Sounding 1) was opened there in 2017 (Pls. III: 2; VI: 1-2).

In 2019, geophysics were conducted both in the southern field and in the field North of the main road to investigate the possible presence of the Halaf village discovered by Woolley.⁷ The preliminary results of the geomagnetic survey in the southern field recorded the presence of bands of magnetic values slightly higher than the background, therefore a small 1×1.5 m test sounding (Sounding 2) was opened over the recognized features and close to Sounding 1 to a depth of ca. 1 m (Pls. III: 1; V: 2).

In the North field, high magnetic values (over ± 50 nT/m) were recorded, compatible with situations of thermal stress. In consideration of the area's possible artisan vocation, the instrumental response, which revealed the presence of sub-circular elements of disturbance, could be indicative of ovens or production waste. It is possible that more circular structures are present on a far wider area, if the cropmarks visible in the fields to the East and as far as 400 m to the North are indeed to be interpreted as such: however, more investigations are needed to assess the validity of this claim (Pl. II: 1-2).

3.1 Stratigraphy⁸

Sounding 1 reached a depth of slightly over 40 cm and yielded three chronologically homogenous phases. The earliest phase 3 consists of a floor of beaten earth (L.10458) disturbed by a large cut (P.10457) filled with blackish soil (F.10459, Fig. 2; Pl. IV: 1). This floor yielded some ceramics and small stones were scattered on its surface. L.10458 was covered by a succession of superimposed layers rich with pottery and lithics (from the earliest to the latest fill: F.10479, F.10473, F.10472).

F.10479 featured numerous small stones and a remarkable amount of pottery, while F.10473 was more compact and rich with ceramics lying horizontally on top of the layer, a fact that suggests that this stratigraphic unit could be the result of intentional levelling operations or might have functioned as a usable surface, although this remains uncertain. Fill F.10472, on the other hand, was brownish in color and far less compact than F.10473

5 In 2014, 231 pottery sherds from Woolley's excavations in the Near Eastern section of the Istanbul Archaeological Museum were preliminarily catalogued by Antonio Bonomo of the Turco-Italian Expedition.

6 See LeBlanc and Watson (1973) for analyses of painted motifs from Yunus Kilns.

7 The geophysical investigations were conducted by Giuseppe Guarino and Daniele Alaimo and are still under study. I thank them for sharing their preliminary data with me.

8 For the strata denomination system see Zaina 2018: 3-4.

and yielded numerous pottery sherds and lithic artifacts.

Phase 2 is made of a structure in pebbles and pressed earth (F.10474) which was revealed in the south-eastern corner of the sounding. This small installment, the purpose of which is difficult to determine, must have collapsed northwards, as the reddish clay layer F.10471 located to the North suggests. F.10474 featured a round pit with a diameter of ca. 40 cm (P.10477) which was coated with plaster on the bottom and on its walls (Fig. 2; Pl. IV: 1).

F.10471 and F.10474 were then covered by F.10470 (Phase 1), a silt-clay compact greyish layer, which was sealed by a series of blackish and compact silt-clay fills (F.10451, F.10452) cut by a long pit P.10454 (F.10455, probably caused by modern agricultural activities), directly below the topsoil (F.10450).

Phase 3, therefore, may be interpreted as an external space, possibly a working area, although the concentration of pottery in the strata above the floor might indicate that these specimens were intentionally discarded. Nonetheless the nature of these fills, interpreted as collapses by the excavators, is difficult to assess with certainty. The small structure in phase 2 is only partially preserved and was most likely rebuilt, although its poor preservation does not allow us to expand on its function.

In Sounding 2 no architectural remains and few pottery sherds and lithics were retrieved. After a series of superficial layers (F.10480; F.10481) in which pottery and flint flakes were found, remnants of a mud floor (L.10482) with a small cut in its center were exposed (P.10483; Pl. V: 1). After the removal of the floor and a series of fills which yielded no material, at a depth of about 1 m a number of stones in the South-West and North-East corners of the sounding were documented (F.10485; Pl. V: 2). These stones resemble the ones from the small structure in Sounding 1 but are too small and chaotically distributed to serve any clear structural purpose.

3.2 Pottery

The pottery from Sounding 1 can be attributed to a Middle-Late Halaf period (Halaf IIa-b in Campbell's chronology, Campbell 1992), although the small size of the sample and the disturbance of the deposit due to the frequent ploughing of the field are worth noting. 99 diagnostic sherds were selected from a total of 387 pieces. The assemblage has been divided into Fine Ware (FW, n.= 91) - painted and unpainted - Coarse Ware (CW, n.= 7), while only 1 sherd is attributable to Black Ware (BW, Fig. 8: 3).

FW is characterized by high-fired reddish-yellow (10YR 6/2-3, 7.5Y 7/2-4, 5YR 7/3) fabrics with small (<0.5/0.5-1mm) rare (<3/3-10%) mineral and vegetal inclusions. Among painted FW (n. = 56), paint is black, brown and red and is applied in a monochrome fashion on sherds except for a few cases which, however, should not be attributed to an intentional polychromic effect but rather to a difference in paint thickness. Sherds are usually decorated on the outer surface with geometric cross-hatching designs occasionally placed under a horizontal band, while the inner walls can feature parallel lines or thick bands under the rim. A slip is found on 15% of these sherds, while among unpainted FW (n.= 35), traces of burnishing have been found on ca. 17 % of the pieces.

CW features more frequent mineral and vegetal inclusions and presents medium-low fired yellow-reddish fabrics (2.5Y 6/2, 2.5Y 7/1-3, 10YR 4/1, 7.5YR 7/1-3), while BW features a black burnished surface.

Numerous types recur among FW. Platters come in a number of dimensions: they feature flaring straight walls and are painted (Figs. 3: 1; 8: 1, 5, rim diameter ranging

between 19-30cm).

YU.17.P.102/5 (Fig. 8: 5) features a combination of parallel undulating bands on the inner walls with a motif which can be interpreted as stylized bucranium, while YU.17.P.102/1 (Fig. 8: 4) is a very small platter (rim diameter 8cm) with flaring walls, decorated on the inner and outer surfaces with a cross-hatching and dotted lozenge motif on the internal and external walls respectively.

Wide bowls with straight flaring walls (Figs. 3: 2,6; 5: 4-5) either feature no surface treatment/decorations or are burnished and/or painted and range in rim diameter between 21-34cm with an average of 26cm. Despite the absence of the lower bodies, morphologically these types could recall the highly decorated Halaf straight sided bowls with flaring walls from Tell Amarna (Cruells 1998: fig. 3: 12, 14-15, 17), Damishliya (Akkermans 1993: figs. 3.6: 32; 3.7: 39), Chagar Bazar (Cruells 2006: pl. 3.9: CB 2689). In these contexts, however, the specimens are all decorated with bands and geometric/naturalistic motifs both on the inner and outer surfaces, while in the present assemblage only two of these bowls are painted under the rim (Figs. 3: 2; 7: 5, see Cruells 2013: pl. 17: THL 1578 for unpainted types). YU.17.P.102/6 (Fig. 8: 6) represents a deeper type and features an undulating motif under the internal rim, recalling examples from Tell Amarna (Cruells 1998: fig. 3: 11) and Tell Sabi Abyad Balikh IIIC (Nieuwenhuys 1997: fig. 6: 7).

Among bowls with flaring walls, a smaller type was also present (Fig. 4: 8), while other pieces (Fig. 7: 1-2, rim diameters 7-8cm) might belong to small angle-necked jars (see Woolley 1934: fig. 3: 2; Cruells 2013: pl. 25: THL1011, THL1086).

In Sounding 1 we found a specimen with flaring walls which was decorated internally with red parallel linear v-shaped designs (Fig. 6: 10). This type, which appears in early Halaf levels in sites such as Tell Arpachiyah and Tell Aqab and continues into later stages (see Davidson 1977: 32-3, 42, pl. III: 2) recalls in shape, among others, examples from the Middle Halaf phases at Tell Halula (Cruells 2013: pl. 8: THL1147), Tell Amarna (Cruells 1998: fig. 4: 8-9), Umm Qseir, (Hole 2017: figs. 17.1: 6-7; 17.3: 8-9; 17.5: 2), Tell Tawila (where it is present since the Halaf Ib phase, Becker 2017: 59, fig. 5.7: 36-38), Late Halaf Kazane Höyük (Bernbeck, Pollock and Coursey 1999: fig. 12c), Girikihaciyan (Watson and LeBlanc 1990: 58-9, fig. 4: 18) and Balikh IIIC phase at Tell Sabi Abyad (Nieuwenhuys 1997: fig. 4: 10).

Only one painted bowl with concave walls was present in our assemblage (Fig. 8: 9; see Akkermans 1993 fig. 3.33: 37; Cruells 1998: pl. 6: 12-14; Özbal 2017: fig. 12.7: 9).

Bowls with round walls encompass both large (Figs. 3: 3; 5: 3) simple types (also found at Tell Amarna and at Chagar Bazar, Cruells 1998: fig. 18: 4-5; Cruells 2006: pl. 3.8: CB 2649) in addition to smaller and deeper shapes (Fig. 4: 9; Cruells 1998: fig. 5: 3).

Bowl YU.17.P.100/6 (Fig. 9: 6) with globular body and overhanging rim is painted and is also found at Khirbet es-Shenef (Akkermans 1993: figs. 3.3: 14-15,17).

Globular bowls can also be small and feature in-turning rims (Fig. 5: 1). YU.17.P.123/2 is decorated with a combined cross-hatching design with a band under the external rim and resembles a type found by Woolley (Dirvâna 1944: pl. LXVII: 2), present also at Tell Amarna (Cruells 1998: fig. 5: 19) and Tell Halula (Cruells 2013: pl. 17: THL1107).

S-shaped bowl with flared rim YU.17.P.123/4 (Fig. 5: 2) is painted externally with red bands recalling specimens from the 'Amuq C phase at Tell Kurdu, generally associated with a Middle-Late Halaf horizon (although see Özbal et al 2004: 50-2, fig. 9: 8), Tell Turlu level IV (Breniquet 1992: pl. XIII: 8), Tell Amarna (Cruells 1998: fig. 6: 3-4),

Damishliyyah (Akkermans 1993: fig. 3.4: 11) and the previous Kilns excavations (Woolley 1934: fig. 3: 10).

Smaller vessels were also present among FW and comprise small containers and cups with round/in-turning walls (Figs. 3: 5; 4: 3,7; Woolley 1934: fig. 3: 7).

FW closed shapes encompass jars and pots. Jars include painted types with tall rounded necks (Fig. 8: 11, present at Khirbet es-Shenef, Akkermans 1993: fig. 3.33: 39;), V-neck and angle neck jars (Fig. 7: 3, 8; Becker 2017: fig. 5.8: T8.33; Bernbeck, Pollock and Coursey 1999: fig. 10: d; Gómez, Cruells and Molist 2014: fig. 2: G.IXc), straight neck jars (Figs. 7: 11; 8: 10) and neckless jars (Fig. 5: 8). YU.17.P.123/3 (Fig. 5: 7) is painted externally with two bands on a cream slip. This shape appears, among others, in the Balikh IIIC phase at Sabi Abyad (Nieuwenhuyse 1997: fig. 6: 4).

Pots are almost all of the hole-mouth type with rounded or straight walls and come in various sizes, they can feature inward curving rims (Figs. 3: 7-10; 7: 15) and are almost all unpainted (see Akkermans 1993: figs. 3.34: 54; 3. 35: 56-60).

YU.17.P.103/3 (Fig. 8: 2) with a flaring rim recalls a type found by Woolley (Dirvâna 1944: pl. 32: 30). FW bottoms are generally flat, with traces of paint present also on the lower bodies of vessels (Figs. 5: 14; 8: 13, compare with Cruells 1998: fig. 4: 11).

CW is rare and encompasses simple bowls (Fig. 9: 9), bowls with globular walls (Fig. 8: 8), and small hole-mouth pots (Fig. 7: 9).

Painted walls are numerous in Sounding 1 (n.= 25). Various studies have underlined the correlation between decoration and vessel shape in Halaf assemblages and have stressed the cultural relevance of painted motifs in terms of identity construction among Halaf communities (Akkermans 1993: 318-321; Hole 2013; 2017). The assemblage from Sounding 1 has yielded motifs which are found in Halaf assemblages in the Middle Euphrates region and beyond. Among geometric patterns, the most popular in our assemblage, horizontal/vertical/cross-hatching lines and line-dot combinations which can be placed under a horizontal band (Figs. 3: 12-3, 17; 7: 11; 8: 10), in addition to the mentioned lozenge motif, are present and recall the ones from Woolley's group (see Dirvâna 1944: pls. LXXVII-LXXII; Woolley 1934: 154-6). Animal decorations are few (bucranium, Figs. 4: 1; 8: 5), while naturalistic representations also include a star on YU.17.P.126/1 (Fig. 3: 15) which resembles an identical design from Woolley's sherds (Dirvâna 1944: pl. LXXIV.5; Woolley 1934: pl. XIX).

Pottery from Sounding 2 comprises very few (n=10) and mainly coarse sherds.

A number of Halaf motifs were also present on the pottery collected from the survey. These ceramics feature both geometric and naturalistic decorations which are similar to the ones found a century ago in the Kilns area. Among geometric representations, the dotted circle and the V motifs are present (Pl. V: 2 left, bottom row and second sherd from the left, see Akkermans 1993: fig. 3.39: 103-5; Pl. V.2 left, fourth sherd in the top row from the left, see Özbal 2017: fig. 12.8: 6-7), while the mountain goat with the horns bent backwards like a bow is also worth noting (Pl. V: 1, third row from above, second sherd from the left, see Erdalkiran 2017: 155 and Nieuwenhuyse 1997: fig. 7: 15).

In Sounding 1 a variety of ceramic types was revealed. The shapes present in our assemblage are comparable, to a certain degree, to Woolley's finds (although Sounding 1 also yielded types which are not found in Woolley's collection) and recur in Halaf contexts across Northern Mesopotamia in sites such as Tell Halula VI-VII, phase Balikh IIIC at Sabi Abyad, Khirbet esh-Shenef, Damishliyyah, Tell Amarna, Tell Kurdu and Kazane Höyük, among others.

Therefore, on a purely typological basis, this group could be dated to a Middle-Late Halaf phase. Unfortunately, the small size of the sample does not allow us to determine the frequency with which the types recur in the strata and, therefore, it is likely that some pieces may be long-lasting types, as argued for Woolley's assemblage (Cruells, Molist and Tunca 2004: 12), although it appears that the pottery from Sounding 1 could be later than Woolley's finds.

3.3 Lithics

Lithic artifacts were found both in Sounding 1 and in Sounding 2 (Pl. VIII). In Sounding 1, flint and obsidian were present in an equal proportion (flint = n.11 pieces; obsidian = n.11 pieces). Overall, four varieties of flint have been recorded: brownish (7.5YR 4/2-10YR), dark-pinkish (5YR 6/2), light pinkish (10YR 7/3) and yellowish (10YR 6/3).

Flint artifacts comprise retouched tools (fig. 10: 1), blades (Fig. 10: 2), bladelets (Fig. 10: 3,5; Pl. VIII: 6) and flakes (Fig. 10: 4). Although no cores were found in Sounding 1, the presence of debris suggests that obsidian knapping was performed locally. Technology on obsidian is oriented towards a laminar production: YU.17.O.115 (Fig. 10: 2, Pl. VIII: 2) is the largest obsidian blade revealed, while YU.17.O.152 (Fig. 10: 3; Pl. VIII: 3) is fractured.

In Sounding 2, lithic remains were less frequent (n.= 7) and no obsidian was revealed. In addition to the types of flint reported for Sounding 1, greyish and whitish specimens were also present. Finds comprise a small core (Pl. VIII: 7), blades (Pl. VIII: 12), a bladelet (Pl. VIII: 9), retouched tools (Pl. VIII: 8) and flakes (Pl. VIII: 11).

Overall, the laminar orientation of the assemblages recalls the late Neolithic lithic trends in the Syrian Euphrates and the Balikh-Khabur areas, where elongated rectangular blades are more common in the Middle-Late Halaf periods (Nishiaki 2018: 9-10), but also in more northern sites such as Kazane Höyük (Bernbeck, Pollock and Coursey 1999). The presence of obsidian in Sounding 1, moreover, emphasizes the use of this raw material during the Halaf period and suggests that our specimens could have been imported from Anatolian sources through long-distance exchange (Healey 2007; Nishiaki 2018: 7-8).

3.4 The Small Finds from the Survey

YU.17.O.43, Disk pendant (Pl. IX: 1)

Material: Stone

Dimensions: h.0.7 cm

Preservation: Complete

YU.17.O.44, Pendant (Pl. IX: 2)

Material: Stone

Dimensions: l. 1.2 cm; w.1 cm; th. 0.6 cm

Preservation: Complete

YU.17.O.45, Incised stamp seal (Pl. IX: 3)

Material: Stone

Dimensions: h.1.2 cm; l.2.3 cm; w.2.4 cm;

th.0.4cm

Preservation: Complete

YU.17.O.48, Incised stamp seal (Pl. IX: 4)

Material: Stone

Dimensions: h.0.65 cm; l.1.4 cm; w.1.3 cm;

th.0.3cm

Preservation: Complete

YU.19.O.49, Pestle (Pl. IX: 5)

Material: Flint

Dimensions: l.5.6 cm; th.7.5 cm

Preservation: Complete

YU.19.O.74, Pestle (Pl. VIII: 7)

Material: Limestone

Dimensions: l. 23.5 cm; w.; th.3.7 cm

Preservation: Nearly complete

YU.19.O.82, Flake (Pl. IX: 9)

Material: Flint

Dimensions: l. 10.8 cm; w.5.6 cm; th.3.1 cm

Preservation: Fragmentary

YU.19.O.50, Grinding stone (Pl. IX: 6)

Material: Basalt

Dimensions: l.8;w.11; th.3.7

Preservation: Fragmentary

YU.19.O.75, Pestle (Pl. IX: 8)

Material: Basalt

Dimensions: h.9.4 cm; th.5.1 cm

Preservation: Complete

YU.19.O.83, Retouched tool (Pl. IX: 10)

Material: Flint

Dimensions: l.6.5 cm; w.2.8 cm; th.0.7 cm

Preservation: Fragmentary

Two stamp seals were collected by farmers South of Sounding 1 and close to the trees on the southern limit of the South field. Stamp seals are known at Halaf sites from the earliest phases to the later periods across all of northern Mesopotamia (Akkermans and Duistermaat 2004; Atakuman 2013). YU.17.O.45 is rectangular in shape and features incised crossing lines that divide the surface into four areas which all present encircled drilled holes, while YU.17.O.48 is also rectangular with incised lines but with no holes. These two seals are similar to the rectangular/squared Halaf types at Domuztepe (Carter 2010: fig. 5: 12, fig. 10: 4a-b) and Fıstıklı Höyük (Bernbeck and Pollock 2003: figs. 32-33). Two pendants were also collected in the same field: YU.17.O.43 is a small, perforated disk, while YU.17.O.44 is of a triangular shape.

A basalt pestle and grinding stone were found (Pl. IX: 6,8), while an elongated pestle (Pl. IX: 7) recalls the Halaf types from Woolley's operations at Yunus Kilns (Woolley 1934: fig. 2 lower right corner). A spherical flint pestle (YU.19.O.49) is also similar to an implement from the previous Yunus Kilns excavation (Woolley 1934: 150; fig. 2).

The nature of the finds collected in the survey suggests that numerous activities including food preparation, flint knapping and administrative-like tasks were performed in these premises, further supporting the possibility of a prehistoric settlement in the area.

4. DISCUSSION

The data obtained by the Turco-Italian Expedition at Karkemish in 2017 and 2019 shed new light on the prehistoric occupation at the site, exposed by Woolley over a century ago in the Yunus Kilns area "immediately below the surface" (Woolley 1934: 146). However, more research and new excavations must be carried out to better characterize the layout of the Halaf settlement.

While the results of the geophysical analyses and the visible cropmarks in the North field and surroundings may suggest the presence of archaeological remains in the area, it is worth noting that the fields in question are regularly plowed and the destructive impact of such activities on the potential underlying archaeological contexts should not be

overlooked. Sounding 1 yielded evidence very close to the surface, while Sounding 2 did not provide any architectural installments and pottery was almost absent, although we could instead see circular traces there in the magnetogram. If the geophysical results in the South field are to be of any guidance, it thus seems highly possible that the Halaf settlement survives only, after repeated ploughing, on the very surface as a scatter of finds and as a relative concentration of decayed building materials.

The area in Sounding 1 might have functioned as an external workspace, a common feature in Halaf settlements with low-density layouts (see, for example, the site of Fıstıklı Höyük, Bernbeck and Pollock 2003: 14-17), although our data is too scarce to make any inference regarding the organization of the occupation in the Yunus plateau. The material culture revealed in our operations, moreover, is comparable to Halaf assemblages from the Middle Euphrates, the Balikh, and Khabur areas, indicating that the communities at Yunus shared similar practices with Halaf groups in the region and beyond.

In conclusion, while it is likely that the Halaf settlement strategy in the Karkemish area was based on an integration of tells and surrounding lands in proximity to water sources (Lawrence and Ricci 2016), the relationship between the Halaf occupation on the Karkemish acropolis and that at Yunus, located approximately 1 km to the North-West as the crow flies, still requires further clarification. Indeed, although the sherds from the trenches on the citadel mound may be comparable to those revealed by Woolley at the Yunus Kilns, the evidence from the acropolis is for the most part limited and it remains difficult therefore to assess not only the extent of its Halaf occupation but also its relative chronological position in relation to the Halaf settlement in the Yunus plateau.

This means that either here we have two functionally differentiated sites which could reflect the integrated territorial organization of Late Halaf communities in Northern Mesopotamia based on a series of connected smaller and mobile occupations spread out in a shared environment (Nieuwenhuys and Akkermans 2018: 125-27), or two settlements inhabited at different periods: future research will tell us more.

ABBREVIATIONS USED IN THE TEXT

SU means Stratigraphic Unit. Each layer is identified by a capital letter defining its function and a progressive number. F. = fill; L. = floor; P. = pit; W. = wall.

Each find is registered according to the following system: site code (YU) year (17); pottery find (P), small find/object (O); absolute progressive number. Small finds receive the "O" during the study phase. Pottery finds are provided with bucket number and sherd number.

In the pottery description the following codes have been used:

- Class: FW = Fine Ware; CW = Coarse Ware
- Technique (Tech.): H= Hand
- Firing: H = high; M = medium; L = low
- Inclusions type: M = mineral; V = vegetal; Y = vegetal and mineral
- Inclusions size: a = < 0.5 mm; b = 0.5-1 mm; c = 1-2 mm
- Inclusions frequency: 1 = < 3%; 2 = 3-10%; 3 = 10-20%; 4 = > 20%
- Fabric color: I/O = inner/outer; C = core. When fabric color is not reported, I/O-C is implied
- Painting (P.)
- Colors: Gr. = Green; R. = Red; Bl. = Black; Br. = Brown; W. = White

Note: In the drawings, when the diameter of a sherd is unknown a dotted line is drawn.

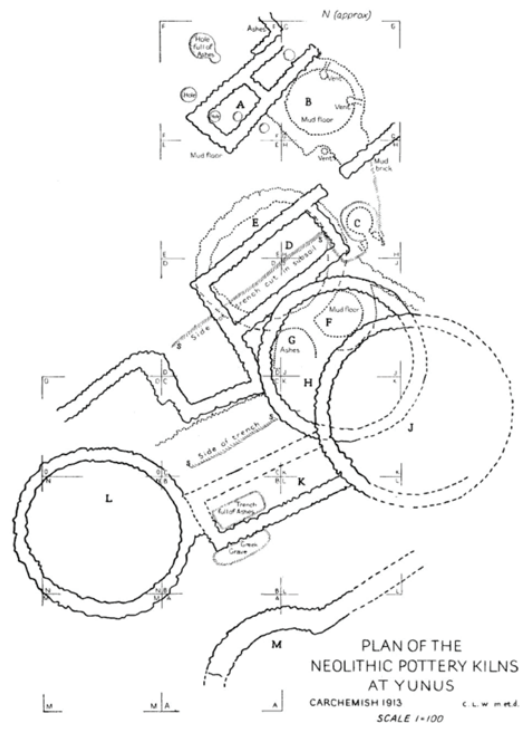


Fig. 1 Woolley’s plan of the Yunus kilns (Woolley 1934: pl. I).

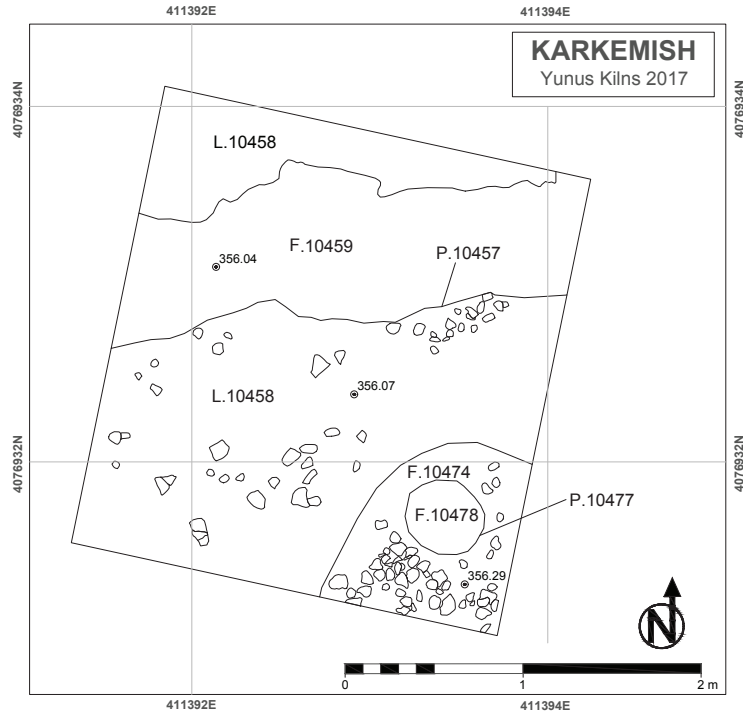


Fig. 2 Plan of Sounding 1. Phase 3 (L.10458) and Phase 2 (F.10474 and P.10477).

No.	Pottery No.	SU	Ph.	Ware	Tech.	Firing	Incl.	Fabric color	Surf. treat	P.
1	YU.17.P.104/2	L.10458	3	FW	H	H	Ya2	2.5Y 8/3		Bl.
2	YU.17.P.104/3	L.10458	3	FW	H	H	Ya1	2.5Y 7/2		Bl.
3	YU.17.P.104/1	L.10458	3	FW	H	H	Ya2	5YR 7/3		R.
4	YU.17.P.104/4	L.10458	3	FW	H	H	Ya1	10YR 6/3		
5	YU.17.P.126/6	F.10479	3	FW	H	H	Ya1	7.5YR 7/3		
6	YU.17.P.126/2	F.10479	3	FW	H	M	Ya2	10YR 4/1	Burnish	
7	YU.17.P.126/4	F.10479	3	FW	H	H	Ya1	10YR 6/3		
8	YU.17.P.126/3	F.10479	3	FW	H	H	Yb1	10YR 6/2		
9	YU.17.P.126/1	F.10479	3	FW	H	H	Ma1	5YR 7/3	Slip W.	
10	YU.17.P.126/5	F.10479	3	FW	H	H	Ya1	10YR 6/3		
11	YU.17.P.126/7	F.10479	3	FW	H	H	Ya1	2.5YR 6/6		R.
12	YU.17.P.126/8	F.10479	3	FW	H	H	Yb2	7.5YR 7/4		R.
13	YU.17.P.126/9	F.10479	3	FW	H	H	Yb1	5YR 7/2		R.
14	YU.17.P.126/10	F.10479	3	FW	H	H	Ya1	7.5YR 7/3		R.
15	YU.17.P.126/11	F.10479	3	FW	H	H	Ya1	2.5YR 6/4		R.
16	YU.17.P.126/12	F.10479	3	FW	H	H	Ya1	7.5YR 7/4		R.
17	YU.17.P.126/13	F.10479	3	FW	H	H	Ya1	7.5YR 7/4	Slip W.	Br.

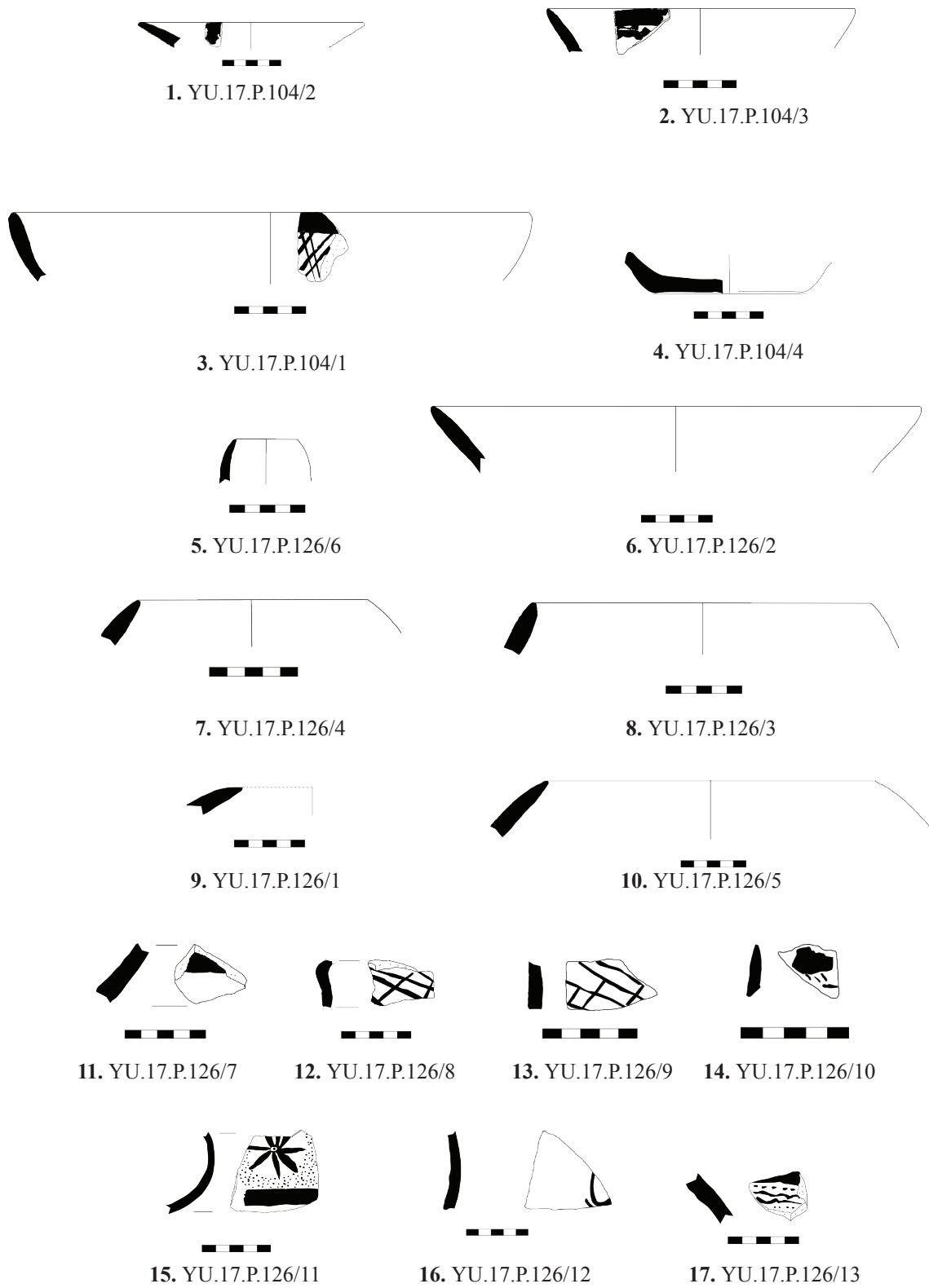


Fig. 3 Pottery from Sounding 1: L.10458 (1-4) and F.10479 (5-17).

No.	Pottery No.	SU	Ph.	Ware	Tech.	Firing	Incl.	Fabric color	Surf. treat	P.
1	YU.17.P.126/14	F.10479	3	FW	H	H	Ya1	7.5YR 7/4	Slip W.	Br.
2	YU.17.P.126/15	F.10479	3	FW	H	H	Ya1	7.5YR 8/2		Bl.
3	YU.17.P.126/16	F.10479	3	FW	H	H	Ya1	7.5YR 7/4		
4	YU.17.P.126/17	F.10479	3	CW	H	L	Yb2	10YR 4/1		
5	YU.17.P.126/18	F.10479	3	CW	H	M	Yb2	7.5YR 7/4 (O) 10YR 6/1 (I/C)		
6	YU.17.P.124/1	F.10473	3	FW	H	H	Ya1	7.5YR 7/3		R.
7	YU.17.P.124/4	F.10473	3	FW	H	H	Ya1	7.5YR 7/4	Slip W.	
8	YU.17.P.124/5	F.10473	3	FW	H	L	Ya1	7.5YR 4/1	Bur- nish	
9	YU.17.P.124/3	F.10473	3	FW	H	H	Ya1	10YR 6/2		Bl.
10	YU.17.P.124/7	F.10473	3	FW	H	H	Yb1	7.5YR 7/3		R.
11	YU.17.P.124/6	F.10473	3	FW	H	L	Yb1	7.5YR		
12	YU.17.P.124/2	F.10473	3	FW	H	H	Ya1	2.5Y 8/3		
13	YU.17.P.124/9	F.10473	3	FW	H	H	Ya2	5YR 7/4		R.

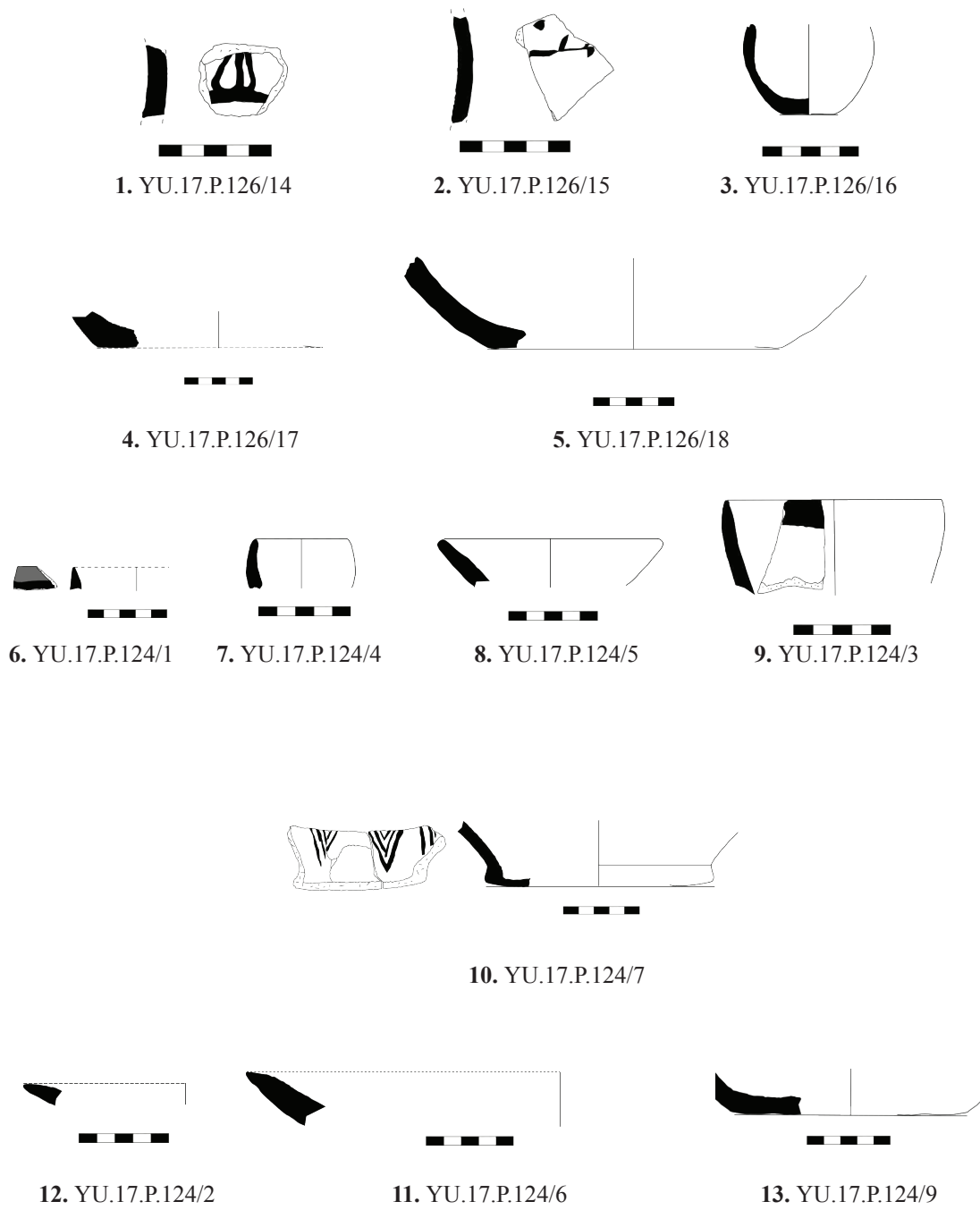


Fig. 4 Pottery from Sounding 1: F.10479 (1-5) and F.104793 (6-13).

No.	Pottery No.	SU	Ph.	Ware	Tech	Firing	Incl.	Fabric color	Surf. treat	P.
1	YU.17.P.123/2	F.10472	3	FW	H	H	Ma1	2.5Y 7/2		Bl.
2	YU.17.P.123/4	F.10472	3	FW	H	H	Ma2	10YR 6/3	Slip W.	R.
3	YU.17.P.123/9	F.10472	3	FW	H	L	Yb2	10YR 6/3	Burnish	
4	YU.17.P.123/6	F.10472	3	FW	H	H	Ya2	5YR 6/6	Burnish	
5	YU.17.P.123/8	F.10472	3	FW	H	M	Ya1	2.5Y 7/3 (I/O) 5YR 7/4 (C)	Slip W.	
6	YU.17.P.123/1	F.10472	3	FW	H	H	Ya1	10YR 6/4	Slip W.	Bl.
7	YU.17.P.123/3	F.10472	3	FW	H	H	Ma2	2.5YR 6/6	Slip W.	R.
8	YU.17.P.123/5	F.10472	3	FW	H	H	Ya2	10YR 6/3		Bl.
9	YU.17.P.123/7	F.10472	3	FW	H	H	Ya2	7.5YR 6/4		
10	YU.17.P.123/11	F.10472	3	FW	H	H	Ya1	10YR 7/3		Br.
11	YU.17.P.123/14	F.10472	3	FW	H	H	Ya1	10YR 7/3		
12	YU.17.P.123/13	F.10472	3	FW	H	H	Ya1	7.5YR 7/4		
13	YU.17.P.123/12	F.10472	3	FW	H	H	Ya1	10YR 7/3		
14	YU.17.P.123/10	F.10472	3	FW	H	H	Ya2	10YR 7/3	Slip W.	Br.

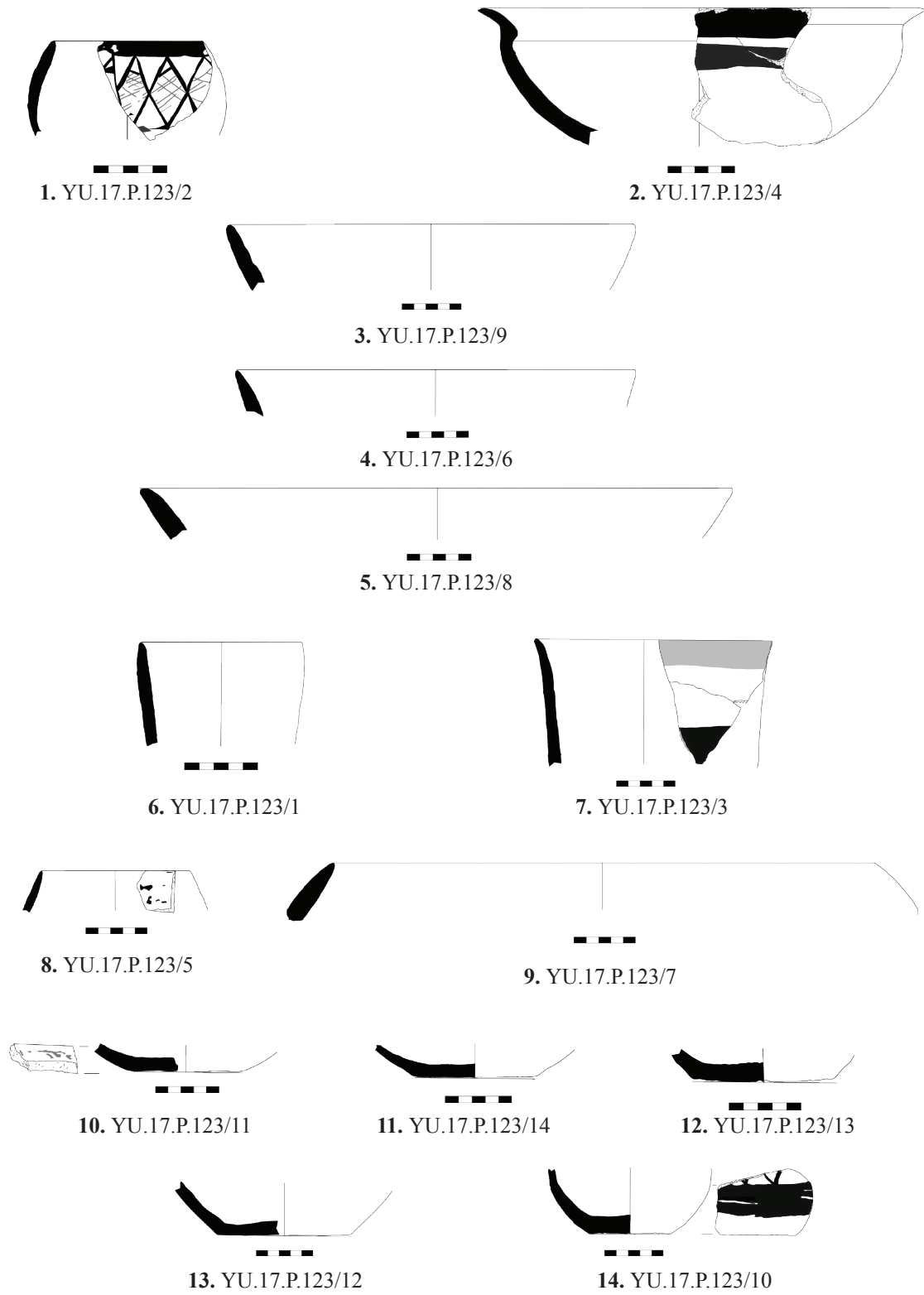


Fig. 5 Pottery from Sounding 1: F.10472.

No.	Pottery No.	SU	Ph.	Ware	Tech.	Firing	Incl.	Fabric color	Surf. Treat.	P.
1	YU.17.P.123/15	F.10472	3	FW	H	H	Ya2	10YR 7/3		R.
2	YU.17.P.123/16	F.10472	3	FW	H	H	Ya2	5YR 7/3		R.
3	YU.17.P.123/17	F.10472	3	FW	H	H	Ya1	10YR 7/3		R.
4	YU.17.P.123/18	F.10472	3	FW	H	H	Ya2	7.5YR 6/4	Slip W.	R.
5	YU.17.P.123/19	F.10472	3	FW	H	H	Ya2	10YR 7/2		R.
6	YU.17.P.123/20	F.10472	3	FW	H	H	Ya1	5YR 6/6		R.
7	YU.17.P.123/21	F.10472	3	FW	H	H	Ya1	5YR 6/4		R.
8	YU.17.P.123/22	F.10472	3	FW	H	H	Ma1	5YR 6/6		R.
9	YU.17.P.123/23	F.10472	3	FW	H	H	Ma1	7.5YR 7/4		R.
10	YU.17.P.123/24	F.10472	3	FW	H	H	Ma2	5YR 6/4	Slip W.	R.
11	YU.17.P.123/25	F.10472	3	FW	H	H	Ma1	2.5YR 6/6	Slip W.	R.
12	YU.17.P.123/26	F.10472	3	FW	H	H	Ma2	7.5YR 6/6		R.
13	YU.17.P.123/27	F.10472	3	FW	H	H	Ma1	5YR 6/4		R.
14	YU.17.P.123/28	F.10472	3	FW	H	H	Ma1	2.5Y 8/3		B.
15	YU.17.P.123/29	F.10472	3	FW	H	H	Ma1	10YR 6/1	Slip W.	Bl.
16	YU.17.P.123/30	F.10472	3	FW	H	M	Ya2	10YR 7/3 (I/O) 10YR 6/1 (C)		Br.
17	YU.17.P.123/31	F.10472	3	FW	H	H	Ya1	7.5YR 7/3		Br.
18	YU.17.P.123/34	F.10472	3	FW			Ya1	10YR 7/3		Br.

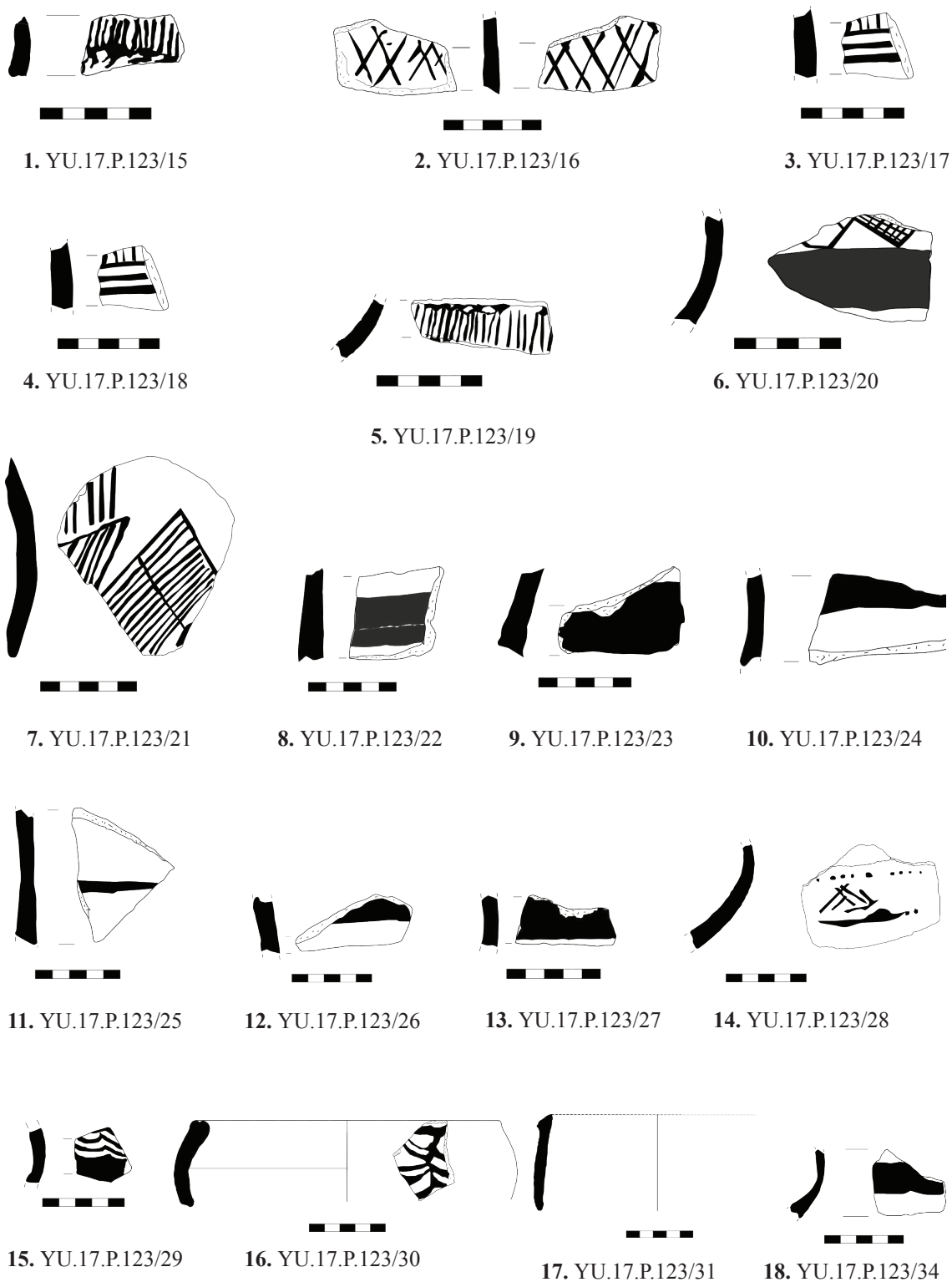


Fig. 6 Pottery from Sounding 1: F.10472.

No.	Pottery No.	SU	Ph.	Class	Tech.	Firing	Incl.	Fabric color	Surf. treat	P.
1	YU.17.P.122/7	F.10471	2	FW	H	H	Yb2	7.5YR 7/2	Bur-nish	
2	YU.17.P.122/5	F.10471	2	FW	H	H	Yb2	7.5YR 6/2		
3	YU.17.P.122/1	F.10471	2	FW	H	H	Ya1	7.5YR 7/4		R.
4	YU.17.P.122/4	F.10471	2	FW	H	H	Ma1	7.5YR 7/3		Br.
5	YU.17.P.122/2	F.10471	2	FW	H	H	Yb1	5YR 7/3		R.
6	YU.17.P.122/6	F.10471	2	FW	H	H	Yb1	10YR 7/4		
7	YU.17.P.122/3	F.10471	2	FW	H	H	Ya1	2.5YR 7/4		Br.
8	YU.17.P.122/8	F.10471	2	FW	H	H	Yb2	10YR 7/3		
9	YU.17.P.122/9	F.10471	2	CW	H	H	Yb2	2.5Y 7/1		
10	YU.17.P.121/5	F.10470	1	FW	H	H	Ya1	5YR 5/1		
11	YU.17.P.121/1	F.10470	1	FW	H	H	Ya1	10YR 7/2		Bl.
12	YU.17.P.121/3	F.10470	1	CW	H	H	Ya1	2.5Y 6/2		
13	YU.17.P.121/2	F.10470	1	CW	H	H	Ya1	10YR 6/1		Bl.
14	YU.17.P.121/4	F.10470	1	FW	H	H	Ya1	7.5YR 7/3		
15	Y.17.P.101/1	F.10470	1	FW	H	H	Ma1	10YR 7/1		

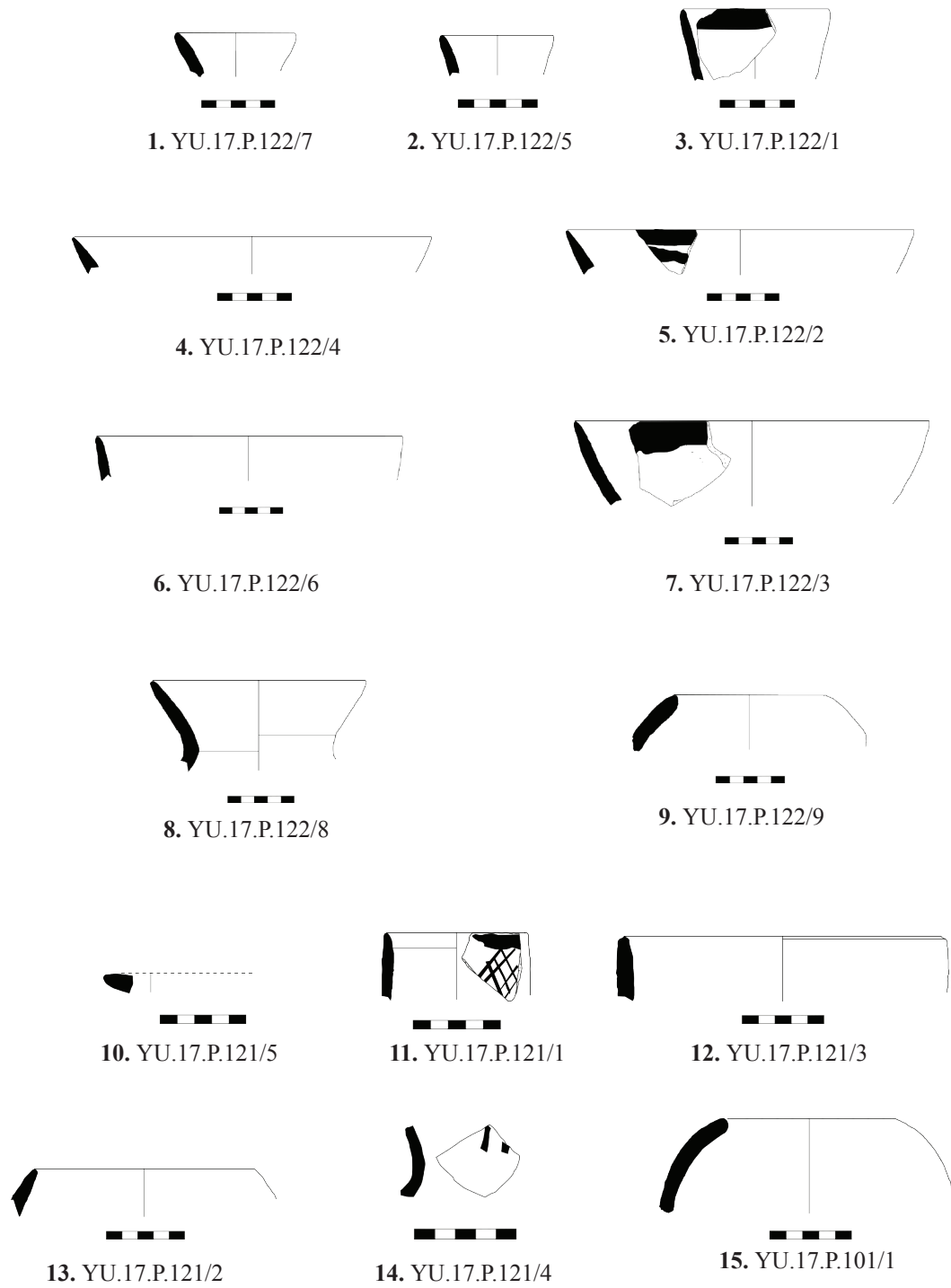


Fig. 7 Pottery from Sounding 1: F.10471 (1-9) and F.10470 (10-15).

No.	Pottery No.	SU	Ph.	Ware	Tech	Firing	Incl.	Fabric color	Surf. treat	P.
1	YU.17.P.103/1	F.10451	1	FW	H	H	Ma1	2.5Y 7/2		Br.
2	YU.17.P.103/3	F.10451	1	FW	H	H	Ma1	10YR 7/3		R.
3	YU.17.P.103/2	F.10451	1	BW	H	L	Ya1	2.5Y 7/2	Burnish	
4	YU.17.P.102/1	F.10451	1	FW	H	H	Ya1	10YR 7/3		Br.
5	YU.17.P.102/5	F.10451	1	FW	H	H	Ya1	10YR 7/3		R.
6	YU.17.P.102/6	F.10451	1	FW	H	H	Ma1	10YR 7/3		R.
7	YU.17.P.102/7	F.10451	1	FW	H	H	Ya1	10YR 6/3		R.
8	YU.17.P.102/8	F.10451	1	CW	H	L	Ya1	2.5Y 6/2	Burnish	
9	YU.17.P.102/4	F.10451	1	FW	H	H	Ma1	10YR 8/3	Slip W.	R.
10	YU.17.P.102/2	F.10451	1	FW	H	H	Ma1	10YR 7/3		Bl.
11	YU.17.P.102/3	F.10451	1	FW	H	H	Ma1	10YR 7/3		R.
12	YU.17.P.102/9	F.10451	1	FW	H	H	Ya1	2.5Y 6/3		
13	YU.17.P.102/10	F.10451	1	FW	H	H	Ya1	7.5YR 7/3		R.

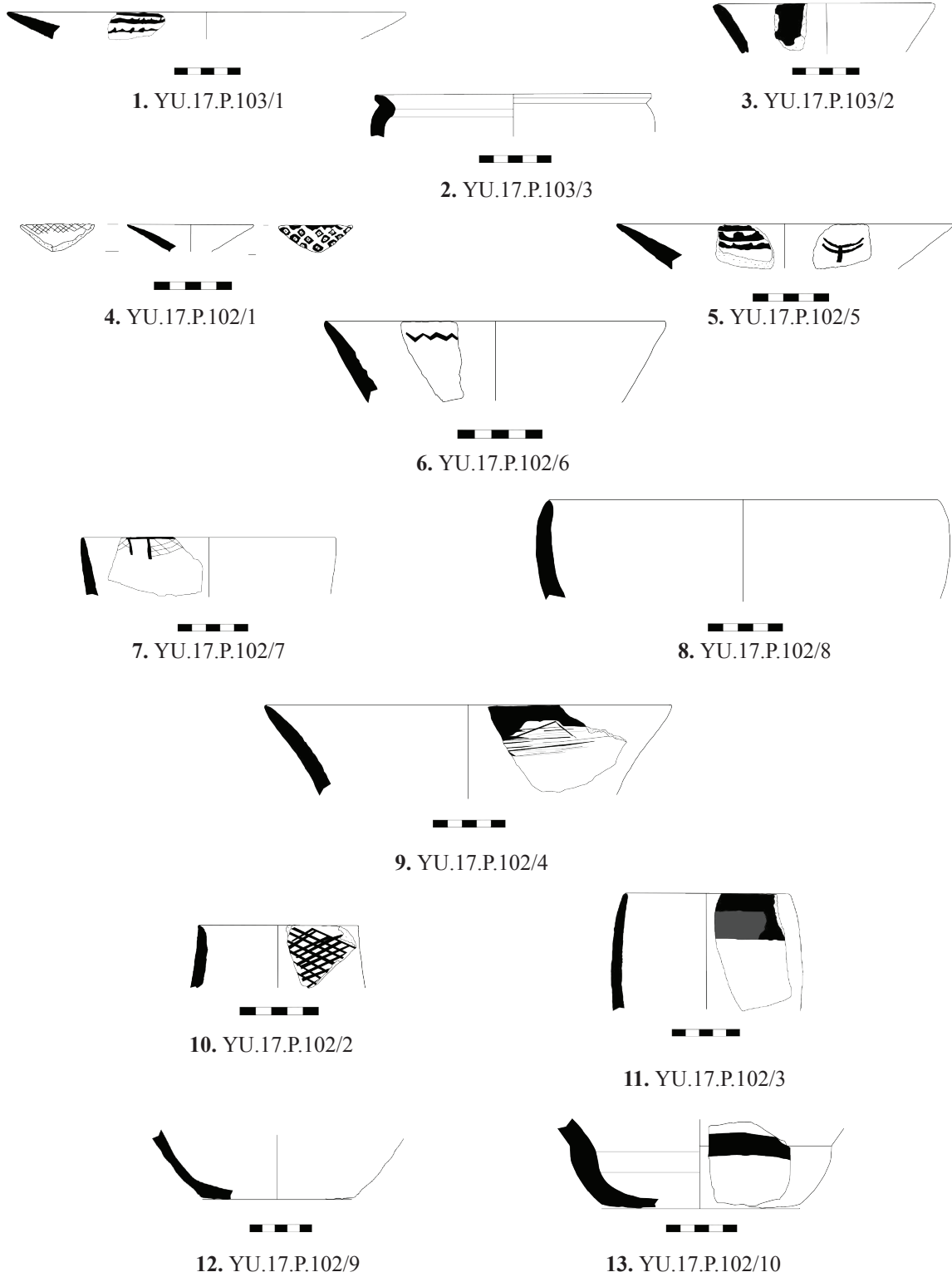


Fig. 8 Pottery from Sounding 1: F.10451.

No.	Pottery No.	SU	Ware	Techn.	Firing	Incl.	Fabric color	Surf. treat	P.
1	YU.17.P.100/2	F.10450 (Topsoil)	FW	H.	H.	Ya1	5YR 7/3		
2	YU.17.P.100/4	F.10450 (Topsoil)	FW	W.?	H	Ya1	2.5Y 8/3		
3	YU.17.P.100/1	F.10450 (Topsoil)	FW	W.	H	Ya2	2.5Y 5/1		
4	YU.17.P.100/10	F.10450 (Topsoil)	FW	H	H	Ya1	10YR 6/1		
5	YU.17.P.100/5	F.10450 (Tospoil)	FW	W.?	H.	Ya2	2.5Y 6/2	Slip R.	
6	YU.17.P.100/6	F.10450 (Tospoil)	FW	H.	H.	Ya1	7.5YR 7/3		R.
7	YU.17.P.100/8	F.10450 (Topsoil)	FW	H.	H.	Ya1	2.5Y 8/2		
8	YU.17.P.100/7	F.10450 (Topsoil)	CW	H.	M.	Ya2	2.5Y 7/2 (I/O) 2.5Y 4/1 (C)	Burnish	
9	YU.17.P.100/9	F.10450 (Topsoil)	CW	H.	M.	Yb2	10YR 6/3 (I/O) 10YR 5/1 (C)		

Fig. 10

Lithics from Sounding 1

- 1) Retouched tool, flint (10YR 6/3), l. 39mm; w. 16mm; th. 4mm (F.10471)
- 2) Retouched blade, obsidian, l.83mm; w.20mm; th.6mm (F.10451)
- 3) Bladelet without retouch, transversal fracture, obsidian, l. 29mm; w.10mm; th. 3mm (F.10471)
- 4) Flake, flint (7.5YR 4/2), l.55mm; w.28mm; th. 33mm (F.10471)
- 5) Bladelet, flint (5YR 6/2), l. 35mm; w.11mm; th. 3mm (F.10472)

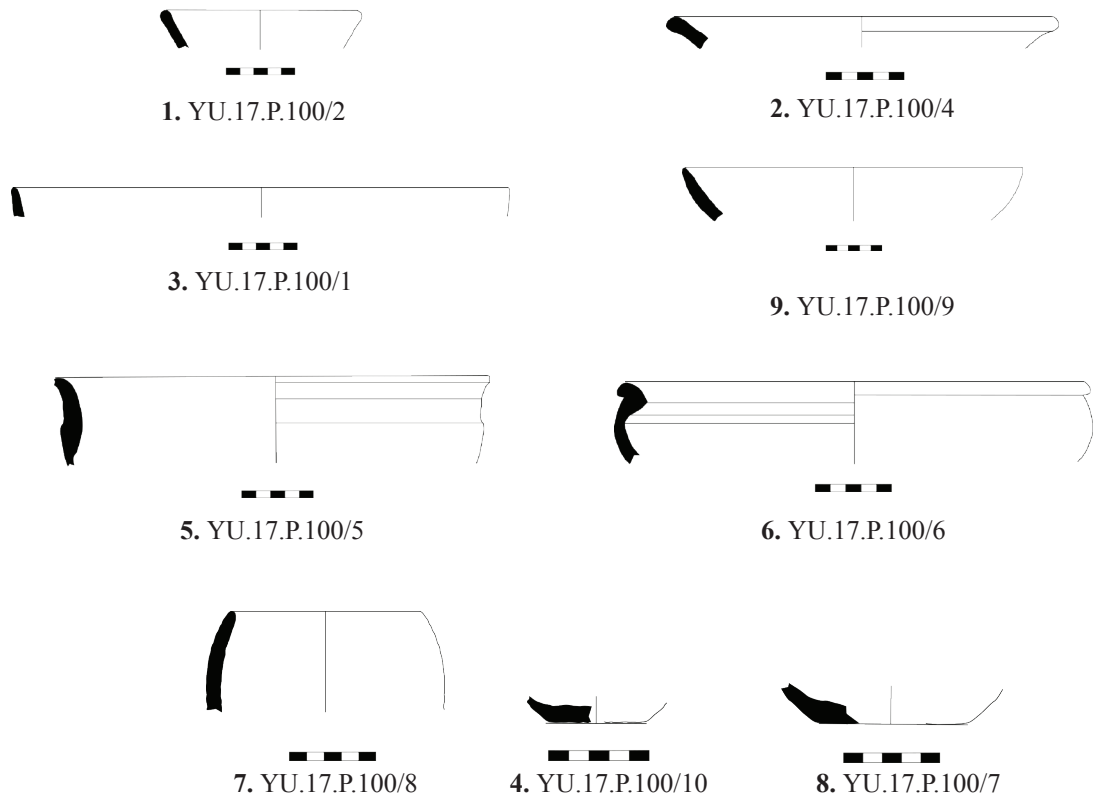


Fig. 9 Pottery from Sounding 1: F.10450 (Topsoil).

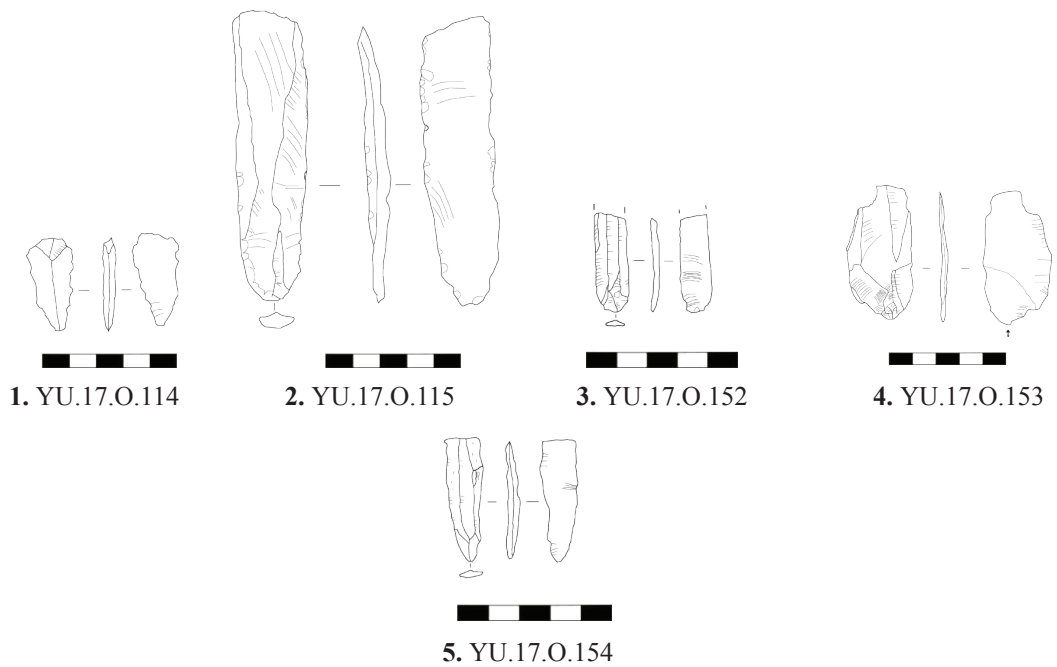


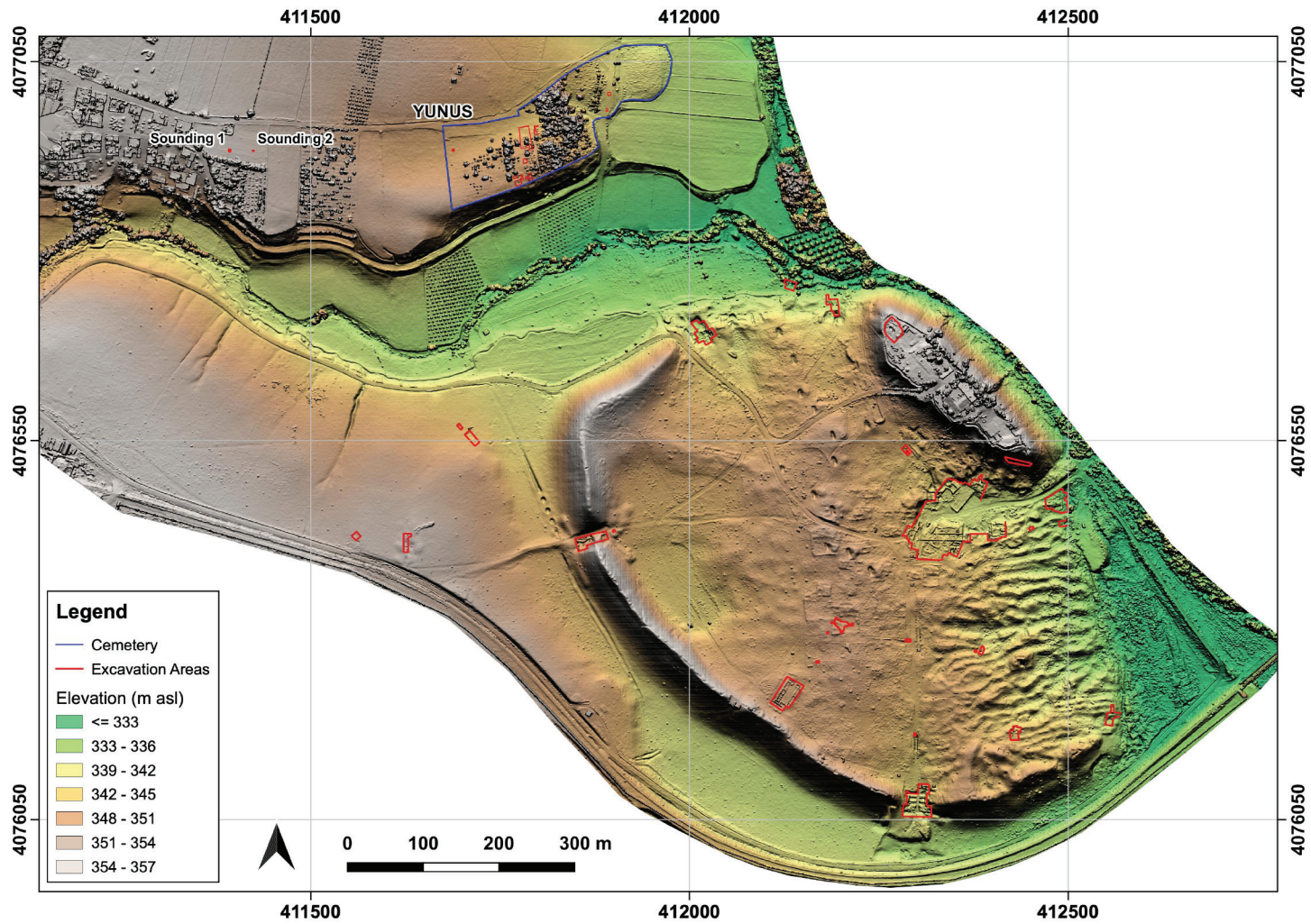
Fig. 10 Lithics from Sounding 1.

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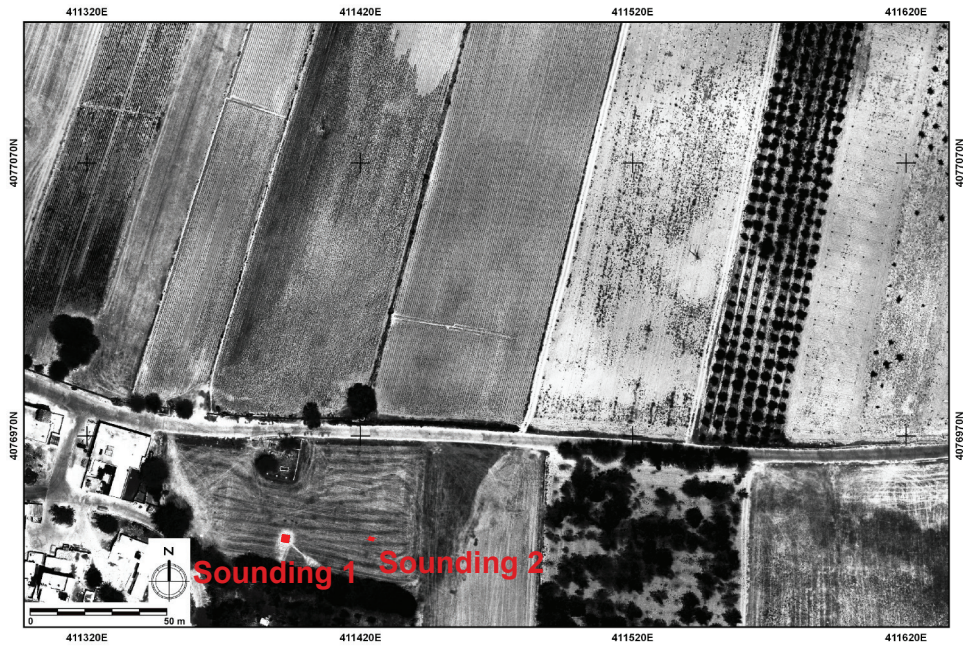
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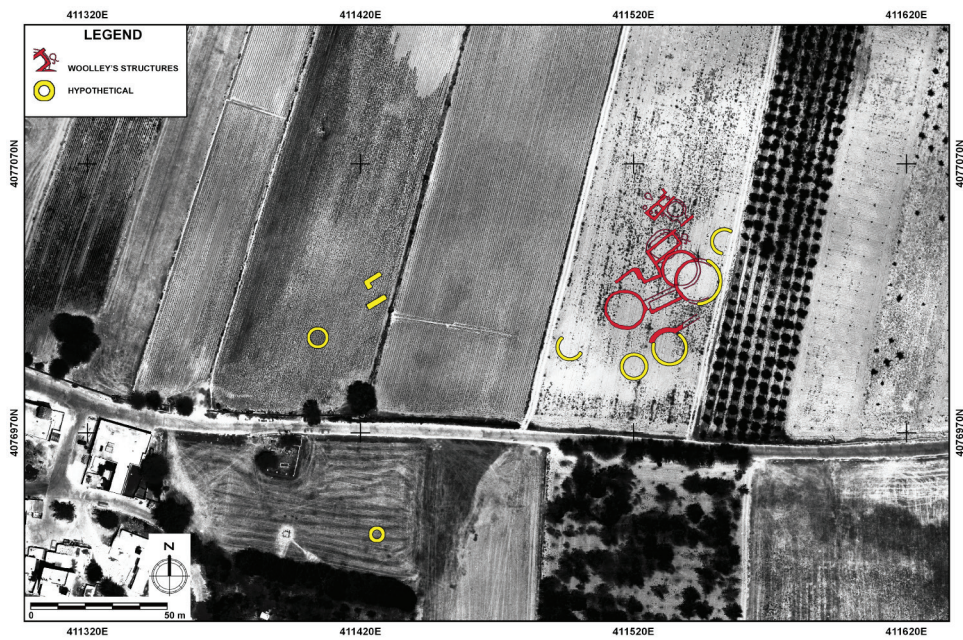
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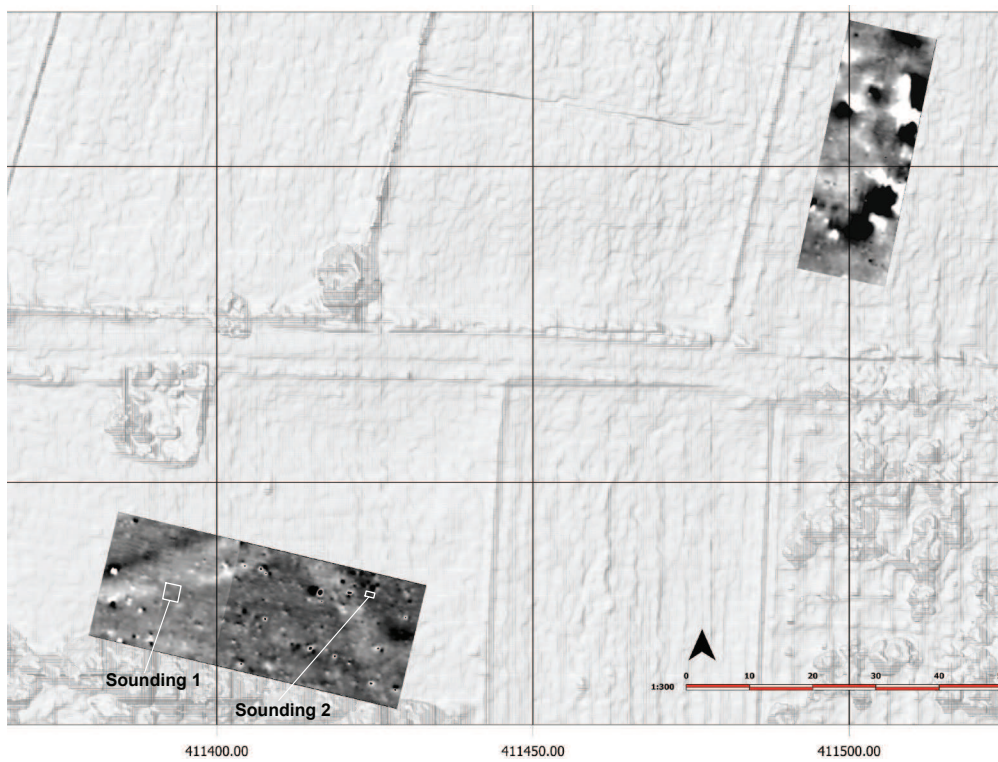
Digital elevation model of Karkemish and of the Yunus area. Sounding 1 and Sounding 2 are indicated in the South Field.



1 The Yunus and Yunus Kilns areas. Sounding 1 (2017) and Sounding 2 (2019) in the South field are indicated in red. Sub-circular and irregular cropmarks are visible in the North field after enhancement of the UAV photo.



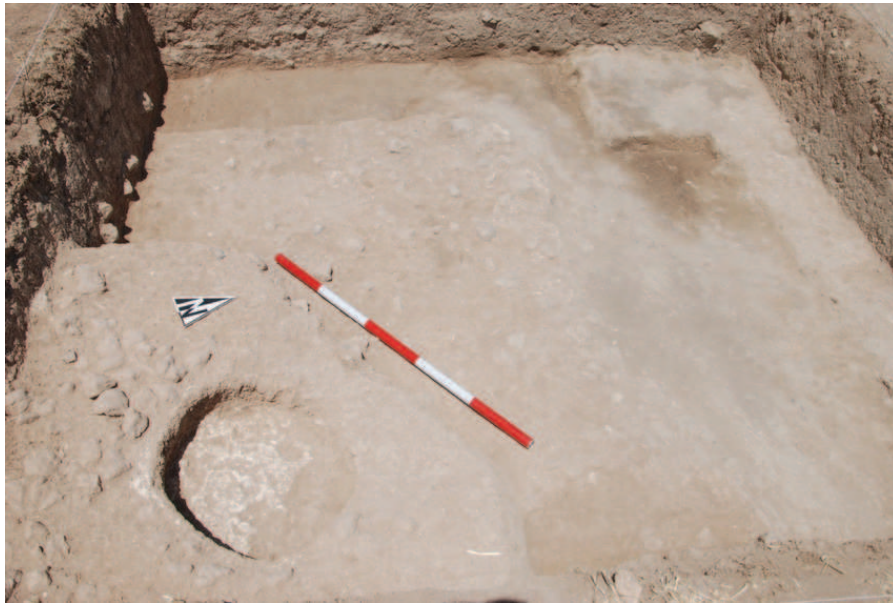
2 Interpretation of cropmarks (the evidence is visible in the preceding image) and of the magnetogram (the evidence is visible in the following image), with the hypothetical placing of the structures documented by Woolley and the interpretation of other visible features.



1 Geophysics in the South and North Fields. Soundings 1 and 2 are indicated in the South Field (Sounding 2 intercepts to the West a small circle, visible in the magnetogram and drawn in Pl. II: 2 bottom).



2 General view of Sounding 1: F. 10470 and cut P. 10457, view from South-West.



1 Sounding 1: Floor L. 10458 (Phase 1) and structure F. 10474 with circular pit P. 10477 (Phase 2). View from the East.



2 Sounding 2 at the beginning of excavation. View from South-East.



1 Sounding 2: L.10482 with small cut P. 10483 near the North arrow. View from the West.



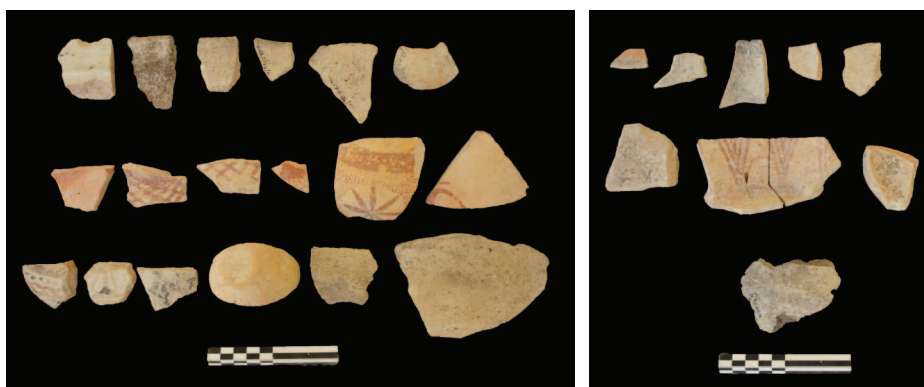
2 Sounding 2: final phase and general view of the excavation area from the South-East.



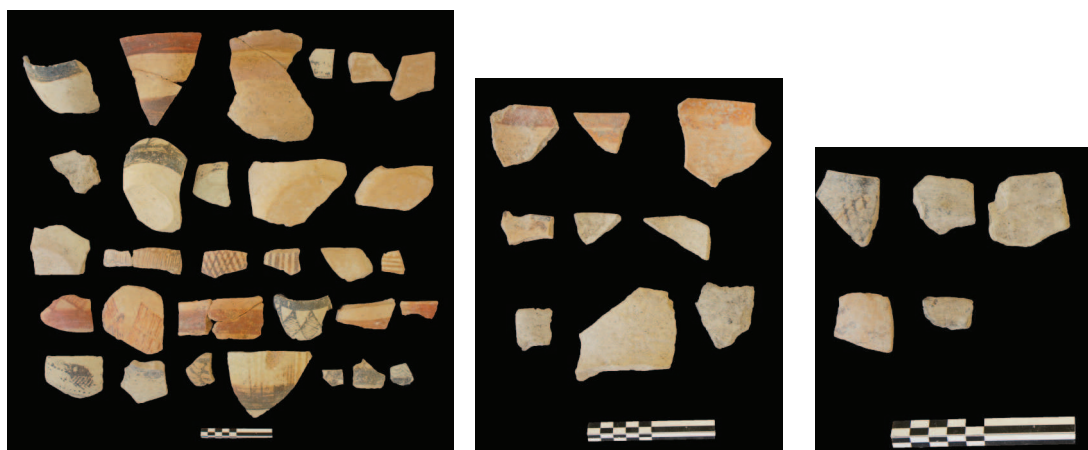
1 Pottery from the survey (South Field, YU.19.P.133).



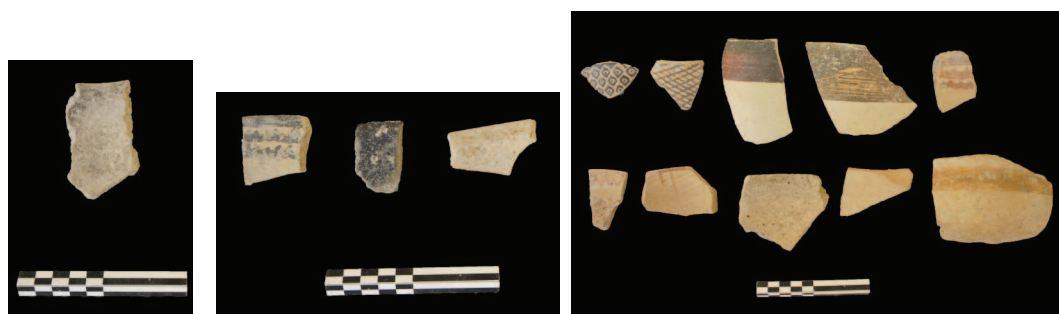
2 Left: Pottery from the survey (North Field, YU.19.P.131). Right: Pottery from Sounding 1, L.10458 (YU.17.P.104).



3 Pottery from Sounding 1. Left: F.10479 (YU.17.P.126). Right: F.10473 (YU.17.P.124).



1 Pottery from Sounding 1. Left: F.10472 (YU.17.P.123). Center: F.10471 (YU.17.P.122). Right: F.10470 (YU.17.P.121)



2 Pottery from Sounding 1. Left: F.10470 (YU.17.P.121, YU.17.P.101). Center and right: F.10451 (YU.17.P.103; YU.17.P.102).



3 Pottery from Sounding 1 and Sounding 2. From the left: Topsoil in Sounding 1 (F.10450, YU.17.P.100). Sounding 2: F.10480 (YU.19.P.128); F.10481 (YU.19.P. 129); F. 10482 (YU.19.P.130).



1. YU.17.O.114



2. YU.17.O.115



3. YU.17.O.152



4. YU.17.O.153



7. YU.19.O.51



5. YU.17.O.154



6. YU.17.O.156



8. YU.19.O.56



9. YU.19.O.52



10. YU.19.O.55



11. YU.19.O.53

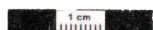


12. YU.19.O.54



13. YU.19.O.57

Lithics from Sounding 1 (1-6) and Sounding 2: 7,8) Topsoil; 9,10) F.10481; 11-13) F.10480.



1. YU.17.O.43



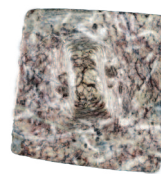
2. YU.17.O.44



4. YU.17.O.48



5. YU.19.O.49



3. YU.17.O.45



6. YU.19.O.50



7. YU.19.O.74



8. YU.19.O.75



9. YU.19.O.82



10. YU.19.O.83

Objects from the survey (South Field).