



BRONZE AGE POTTERY FROM LOGARDAN: PRELIMINARY RESULTS FROM THE THIRD CAMPAIGN

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The 2017 excavations campaign at Logardan focused on the two main trenches started in the second season (2016), namely Trench D and Trench E, at the top of the site and on the north-western side of the upper terrace respectively. As far as the Bronze Age architectural remains, the work in Trench D has provided further information about the extensive and complex ceramic production system, basically confirming the general evidence from the earlier campaign¹. Conversely, a substantial enlargement of the excavation area in Trench E has allowed a better understanding of a now recognized as multi-phased structure uncovered in 2016² and a first disentanglement of the overall complex stratigraphic situation of the area.

For both Trenches, as in the 2016 campaign, the methodological approach to the study of the ceramic assemblages was based on a morpho-functional classification. The sherds collected from each stratigraphic entity (called *numéro vert*) have been, in fact, quantified and divided into two broad categories of open and closed shapes, within which were classified into general functional and morphological types. Non-diagnostic body sherds have been counted and discarded when not useful for vessel reconstruction. As far as the diagnostic pottery fragments, for each of them a photographic record was produced and their technical features – color, texture, inclusions, surface treatment – have been recorded. A selection of diagnostic sherds deemed as being most significant, was drawn. The primary aim of this initial analysis is to: provide a reliable stratigraphic pottery sequence for the second half of 3rd millennium BC at Logardan Trench D and make a first assessment of the ceramic materials dated for the most to either the beginning of 3rd millennium BC or to Late Bronze Age as to Logardan Trench E (Table 1).

1. For the results of the 2017 excavations season in Trench D see Baldi, Naccaro and Bridey, this volume, whereas the 2016 campaign ones are reported in Baldi, Naccaro and Rahoof 2016.

2. See Sauvage, Zingarello and Salah 2016: 71-74.

TRENCH D		TRENCH E	
		Later Levels Undated	
		IA	Late Bronze Age
		IB	
1	Ur III period / End of the Early Bronze Age	II	Ur III period / End of the Early Bronze Age
2			
3a1	Late Akkad / Ur III		
3a2	Late Akkad		
3b	Akkad		
3c	Early Dynastic III / Akkad (mid-late 3 rd millennium BC)		
3d			
		III	Early Dynastic I / Beginning Early Bronze Age
4a	Middle Uruk	IVA	Middle Uruk
4b-c	Early Uruk	IVB	Early Uruk

Table 1 – Preliminary dating by level of Trenches D and E at Logardan.

Due to the lack of a regional relative chronological sequence, as a mostly uncharted region, the Logardan pottery repertoire's ascription to a given chronological phase is essentially based on the correlation with stratified assemblages from the few little-known sites in the region through both their morpho-stylistic comparisons and their diachronic changes and developments. A close morphological similarity and the affinity with pottery repertoires from different sites in the neighboring regions were, in fact, taken into account in establishing preliminary comparisons that will be corroborated and integrated with the investigation of ceramics technical and technological features in a future more in-depth pottery analysis.

LOGARDAN TRENCH D CERAMIC MATERIALS

The work carried out in Trench D during the third excavations campaign continued to focus on the exposure of the different superimposed pottery workshops covering the citadel area of Logardan. During the last season, three Bronze Age levels, labeled 1-3 from the latest to the earlier one, all dating to the mid-late 3rd millennium BC, were recognized. Level 3 was divided into three levels, named a-c from the latest to the earlier, to which this year a fourth level called 'd' has been added. Moreover, between levels 2 and 3a, a new architectural level has been recognized and hence called 3a1. The last season 3a level is therefore deemed to correspond to the new 3a2 level³.

The potsherds scattered on surface and sub-surface of the new trench enlargement or coming from posterior activities that had disturbed the first two Bronze Age levels (1-2) seem to be later in date compared to those gathered from the surface of the excavation area in the 2016 campaign. Except for a single fragment of a high-necked jug with an out-turned grooved rim (LOG.D.320-3) and the remnant of a handle under the rim, possibly dating to

3. For a detailed description of the stratigraphy and architecture in Trench D see Baldi, Naccaro and Bridey, this volume.

Sasanian-Early Islamic period, few miscellaneous fragments dating to the period of the Third Dynasty of Ur (hereafter Ur III) and possibly Late Bronze Age were collected⁴.

The first two levels (1-2), represented by the construction, use and reconstruction of a ceramic workshop, yielded a pottery assemblage consistent with the very late 3rd millennium BC date prompted by the few but significant chronological indicators of the previous season. These are strengthened by the retrieval of a substantial amount of ceramic materials from these two levels, including a quite extensive array of medium-to-large storage jars *in situ*. Among them, only a medium-sized ovoid jar with an out-turned flattened rim on a flared medium-high neck, slightly carinated shoulders, convex base and a decoration with three grooved horizontal lines at the base of the neck (LOG.D.348-1, Fig. 1: 1) has been restored. This jar

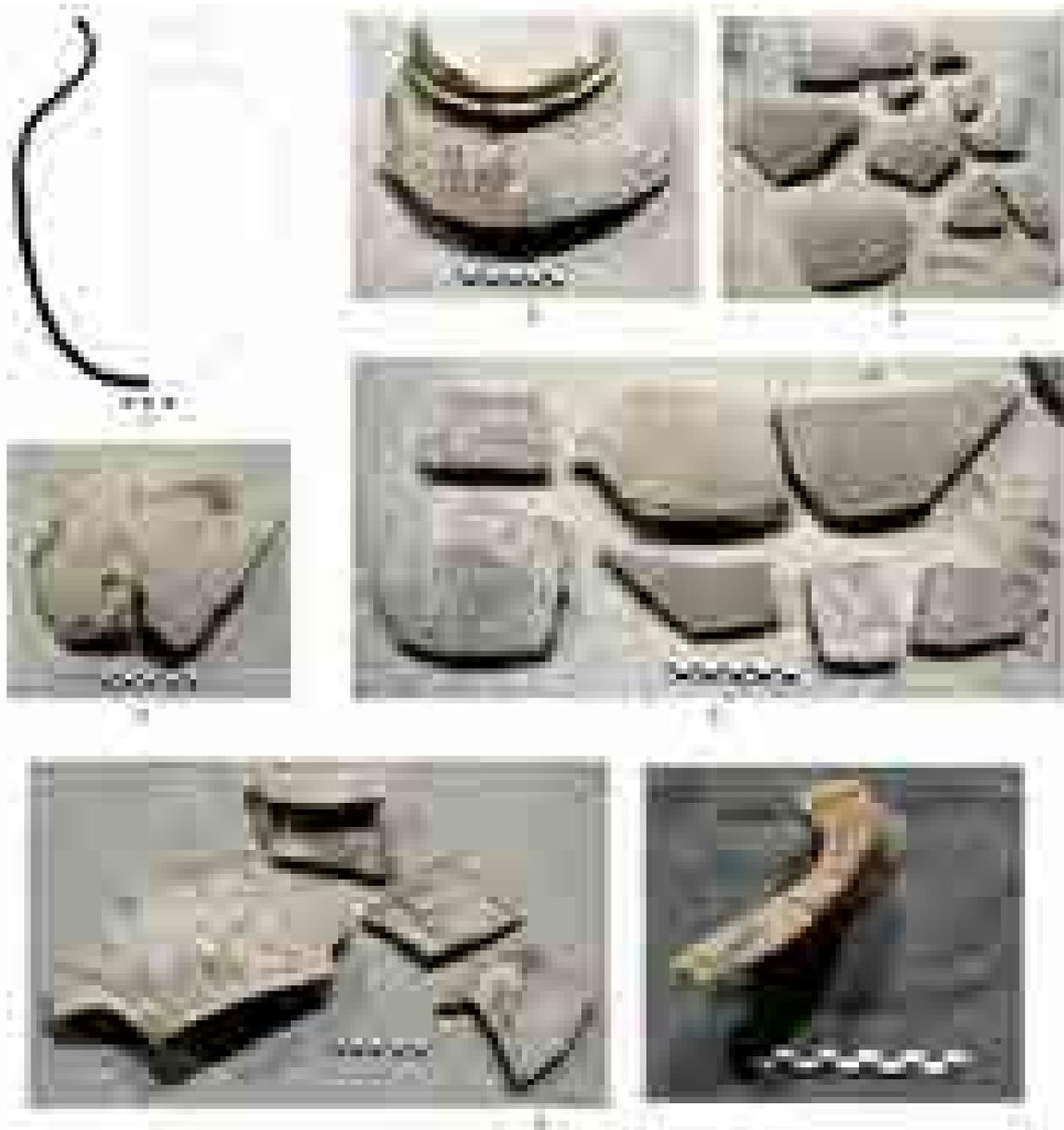


Fig. 1 - Group of medium-to-large-sized vessels from Trench D levels 1-2..

4. At least three fragments of overhanging rim bowls and a large sherd of a jar with rounded rim, flattened on top and slightly concave at the interior, rounded shoulder with a ridge at the neck base, belong to pottery types fairly common in Ur III period (see, for example, similar specimens from Tell Yelkhi: Bergamini 2002-2003, pl. 16, specifically no. 31 for the rounded rim jar). A large fragment of cylindrical stand with 'pie-crust' base would be generally considered as typical of the Late Bronze Age, although attested as early as the Late Akkadian period as revealed by their presence in Level 3a2 at Logardan itself (see below). Other sherds as flat bases probably belonging to jars and plain flared jar rims are not meaningful for a chronological purpose.

was probably discarded because of fire defects, as shown by its warped rim and body (poorly noticeable in drawing) and especially by its overfired green paste.

The initial estimate of at least 7 (almost) complete vessels coming from the same spot as the warped jar will be confirmed or reduced after a qualified restoration planned for the next campaign. It was deemed appropriate, in the meanwhile, to provide some basic information about their main characteristics. The range of medium and large-sized vessels includes triangular rim jars with rounded shoulder decorated by three horizontal grooves (LOG.D.348-2, Fig. 1: 6); a storage jar lacking the rim, with a slightly flared medium-high neck and a protruding ridge with a pointed section at the mid-neck. Its shoulder appears scored horizontally by five parallel superficial 0,8 cm large striations (Fig. 1: 2). Different kinds of decoration, usually located between the neck base and the shoulder, but in some cases also at the junction between the body and the shoulder, are attested. In addition, it is worth mentioning a band of three rounded-sectioned ridges bounded by wide grooved lines impressed vertically with a stick or a tapered profile tool (Fig. 1: 3). The final visual effect is that of a pattern of rectangular tiles. A decoration with a wavy incised line enclosed by two parallel horizontal lines (made with a single-blunt tool rather than a multiple-pointed comb, Fig. 1: 5) and an example of comb-incised decoration with three or four horizontal lines quite spaced-out each other are also represented. Moreover, this assemblage has yielded convex bases defined as ‘channel bases’ because of the shallow grooved ring encircling them (Fig. 1: 4): they almost certainly belong to the jars just mentioned.

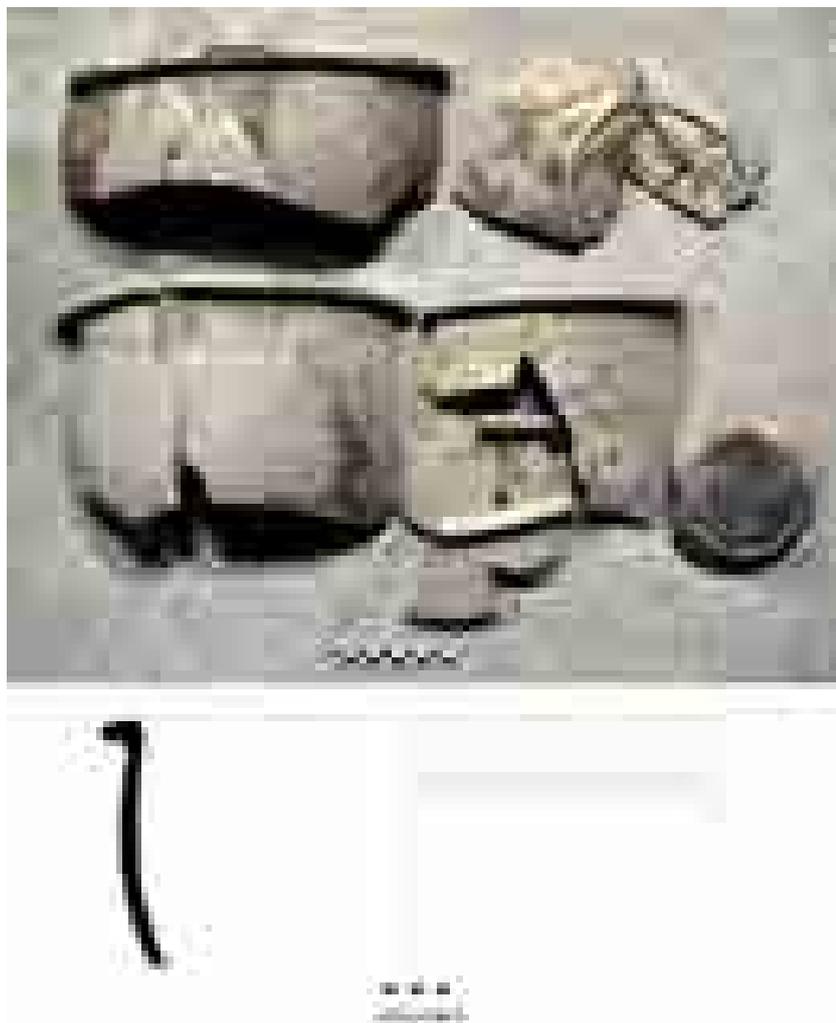


Fig. 2 - Deep bowls or basins (LOG.D.338-4 and LOG.D.348-5) from Trench D levels 1-2.

Another type of vessel belonging to this assemblage is a medium-sized deep bowl or small basin, of which at least two specimens were recovered (Fig. 2). They both have an elongated rounded rim and a comb-incised decoration with four horizontal lines⁵, but one of them has a cylindrical shape and a low ring base whereas the other one's shape is quite globular with the walls slightly inward inclined and a deep channel base. Certain features of some vessels – especially those of the two basins LOG.D.348-4 and LOG.D.348-5 – seem more pertinent to an early 2nd millennium BC date⁶. For the time being, however, in view of the seemingly homogeneity of the Levels 1-2 pottery assemblage, along with a complete absence of any painted pottery, a date to the very late 3rd millennium BC is retained, at least until otherwise proven. Similar wide-mouth elongated vessels with an everted rim with a prominence underneath and a wavy comb-incision (LOG.D.338-1, Fig. 3: 1) are likewise attested.⁷



Fig. 3 - Potstands with 'pie-crust' base from Trench D Early Bronze Age levels: 1) LOG.D.350-1; 2) LOG.D.320-4; 3) LOG.D.346-1; 4) LOG.D.365-19 (left), LOG.D.365-no number (right); 5 – LOG.D.391-no number; 6 – LOG.D.398- no number.

5. The drawing of LOG.D.348-5 shown in Fig. 2 has been made from a point of the vessel's profile displaying three instead of four horizontal parallel lines. This is possibly due to a potter's mistake in making decoration or to a faulty comb.
6. For the description, chronology and comparisons of both mid-late 3rd millennium BC and first half of 2nd millennium BC types, see Bergamini 2002-2003: 24-26 and Gabutti 2002-2003: 89 respectively. Close parallel for our specimens type seem to be the Bergamini's A8 and possibly B4 types (Bergamini 2002-2003: pl. 6: 15-18 (A8 type) and pl. 6: 24-27, 29-42 (B4 type), dating as late as Ur III period, despite some morphological differences mainly in the rim shape. Cf. also the Tell Brak's 'Post-Akkadian urns' (Oates 2001: fig. 428).
7. Close parallels dating to Late Akkadian and/or Ur III periods can be found, among others, in: Area KG at Nineveh (McMahon 1998: pl. 9: 16-19); Ishtar Temple at Assur (Beuger 2013: pl. 9: 12); Levels VII-VIII at Tell Yelkhi (Bergamini 2002-2003: pl. 6: 36-41); in late drains at Abu Salabikh (Postgate – Moon 1984: fig. p. 79: no. 55).

Levels 1-2 also provided a complete specimen of a pot stand with a ‘pie-crust’ base (LOG.D.350-1, Fig. 3: 1), characterized by an undulating, finger-impressed lower edge and generally considered as typical of the Late Bronze Age. However, it may date to the Late Akkadian/Ur III period as revealed mainly by their presence in the stratigraphic sequence of Area KG at Nineveh since Level VIA or in Levels G, F and E of the Ishtar Temple at Assur.⁸ Moreover, the mid-late 3rd millennium BC levels of Logardan Trench D yielded a fair amount of sherds belonging to this pottery type (Fig. 3: 2-6). The only exception to the uniformity of Levels 1-2 pottery repertoire seems to be some ceramic materials from kiln 769, showing a high percentage of Late Bronze Age sherds (see for example Fig. 4: 2). The kiln, however, has been only partially excavated and it lies just under the surface going through later disturbance.



Fig. 4 - Selection of ceramic material from Trench D levels 1-2: 1) LOG.D.338-1 (levels 1-2); 2) Late Bronze Age sherds from LOG.D.328 (possibly intrusive in levels 1-2).

Ceramic material from level 3a1, recognized during the 2017 excavations season, as from level 3a2, did not differ significantly from that of the following Levels 1-2. However, in comparison, level 3a2 shows a slightly higher percentage of pottery types more common in Late Akkadian times. Both levels yielded sherds of carinated bowl with rounded, out-turned rim, a pointed carination just below the rim and a conical lower body (Fig. 5: 1, LOG.D.356-1). This pottery type is a chronological marker for this period, reaching his peak in the Ur III times.⁹ Earlier evidence of this pottery type, spreading across a very large area encompassing Western Iran, through Southern and Central Mesopotamia and reaching as far as the Northern Levant¹⁰, date from the end of Akkadian period¹¹. It is still present in the upper strata of levels 3a2, now with a blunted, upright rim and a pointed carination¹². Different types of carinated-sided bowls increase considerably compared to levels 1-2, including deep bowls

8. See the considerations expressed by McMahon 1998: 19, note 44 with relevant bibliography.

9. For the type's description and comparison, see McMahon 2006: pl. 90; Schmidt 2014.

10. Schmidt 2014: 411 and fig. 1.

11. Late Akkadian specimens, e. g., come from Level F of the Archaic Ishtar Temples at Assur (Beuger 2013: pl. 1:8), Level XI of the WF Sounding at Nippur (McMahon 2006: 80, type O-17) as well as from Tell Asmar (Delougaz 1952: pl. 150, B.151.210) in the Diyala, but also from Susa and some sites of Southern Mesopotamia.

12. See Zingarello 2016: 80, fig. 3: 2. A very close comparison can be found at Nineveh, in “band rim bowls” of the Area KG's Level VIB, dating to the Late Akkadian/Ur III period (McMahon 1998: fig. 7: 26-28).



Fig. 5 - Selection of ceramic material from Trench D levels 3a1-3a2: 1) LOG.D.356-1 (level 3a1); 2) LOG.D.363-1 (level 3a1); 3) LOG.D.365-1 (level 3a1); 4) Assemblage from 'green number' 389, including corrugated bowl LOG.D.389-1 (level 3a2); 5) LOG.D.389-1 (level 3a2); 6) Carinated shoulder fragment of a small-sized jar (level 3a2).

with flaring rim and high carination (LOG.D.365-1. Fig. 5: 3)¹³. Large bowls with triangular rim rounded on top with ridged convex wall (LOG.D.363-1. Fig. 5: 2) are also attested, at least in level 3a1¹⁴.

As for the closed shapes, levels 3a2 provided a variety of wide-mouthed bag-shaped vessels, small to medium in size, with or without combed incisions on the shoulder, and medium- and large-sized storage jars with rounded, rolled or thickened out-turned rims on medium-high neck or neckless, some examples of which are shown in Fig. 5: 4. Both these types are very often characterized by a decoration consisting of groups of band-combed lines on the shoulder, which seems to appear more frequently in the Akkadian and earlier periods¹⁵, or by horizontal and wavy lines made with a multiple-pointed comb. Corrugation, both on top, under the rim, and on the upper half of the body is likewise attested on wide-mouthed bag-shaped vessel (LOG.D.389-1. Fig. 5: 5).

13. The best parallels for this type of carinated bowl come from Level G of Archaic Ishtar Temples at Assur (Beuger 2013: pl. 5: 8), Tepe Gawra' Stratum VI (Speiser 1935: pl. LXVII:92), Tell Brak's Phase N (Oates 2001: figs. 418: 604, 606, 431: 933), and can all be dated to the Akkadian and post-Akkadian phases. Cf. also an almost identical specimen (LOG.D.228-1) from levels 3a2 (corresponding to the 2016 season' level 3a) at Logardan in Zingarello 2016: fig. 2: 5.

14. For some comparisons see Beuger 2013: pl. 6: 5 (decorated version), pl. 10 (both decorated and undecorated versions) and McMahon 1998: fig. 7: 23.

15. Oates 2001: 165.

Body sherds with notched horizontal applied rope(s) are also common in these (3a1-3a2) and in the earlier levels. Likewise, small jars with carinated shoulder and a possibly medium or medium-high neck were retrieved in 3a2 and earlier levels. Their presence showed a clear connection with the southern and central Mesopotamian repertoires, in which these features are typical of a high number of jars types with a wide variety of rims, but generally of small and medium size and with a ring base¹⁶.

If during the third excavations season, few level 3b's architectural remains have been detected (with no pottery to discuss), both level 3c and the new detected level 3d yielded typical shapes occurring in Akkadian time or dating back to the end of Early Dynastic III and to the beginning of the Akkadian period. Shallow bowls with carinated-sided in common ware as well as in fine ware with slightly thickened rounded or beaded rims respectively, whose comparisons come mostly from Akkadian contexts¹⁷, increase in percentage. Typical Akkadian pottery types seem to be the small cups or cylindrical beakers with beaded or slightly thickened and everted or folded outside rims with a convex or flat base¹⁸. Like other vessel types discussed above, these cups find the most consistent parallels in similar vessels from levels VII-VI in Area KG at Nineveh¹⁹, from levels G-F of Ishtar Temple at Assur²⁰, and, above all, from the levels dating from the end of the Early Dynastic III/Akkadian period at sites in the Eski-Mosul region²¹.

Moreover, as far as the open shapes, the hemispherical bowl LOG.D.384-1 (Fig. 6: 2) might be linked to some later bowls with two undecorated ridges under a slightly turned inward rim from Tell Brak²². Nonetheless, one might suggest that this sherd may conceivably be part of a stemmed bowl or 'fruit stand' with a rim shape somewhat different compared to elongated beveled southern Mesopotamian rims, having a rounded rim with two notched ridges underneath.²³ Similarly, another large bowl sherd with a rounded overhanging rim and a relatively wide groove immediately followed by a narrow applied ridge with a notched decoration (LOG.D.399-1, Fig. 6: 1) could belong to both the mid-late 3rd millennium large bowl type or to a medium-large-sized 'fruit stand'. Few but significant fragments of the latter vessel

16. This type of high carinated shoulder such as the one shown in Fig. 5: 6 is widely distributed in southern and central Mesopotamia as well as in the Diyala region especially during the Early Dynastic III and Akkadian periods. Broadly speaking, it is quite different from the high carinated shoulder jars of Late Akkadian times, which show an applied plain ridge at the carination. For an overview of the wide variety of jars displaying this feature see, for example, the chapter about ring-based jars in Moon 1987 or Delougaz 1952: pls. 142, 155 (only B.515.470), 180.

17. Besides the specimens from Area KG's Level VII at Nineveh (McMahon 1998: fig. 5: 9-13), the best parallels could be found in Ishtar Temple's level G at Assur (Beuger 2013: pl. 2: 13) and at sites in the Middle Tigris Valley such as Tell Fisna (Numoto 1988: fig. 21: 136-139).

18. See the specimens shown in Zingarello 2016: fig. 6: 1, 4 (in the middle and at the bottom left).

19. McMahon 2008: fig. 7: 1-7.

20. Beuger 2008: 356, fig. 6.

21. See Levels Vb-a at Tell Fisna (Numoto 1988: fig. 21: 125-132, 22: 150-155) and Tell Jigan (Fuji 1987: fig. 6: 68-69). This vessel type is attested also at sites in the Upper Khabur and the Eastern Jezirah, see Orsi 2011: pls. 59: 10-12 (Tell Leilan), 66: 20-22 (Tell Hamoukar), 74: 531 (Tell al-Rimah).

22. Oates 2001: fig. 418: 611-613. J. Oates (2001: 174) includes these three specimens among the 'band-rim bowls' typical of the Ur III period, commonly referred to as carinated bowls (such as our LOG.D.356-1, Fig. 5: 1). It should be stressed, however, that they show two plain ridges under the rim, rather than a proper carination.

23. Cf. for example type O-2 and type O-4 in McMahon 2006: pls. 77 and 79 respectively. Among others, a decoration with a double notched ridges is very typical of the southern and central Mesopotamian 'fruit stands'.

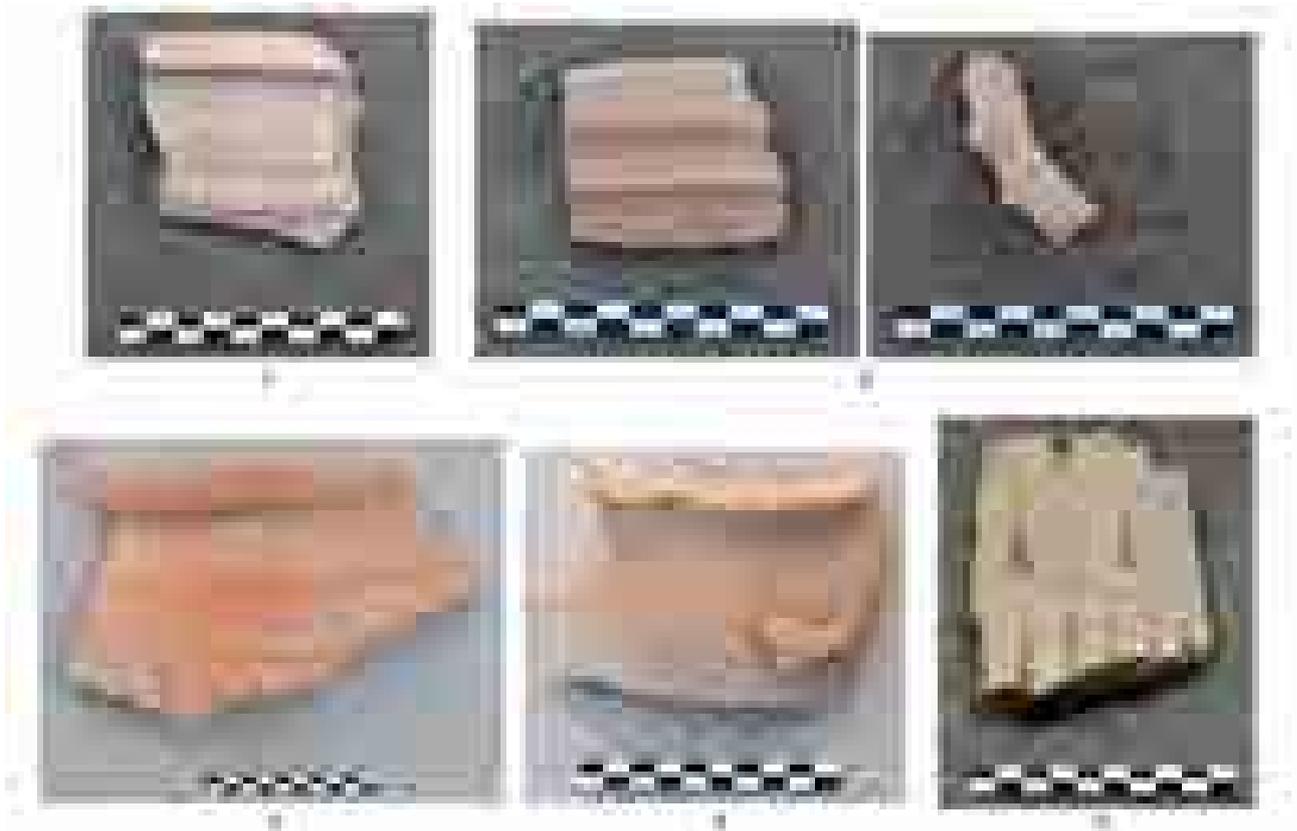


Fig. 6 - Selection of ceramic material from Trench D levels 3c-d: 1) LOG.D.399-1; 3) LOG.D.384-1; 3) LOG.D.399-4/2; 4) LOG.D.391-4; 5) LOG.D.357-1.

type were already found during the second season, in particular the undecorated base of such a pottery type's large specimen (LOG.D.262-12+241-1).²⁴

As far as closed shapes, also in levels 3c-d a wide variety of vessel types were retrieved, among which it is worth mentioning: a sherd of a wide-mouthed, bag-shaped jar (a pottery type again largely attested) with a slightly tapering rim pointing downward and a shallow groove inside, ornamented with an appliqué scorpion together with an incised vegetal motive (LOG.D.391-4, Fig. 6: 4); a medium-to-large-sized storage jar fragment with a triangular outward-turning rim with a decoration combining wavy and horizontal comb-incised lines with two rows of differently tilted slashes (LOG.D.399-4/2, Fig. 6: 3). Lastly, a cylindrical stand fragment with at least two series of excised triangles, the upper ones of which are encased in faint concentric triangles (LOG.D.357-1, Fig. 6: 5) seems to be dated to an earlier date compared to assemblages of the levels under discussion.²⁵

In sum, the framework outlined in the 2016 excavations season, in which Logardan is seemingly fully included within the ceramic tradition of the Tigridian region – according to the regional borders assessed by the ARCANE Project – with strong connections with the neighboring areas is confirmed and strengthened by the 2017 work. Furthermore, what is becoming increasingly clear is also the Logardan potters' craftsmanship, that combines a long standing, but evolving pottery regional tradition during the mid-late 3rd millennium BC with a significant local specificities that characterize it.

24. Zingarello 2016: 85, fig. 8: 2.

25. It has two close parallels in the Diyala region, both dating to Early Dynastic I period (Delougaz 1952: pl. 173: C.3--063 and C.3--0--).

LOGARDAN TRENCH E CERAMIC MATERIALS

Since the beginning of excavations, pottery from Trench E appeared quite mixed, although the 2017 work has partly clarified the existence of two main Bronze Age levels, dating back to the early 3rd millennium BC and to the beginning of Late Bronze Age respectively. The first one is mostly represented by a group of medium- and large-sized storage jars found in one of the rooms (L.2020) of the building uncovered in 2016, which was used through several phases, recognized during the last campaign. As much as it has been possible to establish so far, the earlier phase of the building can be traced back to the Early Uruk period, whose remains were reused and partly adapted since the Middle Uruk time.²⁶ The jars under discussion, most of which have not been restored yet, share both morpho-stylistic and technological characteristics, although further analysis still have to be undertaken: all of them have a rounded or slightly beveled flaring rim, (high- or slightly) carinated shoulder and peculiar decorations seldom attested so far. The jar LOG.E.1068-1 (Fig. 7: 4), featuring an applique



Fig. 7 - SMedium- and large-sized early 3rd millennium BC jars from room L.2020 in Trench E: 1) LOG.E.1103-1 (in the foreground) and LOG.E.1101-1 (at the top left) in situ (not yet restored); 2) LOG.E.1076-1; 3) LOG.E.1287-1 (not restored); 4) LOG.E.1068-1.

26. See both Trench E excavation report (Savage, Zingarello, Obreja and Abdullrahman, this volume) and the pottery analysis (Baldi, this volume).

notched crescent-shape rope along with a ceramic raised circle quite symmetrically placed on the shoulder, still had a lump of clay attached just below the rim, aimed at sealing the vessel's content. Other jars show a deeply and spaced notched rope applique on the shoulder with the edges facing downwards (LOG.E.1076-1, Fig. 7: 2) and a similar notched rope on shoulder with the edges equally facing downwards almost touching a second notched horizontal rope (LOG.E.1287-1, Fig. 7: 3)²⁷. A fourth, large-sized jar (LOG.E.1103-1, Fig. 7: 1 in the foreground) shows the same pattern of decoration, with two notched ropes pointing down applique on the sharply carinated shoulder and on the lower half of the body tapering to a rounded base, divided by a horizontal notched rope located just under the first one. This kind of applied ridges seems comparable to that from Early Dynastic I levels at Tell Sabra²⁸ and Tell Madhhur, both in the Hamrin region. A decoration with at least four alternating notched and impressed applique ropes over most of the body large-sized, is clearly recognizable on an elongated bag-shaped jar with a wide mouth and rounded base (LOG.E.1101-1, Fig. 7: 1 at the top left), despite its poor state of preservation.

The latest phases detected in Logardan Trench E, represented by intrusive pits (especially in the earlier room L.2020) and by a system of pottery kilns spread over the whole excavation area, is characterized by a broad presence of large wide-mouthed storage jars with square-sectioned rim (with or without a slight depression in its inner or outer edge) and horizontal ribs at the base of the neck and on the shoulder (for example LOG.E.1284-1, Fig. 9: 1; LOG.E.1374-21, Fig. 9: 2)²⁹; large wide-mouthed storage with a distinct inwardly beveled rim or incurved ledge rim (LOG.E.1382-17, Fig. 9: 3; LOG.E.1374-3, Fig. 9: 4)³⁰ and small unpainted beakers with plain or tapering rim and a footed base (LOG.E.1361-3, Fig. 9: 5; LOG.E.1319-1, Fig. 9: 6; LOG.E.1363-3, Fig. 9: 7)³¹.

A nearly complete large storage jar (LOG.E.1108-1, Fig. 8) was placed in a pit cutting the early 3rd millennium BC strata in room L.2020 and sparing, quite surprisingly, the earlier jar 1103-1 (Fig. 7: 1 in the foreground).³² This vessel shows an inwardly beveled rim, squat barrel-shaped body, round base and a decoration of quite regularly spaced both impressed and



Fig. 8 - Large storage jar LOG.E.1108-1 from a Late Bronze Age pit, Trench E.

27. It should be stressed that a feature of this roped jar – uncovered during the 2017 excavations campaign – namely the presence of a hole at its base (cf. Fig. 7: 3, fragment immediately under the measure) is meaningful with respect to its function: it may be involved, in fact, in a beverage manufacturing process, most likely beer.

28. See Tunca 1987: pls. 96: 4 (Early Dynastic I), 98: 3 (Early Dynastic I ?) for Tell Sabra; Moon and Roaf 1984: fig. 14: 10 for Tell Madhhur.

29. Cf. type T10/12 in VV.AA. 2012: 80 with relevant bibliography.

30. Cf. types T10/14 and T10/15 respectively, in VV.AA. 2012: 80 with relevant bibliography. These large wide-mouthed storage jars with different rim types have good parallels also in the Mitannian pottery from Nemrik (north of Mosul) for which see Reiche 2014: 295 and pls. 9-10.

31. For comparisons, see Gabutti 2002-2003: pls. 67-68, including several examples of late Middle Bronze Age.

32. Due to the relatively high amount of vessels apparently located along at least two walls of room L.2020 in the early 3rd millennium BC building phase, it is likely that the pit cut to accommodate the Late Bronze jar 1108-1 (Fig. 8) came across and took one or more earlier vessels out.



Fig. 9 - Selection of Late Bronze Age pottery from Trench E: 1) LOG.E.1284-1 (from a pit in south-west corner of room L.2020); 2) LOG.E.1374-2 (from kiln 2095); 3) LOG.E.1382-17 (from kiln 2120); 4) LOG.E.1374-3 (from kiln 2095); 5) LOG.E.1361-3 (from kiln 2095); 6) LOG.E.1319-1 (from a pit in south-west corner of room L.2020); 7) LOG.E.1363-3 (from a foundation layer).

oval-sectioned plain ridges. Between and partly above them a hard and heavy clay plaster was laid from the shoulder down on the body and base, aiming most likely at isolating the vessel's content. In this regard, it may be suggested as a working hypothesis, not only an aesthetic but also a functional purpose for the ridges applied on the jar's body as a support and 'grip' for this kind of mortar coating.

Currently, it still has to be understood whether the two Late Bronze Age levels recognized in this area have to be assigned to a very early phase of the Late Bronze Age (i.e. a 'transitional' phase between the end of the Middle Bronze and the beginning to the Late Bronze Age) or to a slightly later one. In this sense, the complete lack of painted sherds should be stressed: this situation may be due to a random event that affected the ceramic material distribution or may have a functional reason. The excavations completion of the system of pottery kilns in Trench E, planned for the next season, will help clarify this aspect.

Finally, a late 3rd millennium BC elusive phase seems to be marked by few vessel types, most of which are comparable to those retrieved in Trench D – such as a limited variety of carinated bowls with out-turned or thickened rim flattened on top, high carination and hemispherical body or wide-mouthed bag-shaped jars with a comb-incised decoration. However, the predominant shape of the late Early Bronze Age in Trench E, although not associated so far with a distinct architectural level, is a hemispherical bowl with a high vertical grooved

rim (Fig. 10). This kind of open vessel, both in carinated, straight-sided or curved version,³³ mainly attested in Period EME 5,³⁴ is among the most widespread shapes of the Middle Euphrates as well as in the Upper Khabur, e.g. at Tell Mozan and Tell Barri³⁵, but also in Southern Mesopotamia as a characteristic type of the Ur III period³⁶.



Fig. 10 - Carinated bowls with upturned, grooved rim from Trench E.

33. This bowl corresponds to 'type 116' of the typology elaborated by P. Sconzo (2015: 132-133, pl. 22: 4-6) for the Middle Euphrates region within the ARCANE project.

34. According to radiocarbon dates, phase EME 5 lasted little bit more than one century, from 2196-2076 BC (Finkbeiner *et al.* 2015: 436).

35. Orsi 2011: pls. 146: 28 (Phase 4, Tell Mozan), 181: 273 (Phase P, Tell Barri).

36. McMahon 2006: 82, Type O-22, pl. 94 with relevant bibliography.

