

CHALCOLITHIC CERAMICS FROM LOGARDAN TRENCHES D AND E: MORPHO-STYLISTIC FEATURES AND REGIONAL PARALLELS

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As already observed in 2016, the assemblage from Levels 1-3 of Trench D at Logardan dates back to the 3rd millennium BC: Levels 1-2 yielded Ur III ceramics, while pottery from Level 3 and its sub-levels belongs to a Proto-dynastic III-Akkad horizon¹. Although some out-of-context chalcolithic sherds have been collected in Levels 1-3², 4th millennium ceramics come essentially from Level 4a-c and date back to the Early and Middle Uruk Phase (Fig. 1). However, 4th millennium ceramics have also been collected this year in Trench E³, where two different 4th millennium phases of occupation are recognizable, Early and Middle Uruk respectively. Trench D yielded a limited amount of chalcolithic pottery (882 sherds, of which 63 typologically diagnostic samples), while a much more important quantity comes from Trench E (2018 sherds, of which 144 typologically diagnostic samples). It significantly improves the information available on the south-Mesopotamian repertoire in Central and Northern Mesopotamia. It demonstrates also that the Early Uruk presence (about 3900 BC) at Logardan is not limited at the edge of the hill (Trench D), but completely occupies the top of the anthropic tell and continues during the first part of the Middle Uruk period (about 3700 BC)⁴.



Fig. 1 - Early and Middle Uruk vessels.

Concerning the Early Uruk repertoire at Logardan Trench D Level 4 and Trench E Level IVB, open shapes, conical flat-base bowls with rims slightly rounded or thickened on the exterior side are roughly finished and sometimes scraped on the lower part of the exterior body⁵. Some

1. Zingarello, this volume.
2. Despite important building activities due to the construction of the kilns in Levels 1-3, only 89 chalcolithic sherds (7 Halaf, 39 Ubaid and 43 Early Uruk specimens) were found out of context in Trench D.
3. Several 4th millennium sherds were amongst other chalcolithic ceramics collected during the survey of the Area E, but stratified contexts in Trench E yielded only sporadic out-of-context 4th millennium fragments in 2016.
4. Since it has not yet been possible to excavate on an important surface the Middle Uruk phase in Trench E (the Middle Uruk occupation in Trench D has yielded a very limited quantity of materials), for the moment it is impossible to state whether these two phases correspond to a uninterrupted occupation, or if there is some intermediate hiatus.
5. Both morpho-stylistic and technical features of these conical bowls match with late (i. e. LC2) oriental samples of “V”-shaped Coba bowls attested in northern Mesopotamia during this phase (Baldi 2012b). For south-Mesopotamian Early Uruk parallels see Eridu (Safar *et al.* 1981: fig. 22; Wright 2014: fig. 7.2.a-b), Farukhabad (Wright 1981: fig. 46.d-f), Geser 15 (Alizadeh 2014: fig. 61.G).

samples of little carinated bowls are well-shaped and fine-walled (Pl. I.5)⁶. In-turned rim bowls are quite shallow and have rounded or somewhat inwards belled rims⁷, while a deeper type displays pinched or top-flattened rims (Pl. I.6)⁸ and a slight carination towards the middle of the body (Pl. I.4)⁹. Coarse flattened-base basins, a widespread shape of the Middle Uruk period, appear since this early phase (Pl. I.3), even if they are better attested in the Middle Uruk Level IVA in Trench E¹⁰. Bevelled-rim bowls (hereafter BRBs), which are considered the main hallmark of the Uruk period, are quite rare and not yet serially produced: their rims can be oblique, but most of time are vertically bevelled on the exterior side (Pl. I.1)¹¹. But the most characteristic open containers are the so-called proto BRBs¹², with rims sometimes thinned, rounded, or loosely cut and bevelled in various ways and with varying orientations (Pl. I.2, Fig. 2)¹³.



Fig. 2 - Proto bevelled-rim bowl from Logardan Trench D
Level 4B

Early Uruk closed shapes are basically represented by ovoid jars with flared necks and rounded or flattened rims, sometimes provided with straight or conical spouts (Pl. II.4-5, 7)¹⁴. Carinated pots with beaded rim are not frequent but diagnostic of Early Uruk assemblages

6. See Geser 15 (Alizadeh 2014: fig. 61.I), Farukhabad (Wright 1981: fig. 47.p, q, r). This same type is also documented within contemporary north-Mesopotamian late LC2 assemblages, as at Nineveh (Gut 1995: Taf. 57.840) or Tepe Gawra (Rothman 2002: pl.8.743, pl. 22.2798).

7. For rounded in-turned rims see Eridu (Wright 2014: 7.2d), Geser 12 (Alizadeh 2014: fig. 58.F). For inwards bevelled-rim bowls see Farukhabad (Wright 1981: fig. 46.h), Geser 13-14 (Alizadeh 2014: fig. 59.J, 60.D).

8. See Susa "Acropole III" 7-11 (Wright 2014: fig. 7.5i), Farukhabad (Wright 1981: fig. 47.c, m), Geser 10-11 (Alizadeh 2014: fig. 57.C, O).

9. See Eridu (Wright 2014: 7.2e-f), Susa "Acropole III" 7-11 (Wright 2014: fig. 7.5g), Geser 12 (Alizadeh 2014: fig. 58.H).

10. See Uruk/Warka XII-IX (von Haller 1932: Taf. 18.B.v, Taf. 18.C.c'), Farukhabad (Wright 1981: fig. 42.a), Geser 14 (Alizadeh 2014: fig. 60.B).

11. BRBs appear as a generic open shape before being serially produced since the beginning of the Middle Uruk phase (at Uruk, they become a serial product since Level Eanna VIII-VII – Sürenhagen 1986). For Early Uruk BRBs, see Eridu (Safar *et al.* 1981: fig. 22 lower left; Wright 2014: fig. 7.2.c), Susa "Acropole III" 7-11 (Wright 2014: fig. 7.5c).

12. Dyson 1966: 320; Alizadeh 2014: 30; Wright 2014: 119.

13. See Susa "Acropole III" Levels 7-11 (Le Brun 1971: fig. 40.4; Wright 2014: fig. 7.5a-b), Farukhabad (Wright 1981: fig. 45.h-k), Geser 11, 13 (Alizadeh 2014: fig. 57.H, 59.H).

14. See Eridu (Safar *et al.* 1981: table 3:1, 3:2, 3:12, 3:17, 3:18, 3:21; Wright 2014: fig. 7.3b-e), in the Uruk region Site WS022 (Adams and Nissen 1972: fig. 33.8, 53.6; Wright 2014: fig. 7.4f, 7.4g), Susa "Acropole III" 7-11 (Le Brun 1971: fig. 40.8-9; Wright 2014: fig. 7.6g, i, j, k), Farukhabad (Wright 1981: fig. 51.g-o), Geser 14-15 (Alizadeh 2014: fig. 60.F, 61.S – for straight spouts see since Levels 9-10 fig. 56.A).

Plate I

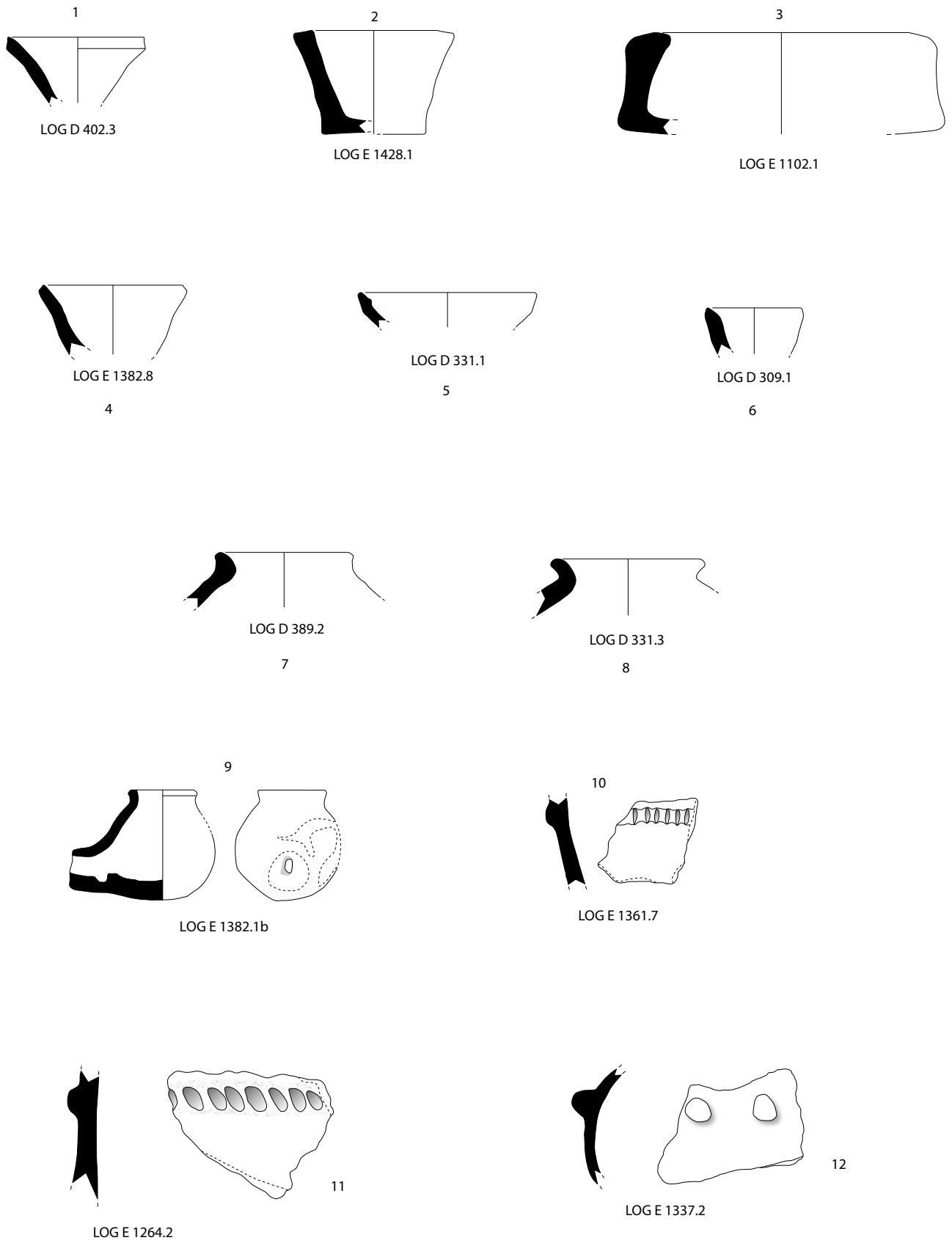
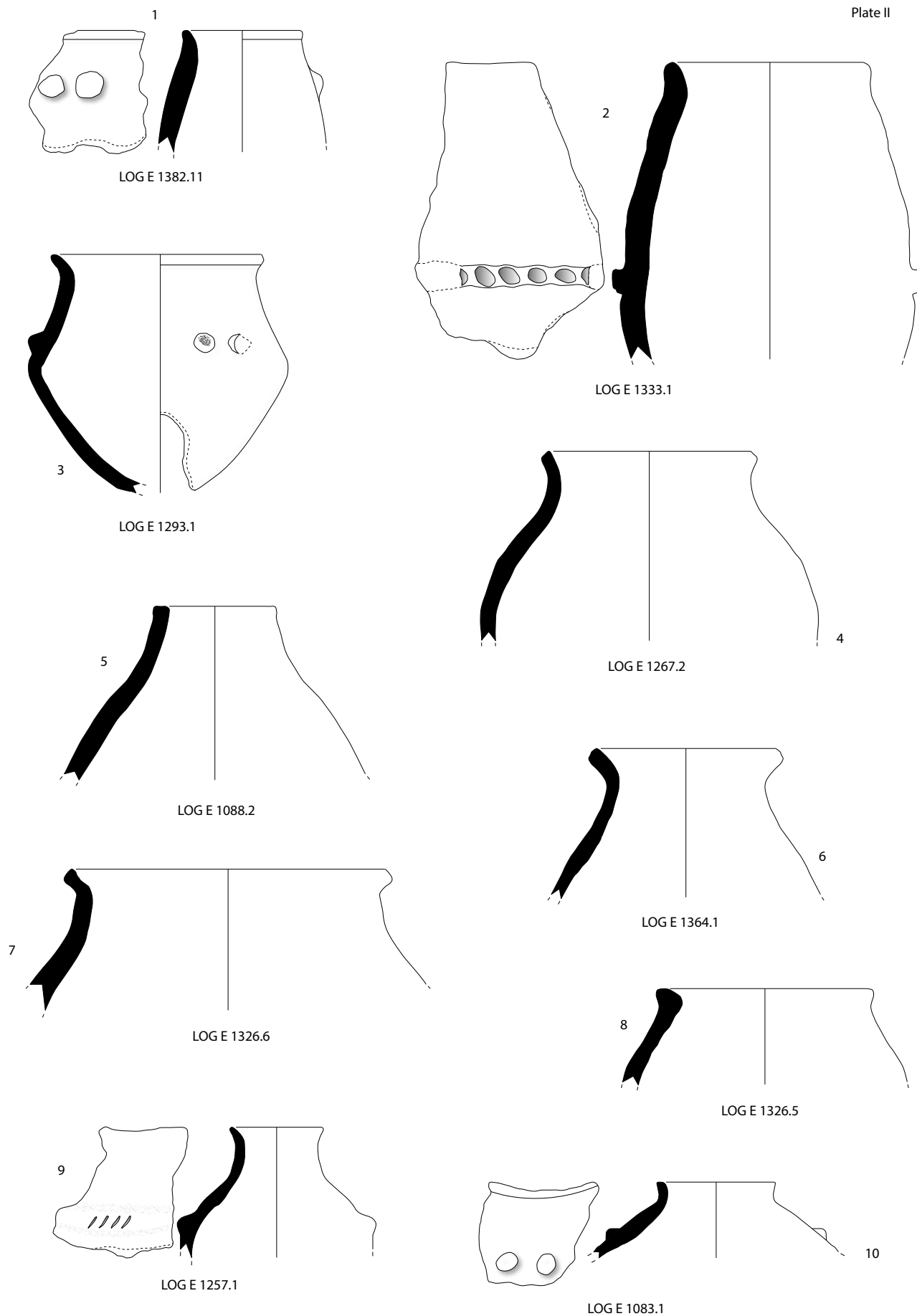


Plate II



0 10 20 cm

Plate II.

(Pl. II.8)¹⁵. Some rare neckless samples have everted and rounded rims (Pl. II.6)¹⁶, while some sporadic specimens with developed necks have flaring pinched or hollowed rims and quite elliptical shapes (Pl. II.9)¹⁷. Another diagnostic closed shape, attested especially in Trench E Level IVB, is represented by deep urns with a restricted mouth and club-headed rims thickened on the exterior side¹⁸. Finally, some globular hole-mouth jars¹⁹ and the very first samples of jars with triangular-section everted rims (Pl. I.7) are documented during the Early Uruk phase²⁰. A remarkable Early Uruk trait that characterizes a disparate range of jars and closed shapes is represented by the hollowed inner profile of different kind of rims (Pl. II.7)²¹.

Concerning surface treatments, some rare (2% of the assemblage) but very distinctive red slipped sherds²² probably constitute the first appearance of the southern tradition known as Uruk red ware²³. Moreover, besides plain hand-finished surfaces, a consistent percentage of the sherds (22%) displays clear traces of scraping on the exterior body²⁴.

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15. See Uruk/Warka XII-IX (von Haller 1932: Taf.18B.d', e', Taf. 18C.x), Geser 11-12 (Alizadeh fig. 57.f, fig.58.J), Sargarab (Wright *et al.* 1975: fig. 8.e), Kunji Cave (Wright *et al.* 1975: fig. 6.i).
 16. See in the Uruk region Site WS022 (Adams and Nissen 1972: fig. 33.11; Wright 2014: fig. 7.4a), Susa "Acropole III" 7-9 (Wright 2014: fig. 7.6c-d), Farukhabad (Wright 1981: fig. 48.i, j), Geser 10, 14 (Alizadeh 2014: fig. 57.A, 60.I).
 17. This type is very close to the typically LC1-LC2 north-Mesopotamian flaring-rim jars (for north Mesopotamian contemporary samples, see Tepe Gawra IX – Rothman 2002: pl. 20.2223, 2240). However, compared to northern specimens, flaring-rim Early Uruk jars are quite rare and have narrow shoulders and ovoid bodies, while in the North these jars are globular and sometimes characterized by a slight carination under the shoulder. For southern parallels, see in the Uruk region Site WS218 (Adams and Nissen 1972: fig. 49.7; Wright 2014: fig. 7.4b), Farukhabad (Wright 1981: fig. 49.b-c, h-l), Geser 11, 12 (Alizadeh 2014: fig. 57.I, 58.D).
 18. See Nineveh (Gut 2002: fig. 15.9-10), Eridu (Wright 2014: fig. 7.3a), Farukhabad (Wright 1981: fig. 52.I), Geser Level 14 (Alizadeh 2014: fig. 60.H, K).
 19. See Susa "Acropole III" (Wright 2014: fig. 7.6a-b), Geser Levels 12, 13, 15 (Alizadeh 2014: fig. 58.K, 59.D, 61.U-V).
 20. This type is very distinctive of the Middle Uruk phase (see for instance at Girdi Qala northern mound Trench D). Compared to the neckless Middle-Uruk samples, the first specimens have a slightly more developed neck and a rim forming a band on the exterior side. See Susa "Acropole III" (Wright 2014: fig. 7.6e-f), Farukhabad (Wright 1981: fig. 52.h, i, j).
 21. See Uruk/Warka XIII-XII (von Haller 1932: Taf. 17 D.h, I, n, Taf. 18A.p), Geser 12 (Alizadeh 2014: fig. 58.J), Susa "Acropole III" Level 9 (Wright 2014: fig. 7.6e), Kunji Cave (Wright *et al.* 1975: fig. 6.k), Sargarab (Wright *et al.* 1975: fig. 8.i), Farukhabad (Wright 1981: fig. 43.m-n, fig. 48.c).
 22. See Eridu (Wright 2014: 111), Geser 15 (Alizadeh 2014: fig. 61.U).
 23. The Uruk red ware is typical of the Middle Uruk phase in the South, as well as in central and northern Mesopotamia (see for instance at Nippur, Rubeidheh or Gurga Chiya – Hansen 1965: 204-205; McAdam and Mynors 1988: 39,48; Wengrow *et al.* 2016: fig. 8.13-15) and some very rare specimens are still documented in the Late Uruk (Eanna VI-V – Nissen 1970: 147), but its first appearance dates back to the end of the Ubaid period and to the Early Uruk phase (Eanna Levels XIV-XII – von Haller 1932: 38-40; Susa "Acropole I" 22 – Le Brun 1978: 181).
 24. Even if quite typical of the LC1-LC2 north-Mesopotamian repertoires (Baldi 2012a, 2012b), scraped surfaces are also documented within Early Uruk southern assemblages, as at Eridu (Wright 2014: 111, fig. 7.2a-b, e-f, 7.3a), in the Uruk region (Site WS022 – Adams and Nissen 1972: fig. 33.11), at Susa "Acropole III" (Wright 1985: fig. 4; Wright 2014: fig. 7.5i, 7.6a-b), Geser 9-10 (Alizadeh 2014: fig. 56.E).

Decorations are rare. The most noticeable amongst them, are some pierced lugs and the first appearance of some irregular nails (Pl. II.9)²⁵ or cross-hatched incisions²⁶. Finally, some rare samples (just 3 of them have been collected in Trench D and 5 in Trench E) indicate the emergence of appliqué fingered cordons (Fig. 3). This kind of decoration is largely attested during the Middle Uruk phase (both at Girdi Qala northern mound Trench D and at Logardan Trench E Level IVA – Pl. I.11, II.2)²⁷, but it is noteworthy that the first samples known from south-Mesopotamia, Khuzestan and Logardan are associated to similar types of deep goblets²⁸.

Even if basic, the repertoire from Level 4c-b at Logardan Trench D and Level IVB in Trench E represents a unique document. It is the only genuine Early Uruk (namely south-Mesopotamian) assemblage from central and northern Mesopotamia. Moreover, it offers a significant comparative base for the ceramic productions of a period that, even in southern Mesopotamia and Khuzestan, is known from a very restricted number of sites and contexts.

Actually, based on the ceramic chrono-typology established by Sørenhagen (1986), it is clear that the Early Uruk phase attested at Logardan Trenches D-E corresponds to Levels XII-IX of the “*Tiefschnitt*” sounding at Uruk/Warka, where the excavated contexts are quite restricted and not very informative. The only other south-Mesopotamian site which yielded stratified materials is Eridu (Lloyd 1948): vessels from a well-preserved tripartite building are documented by some photos and drawings (Safar *et al.* 1981: fig. 22-23) illustrating flared-rim jars with straight or conical spouts, “V”-shaped bowls with roughly scraped surfaces, rare BRBs and different types of proto-BRBs. It largely coincides with the typology from Trenches D-E at Logardan. But the range of shapes from Eridu is very restricted: the total absence of storage jars or cooking pots clearly depends on the function of the excavated context, namely a tripartite building whose main spaces were devoted to serve and consume food towards the end of their period of occupation. Some other Early Uruk ceramics are also documented in the Uruk region at Sites WS022, 178, 218 (Adams and Nissen 1972: 220, 226, 228), but they come from a survey and are, therefore, un-stratified.



Fig. 3 - Early Uruk finger-pressed cordon decoration from Logardan Trench E Level IVB.

25. Finger-nail impressed and incised decorations appear in Eanna XII-IX Levels (von Haller 1932: Taf. 18A.h', Taf. 18C.g) and become popular in the Middle Uruk phase: see at Rubeidheh (McAdam and Mynors 1988: types 90a-I, 91a-e).

26. See Eridu (Safar *et al.* 1981: table 4:1), Farukhabad (Wright 1981: fig. 55.a).

27. During the Middle Uruk Phase, finger-impressed cordons are frequent on the shoulder and body of the closed shapes – see for instance at Uruk: Warka Level VI (von Haller 1932: Taf. 19C.k-i).

28. See Uruk/Warka (Sørenhagen 1986: 42 T/198-223; von Haller 1932: Taf. 18C.n), Geser 13 (Alizadeh 2014: fig. 59.C).

In South-western Iran, Early Uruk materials are known from Levels 7-11 of the so-called “Acropole III” sounding (Wright 1985: 726-732 and fig. 4) and from Level 23-22 of the “Acropole I” at Susa (Johnson 1973; Le Brun 1978: 181). Despite the limited excavated surface, the morpho-functional repertoire from Susa is wider than that from Eridu because both “Acropole I” and “Acropole III” soundings cut deeply through layers deposited by different activities. Well-stratified Early Uruk ceramics are also documented in Levels 11-15 of the Step Trench at Tall-e-Geser (Caldwell 1968). But from an architectural point of view, the whole 4th millennium sequence is represented by a series of fragmentary floors, walls and mud-brick layers, without any possibility of detecting some coherent building plans (Alizadeh 2014: 12).

Likewise, the materials from Farukhabad offer an uncertain overview on the Early Uruk phase. Indeed, excavations at Farukhabad have reached Early Uruk strata in Trench B Levels 36-35, which yielded a large ceramic assemblage. But the sharp typological separation established by the excavator between Uruk materials and so-called Sargarab ware (Wright 1981: 91) seems problematic if one compares this production (supposed to be local) to the assemblage from the deepest levels of Trenches D-E at Logardan. Despite several features testifying of a clear continuity from the previous Susa I assemblage, Sargarab ware²⁹ shows an unmistakably Early Uruk-related repertoire (Wright 1981: fig. 40-44). Nevertheless, this typological continuity between the 5th millennium Farukh repertoire and the so-called Sargarab ware is not surprising if compared to the presence of many late-Ubaid-related types within the Early Uruk assemblages. Besides, even if Wright (1981: 168 and Table 2) places this tradition between the so-called Farukh phase and the beginning of the Uruk period, Sargarab ware is not typical of the late 5th millennium layers: on the contrary, it is very abundant and even dominant in the Early Uruk phase (Wright 1981: 91). Moreover, it shares several morpho-stylistic features with other sites in Luristan and Khuzestan³⁰, while some of its shapes are documented both in the north- and south-Mesopotamian assemblages of this period³¹. But it

29. Named this way because of the large amount of this pottery collected on the surface at the eponym village of Sargarab, in the Deh Luran Plain (DL 169) (Neely and Wright 1994: 131-138).

30. See for instance the presence, both at Sargarab and Kunji Cave, of large club-headed bowls (Wright *et al.* 1975: fig. 6.n, 7.f), or the frequency of Sargarab appliqué finger-impressed cordons, as at Kozegarān, Khāvardi or Baba Jan V (Wright *et al.* 1975: fig. 7.e, h, j; Goff 1971: fig. 6.25-27, fig. 6.46, fig. 7.17, 21). Nevertheless, even if the early 4th millennium assemblages from northern Khuzestan and Luristan belong to a local tradition, it is evident that they are closely related both to the north-Mesopotamian LC2 chaff-faced traditions (see the in-turned rim bowls or Coba bowl-like scraped container from Chiā Sabz – Goff 1971: fig. 6.7-9, 13; see also the in-turned rim bowls and the inwards bevelled-rim bowl from Baba Jan V – Goff 1971: fig. 7.2-6, 13). At the same time, these assemblages show some south-Mesopotamian Early Uruk traits (as the slightly drooping spout of Baba Jan V or the flared rim deep bowl of Afrineh – Goff 1971: fig. 7.30; fig. 6.37).

31. For instance, the flaring-rim jars with thinned rims, which are generally considered as a LC1-LC2 north-Mesopotamian type (but see for instance at Sargarab – Wright *et al.* 1975: fig. 8.f). In the same way, some deep pots with restricted mouth and rims thickened on the exterior side are documented at Nineveh (“Lower” and “Middle” Nineveh 3 phase in a typically Gawra B horizon – Gut 2002: fig. 15.9-10), at Eridu (in a genuine Early southern Uruk context – Wright 2014: fig. 7.3a), as well as at Sargarab (Wright *et al.* 1975: fig. 7.i)

also shows several south-Mesopotamian Uruk traits from a morphological point of view³². In the same way, it is possible to recognize the first emergence of some Early Uruk decorations at Logardan Trenches D-E and within the Sargarab assemblage from Farukhabad³³. Therefore, it seems likely that the so-called Sargarab ware represents a production very close to (and strongly influenced by) the south-Mesopotamian Early Uruk tradition of the Khuzestan region, attested at Susa “Acropole I” 23-22 and “Acropole III” 7-11, as well as at Farukhabad Trench B 36-35.

As already observed in 2016, the Early Uruk assemblage from Logardan – as all the other Early Uruk sites known so far – shares important morpho-stylistic features with Godin VII-“early” VI and Uruk Eanna XII-IX. Moreover, from a technical point of view, it is remarkable that the first Uruk productions do not are exclusively mineral-tempered. On the contrary, at Eridu, Susa, Uruk, Farukhabad, Tall-e-Geser or Logardan, despite some mineral fabrics, the majority of the Early Uruk sherds has quite rough vegetal pastes. As already stressed last year, this intriguing element tends to remove a long-lasting prejudice on the existence of a dichotomy between north- and south-Mesopotamian late chalcolithic ceramics.

As far as the little Middle Uruk assemblage from Trench E Level IVA it is essentially composed by BRBs³⁴, little-sized pots with a low spout close to the bottom (Pl. I.9)³⁵, knobbed jars and pots (Pl. I.12, II.1, 3, 10)³⁶, shallow basins with irregular ovoid profiles³⁷, urns and jars decorated with finger-impressed cordons (Pl. I.11, II.2)³⁸, some red-slipped wares³⁹ and

32. Some samples of finger-impressed cordons are attested in Early Uruk contexts at Logardan Trenches D-E, or at Geser 13 (Alizadeh 2014: fig. 59.C); Sargarab shallow flat-base basins are a typically Uruk shape (Wright *et al.* 1975: fig. 8.1 for a Sargarab ware specimen, while see Farukhabad and Geser 14 for Early Uruk samples – Wright 1981: fig. 42.a; Alizadeh 2014: fig. 60.B); some scraped and slightly carinated bowls are also attested in southern Mesopotamia (see Wright *et al.* 1975: fig. 7.b for a sample in Sargarab ware; see Wright 2014: fig. 7.2f for an Early Uruk sample from Eridu); some early types of BRBs are attested in Sargarab ware (Wright 1981: fig. 42.n); the typically early Uruk proto-BRBs seem to be documented also in Sargarab ware (Wright *et al.* 1975: fig. 7.a); conical bowls with pouring lips, which are attested at Farukhabad in Sargarab ware (Wright 1981: fig. 40.e.), are also typically Uruk (see for instance at Girdi Qala northern mound Trench D); upwards conical spouts represent another feature the Sargarab ware shares with south-Mesopotamian Early Uruk assemblages (see Farukhabad, Wright 1981: fig. 40.b; see Eridu, Wright 2014: fig. 7.3e), as well as square-section flared-rim jars (see in Sargarab ware from Farukhabad, Wright 1981: fig. 44.g-j; see Early Uruk samples from Eridu, Wright 2014: fig. 7.3b-d); finally, some very early specimens of jars with triangular-section rims – a very widespread and peculiar Middle Uruk type – appear at Farukhabad in Sargarab ware (Wright 1981: fig. 42.i, fig. 44.a) as at Logardan Trench D Level 4 and other Early Uruk contexts (see for instance at Susa “Acropole III” Level 7 – Wright 2014: fig. 7.6f). It is also remarkable that some jars in Sargarab ware have a rim hollowed on the inner side (see at Sargarab – Wright *et al.* 1975: fig. 8.i; or at Farukhabad in Sargarab ware – Wright 1981: fig. 43.l, m, n), as it is sometimes the case of jars and closed shapes from genuine Early Uruk assemblages (Pl. II.7) (see at Farukhabad in “Uruk ware” – Wright 1981: fig. 48.c; or Susa “Acropole III” Level 9 – Wright 2014: fig. 7.6e).

33. The most noteworthy example is represented by the vertical pierced lugs and the criss-cross incisions, which are typical of the south-Mesopotamian Uruk assemblages (as at See Eridu – Safar *et al.* 1981: table 4:1; but also at Farukhabad, in a ware that the excavator considers genuinely Early Uruk – Wright 1981: fig. 55.a; while for a sample in Sargarab ware from Farukhabad see Wright 1981: fig. 44.1).

34. As in Uruk/Warka Level VIII, BRBs (that were rare in Trench E Early Uruk Level IVB), begin to be serially produced in Trench E Level IVA.

35. See at Uruk/Warka Level VIII (von Haller 1932: Taf. 18C.v, w).

36. See at Uruk/Warka Level VIII (von Haller 1932: Taf. 18C.g¹).

37. See at Uruk/Warka Levels VIII-VII (von Haller 1932: Taf. 18C.c¹, 18D.a).

38. See at Rubeidheh (McAdam and Mynors 1988: fig. 30.46; 34.100; 36.122).

39. See at Uruk/Warka Levels VIII (von Haller 1932: Taf. 18C.f¹).

globular neckless jars with plain rounded rims (Pl. II.10)⁴⁰.

Obviously, 4th millennium pottery from Trenches D and E at Logardan largely confirms what already observed in Trench C at Girdi Qala in 2015 and in Trench D at Logardan in 2016: the repertoire is basically the same and some typological crossings can be observed between ceramics from Trench E Level IVA and Trench D at Girdi Qala northern mound (this volume, *infra*). This is completely normal, since, in both cases (as also in Trench C at Girdi Qala main mound), several Middle Uruk types are essentially the same. Nevertheless, some discrepancies can be stressed between the different Middle Uruk assemblages identified so far. Most of time, these variabilities are related to functional aspects of the pottery. In this sense, it is quite obvious to observe that the houses in Trench D at Girdi Qala northern mound yielded any kind of vessels devoted to any kind of domestic functions (storage, consumption or presentation of food), while the potter's kilns in Trench C at Girdi Qala main mound or in Trench E at Logardan contained only few storage jars and practically no fine ceramics⁴¹.

But other variabilities within Middle Uruk ceramics depend on chrono-cultural differences between the excavated areas. On the one hand, this aspect is very important because it is likely to offer information on the evolution and organization of the south-Mesopotamian presence at Logardan and Girdi Qala. However, on the other hand, it is difficult for the moment to establish clear chronological differences between the trenches because some Middle Uruk assemblages (as the one from Trench E at Logardan) are quantitatively limited. For the time being, it is important to stress that, unlike Trench C at Girdi Qala main mound, where a local LC2-LC3 tradition was also documented, Level 4 of Logardan Trench D and Levels IVA-IVB at Logardan Trench E yielded exclusively south-Mesopotamian-related shapes⁴². The same can be observed in Trench D at Girdi Qala northern mound. In other terms, although the firing area in Trench C at Girdi Qala main mound was essentially used by south-Mesopotamian artisans, it was a work space frequented also by local potters, or at least integrated within a local housing context. On the contrary, the Early Uruk architectural complexes at Logardan Trenches D and E, as well as the Middle Uruk houses and kilns of Trench D at Girdi Qala and of Trench E at Logardan appear as living or working spaces exclusively associated with an Uruk material culture and, therefore, presumably reserved for South-Mesopotamian inhabitants and workers. From a merely chronological point of view, there is no noticeable difference between the Early Uruk assemblages identified at Logardan (Trench D Level 4c-b and Trench E Level IVB) and in the basal levels (10-8) of Trench C at Girdi Qala main mound. It means that, at the beginning of the 4th millennium BC, south-Mesopotamian settlers were living and meeting in the architectural complexes of Logardan, while they were used to produce their own pottery at Girdi Qala main mound. Later, during the Middle Uruk Phase, some typological discrepancies can be recognized between the different trenches. If the assemblages from Levels 2-1 of Trench C at Girdi Qala main mound and from Trench D

40. See at Farukhabad (Alizadeh 2014: fig. 43.k).

41. Fine ceramics and jars are produced more rarely, respectively, because they are ostentatious ceramics (and therefore uncommon by definition), or because they have a life span longer than bowls (Baldi 2012b, 2012c): in both cases, it is more difficult to find substantial quantities of them in abandoned kilns rather than in dwellings or domestic contexts.

42. No diagnostic samples and just 4 body-sherds can be attributed to a north-Mesopotamian LC2-LC3 tradition.

at Girdi Qala northern mound appear almost identical⁴³, the little amount of pottery coming from Logardan Trench E seems slightly older⁴⁴. It could suggest that before the foundation of a south-Mesopotamian settlement separated from the rest of the village at Girdi Qala north, the Middle Uruk presence was not limited at Girdi Qala main mound (where, at the beginning of the local LC3 – in Trench C Levels 7-3 – south-Mesopotamian artisans were used to fire their pots). In this period, Logardan (Trench E Level IVA) was also occupied by Middle Uruk settlers, who produced their ceramics in firing installations built within the ruins of the Early Uruk buildings.

This reading of the ceramic assemblages seems to delineate a continuous dynamic of expansion of the South-Mesopotamian presence at Logardan and Girdi Qala during the first half of the 4th millennium BC. To validate this picture and to specify the temporalities of this dynamic, during the next campaigns it will be necessary to verify when the south-Mesopotamian settlement of Girdi Qala north was founded, as well as to understand the extension of the Middle Uruk presence at Logardan.

43. Tentatively to attribute to the second part (Eanna Level VI at Uruk) of the Middle Uruk (local LC3) period, around 3600-3500 BC.

44. Tentatively to attribute to the first part (Eanna Level VIII at Uruk) of the Middle Uruk (local LC3) period, around 3800-3700 BC.