



## Phase I - Late Chalcolithic period

Simone Nannucci

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# **Hirbemerdon Tepe Archaeological Project 2003-2013 Final Report: Chronology and Material Culture**

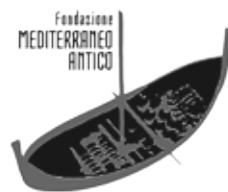
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# Chapter 2. Phase I: Late Chalcolithic period

Simone Nannucci

Until recently, the chronology of the fourth millennium BCE in the northern part of the ‘Greater Mesopotamia’ was highly problematic and debated, partly due to mistakes and misunderstandings about the stratigraphic sequences of the main sites of the region.

The academic literature showed a wide number of chronological schemes and labels, based essentially on the traditional synchronization of strata XIA-VIIIa of Gawra (with many internal differentiations) with the sequence ‘Early’, ‘Middle’ and ‘Late Uruk’ and ‘Jemdet Nasr’ of southern Mesopotamia (e.g., Porada 1965; Buchanan 1967; Forest 1983; Rothman 1988; von Widecke 1990). During the last decade of the twentieth century, many researchers have attempted a synchronization of the different regional chronologies on the basis of new data from modern stratigraphic excavations carried out in Syria and Turkey and the reconsideration of fundamental stratigraphic sequences like those of Gawra and Nineveh<sup>1</sup> (e.g., Gut 1995; Trufelli 1997; Rova 1999-2000; Rothman 1988; 2002a).

Three conferences entirely or partly dedicated to this topic have been organized (Marro and Hauptmann 2000; Rothman 2001; Postgate 2002). In particular, the conference organized by Rothman (2001) at the School of American Research (*SAR*) in Santa Fe proposed a new periodization valid for the entire ‘Greater Mesopotamia’, widely accepted by the majority of scholars but often with some variations. On this occasion, many different definitions suitable for a basic chronologic terminology<sup>2</sup> have been taken into account, and finally the label ‘Late Chalcolithic’ (LC) has been chosen for the entire period, with an internal division in five consecutive phases, from LC 1 (i.e., Post-‘Ubaid’) to LC 5 (i.e., Late Uruk).<sup>3</sup> This periodization has been made on the basis of the strong data obtained by the radiocarbon dating of many sites (Wright and Rupley 2001), in turn specified by the relative regional chronologies based on the synchronization of each sequence in reason of their material culture, in particular pottery and glyptics. Here we are going to use the *SAR* chronology and its periodization, combined with some elements from the chronology by Gut<sup>4</sup> (Rothman 2002b:

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1 About the Syro-Iraqi Jazirah, the reconsideration of the data from Nineveh’s Deep Sounding and its connection to the Gawra sequence allowed a remarkable improvement of the regional chronology. Gut proposed a division in two main periods, both divided into different phases: an early “Gawra” period (A and B) and a late “Uruk” period (A to D) (Gut 1995; 2002). The “Gawra” period should represent a pure “indigenous” period preceding the contact of northern sites with the “Uruk” southern Mesopotamia, while the following period was characterized by different scales of interaction between the northern “indigenous” and the southern “exogenous” elements.

2 Some different names were used to describe the phases of this period, with the result that the problem was still not clarified. “Uruk” could be the proper term when it was used to point the cultural phenomenon out, but on the other hand it could be misleading when used as a chronological marker. Also the term “Gawra” was clearly inadequate for the periodization in the northern regions of the “Greater Mesopotamia”.

3 Gut (2002: 22) does not agree about this sequence, because the regional and the sub-regional variety is not taken into account; moreover, the chronological meaning of the presence or the absence of certain phases in each site is not clear.

4 In any case the lower limit of the *SAR* periodization is not the same as Gut’s “Uruk” period, because the “Uruk D” phase (End Uruk) comprises the post-LC5 developments, dated between the last quarter of the fourth and the beginning of the third millennia BCE (Gut 2002: 22).



51; Brustolon and Rova 2007: 6). There is no unanimous agreement between the scholars about the absolute dating: within the proposed dating it is possible to detect some fluctuations consisting of one century or more (see: Schwartz 2001; Wright and Rupley 2001; Rothman 2002a; 2002b; Matthews 2003a; Brustolon and Rova 2007; McMahon and Oates 2007) (Tab. 2).

Periods SAR	Periods Gut	Southern Mesopotamia	Absolute dating					
			Wright and Rupley 2001	Schwartz 2001	Rothman 2002a; 2002b	Matthews 2003a	McMahon and Oates 2007	Brustolon and Rova 2007
LC 1	End-'Obel	Final 'Ubaid	4300-4150		4300-4100	4200-4000		4200-4000
LC 2	Gawra A-B	Early Uruk	4150-3800	4200-3900	4100-3800	4000-3800	4200-3900	4000-3700
LC 3	Uruk A (?)	Middle Uruk (early)	3800-3500	3900-3600		3800-3600	3900-3400	3700-3500
LC 4	Uruk B	Middle Uruk (late)	3500-3350	3600-3400		3600-3400		3500-3300
LC 5	Uruk C	Late Uruk	3350-3100		3300-3000	3400-3000		3300-3100

Table 2 - Chronology and periodization of the Late Chalcolithic period.

## Stratigraphy and Architecture

The earliest phase of occupation at the site is dated to LC 3, located in Area B in the Outer Town. Unfortunately, the level is poorly preserved and has been disturbed by the course of the river and building activity, and is the reason why a large part of the evidence is absent.<sup>5</sup> The excavations have shown the eroded remains of rows of bricks, most probably part of a wall or of a bench (B0049), and a shallow pit filled with a thick layer of ashes (B0021, B0022, B0023)(Fig. 6.1). The large amount of cooking pottery associated with this evidence makes the interpretation of an area for cooking within a domestic context possible. Even though tools associated with craft production (i.e., four flint blades and a grinding stone (Pl. CXX-VI: 1-2) were found in these layers, unfortunately the limited surface of the excavated area and its poor preservation does not provide further data for the reconstruction of this level (Laneri *et al.* 2006b: 158; 2008c: 178-179; 2009: 230).

## Pottery Assemblage

### Methodological criteria

This discussion takes into account part of the pottery recovered during the excavations of Phase I in Area B. A study of the ceramic material has been carried out during the 2005 and 2006 campaigns. It essentially consists of sherds presenting diagnostic features (i.e., complete forms, complete profiles and rim potsherds). However, since the largest part of the analyzed repertoire consists of sherds, the comparison with materials from other sites is difficult, especially when they consist of assemblages of complete vessels. As noted by Nissen (1970: 144), when the repertoire is mainly composed by sherds, the typology can be defined on the

<sup>5</sup> The ceramic material ascribed to this level is present also in later deposits.

basis of few diagnostic features (i.e., rim form, decoration, etc.); on the other hand, complete vessels include a wide set of characteristics (i.e., rim form, complete profile section, base form, decorations, and other secondary elements such as handles, spouts, lugs etc.). Therefore, when a typology is thoroughly defined on the basis of sherds, there is a danger in distinguishing types on the basis of minimal variations in the rim shape or the neck angle; these variations usually do not correspond to the potter's intention (McAdam and Mynors 1988: 44). Therefore in this repertoire it is also possible that types or different variants can be interpreted as variable examples of the same vessel shape.

## **Main classes and diagnostic forms from Phases LC 3 and LC 4**

The main diagnostic class characterizing these two phases is the so-called Chaff-Faced Ware (CFW). This pottery production belongs to a wide horizon extending from the upper courses of the Tigris and Euphrates to the upper Khabur valley and the Jazirah in northern Iraq; CFW is characterized by buff greyish/brown coarse fabric whose section is often blackened due to incomplete oxidation. The most common diagnostic forms belonging to this class are the oblique-rimmed bowls - with a thickening more or less marked inside or inside and outside, better known as Hammerhead Bowls - and the large deep carinated bowls, the so-called Casseroles. The study of ceramics found in stratigraphical contexts recently excavated has made it possible to distinguish between two variants for both classes, corresponding roughly to two subsequent phases during LC 3 and LC 4 (Pollock and Coursey 1995: 108-111; Pearce 2000: 116-118).

Regarding the Hammerhead Bowls, two variants have been identified: an 'early' form with a simple rim (i.e., the rim is more rounded and less defined compared to the later variant), characterizing LC 3 and probably the first part of the following phase,<sup>6</sup> and a 'mature' variant with an enhanced rim (i.e., the rim presents a marked thickening both inside and outside) typical of LC 4.<sup>7</sup>

The same observations are possible for the Casseroles: an 'early' variant has been identified on the basis of the simple or slightly thickened rim, characteristic of the LC 3 and the beginning of LC 4,<sup>8</sup> and a variant with an enhanced rim (i.e., the rim is significantly thickened) typical of LC 4.<sup>9</sup>

Other peculiar vessel forms of this assemblage are bowls with simple inverted rim and an almost rounded carination,<sup>10</sup> generally in relatively fine ware; jars with internally grooved neck, present during the LC 3 (e.g., Hacinebi A) and then widespread in the following phase;<sup>11</sup> and jars with short neck marked with a sharp angle on the interior<sup>12</sup> that is also typical in LC 4 but are already recorded in LC 3 and in earlier phases.<sup>13</sup>

6 Attested, for example, at Brak HS1 6 (Felli 2003: fig. 4.17: 12), Leilan V (Schwartz 1988a: fig. 57: 2) and Hacinebi A (Pearce 2000: fig. 6: a-b; 7: e).

7 Examples are found at Brak TW 14 (Oates and Oates 1993: fig. 52: 2), Leilan IV (Schwartz 1988a: fig. 52: 7) and Hacinebi B (Pearce 2000: fig. 9: a).

8 As suggested by its presence in the repertoire of Brak HS1 6 (Felli 2003: fig. 4.19: 7), Leilan V (Schwartz 1988a: fig. 59: 5) and Hacinebi A (Pearce 2000: fig. 3: d).

9 As demonstrated by the examples at Brak TW 14 (Oates and Oates 1993: fig. 54: 69), Leilan IV (Schwartz 1988a: fig. 54: 2) and Hacinebi B (Pearce 2000: fig. 10: c).

10 Examples of this type are common in the central part of the fourth millennium BCE (LC 3 e LC 4). They appear at Hacinebi A (Pearce 2000: 117; fig. 6: d-e) and Leilan V e IV (Schwartz 1988a: fig. 53: 8, 10, 12; 60: 7). Similar types are also present during the late "Ubaid" period (e.g., Hammam et-Turkman IV - Akkermans 1988b: fig. 7: 90-93) and allow us to consider that their appearance can be dated to the first part of the fourth millennium BCE (i.e., LC 1 and LC 2).

11 This type is recorded both among coarse CFW and fine ware. It is present at Brak TW 16 (Oates and Oates 1993: fig. 51: 19; 53: 57), Leilan V (Schwartz 1988a: fig. 60: 5) and Hacinebi A (Pearce 2000: fig. 4: e, f, g), as well as among the material record in the Iraqi Jazirah survey (Wilkinson and Tucker 1995: fig. 66: 10-11) and Hamoukar survey (Ur 2010: fig. B13: 7-9).

12 The inner part of the neck can be straight or concave, whereas the rim is usually thickened, although a wide number of morphological versions are recorded.

13 Documented at Brak HS1 (Felli 2003: fig. 4.20: 1-2, 15, fig. 4.23: 2), Leilan V-IV (Schwartz 1988a: fig. 54: 7, 8; fig. 60: 1-2), Hammam VB (Akkermans 1988b: fig. 10: 156-157) and Habinebi B2 (Pearce 2000: fig. 15: d-e).

Another diagnostic class datable to the LC 3 - probably in its early stage - is a middle-coarse, mainly vegetal-tempered ware with a homogeneously grey and slightly burnished surface, called “Uruk grey” ware<sup>14</sup>. This class defines a pottery horizon recognized first by Gut (1995: 250-251; 292) as “Uruk A” phase, which marks the transition between the LC 2 and the period of larger distribution of the typical CFW assemblage during LC 3 and LC 4.<sup>15</sup> Typical forms are the bowl with a slightly thickened and rounded rim<sup>16</sup> and the hole-mouth jar with a slightly raised rim.<sup>17</sup> The list of diagnostic types proposed by Gut (1995: 250-251; 261-262; 2002: 20) for her “Uruk A” on the basis of the evidence from the central part of the Ninevite 3 sequence is certainly incomplete, because for this phase only a small amount of ceramic was recovered and recorded by the excavators, with the exception of “Uruk grey” ware. Indeed “Uruk A” assemblage should be integrated with many LC 2 forms that were still in use (e.g., WFPs, bowls with internally bevelled rim<sup>18</sup>, jars with internally hollowed rim and double-mouthed jars) and the other new CFW forms not taken into account by Gut. As already mentioned, a CFW assemblage very similar to that of the second part of the LC 3 is in use during the LC 4,<sup>19</sup> although it compares with an increasing number of southern “Middle Uruk” types (e.g., Leilan IV, Hacinebi late B1 and B2). Some forms do not show significant variations compared to the previous ones (i.e., jars with internally grooved neck and jars with short neck marked with a sharp angle on the interior), although they look more typical for this phase, while others appear with their “mature” variants (i.e., Hammerhead Bowls and Casseroles with an enhanced rims)<sup>20</sup>.

## **Phase I pottery assemblage at Hirbemerdon Tepe**

The pottery assemblage during Phase I is characterized by the prominent presence of CFW (Pl. CLXXX-VII). The largest part of diagnostic fragments is composed of medium-coarse or coarse ware rich in vegetal inclusions as well as mineral inclusions (i.e., grit, lime and mica) in different quantity and quality. The majority of coarse ware vessels are handmade and present a black cross-section. The surfaces often appear summarily smoothed and, in some cases, traces of scraping, probably made with flint or other sharp tools, are present. Vessels made with medium quality fabrics are often wheel-made or wheel finished and can present burnished or smoothed surfaces. Since the investigated surface and the amount of recovered ceramics is not so wide, it is not surprising that the presence of fine ware classes is low.

Among the recorded open forms are simple rim bowls with a curved profile (Pl. I: 2) and slightly carinated simple rim bowls (Pl. I: 3). These examples are made with medium quality fabrics with vegetal inclusions, although a few mineral and stone inclusions are also present. These types have similarities

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14 However, as shown by Rova (1999-2000: 185), the diagnostic use of “Uruk grey” ware can be problematic, because its definition is still not clear and its diffusion is apparently limited and heterogeneous.

15 The chronological limit between the “Uruk grey” ware horizon and the CFW horizon is still not clear, however it should be located during the LC 3 (Brustolon and Rova 2007: 22).

16 Recorded at Nineveh MM -45/-39 (Gut 1995: Tafel. 57-58: 848-857), Brak HS6 1 (Matthews 2003b: fig. 3.16: 4), Hacinebi A (Pearce 2000: fig. 5: a-e) and Hammam et-Turkman VB (Akkermans 1988b: fig. 9: 146).

17 The diagnostic use of this form can be problematic because of its presence during the LC 2 and during LC 3 only in “Uruk grey” ware (Gut 1995: 229), while at Gawra it is typical of XII-XI stratum and then it subsequently disappears (Tobler 1950: 154). It is recorded at Nineveh, Middle Ninevite 3 (Gut 2002: fig. 15: 9), Grai Resh IV-II (Lloyd 1940: fig. 7: 9), al-Hawa (Ball *et al.* 1989: fig. 28: 38-40), Hammam et-Turkman VB (Akkermans 1988a: pl. 107: 101; 108: 102-103) and Kurban VI (Algaze 1986: pl. 3: Q).

18 See the examples of Hammam et-Turkman VB (Akkermans 1988b: fig. 9: 140) and Hacinebi A (Pearce 2000: fig. 2: g) whose rims look more rounded than in the previously.

19 Gut (1995: 98; 251, note 681) ascribes also the casseroles (Gut 1995: Tafel 61: 881) and carinated bowls with a vertical rim to this phase.

20 Hammerhead bowls with a simple rim are also documented for the first part of the LC 4. For the “mature” hammerhead bowls see: Brak TW 14 (Oates and Oates 1993: fig. 52: 2), Leilan IV (Schwartz 1988a: fig. 52: 7), Hacinebi B (Pearce 2000: fig. 9: a). For “mature” casseroles see: Brak TW 14 (Oates and Oates 1993: fig. 54: 69), Leilan IV (Schwartz 1988a: fig. 54: 2), Hacinebi B (Pearce 2000: fig. 10: c).

at Hacinebi A (Pearce 2000: fig. 5: g), Hammam et-Turkman VB (Akkermans 1988a: pl. 104: 79) and Leilan IV (Schwartz 1988a: fig. 53: 3, 7). An additional similarity for the slightly carinated simple rim bowls comes from Pit 203 in Area C01 at Kurban VI (Algaze 1990: pl. 17: g). Bowls with internally bevelled rim (Pl. II: 8) can be compared with findings from Hacinebi A (Pearce 2000: fig. 2: f-i), Giricano (Schachner 2002b: fig. 44: h), Nineveh "Uruk (A)" (Gut 1995: Tafel 54: 810), Grai Resh IIA (Kepinski 2011: pl. 1: 9), Leilan V (Schwartz 1988a: 58: 5-7), Brak CH B 9, 11 & TW (Fielden 1981: fig. 1: 33; Oates J. 1985: fig. 1: 5), Chagar Bazar (McMahon *et al.* 2001: fig. 3: i-k) and Hammam et-Turkman VB (Akkermans 1988a: pl. 104: 76-78). These bowls are typical in the LC 2 assemblage, but a large proportion of the examples are characterized by painted horizontal bands around the rim and blobs of paint. Some examples from Hirbemerdon are totally without decoration and realized with vegetal tempered fabrics in different qualities. Another type present at Hirbemerdon is represented by simple flat rim bowls that can be slightly inwardly bevelled (Pl. I: 5), which in the assemblage at Hacinebi A are assimilated to the Hammerhead Bowls type in their "early" variant (Pearce 2000: 117). This type is well-attested, sometimes with slightly different inclinations, at Hacinebi A (Pearce 2000: fig. 7: f-g), Karatut (Schwartz 1988b: fig. 5: 1), Kurban VI (Algaze 1990: pl. 30: D, F), Grai Resh IIA (Kepinski 2011: pl. 1: 4-6), Leilan V (Schwartz 1988a: 58: 1), Brak CH B & HS1 7-5 (Fielden 1981: fig. 1: 34; Felli 2003: fig. 4.17.3; 4.22.2), Chagar Bazar (McMahon *et al.* 2001: fig. 5: e; 3: i, m) and in 'Amuq F (Braidwood and Braidwood 1960: fig. 174: 14). Another set of bowls with inside and/or outside slightly thickened and flattened rims similar to the last type and made with medium-coarse ware, can be considered as part of the wide category of the Hammerhead Bowls. These bowls are present in three groups: the shallow medium-sized Hammerhead Bowls with rounded flat rim (Pl. I: 4), the Hammerhead Bowls with simple flat to slightly rounded flat rim (Pl. I: 6) and the Hammerhead Bowls with in-turned thickened bevelled rim (Pl. I: 7). Bowls of the first group are recorded at Hacinebi A (Pearce 2000: fig. 5: d), Kurban VI A-B (Algaze 1990: pl. 30: G), Nineveh -38 e -36 (Gut 1995: Tafel 57: 848, 850; 122: 1490 - Uruk Grau), Leilan V-IV (Schwartz 1988a: fig. 52: 13; fig. 58: 2), Brak HS1 4-3 (Felli 2003: fig. 4.24.20) and Chagar Bazar (McMahon *et al.* 2001: fig. 5: e). Bowls of the second group are present at Hacinebi A (Pearce 2000: fig. 7: g, i), Karatut (Schwartz 1988b: fig. 5: 2), Kurban VI (Algaze 1990: pl. 22: H), Brak HS1 7-6/1 (Felli 2003: fig. 4.17.14; 4.21.16) and in 'Amuq F (Braidwood and Braidwood 1960: fig. 174: 14). The last group of bowls has been recorded at Hacinebi A (Pearce 2000: fig. 6: c; 7: i), Karatut (Schwartz 1988b: 5: 8), Kurban VI (Algaze 1990: pl. 17: J; 21: B), Nineveh (-63 Uruk) (Gut 1995: Tafel 119: S458), Leilan IV (Schwartz 1988a: 52: 11) and Brak HS1 5 (Felli 2003: fig. 4.22.8).

Among the bowls two small types can also be distinguished and are characterized by a medium-fine ware with a well mashed vegetal inclusions, tiny particles of lime and mica: a small shallow simple rim bowl (Pl. II: 11) and a small sinuous-sided bowl (Pl. II: 10). A comparison for this last type comes from Kurban VI (Algaze 1990: pl. 17: B). Regarding the open forms, simple rim dishes or simple rim shallow bowls are also recorded, made with different kinds of fabrics (Pl. I: 1; pl. II: 9), comparable with those from Hacinebi A (Pearce 2000: fig. 2: b - c) and Kurban VI (Algaze 1990: pl. 17: c). Beakers are not so common. The only type identified, documented by two complete samples, is characterized by an S profile with a simple rim and a flat base (Pl. II: 12-13). This type can be accurately compared with a beaker from Giricano (Schachner 2002b: fig. 45: j).

Among the closed forms, jars with an everted short neck and a simple rim are well attested. Unfortunately, samples with a complete profile have not been found, but rather many fragments of rounded carinated walls that allow for a comparison with the so-called Casseroles, particularly the type characterized by the internal junction with a bevelled angle (Pl. III: 18; pl. IV: 24; pl. V: 27). These samples can be compared with similar findings from many sites of the region, such as Giricano (Schachner 2002b: fig. 45: b), Hacinebi A (Pearce 2000: fig. 3: b), Kurban VIA (Algaze 1990: pl. 25: I) and Brak HS1 6 (Felli 2003: fig. 4.20.14). A variation of this type presents an internal rounded junction and a slightly thinned rim (Pl. III: 19; pl. IV: 23; pl. V: 28-30, 32) and can be compared with samples from Hacinebi A (Pearce 2000: fig. 3: d), Kurban VIA-B (Algaze 1990: pl. 36: G) and Hammam et-Turkman VB (Akkermans 1988a: fig. 108: 109). A sample of this type is the cannon-spouted jar with everted short neck and simple rim (Pl. VII: 43). Among the closed forms, other attested types are the jars with everted short necks with medium width mouth, sloping shoulder, and simple rim (Pl. III: 20; pl. IV: 21)

or flattened rim (Pl. VII: 40-41), that can be compared with samples from Kurban VI Pit 203 & VIA-B (Algaze 1990: pl. 18: E, H; 36: E) and Hammam et-Turkman VA (Akkermans 1988a: fig. 103: 67). Among the jars with short necks and wide mouths there is also a characteristic storage jar with internal corrugations low on the interior of the neck (Pl. VII: 39). This type is recorded at Hacinebi A (Pearce 2000: fig. 4: f), Leilan V (Schwartz 1988a: fig. 60: 5), Brak CH B, CH 10 & HS1 6 (Fielden 1981: fig. 2: 13-14; Oates J. 1985: fig. 1: 13; Felli 2003: fig. 4.20.16), Chagar Bazar (McMahon *et al.* 2001: fig. 5: k) and in 'Amuq F (Braidwood and Braidwood 1960: fig. 176: 13). Among the jars with slightly everted short necks there is also a sample with narrow mouths and wide shoulder (Pl. VII: 44) that can be compared with the only other example from Kurban VI (Algaze 1990: pl. 39: A). The hole-mouth jars are represented by a single sample with a slightly raised rim characterized by a rather coarse grey fabric and a burnished surface, probably in "Uruk grey" ware (Pl. VIII: 49). A similar type is recorded from Hammam et-Turkman VB (Akkermans 1988a: pl. 107: 101) and Nineveh Middle Ninevite 3 (Gut 2002: fig. 15: 9). Wide-short-necked jars with an internally angled and tapered rim (Pl. III: 17) are also present at Hirbemerdon Tepe and can be compared with those samples from Giricano (Schachner 2002b: fig. 45: c), Kurban VIA (Algaze 1990: pl. 25: F) and Hammam VB (Akkermans 1988a: pl. 110: 123-124). The medium sized wide-necked jars with a short straight collar are a widely common type and recorded in three different variations: with a simple rim (Pl. III: 16; pl. VI: 33-34), with a flattened rim (Pl. II: 14; pl. V: 15; pl. IV: 22; pl. VI: 36) and with a flattened and slightly thickened rim on the outside (Pl. VI: 35, 37). These types can be compared with samples from the assemblages of Hacinebi A (Pearce 2000: fig. 3: e), Kurban Pit 203 & VIA-B (Algaze 1990: pl. 18: B, F-H; 36: I), Brak HS1 6 (Felli 2003: fig. 4.20.11) and Hammam et-Turkman VB (Akkermans 1988a: fig. 110: 125). Similar to this type is the jar with a slightly everted neck, simple or flattened rim and a medium width mouth (Pl. IV: 25; pl. V: 26, 31; pl. VII: 42; pl. VIII: 45) comparable with findings from Giricano (Schachner 2002b: fig. 45: d), Kurban Pit 203 & VIA-B (Algaze 1990: pl. 18: E; 37: H), Brak HS1 6 (Felli 2003: fig. 4.20.7) and Hammam et-Turkman VB (Akkermans 1988a: fig. 110: 126). A single example of a jar with a wide mouth, with an outwardly thickened and flattened rim and a sloping shoulder (Pl. VI: 38) can be compared with a finding from Hammam et-Turkman VB (Akkermans 1988a: fig. 110: 123). Also attested by a single example is an irregularly shaped small basin with a simple rim, slightly inverted walls, a rounded carination and a flat base (Pl. VIII: 46). A particular type recorded at Hirbemerdon is a large tray with straight wall and a series of holes along the edge (Pl. VIII: 47). The shape is irregular and presents at least one side opening. The fabric contains chaff, mica, grits and small pebbles; this coarse ware is very irregular on the surface. This type can be assimilated to the *mangals*, a sort of brazier,<sup>21</sup> widespread in the Late Chalcolithic sites of Transcaucasia (Gülçür and Marro 2012: 319). Another type consists of a sort of support with a vertical wall and at least one hole (Pl. VIII: 48), that can belong to the same category.<sup>22</sup>

These materials from Hirbemerdon Tepe are a new *corpus* that enriches the ceramic types of the upper Tigris river region,<sup>23</sup> and generally the knowledge of the Late Chalcolithic in the northern part of the

21 The discussion on the real use for these vessels is still ongoing. The perforation could be interpreted as holes made in order to fix a sort of a metallic grid or spit, but as already said there is no consensus among scholars about their use in direct contact with fire.

22 See the similarities with the sample from Ovçular (Gülçür and Marro 2012: fig. 11: 4).

23 Nowadays evidences ascribable to the Late Chalcolithic are quite numerous in the area of Ilisu Dam Reservoir. At Giricano the "Uruk grey" ware of the early part of the LC 3 is recorded (Schachner 2002b: 54), while at Kuriki and Kenan other contexts with similar indigenous repertoires, partially slightly later, are attested. At Kuriki pottery from the level IVB with its phases (IVB1, IVB2, IVB3, IVB4) in Area A, and probably from Level IV in Area B, roughly corresponds to the assemblage from Hirbemerdon, especially for the presence of the CFW and its characteristic diagnostic forms (Genç, Valentini and D'Agostino 2012: 469-471; Valentini 2012: 283). Kenan has instead provided a longer sequence. The Late Chalcolithic materials, found in different areas of the site, including hammerhead bowls and casseroles, has been variously dated between the second part of the LC 3 or LC 4 and the beginning of the LC 5 (Creekmore 2007: 95-96; Parker *et al.* 2008: 104; Parker and Foster 2009: 525-526, 530-531; fig. 6). Other sites such as Kavaşan (Kozbe, Köroğlu and Sağlamtimur 2004: 499-500; fig. 17) and Salat (Ökse *et al.*



“Greater Mesopotamia”. While the archaeological evidence is not so large in terms of excavated surfaces and associated ceramic materials, we can guess that the site was part of a regional system composed mainly by small rural settlements located near the course of the Tigris river and its tributaries. Although it is complicated assigning an assemblage to a precise phase when “Uruk” tradition artefacts - that are a good guarantee for dating - are not present, the close similarity with numerous assemblages of the Syrian-Iraqi Jazirah and southeastern Anatolia allows us to consider a dating for these materials and their location in a wider regional pattern (Tab. 3). The recorded diagnostic types - such as Hammerhead Bowls and Casseroles in their earliest variations, and jars with an everted internally grooved neck - match with the LC 3 assemblage. The presence of some bowls with internally bevelled rim and of the “Uruk grey” ware, and at the same time the absence of any southern “Uruk” material, causes us to lean towards a possible dating in the earliest part of LC 3 that corresponds to the period before the first contacts between the upper Tigris region and “Uruk” southern Mesopotamia.

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2001: 623-637; fig. 8-9; Ökse and Görmüş 2013b: 135-136) have partly contemporary assemblages. Further downstream, along a tributary of the Tigris river, Başur has shown an abundant repertoire in CFW characterized by hammerhead bowls and casseroles (Sağlamtimur and Kalkan 2015: 60-61; fig. 6-8). Further south, in the plain area of Cizre-Silopi, a number of sites has provided Late Chalcolithic materials marked by the typical CFW repertoire (Algaze, Hammer and Parker 2012: 19-21; fig. 19: 5-9, 11-15).

SAR	LC1	LC2		LC3	LC4	LC5
		Early	Late			
Gut 1995	Post-Ubaid	"Gawra A"	"Gawra B"	"Uruk A"	"Uruk B"	"Uruk C"

<b>Upper Tigris river valley</b>						
Hirbemerdon Tepe				■ →	→ ?	
Giricano			■	■ ?		
Kenan Tepe				?	■ ←	■
Kuriki Höyük				■	→ ?	

<b>South-eastern Anatolia</b>						
Sakçe Gözü	IVa-b →	IVc	V ? →	V	VI →	
Kurban Höyük				VIB →	VIA →	
Hasek Höyük						5
Karatut Mevkii				■		
Hayaz Höyük	? →	?				
Samsat				←	XXVII-XX	
Hacinebi Tepe			←	B1 →	B2 →	
Arslantepe	VIII →	→	→	A ← VII →		← VIA

<b>Upper Euphrates River Valley</b>						
Norşuntepe WH	?	10	→	6		
Korucutepe				←	B	
Tepecik			14-			
Tülin Tepe			■			
Fatmalı Kalecik			■			
Çayboyu				■	■ ?	

<b>Northern Iraq</b>						
Tepe Gawra	XII	XIA/XA	X-IX	VIII →		
Ninive			MM -59/-50	MM -45/-38	MM -37/-31	MM -31/-20
Arpachiya			■			
Qal'at Agha		VI-V →	IV-I			
Yorgan Tepe		X ? →			■	

Kudish Saghir			■				
Gardi Resh					?		
Raffaan			■				
Mashrafa				■			
Tell as-Shamali			← 5-6?				
Tell Thuwajj				?			
Khirbet Hatarra				2b-a	3b-a →	4 →	
Abu Dhahir			?				
Tell al-Hawa					LP →	■	■ ?
Tell Leth-Thalatat				■			
Grai Resh	IV		III →	← IIB	IIA →		
Tell Girdi					?		

<b>Northern Syria</b>							
Tell Hamoukar			← ■ ?		■	■ →	
Tell Brak	TW		TW 21-20	TW 19 → TW 18	TW 17-14	→	TW 12-11
	CH	CH 15-20	CH (14)-13		CH 12-9 →		
	HS	HS 6 9-7 →	HS 6 6-2 →	HS 17-6 →	← HS 15-3		
Tell Lelilan		← Vlb			← V	IV →	
Tell Feres es-Sharqi		9	← 8-4 ?		3	← 2	1
Mashnaga	B1		B2 ?	B3 ?	B 4 ? →	← C1	C2 ?
Kashkashok II					■		
Umm Qseir	←	←	←	Phase 2 'early'	→	Phase 2 'late'	
Hammam et-Turkman	IVD-VA	→	VA →	← VB			
Tell Sheikh Hassan						■	
Tell Kosak Shamali							
Habuba Kabira Süd					"Post-Ubaid"		■

<b>Western Syria</b>							
'Amuq	E				F	→	G
Tell Abu Dammè					VII	→	
Tell Afis	← ?	←	25-19	?	18?		
Hama				7K10 →	K	→	?

Table 3 – Chronological sequence of the LC sites in northern Mesopotamia, southeastern Anatolia and Syria.



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# CATALOGUE

# FIGURES

## Architecture

### Phases I, IIa, IIb, IIIa



6.1 — Ph. I pit with *in situ* material culture (Area B) viewed from east.

# **I. Pottery**

## Notes to the Pottery Catalogue

*Abbreviations used in the description of pottery:*

**Nr.:** Sherd number to identify drawing in plate;

**HM no.:** Hirbemerdon Tepe inventory number;

**Ware:** Pottery category;

**Color:** Reference to the Munsell Soil Colour Charts 2000;

**Fabric:** Lists sequence of inclusions from highest to lowest density.

*Definition of pottery categories listed following HM chronological phases:*

PHASE I	
CFW	Chaff-Faced Ware
PHASES II A-B	
BBW	Buff Burnished Ware
CMW	Common Ware
CW	Cooking Ware
FW	Fine Ware
FIW	Fingernail Incised Ware
KW	Karaz Ware
MW	Metallic Ware
N	Ninivite 5
RBW	Red Burnished Ware
PHASE III A	
BBW	Buff Burnished Ware
CW	Cooking Ware
DROB	Dark Rimmed Orange Bowls
FW	Fine Ware
KW	Karaz Ware
RBWW	Red Brown Wash Ware
PHASE III B	
CMW	Common Ware
CW	Cooking Ware
GW	Gray Ware
KW	Khabur Ware
BPW	Band Painted Ware
RBWW	Red Brown Wash Ware
PHASE III C	
BBW	Buff Burnished Ware



COMW	Common Ware
CW	Cooking Ware
LKW	Late Khabur Ware
NW	Nuzi Ware
WW	White Ware
REB	Red Edged Bowl
<b>PHASES IV A-B</b>	
BPW	Brown/Pink Ware
CW	Cooking Ware
GRW	Grooved Ware
PW	Plain Ware
<b>PHASE V</b>	
COMW	Common Ware
GLW	Glazed Ware
IW	Incised Ware
PAW	Painted Ware
<b>PHASES VI-VII</b>	
CIW	Combed Incised Ware
COW	Common Ware
CRW	Cream Ware
GLW	Glazed Ware
GreenW	Green Common Ware

# Phase I

Nr.	HM no.	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface treatments
1	704	CFW	2.5YR 6/6 light red	2.5YR 6/6 light red	N/A	coarse, vegetal, grits, mica	
2	709	CFW	10YR 7/3 very pale brown	10YR 6/3 pale brown	N/A	medium, vegetal, grits, mica	low fired
3	492	CFW	2.5YR 6/6 light red	10R 6/8 light red	10YR 5/2 brownish	medium-coarse, vegetal, grits, mica	marks on the upper exterior wall (scraping marks)
4	706	CFW	10YR 8/3 very pale brown	10YR 8/3 very pale brown	N/A	coarse, vegetal, white grits	
5	687	CFW	7.5YR 6/3 light brown	5YR 7/4 pink	5YR 2.5/1 black	medium, vegetal, grits, mica	burnished
6	691	CFW	2.5YR 6/6 light red	2.5YR 6/6 light red	5YR 2.5/1 black	medium-coarse, vegetal, grits, mica	burnished
7	708	CFW	5YR 5/4 - 7/6 - 6/6 reddish brown	N/A	N/A	medium-coarse, vegetal, mica, grits	
8	6671	CFW	5YR 6/4 light reddish brown	N/A	N/A	medium-coarse, vegetal, grits (granules), mica	marks on the exterior wall
9	696	CFW	2.5YR 6/8 light red; 2.5YR 5/8 red	5YR 6/6 reddish yellow	N/A	medium-coarse, vegetal, grits (also small pebbles), mica	
10	665	CFW	5YR 6/4 light reddish brown	2.5YR 6/6 light red	10YR 5/2 brownish	medium-fine, mica, grits, vegetal	medium fired, smoothed
11	498	CFW	5YR 6/6 reddish yellow	7.5YR 6/3 light brown	N/A	medium-fine, vegetal, mica, quartz, sand	medium fired, smoothed
12	281	CFW	10YR 7/6 yellow	10YR 7/6 yellow	N/A		
13	496	CFW	N/A	N/A	N/A		
14	702	CFW	7.5YR 6/3 light brown	5YR 7/4 pink	5YR 5/1 gray	coarse, grits (small pebbles)	
15	499	CFW	5YR 6/4 light reddish brown	7.5YR 6/3 light brown	N/A	coarse, vegetal, grits (small pebbles), mica	smoothed surface, low fired
16	672	CFW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	10YR 3/1 very dark gray	coarse, vegetal, grit, mica	
17	673	CFW	7.5YR 6/4 light brown; 7.5YR 5/4 brown	N/A	5YR 2.5/1 black	coarse, vegetal, grits (granules-small pebbles), mica	
18	690	CFW	7.5YR 7/4 pink	7.5YR 7/4 pink	N/A	medium-coarse, vegetal, grits (granules), mica	Exterior surface black smudged from fire

Nr.	HM no.	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface treatments
19	692	CFW	2.5YR 6/6 light red; 2.5YR 5/6 red	2.5YR 6/6 - 7/6 light red	10YR 5/1 gray	coarse, vegetal, grits	
20	661	CFW	5YR 5/4 reddish brown	2.5YR 6/6 light red	10YR 5/1 gray	coarse, vegetal, grits (small pebbles)	marks on the upper body
21	668	CFW	2.5YR 5/6 red	7.5YR 7/4 pink	10YR 5/2 brownish	medium-coarse, vegetal, grits (also small pebbles), mica	
22	669	CFW	5YR 6/4 light reddish brown	5YR 5/4 reddish brown	10YR 3/1 very dark gray	coarse, vegetal, grits (also small pebbles)	
23	666	CFW	2.5YR 6/6 - 6/8 light red	2.5YR 6/8 light red	7.5YR 5/1 gray	coarse, vegetal, grits (small pebbles)	
24	667	CFW	N/A	7.5YR 6/6 reddish yellow	N/A	coarse, vegetal, grits	
25	675	CFW	5YR 7/6 - 6/6 reddish yellow	5YR 7/6 - 6/6 reddish yellow	10YR 5/1 gray	medium-coarse, vegetal, mica	
26	685	CFW	5YR 6/4 light reddish brown	5YR 5/4 reddish brown	10YR 5/1 gray	coarse, vegetal, grits (granules), mica	
27	683	CFW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	7.5YR 7/1 light gray	coarse, vegetal, grits (granules and small pebbles), mica	
28	695	CFW	2.5YR 6/6 light red	2.5YR 5/6 red	N/A	coarse, vegetal, grits (granules), mica	
29	701	CFW	7.5YR 7/3 pink	N/A	N/A	coarse, vegetal, grits, mica	
30	700	CFW	5YR 6/6 reddish yellow	5YR 6/6 reddish yellow	5YR 2.5/1 black	medium-coarse, vegetal, grits, mica	high fired, irregular marks on the interior
31	705	CFW	7.5YR 6/4 light brown	7.5YR 7/3 pink	5YR 5/1 gray	coarse, vegetal, grits (also small pebbles)	low fired
32	678	CFW	7.5YR 5/3 brown	N/A	N/A	coarse, vegetal, grits (small-medium pebbles)	
33	684	CFW	5YR 6/4 light reddish brown	7.5YR 4/2 brown	10YR 3/1 very dark gray	coarse, vegetal, grits	
34	677	CFW	5YR 7/4 pink; 2.5YR 5/8 red	2.5YR 5/8 red	10YR 5/1 gray	coarse, vegetal, grits (also small pebbles)	low fired, smoothed
35	686	CFW	10YR 7/3 very pale brown	10YR 8/2 very pale brown	10YR 3/1 very dark gray	coarse, vegetal, grits (small pebbles in fracture)	medium fired
36	693	CFW	2.5YR 5/6 red	7.5YR 5/4 brown	5YR 2.5/1 black	coarse, vegetal, grits (small granules), mica	low fired
37	670	CFW	5YR 7/6 - 6/6 reddish yellow	5YR 7/6 - 6/6 reddish yellow	N/A	coarse, vegetal, grits (small pebbles)	low fired
38	688	CFW	7.5YR 6/4 light brown	5YR 6/6 reddish yellow	N/A	medium, vegetal, grits (granules)	

Nr.	HM no.	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface treatments
39	6672	CFW	encrusted	7.5YR 6/4 light brown	N/A	medium, vegetal, grits, mica	burnished
40	676	CFW	2.5YR 5/6 red	2.5YR 6/8 light red	10YR 3/1 very dark gray	coarse, vegetal, grits (also small pebbles), mica	
41	679	CFW	2.5YR 6/6 light red	2.5YR 6/8 light red	5YR 2.5/1 black	coarse, vegetal, grits (also small pebbles)	low fired
42	682	CFW	10YR 8/3 - 8/4 very pale brown	5YR 7/6 - 6/6 red-dish yellow	N/A	coarse, vegetal, grits (also small pebbles)	medium fired
43	662	CFW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	N/A	coarse, grits (also small pebbles), vegetal, mica	surface black smudged from fire
44	500	CFW	5YR 6/4 light red-dish brown	N/A	5YR 5/1 gray	coarse, vegetal, grits (also small pebbles), mica	low fired
45	493	CFW	N/A	N/A	N/A		
46	501	CFW	7.5YR 6/4 light brown	2.5 YR 6/6 light red	7.5YR 5/1 gray	coarse, vegetal, grits (also small pebbles), mica	fairly rough and irregular
47	491	CFW	2.5YR 6/4 light reddish brown	N/A	10YR 5/2 grayish brown	medium-coarse, vegetal, grits (granules), mica	low fired
48	664	CFW	N/A	N/A	N/A	coarse, vegetal, grits, small pebbles	low fired
49	663	GW	2.5YR 6/1 gray	2.5YR 6/1 gray	10YR 3/1 very dark gray	medium-coarse, grits, vegetal, mica	burnished outside

Plate I

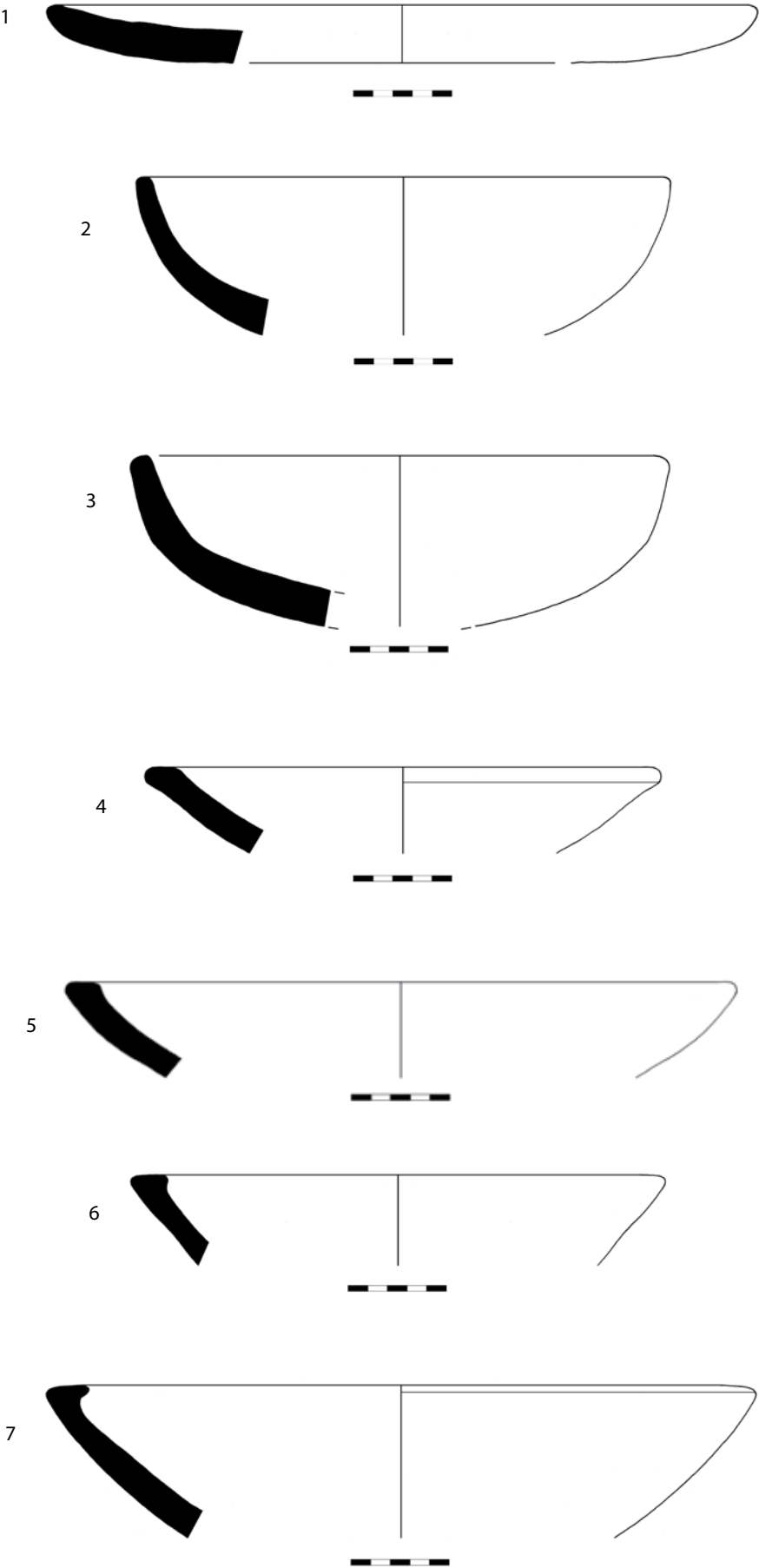


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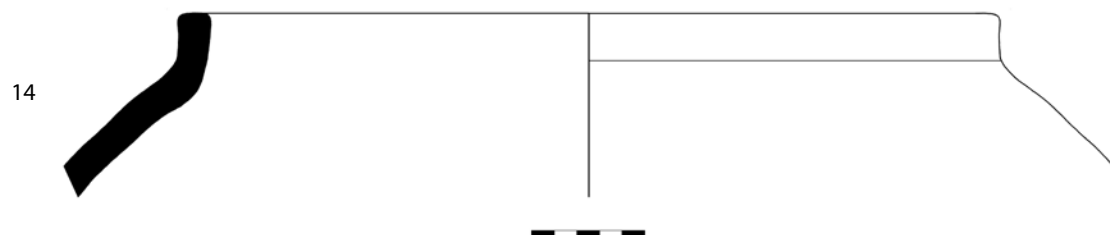
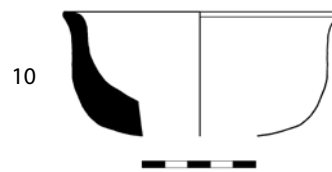
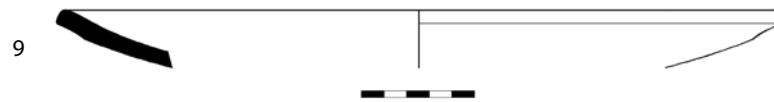
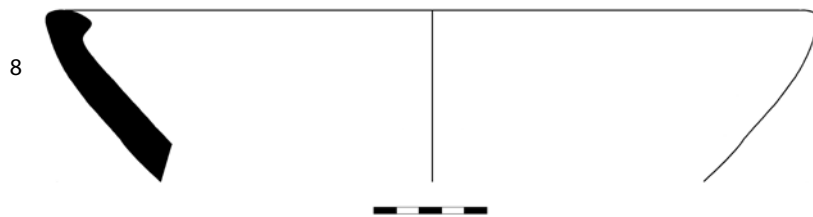


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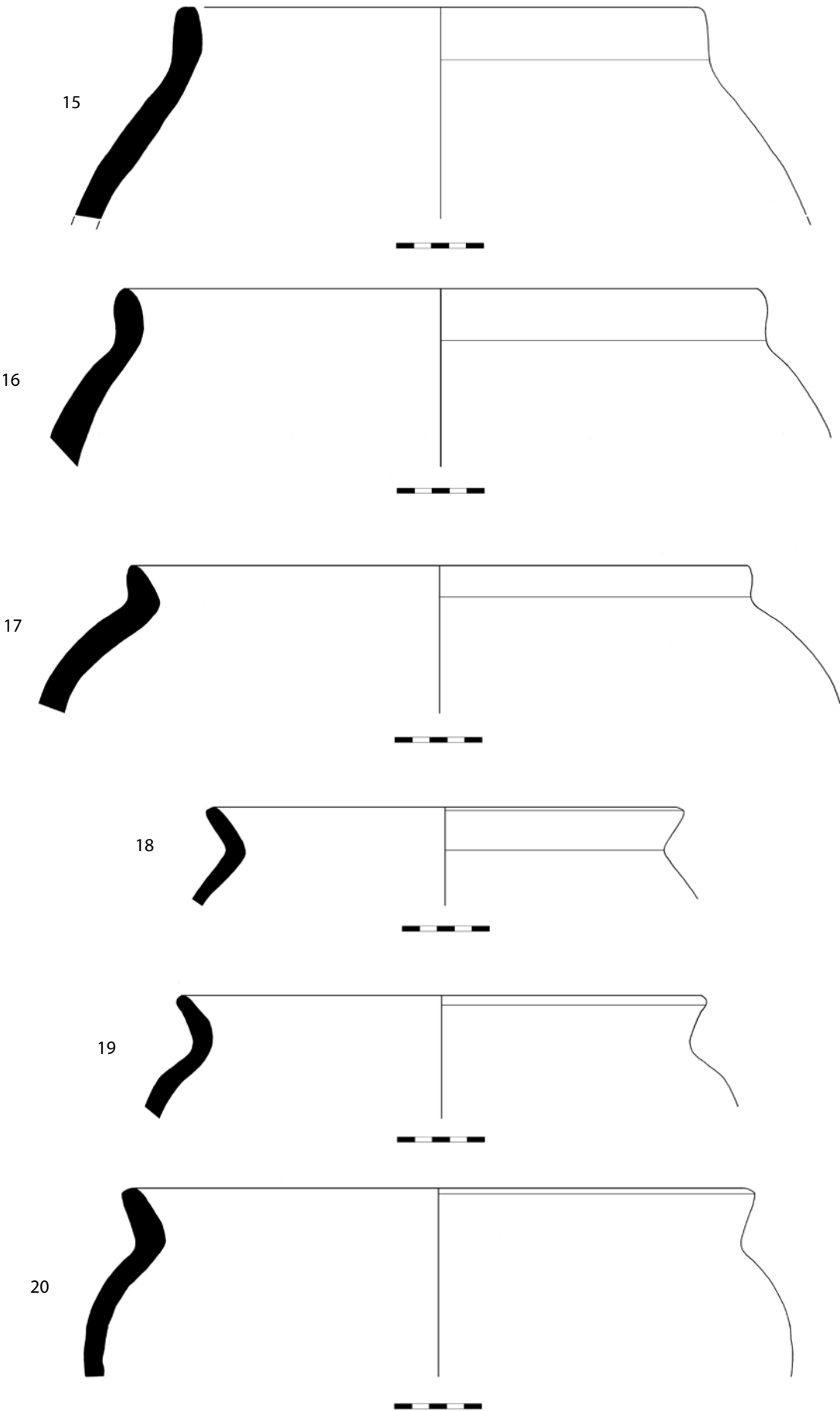




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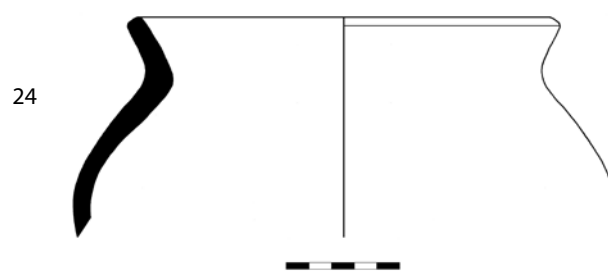
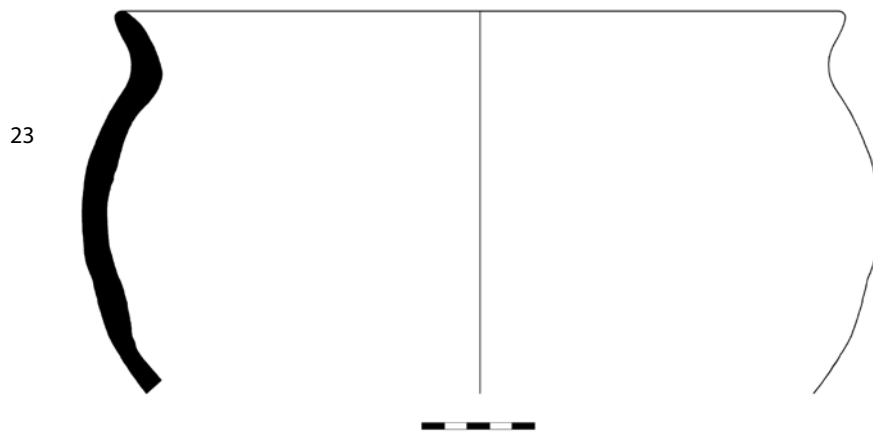
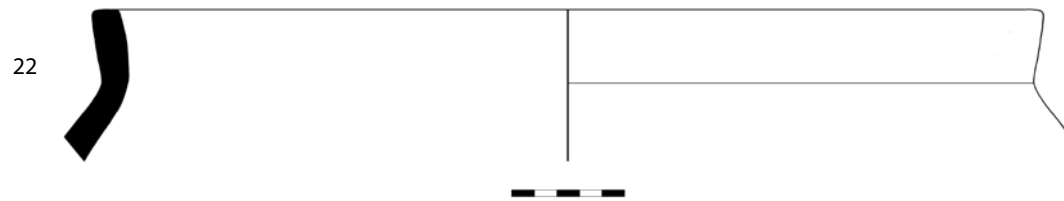
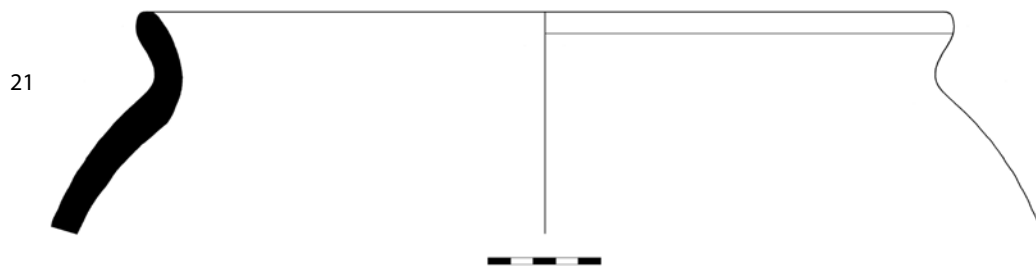


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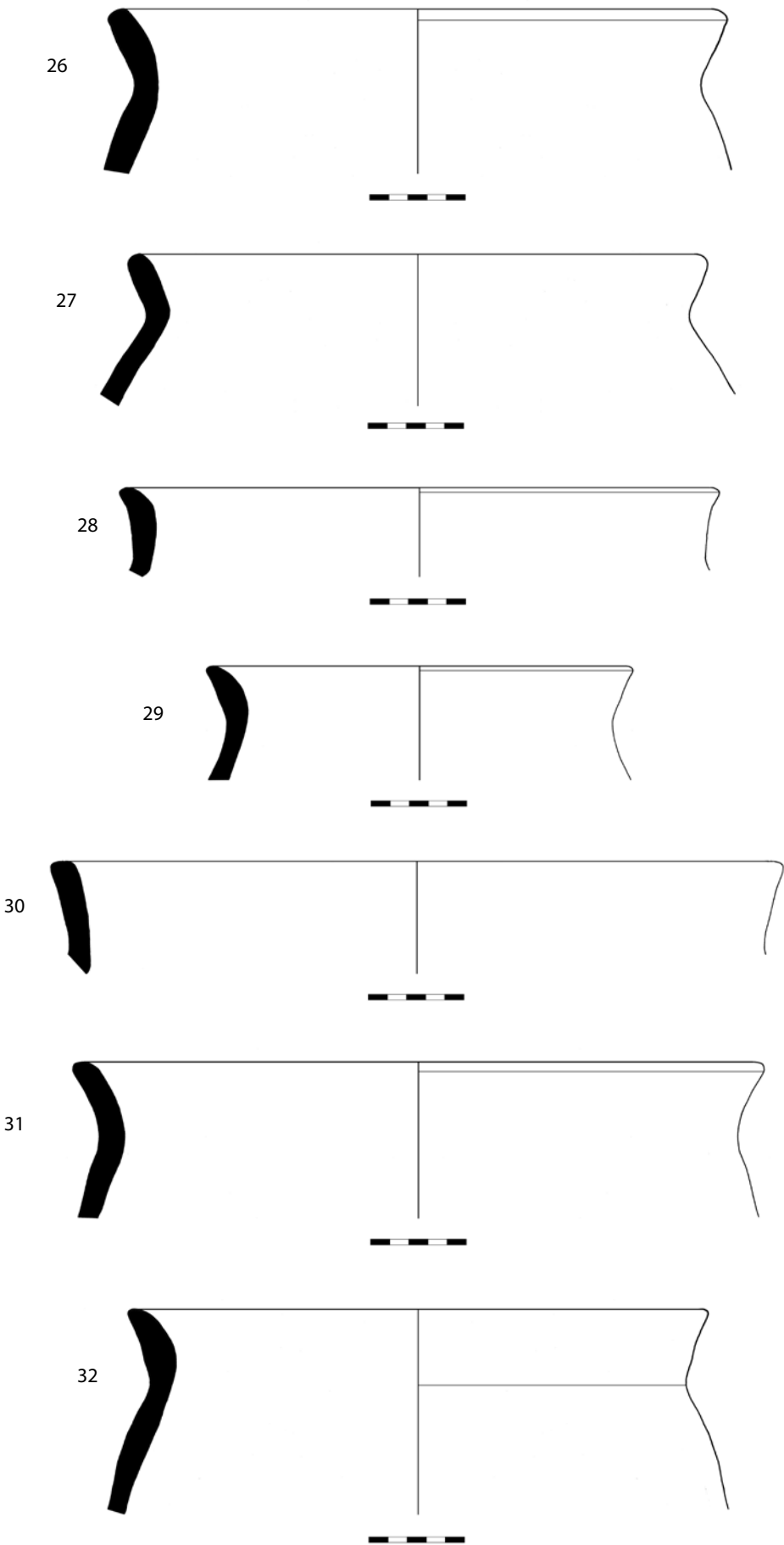


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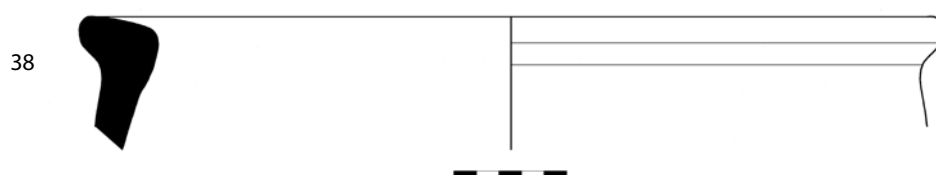
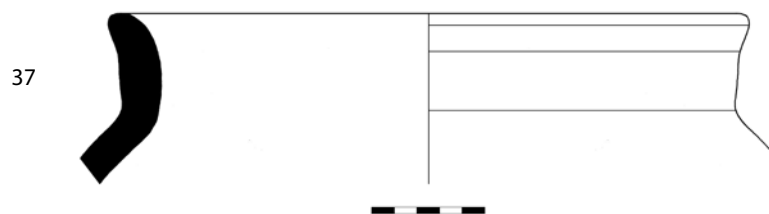
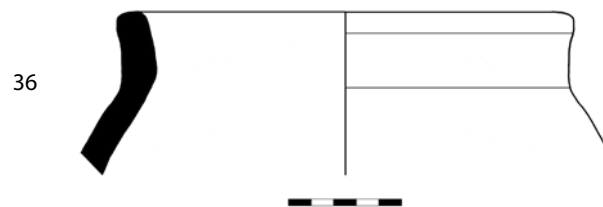
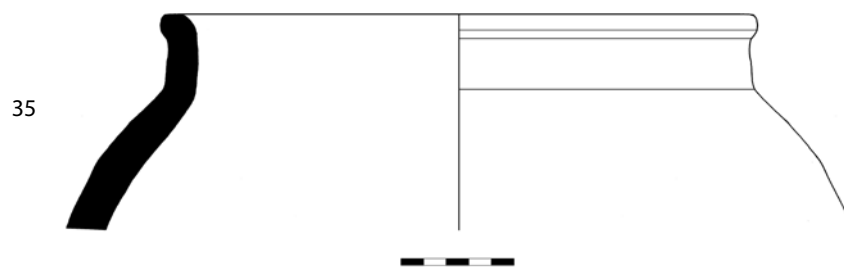
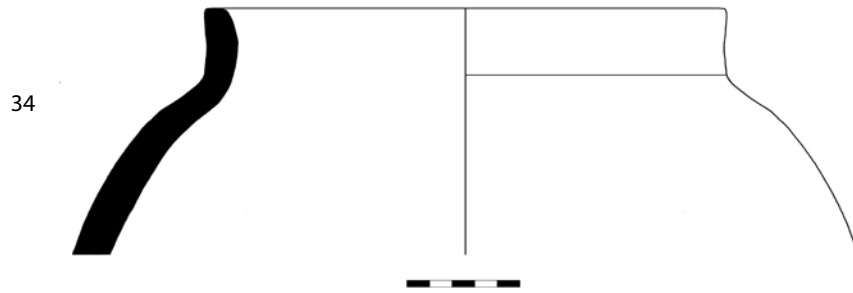
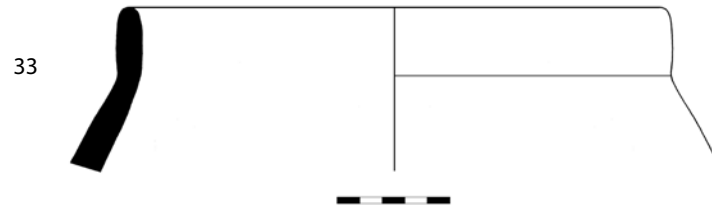


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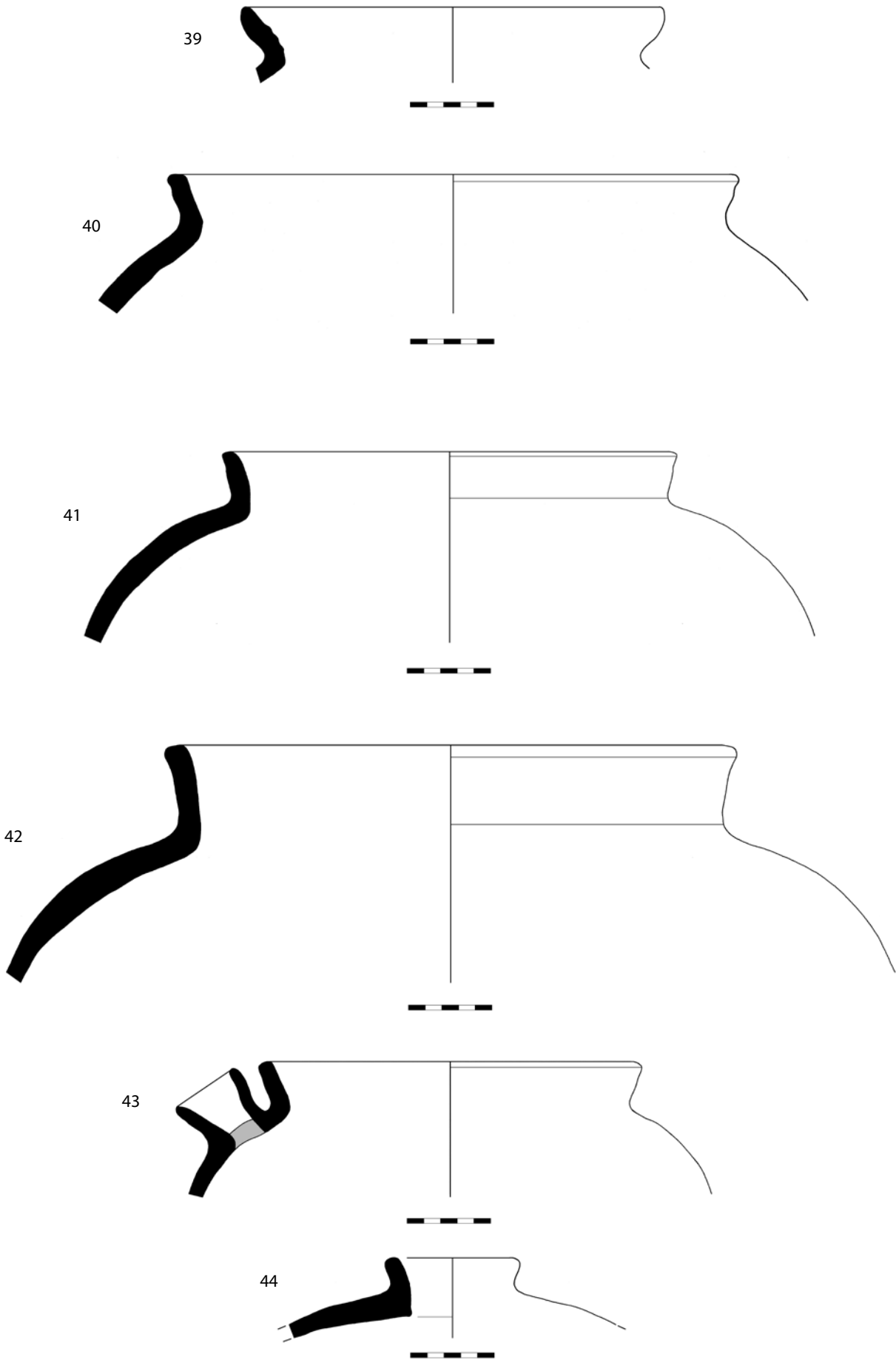
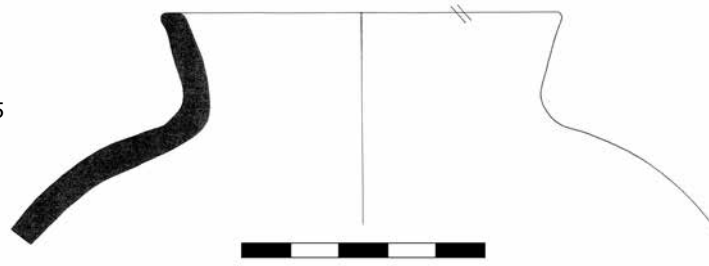
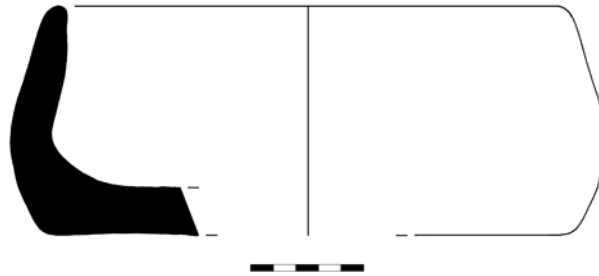


Plate VIII

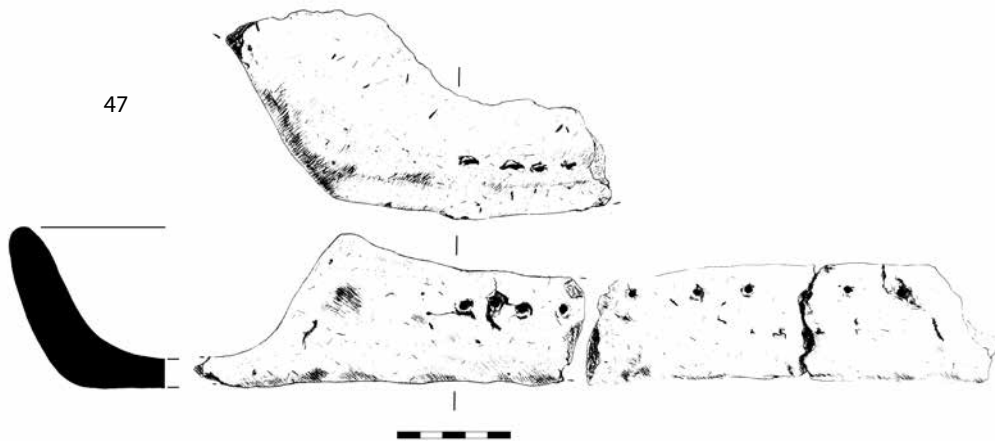
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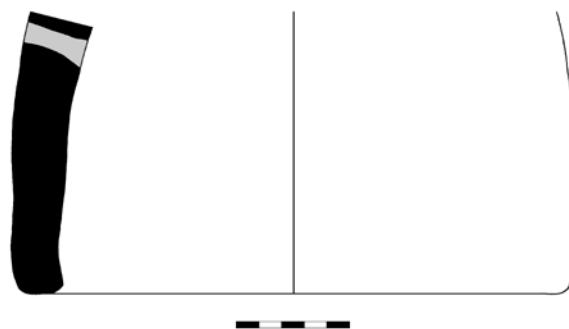
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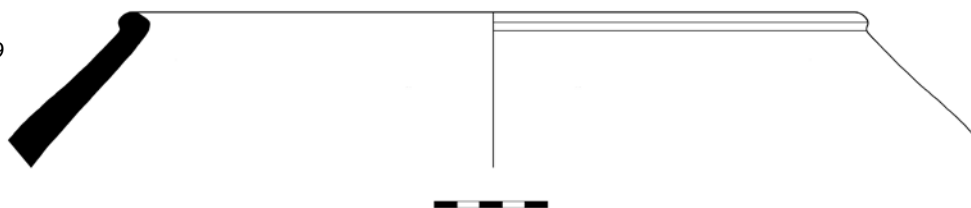
47



48



49



## **II. Objects**

## **Abbreviations used in the description of objects**

**Nr.:** Object number to identify object in plate;

**HM no.:** Hirbemerdon Tepe inventory number;

**Color:** Reference to the Munsell Soil Colour Charts 2000. The full code is not listed;

**Measures:** Ht (height); Lg (length); Th (thickness); Wh (weight); D1 (diameter 1); D2 (diameter 2).

**N.B.** Due to lack of space, only object drawings are published when available, except for the most important Ph. IIIB ritual paraphernalia (i.e. 149, 187, 188, 191, 193), which include both photographs and drawings.

Photographs and drawings can be found in the online catalog.

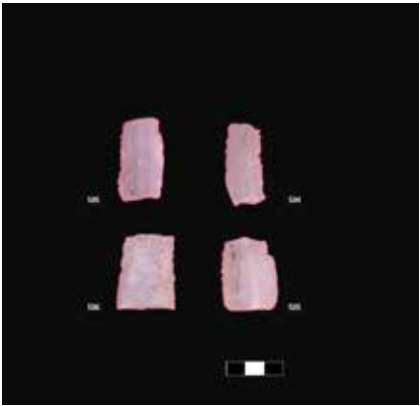


# Phase I

Nr.	HM no.	Description	Material	Color	Ht	Lg	Th	Wh	Notes
1a	503	Blade	flint	light brown	4,2	0	0,7	3	
1b	504	Blade	flint	light brown	4,7	0	0,5	2	
1c	505	Blade	flint	light brown	4,6	0	0,5	2,3	
1d	506	Blade	flint	light brown	4	0	0,8	2,8	
2	3027	Grinding stone	basalt	black	0	30,7	5,8	16,3	Elliptical in shape. Moderately worn. Complete.

Plate CXXVI

1



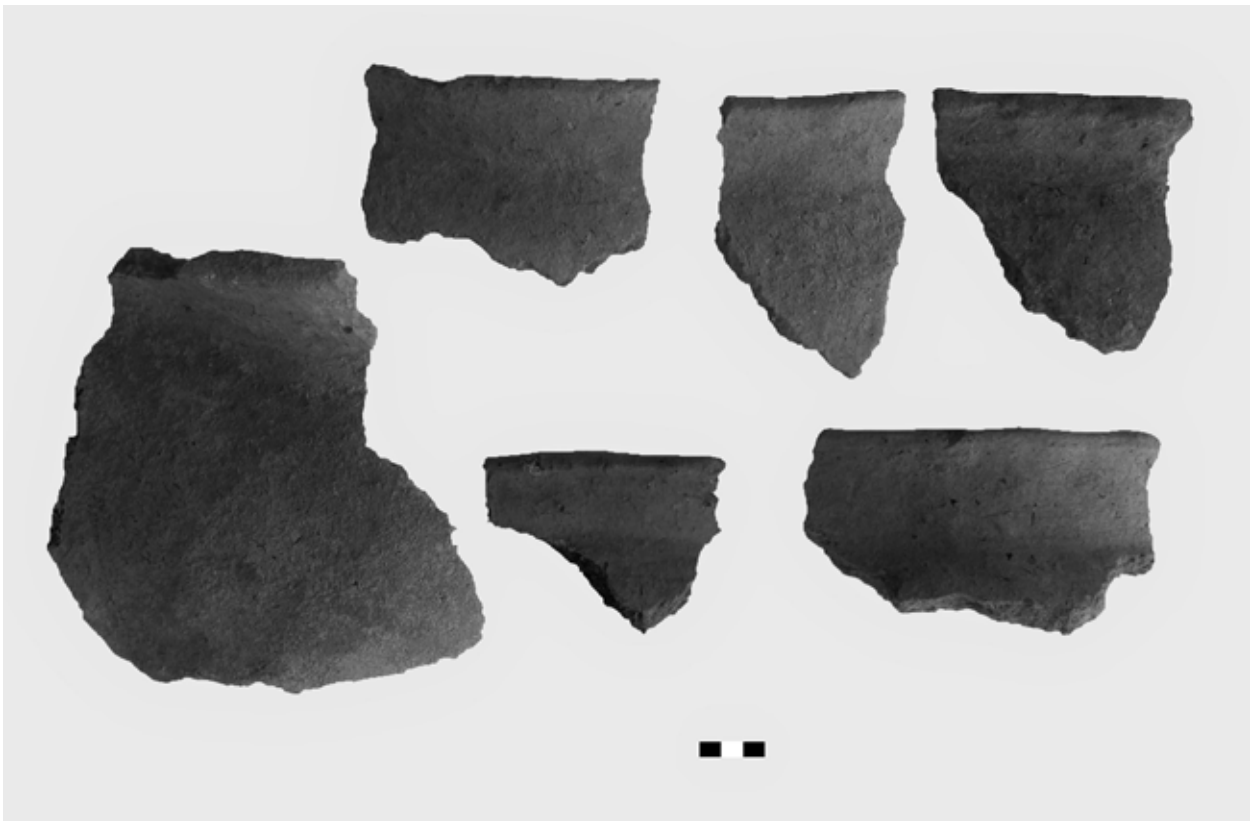
2



### **III. Ceramic typologies**

Plate CLXXXVII

# Phase I



Ware:CFW



Ware:CFW