The assemblage from Levels 1-3 of Trench D at Logardan dates back to the 3rd millennium BC: Levels 1-2 yielded Akkad and post-Akkad ceramics, while pottery from Level 3 belongs to a Proto-dynastic II-III horizon. Although some out-of-context chalcolithic sherds have been collected in Levels 1-3, 4th millennium ceramics come essentially from Level 4 and its sub-levels. It is not a huge amount of pottery (just 2205 sherds, of which 198 typologically diagnostic samples), but it significantly improves the information available on the Early Uruk period. This south-Mesopotamian repertoire was not documented at all in central and northern Mesopotamia before the excavation, in 2015, of Levels 10-8 of Trench C at Girdi Qala and, even in southern Mesopotamia, it is very little known. Obviously, pottery from Trench D Level 4 at Logardan largely confirms what already observed about the assemblage from the basal levels of Trench C at Girdi Qala, but it also offers several additional clarifications. Moreover, unlike Trench C at Girdi Qala, where a local LC2 tradition was also documented, Level 4 of Logardan Trench D yielded exclusively south-Mesopotamian-related shapes.

Concerning 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 body (Pl. I.1 – Fig. 1). The only sample of little carinated bowl is well-shaped and quite fine-walled (Pl. I.2). In-turned rim bowls are quite shallow and have round-
Plate I - Different shapes of Chalcolithic ceramics from Logardan Trench D.
Plate II - Different shapes of Chalcolithic ceramics from Logardan Trench D.
ded or somewhat inwards belled rims (Pl. I.3)\(^6\), while a deeper type displays pinched or top-flattened rims\(^7\) and a slight carination towards the middle of the body (Pl. I.4-5)\(^8\). Coarse flattened-base basins, a widespread shape of the Middle Uruk period, appear since this early phase, even if they are quite rare\(^9\). 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.6)\(^10\). But the most characteristic open containers are the so-called proto BRBs\(^11\), with rims sometimes thinned, rounded, or loosely cut and bevelled in various ways and with varying orientations (Pl. I.8 – Fig. 2)\(^12\).

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.1-2)\(^13\). Carinated pots with beaded rim are not frequent but very diagnostic of Early Uruk assemblages (Pl. II.3)\(^14\). Some rare neckless samples have everted and rounded rims (Pl. II.4-5, 8)\(^15\), while some sporadic specimens with developed necks (Fig. 3) have flaring pinched or hollowed rims and quite elliptical shapes.

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7. See Susa "Acropole III" 7-11 (Wright 2014: fig. 7.5i), Farukhabad (Wright 1981: fig. 47.e, m), Geser 10-11 (Alizadeh 2014: fig. 57.C, O).
8. 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. 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 \textit{et al.} 1981: fig. 22 lower left; Wright 2014: fig. 7.2.c), Susa ‘Acropole III’ 7-11 (Wright 2014: fig. 7.5c).
13. See Eridu (Safar \textit{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).
15. 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).
Another uncommon but diagnostic closed shape is represented by deep urns with a restricted mouth and club-headed rims thickened on the exterior side (Pl. II.10). Finally, some globular hole-mouth jars and the very first samples of jars with triangular-section everted rims are also documented during the Early Uruk phase. A remarkable Early Uruk trait which characterizes a disparate range of jars and closed shapes is represented by the hollowed inner profile of different kind of rims (Pl. II.6-9).

Concerning surface treatments, some rare (1.5% of the assemblage) but very distinctive red slipped sherdsl probably constitute the first appearance of the southern tradition known as Uruk red ware. Moreover, besides plain hand-finished surfaces, a consistent percentage of the sherds (24%) displays clear traces of scraping on the exterior body.

Decorations are extremely rare. The most noticeable amongst them, are some pierced lugs and the first appearance of some irregular nails (Pl. II.1-2, 4) or cross-hatched incisions.

16. 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). But 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. 57.1, 58.D).

17. See Nineveh (Gut 2002: fig. 15.9-10), Farukhabad (Wright 1981: fig. 52.1), Geser Level 14 (Alizadeh 2014: fig. 60.H, K).


19. 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).

20. 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. 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).

23. 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. 7.5, 7.6a-b), Geser 9-10 (Alizadeh 2014: fig. 56.E).

24. 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-l, 91a-e).

Finally, a very restricted number of sherds (just 5 fragments) indicated the emergence of appliqué fingered cordons. This kind of decoration is better attested during the Middle Uruk phase (see for instance à Girdi Qala northern mound Trench D), but it is noteworthy that the first samples known from south-Mesopotamia, Khuzestan and Logardan Trench D Level 4 are associated to similar types of deep goblets (Pl. I.7)26.

Even is quite basic, the repertoire from Level 4 at Logardan Trench D 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 which, even in southern Mesopotamia and Khuzestan, is known from a very restricted number of sites and contexts.

Actually, on the basis of the ceramic chrono-typology established by Sürenhagen (1986), it is clear that the Early Uruk phase attested at Logardan Trench D corresponds to Levels XII-IX of the “Tiefchnitt” sounding at Uruk/Warka, but 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 Level 4 of Logardan Trench D. 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 their un-stratified nature does not allow to use them to improve our chrono-typological knowledge of this phase.

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 restricted nature of the excavations, the beginning of the 4th millennium in both these trenches implies a rupture of the Ubaid-related traditions of Susa I period and the appearance of typically Uruk ceramic productions. 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. Nevertheless, some pottery comes from the initial cleanings of the sections (Le Brun 1971: 209-210). 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).

For different reasons, also the materials from Farukhabad offer a questionable overview on the Early Uruk phase. Indeed, excavations at Farukhabad have reached Early Uruk strata in Trench B Levels 36-35, which yielded a quite 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 Level 4 at Logardan Trench D. Despite several features testifying of a clear continuity from the previous Susa I assemblage, Sargarab ware shows an unmistakably Early Uruk-related repertoire (Wright 1981: 40-44). But 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 some morpho-stylistic features with other sites in Luristan and Khuzestan, while some of its shapes are common to north- and south-Mesopotamian assemblages of this period. But it also shows several south-Mesopotamian Uruk traits from a morphological point of view. In the same

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

28. 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 applique 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 Chai 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). In 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).

29. 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).

30. Some samples of finger-impressed cordons are attested in Early Uruk contexts at Logardan Trench D Level 4, 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.l 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 – Pl. GQN_D L.8-9); 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. 7.3c), 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 type of the Middle Uruk assemblages – 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. LOG_D II.6-9) (see at Farukhabad in “Uruk ware” – Wright 1981: fig. 48.c; or Susa “Acropole III” Level 9 – Wright 2014: fig. 7.6e).
way, it is possible to recognize the first emergence of some Early Uruk decorations at Logardan Trench D Level 4 and within the Sargarab assemblage from Farukhabad\(^\text{31}\). 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.

In this sense, the assemblage from Level 4 at Logardan Trench D reveals its entire informative potential: not only it offers a unique archaeological record in central and northern Mesopotamia, but it also allows a better definition of the Early Uruk phase in its own characteristics and in its parallels. Actually, next campaigns at Logardan will offer the possibility to better establish the technical attributes of the Early Uruk pottery on the basis of larger assemblages. For the moment, beyond morpho-stylistic features that Logardan Trench D Level 4 and all the other Early Uruk assemblages share with Godin VII-“early” VI and Uruk Eanna XII-IX, 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 above, this intriguing element tends to remove a long-lasting prejudice on the existence of a dichotomy between north- and south-Mesopotamian late chalcolithic ceramics.

\(^{31}\) 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.l).