

# FISHES, RINGSTANDS, NUDES AND HIPPOS – A PRELIMINARY REPORT ON THE HYKSOS PALACE PIT COMPLEX L81 OF<sup>1</sup>

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## INTRODUCTION

During the Spring of 2006, excavations in area F/II led to the discovery of a large pit complex, L81, situated in square r/22, within a courtyard associated with a large palatial building, Building B, of the Hyksos period.<sup>2</sup> When the square was first opened, the entire surface was covered with a dense layer of closely packed sherds and animal bones, in which several complete vessels could easily be observed. Despite the best efforts of the excavation team, this “pit” could not be entirely cleared during the 2006 campaign, and further work was undertaken during the Spring and Autumn campaigns of 2008.<sup>3</sup> By 2008, however, it was clear that the original pit, subsequently termed L81/1 was cut into a depression which is either natural or a larger pit complex which (principally) bears the numbers L81/3-6-12-15. The entire pit complex was subsequently filled with a mass of pots, of which over 1800 complete profiles have since been restored, animal bones, on which a brief report by Karl Kunst is appended to this report, and a host of numerically smaller items, such as beads, shell pendants, scarabs, scaraboids, gaming pieces/pot lids, so-called meat or bread models, flints, seals, three of which bear the name of Khayan,<sup>4</sup> stone vessel fragments, pieces of pumice, at least one net sinker and a few bronze items. A number of the pots were found intact, or could be completely restored indicating that they were either whole when placed in this pit complex, or had simply been deliberately broken at their time of deposition in a manner perhaps reminiscent of the ritual of breaking the red pots, whilst others were clearly broken in antiqui-

ty and arrived in L81 in an incomplete and worn state, some of which showed evidence of reuse as scrapers. The ceramic material is entirely homogeneous – sherds from the lowest levels joined those from the higher ones, and joins could be made across all the pits making up the complex, thus pieces from L81/1 joined L81/4; sherds from L81/1 joined L81/6; L81/6 joins L81/12 and L81/15 etc., so it would appear clear that, even if the pits were originally dug at different periods, they were all filled at roughly the same time. Overall the pots found in this locus tended to be in a good state of preservation, only the surface paint on those vessels found in the lowest levels of the complex had been removed by the rising ground water.

As to the purpose and meaning of this pit a number of theories can be advanced, although since the material is not yet fully studied all such must be seen as preliminary in nature. It would appear, however, that the material found in this pit complex is composed primarily of the remains of several meals, ritual or otherwise, deposited over a short period of time,<sup>5</sup> with some other rubbish thrown in, since only pottery, bones, flint tools and gaming pieces/pot lids have been found in the numerous offering pits already discovered at Tell el-Dabca.<sup>6</sup> Indeed if we have here an open rubbish dump, on which was tipped the remains of several meals (and other rubbish, cf. below sections B and C) over a short period of time, this would certainly have encouraged rodents and, as Karl Kunst has shown (below section C), marks resulting from the gnawing activity of rodents were visible on some of the animal bones found in this pit complex.

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<sup>1</sup> We owe this title to Irene Forstner-Müller.

<sup>2</sup> Cf. BIETAK and FORSTNER-MÜLLER, 2006, 74–76; IDEM, 2007, 22–25; BIETAK, FORSTNER-MÜLLER, HERBICH, 2007, 123.

<sup>3</sup> BIETAK and FORSTNER-MÜLLER, 2009 this volume.

<sup>4</sup> For the seals see SARTORI, 2009, this volume.

<sup>5</sup> FORSTNER-MÜLLER, forthcoming.

<sup>6</sup> Cf. MÜLLER, 2008, hereafter *TD XVII*, passim. The same holds true for offering pits found at Tell el-Maskhuta, HOLLADAY, 1997, 196, 249 pl. 7.20c–d.

**A. THE POTTERY CORPUS<sup>7</sup>**

From the outset it was clear that most of the pottery forms were well known to the Tell el-Dab<sup>c</sup>a repertoire and could be firmly positioned within the Hyksos Period. By applying the established Tell el-Dab<sup>c</sup>a vessel index to the large number of restorable round-bottomed cups (U-Näpfe) it became obvious that the entire ceramic material can be dated to the period E/1–D/3, (cf. Tables 1–2). Although the Napf index cannot differentiate between E/1 and D/3, a dating into phase E/1, (or at latest the changeover from E/1 to D/3) might be preferred since a number of the vessel forms have antecedents in Phases E/3 and E/2 whilst the minimal amount of Marl F perhaps speaks against a full D/3 date. Similarly the dipper jugs, albeit few in number, are more likely to be E/1 than D/3 since they tend to be slim with sloping shoulders rather than the more squared examples of D/3 whilst the Cypriote imports are primarily different varieties of White Painted wares, for which see further below. A dating into this period is also confirmed by the relative amounts of the different fabrics distributed among the so-far restored vessels. The silt clays comprise mostly Nile B2, – in both a fine variant (true B2) and a coarser sandy variant which borders on a Nile E, hence the term b2/e is coined for these vessels, – with Nile C being somewhat rare, whilst the marl clays consist almost entirely of Marl C, mostly Marl C2, and, amongst the so-far studied material only six vessels – 0.033% of restored vessels – are made of Marl F. This is again typical of an early Hyksos context. No previously known vessel type is earlier than Phase E/1–D/3 and no previously known vessel type is later. In addition to these well-known types, however, a number of types, never seen in forty years of excavations at Tell el-Dab<sup>c</sup>a can, naturally not be dated except by reference to the earlier excavated repertoire. However, since all the known types found in this homogeneous pitfill complex date to the period E/1–D/3, it is thus highly probable that these new types are of the same date. As such this pit is likely to provide us with the definitive corpus for Hyksos Period pottery. For the remainder of this section, the pottery will be divided into

Nile clays, Marl clays, oasis vessels, and imports, the first being divided into previously known types and those new to the Tell el-Dab<sup>c</sup>a ceramic repertoire:

9004F	L81/1	U-Napf	87.00
8992J	L81/1	U-Napf	87.78
8992G	L81/1	U-Napf	87.78
x0760	L81/1	U-Napf	87.80
x0791	L81/1	U-Napf	88.23
9006Z	L81/1	U-Napf	88.42
9003P	L81/1	U-Napf	88.46
9005T	L81/1	U-Napf	88.68
9006E	L81/1	U-Napf	89.10
x0775	L81/1	U-Napf	89.52
9005X	L81/1	U-Napf	89.58
9000S	L81/1	U-Napf	89.69
9000L	L81/1	U-Napf	89.79
9004Y	L81/1	U-Napf	90.00
9000M	L81/1	U-Napf	90.09
9004U	L81/1	U-Napf	90.12
x0157	L81/1	U-Napf	90.22
9001F	L81/1	U-Napf	90.72
8990L	L81/6	U-Napf	90.72
8995Y	L81/1	U-Napf	90.82
x0345	L81/1	U-Napf	90.90
x0809	L81/1	U-Napf	91.00
x1032	L81/12	U-Napf	91.50
9004T	L81/1	U-Napf	91.58
9010Q	L81/1	U-Napf	91.75
9010Y	L81/1	U-Napf	91.84
9347	L81/1	U-Napf	92.05
8989U	L81/6	U-Napf	92.39
8995R	L81/1	U-Napf	92.39
8989J	L81/4	U-Napf	92.55
8998Y	L81/1	U-Napf	92.63
x1033	L81/1	U-Napf	92.71
8995D	L81/1	U-Napf	92.78
9002T	L81/1	U-Napf	93.00
x0765	L81/1	U-Napf	93.33
x0747	L81/1	U-Napf	93.33
9223	L81/1	U-Napf	93.41
x1014	L81/6	U-Napf	93.54
9000V	L81/1	U-Napf	93.62

Table 1 L81 Round-Bottomed Cup Vessel Indices

<sup>7</sup> All the pots were reconstructed by Hassan el Mutwali, drawn by David Aston and inked by Eva Dobretsberger, with the exception of 9018X, drawn by Piet Collet. All the photographs were taken by Manfred Eccarius,

except for catalogue numbers 60–74, 78 from above, and inv nos. 9019B and 9019G, which were photographed by Axel Krause.

x0827	L81/6	U-Napf	93.81	9018L	L81/1	U-Napf	95.96
9347	L81/1	U-Napf	92.05	x0052	L81/1	U-Napf	96.00
8989U	L81/6	U-Napf	92.39	8998R	L81/1	U-Napf	96.15
8995R	L81/1	U-Napf	92.39	9001X	L81/1	U-Napf	96.17
8989J	L81/4	U-Napf	92.55	9224	L81/1	U-Napf	96.47
8998Y	L81/1	U-Napf	92.63	x0299	L81/1	U-Napf	96.55
x1033	L81/1	U-Napf	92.71	x0822	L81/1	U-Napf	96.66
8995D	L81/1	U-Napf	92.78	9368	L81/6	U-Napf	96.70
9002T	L81/1	U-Napf	93.00	9010X	L81/1	U-Napf	96.70
x0765	L81/1	U-Napf	93.33	x0067	L81/1	U-Napf	96.77
x0747	L81/1	U-Napf	93.33	8999C	L81/1	U-Napf	96.77
9223	L81/1	U-Napf	93.41	8998W	L81/1	U-Napf	96.84
x1014	L81/6	U-Napf	93.54	9010O	L81/1	U-Napf	96.84
9000V	L81/1	U-Napf	93.62	9215	L81/1	U-Napf	96.84
x0827	L81/6	U-Napf	93.81	9011E	L81/1	U-Napf	96.88
8999A	L81/1	U-Napf	93.88	8995H	L81/1	U-Napf	96.94
x0984	L81/6	U-Napf	94.00	8991O	L81/6	U-Napf	96.94
x0051	L81/1	U-Napf	94.17	x0050	L81/1	U-Napf	97.08
9004Z	L81/1	U-Napf	94.62	9218	L81/1	U-Napf	97.62
x0795	L81/1	U-Napf	94.62	x1015	L81/6	U-Napf	97.65
9006Y	L81/1	U-Napf	94.68	x0069	L81/1	U-Napf	97.67
x0732	L81/1	U-Napf	94.79	x1061	L81/4	U-Napf	97.70
8998Z	L81/1	U-Napf	94.79	8999D	L81/1	U-Napf	97.73
x1034	L81.4	U-Napf	94.79	x0794	L81/1	U-Napf	97.73
8992O	L81/1	U-Napf	94.85	x1038	L81/4	U-Napf	97.73
8999O	L81/1	U-Napf	94.85	8989T	L81/12	U-Napf	97.77
x0731	L81/1	U-Napf	94.89	x0233	L81/1	U-Napf	97.80
8989H	L81/1	U-Napf	94.89	x0073	L81/1	U-Napf	97.85
x1062	L81/4	U-Napf	94.89	x0066	L81/1	U-Napf	97.87
9006O	L81/1	U-Napf	94.95	x0745	L81/1	U-Napf	97.87
8997P	L81/1	U-Napf	94.95	8991Z	L81/1	U-Napf	97.87
9006D	L81/1	U-Napf	94.95	x0427	L81/1	U-Napf	97.89
9001J	L81/1	U-Napf	95.15	9008K	L81/1	U-Napf	97.92
x1035	L81/4	U-Napf	95.31	x0451	L81/1	U-Napf	97.92
9000N	L81/1	U-Napf	95.45	x0064	L81/1	U-Napf	97.96
x0907	L81/1	U-Napf	95.56	x0054	L81/1	U-Napf	97.98
x0772	L81/1	U-Napf	95.61	x0846	L81/4	U-Napf	98.39
9005G	L81/1	U-Napf	95.65	x0452	L81/1	U-Napf	98.42
x0429	L81/1	U-Napf	95.65	x0426	L81/1	U-Napf	98.86
x1016	L81/12	U-Napf	95.69	8992P	L81/1	U-Napf	98.88
9010Z	L81/1	U-Napf	95.69	x0344	L81/1	U-Napf	98.90
9011W	L81/1	U-Napf	95.69	x1029	L81/4	U-Napf	98.91
x0796	L81/1	U-Napf	95.70	x0060	L81/1	U-Napf	98.92
x0839	L81/6	U-Napf	95.74	9018P	L81/4	U-Napf	98.92
x0071	L81/1	U-Napf	95.74	x0767	L81/1	U-Napf	98.93
x1040	L81/4	U-Napf	95.79	9019C	L81/1	U-Napf	98.94
9011P	L81/1	U-Napf	95.79	x0070	L81/1	U-Napf	98.95
x0763	L81/1	U-Napf	95.79	x1065	L81/4	U-Napf	98.95
8992N	L81/1	U-Napf	95.79	8989K	L81/12	U-Napf	98.96
9002R	L81/1	U-Napf	95.83	x0053	L81/1	U-Napf	98.97
x1070	L81/4	U-Napf	95.88	9001V	L81/1	U-Napf	99.43

Table 1 continued L81 Round-Bottomed Cup Vessel Indices

x0743	L81/1	U-Napf	99.45	x1074	L81/4	U-Napf	102.12
x0343	L81/1	U-Napf	99.49	8989E	L81/1	U-Napf	102.13
8998C	L81/1	U-Napf	100.00	x0713	L81/1	U-Napf	102.17
x0055	L81/1	U-Napf	100.00	9008D	L81/1	U-Napf	102.17
x1041	L81/4	U-Napf	100.00	9006F	L81/1	U-Napf	102.22
8991P	L81/1	U-Napf	100.00	8990Y	L81/6	U-Napf	102.22
x0268	L81/1	U-Napf	100.00	8998V	L81/1	U-Napf	102.27
9377	L81/4	U-Napf	100.00	x0068	L81/1	U-Napf	102.29
9348	L81/6	U-Napf	100.00	x0837	L81/6	U-Napf	102.29
8998O	L81/1	U-Napf	100.00	x0384	L81/1	U-Napf	102.29
x0766	L81/1	U-Napf	100.00	x1017	L81/6	U-Napf	102.33
8992A	L81/1	U-Napf	100.00	x1038	L81/12	U-Napf	102.73
9009F	L81/1	U-Napf	100.00	9013S	L81/1	U-Napf	103.16
x0773	L81/1	U-Napf	100.00	x0235	L81/1	U-Napf	103.29
x0921	L81/6	U-Napf	100.00	9009V	L81/1	U-Napf	103.37
x0059	L81/1	U-Napf	100.00	8997C	L81/1	U-Napf	103.45
x0065	L81/1	U-Napf	100.00	8990M	L81/12	U-Napf	103.49
x1030	L81/1	U-Napf	100.00	x0428	L81/1	U-Napf	103.93
x1026	L81/6	U-Napf	100.00	9018Z	L81/1	U-Napf	104.21
8989F	L81/1	U-Napf	100.00	x0725	L81/1	U-Napf	104.21
8992M	L81/1	U-Napf	100.00	8989G	L81/1	U-Napf	104.26
8999R	L81/1	U-Napf	100.00	x0983	L81/6	U-Napf	104.34
8993N	L81/1	U-Napf	100.00	x1079	L81/12	U-Napf	104.44
x0065	L81/1	U-Napf	100.00	8989L	L81/12	U-Napf	105.11
x1031	L81/1	U-Napf	100.53	x0877	L81/6	U-Napf	105.68
x0734	L81/1	U-Napf	101.05	x0269	L81/1	U-Napf	105.81
8995L	L81/1	U-Napf	101.05	x1028	L81/4	U-Napf	106.02
x0049	L81/1	U-Napf	101.09	9376	L81/1	U-Napf	106.32
x0056	L81/1	U-Napf	101.09	x0072	L81/1	U-Napf	106.59
8997G	L81/1	U-Napf	101.11	x0061	L81/1	U-Napf	106.59
x0062	L81/1	U-Napf	101.15	x0764	L81/1	U-Napf	107.61
x0921	L81/6	U-Napf	101.15	x0792	L81/1	U-Napf	107.86
x0838	L81/6	U-Napf	101.16	8995Z	L81/1	U-Napf	108.88
x0057	L81/1	U-Napf	101.22	x1018	L81/6	U-Napf	113.33
9019A	L81/4	U-Napf	102.06	x0341	L81/1	U-Napf	113.33
x0063	L81/1	U-Napf	102.08	8995G	L81/1	U-Napf	113.97

Table 1 continued L81 Round-Bottomed Cup Vessel Indices

### A.a. Previously known Nile Clay type groups

In a preliminary report it is almost impossible to give justice to the full range of vessels found in the pit complex, and the following selection is a purely subjective one. The numeration of the previously known type groups follows that of *Tell el-Dab<sup>a</sup> XII*.<sup>8</sup> The following vessel groups are found in L81: *TD XII* group 14, bowls with ridges, cf. below cat. no. 33, and as previously, several small

clay figures of birds, 2.0–5.0 cms. tall, which have a small hollow peg at their base, are found in this pit, which possibly strengthens the view that, at Tell el-Dab<sup>a</sup>, these figurines were once mounted on this type of vessel;<sup>9</sup> *TD XII* group 28, wide bodied jars with rounded bases, direct rims, and applied spouts, although these are rare; one example of *TD XII* group 29, jars with ring bases, direct rims, short necks and applied spouts; *TD XII* group 35/250, dishes with ‘triangular’ rims and

<sup>8</sup> ASTON, 2004, hereafter *TD XII*.

<sup>9</sup> A. PAPE, unpublished, quoting an unnamed excavator.

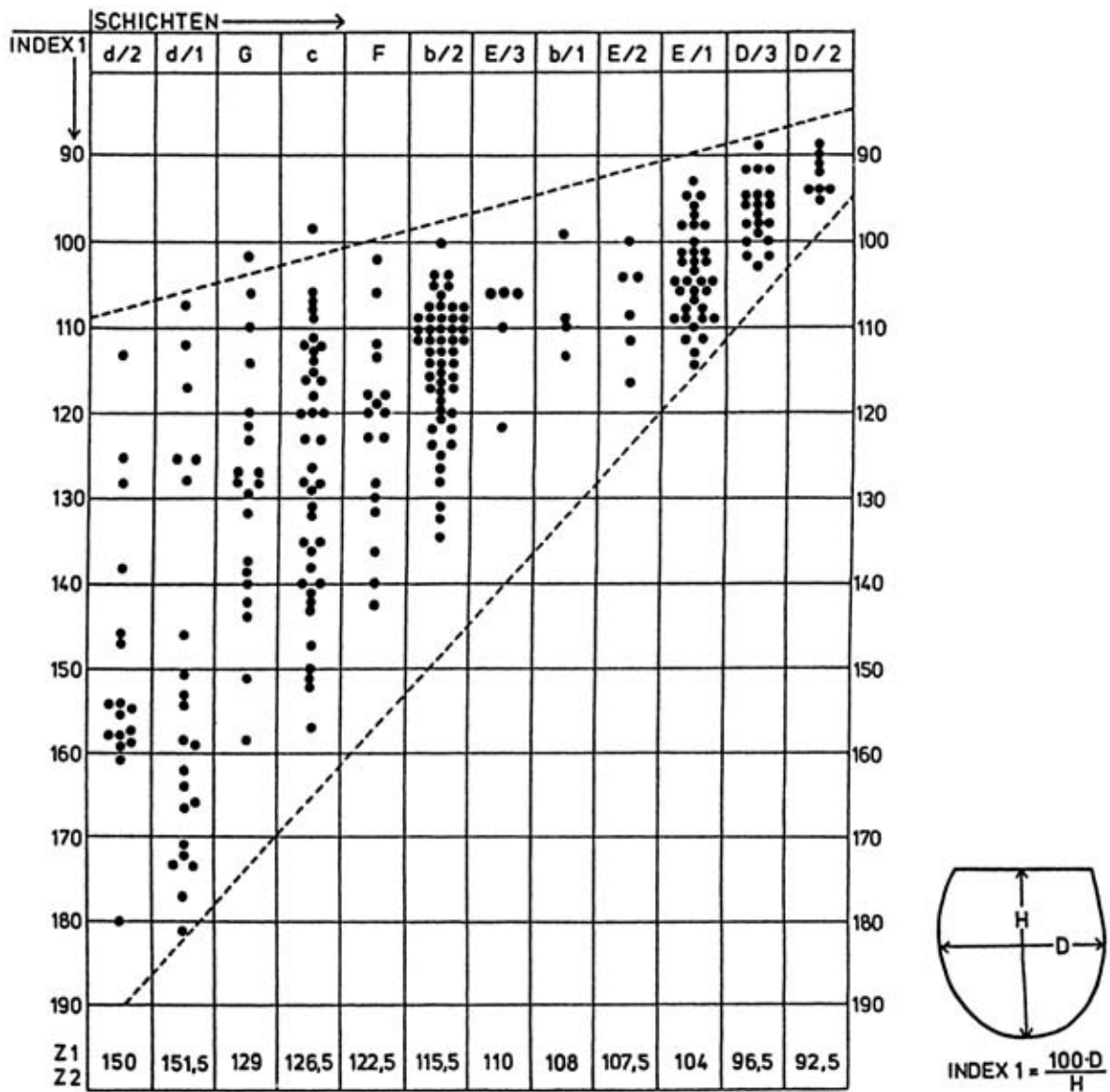


Table 2 Round-Bottomed Cup Vessel Indices by Strata at Tell el-Dabca (after BIETAK, 1991, 50)

hollow pedestal bases, such as cat. no. 16; and *TD XII* group 36/249, dishes with direct rims and pedestal bases, eg. cat. no. 15. Beer jars, *TD XII* group 49, (= *TD XVI* Typ 75<sup>10</sup>) are present in the pit complex although only in small numbers. The one reconstructed example, cat. no. 13, does not match any of the previous ‘types’ known from Tell el-Dabca, but is rather a development of type 10, in that it closely resembles type 10a but has a taller neck and shorter body. In fact the form is already known at Tell el-Dabca, since an example, 4098E, was found in an offering pit dated to stratum a/2,

but was rejected as a beer bottle by Szafranski since it neither ‘fitted’ his seriated sequence, nor the perceived reasoning that beer bottles did not survive in Lower Egypt beyond the beginning of the Hyksos Period.<sup>11</sup> However, the finding of 4098E and the presence of similar examples in this pit complex indicates that beer jars continued to be made into the early-mid Hyksos Period, and should perhaps be seen as type 10c, a late development of type 10a. Indeed this has already been suggested by Kopetzky who indicated that the beer jars of her Typ 5, which first appeared in Phase F

<sup>10</sup> *TD XVI* types = FORSTNER-MÜLLER, 2008, hereafter *TD XVI*, 387–396.

<sup>11</sup> SZAFRANSKI, 1997, 104–105. Cf. also MÜLLER, *TD XVII*, I, 124, who follows Szafranski’s argument.

and continued down to Phase D/3, and, moreover 'weisen einen schmalen Hals auf, der im Laufe der Zeit immer länger wird.'<sup>12</sup> Whether the beer jar, TD 8792A, found in a grave dated to Phase D/3 should be seen as a type 10c is hard to ascertain since the upper part is missing.<sup>13</sup> Comparison with contemporary beer bottles from Memphis shows that a different rim form is known in the later Second Intermediate Period<sup>14</sup> which would suggest that the (type 10c) beer jars found in the pit were locally made, and hence beer jars must have continued to have been made in Lower Egypt well into the Hyksos Period.<sup>15</sup> Other known groups include *TD XII* groups 73/262, (= *TD XVI* Typ 52), dishes with inner lip and raised or ring bases; *TD XII* group 75/263, (= *TD XVI* Typ 49), such as cat. no. 17, dishes with inner lip, raised or ring bases and (usually burnished) red crosses on the interior; amphorae groups *TD XII* 151/291, (= *TD XVI* Typ 85) cat. no. 90, although these are relatively rare, with perhaps about twenty examples being noticed; parts of one baking tray of *TD XII* group 163, and a fragmentary red burnished example of a conical vessel *TD XII* group 165. Ringstands of *TD XII* group 171b/306b, (= *TD XVI* Typ 74a), are extremely common, making up at least one third of all the so-far reconstructed complete profiles, though in contrast to similar vessels found in normal offering pits,<sup>16</sup> most of the ringstands found in pit complex L81 are red slipped on the exterior and on the inner rim, as in cat. no. 22. Other ringstands of *TD XII* group 172/307, cat. no. 23; and large ringstands of *TD XII* group 173, (= *TD XVI* Typ 74c), cat. no. 24 are also relatively frequent. All told 611 out of the 1804 so-far restored complete profiles are ringstands. This is, however not surprising since they are generally somewhat solid and thus better preserved. Whether this one third proportion will remain once all the pottery has been studied is a question which cannot be answered at present. Other pottery groups comprise a fragmentary double ringstand, *TD XII* group 176; tall stands of *TD XII* group 177, cat. no. 25; dishes with direct rims and raised bases, *TD XII* group 197, (= *TD XVI* Typ 48b), cat. no. 1, which

are found in a variety of wares, being either left uncoated, given a red slip on both surfaces, or, most often, as in the illustrated example, being red slipped only on the interior. Dishes with direct rims and wheel-made ring bases, *TD XII* group 200, (= *TD XVI* Typ 48d), cat. no. 2, are relatively common and are generally red slipped on both the inner and outer surfaces. Also common are deep bowls with flaring rims and ring bases, *TD XII* group 206, (= *TD XVI* Typ 56), cat. no. 4, whilst less common are the small carinated bowls *TD XII* group 210, cat. no. 3, and the deep bowls with flaring rims, undulating walls, incised grooves and ring bases, *TD XII* group 212, cat. no. 5. The round bottomed cups, *TD XII* group 216, (= *TD XVI* Typ 42), cat. no. 6, most of which are red slipped on the exterior, are very common, which contrasts markedly with the flat-based cups, *TD XII* group 220, (= *TD XVI* Typ 45), cat. no. 7, of which less than ten examples have so-far been found. Carinated bowls, *TD XII* group 221, (= *TD XVI* Typ 73), cat. no. 8, are slightly more frequent, and many have a white slip in evident imitation of Marl C vessels. The slender beaker-jar forms, *TD XII* groups 224, (= *TD XVI* Typ 57), cat. no. 9, and 225, (= *TD XVI* Typ 58), cat. no. 10, are extremely common, but owing to the fact that they tend to break into myriad fragments it has proved difficult to reconstruct them. Other (reconstructed) jar types are rare, but they include examples of *TD XII* groups 228, (= *TD XVI* Typ 60), cat. no. 11, and 236, cat. no. 12. Vessels related to *TD XII* group 248 with incised decoration are represented by several base and body sherds and the rim. cat. no. 14. At least four vessels of *TD XII* group 265, dishes with modelled rims, ring bases and ledge handles, cat. no. 18, were also present in this pit complex. All were produced in a reducing atmosphere and three of them are burnished. The fourth shows no trace of a black slip or burnishing, but perhaps this was obliterated by the damp conditions in the lower levels of L81. The carinated bowls of *TD XII* groups 267, cat. no. 19, 268 and 272, the latter two groups represented by single incomplete examples are distinctly rare. Two or

<sup>12</sup> KOPETZKY, 2005, 174. Actually this is a better and more accurate reflection of the difference between her Typ 4 and 5, rather than the rim diameter. The vessel illustrated in this report with a rim diameter of 10.6 cms. would, by definition, fall into her Typ 4, although its characteristics clearly place it in her Typ 5.

<sup>13</sup> *TD XVI*, 332–333.

<sup>14</sup> BADER, 2009, 160–183, 215–224, chapters 5.2 and 7.2, hereafter *TD XIX*.

<sup>15</sup> This is also suggested by the relatively high amount of quartz inclusions in the fabric. Cf. *TD XIX*, 623, Abb. 339.

three examples of the jars of *TD XII* group 275, large tall jars with ring bases and rolled rims, cat no. 20, have also been recognised. Dipper jugs, *TD XII* group 286, are rare, the best preserved being cat. no. 26. This vessel, 9018R, is made of Nile B2 and somewhat problematic, because the body does not show the typical wheel ridging on the inside as is usually associated with Nile clay dipper jugs. Although the dimensions are slightly different<sup>17</sup> the proportion of the neck and the body closely resemble vessels of Phase E/1.<sup>18</sup> The reconstruction of the kernos ring, *TD XII* group 302, cat. no. 21, is based on a more complete example from Tell el-Maskhuta,<sup>19</sup> since only one kernos is preserved. As such it is not clear whether each of the kernoi had a spout or only the one which is still extant. In addition to this example, fragments of several others were also present in L81. Finally to round off the previously known types made of Nile clays mention should be made of a number of miniature vessels, however, apart from the model dishes with direct rims and round bases, *TD XII* group 312, which were probably used as lamps and lids, and a surprising number of small black burnished jugs, none of which have yet been reconstructed, these were not common. Surprisingly absent from the pit complex, however, are the holemouth cooking pots made in Nile E, since diagnostic sherds indicate that only three fragmentary examples were thrown into L81. This contrasts remarkably with the smaller offering pits studied by Vera Müller where they were the eleventh, out of twenty-nine, most frequent type of vessel encountered.<sup>20</sup>

1. 8996S. L81/1 FN 67 ZN 196/2006, Fig. 1, Pl. 1

TGRF	I-b-2	mi	W1	abg.	ox	2-3
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D. 20.1 cm. Bd. 5.4 cm. H. 6.7 cm. Md. 20.1 cm. Wd. 0.6 cm.

AI 102.55 VI 300.00

Restored from sherds, incomplete

Surface colour: 5YR6/6-8 reddish yellow; slip 2.5YR6/6 light red

Break: grey core, red and brown oxidation zones

2. 8996L. L81/1 FN 158 ZN 158/2006, Fig. 1, Pl. 1

RF	I-b-2	s.f	W1	gef.	ox	2-3
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D. 24.8 cm. Bd. 7.1 cm. H. 7.3 cm. Md. 24.8 cm. Wd. 0.8 cm.

AI 116.07 VI 339.73

Restored from sherds, incomplete

Surface colour: slip 10R5/6 red

Break: grey core, red and brown oxidation zones

Clay very fine

Potmark scratched post-firing

3. 9013C. L81/1 ZN 583/2006, Fig. 1

RF	I-b-2	mi	W1	gef.	ox	2-3
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D. 10.6 cm. Bd. 4.7 cm. H. 6.9 cm. Md. 10.6 cm. Wd. 0.35 cm.

AI 101.93 VI 153.62

Restored from sherds, incomplete

Surface colour: slip 2.5YR6/8 light red, red rim band 10R5/8 red

Break: grey core, brick red oxidation zones

4. 9001Y. L81/1 ZN 209/2006, Fig. 1

TG	I-b-2	mi	W1	abg.	ox	2-3
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D. 12.2 cm. Bd. 4.8 cm. H. 5.8 cm. Md. 12.2 cm. Wd. 0.3 cm.

AI 103.39 VI 210.34

Restored from sherds, incomplete

Surface colour: 7.5YR7/4 pink, red rim band 10R5/6 red

Break: black core, red and brown oxidation zones

5. 8997Q. L81/1 ZN 176/2006, Fig. 1

RF	I-b-2	f	W1	gef.	ox	2-3
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D. 20.5 cm. Bd. 6.8 cm. H. 11.1 cm. Md. 20.5 cm. Wd. 0.65 cm.

AI 102.50 VI 184.68

Restored from sherds, incomplete

Surface colour: slip 10R6/8 light red

Break: black core, thin red and brown oxidation zones

6. 9189. L81/1 FN 546 ZN 151/2006, Fig. 1, Pl. 1

TG	I-b-2	mi	W1	gesp.	ox	2-3
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D. 8.3 cm. H. 9.2 cm. Md. 9.0 cm. Wd. 0.3 cm.

AI 138.33 VI 97.82

Intact: a few chips in rim.

Surface colour: 7.5YR7/4 pink

Break: red core, brown oxidation zones

<sup>16</sup> *TD XVII*, I, 135.

<sup>17</sup> KOPETZKY, 2002, 230.

<sup>18</sup> KOPETZKY, 2002, 235, fig. 5.

<sup>19</sup> REDMOUNT, 1989, 895, 897 fig. 149; HOLLADAY, 1997, 252 pl. 7.23A.

<sup>20</sup> *TD XVII*, 33, Tabelle 2.

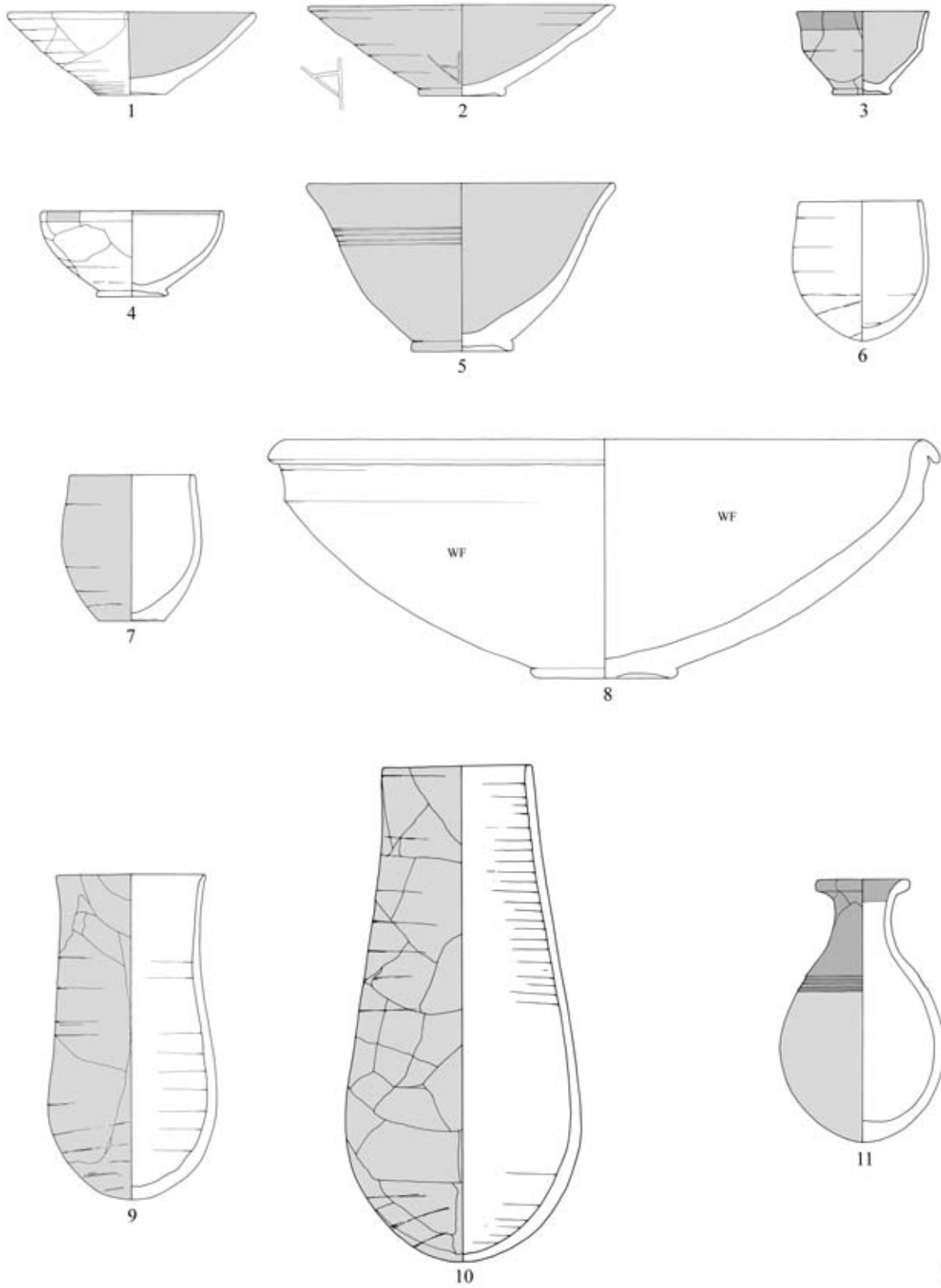


Fig. 1



## 7. 8999B. L81/1 FN 20A ZN 179/2006, Fig. 1

RF	I-b-2	mi	W1	abg.	ox	2-3
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D. 8.4 cm. Bd. 4.3 cm. H. 9.6 cm. Md. 9.3 cm. Wd. 0.4 cm.

AI 104.88 VI 96.88

Restored from sherds, incomplete

Surface colour: 5YR7/2 pinkish gray; slip 10R6/8 light red

Break: grey core, red and brown oxidation zones

## 8. 9003L. L81/1 FN 332 Fig. 1

WF	I-c-2	mi	W1	gef.	ox	2-3
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D. 44.2 cm. Bd. 9.8 cm. H. 15.9 cm. Md. 44.2 cm. Wd. 1.5 cm.

AI 105.23 VI 277.98

Restored from sherds, incomplete

Surface colour: 2.5YR6/6 light red; slip 7.5YR8/3 pink

Break: grey core, thin purple and brown oxidation zones

## 9. 8996Y. L81/1 FN 81 ZN 168/2006, Fig. 1

RF	I-b-2	mi	W1	gesp.	ox	2-3
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D. 9.9 cm. H. 21.6 cm. Md. 11.7 cm. Wd. 0.4 cm.

AI 110.00 VI 54.16

Restored from sherds, incomplete

Surface colour: 2.5YR6/6 light red; slip 10R5/8 red

Break: grey core, red and brown oxidation zones

## 10. 9012V. L81/1 FN 100 Fig. 1

RF	I-b-2	mi	W1	gesp.	ox	2-3
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D. 10.1 cm. H. 32.7 cm. Md. 15.8 cm. Wd. 0.6 cm.

AI 112.22 VI 48.32

Restored from sherds, incomplete

Surface colour: 2.5YR6/4 light reddish brown; slip 10R5/6 red

Break: grey core, red and brown oxidation zones

## 11. 9006W. L81/1 FN 219 ZN 197/2006, Fig. 1, Pl. 1

RF	I-b-2	mi	W1	gesp.	ox	2-3
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D. 6.3 cm. H. 17.5 cm. Md. 11.0 cm. Wd. 0.5 cm.

AI 116.66 VI 62.86

Restored from sherds, incomplete

Surface colour: slip 10R7/8 light red, red rim band 10R5/6 red

Traces of horizontal burnish on the red rim and neck band

Break: grey core, red and brown oxidation zones

## 12. 8997O. L81/1 ZN 170/2006, Fig. 2, Pl. 1

WF	I-b-2	mi	W1	gesp.	ox	2-3
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D. 11.35 cm. H. 27.6 cm. Md. 20.6 cm. Wd. 0.6 cm. AI 111.54 VI 74.64

Restored from sherds, incomplete

Surface colour: slip 2.5Y8/1 white

Break: grey core, brick red oxidation zones

## 13. 9004N. L81/1 FN 51 ZN 175/2006, Fig. 2, Pl. 1

TG	I-c-2	mi	W1	gesp.	ox	2-3
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D. 10.6 cm. H. 52.8 cm. Md. 24.9 cm. Wd. 0.8 cm.

AI 106.00 VI 47.16

Restored from sherds, incomplete

Surface colour: 7.5YR7/6 reddish yellow; slip 10R6/6 light red

Break: wide black core, thin red and brown oxidation zones

## 14. K11000/602. L81/1, Fig. 2

TG	I-b-2s	mi	W1	-	ox	2-3
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D. 17.0 cm. pH. 19.0 cm. Wd. 0.9 cm.

Restored from sherds, incomplete

Surface colour: 2.5YR6/8 light red

Break: wide grey core, thin reddish brown oxidation zones

## 15. 9000Q. L81/1 FN 295 ZN 182/2006, Fig. 2

TG	I-c-2	f	W1	gef.	ox	2-3
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D. 23.2 cm. Bd. 7.6 cm. H. 8.6 cm. Md. 23.2 cm. Wd. 0.85 cm.

AI 105.45 VI 269.77

Restored from sherds, incomplete

Surface colour: 5YR6/6 reddish yellow

Break: black core, red and brown oxidation zones

## 16. 9007C. L81/1 ZN 520/2006, Fig. 2

TG	I-c-2	f	W1	abg.	ox	2-3
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D. 42.8 cm. Bd. 15.5 cm. H. 15.9 cm. Md. 42.8 cm. Wd. 2.6 cm.

AI 101.91 VI 269.18

Restored from sherds, incomplete

Surface colour: 2.5YR5/6 red

Break: wide black core, thin purple and brown oxidation zones

## 17. 9004G. L81/1 FN 517 ZN 190/2006, Fig. 3, Pl. 1

TGRF	I-b-2	s.f	W1	gef.	ox	2-3
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D. 22.2 cm. Bd. 6.7 cm. H. 6.3 cm. Md. 22.2 cm. Wd. 0.6 cm.

AI 116.73 VI 352.38

Restored from sherds, incomplete

Surface colour: 7.5YR6/6 reddish yellow, slip 2.5YR6/6 light red; red cross 10R4/6 red

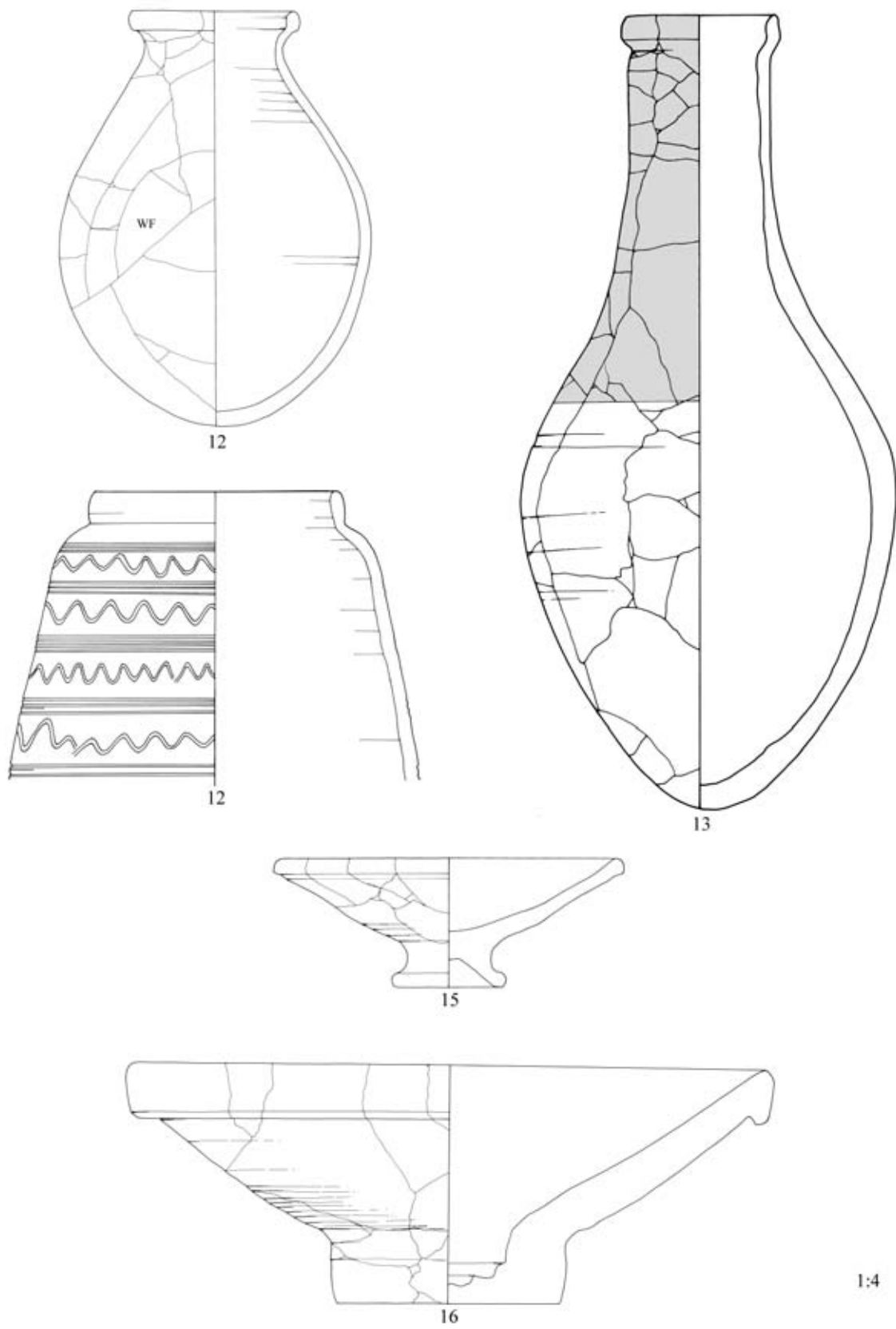


Fig. 2

Break: grey core, red and brown oxidation zones

18. *K11000/601*. L81/1 Fig. 3 Pl. 1

SP	I-b-2	s.f	W1	gef.	re	2-3
----	-------	-----	----	------	----	-----

D. 25.4 cm. Bd. 7.4 cm. H. 6.3 cm. Md. 24.8 cm. Wd. 0.8 cm.

AI 107.63 VI 393.65

Restored from sherds, incomplete

Surface colour: slip 5YR3/1 very dark gray

Break: black core, grey reduction zones

19. *9004R*. L81/1 FN 522 ZN 191/2006, Fig. 3, Pl. 1

GP	I-b-2	s.f	W1	gef.	ox	2-3
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D. 14.9 cm. Bd. 5.2 cm. H. 6.5 cm. Md. 14.9 cm. Wd. 0.5 cm.

AI 103.47 VI 229.23

Restored from sherds, incomplete

Surface colour: 5YR7/4 pink; burnish 5YR7/8 reddish yellow

Horizontal burnish inside above carination and vertical burnish below carination. Exterior decorated in a striped pattern. Burnished cross on underside of base.

Break: red core, brown oxidation zones

20. *K11000/434*. L81/1 Fig. 3

RF	I-b-2	s.f	W1	gef.	ox	2-3
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D. 23.2 cm. Bd. 12.5 cm. H. 32.7 cm. Md. 32.7 cm. Wd. 1.0 cm.

AI 105.45 VI 100.00

Restored from sherds, incomplete

Surface colour: slip 2.5YR7/8 light red; red polished neck 10R5/8 red

Break: grey inner core, red outer zone

21. *K11000/436*. L81/1 Fig. 3

RF	I-b-2	mi	W1	gesp.	ox	2-3
----	-------	----	----	-------	----	-----

D. 16.9 cm. Bd. 16.9 cm. H. 9.1 cm. Md. 16.9 cm. Wd. 0.6 cm.

AI 130.00 VI 469.44

Incomplete

Surface colour: slip 10R5/6 red

Break: purple core, brown oxidation zones

Only one kernos is preserved so it is not clear that all kernoi are similar to one another.

22. *9184*. L81/1 FN 365 ZN 148/2006, Fig. 3, Pl. 1

RF	I-b-2	r	W1	gesp.	ox	2-3
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D. 9.3 cm. Bd. 12.1 cm. H. 7.1 cm. Md. 12.1 cm. Wd. 0.65 cm.

AI 288.09 VI 170.42

Intact

Surface colour: 2.5YR 6/6 light red; slip 10R5/6 red

Break: not visible

23. *9014K*. L81/1 ZN 43/2007, Fig. 3

TG	I-c-2	f	W1	gesp.	ox	2-3
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D. 19.4 cm. Bd. 22.0 cm. H. 5.8 cm. Md. 22.0 cm. Wd. 1.3 cm.

AI 148.64 VI 379.31

Restored from sherds, incomplete

Surface colour: 2.5YR6/8 light red

Break: wide black core, very thin red and brown oxidation zones

24. *9012W*. L81/1 FN 33 ZN 575/2006, Fig. 3

RFTG	I-c-2	f	W1	gesp.	ox	2-3
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D. 26.4 cm. Bd. 29.1 cm. H. 13.2 cm. Md. 29.1 cm. Wd. 1.3 cm.

AI 148.31 VI 220.45

Restored from sherds, incomplete

Surface colour: slip 10R6/6 light red

Break: wide grey core, thin red and brown oxidation zones

25. *9015C*. L81/1 FN 183 ZN 58/2007, Fig. 4

RF	I-c-1	f	H	gesp.	ox	2-3
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D. 17.0 cm. Bd. 21.5 cm. H. 58.7 cm. Md. 21.5 cm. Wd. 1.3 cm.

AI 340.00 VI 36.63

Restored from sherds, incomplete

Surface colour: slip 10R6/6 light red

Break: wide grey core, thin red and brown oxidation zones

26. *9018R*. L81/12 FN 68 ZN 70/2008, Fig. 4

RP	I-b-2	f	W1	gef.	ox	2-3	1R
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D. 3.7 cm. H. 18.4 cm. Md. 6.7 cm. Wd. 0.3 cm.

AI 185.00 VI 36.41

Incomplete

Surface colour: burnish 10R5/8 red

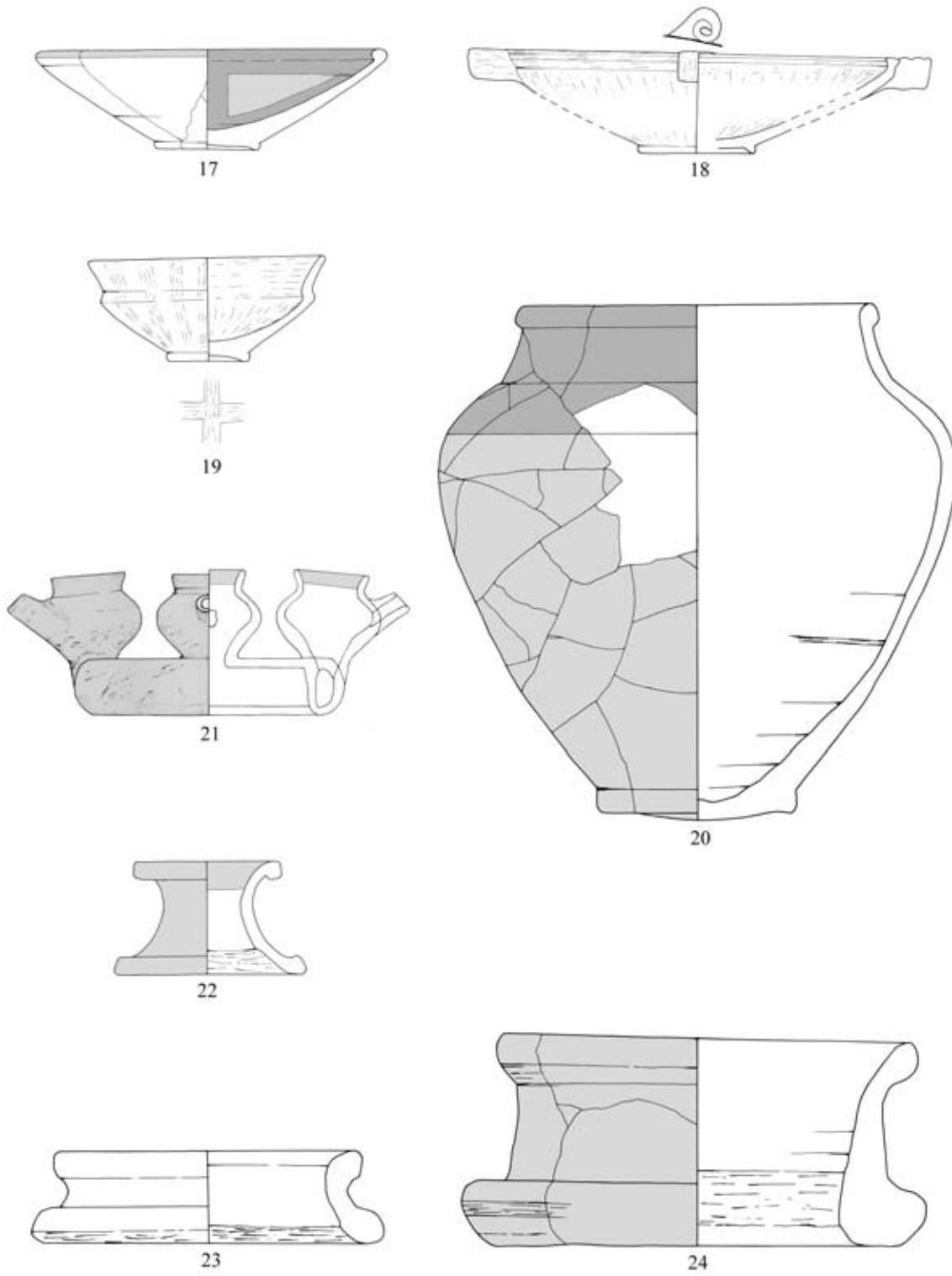
Pebble burnished on the exterior.

Break: grey core, thin brown oxidation zones

Note in contrast to most examples of this type, 9018R shows no heavy wheel ridging on the interior

#### A.b) Nile clay groups new to the corpus

In addition to the vessel groups already well known in the Tell el-Dab<sup>a</sup> repertoire, a number of new forms were also found. Whilst this may be due to the fact that most of the pottery, or at least the complete profiles, previously recorded at Tell el-Dab<sup>a</sup>, come mostly from graves or offering pits, this new materi-



1:4

Fig. 3

al may reflect the domestic corpus, which, until now has been lacking. On the other hand, since it has been noticed by anthropologists working in the Philippines that certain vessels were only utilised for elite ritual feasts,<sup>21</sup> it is also possible that some of these new forms were function specific, being produced only for such an activity. One of the more remarkable aspects of the L81 complex ceramics is the relatively large number of vessels with hand made ring bases. These are made in a number of ways, the most usual being finger-pinching in which the flat base, as cut from the wheel is pinched with the fingers to form a low ring base. Less often it is clear that a separate disc of clay has been added and this has been modelled with the fingers to form a ring base. Since a large number of dishes bear such hand-made ring bases, it is probably quite legitimate to see these as new types. K11000/374, cat. no. 27, is here chosen as a representative example of such a dish with a direct rim and hand-made ring base. Other dishes with incurved modelled rims and hand-made ring bases are represented by cat. no. 28. The interesting cups with ring bases, cat. no. 29, are rare but have also already been found at Tell el-Maskhuta.<sup>22</sup> Of the three reconstructed examples, two are red slipped on the exterior and one is red slipped and vertically burnished. A few examples of the type illustrated by cat no. 30, usually with a red band out above the carination and a single example of the ‘crown beaker type,’ cat. no. 31, are also present. Several examples of round bottomed carinated bowls with finger pinched rims, as cat. no. 32, have been found. All examples show distinct signs of knife paring below the carination which has not been smoothed. Cat. no. 33 is related to *TD XII* group 14, but differs in having an inner ring near the base in which five holes at roughly equidistant points were drilled. These presumably served the same purpose as the ledges with holes at the rim, although of course the ones near the base are much shallower. The black ring-based burnished, ribbed bowl, 34, is one of probably two examples of this type found in the pit complex. Simple, handleless, black slipped and burnished bowls are somewhat rare in this locus, and none of the others have exter-

nal ribbing, but they all show the unusual characteristic that all are unburnished on the interior – the illustrated example which is burnished on the interior at the rim, being the only one to show any hint of burnishing – which raises the possibility that they may have been intended as lids. Several examples of the vessel represented by cat. no. 35 have been reconstructed. Such vessels have not been found at Tell el-Dab<sup>a</sup> before; however, rim sherds could have been mistaken for cooking pots, *TD XII* groups 158/304, whilst the bases may have been mistaken for footed dishes of *TD XII* group 39 in Nile B2. No exact parallels are known to us; however, they seem to have developed from somewhat similar Middle Kingdom vessels, which have a wider base in proportion to their height and thus not such a pronounced bulge in the upper body, known from Dahshur.<sup>23</sup> Similar examples, but with spouts are also known at Harageh.<sup>24</sup> Whilst the sinuous-sided type is relatively frequent, with some 12 examples having so far been reconstructed, the straight-sided type, represented by catalogue no. 36 is much rarer, with only two examples having been restored. This type too may have Middle Kingdom antecedents in the British School of Archaeology type series 54T and 54V at Harageh.<sup>25</sup> The tall beaker, cat. no. 37, is another of the vessels found in this pit complex to have a hand pinched base. The fenestrated vessels are highly unusual. Parts of two evidently similar vessels have been found. Cat. no. 39 clearly shows that they were mounted on a flat base and were evidently attached to something, perhaps another vessel. Both clearly had a tubular ‘belt’ running around the top of the body in which liquids could be poured in and out via a spout. Four (cat. no. 39) or five (cat no. 38) windows were cut into the lower body. There are no signs of burning on either vessel and their purpose remains unexplained. The jug 9012T, cat no. 40 is reminiscent of a larger vessel, TD 5917, found in tomb k/9-35.<sup>26</sup> The potstand, catalogue no. 41 represents one of eight such vessels known to have been deposited in this context. It is a type well known in New Kingdom contexts, but before the discovery of L81, they had not been found in Hyksos levels at Tell el-Dab<sup>a</sup>.

<sup>21</sup> Eg, JUNKER, 2001, 285.

<sup>22</sup> REDMOUNT, 1989, 936 no. 46.

<sup>23</sup> Good examples come from the tomb of Sitweret. In contrast to the vessels from Tell el-Dab<sup>a</sup>, they have a low ring base. We are grateful to Susan Allen for showing us these vessels in Dahshur, and for permission to mention them here. In addition Robert Schiestl

informs us that similar vessels have also been found in earlier excavations at Dahshur, but most remain unpublished.

<sup>24</sup> ENGELBACH, 1923, pl. xl. 70M2

<sup>25</sup> ENGELBACH, 1923, pl. xxxviii.

<sup>26</sup> *TD XVI*, 348–349.

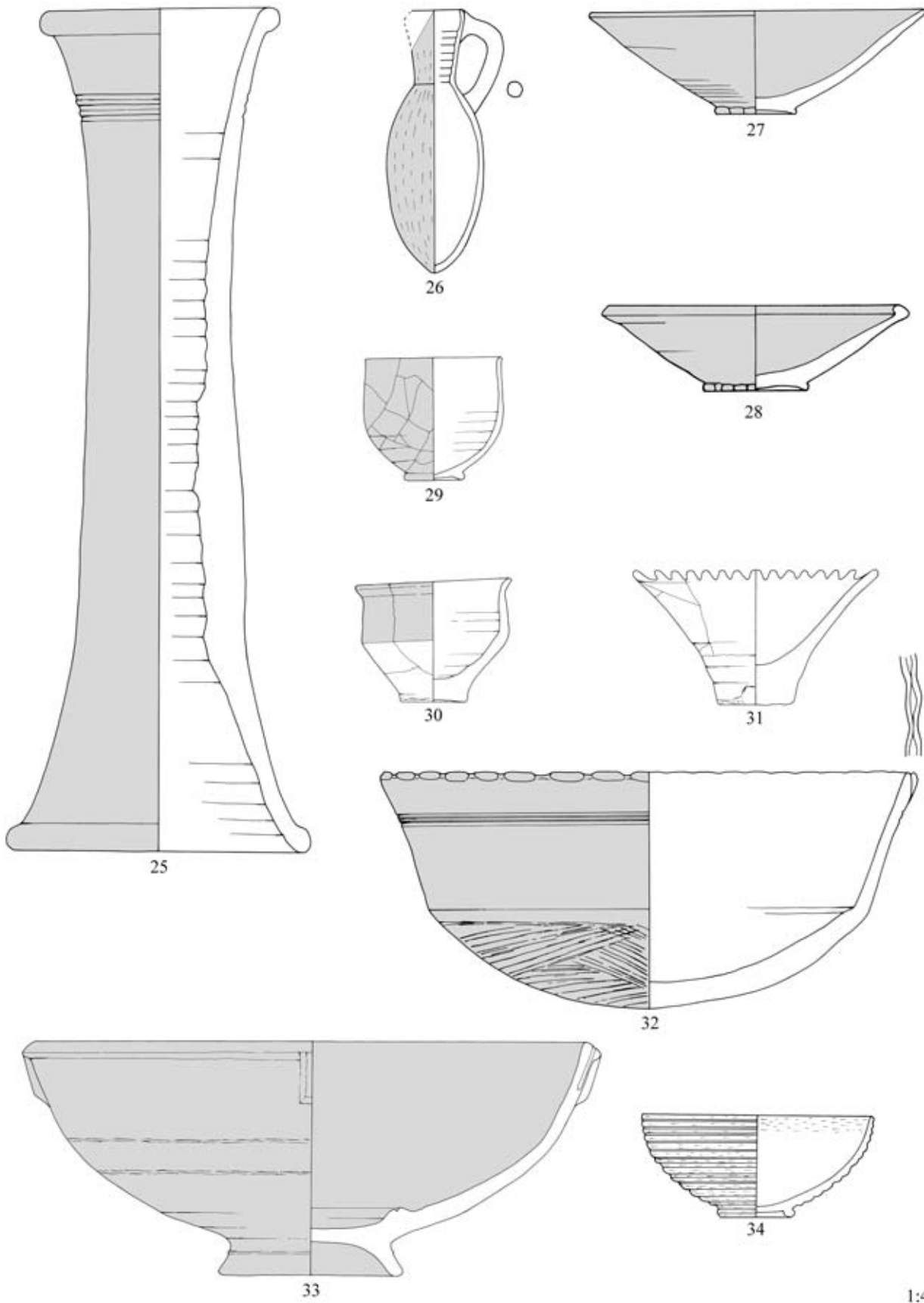


Fig. 4

1:4

The same goes for the firedogs, represented by cat. no. 42, three incomplete examples of which have been found in this pit complex. Although their use is disputed it is noticeable that all three bear smoke stains on the exterior. Most of the fire dogs known to us date from the New Kingdom to the Ptolemaic Period, but examples from Buhen have been dated to the Middle Kingdom, so the finding of Second Intermediate Period examples is perhaps not unexpected. The examples from L81, which all differ one from another, have the two characteristic ‘ears’ but neither a ‘muzzle’ nor handle on the opposite side to the ‘ears’. The solid mass of the unique pot 9009O, catalogue no. 43, indicates that this ‘vessel’ was probably intended as a table. The strange pot, cat. no. 44, is presumably a ritual vessel. Three examples have been reconstructed, but several rim and base fragments are also present in this pit complex. Lids, as opposed to small dishes used as lids, – in particular the so-called miniature dishes of *TD XII* group 312 – are generally rare among the Tell el-Dabca ceramic repertoire.<sup>27</sup> It is thus something of a surprise to find in L81 several examples of vessels which were probably intended as lids, or stoppers, from the moment of their manufacture. Several different types are recognisable. There can be no doubt that the stopper, cat. no. 45, which is similar to stone stoppers utilised for kohl pots, and the lids, catalogue numbers 50–53 must have been utilised as lids, since, if they were stood the other way up, they would be somewhat unstable. 9014W, cat. no. 48, is also to be seen as a lid since it has a small hole in the top, which would allow any fermenting gases to escape from the jar it presumably covered. The remainder, cat. nos. 46, 47 and 49 may have been miniature votive vessels, but some examples, not illustrated in this paper, were evidently red slipped on the exterior, whereas votive dishes were usually left uncoated, or were painted on the interior.<sup>28</sup> The lid, cat. no. 53, not yet fully restored, is interesting since it bears two sculptured figures (crocodiles?) on the top of the lid.

27. *K11000/374*. L81/1, Fig. 4

RF	I-b-2	f	W+H	H	ox	2-3
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D. 23.6 cm. Bd. 5.6 cm. H. 7.4 cm. Md. 23.6 cm. Wd. 0.7 cm.

AI 100.85 VI 318.92

Incomplete

Surface colour: slip 10R6/8 light red

Break: wide black core, red and brown oxidation zones

28. *K11000/1008*. FN 58 L81/1, Fig. 4

RF	I-b-2/e	f	W+H	H	ox	2-3
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D. 21.4 cm. Bd. 7.2 cm. H. 6.0 cm. Md. 21.4 cm. Wd. 0.8 cm.

AI 112.00 VI 305.66

Incomplete

Surface colour: slip 10R6/8 light red

Break: grey core, purple and brown oxidation zones

29. *8997W*. L81/1 ZN 174/2006, Fig. 4

RF	I-b-2	f	W1	gef.	ox	2-3
----	-------	---	----	------	----	-----

D. 9.4 cm. Bd. 4.2 cm. H. 8.6 cm. Md. 9.6 cm. Wd. 0.3 cm.

AI 102.17 VI 111.62

Restored from sherds, incomplete

Surface colour: 2.5YR6/6 light red; slip 10R6/6 red

Break: thin red core, brown oxidation zones

30. *8995M*. L81/1 ZN 155/2006, Fig. 4

TG	I-b-2	f	W1	abg.	ox	2-3
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D. 11.0 cm. Bd. 4.7 cm. H. 8.4 cm. Md. 11.0 cm. Wd. 0.6 cm.

AI 103.77 VI 130.95

Restored from sherds, incomplete

Surface colour: 5YR7/4 pink; slip 10R5/6 red

Break: thin red core, yellowish brown oxidation zones

31. *8999Y*. L81/1 FN 6 ZN 180/2006, Fig. 4, Pl. 2

TG	I-b-2/e	f	W1	abg.	ox	2-3
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D. 17.2 cm. Bd. 5.4 cm. H. 9.4 cm. Md. 17.2 cm. Wd. 0.7 cm.

AI 104.88 VI 182.97

Restored from sherds, incomplete

Surface colour: 5YR7/4 pink

Break: grey core, purple and brown oxidation zones

32. *K11000/473*. L81/1, Fig. 4

RFTG	I-c-1	f	W	gesp.	ox	2-3
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D. 37.6 cm. H. 16.6 cm. Md. 37.6 cm. Wd. 0.7 cm. AI 104.44 VI 226.51

<sup>27</sup> *TD XII*, 245, *TD XVII, I*, 142–143.

<sup>28</sup> *TD XVII, I*, 153.

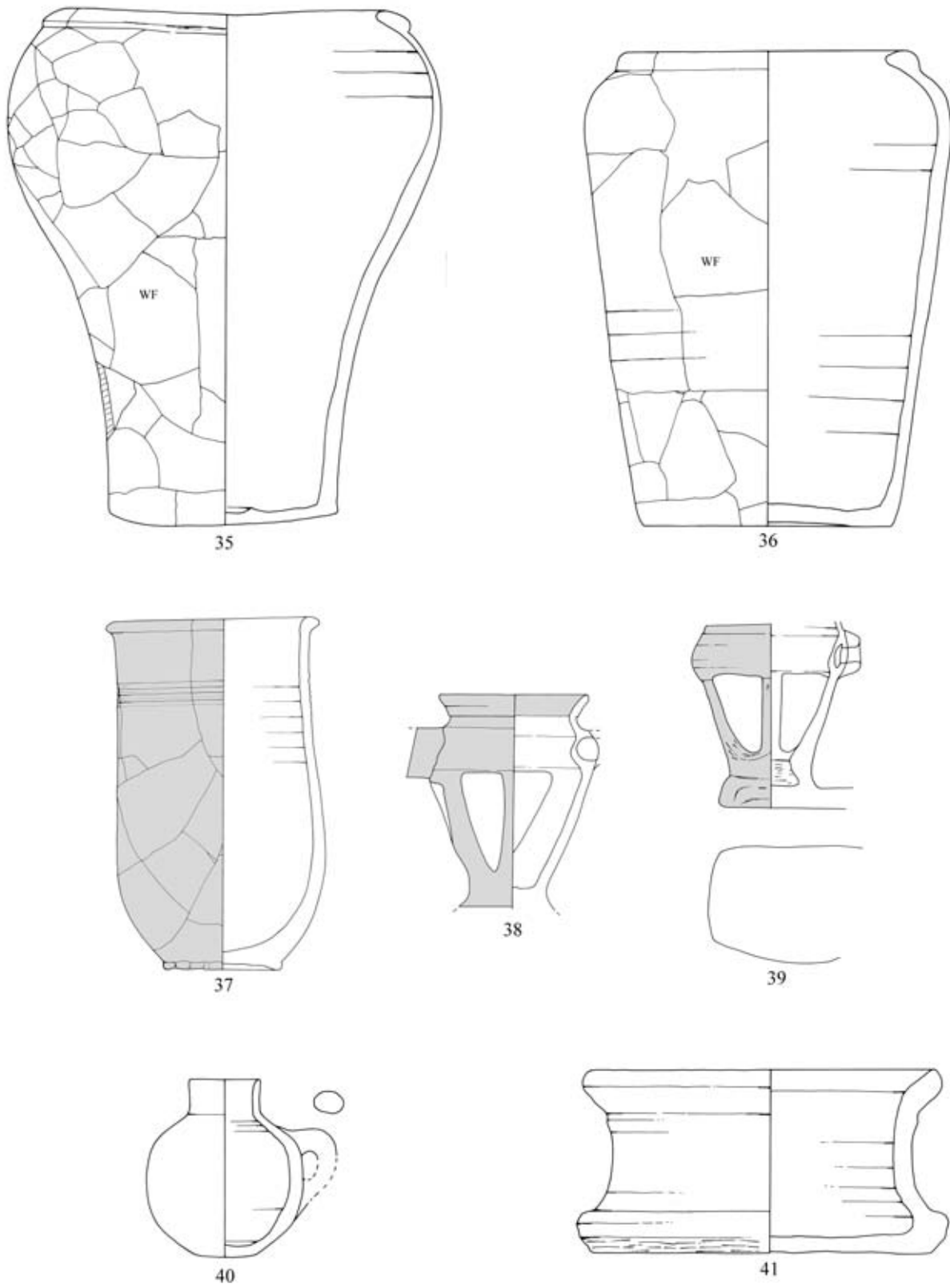


Fig. 5



Restored from sherds, incomplete

Surface colour: 7.5YR7/4 pink

Break: wide black core, red and brown oxidation zones

Base scraped with a tool

33. *9004O*. L81/1 FN 513 ZN 159/2006, Fig. 4

RF	I-b-2	mi	W1	gef.	ox	2-3
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D. 40.5 cm. Bd. 13.0 cm. H. 16.4 cm. Md. 40.5 cm. Wd. 1.0 cm.

AI 106.57 VI 246.95

Restored from sherds, incomplete

Surface colour: 5YR6/6 reddish yellow; slip 10R5/6 red

Break: thin violet core, red and brown oxidation zones

Five holes in base ring. Drawn with four pockets but could be more

34. *K11000/902*. L81/1 + L81/6 + L81/12, Fig. 4

SPTG	I-b-2	f	W1	gef.	re	2-3
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D. 16.2 cm. Bd. 5.4 cm. H. 7.1 cm. Md. 16.2 cm. Wd. 0.5 cm.

AI 101.25 VI 228.17

Restored from sherds, incomplete

Surface colour: 2.5YR5/1 reddish black; burnished slip 10R5/1 reddish black

Break: red core, black reduction zones

35. *9013B*. L81/1, Fig. 5, Pl. 2

WF	I-b-2/e	f	W	H	ox	2-3
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D. 24.5 cm. Bd. 15.2 cm. H. 33.7 cm. Md. 28.9 cm. Wd. 1.0 cm.

AI 122.50 VI 85.76

Restored from sherds, incomplete

Surface colour: 10R8/1 white

Break: wide grey core, thin brown oxidation zones

Base coil built

36. *9013E*. L81/1, Fig. 5, Pl. 2

WF	I-b-2/e	f	W	H	ox	2-3
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D. 20.0 cm. Bd. 17.0 cm. H. 31.3 cm. Md. 24.4 cm. Wd. 0.9 cm.

AI 256.41 VI 77.95

Restored from sherds, incomplete

Surface colour: 2.5Y7/1 light gray

Break: grey core, red oxidation zones

Base coil built

37. *9001D*. L81/1 FN 567 ZN 183/2006, Fig. 5, Pl. 2

RF	I-b-2	s.f	W1	H	ox	2-3
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D. 14.1 cm. Bd. 7.8 cm. H. 23.2 cm. Md. 14.1 cm. Wd. 0.6 cm.

AI 141.00 VI 60.78

Restored from sherds, incomplete

Surface colour: slip 10R6/6 light red

Break: wide grey core, red and brown oxidation zones

38. *8995A*. L81/1 ZN 155/2006, Fig. 5 Pl. 2

RF	I-b-2	s.f	W1	-	ox	2-3
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D. 9.9 cm. Bd. ? cm. pH. 14.1 cm. Md. 11.2 cm. Wd. 0.6 cm.

AI 137.50

Restored from sherds, incomplete

Surface colour: 2.5YR6/4 light reddish brown; slip 10R6/6 light red

Break: grey core, red and brown oxidation zones

39. *9016C*. L81/1 ZN 68/2007, Fig. 5

RF	I-b-2	s.f	W1	H	ox	2-3
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D. ? cm. Bd. Width 7.7. cm. pH. 14.1 cm. Md. 10.2 cm. Wd. 0.6 cm.

Restored from sherds, incomplete

Surface colour: 5YR7/4 pink

Break: grey core, red and brown oxidation zones

40. *9012T*. L81/1 ZN 572/2006, Fig. 5

TG	I-b-2	f	W1	H	ox	2-3
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D. 4.7 cm. Bd. 4.0 cm. H. 12.0 cm. Md. 10.3 cm. Wd. 0.8 cm.

AI 130.55 VI 85.83

Restored from sherds, incomplete

Surface colour: 2.5YR6/6 light red, water eroded

Break: grey core, purple, red and brown oxidation zones

41. *9013D*. L81/1 ZN 584/2006, Fig. 5, Pl. 2

TG	I-c-1	f	W	abg.	ox	2-3
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D. 23.7 cm. Bd. 24.5 cm. H. 12.2 cm. Md. 24.5 cm. Wd. 1.1 cm.

AI 146.29 VI 200.82

Restored from sherds, incomplete

Surface colour: 2.5YR6/8 light red, water eroded

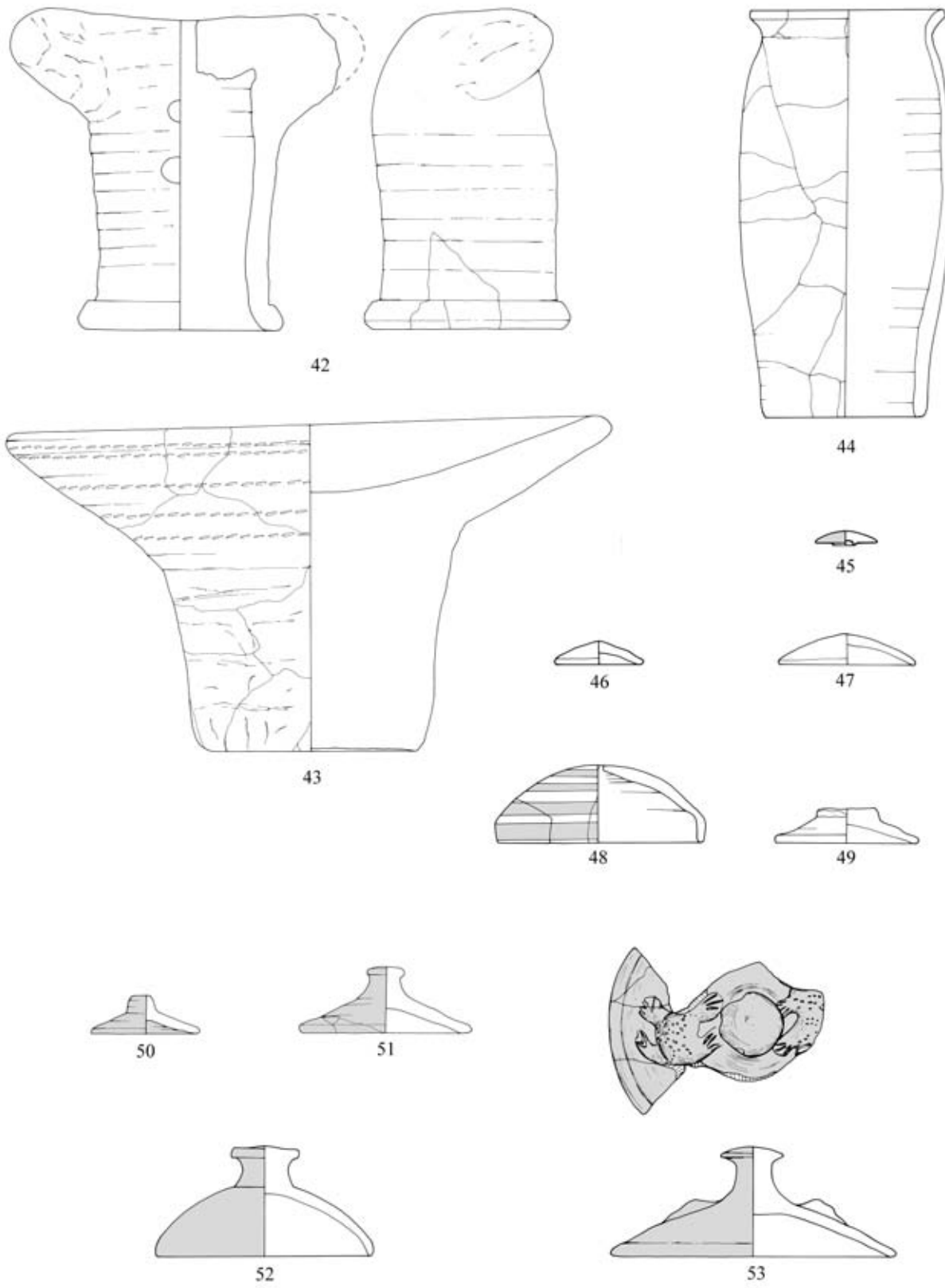
Break: wide black core, red and brown oxidation zones

42. *8997D*. L81/1 FN 253 ZN 169/2006, Fig. 6, Pl. 2

TG	I-c-1	mi	W1	gef.	ox	2-3
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D. 13.7 cm. H. 21.6 cm. Md. 12.0 cm. Wd. 1.4 cm. AI 159.30 VI 55.55

Restored from sherds, incomplete



1:4

Fig. 6

Surface colour: 7.5YR6/4 light brown  
Break: black core, red and brown oxidation zones

43. 90090. L81/1 FN 554 ZN 521/2006, Fig. 6

TG	I-c-2	f	W+H	H	ox	2-3
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D. 40.4 cm. Bd. 15.6 cm. H. 22.4 cm. Md. 40.4 cm.  
Wd. 3.0 cm.

AI 107.45 VI 180.36

Restored from sherds, incomplete

Surface colour: 2.5YR6/4 light brown

Break: black core, red and brown oxidation zones

44. K11000/723. L81/1, Fig. 6

TG	I-e-1	f	W1	gesp.	ox	2-3
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D. 13.0 cm. Bd. 11.0 cm. H. 27.0 cm. Md. 14.3 cm.  
Wd. 0.8 cm.

AI 125.00 VI 52.96

Restored from sherds, incomplete

Surface colour: 7.5YR7/4 pink

Break: black core, red and brown oxidation zones

45. 9014D. L81/1 ZN 41/2007, Fig. 6

RP	I-b-2	f	W1	gef.	ox	2-3
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D. 4.0 cm. Bd. 1.3 cm. H. 1.0 cm. Md. 4.0 cm. Wd.  
0.7 cm.

VI 400.00

Incomplete

Surface colour: 5YR7/4 pink, polish 10R5/6 red

Break: black core, red and brown oxidation zones

46. 8990H. L81/6 ZN 44/2008, Fig. 6

TG	I-b-2/e	f	W1	gesp.	ox	2-3
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D. 5.9 cm. H. 1.6 cm. Md. 5.9 cm. Wd. 0.5 cm.

AI 118.00 VI 368.75

Incomplete

Surface colour: 7.5YR7/4 pink

Break: grey core, red and brown oxidation zones

47. K11000/1021. L81/6, Fig. 6

TG	I-b-2/e	f	W1	gesp.	ox	2-3
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D. 9.0 cm. H. 2.0 cm. Md. 9.0 cm. Wd. 0.6 cm.

AI 107.24 VI 450.00

Incomplete

Surface colour: 7.5YR7/4 pink

Break: black core, brown oxidation zones

48. 9014W. L81/1 ZN 49/2007, Fig. 6

TG	I-b-2	f	W1	gesp.	ox	2-3
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D. 13.6 cm. H. 5.2 cm. Md. 14.0 cm. Wd. 0.7 cm.

AI 103.82 VI 269.23

Restored from sherds, incomplete

Surface colour: 2.5YR7/4 pink, red bands 10R6/8  
light red

Break: grey core, red and brown oxidation zones

49. 8990T. L81/6 ZN 51/2008, Fig. 6

TG	I-b-2	f	W1	abg.	ox	2-3
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D. 9.5 cm. Bd. 3.8 cm. H. 2.4 cm. Md. 9.5 cm.  
Wd. 0.6 cm.

AI 105.56 VI 395.83

Restored from sherds, incomplete

Surface colour: 7.5YR7/4 pink

Break: grey core, red and brown oxidation zones

50. 8995N. L81/1 ZN 157/2006, Fig. 6

RF	I-b-2	f	W1	abg.	ox	2-3
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D. 7.2 cm. Bd. 1.3 cm. H. 2.5 cm. Md. 7.2 cm.  
Wd. 0.6 cm.

AI 112.50 VI 205.71

Incomplete

Surface colour: 7.5YR7/6 reddish yellow; slip  
10R5/4 weak red

Break: uniform brown

51. 9004E. L81/1 FN 403 ZN 187/2006, Fig. 6

RFTG	I-b-2	f	W1	gef.	ox	2-3
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D. 11.5 cm. Bd. 2.5 cm. H. 4.4 cm. Md. 11.5 cm.  
Wd. 0.8 cm.

AI 115.00 VI 261.36

Restored from sherds, incomplete

Surface colour: 5YR7/6 reddish yellow; slip  
10R5/6 red

Break: grey core, red and brown oxidation zones

52. K11000/758. L81/1 Fig. 6

RFTG	I-b-2	f	W1	gef.	ox	2-3
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D. 14.5 cm. Bd. 4.5 cm. H. 7.2 cm. Md. 14.5 cm.  
Wd. 0.6 cm.

AI 103.58 VI 322.22

Incomplete

Surface colour: 2.5YR6/8 light red; slip 10R6/8  
light red, water eroded

Break: grey core, purple and brown oxidation  
zones

53. K11000/988. L81/12 Fig. 6

RP	I-b-2	f	W1	gef.	ox	2-3
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D. 18.8 cm. H. 7.3 cm. Md. 18.8 cm. Wd. 0.7 cm.

AI 104.44 VI 257.53

Restored from sherds, incomplete

Surface thick red slip burnish: 10R4/6 red

Break: red core, brown oxidation zones

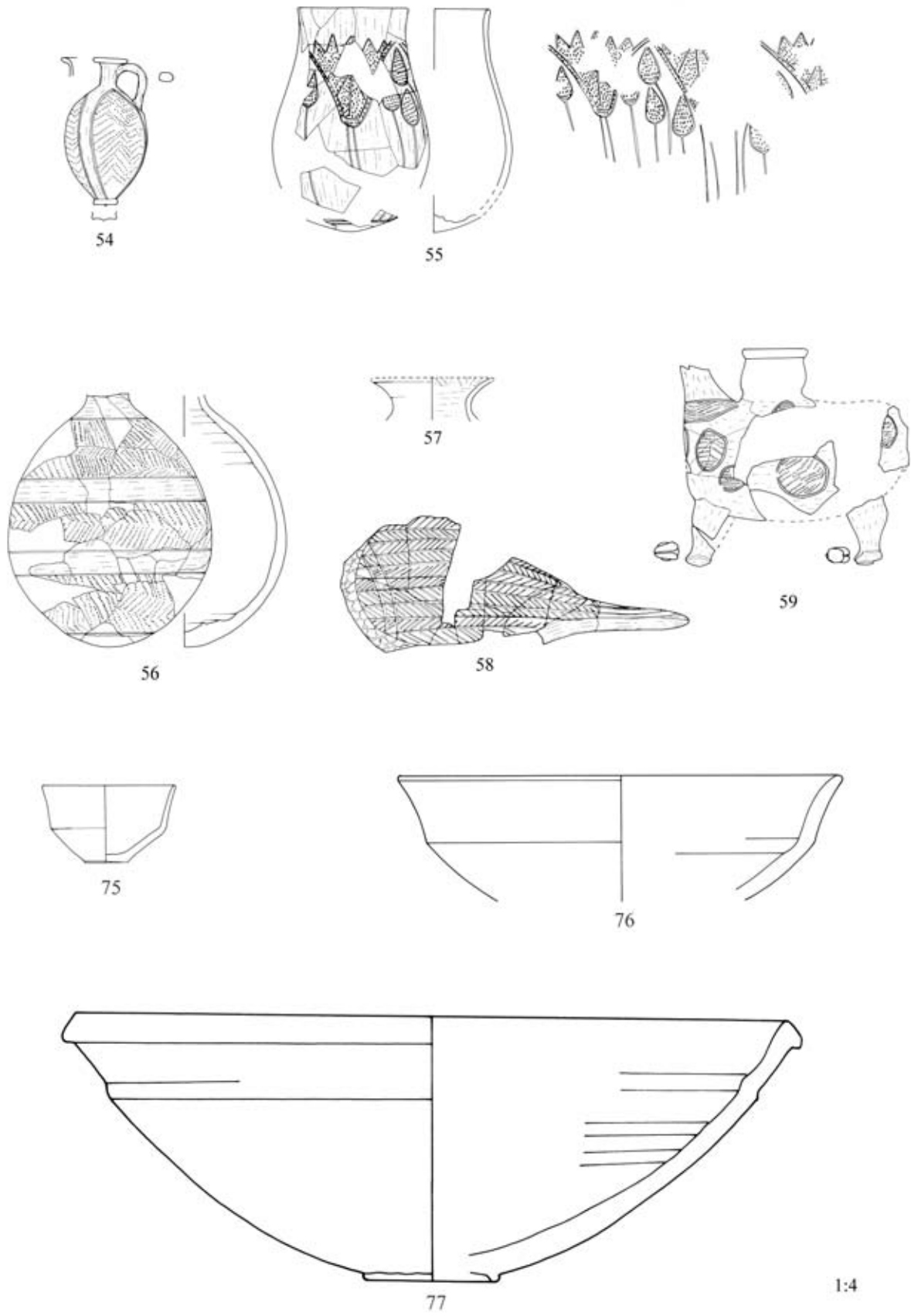


Fig. 7

1:4

### A.c. Tell el-Yahudieh Ware

Several examples of Tell el-Yahudiyeh ware have been found in L81. Most, however, are still in the process of reconstruction; nevertheless, with one exception, 9012M, cat. no. 56, all are of Egyptian manufacture. The Egyptian vessels are typical of the Hyksos Period,<sup>29</sup> consisting primarily of Kaplan's cylindrical 1, globular, quadrilobal, piriform 2a, and biconical 1 types.<sup>30</sup> Most of these vessels are of the average size usually found in vessels deposited in tombs at Tell el-Dab<sup>c</sup>a, although at least two vessels are somewhat larger, and many are clearly miniatures. In addition to the aforementioned types, the upper half of a miniature biconical grooved Tell el-Yahudieh jug was found in L81/6. Since most of these vessels are still in an incomplete state, only one of the piriform 2a vessels is illustrated here together with the Syro-Palestinian import and four others which are somewhat unusual. The piriform 2a jug, 9180, cat. no. 54, found intact is of the type with rolled rim, strap handle and a variant ring base, previously known on at least six vessels from Tell el-Dab<sup>c</sup>a, (TD 231, 367, 2138, 2142, 3050 and 4902), and in one example from Ashkelon,<sup>31</sup> where the centre of the base forms a distinct bulb. Vessel 9180 is of the type of which the decoration consists of three lozenges each infilled with vertical chevrons made with a ten-toothed comb. Whilst the undecorated areas of the neck and body were burnished, the rim and base were left unburnished, which is somewhat unusual for the piriform 2a vessels previously found in Tell el-Dab<sup>c</sup>a. The imported vessel, 9012M, cat. no. 56, is also unusual. The banded decoration, as well as the fabric, is typical for an import from the Levant, but Levantine wheel made globular Tell el-Yahudiyeh jugs are unknown to us, though perhaps they are not unexpected. Early Palestinian vessels with round or pointed bases are known,<sup>32</sup> and 9012M may well represent a later development. The drop shaped beaker, 9012H, is an interesting addition to the corpus of vessels made in Tell el-Yahudieh technique.<sup>33</sup> The unburnished decoration clearly consists of three lotus flowers, whose similarity to the lotus flowers

drawn on contemporary fish dishes is uncanny, separated from each other by three or four lotus buds. Catalogue no. 57, 9018W, is the only ringstand in Tell el-Yahudieh technique known to us. It is horizontally burnished on the interior, with impressed decoration on the rim made with a six-toothed comb. The exterior remained unburnished. Cat. no. 58, 9018Y, is evidently part of a falcon, a not unknown type, with the best preserved example being a complete hawk-shaped bird from the Fayoum area, now in the British Museum (BM EA 17046).<sup>34</sup> In that example the neck and single strap handle rise from the top of the head, whilst the bird stands on its legs and tail, and its wings, back and chest are decorated with incised striations. Fragments of similar vessels are known from Lisht,<sup>35</sup> Gebel Zeit,<sup>36</sup> and from earlier excavations at Tell el-Dab<sup>c</sup>a, (TD 1165, 4128G, 6034A/2, 6458A, 8475C, 8908V). The present piece, however, is the largest yet known and the most naturalistic in that clear attempts have been made to show the wing feathers, whilst the breast feathers are shown in the manner of scales. Finally cat. no. 59, 9018X, is highly unusual. It is clearly part of an animal figurine – probably a cow (?) – with circular decoration on the body and a band of decoration around the base of the neck.

54. 9180. L81/1 FN 248 ZN 154/2006, Fig. 7

SP	I-d ?	f	W1-2	gef.	re	2-3	1B
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D. 2.4 cm. H. 10.1 cm. Md. 5.6 cm. Wd. 0.2 cm.  
VI 55.45

Intact

Surface colour: 7.5YR5/1 gray; burnish 7.5YR3/1 very dark gray.

Not burnished on rim or base

Break: not visible.

55. 9012H. L81/1 ZN 566/2006, Fig. 7

SP	I-b-2	s.f	W1	gesp.	re	2-3
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D. 7.5 cm. H. 15.4 cm. Md. 10.7 cm. Wd. 0.3 cm.  
AI 104.17 VI 69.48

Restored from sherds, incomplete

Surface colour: 10R5/1 reddish grey; burnish

<sup>29</sup> BIETAK, 1989, 7–34.

<sup>30</sup> KAPLAN, 1980, 4–12, 15–25, figs. 13–22, 46–62, 85–103.

<sup>31</sup> L. STAGER, personal communication.

<sup>32</sup> Cf. KAPLAN, 1980, figs. 113c–d, 114a, 115a–b.

<sup>33</sup> Cf. KOPETZKY, 2006, 177–186.

<sup>34</sup> HALL, 1901, 69, fig. 30.

<sup>35</sup> MERRILLEES, 1974, 59, figs. 43, 47, Kaplan, 1980, figs. 123a.

<sup>36</sup> Exhibition catalogue, *25 ans de découvertes archéologiques sur les chantiers de l'IFAO, 1981–2006*, (Cairo, 2007), 56 nos. 37.349.

10R3/1 dark reddish gray

Decoration consists of three large lotus flowers separated from one another by lotus buds. The decorated areas are not burnished

Break: uniform dark grey

56. 9012M. L81/1, Fig. 7

SP	IV-2	f	W1-2	gef.	re	2-3
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pH. 17.3 cm. Md. 14.0 cm. Wd. 0.6 cm.

Restored from sherds, incomplete

Surface colour: 7.5YR5/1 gray

Break: inner grey core, reddish brown outer edge

57. 9018W. L81/6, Fig. 7

TGSP	I-b-2	s.f	W1	-	re	2-3
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D. 8.3 cm. pH. 2.9 cm. Wd. 0.3 cm.

Incomplete

Surface colour: 2.5YR6/1 dark reddish grey; burnish 2.5YR3/1 dark reddish gray

Decoration on rim made with a ten-toothed comb

Break: grey core, brown reduction zones

58. 9018Y. L81/1 + L81/6 + L81/12, Fig. 7

SP	I-b-2	f	W1	-	re	2-3
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pH. 8.7 cm. preserved length 24.0 cm.

Restored from sherds, incomplete

Surface colour: 5YR4/1 dark gray; burnish 10R3/1 dark reddish gray

Decoration consists of rishi feather pattern on breast and incised lines representing feathers on wing

Break: uniform grey

59. 9018X. L81/1 + L81/6 + L81/12, Fig. 7

SP	I-b-2	s.f	W1	gesp.	re	2-3
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D. 7.5 cm. H. 15.4 cm. Md. 10.7 cm. Wd. 0.3 cm.

AI 104.17 VI 69.48

Restored from sherds, incomplete

Surface colour: 10R5/1 reddish grey; burnish 5YR4/1 dark gray

Decoration consists of a band around neck and circles on body

Break: uniform grey

#### A.d. Marl C Vessels – Preliminary Report

##### A.d.i. Introduction

Since the publication of *TD XIII*, much work has been done on the physical structure of Marl C whilst much new material has come to light. The fabric itself with its properties, the reason for, and the nature of, the development of a whitish surface layer has been subject to more analyses and the results of these shed more light on the chemical composition of both and clarify a few questions in connection with the varied presence or absence of a “scum” on the inside or outside of vessels made from Marl C.<sup>37</sup>

As for the distribution of the fabric within and without Egypt a number of other sites can now be added: Ashkelon,<sup>38</sup> Sidon<sup>39</sup> and perhaps Byblos<sup>40</sup> abroad; Kom el-Hisn,<sup>41</sup> Abu Ghalib,<sup>42</sup> Heliopolis,<sup>43</sup> Saqqara<sup>44</sup> and Giza<sup>45</sup> in Lower Egypt; Mersa Gawasis<sup>46</sup> on the Red Sea Coast; Deir el-Bersheh,<sup>47</sup> Dra Abu el Naga,<sup>48</sup> Hierakonpolis<sup>49</sup> in Upper Egypt and Gebel es Asi<sup>50</sup> and Toschka<sup>51</sup> in Nubia. Even along some of the desert roads such material, mostly Marl C storage jars have been found, the numbers of which are quoted as going into the hundreds.<sup>52</sup> Here it will be especially interesting to see variations

<sup>37</sup> Cf. CYGANOWSKI, 2003; OWNBY and GRIFFITHS, 2009, this volume.

<sup>38</sup> STAGER, 2002, 353–362, fig. 21.

<sup>39</sup> GRIFFITHS and OWNBY, 2006, 63–77. BADER, 2003, 31–37. DOUMET-SERHAL, FORSTNER-MÜLLER, KOPETZKY, 2006, 52–59.

<sup>40</sup> Surface sherds viewed during a visit in 2002.

<sup>41</sup> Cf. KIRBY, OREL and SMITH, 1998, 29, table 1.

<sup>42</sup> BAGH, 2002, 29–61.

<sup>43</sup> R. Schiestl, personal communication.

<sup>44</sup> RZEUSKA, 2006.

<sup>45</sup> A. WODSZINKA, Lecture during the Old Kingdom Pottery Workshop in Warsaw, 20<sup>th</sup> to 21<sup>st</sup> of August 2007.

<sup>46</sup> BARD, FATTOVICH, Joint Archaeological Expedition at Mersa/Wadi Gawasis (Red Sea, Egypt) of the University of Naples “l’Orientale” (Naples, Italy), Istituto Italiano

per l’Africa e l’Oriente (Rome, Italy), and Boston University (Boston, USA) – 2005–2006 Field Season, Archaeogate 12/2006, On-line Journal <http://www.archaeogate.org/egittologia>. Sally Wallace-Jones, personal communication.

<sup>47</sup> BOURRIAU, DE MEYER, OP DE BEECK, VERECKEN, 2005, 101–129.

<sup>48</sup> SEILER, 2005.

<sup>49</sup> GIULIANI, 2001, 40–45.

<sup>50</sup> SHAW, BLOXAM, BUNBURY, LEE, GRAHAM, D. DARNELL, 2001, 33–34.

<sup>51</sup> BADER, 2006a, 97–102.

<sup>52</sup> DARNELL, 2007, 36–40. These finds were reported from Abu Ziyar which is located approximately at the same height as Qus and towards the oases of Dakhla and Kharga.

within shape and capacity that are currently rather elusive.<sup>53</sup>

These additions to the fabric's distribution fill some gaps in the archaeological record, so that a clearer picture emerges, namely a very dense patch of sites in the Memphis-Fayoum region with a regular network of sites further away. Together with quantitative data from Tell el-Dab<sup>ca</sup> and Kom Rabi<sup>ca</sup><sup>54</sup> this supports even more firmly the original assumption of Dorothea Arnold that this material originates in the Memphis – Fayoum region.<sup>55</sup> Some uncertainties still remain, as no material derived from southern sites was tested and compared against the comparatively well researched Marl C ceramics from the north. The more so as no research has been undertaken by geologists to try and locate the areas from whence the raw clay, utilised for this fabric, was originally extracted.

The interpretation of this distribution pattern involves the assumption that the workshops producing this kind of Marl C pottery were administered by a “central power” or were “state controlled” with a centralised distribution of such vessels, or rather, the original products with which they were filled, to the other sites, probably provisions of some kind.<sup>56</sup> This is certainly a very likely option for the Twelfth and early Thirteenth Dynasties, but before and after that period, the material seems to be only of local importance. In the Old Kingdom difficulties arise from problems in identification of the fabric, because the Marl fabrics are neither as well known nor as well described as those of the Middle Kingdom and often finer and therefore harder to distinguish. The planned collaboration of the Old Kingdom Pottery Workshop<sup>57</sup> in this respect is a very welcome addition that will hopefully solve some of these problems.

The sites of Giza and Saqqara provide an extension of the time frame in which this material was

used. It is thus now proven, at least as far as the Memphis-Fayoum region is concerned, that pottery was indeed manufactured out of a Marl C fabric from the Old Kingdom,<sup>58</sup> and on through the First Intermediate Period.<sup>59</sup> Regions further afield are less likely to have received such material.

#### *A.d.ii. The Marl C ceramics of L81*

The Marl C finds in pit complex L81 are of interest because many complete profiles could be recovered so they thus add to the known vessel typology, which is still expanding. Additionally it adds much to our knowledge of Marl C material from the early Hyksos period (Phase E/1-D/3) since not much of this class of material from Tell el-Dab<sup>ca</sup> was derived from secure archaeological deposits, the more so as such strata were very close to the surface in some of the excavation areas. This is particularly true of Area F/I, and it was thus often impossible to arrive at fixed dates for some vessel types.<sup>60</sup>

It should be said, at the outset, that the overall percentage of Marl C within the repertoire of L81 is not very high – a preliminary estimate of the percentage of Marl C suggests that it comprises around 5 % of the repertoire at the most.<sup>61</sup> It is, however, the completeness and the variety of the Marl C vessels in L81 that are of great interest. Perhaps the most interesting are the fourteen fish dishes and these, along with an evident imitation in Nile E, will be examined in depth (§ A.d.ii.a); however, to give a more rounded view of the other Marl C types found in the pit complex a small number of other vessels will also be considered (§ A.d.ii.b).

#### *A.d.ii.a. The Fish Dishes*

Since the last extensive discussion of fish dishes,<sup>62</sup> a number of new discoveries have been made.<sup>63</sup> Not the least amongst these is the finding of fifteen new examples in complex L81, and it thus

<sup>53</sup> ALLEN, 2006, 29–36.

<sup>54</sup> *TD XIX*, 646–652.

<sup>55</sup> DO. ARNOLD, 1981, 180–181, 188–190.

<sup>56</sup> DO. ARNOLD, 1981, 190–191. BOURRIAU, 1997, 163.

<sup>57</sup> T. Rzeuska and A. Wodzinska are the organisers of these conferences. The first volume of Proceedings of the Old Kingdom Pottery Workshop in Warsaw, 20<sup>th</sup> to 21<sup>st</sup> of August 2007 is in print.

<sup>58</sup> Cf., NORDSTRÖM and BOURRIAU, 1993, 180; BADER, 2001 (hereafter *TD XIII*), 41, Anm. 239.

<sup>59</sup> BADER, in print.

<sup>60</sup> Cf. *TD XIII*, passim.

<sup>61</sup> A current preliminary calculation using complete profiles resulted in 3.4 % of Marl C, of which 0.8 % consists of Marl C1 and 2.6 % of Marl C2. In fact as more vessels are reconstructed, the relative percentage of Marl C vessels is likely to decrease.

<sup>62</sup> *TD XIII*, 79–85.

<sup>63</sup> For an example at Abydos – cf. WAGNER, 2007, 247, 279 fig. 128 no. 148, and a reference there to a forthcoming publication of a well preserved example.

seems worthwhile to update our knowledge of this distinctive type of late Middle Kingdom and Second Intermediate Period pottery, especially since the vessels found in L81 bring new evidence concerning the dating and possible use of these enigmatic objects. Since 1966 when excavations first began at Tell el Dab<sup>c</sup>a, sherds of fish dishes, although infrequent, have regularly surfaced within the ceramic sherd collections.<sup>64</sup> However, in contrast to these earlier discoveries, all newly excavated dishes show a large fish in the centre of the dish, which can be identified as a tilapia<sup>65</sup>—a motif that was previously not well represented among the fish dishes found at Tell el Dab<sup>c</sup>a, but is known from other sites in Egypt.<sup>66</sup>

60. 9015ML81/1 FN 357 Pl. 3

TG	II-c-2	s.f	Ha1	H	ox	4
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D. 37.0 × 25.5 cm. H. 7.0–9.0 cm. Md. 37.0 cm. Bd (long axis) 13.5 cm. Wd. 1.2 cm.

Restored from sherds, incomplete

Surface colour: 7.5YR8/2 pinkish white

Decoration: see description

Break: grey core, red + brown ox zones.

9015M belongs to a relatively small class of the boat shaped oval dishes with a measurement of 37.0 cms across its longer axis and 25.5 cms across its narrower axis. The decoration is almost completely preserved with only a small portion of the rim missing. As with all other dishes, it was made by hand, the rim trimmed with a tool to form a sharp edge that falls towards the outside. The dish was made from a dense Marl C2 fabric in which only a few lime particles are visible. The same holds true for the marl particles/argillaceous inclusions. The surface is only very patchily covered with the natural white surface layer, which almost looks like paint in this instance.<sup>67</sup> Also noteworthy is the very high amount of (golden) mica (probably biotite) visible on the surface of the dish, which is not a normal feature. There are no signs of wear in the middle of the dish which

would have occurred if it were used for grinding.

The median line<sup>68</sup> of the large fish carved into the middle of the dish is shown by means of three parallel incisions that were filled with short oblique dashes. The scales of the fish are represented by short oblique notches, probably made with a finger nail,<sup>69</sup> whilst the head was divided from the body with a double rounded line. No eyes are depicted. The fish shows a long dorsal fin filled with short oblique lines, whilst the pectoral and anal fins were incised at some distance from each other. Between these two fins there is a large triangular feature – of which it is not entirely clear if it is supposed to be a (desert) mountain or if it actually belongs to the fish – filled with five long lines and notches. We would suppose, however, that this is meant to represent a hill/mountain, since the artists who decorated these fish dishes were, on the whole, quite accurate in their renderings of nature, and such a large ventral fin does not belong on a tilapia.<sup>70</sup> It looks very similar to the features on top of the tail of the fish. The tail (caudal) fin develops out of the body of the fish by means of two flaring lines and is filled with an irregular pattern of perpendicular crossing lines creating the illusion of scales. On top of the fin, – but probably not intended to be part of it, since in other examples this space is filled with motifs which are clearly not meant to be part of the tail, such as, for example, the hippopotamus in the next dish to be described (see cat. no. 61), – are two more of the triangular features, again filled with several long lines and notches, which yet again are perhaps meant to represent hills or mountains. Out of the mouth of the fish, which is not particularly well drawn, a lotus flower emerges on a single stem. The flower was drawn in a rather simple way with a line through the middle and some triangular features on top of it, quite in keeping with other renderings of lotus flowers on Egyptian pottery. The remainder of the decoration consists mainly of a very simple depiction of vegetation, probably reeds or a

<sup>64</sup> Cf. *TD XIII*, 85–98, nos. 96–134.

<sup>65</sup> GAMER-WALLERT, 1970, 24–27.

<sup>66</sup> For example, Kahun, PETRIE, 1890, pl. v.1, 3; Tell el-Yahudieh, PETRIE, 1906, pl. i.10; Kom Rabi<sup>c</sup>a – JEFFREYS and GIDDY, 1989, 5 fig. 3; Dahshur, and Lisht unpublished. Others without provenance are also to be found in various museum collections.

<sup>67</sup> On this see OWNBY and GRIFFITHS, this volume.

<sup>68</sup> The individual parts of a fish are described following the terminology as given by BREWER and FRIEDMAN, 1989, 47.

<sup>69</sup> The hands and/or finger nails of the potter/artist would have had to be very wide and long.

<sup>70</sup> Note the shape and character of the ventral fin shown in 9000A (see below cat. no. 62).



marsh landscape.<sup>71</sup> The 22 “reeds” grouped around the fish and its fins are drawn as long stems with between six and twelve short oblique lines representing the branches. Roughly opposite the “mountain” a budding plant is featured with a bud on top and two more buds on each side. Short oblique lines seem to depict the leaves of this plant. Whilst stylised lotus flowers are often shown emerging from the mouth of the fish, the reeds are somewhat unique. Many representations of vegetation with branches on both sides of a stem are known to us, but the only possible parallels for the type of ‘reed’ shown on this vessel is to be found on a dish from Antaeopolis,<sup>72</sup> and on a fragment found at Tell el-Yahudieh.<sup>73</sup> The triangular ‘mountains’ shown below the fish and above the tail fin also find somewhat good parallels on vessels from Kahun,<sup>74</sup> Lisht,<sup>75</sup> and Memphis.<sup>76</sup>

61. 9195 L81/1 Pl. 4

TG	II-c-2	s.f	Ha1	H	ox	4
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D. 34.5 × 24.0 cm. H. 6.4–8.5 cm. Md. 34.5 cm. Bd 14.5 × 16.0 cm. Wd. 1.2 cm.

Intact

Surface colour: 5Y8/1 white

Decoration: see description

Break: not visible.

9195 is similar in size to 9015M being 34.5 cms long and 24.0 cms wide, and, like the previous fish dish it was handmade exhibiting a sharp rim edge from trimming with a, probably, wooden tool. This oval, boat-shaped dish was found intact so that the fabric classification could only be proposed from a close scrutiny of the surface which suggests a Marl C2 fabric. The white surface layer usually developing in the process of manufacture due to the chemical composition of this fabric is, in this example, rather thin and patchy, perhaps due to a higher quartz content.<sup>77</sup> The dish shows signs of wear in the middle as if from abrading some material inside the dish. The incised lines are notably shallower here than in other places of the centre of the dish.

Like the previous dish, this example bears a large incised fish in the centre with a bunch of

lotus flowers seemingly growing out of its mouth. The fish itself has one long dorsal fin on the back and pectoral and anal fins under the belly, the first beginning almost at its head. The scales are shown by incised notches probably made with a finger nail as in the previous example. The median line is represented by three parallel lines, and these are also filled with short oblique parallel lines, but in this instance they are mirrored thus forming a classic herring-bone pattern. The head is depicted by two rounded lines filled with oblique short lines, and a dot within the second circular line might represent the eye. In contrast to 9015M, the mouth of the fish is shown as an opening, not as a straight line. The caudal fin develops out of the fish shape itself and is divided into broad bands by parallel lines, which, in turn, are filled with short more-or-less perpendicular parallel lines, creating an image of the pattern of a real fish tail. The flower is shown with many subdivisions out of which other petals emerge and they are filled with notches. The depiction of the flower is symmetrical so that one larger flower is flanked by one bud on each side and one smaller flower each. To the right of the lotus flower two small fish are shown looking to the right (from the observer’s view) swimming towards another bunch of lotus flowers which seems to grow out of the pectoral fin of the fish. The last lotus bud comes from a stem which is being pushed out of the way by the large swimming fish.

Continuing to the right the next motif is a standing figure of a hippopotamus goddess, Ipet (Ipi), Reret or Taweret, characterised by a hippopotamus body, decorated with cross hatching, as are most of the mammals shown in such dishes from L81, crocodile tail and lion’s paws, holding a knife in her fore legs. These three goddesses are hard to tell apart, but since Taweret is usually shown with a female wig, perhaps she is to be excluded. All three hold various symbols which may be interchangeable, but Taweret is most often shown holding *sa*-symbols or *ankh*-signs, whilst Reret generally holds a mooring post, which is sometimes shown in the form of a

<sup>71</sup> The depiction is too simplistic to be able to identify securely if a papyrus thicket is meant, but it seems possible that this genre is alluded to in this case.

<sup>72</sup> PETRIE, 1930b, pl. xxi.24.

<sup>73</sup> PETRIE, 1906, pl. i.9.

<sup>74</sup> PETRIE, 1890, pl. v.5.

<sup>75</sup> Lisht North pyramid, village site BT 3, unpublished.

<sup>76</sup> JEFFREYS and GIDDY, 1989, 5 fig. 3.

<sup>77</sup> NORDSTRÖM and BOURRIAU, 1993, 180. Cf. also OWNBY and GRIFFITHS, this volume.

crocodile, and Ipet a knife or a torch. Since the goddess shown on this dish is holding a knife we favour the interpretation as Ipet.<sup>78</sup> Such a depiction is unique in the repertoire of known fish dishes, and leads to additional questions concerning the function of such vessels which have not hitherto been examined, since it puts it closer to the apotropaic wands (magic knives) made from hippopotamus ivory which show similar motifs.<sup>79</sup> Ipet is usually found on such wands in order to provide protection to newborns and their mothers, although, in at least one instance, she appears on the back of a seated statue, London BM EA 871, of Sobekemsaf I,<sup>80</sup> where she is presumably protecting the king. Following to the right of Ipet, is a baboon or monkey, which perhaps may be identified as a hamadryas baboon,<sup>81</sup> climbing on a very simply rendered tree. On top of the caudal, or tail, fin of the central fish another hippopotamus on all fours looking right is depicted. Its body is partly filled with stripes and notches rather than the usual cross-hatching. The connection of the hippopotamus and tilapia on a fish dish is interesting since they have a symbiotic relationship in nature and this may have been observed by the Egyptians.<sup>82</sup> Facing the hippo and looking him directly in the eyes is a smaller, simplified, fish, but similar in general lay-out to the large fish in the centre except that the median line is not shown. It clearly shows a well made long dorsal fin as well as a caudal fin, and bears two fins on the belly, with what appears to be a possible third fin represented immediately below the face, though this first 'fin', being close to the mouth might be intended to represent sensory filaments or barbells. Finally the "frieze" is rounded off with two more small fish swimming in the direction of the lotus flowers. The first of these is somewhat unusual in that it has the normal long dorsal fin on the back, but also one long fin on the underbelly, which is somewhat unexpected. However, such representations may well be attempts by the artist to show a different species of Tilapia.<sup>83</sup>

<sup>78</sup> Cf. also BIETAK, and FORSTNER-MÜLLER, 2007, 24. For a brief summary of these goddesses see R.H. WILKINSON, 2003, 183–186.

<sup>79</sup> Cf. ALTENMÜLLER, 1965, passim.

<sup>80</sup> DAVIES, 1981; ROBBINS, 1997, 119–121.

<sup>81</sup> OSBORN and OSBORNOVÁ, 1998, 32–37.

<sup>82</sup> BEHRMANN, 1996, 21, quoting *Grzimeks Tierleben XIII*,

62. 9000A L81/1 FN 213 + 294 + 497 Pl. 5

TG	II-c-2	s.f	Ha1	H	ox	4
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D. 43.0 × 30.0 cm. H. 9.3–11.0 cm. Md. 37.0 cm. Bd 15.5 × 15.0 cm. Wd. 1.2–1.5 cm.

Restored from sherds, incomplete

Surface colour: 10YR8/2 very pale brown

Decoration: see description

Break: grey core, red + brown ox zones.

9000A is an almost complete Marl C2 fish dish, again belonging to the group of dishes having a large fish in the centre. With measurements of 43.0 cms. in length and 30.0 cms. in width the dish is slightly larger than the two previously described, whilst the oval boat-shaped vessel form, with sharply trimmed edges falling towards the outside, is in keeping with the other dishes. This fish dish shows the typical juxtaposition of Nilotic versus desert landscapes so familiar from others of this genre, but is somewhat better executed than most, even if the central fish looks a little foreshortened, perhaps because of a lack of space for the incised decoration around the sides of it, but this would imply that the "frieze" around the sides of the dish was incised first. Such a supposition, however, is not corroborated by close scrutiny of the dish, as some of the animals are etched into the fish and cross its lines indicating that they were drawn after the base fish had been incised. The naturally developed surface layer has fired to a deep white colour, so that the dark incisions stand out very well against the white surface. Surely this effect was intentionally desired; it just did not work out so well in the other examples, particularly in 9195. The central fish shows use marks in the centre, namely an abraded white surface, particularly obvious in this example, where the remainder of the dish is covered with a relatively thick surface layer, and less deep incisions than in the other places of the dish. Whether this comes from some grinding activity is disputable, because the shape itself does not really support such an activity in an ergonomic way.<sup>84</sup> Whether these dishes are nothing more than grinding

Zurich, 1968, 118. The faeces of hippopotami provide good breeding grounds for the plants on which the tilapia feed.

<sup>83</sup> Cf. BREWER and FRIEDMAN, 1989, fig. 3.39, a pond scene with various tilapia species, which also shows some of these variants in the fins.

<sup>84</sup> IKRAM, 1995, 73–74.

devices is one of the unresolved questions of Marl C ceramics, but one wonders if it would not be overly elaborate for such a mundane task, when cross hatching and a normal round vessel shape would have done the job just as efficiently.

The decorative frieze, which is mainly orientated towards the right, as indeed they are in tombs and temples,<sup>85</sup> is centred on a large fish with a median line in the middle, but near the head, which is indicated by seven semicircular lines with some shorter ones, there are several oblique lines going out into the body of the fish. This feature is so far not paralleled by any other dish. The median line is shown as three parallel lines filled with short oblique lines in a herring bone pattern, well comparable to other dishes. The fish shows three fins on the belly, the pectoral fin being mirrored on the inside of the fish, a usual way of representing both the left and right pectoral fins, which in reality would be obscured from the viewer,<sup>86</sup> whilst the ventral fin is also shown in addition to the usually shown anal fin. The dorsal fin is very long and ends in a sharp point, a typical trait of the tilapia species, whilst the caudal fin is shown with out turned lines and filled with a chequer-board pattern. The body of the fish is covered with small notches representing the scales as is usual in the depiction mode of these dishes. Out of the mouth of the fish comes a tree, which might well be identified as a date palm by the circular fruits and the leaves, flanked by three lotus flowers on each side that are filled with notches as usual. The tree trunk is covered with cross hatching representing the texture of a palm tree trunk. Sitting in the tree are four anti-thetic monkeys<sup>87</sup> with rounded muzzles, two of them already tucking into the dates/fruits while two more are just on their way to join them.<sup>88</sup> Three fish are swimming with their heads towards the right side, shown in a very similar manner to the large fish with three fins on the belly, the first of which (pectoral fin) is mirrored on the inside of the fish, the dorsal fin floating over the rear end of the fish and a caudal fin filled with a

square pattern. In contrast to other small fish these were equipped with a median line in herring bone pattern. Also marching to the right from the viewer's point of view is a feline with round dots enabling one to identify this animal as a cheetah or a leopard. A cheetah is more likely because, as Osborn and Osbornová have pointed out, leopards are almost always shown in Egyptian art with their heads down, whilst cheetahs are shown with their heads up.<sup>89</sup> Its tail is curled over the back of the cat and it is stepping with one leg raised on top of another animal lying on its back. The presence of horns indicates one of the different species of antelopes depicted on the dish, but they are rather straight than curled or undulating as in the others. The raised paw of the cheetah makes an enlarged impression in relation to the remainder of the animal, so that even the claws are depicted. This way of showing the cheetah is very reminiscent of a scene of two falcon headed sphinxes trampling foreigners on a pectoral with the name of Sesostris III, belonging to queen Mereret, found in the pyramid of Senwosret III at Dahshur.<sup>90</sup>

In front of the cheetah are five animals with long curving horns, probably ibexes, whose bodies are filled with cross hatching. The ibexes are represented in an Egyptian manner with high curved horns, in contrast to Syrian style ibexes which have more tightly curved hook-shaped ones.<sup>91</sup> They are walking further towards the right above the caudal fin of the large fish. One animal amongst these shows two curved horns drawn in opposition to each other and it seems to be an attempt on the part of the artist to represent a hartebeest which is the only possible species with such horns.<sup>92</sup> One more animal walking in the same group is only partly preserved, so no exact identification can be made. In the very small space between the dorsal and caudal fins, just underneath one of the ibexes, there is a very small hippopotamus, recognisable only by its opened muzzle and small ears. It should be noted that the size relation to the other animals is not

<sup>85</sup> ROBBINS, 1997, 24. Cf. also FISCHER, 1977, 6–8.

<sup>86</sup> Cf. SCHÄFER, 1974, 80 – 159.

<sup>87</sup> The species represented could be Green Monkeys or Patas Monkeys. Cf. OSBORN and OSBORNOVÁ, 1998, 39–42.

<sup>88</sup> A similar motif appears on a New Kingdom faience dish from Kahun, although the climbers seem to be human. Cf. PETRIE 1890, pl. XVIII.35.

<sup>89</sup> OSBORN and OSBORNOVÁ, 1998, 119.

<sup>90</sup> DE MORGAN, 1895, pl. xix.1

<sup>91</sup> OSBORN, 1987, 243–244. OSBORN and OSBORNOVÁ, 1998, 180–184.

<sup>92</sup> OSBORN and OSBORNOVÁ, 1998, 171–173. This is a little hard to see because the horns are incised very close to each other making the impression of one ear rather than two horns.

correct, a typical trait which is paralleled, for example, in various tomb scenes where, to quote an example, among many others, a hedgehog is often shown overlarge in comparison to other animals.<sup>93</sup> Then a small portion of the dish is missing. Out of the gap walks an ostrich towards the right with stylised wings and very long legs that reach down into the central fish. As the legs cut the fish fins it is clear that the ostrich was drawn after the basal fish. The next animal in front of the ostrich shows pointed horns or ears and is filled with cross hatching. Whilst it might be another kind of antelope, it could also be a wild ass,<sup>94</sup> although the horns/ears seem perhaps a bit too pointed. One more animal of the same kind is walking on top of the other fin of the fish, again indicating that the fish was incised first. Finally there are three more antelopes with wavy horns and short tails which curl upwards, both traits making it possible to identify these creatures as dorcass gazelles,<sup>95</sup> the first one looking back towards the ostrich and the other two looking to the right, walking towards the lotus flowers coming out of the central fish's mouth. The motif of one animal within a group looking back while all the other ones are looking forward is typical on the fish dishes in L81, and it breaks up the monotony of long rows of very similar animals.

As with 9195, the decoration of 9000A includes some unique elements, not the least of which is the scene of monkeys stealing fruit from a date palm. Whilst perhaps surprising to find this motif on a fish dish, scenes of (men and) monkeys climbing palm trees are well known in Old and Middle Kingdom art,<sup>96</sup> whilst monkeys and baboons were quite often depicted in Egyptian iconography, helping with the vintage, directing shipbuilding, plucking fruit from trees, scampering up a ship's mast, pulling other animals, and playing musical instruments.<sup>97</sup> Nor should it be

forgotten that both the dom palm and baboon (should these creatures be identified as baboons rather than monkeys) are manifestations of the Egyptian god Thoth.<sup>98</sup>

Parallels for large felines can be found on fish dishes from Kom Rab'ia<sup>99</sup> and Kahun,<sup>100</sup> whilst gazelles or antelopes of various kinds are a rather common occurrence on such dishes from Tell el-Yahudieh,<sup>101</sup> Kom Rabi'a,<sup>102</sup> Lisht North,<sup>103</sup> and perhaps Antaeopolis.<sup>104</sup>

63. 8994C L81/1 Pl. 6

TG	II-c-1	s.f	Ha1	H	ox	4
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D. 42.0 × 31.5 cm. H. 7.3–10.7 cm. Md. 31.5 cm. Bd 13.2 × 12.0 cm. Wd. 1.2–1.5 cm.

Restored from sherds, incomplete

Surface colour: 10YR8/2 very pale brown

Decoration: see description

Break: grey core, red oxidation zones.

With its preserved length of ca. 42 cms., and a width of 31.5 cms., 8994C also belongs to the smaller class of fish dishes. The central motif is again a large fish, which because of its pointed dorsal fin, is most probably a tilapia. About a sixth of the dish is missing, including, unfortunately, a part of the head of the fish. The boat shaped form with sharply trimmed edges is in accord with the other known examples of this type. In contrast to most of the other fish dishes mentioned in this article, however, the fabric of this handmade vessel is Marl C1. The white surface layer is well developed, so that the incised motifs show up very well. The middle of the fish, in the very centre of the dish, shows signs of use probably by rubbing of some kind, since the surface layer is missing there and the incisions are, through use, much shallower than in other parts of the centre.

The central fish is depicted much in the usual manner: the head is divided from the body with

<sup>93</sup> For convenience see OSBORN and OSBORNOVÁ, 1998, 10, 20. Note too that in tribute scenes the animals are usually shown at a much smaller scale than their human handlers.

<sup>94</sup> NIBBI, 1979, 148–168.

<sup>95</sup> OSBORN and OSBORNOVÁ, 1998, 175–177.

<sup>96</sup> Men in fig trees, WRESZINSKI, 1923, 62. For primates in fig trees see VANDIER D'ABBADIE, 1964, 171. IDEM, 1965, 185–186. HOULIHAN, 1992, 31–47 and references cited.

<sup>97</sup> HOULIHAN, 1996, *passim*.

<sup>98</sup> KEIMER, 1938, 42–45. HOULIHAN, 1992, 41.

<sup>99</sup> J. Bourriau, *pers. comm.*

<sup>100</sup> PETRIE, 1890, pl. V.5, now in Manchester Museum MM486.

<sup>101</sup> PETRIE, 1906, pl. I. 8, 10. U.C. 19003 and 19004.

<sup>102</sup> Especially the complete example in JEFFREYS, GIDDY 1989, 5, fig. 3, but there are more of this kind from that site. J. Bourriau, *pers. comm.*

<sup>103</sup> Old Excavations of Mace in the shaft tombs, slipped into from the settlement. *Pers. comm.* of S. Allen.

<sup>104</sup> PETRIE, 1930b, pl. xxi.4.

three parallel, more-or-less, curved lines, the body is filled with notches and the median line is shown by means of cross hatching. The rendering of the caudal fin seems less well done than on the other examples; it is filled with a chequer-board pattern with some additional oblique lines creating the impression of rays. The long dorsal fin ends in a sharp point, whilst on the belly the pectoral and anal fins are shown. The decorative frieze of the dish is orientated towards the right with the exception of one small fish, which swims in the other direction. Out of the mouth of the basal fish a bunch of lotus flowers is emerging. As this part is not totally preserved we cannot be sure of the exact number of the flowers, however, one opened flower and one bud filled with notches are preserved. It is likely that there is at least one more of each kind – in view of the missing space we might suggest that there were three flowers, the outermost two being flanked with buds. To the right of this bunch of flowers a ‘tree’ appears, consisting of a stem with three branches on each side, the leaves being rendered as short oblique lines. Following this motif, six animals of various species are shown wandering to the right, each one equipped with its own register line. This trait is completely unique amongst the dishes from L81 and, indeed all other fish dishes known to us. The topmost animal seems to be a large feline (lion/cheetah) shown as if it were almost biting into the tail of a goat standing in front of it. Below the feline there are two animals of unfamiliar shape, pictured one above the other, which might represent hedgehogs, honey badgers or pigs.<sup>105</sup> Of the three the hedgehog is probably the least likely since, in Egyptian art, such animals usually show a line across the body which divides the bristles from the softer underbelly,<sup>106</sup> but the choice between honey badger and pig is harder to make. Further to the right two larger horned animals, probably wavy-horned goats,<sup>107</sup> are depicted. Their bodies are filled with elongated notches, as also are the legs which are shown with double lines. The tails are very short and pointed. Underneath the first goat a smaller animal with short, slightly bent horns is shown, which is presumably an oryx. These animals fill the space between the tree and the caudal fin of the fish almost entirely, leaving

almost no empty room, exemplifying a typical *horror vacui*. Over the caudal fin two smaller fish are drawn that look slightly more squashed than the average tilapia, although they show the right shape of dorsal, pectoral and anal fins. This may be caused by the fact that the artist has drawn a crocodile at the rim, leaving very little space between it and the caudal fin, in which to squash these fish. Unfortunately the crocodile is partly eroded, especially the back parts, but preserved are its four short legs in a walking position, its long tail reaching the muzzle of one of the goats, and its long snout slightly opened. The eye is shown, but in contrast to the other representations of crocodiles found on the L81 fish dishes, the teeth are missing. The snout is filled with small notches, whilst the remainder of the scaled body is rendered with cross hatching. Opposite its open snout a fish is depicted as if swimming into it. This fish might also be a tilapia, slightly squashed for space reasons, since it again shows the pointed dorsal fin as well as the pectoral and anal fins in the usual way, although the fins on the belly are depicted as three small short strokes having the “closing” line missing. Turning right there are three more larger goats walking in procession and looking towards the right. The one immediately in front of the crocodile is missing its eye, but otherwise they are rendered in the same way as those on the opposite side of the dish. The first goat is standing on an additional base line whilst the other two are using the top of the dorsal fin of the fish as base lines. The first goat in this procession, that is the one farthest from the crocodile, is seemingly browsing on the leaves of a ‘tree’ which is depicted in front of it.

The decoration on this dish is highly unusual: it is the only one known to us in which the animals are all shown standing on a base line. However goats, as opposed to gazelles, are also known on the fragment London UC 19003 from Tell el-Yahudieh,<sup>108</sup> whilst a fragment from the same dish (?) may also show a pig/honey badger.<sup>109</sup>

64. 9015L L81/1 FN 14 Pl. 7

TG	II-c-2	s.f	Ha1	H	ox	4
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D. ca. 48.0 × 38.0 cm. H. 8-0–10.5 cm. Md. Ca. 48.0 cm. Wd. 1.2–1.5 cm.

<sup>105</sup> Cf. OSBORN and OSBORNOVÁ, 1998, 19–23; 84–85; 142–143.

<sup>106</sup> Cf. OSBORN and OSBORNOVÁ, 1998, 19–23.

<sup>107</sup> OSBORN and OSBORNOVÁ, 1998, 187–188. Plumper bodies than ibexes, short tails, twisted horns.

<sup>108</sup> PETRIE, 1906, pl. i.8.

<sup>109</sup> PETRIE, 1906, pl. i.14. The current location is unknown to us.

Restored from sherds, incomplete

Surface colour: 2.5YR8/1 white

Decoration: see description

Break: grey core, red + brown ox zones.

9015L is an incomplete Marl C2 fish dish that was probably larger than the ones previously described, because, although only about half of it is extant, the preserved part is 39.0 cms in length. This dish is another example of the type with a large central fish in the middle as seems to be the norm in L81. It was again made by hand with a sharply trimmed edge, and the oval boat shape is clear despite its fragmentary state. The natural white surface layer is quite thin and transparent when compared, for example, with 9000A (cat. no. 62). The incised lines are rather thin and not very deep. The centre of the base fish shows signs of wear: abrasion of the white surface and the incised lines are less deep in the middle of the centre than at the edges.

What is preserved of the incised decoration is a “frieze” orientated, as usual, towards the right, and the rear part of a large base fish. The fish is shown with very long scales, the median line is represented by a single long line and short oblique ones forming a herring bone pattern. The ventral and anal fins are preserved as well as most of the long dorsal fin, which becomes wider towards the caudal fin and is filled with parallel short oblique lines. These traits again identify this fish as a tilapia. The caudal fin was depicted by flaring lines connected with a bent line, filled with parallel long lines and short oblique ones, creating the image of the texture of a real caudal fin. The description of the frieze starts left of the caudal fin, because of its fragmentary state: a smaller fish is swimming towards the right towards the caudal fin. It is shown with scales in the form of notches. The pectoral and ventral fins are preserved on the belly of the fish. The head is separated by seven relatively carelessly drawn vertical lines from the body; no eye is shown but a very short horizontal line represents the mouth of the fish. Over the caudal fin a large animal with a long snout and a long tail is visible facing towards the right. The body was filled with cross hatching whilst on the back and tail short oblique lines represent the scaling. The evident snout with two

rows of large teeth opposite each other gives away the species, proving that it is a crocodile. Five short bent lines divide the head from the body and the eye is separated by one line from the head. Over the crocodile there is a horizontal line with seven oblique lines hanging from it. Whether this is a space filler, reminiscent of the *horror vacui* often found in Egyptian art or a representation of vegetation of some kind cannot be ascertained. In front of the crocodile another smaller fish is swimming towards the right. Here a part of the dish is missing, so it cannot be determined as to what the lines protruding under the fish are really meant to represent. This fish shows a different kind of scale to the first one for here they are rather horizontal and much shallower. The dorsal fin is drawn in the same way as before, again indicative of the tilapia species. The following motif in front of this fish consists of three birds, certainly ostriches, with long legs bent in the middle and two wings each, very much in accord with the Egyptian depictive canon.<sup>110</sup> Here again, as already seen with the antelopes on 9000A, one of these ostriches looks back at the other two. The heads of the birds are shown in a very simple but apt style, – a simple triangular head attached to the long neck, with the lower line elongated to represent the beak. The legs of the birds reach down into the fish again proving that the base fish was incised first and the surrounding frieze later. The ostrich bodies were filled with parallel oblique lines. It is interesting to note that the numbers of these lines in each bird are consistent: six lines then a gap and again six lines in the first bird; five lines then a gap and again five lines and seven lines with a gap and again seven lines in the last bird. A very minute detail is also that the tail feathers of the ostriches are alluded to, though this is perhaps not surprising since the tail feathers were prized for making fans. In front of these three birds another creature, unfortunately only partially preserved, is visible: it might be identified as another kind of bird, – since the style of decoration clearly resembles that of the ostriches – with two feathers emerging from the tail very much in the manner of a bee-eater.<sup>111</sup> However, since so little is preserved, such a suggestion can only remain a speculative one.

<sup>110</sup> Cf. SCHÄFER, 1974, 111–112.

<sup>111</sup> If the creature represented is really a bird, the bee-eater seems to be the only bird shown in Egyptian art

with two distinct feathers projecting from the tail. Cf. HOULIHAN, 1986, 117.

The last preserved element of this dish is a pointed structure combined from two long lines.

This dish clearly shows a different style in its execution to the other dishes, perhaps more erratic and hasty, although we would be reluctant to speak of single artists in this respect. The question of whether the potter and the “artist” were one and the same person or separate beings, or even a group of people, cannot be answered with any degree of certainty, as there is, as far as we know, no extant evidence relating to such a theme. There are no hints that a sketch existed before the actual execution of the scenes was carried out, for which we find evidence in the manufacture of tomb scenes.<sup>112</sup>

65. 9015P L81/1 FN 271 + 510 Pl. 7

TG	II-c-2	s.f	Ha1	H	ox	4
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D. ca. 60.0–65.0 × 40.0 cm. H. 9.3–12.5 cm. Wd. 1.2–1.5 cm.

Restored from sherds, incomplete

Surface colour: 7.5YR8/1 white

Decoration: see description

Break: grey core, red + brown ox zones.

9015P also belongs to a larger size of fish dish but again with a large central fish depicted on the base. The dish is not as well preserved as the others, but the length can be estimated to be at least 60.0 to 65.0 cms as a length of 50.0 cms is preserved. The oval boat shape is clearly recognisable and the sharply trimmed edges of the vessel walls recur as in the other examples. The fabric is again Marl C2, whilst the naturally developed white surface is quite irregular, a thick layer in some places but rather thin and wishy-washy in others. There is one special trait to this dish that could not be observed in the other examples, namely that the base is thickened notably in the centre that is incidentally also the centre of the fish. There are traces of use visible on that fish, not in the centre but around the edges. Again the surface appears to be worn off and the scales (notches) make a shallower impression than the unused ones.

The design of this dish also appears slightly different to the others. Preserved is the head of the central fish with scales represented by notches and a median line shown as a double line filled

with cross hatching. This trait recurs in the smaller fish around the frieze. Quite a large part of the dorsal fin is preserved and, as usual, it is filled with parallel oblique lines. On top of it there seem to be several triangular objects filled with cross hatching. Unfortunately this part is too badly preserved to be sure about the motif. Perhaps these triangular features are supposed to represent a mountainous region. The head of the large fish is divided by five bent lines filled with notches whilst the mouth was rendered as a gap out of which a large lotus flower emerges. It is a very large flower elaborately rendered, with many petals shown each filled with notches. The lotus flower is flanked by two smaller fish each facing the flower antithetically. They seem to be depicted in the same fashion, although only the one on the right side is completely preserved. It shows a long dorsal fin filled with short oblique lines, pectoral and anal fins and a caudal fin emerging out of the body of the fish by means of two flaring lines. Whilst the head was divided from the body by three bent parallel lines, the tail was not, being indicated as a contracted part of the body. Two more non-joining fragments that very probably belong to this dish show parts of fish, which in lay out and style are totally analogous to the small fish around the “frieze”.

66. 9015O L81/1 Pl. 7

TG	II-c-2	s.f	Ha1	H	ox	4
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D. preserved 24.0 × 20 cm.

Non-joining sherds, incomplete

Surface colour: 2.5YR7/6 light red in, 10R8/3 pink out

Decoration: see description

Break: grey core, red + brown ox zones.

9015O is a very fragmentary fish dish with a large central fish motif. The preserved length is ca. 24 cms, the preserved width ca. 20 cms. Like most of the other examples this dish was made from Marl C2, but the white surface layer did not develop on the inside of the dish, and only appears on the outside. The very centre shows signs of use visible by the way the notches are less deep and abraded.

The fish was, as usual, depicted with three parallel lines indicating the median line filled with

<sup>112</sup> Cf. ROBBINS, 1994, *passim*.

two rows of short oblique notches in order to represent three dimensions.<sup>113</sup> The scales are rendered in the same way. Also preserved are three curved parallel lines separating the head from the body. The dorsal fin is shaped like the others described above, again indicating the species to be a tilapia. On top of it are the remains of several triangular features filled with notches, perhaps mountains. Additional fragments, which owing to both their colouring and their style of incision, probably also belong to the same vessel, show lotus buds and more triangular objects.

## 67. 9015Q L81/1 FN 215 + 298 Pl. 8

TG	II-c-2	s.f	Ha1	H	ox	4
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Non-joining sherds, incomplete

Surface colour: 2.5YR8/3 pink in, 7.5YR8/2 pinkish white out

Decoration: see description

Break: grey core, red + brown ox zones.

9015Q also consists of several fragments that seem to belong together since the fabric, surface colour and the style of the incisions are all similar. The fabric is Marl C2, and the surface colour shows a cream-pink tinge. The edges of the rim are sharply trimmed. A part of the central fish shows abrasions of the median line and scales.

Again the centre of the dish is taken up by a large fish, rendered in the usual manner: three parallel lines indicating the median line filled with oblique lines forming a herring bone pattern. The scales are shown as notches. Also preserved are six parallel curved lines dividing the head from the body, as well as the caudal fin, which is filled with parallel lines to represent the rays, in contrast to the chequer-board patterns of the other dishes. Other fragments show parts of smaller fish that belong to the frieze around the central fish; the way the fins of these fish are drawn would again indicate the tilapia species. One mouth of a fish is preserved, just as a gap, whilst the head is again separated by seven curved parallel lines from the body. One gazelle, probably a dorcas gazelle,<sup>114</sup> is also preserved. It looks back over its shoulder, with an elegant turn of its slender neck. In this instance the wavy horns are depicted as well as an ear. The body is filled with elongated shallow notches and the tail is short and curling upwards. In contrast to other exam-

ples the space above the caudal fin of the large base fish appears to have been left blank.

## 68. 9015Y L81/1 Pl. 8

TG	II-c-2	s.f	Ha1	H	ox	4
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Non-joining sherds, incomplete

Surface colour: 2.5Y8/2 pale yellow

Decoration: see description

Break: grey core, red + brown ox zones.

9015Y, comprises three fragments with parallel lines one of which is a rim fragment with a sharply trimmed edge. The fabric is Marl C2, with the white surface showing very well on the inside of the dish, but not on the outside.

## 69. 9016A L81/1 Pl. 8

TG	II-c-1	s.f	Ha1	H	ox	4
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Non-joining sherds, incomplete

Surface colour: 2.5Y8/2 pale yellow

Decoration: see description

Break: grey core, red + brown ox zones.

9016A consists of two non-joining fragments, which are surprisingly thick – 2.4 cm. – that might belong to the same vessel, but this is by no means certain. The fabric is Marl C1, which is generally quite rare in this context. The first fragment, from a rim with sharply trimmed edge shows the head of a bird (?) with one eye and four lines dividing the head from the body which is not preserved. The other fragment shows either the foot of a bird or part of a plant.

## 70. 9015N L81/1 Pl. 8

TG	II-c-2	s.f	Ha1	H	ox	4
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Incomplete

Surface colour: 10YR8/1 white in, 10R7/4 pale red out

Decoration: see description

Break: uniform light red.

9015N is represented only by a single rim fragment of a dish with a trimmed edge. Contrary to the other examples the edge falls towards the inside of the dish and, like 9016A, the wall thickness is exceptionally thick – 2.5 cms. The fabric is Marl C2 with a white surface on the inside that is well developed. Outside only a thin and irregular white layer is visible.

<sup>113</sup> SCHÄFER, 1974, 144 and fig. 129.

<sup>114</sup> OSBORN and OSBORNOVÁ, 1998, 175–177.



On top of a dorsal fin of a large central fish a small fish is swimming towards the right. Although its head is missing the remainder of it is well preserved. The median line is shown by means of a single simple line, the scales as notches, the dorsal fin indicative of a tilapia reaches almost to the top edge of the vessel, whilst the pectoral and ventral or anal fin are shown in the usual manner. Some of the curved lines dividing the head from the body are also preserved. To the left of this fish the mouth of another is just preserved, indicating that there were at least two.

71. 8989Y L81/1 Pl. 8

TG	II-c-2	s.f	Ha1	H	ox	4
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Incomplete

Surface colour: 2.5YR8/1 white

Decoration: see description

Break: grey core, red + brown ox zones.

8989Y is also known through a single rim fragment with a trimmed edge falling outwards. The fabric is Marl C2 with a relatively thin white surface layer on both the inside and the outside of the vessel.

The preserved design shows a bunch of lotus flowers coming out of the mouth of a fish indicating that the fragment should be placed at one of the long ends of the oval dish. The largest lotus flower was rendered very elaborately with many petals<sup>115</sup> filled by many small notches. To the left of the large flower are four smaller ones growing from an extra curved stem. The head of the fish is just as much preserved to be certain that the identification is secure: the mouth, one eye and two curved lines dividing the head from the body. The break of the sherd goes right through the second of these incisions.

72. 8989Z L81/1 Pl. 9

TG	II-c-2	s.f	Ha1	H	ox	4
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Incomplete

Surface colour: 5YR6/6 reddish yellow

Decoration: see description

Break: grey core, red + brown ox zones.

Register Number 8989Z comprises two fragments that are considered to belong together due to their fabric, Marl C2, and their very orange sur-

face colour. There are no traces of a white surface, which may be due to erosion, because the real surface of this vessel is not very well preserved, as is indeed true for a lot of other pottery from the deeper layers of L81.

The base/wall fragment, 8989Z/1, (Plate 9), reveals the existence of a large central fish, partly abraded, with a median line consisting of three parallel lines filled with short oblique lines forming a herring bone pattern. The scales are represented by notches, whilst the caudal fin is filled with a very minute chequer board pattern. The dorsal fin is partly preserved and rendered as single strokes rather than a closed shape filled with oblique strokes. The rim fragment, 8989Z/2, (Plate 9), shows a very charming depiction of a hippopotamus with very prominent belly, thick head and small ears. The eye is preserved but not the muzzle. The short tail shows a little fork at the end. The body of the hippo is filled with minute cross hatching, very similar in style to the filling of the caudal fin.

73. 9015Z L81/1 FN 42 Pl. 9

TG	II-e-2	f	Ha1	H	ox	2-3
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Incomplete

Surface colour: eroded

Decoration: see description

Break: light brown inner, pinkish grey outer.

The fish dish, 9015Z, unfortunately represented only by a single rim fragment is exceptional, since it is an evident imitation made from a Nile E2 fabric. Due to this fact the preservation of the surface is also not as good as in the other examples. It does, however, appear to show the caudal fin of a fish with elaborate filling pattern, but it is unclear if the object on top of the caudal fin is actually part of it or something to be considered separately, like a crocodile for instance.

74. 9000B L81/1 FN 343 Pl. 9

TG	II-c-2	s.f	Ha1	H	ox	4
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Preserved H. 18.2 cm. Wd. 2.1 – 2.9 cm.

Incomplete

Surface colour: 2.5YR8/2 pale yellow

Decoration: see description

Break: grey core, red + brown ox zones.

9000B belongs to a special class of fish dishes

<sup>115</sup> Cf. SCHÄFER, 1974, 144 and fig. 129, in order to show three dimensional representations.

which have raised protrusions within the dish. Hitherto only examples with raised middle parts were known,<sup>116</sup> but this example shows a raised part that comes from the higher end of the dish, where the head of the fish would be located. Presumably a second raised part would have been positioned at the other end of the vessel. The fabric of this exceptionally large, but still boat-shaped, oval vessel (preserved length ca. 31 cms, preserved width ca. 36 cms.) is Marl C2. Only about a quarter of it is preserved, so that it must have been a massive and very heavy vessel. The edges of the rim are sharply trimmed, this time horizontally, rather than falling to the inside or outside. The white surface is quite thick and can be observed both inside and outside. The raised part that protrudes into the dish is hollow and was formed by hand as was the remainder of the dish.

The centre of the dish seems to be taken up by a very large fish, one end of which is preserved. The three parallel curved lines that seem to divide the body from the head surround the raised part of the dish as if it took the place of the actual head. Contrary to this interpretation there are pointed triangular objects drawn where the raised “platform” starts to protrude out of the vessel wall, which are sometimes seen on top of the caudal fin. But an overly ‘ornamentation’ of the fish is known to have happened in other examples, notably, Manchester 7397, from Antaeopolis, where two caudal fins are shown at each end of the fish.<sup>117</sup> The notches of the central fish are very large and crude. On top and on the sides of the raised “platform” there are more fish depictions: one larger one on top of the “platform”, one each to the left and right of it and one larger and one smaller one in antithetical fashion on the side facing inwards. All of those fish are shown almost in the same way, with one long dorsal fin, pectoral, ventral and anal fins, scales represented by notches, eyes, a short stroke for the mouth and caudal fins filled with parallel lines, which in turn are filled with short vertical lines. The difference lies in the presence of the median lines, which are only

shown with the larger fish and the division of the heads from the bodies, which is more elaborate in the larger fish, than in the smaller ones. Unequivocally all these fish can be identified as tilapia.

Study of the fifteen fish dishes found in L81 leads to the following observations. They are generally of two distinct sizes, a smaller one of about 37 to 40 cms. in length, and a larger one of 55 to 60 cms. in length. Most show signs of wear in the centre, which indicates that they were used for a purpose which eludes us at this moment. They all show a sense of *horror vacui*, in that the interiors are covered with a wide expanse of decoration. Most are entirely Nilotic in character with representations of fish, lotus flowers, reeds, crocodiles and hippopotami, although four, 9000A, 8994C, 9015L and 9015Q show a distinct contrast between Nilotic and desert animals and between Nilotic and desert landscapes. Perhaps the boat shape of these dishes is symbolic of a boat going along the Nile passing through the desert. The reason for the relatively sudden appearance of a richly decorated pottery type during times when the bulk of the ceramic repertoire was left without any decoration represents a change in the behaviour or the beliefs of the Ancient Egyptians. What the exact nature of this change might have been cannot be fathomed as yet, but at least it is worth noting that a remote similarity or relationship between fish dishes and decorated pottery of the Naqada period exists. Comparable, simple Nilotic scenes and other motifs can be found on the inside of circular, sometimes oval, dishes painted in white or red.<sup>118</sup> Whether this similarity is rooted in similar behaviour or beliefs or is just mere coincidence needs further study and goes beyond the scope of this paper.

*A.d.iib. Selected other Marl C vessels*

Cat. no. 75, (reg.no. 9000T), a Marl C1 (TD II-c-1)<sup>119</sup> carinated cup, one of at least twelve found in the pit, has been chosen since such cups are remarkably rare at Tell el-Dab<sup>a</sup>, with only fragmentary examples of a rather early date having been found previously.<sup>120</sup> Thus these examples

<sup>116</sup> Cf. *TD XIII*, type 25c, Cat. no. 133–134. PETRIE, 1890, pl. XIII. 107, now in Manchester Museum, MM 474.

<sup>117</sup> PETRIE, 1930b, pl. XXI.4; BEHRMANN, 1989, Dok. 145.

<sup>118</sup> To cite only a few cf. PETRIE 1921, pl. xviii.71; BEHRMANN, 1989, Dok. 27.d–h; VON BISSING, 1913, 21, 24, cat. nos. 2071, 2073, 2074, 18799.

<sup>119</sup> Note that, in this paper, the fabric abbreviations for Tell el-Dab<sup>a</sup> were adapted more closely to the Vienna System, than before, when Marl C, compact used to be II-c-1; Marl C1: II-c-2 and Marl C2: II-c-3. Here II-c-1 is Marl C1 and II-c-2 is Marl C2.

<sup>120</sup> *TD XIII*, cat.no. 32 and 37, fig. 5.h and j, ph. I and H, respectively. CZERNY, 1999, 186, Mc22–28.

with their complete profiles are a welcome addition to the Tell el-Dab<sup>c</sup>a repertoire. It might be argued that, because of the lack of contemporary parallels at the site they are old pieces, but at Memphis/Kom Rabi<sup>c</sup>a such cups are still quite common in levels of a similar date.<sup>121</sup> A good parallel to 9000T can be found in *TD XIX* type 129c1 which occurs from Level VII to VIb; this is well into the late Second Intermediate Period, thus contemporary with L81.<sup>122</sup> Cat. no. 76 (reg. no. K11000/543) is a large carinated dish with flaring rim made from Marl C2, unfortunately the base is missing. Such vessels were hitherto not represented at Tell el-Dab<sup>c</sup>a, and even in Kom Rabi<sup>c</sup>a such a large size is not attested in Marl C2,<sup>123</sup> but there are similar medium sized vessels with a carination (*TD XIX* type 158d), which came to light in levels VIc and V, that is contemporary with Tell el-Dab<sup>c</sup>a Phases E/1–D/2.<sup>124</sup> Cat. no. 77, (reg. no. K11000/1) is a large carinated bowl with a hand made ring base, the finger modelling being clearly visible, cf. plate 2, made of Marl C1 and belongs to a type of dish in which the carination itself is expressed rather as a thickening ridge inside and outside of the vessel than as a change in direction of the vessel wall. At least one parallel for this type of bowl exists in Tell el-Dab<sup>c</sup>a in Phase E/1.<sup>125</sup> At Kom Rabi<sup>c</sup>a similar bowls were found from Level VII to VIb (*TD XIX* type 131e),<sup>126</sup> the younger levels being well in accord with the date of the pit complex.<sup>127</sup> Cat. no. 78, (reg. no. 9004P) a dish with carination and incised wavy lines and fish made from Marl C1, is remarkable in its design, although existing fragments hinted at the existence of such a type,

but the overall lay-out of the decoration remained unclear. The top of the rim shows a depression made with a tool. It is still possible that further variations on this theme exist. Several fragments as well as a base made of Marl C1 with wavy lines instead of fish and finger modelling on top of the rim (*TD XIX* type 132b) were found in Kom Rabi<sup>c</sup>a in Levels VIc to VIb,<sup>128</sup> whilst a finger modelled rim (*TD XIX* type 131c) belongs to Level VIe.<sup>129</sup> Sherds with incised wavy lines, but manufactured from Marl C2, were found in Phase E/1 at Tell el-Dab<sup>c</sup>a and in Level VIb at Kom Rabi<sup>c</sup>a.<sup>130</sup> These fragments might suggest that this piece could be contemporary in its context. At least one related bowl, but made from Marl A4, was found in Elephantine in Bauschicht 12, which is currently dated from the Thirteenth to the Seventeenth Dynasty,<sup>131</sup> whilst another was found at Abydos.<sup>132</sup> To what extent these dishes are really related and derived from each other must remain uncertain for the moment. Many variations in design were found in the cemeteries of Qau and Badari.<sup>133</sup>

Closed shapes are selectively represented by the following vessels. Cat. no. 79 (reg. no. K11000/548) is a large ovoid jar made from Marl C2 without any known exact parallels. Its ovoid shape is vaguely reminiscent of a jar from Memphis/Kom Rabi<sup>c</sup>a level VIa but that vessel is manufactured from Marl C1 and is more globular.<sup>134</sup> A similar rim fragment from Dahshur, complex 7, can perhaps be cited as a parallel, but it is earlier in date (mid Thirteenth Dynasty) and is made of Marl C1.<sup>135</sup> Cat. no. 80, (reg. no. K11000/550) is the upper part of a large jar of Marl C1 which looks more at home in the Marl C repertoire than

<sup>121</sup> For all references to finds from Kom Rabi<sup>c</sup>a, cf. BOURRIAU and GALLORINI, in print, and BOURRIAU and GALLORINI in preparation.

<sup>122</sup> *TD XIX*, 426, fig. 240 and 648, fig. 357.

<sup>123</sup> But similar large Marl C1-carinated dishes are existing in Level VIc, type 128d. Cf. *TD XIX*, 425–426, fig. 240.

<sup>124</sup> *TD XIX*, 466, fig. 261.

<sup>125</sup> *TD XVII*, I, 365, fig. 211.3. For earlier examples see *TD XIII*, 72–77. KOPETZKY, 2005, 207–208, fig. 12, 37, 75, 112, some of them with spout.

<sup>126</sup> *TD XIX*, 430, fig. 242.

<sup>127</sup> The earlier examples from complex 7 in Dahshur, and Memphis, Kom Rabi<sup>c</sup>a, show mainly the same type. Cf. Do. ARNOLD, 1982, fig. 11.1. BOURRIAU and GALLORINI, in print, *passim*.

<sup>128</sup> *TD XIX*, 432, fig. 243.

<sup>129</sup> *TD XIX*, 428, fig. 241.

<sup>130</sup> Cf. *TD XIII*, cat.no. 79, fig. 11.a, Marl C2, a wall fragment of a large dish with incised wavy lines inside and outside, Ph. E/1. *TD XIX*, type 159d, 468, fig. 262, Level VIb is a rim fragment that might have belonged to such a dish.

<sup>131</sup> RZEUSKA, Report on the 34<sup>th</sup> season of Excavation and Restoration on the Island of Elephantine, 14, fig. 7.20. Published on the internet [http://www.dainst.org/en/daik\\_ele34\\_rep\\_en.pdf](http://www.dainst.org/en/daik_ele34_rep_en.pdf).

<sup>132</sup> WEGNER, 2007, 245–246, fig. 56–57.

<sup>133</sup> BRUNTON, 1930, pls. xii–xiii.

<sup>134</sup> *TD XIII*, Cat.no. 190, fig. 28.a.

<sup>135</sup> Do. ARNOLD, 1982, 45–47, Abb. 11.6.

cat. no. 79, and might *inter alia* be related to a rim shape that eludes proper identification.<sup>136</sup> Somewhat similar parallels in which the lip is less pronounced have been found in Lisht.<sup>137</sup> Cat. no. 81, (reg. no. K11000/547) is a jar made of Marl C2, with a height of ca. 30 cms. representing what seems to be a smaller version of a storage jar that might well have been modelled on the larger examples such as cat. no. 82 (see below). The preservation of the profile affords us the chance to appreciate the possibility that there must have been several size classes of storage jars, just as, indeed, it has already been shown for the early Twelfth Dynasty by Dorothea Arnold.<sup>138</sup> The scarcity of completely preserved profiles does not help in clarifying the matter. However, this vessel helps draw attention to different size classes and helps in distinguishing them since the rim diameter of K11000/547, at 15.2 cms., is also considerably smaller than that of a “normal” sized vessel. Since this vessel lacks an articulated base – it is hardly more than a “Wackelboden” – the overall shape might be considered as a linking type to be sited between *TD XIII* storage jar Types 5 and 7.<sup>139</sup> The rim of this vessel would belong to type 7 in an updated rim typology based on the random sample,<sup>140</sup> which occurs in Phases E/3, E/2 and D/3 at Tell el-Dab<sup>c</sup>a,<sup>141</sup> and in Levels VII to V in Kom Rabi<sup>c</sup>a.<sup>142</sup> Cat. no. 82 (reg. no. 9010F) is a large storage vessel of Marl C1 with a height of 63 cms. The rim of this vessel is in keeping with storage jar rim type 10<sup>143</sup> which occurs in Tell el-Dab<sup>c</sup>a in Phases D/3 and D/2 but almost exclusively manufactured from Marl C2. This type, made of Marl C1, was not selected into the random sample of Tell el-Dab<sup>c</sup>a, so it must be considered as very

rare.<sup>144</sup> The shape of the vessel is very ovoid rather than globular or slender ovoid as in the later types of the series of storage jars as they are represented by storage jar types in *TD XIII* with preserved complete profiles (types 7 and 9).<sup>145</sup> It seems to be a type that would fit very well between types 5 and 7<sup>146</sup> as it does not show a flat base, but does follow type 5 in the contour of the vessel more closely. In terms of dating it would also fit very well between type 5 occurring from Phase G/4 to E/1 and type 7 that was mainly found in Phases E/1 and D/3. Another good parallel from Tell el-Dab<sup>c</sup>a itself can be quoted, namely a storage jar used as a burial container, which in itself is rather unusual, dated to Phase D/3. The contour of that vessel TD 8928K<sup>147</sup> differs slightly in that the maximum diameter is situated in the lower third of the vessel rather than in medium height as in the current example. It should further be noted that the overall height of that vessel is also 63 cms. – the same size class as storage jar 9010F. A vessel with some closeness in shape comes from Karnak North in a Second Intermediate Period context, although it is more bag-shaped.<sup>148</sup> Comparable rims exist in Tell el-Maskhuta but unfortunately no complete vessels seem to have been found there.<sup>149</sup>

Cat. no. 83 (reg. no. 9001C) is a Marl C1 medium ringstand with a maximum diameter of 16.8 cms. With this example the existence of ringstands in a shape that is usually found in Nile B fabrics (cf. above cat. no. 22) can be proved. Previously some fragments were assigned to this type because of their general similarity to ringstands made from Nile clay fabrics,<sup>150</sup> but a secure statement about their existence can only be made now

<sup>136</sup> *TD XIX*, 452, fig. 254, type 143g, in phases G/4 to E/3 at Tell el-Dab<sup>c</sup>a and in Levels VII to VIc and VIa at Kom Rabi<sup>c</sup>a; however, these rims do not show such an overhanging lip as that of the current example. Therefore it must remain doubtful whether the same type is meant.

<sup>137</sup> ARNOLD, ARNOLD and ALLEN, 1995, 23 no. 5.

<sup>138</sup> DO. ARNOLD, 1988, 112, fig. 59.

<sup>139</sup> *TD XIII*, 157, fig. 43.

<sup>140</sup> This is probably equivalent to rim type 5a of KOPETZKY dated to E/3–E/2. Cf. KOPETZKY, 2005, 216.

<sup>141</sup> *TD XIX*, 239.

<sup>142</sup> *TD XIX*, 242, table 47.

<sup>143</sup> *TD XIX*, 225–243. This is perhaps partly equivalent with Kopetzky's Type 5b. Cf. KOPETZKY, 2005, 216.

<sup>144</sup> *TD XIX*, 239 fig. 156.

<sup>145</sup> *TD XIII*, 157, fig. 43 and 179–189. The example of type 9 given in this figure can now be replaced by a better example from Ezbet Helmi of the New Kingdom, (TD Reg.nr. 9076 A, Marl C2/F), which is preserved in its upper part with only the base, presumably round, missing. Cf. BADER, 2006b, 41, fig. 4.c.

<sup>146</sup> Note that type 6 seems to be a development that is only testified by one vessel as no more examples of this shape have been found since.

<sup>147</sup> *TD XVI*, 330–331, fig. 251.3.

<sup>148</sup> JACQUET-GORDON, 1991, 27–28.

<sup>149</sup> HOLLADAY, 1997, 235–236, plate 7.8.21, pl. 7.9.1–4.

<sup>150</sup> Cf. *TD XIII*, 217, type 70, fig. 70.d; *TD XIX*, 458, fig. 257, type 148b.

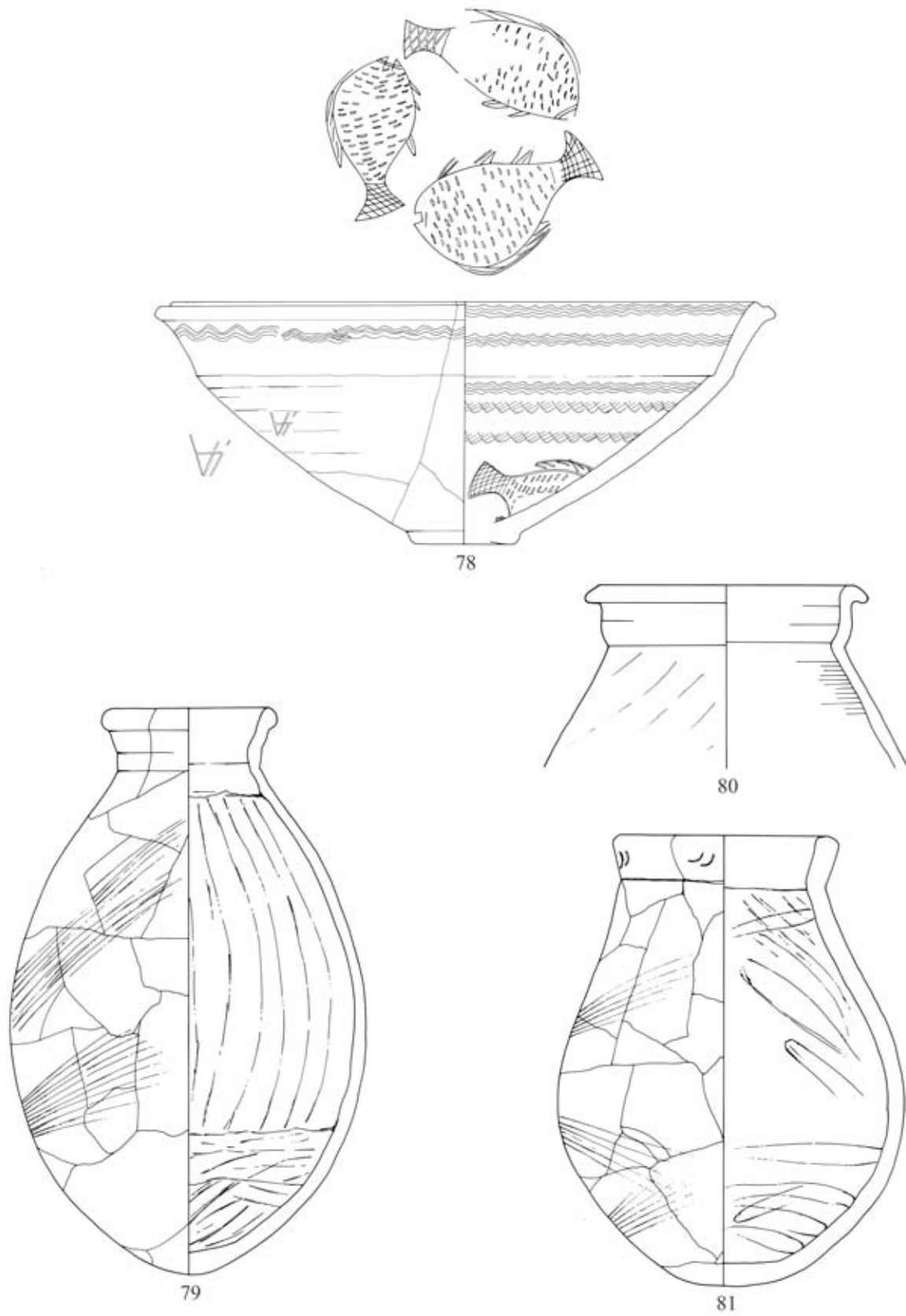


Fig. 8

1:4

as a result of the complete examples found in L81. Fragments belonging to this type were found in Memphis/Kom Rabi<sup>c</sup>a in Levels VII, all subdivisions of VI and V attesting a sound history of occurrence throughout the later Second Intermediate Period contemporary with the Hyksos Period in the Delta.<sup>151</sup> Cat. no. 84, (reg. no. 8994E) constitutes a more normal and better known kind of stand that is larger and more massive in its execution. Examples of this type made from Marl C2 are not as common as such pottery manufactured from Marl C1.<sup>152</sup> Secure examples made of Marl C2 were found in Tell el-Dab<sup>c</sup>a in Phase E/1, and in Memphis/Kom Rabi<sup>c</sup>a in Level VII and all subdivisions of Level VI, again adding weight to the assumption that the stand does not necessarily need to be old in its context. Cat. no. 85 (reg. no. K11000/546), although of Marl C2, probably belongs with a type of libation vessel hitherto only known in Marl C1 from Memphis, Level VII with similar body fragments also being found in Level VIb.<sup>153</sup> Whilst the general idea and purpose of the vessel as a libation vessel seems to be the same, an actual spout is missing in reg. no. K11000/546, but this may be due to the incomplete state of the L81 vessel, and it is slightly smaller. The carinations are more rounded and the tapering around the ‘waist’ is more radical. The rims are missing from both vessels, but perhaps a reconstruction with a rim of “key hole” shape can be proposed as such rims often show such a sharp bend at the point where they reach the shoulder of the vessel as it is seen here.<sup>154</sup>

75. *9000T*. L81/1 FN 476 ZN 159/2006, Fig. 7, Pl. 2

TG	II-c-1	f	W1	abg.	ox	3-4
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D. 9.1 cm. Bd. 2.9 cm. H. 5.3 cm. Md. 9.1 cm. Wd. 0.3 cm.

AI 104.59 VI 171.69

Incomplete

Surface colour: 2.5Y8/2 pale yellow

Break: uniform reddish brown

76. *K11000/543*. L81/1, Fig. 7

TG	II-c-2	f	W1	-	ox	3-4
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D. 30.5 cm. pH. 8.6 cm. Md. 30.5 cm. Wd. 1.0 cm.

<sup>151</sup> *TD XIX*, 459.

<sup>152</sup> Cf. *TD XIII*, 212–217; *TD XIX*, 458, fig. 257. KOPETZKY, 2005, 228.

<sup>153</sup> *TD XIII*, 155, fig. 42.e; *TD XIX*, 461–462, Typ 154.

AI 102.35

Incomplete

Surface colour: 7.5YR8/1 white

Break: uniform brick red

77. *K11000/1*. L81/1 FN 408, Fig. 7, Pl. 2

TG	II-c-1	s.f	W+H	H	ox	3-4
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D. 50.2 cm. Bd. 9.2 cm. H. 18.1 cm. Md. 50.2 cm. Wd. 1.2 cm.

AI 105.02 VI 277.35

Restored from sherds, incomplete

Surface colour: 5YR8/2 pinkish white

Break: red core, greenish grey oxidation zones

78. *9004P*. L81/1 + L81/4 FN 590, Fig. 8, Pl. 10

TG	II-c-1	s.f	W+H	H	ox	3-4
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D. 41.8 cm. Bd. 7.5 cm. H. 16.4 cm. Md. 41.8 cm. Wd. 1.3 cm.

AI 107.18 VI 254.88

Restored from sherds, incomplete

Surface colour: 10R8/1–2 white – pinkish white

Break: wide black core, reddish brown oxidation zones

Potmark on the exterior pre-fired

79. *K11000/548*. L81/1, Fig. 8

TG	II-c-2	f	W+H	M	ox	3-4
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D. 11.8 cm. H. 37.8 cm. Md. 24.1 cm. Wd. 0.7 cm.

AI 147.50 VI 63.76

Restored from sherds, incomplete

Surface colour: 5Y8/1 white

Break: uniform brick red

80. *K11000/550*. L81/1, Fig. 8

TG	II-c-1	f	W+H	-	ox	3-4
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D. 19.0 cm. pH. 12.5 cm. Wd. 0.7 cm.

Incomplete

Surface colour: 5Y8/3 pale yellow

Break: grey core, red oxidation zones

81. *K11000/547*. L81/1, Fig. 8

TG	II-c-2	f	W+H	M	ox	3-4
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D. 15.2 cm. H. 30.2 cm. Md. 23.4 cm. Wd. 1.2 cm.

AI 138.18 VI 77.48

Restored from sherds, incomplete

<sup>154</sup> Cf. *TD XIX*, 452, fig. 254, type 143g; 436, fig. 245, type 136f, where such a rim is part of another vessel type and 475, fig. 266, type 168f.

Surface colour: 5Y8/2 pale yellow  
 Break: uniform reddish brown  
 Potmark on the exterior rim pre-fired

82. *9010F*. L81/1 FN 461, Fig. 9

TG	II-c-1	f	W+H	MI	ox	3-4
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D. 22.4 cm. H. 63.0 cm. Md. 44.3 cm. Wd. 1.1 cm.  
 AI 124.44 VI 70.32

Restored from sherds, incomplete  
 Surface colour: 5Y8/3 pale yellow  
 Break: wide grey core, thin red and greenish yellow oxidation zones

83. *9001C*. L81/1 FN 459 ZN 183/2006, Fig. 9, Pl. 11

TG	II-c-1	f	W	gesp.	ox	3-4
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D. 15.1 cm. Bd. 16.8 cm. H. 9.3 cm. Md. 16.8 cm.  
 Wd. 0.8 cm.

AI 193.59 VI 180.64

Restored from sherds, incomplete  
 Surface colour: 2.5Y8/2 pale yellow  
 Break: grey core, reddish brown ox zones

84. *8994E*. L81/1 FN 715 + L81/4 FN 750  
 ZN 10/2008, Fig. 9

TG	II-c-2	f	W	gesp.	ox	3-4
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D. 26.6 cm. Bd. 26.3 cm. H. 12.7 cm. Md. 26.6 cm.  
 Wd. 1.0 cm.

AI 149.43 VI 209.44

Restored from sherds, incomplete  
 Surface colour: 5Y8/1 white  
 Break: grey core, reddish brown ox zones

85. *K11000/546*. L81/1 FN 25, Fig. 9

TG	II-c-2	f	W	W	ox	3-4
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Bd. 9.3 cm. pH. 19.0 cm. Md. 16.7 cm. Wd. 0.6 cm.

Restored from sherds, incomplete  
 Surface colour: 10YR8/2 very pale brown  
 Break: uniform reddish brown

#### *A.d.iii. summary*

To summarise the nature of the Marl C ceramics within pit complex L81 it can be said that the overall impression of the pottery is of contemporaneity with the remainder of the material, i.e.

Phase E/1–D/3. Some hints could be gathered from comparison of the material with the younger levels at Memphis/Kom Rabia (Levels VIc to VIa),<sup>155</sup> which is located near the likely source site of Marl C (at least in the northern part of Egypt) and thus affords us a glance into the repertoire closest to the origin of the material, where it can be assumed to have been in use longest.

The contemporaneity of this material brings us to a consideration of the date of the fish dishes, which, we believe, as will become clear in the following discussions, are also of the same date as the remainder of the pit material. Since fish dishes are visually attractive, a large number of them have been published, and their excavators have assigned them various dates from the Twelfth Dynasty to the end of the Second Intermediate Period.<sup>156</sup> Dates in the Twelfth Dynasty stem entirely from the old publications of Petrie and Garstang, although newer research would rather tend to reassign the assemblages in which they were found to a later, or at least a much wider, date range. For example Petrie dated the examples found at Kahun to the Twelfth Dynasty, but Kemp and Merrillees have shown that such a dating can no longer be maintained since the ceramic material from that site extends from the reign of Sesostriis II to the end of the Thirteenth Dynasty.<sup>157</sup> The same holds true for the recent fragments found at Abydos which again date from the reign of Sesostriis III to the end of the Thirteenth Dynasty.<sup>158</sup> What is more telling is that the few examples which can be dated, as a result of our current ideas concerning Middle Kingdom pottery, can all be assigned to the Thirteenth Dynasty. Thus the examples known from Dahshur, which come from both the Amenemhet III valley temple, and from complex 7 have been dated to the Thirteenth and the later part of the second third of the Thirteenth Dynasty respectively.<sup>159</sup> Those from Lisht are dated after the end of the Twelfth Dynasty,<sup>160</sup> whilst previous examples from Tell el-Dabca have been found throughout strata d/1 (= Phase G/4) to a/2 (Phases E/1–D/3). Since, before the discovery of the examples in L81, only one complete example had

<sup>155</sup> Cf. the synchronisation of the two stratigraphies in *TD XIX*, 707, fig. 397.

<sup>156</sup> Cf. *TD XIII*, 79–82.

<sup>157</sup> KEMP and MERRILLEES, 1980, 79, 88, 102.

<sup>158</sup> WEGNER, 2007, 232.

<sup>159</sup> DO. ARNOLD, 1977, 21–22; EADEM, 1982, Abb. 11.

<sup>160</sup> ARNOLD, ARNOLD and ALLEN, 1995, 22–24.

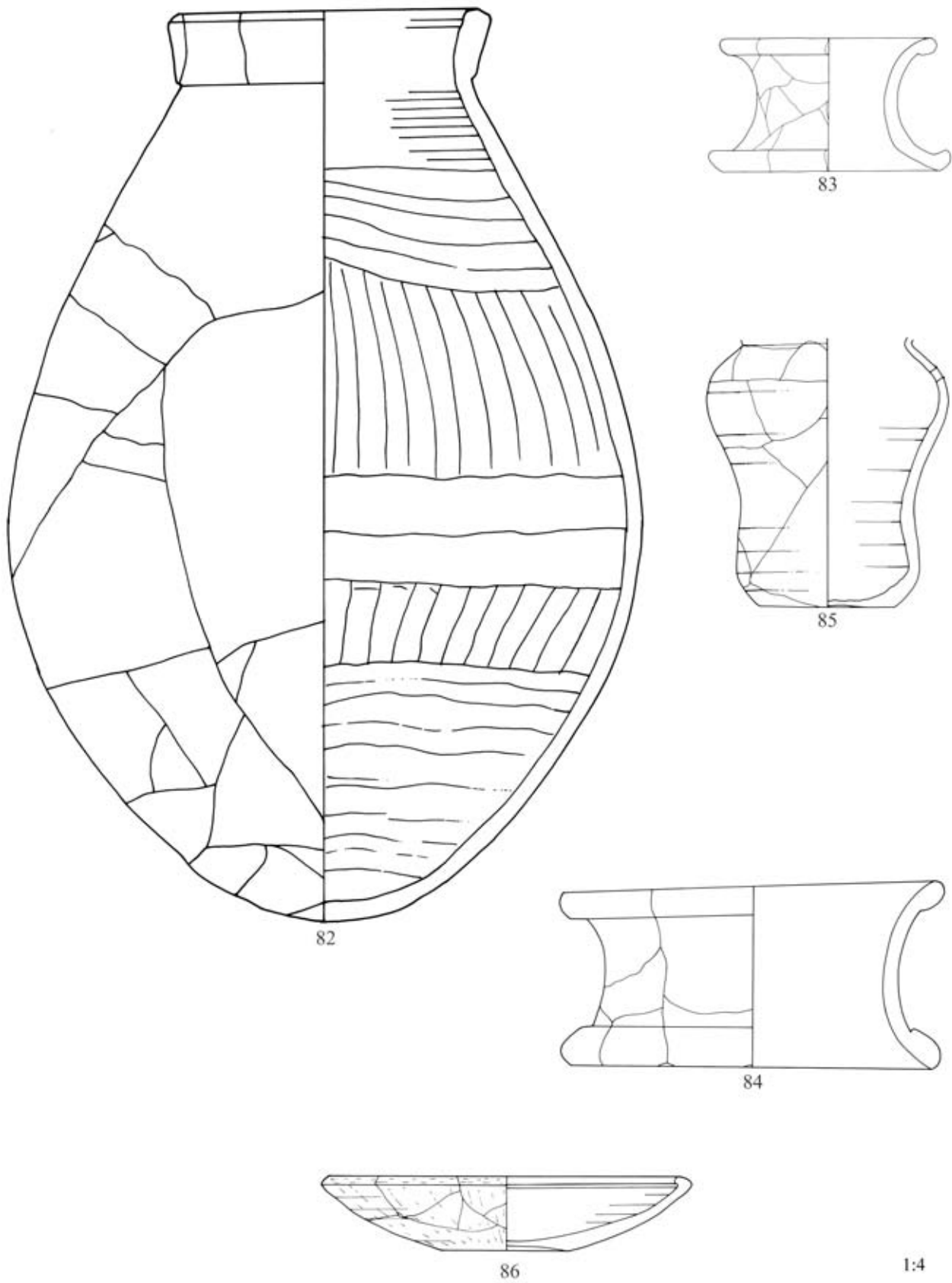


Fig. 9



been discovered, and that from Phase G/1–3,<sup>161</sup> it has been suggested that sherds found in later levels may have been old pieces. However, in view of the number of fish dishes found in L81 both suggestions probably need to be re-examined. If we assume that the fragments found at Tell el-Dab<sup>c</sup>a are not old pieces but reflect a longer time of production, extending from the early to the late Thirteenth Dynasty (contemporary with strata b/1–a/2 = Phases E/2–E/1–D/3) this also mirrors the picture revealed at Memphis, Kom Rabi<sup>c</sup>a, where sherds of fish dishes are also found in every level dating from just before the middle of the Thirteenth Dynasty to the end of the Second Intermediate Period.<sup>162</sup> One must also remember that the heartland of the Thirteenth Dynasty, the area around Itj-tawy, has never been scientifically examined since the site of Itj-tawy itself has only been located by means of textual evidence but not excavated;<sup>163</sup> however, it is reasonable to assume that the kings of the Thirteenth Dynasty continued to rule this region until it was conquered by the northward expansion of the Theban Seventeenth Dynasty.<sup>164</sup> Thus, since no good deposits of late Thirteenth Dynasty material are known, it is an argument *ex silentio* to suggest that pottery styles of the early to mid Thirteenth Dynasty did not continue to be produced in the later Thirteenth Dynasty. It should also be noted that over 1800 complete profiles have so far been reconstructed from complex L81, and, the fish dishes withstanding, not a single one of these can be exclusively dated earlier than Phase E/1–D/3. Rather than to

postulate that *all* pieces found at Tell el-Dab<sup>c</sup>a in strata later than the mid Thirteenth Dynasty, that *all* pieces found at Kom Rabi<sup>c</sup>a in the upper levels, and that *all* examples found in L81 are heirlooms, and for that matter, *all* the pieces discovered at Tell el-Yahudieh,<sup>165</sup> and those found at Tell Hebwa I,<sup>166</sup> where, at both sites no (other) Middle Kingdom pottery was found, we would suggest that they constitute proof that fish dishes continued to be made well into the late Thirteenth Dynasty, that is to say contemporary with the Hyksos Fifteenth and the Theban Seventeenth Dynasties.<sup>167</sup> In this light the L81 fish dishes would indeed be contemporary with the remaining pottery found in this context.

It should also be pointed out that twelve of the fourteen Marl C dishes listed in this article are made of Marl C2. In the earlier excavations at Tell el-Dab<sup>c</sup>a it is noticeable that of the sixteen fish dishes which can be both accurately dated and of which the clay can be precisely differentiated between Marl C1 and Marl C2, ten of the eleven Marl C1 vessels date no later than the transition between strata b/3 to b/2 (= Phase F–E/3), whilst the five Marl C2 vessels, were somewhat evenly distributed from stratum c (= Phase G/1–3) to b/1 (= Phase E/3–E/2). Since only two of the dishes from L81 are made of Marl C1 this might suggest that the L81 dishes are rather late than early. In this sense it is interesting to note that of the Marl C vessels published in *TD XIII*, which can be associated with a certain stratum and also be differentiated between Marl C1 and Marl C2, the following picture emerges (cf. Table 3).<sup>168</sup>

<sup>161</sup> TD 2529, BIETAK, 1977, 315 Abb. 3–4. IDEM, 1986, pl. VIIIa; *TD XIII*, 87, Abb. 16, Taf. Ib.

<sup>162</sup> Levels VII, VIe, VI d, VIc, VIb, VIa and V. J. Bourriau, pers. communication, and compare *BCEg* 13 (1988), 30.

<sup>163</sup> SIMPSON, 1963, 53–63.

<sup>164</sup> Whether, or not, the later Thirteenth Dynasty rulers owed *political allegiance* to the Hyksos Fifteenth Dynasty is immaterial since the pottery found in the later Second Intermediate Period levels at Kom Rabi<sup>c</sup>a shows no significant Hyksos *cultural influence*, when compared to the pottery from Tell el-Dab<sup>c</sup>a – Cf. *TD XIX*, passim, – thus we can be fairly certain that, at least at Kom Rabi<sup>c</sup>a (and perhaps the entire northern Upper Egypt ?), Thirteenth Dynasty pottery styles continued throughout the entire Second intermediate Period. Cf. BOURRIAU, 1997, 159–182.

<sup>165</sup> PETRIE, 1906, pl. i.8-10, 14. Petrie, page 14, dated these to the Twelfth Dynasty, solely on the grounds that he

had earlier found fish dishes in Middle Kingdom contexts at Kahun. No mention of any (other) Middle Kingdom pottery at Tell el-Yahudieh is made by Petrie in his publication of the site, although he would certainly have recognised it if any were present.

<sup>166</sup> ABD EL-MAKSOUH, 1998, 186, fig. 12.108–107; 191, found in a level dated to the end of the Second Intermediate Period.

<sup>167</sup> This thus revises the statement in *TD XIII*, 83, where in view of the absence of fragments found at Tell el-Maskhuta, it was suggested that fish dishes were no longer used in the Delta after the mid Thirteenth Dynasty, ie the beginning of the Hyksos Period.

<sup>168</sup> Not all vessels were counted since some were clearly from the surface, and could thus not be dated, or are stored in SCA magazines and could not be accessed to check whether they were made of Marl C1 or Marl C2.

Phases (rel. strata)	Marl C1 pots (%)	Marl C2 pots (%)	Dynasties
N-H (str. F/I "e"-d/2)	33 (91.66 %)	3 (8.33 %)	12 <sup>th</sup> Dyn.
G/4-F (str. d/1-b/3)	99 (90.83 %)	10 (9.17 %)	early 13 <sup>th</sup> Dyn.
E/3-E/2 (b/2-b/1)	21 (84 %)	4 (16 %)	mid 13 <sup>th</sup> /early 15 <sup>th</sup> Dyn.
E/1-D/2 (b/1-a/2)	3 (16.66 %)	15 (83.33 %)	late 13 <sup>th</sup> /15 <sup>th</sup> Dyn.

Table 3 Distribution of Marl C vessels in Tell el-Dab<sup>a</sup> using vessels from *TD XIII*

For the Twelfth Dynasty, (strata e-d/2 [Phases I-H]), 33 vessels were made of Marl C1 and 3 of Marl C2, roughly 91.66% Marl C1 and 8.33% Marl C2; for the early Thirteenth Dynasty (strata d/1-b/3 [= Phases G/4-F]), 99 vessels were made of Marl C1 and 10 of Marl C2 or 90.83% Marl C1 and 9.17% Marl C2; for the mid Thirteenth Dynasty (strata b/2-b/1 [= Phases E/3-E/2]), 21 vessels were made of Marl C1 and 4 of Marl C2 or 84% Marl C1 and 16% Marl C2, whilst finally for the Late Thirteenth/Fifteenth Dynasties, (Phases E/1-D/2), 3 vessels were made of Marl C1 and 15 of Marl C2 or 16.66% Marl C1 and 83.33% Marl C2. The L81 fish dishes with 2 Marl C1 vessels (14.28%) and 12 Marl C2 (85.72%) would thus appear to fall into the period covered by Phases E/1-D/2, the suggested date of the pit.

Whilst it may be argued that the figures above are not a true reflection since it takes no account of the vessels which could not be assigned the correct grouping and nor were the preserved rim parts of the vessels used (*estimated vessel equivalents*), a statistical analysis of sherd material, in which all rim sherds could be assigned their proper grouping shows that Marl C2 becomes proportionally more common as time goes on thus in Phase G/4, 79.8% of Marl C1/C2 sherds were made of Marl C1, and 10.2 % of Marl C2; in Phase G/3-1, 90.61% of Marl C1/C2 sherds were made of Marl C1, and 9.39% of Marl C2; in Phase F, 82.76% of Marl C1/C2 sherds were made of Marl C1, and 17.24% of Marl C2; in Phases E/3 and E/2, 100% of Marl C1/C2 sherds were made of Marl C1, in Phase E/1, 55.5% of Marl C1/C2 sherds were made of Marl C1, and 44.5% of Marl C2; and in Phase D/2 100% of Marl C1/C2 sherds were made of Marl C2.<sup>169</sup> If these figures are recalculated along the lines postulated above

then for the early Thirteenth Dynasty (strata d/1-b/3 [= Phases G/4-F]), 86.65% of Marl C1/C2 sherds were made of Marl C1, and 13.35% of Marl C2; for the mid Thirteenth Dynasty (strata b/2-b/1 [= Phases E/3-E/2]), 100% of Marl C1/C2 sherds were made of Marl C1; and for the Late Thirteenth/Fifteenth Dynasties, (Phases E/1-D/2), 42.05% of Marl C1/C2 sherds were made of Marl C1, and 57.95% of Marl C2. Whilst these figures are perhaps less dramatic the conclusion is that the relative proportion of Marl C2 fish dishes to those made of Marl C1 again points to the fact that they are probably rather later in time than earlier, and are thus very likely contemporary with the remainder of the material found in the pit.

In this respect it is interesting to note that, where preserved, all the bases of the earliest fish dishes found in Tell el-Dab<sup>a</sup>, namely TD 2529 from Phase G/1-3, TD 4443F from stratum c-b/3 (= Phase G/1-3 - F), TD 4512 from stratum b/3 (= Phase F) and TD 3340 from stratum b/1 (= Phase E/2-E/1) show a cross hatched design in the centre, which presumably represents a pond, rather than a fish.<sup>170</sup> The use of a fish as the central basal motif first occurs in stratum b/1 (= Phase E/2-E/1) with find numbers TD 3370 and TD 3646K.<sup>171</sup> Whilst this is only a small sample, it would seem that those fish dishes with a fish in the base are later than those which show a stylised pond. Since the dishes from L81 also bear a fish on the interior at the base we can suppose, if the development listed above is a correct one, that they are no earlier than stratum b/1 (= Phases E/2-E/1), and thus a date contemporary with the remaining pottery from the pit, Phase E/1-D/3, is again very likely. Whether or not the use of a pond or a fish as the base motif can be unequivocal

<sup>169</sup> *TD XIX*, 646-652. No Marl C rim sherds were selected into the random samples in Phase D/3.

<sup>170</sup> *TD XIII*, 86 cat. no. 102, 88 cat. no. 104, 90 cat. no. 107, 92 cat. no. 116.

<sup>171</sup> *TD XIII*, 94 cat. no. 120, 95 cat. no. 125.

cally proved to have chronological worth, must await further discoveries, but it is certainly an avenue worth exploring. Two other sites are known to us with a large enough sample of dishes with both this presumed earlier and presumed later decoration. The first is Kahun, where, unfortunately, the vessels can no longer be stratigraphically assigned to a given phase. However, it is probably significant that the pottery from Kahun extends from the reign of Sesostri II to late in the Thirteenth Dynasty. The second is Kom Rabi<sup>c</sup>a. There three (or rather one complete and two fragments of) fish dishes show clear evidence of large fish in the base. These RAT 1001/20539, RAT 1319/21738 and RAT 1003/4465-4476, were found in levels VIc, VIb-c and VIb respectively.<sup>172</sup> From a comparative analysis of the ceramic material it has been suggested that Kom Rabi<sup>c</sup>a level VIc is contemporary with Tell el Dab<sup>c</sup>a Phases E/2-D/3; Kom Rabi<sup>c</sup>a level VIb-c is contemporary with Tell el Dab<sup>c</sup>a Phases E/1-D/3; and Kom Rabi<sup>c</sup>a level VIb is contemporary with Tell el Dab<sup>c</sup>a Phase D/3.<sup>173</sup> Although the Kom Rabi<sup>c</sup>a sample is very small, it again hints at the fact that fish dishes with a large fish in the base are contemporary with the Hyksos Fifteenth Dynasty/late Thirteenth Dynasty. Thus, in the absence of any evidence to the contrary, we would propose, as a working hypothesis, that those dishes showing the stylised ponds are earlier than those with a large fish on the interior.

The interpretation of the appearance of all this Marl C material in a Hyksos period pit, at a time when contacts between the Delta and Memphis were presumed to have already lapsed,<sup>174</sup> is not a straight forward one. A major point in this interpretation has to focus on the quantity which – in relation to the other local material from L81 – is miniscule. Other studies mainly concerned with ceramic material from settlements at Tell el-Daba, also do not show a high percentage of Marl C vessels at this point in time.<sup>175</sup> One possible explana-

tion could be the special context that pit complex L81 certainly provides, so that for such an activity imported vessels from the Memphis/Fayoum region were still available, whilst for “lowly” settlement activities such material ceased to be on-hand. Another reason might have been the better conditions for preservation in an environment like L81, where little if any secondary displacement of the material took place, and so stood a much better chance to be found by archaeologists several thousand years later.

#### A.e. Marl F

Only six vessels in Marl F, have so-far been noticed amongst the material from pit complex L81. All six are open forms, and the example illustrated is the best preserved.

86. K11000/3 L81/1 Fig. 9

GPTG	II-f	s.f	W1	abg.	ox	3-4
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D. 26.0 cm. Bd. 8.7 cm. H. 5.2 cm. Md. 26.0 cm. Wd. 0.6 cm.

AI 111.11 VI 500.00

Restored from sherds, incomplete

Surface colour: 2.5YR6/6 light red; burnish 5Y8/2 vertically burnished out

Break: greenish grey core, reddish brown ox zones

#### A.f. Oases Vessels

Contact between the Hyksos and Kerma has long been known from historical sources, which indicate that the oases played a major role in it.<sup>176</sup> The most obvious Hyksos style pottery, the Late Egyptian Tell el-Yahudieh ware, has been found in Bahariya oasis,<sup>177</sup> whilst jar seals of reputed Hyksos kings were found at Tundaba, approximately mid way between the northern Thebaid and Kharga Oasis.<sup>178</sup> These latter are an enigma. Associated pottery, or at least that which has been published, is clearly Theban in character, and of late Seventeenth or early Eighteenth Dynasty date,<sup>179</sup> and

<sup>172</sup> For RAT 1003/4465-4476 see JEFFREYS and GIDDY, 1989, 5 fig. 3. The others are unpublished and we are grateful to JANINE BOURRIAU for permission to quote these examples, and for the levels in which they were found.

<sup>173</sup> *TD XIX* 707, fig. 397.

<sup>174</sup> *TD XIII*, 231-232; *TD XIX*, 652. KOPETZKY, 2005, 199-200.

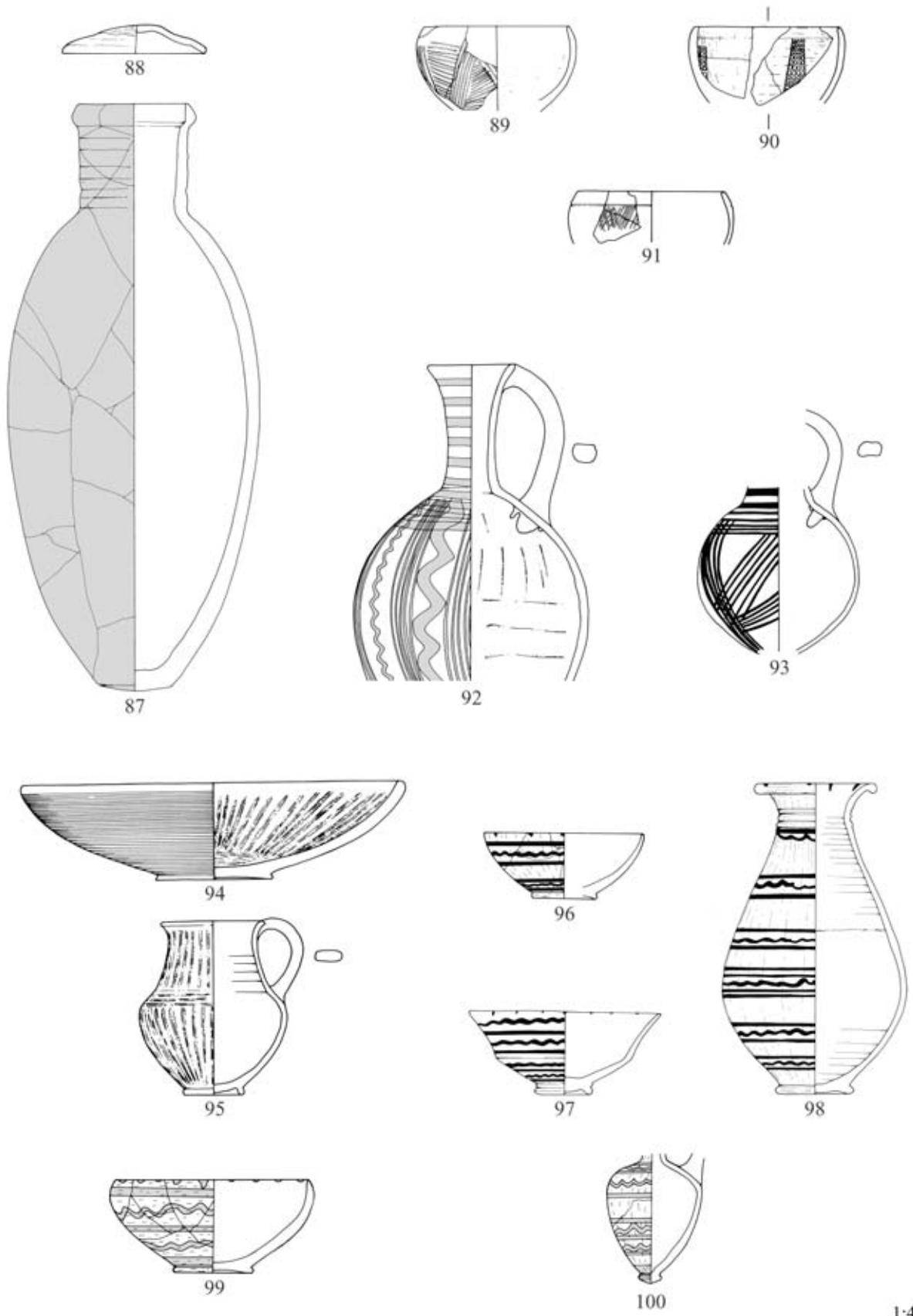
<sup>175</sup> Whether they were based on random sampling or not. *TD XIX*, passim. HEIN and JÁNOSI, 2004, passim. KOPETZKY, 2004, EADEM, 2005, passim.

<sup>176</sup> See last, COLIN, 2005, 35-47 and references cited.

<sup>177</sup> COLIN, LAISNEY, MARCHAND, 2000, 186 no. 16.

<sup>178</sup> J. DARNELL, 2002, 147.

<sup>179</sup> D. DARNELL, 2002, 170 fig. 9.



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Fig. 10

Darnell and Darnell have plausibly suggested that Tundaba was a Seventeenth Dynasty establishment, probably founded to control the routes between Thebes and Khargeh. The presence of Hyksos jar seals in such a settlement can thus only be explained as the result of direct trade between the Hyksos and the Thebans,<sup>180</sup> or that the sealed jars were ‘sold on’ from the Hyksos to the Thebans by a third party, presumably the inhabitants of Khargeh oasis. The seals presumably covered Hyksos vessels, or perhaps Canaanite jars which had been reused. As yet, however, no Hyksos style pottery, nor any Middle Bronze Canaanite jar sherds have been published from Tundaba. Be that as it may, both the presence of Tell el-Yahudieh ware in Bahariyah and Hyksos seals in the vicinity of Khargeh, attest to southern trade from the Hyksos heartland to the south. Until the discovery of this pit complex, however, trade in the opposite direction could always be assumed but archaeological evidence was lacking. Two storage jars and two lids in undoubted oasis ware have been recovered from L81/1. These vessels have nothing in common with Second Intermediate Period pottery from Dakhleh,<sup>181</sup> and as far as we know, no material of this date has been published from Khargeh.<sup>182</sup> Thus, in the present state of our knowledge, the most likely source, is probably Bahariyah, which, significantly is also the nearest to Tell el-Dab<sup>c</sup>a, although no exact parallels can be quoted. However, wheel-made bases of similar-size jars have indeed been found there, whilst a somewhat similar kettle rim is also known in the same sherd collection.<sup>183</sup> The lid is somewhat shallower than later (New Kingdom) examples known from Amarna.<sup>184</sup>

87. 9011Z. L81/1 FN 540, Fig. 10, Pl. 11

RF	V	s.f	W1	gef.	ox	2-3
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D. 8.5 cm. Bd. 5.0 cm. H. 40.4 cm. Md. 17.3 cm. Wd. 1.1 cm.

AI 146.55 VI 42.82

Restored from sherds, incomplete

Surface colour: 5YR6/1 gray; slip 10R5/6 red

Break: greyish blue core, red and yellow oxidation zones

88. K11000/332. L81/1 + L81/6, Fig. 10

TG	V	s.f	W1	gesp.	ox	2-3
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D. 10.0 cm. H. 1.9 cm. Md. 10.0 cm. Wd. 0.5 cm. AI 106.38 VI 526.32

Restored from sherds, incomplete

Surface colour: 10R8/4 pink

Break: greyish blue core, pink oxidation zones

### A.g. Imported Pottery

When considering the imports, which derive from Nubia, Cyprus and the Levant, it is noticeable that none of the Nubian or Cypriote vessels could be entirely reconstructed which implies that they were already broken before they found their way into L81. By contrast most of the Levantine vessels, with the exception of the amphorae, could be rebuilt, if not into complete vessels, at least into complete profiles, which suggests that they were deposited in a more-or-less complete state.

Several Nubian sherds were found in L81. In addition to the unusual sherds previously illustrated in *Ä&L* 16,<sup>185</sup> several pieces of Classic Kerma ware were recovered, but when compared with similar material known from Elephantine, Deir el-Ballas and Memphis, the Tell el-Dab<sup>c</sup>a material is generally somewhat thinner.<sup>186</sup> Janine Bourriau (personal communication) thus suggests that, as such, it may be related to Nubian pottery from Diospolis Parva cemetery E, but this would need to be checked at a later stage of research. Since this material is different, but clearly related, to the Nubian pottery found at Elephantine, Deir el-Ballas and Memphis, this might suggest that the pottery found at Tell el-Dab<sup>c</sup>a was perhaps imported from a different part of Nubia, or was brought to Tell el-Dab<sup>c</sup>a by mercenaries from a different area to those who lived and died at the other sites mentioned above. Indeed Charles Bonnet, (personal communication), who also saw the sherds, has pointed out their dissimilarity to normal Kerma ware and suggests that the L81 sherds derive from

<sup>180</sup> For remarks on this direct trade see GIVEON, 1983, 155–161.

<sup>181</sup> HOPE, 1999, 225–227; MARCHAND, 2003, 113–122.

<sup>182</sup> Cf. D. DARNELL, 2002, 173.

<sup>183</sup> COLIN, LAISNEY, MARCHAND, 2000, 184 no. 6, 186 nos. 20–21.

<sup>184</sup> ROSE, 2002, 129; EADEM, 2007 145, type NA 1.1

<sup>185</sup> BIETAK, FORSTNER-MÜLLER, 2006, 76 Abb. 14.

<sup>186</sup> We are grateful to Dietrich Raue and Janine Bourriau for pointing this out during visits to the site in the Spring of 2008.

an area between the Aswan border and the Kerma heartland to the south. Three examples, cat. nos. 89–91, are illustrated here.

Considering that Tell el-Dab<sup>a</sup> has produced the most Cypriote Middle Bronze Age pottery found outside of Cyprus,<sup>187</sup> it is perhaps not surprising that sherds of several Cypriote jugs have been found in L81, of which the two most complete are illustrated as cat. nos. 92 and 93.<sup>188</sup> 9012K is a White Painted Pendant Line Style jug whilst 9015U is of White Painted Tangent Line Style. Other sherds, not illustrated, also attest to the presence of White Painted V, White Painted Cross Line Style, White Painted Tangent and Wavy Line Style and White Painted Eyelet style, within this pit complex. Together these wares are most frequent in Phase E/1, which might help to date the material found in L81, although since these wares also continue into D/3, this is not unequivocal.<sup>189</sup> Many of the examples are similar to those exported to Ras Shamra and Megiddo.<sup>190</sup>

Levantine imports are not frequent. They consist of approximately twenty Canaanite jars, most of which seem to derive from the Levantine coast in present day Lebanon and northern Israel,<sup>191</sup> although not one could be restored to a complete profile; at least one handleless jar; a single Tell el-Yahudieh vessel referred to above; a number of other jugs; and a few painted forms. Catalogue numbers 94–95, 96–98, and 99–100 are so similar to each other that they are perhaps to be seen as parts of three different sets of specialised tableware which could possibly have been sent as royal gifts. The exchange of royal gifts is certainly well attested during the Late Bronze Age,<sup>192</sup> and there is no reason to suppose that this practice did not take place during the Middle Bronze Age. If cat. nos. 94 and 95 are part of the same service, their origin might be sought in the northern Levant since the incised burnishing technique shown most clearly on the jug is known from Ruweise and the tomb of the goats at Ebla,<sup>193</sup> and this same technique is also found on a jar from Yabrud.<sup>194</sup> Vessels 96–98 are decorated with dark paint on a beautifully bur-

nished white to orange surface which remains unburnished on the interior, and is certainly reminiscent of Chocolate-on-White Ware, however these particular shapes do not exist in the catalogue of such pottery as defined by Fischer.<sup>195</sup> The bowl, 8990A, cat. no. 99, is again burnished only on the exterior surface and the decoration is this time in red. Whilst rare in relative proportion to the numbers of vessels found in the complex a small number of jugs have so far been partially, or completely reconstructed. The jug, 9018V, cat. no. 100, is the only example of the so-called painted Tell el-Yahudieh ware, found in the pit complex, and finds a very good parallel in TD 8875C found in a grave dated to Phase E/2,<sup>196</sup> whilst the dipper jug, cat. no. 103, is one of only two recognisably imported examples. 9015T, cat. no. 102, is a well-known type with other examples known from Tell el-Farah<sup>197</sup> and Tell el-Ajjul.<sup>198</sup> Catalogue number 104 is the best preserved handleless storage jar, and 105, the, as yet, most completely restored amphora.

89. *9016B*. L81/1, Fig. 10

TG	VII	f	H	–	ox	2–3
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D. 10.0 cm. pH. 5.9 cm. Md. 10.9 cm. Wd. 0.4 cm. AI 104.16

Restored from sherds, incomplete  
Surface colour: 2.5Y7/1 light gray  
Break: grey core, red oxidation zones

90. *9014G*. L81/1, Fig. 10

RP	VII	f	H	–	ox	2–3
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D. 10.0 cm. pH. 5.3 cm. Md. 10.0 cm. Wd. 0.4 cm. AI 104.16

Restored from sherds, incomplete  
Surface colour: 10R4/6 red  
Break: grey in, brown out

91. *9014H*. L81/1, Fig. 10

RPSP	VII	f	H	–	ox	2–3
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D. 10.0 cm. pH. 3.7 cm. Md. 10.0 cm. Wd. 0.4 cm. AI 103.09

Restored from sherds, incomplete

<sup>187</sup> MAGUIRE, 1995, 54; EADEM, 2009, 13.

<sup>188</sup> I thank Louise Maguire for comments on these Cypriote vessels.

<sup>189</sup> MAGUIRE, 1992, 117.

<sup>190</sup> MAGUIRE, 1991, RSH 390, RSH428, MEG 248.

<sup>191</sup> Mary Ownby, personal communication.

<sup>192</sup> COCHAVI-RAINEY and LILYQUIST, 1999.

<sup>193</sup> Cf. NIGRO, 2002, 110, 128, pl. lvi.93–94.

<sup>194</sup> BRAEMER and AL-MAQDISSI, 2002, 44, pl. xiv.55

<sup>195</sup> FISCHER, 1999, 1–29.

<sup>196</sup> *TD XVI*, 238 no.2.

<sup>197</sup> DUNCAN, 1930, Group 38 class H.

<sup>198</sup> PETRIE, 1932b, pl. xxx.35P5.

Surface burnish: exterior 10R5/6 red, interior 10R2.5/1 reddish black

Break: uniform greyish brown

92. 9012K. L81/1, Fig. 10, Pl. 11

WPPL	VI	f	H1	-	ox	2-3	1B
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D. 6.0 cm. pH. 21.6 cm. Md. 16.0 cm. Wd. 0.4 cm. AI 272.72

Restored from sherds, incomplete

Surface colour: 5YR8/3 pink, paint 10R5/8 red

Break: uniform orange brown

93. 9015U. L81/1, Fig. 10

WPTLS	VI	f	H1	-	ox	2-3	1B
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pH. 17.0 cm. Md. 11.0 cm. Wd. 0.4 cm.

Restored from sherds, incomplete

Surface colour: 5YR7/6 reddish yellow, paint 5Y3/2 dark reddish brown

Break: uniform yellow.

94. K11000/435. L81/1, Fig. 10

TG	IV-2	f	W1	gef.	ox	2-3	
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D. 26.3 cm. Bd. 8.0 cm. H. 6.7 cm. Md. 26.3 cm. Wd. 0.8 cm.

AI 103.54 VI 392.54

Restored from sherds, incomplete

Surface colour: 5YR6/4 light reddish brown

Combed on exterior surface and beneath base; pebble burnished on the interior

Break: uniform grey

95. 9014S. L81/1 ZN 49/2007, Fig. 10

TG	IV-2	f	W1	gef.	ox	2-3	1B
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D. 7.1 cm. Bd. 4.2 cm. H. 12.0 cm. Md. 10.1 cm. Wd. 0.3 cm.

AI 131.48 VI 84.17

Restored from sherds, incomplete

Surface colour: 5YR7/6 reddish yellow; burnish 7.5YR6/4 light brown

Pebble burnished on the exterior

Break: uniform grey

96. K11000/979. L81/12, Fig. 10

PMO	IV-2	f	W2	gef.	ox	2-3	
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D. 11.0 cm. Bd. 4.4 cm. H. 4.4 cm. Md. 11.0 cm. Wd. 0.3 cm.

AI 103.77 VI 250.00

Restored from sherds, incomplete

Surface colour: 5Y8/2 pale yellow; paint 2.5YR4/2 weak red

Pebble burnished vertically on the exterior

Break: uniform reddish brown

97. K11000/1078. L81/12, Fig. 10

PMO	IV-2	f	W2	gef.	ox	2-3	
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D. 13.2 cm. Bd. 4.0 cm. H. 5.7 cm. Md. 13.2 cm. Wd. 0.3 cm.

AI 101.54 VI 231.58

Restored from sherds, incomplete

Surface colour: 5Y7/4 pink to 2.5YR6/8 light red; paint 5YR5/2 reddish gray

Pebble burnished vertically on the exterior

Break: uniform yellowish brown

98. K11000/989. L81/12, Fig. 10

PMO	IV-2	f	W2	gef.	ox	2-3	
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D. 8.3 cm. Bd. 5.3 cm. H. 21.5 cm. Md. 12.5 cm. Wd. 0.4 cm.

AI 218.42 VI 58.14

Restored from sherds, incomplete

Surface colour: 5Y8/1 white to orange 5YR7/8 reddish yellow; paint 5YR6/2 pinkish grey

Pebble burnished vertically on the exterior, horizontally on rim and base

Break: red outer edge, grey inner edge

99. 8990A. L81/6+L81/12 FN 55 ZN 59/2008, Fig. 10

PMO	IV-3	f	W1	gef.	ox	2-3	
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D. 13.1 cm. Bd. 5.4 cm. H. 6.4 cm. Md. 13.9 cm. Wd. 0.6 cm.

AI 100.77 VI 217.18

Restored from sherds, incomplete

Surface colour: 5Y8/2 pale yellow; decoration varies from red to black 10R6/4 pale red to 10R3/3 dusky red

Pebble burnished on the exterior

Break: pinkish core, greenish oxidation zones

100. 9018V. L81/12 FN 98, Fig. 10

PMO	IV-2	f	W1	gef.	ox	2-3	1B
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Bd. 1.6 cm. pH. 8.9 cm. Md. 6.5 cm. Wd. 0.35 cm.

Restored from sherds, incomplete

Surface colour: 2.5Y8/1 white; paint 2.5YR6/8 light red

Pebble burnished on the exterior

Break: uniform orange brown

101. K11000/527. L81/1, Fig. 11

RP	IV-2	f	W1	gef.	ox	2-3	1B
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D. 7.1 cm. Bd. 4.3 cm. H. 16.7 cm. Md. 10.5 cm. Wd. 0.4 cm.

Restored from sherds, incomplete

Surface colour: burnish 2.5YR5/8 red

Vertically pebble burnished on the exterior

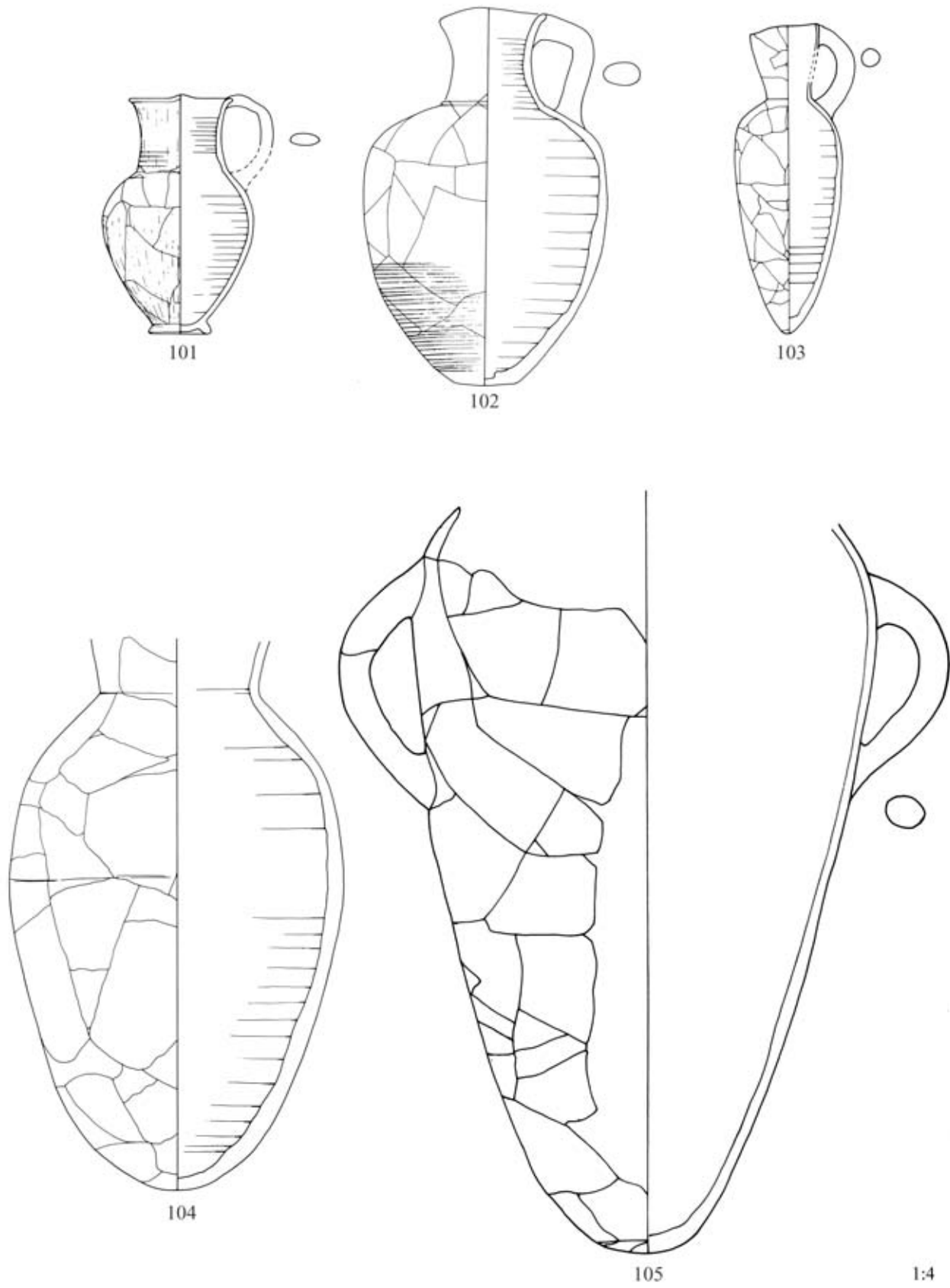


Fig. 11

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Break: greyish core, red and brown oxidation zones

102. 9015T. L81/1 ZN 52/2007, Fig. 11

TG	IV-1	f	W1	gef.	ox	2-3	1B
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D. 7.3 cm. Bd. 4.3 cm. H. 26.3 cm. Md. 16.9 cm. Wd. 0.6 cm.

Restored from sherds, incomplete

Surface colour: 10R6/8 light red

Horizontally combed on the exterior

Break: grey inner core, red outer

103. 899IX. L81/1 FN 872 ZN 35/2008, Fig. 11

TG	IV-2	f	W1-2	gef.	ox	2-3	1R
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D. 4.7 cm. H. 21.3 cm. Md. 7.3 cm. Wd. 0.3 cm. AI 117.50 VI 291.78

Restored from sherds, incomplete

Surface colour: 7.5YR8/2 pinkish white

If this vessel were ever pebble burnished, all trace of this has worn off

Break: grey core, red outer edge

104. 9015W. L81/1 Fig. 11, Pl. 11

TG	IV-2	f	W1	Bd. W	ox	2-3	
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pH. 38.2 cm. Md. 23.2 cm. Wd. 0.8 cm.

Restored from sherds, incomplete

Surface colour: 10YR8/3 very pale brown

Break: uniform reddish yellow (5YR6/6)

105. 9012Z. L81/1, Fig. 11, Pl. 11

TG	IV-2	f	W1	gef.	ox	3-4	2B
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Bd. 6.0 cm. pH. 50.5 cm. Md. 32.5 cm. Wd. 0.7 cm.

Restored from sherds, incomplete

Surface colour: 5YR7/6 reddish yellow

Combed on the exterior.

Break: grey core, reddish yellow oxidation zones

## B) OTHER MATERIAL

Amongst the ceramic material which is not yet restored are several faces which were evidently once

affixed to various pottery jars, and a somewhat similar fragment has been found in a Second Intermediate Period/early Eighteenth Dynasty context in Bahariya Oasis.<sup>199</sup> Several fragments of at least two pottery capitals (the tops of pottery stands ?) have been found, the largest of which is remarkably similar to a capital found at Kahun, although unfortunately Petrie does not describe the material of which it was made.<sup>200</sup> To date some 126 counters/pot lids – sherds reworked into crude discs – have been registered, and there are more still awaiting study. These are principally cut from vessels originally made of Marl C, or from Canaanite jars, evidently chosen for the hardness of their constituent material, although examples made from softer Nile clays are also encountered. The purpose of these objects has unfortunately never been satisfactorily explained, and their identification as gaming pieces is the one usually given,<sup>201</sup> although their use as amphora lids is well attested on Roman sites.<sup>202</sup> The ceramic bread/meat models, of which over 150, all made of Nile B2, have been found, the majority of them in L81/6 and L81/12, vary in weight from 28.8 grams (9016G) to 97.6 grams (9017Y). Most of them however fall into two weight clusters, one between 41 and 46 grams, and the other around 53 to 58 grams, though whether this has any particular significance must await further research.<sup>203</sup> A number of bird figurines, some of which have small protrusions which may have been intended to sit in the small holes found on the rims, and even bases, of certain bowls (cf cat. no. 33), were also found as were pieces of larger bird figurines. Several Nile clay black burnished sherds also attest to the presence of other animal figurines, one of which, 9026W, is possibly a crocodile, whilst the presence of black burnished feet and an arm indicate the existence of an anthropomorphic figure or deity. The heads (9010F, 9019B, plate 12) and rear end (9199X, plate 12) of three different Nile clay, and the foreparts of a Marl C2 (9015S, plate 12), hippopotami were also found in L81/1.<sup>204</sup> As the

<sup>199</sup> COLIN, LAISNEY, MARCHAND, 2000, 185 no. 11.

<sup>200</sup> PETRIE, 1890, 7, pl. vi.7.

<sup>201</sup> On these enigmatic objects see, BRISSAUD and COTELLE, 1987, 101–106. At Mendes examples (of later date) were found cached in a jar together with an egg-shaped quartzite grinder, two conical pieces of limestone and three small juglets (WILSON, 1982, 35, pl. xxiv), but the association between all these objects is unclear. For other possible uses see CARTLAND, 1918, 139.

<sup>202</sup> PEÑA, 2007, 154.

<sup>203</sup> Similar examples may have been found at Tell Hebwa – cf. ABD EL-MAKSOUUD 1998, 264–265 nos. 481–482.

<sup>204</sup> In this respect it is noteworthy that a lid fragment, TD 6085, with a modelled representation of a hippopotamus head was previously found in a contemporary offering pit in area F/I. cf. TD XVII, 1, 143.

fish dishes are linked to contemporary faience dishes, these clay hippopotami are probably to be linked to contemporary faience examples, which are often decorated with stylised straps, rosettes and lotus flowers, particularly as the body fragment, 9199X, would appear to have a modelled lotus flower at the back near to the tail, well known on faience examples from the Middle Kingdom and Second Intermediate Periods.<sup>205</sup> As these hippopotami were not restorable, it implies that these figures were already broken when deposited in the pit. From L81/6 came the lower part of a vessel 9019G, plate 12, with added legs and a pubic triangle which evidently derives from a vessel in the shape of a feminoform figure, and perhaps the faces mentioned above originally derived from such vessels. This too would appear to have been broken before deposition. As such the juxtaposition of broken hippo heads and broken feminine figures is reminiscent of a number of other finds, usually in graves, – where the two have been found together.<sup>206</sup> Whilst on the subject of pottery finds, one may also mention pieces of a Marl C fish vessel, 9026U, perhaps a fish-shaped jug if contemporary Tell el-Yahudieh fish-shaped jugs are any guide, and the net sinker, 8990E. The latter is similar to a stone example found at Tell Hebwa,<sup>207</sup> where, incidentally others were also found made of pottery, although they are somewhat smaller than the L81 example.<sup>208</sup>

Several beads were found in this pit complex.<sup>209</sup> Most are of (water-eroded) faience, and a selection of such are shown on fig. 12. They are of various different types namely lentoid-, cylindri-

cal-, barrel- ring- disc- spheroid- and, in carnelian, poppy seed-, but the most common are faience cylinder and nasturtium-seed-shaped.<sup>210</sup> They are evidently similar to others found at Tell el-Maskhuta,<sup>211</sup> Tell Hebwa I,<sup>212</sup> and Tell el-Ajjul.<sup>213</sup>

Flint objects tend to be ignored in many publications,<sup>214</sup> but similar examples to those found in L81, fig 12<sup>215</sup> have been found at Tell el-Ajjul,<sup>216</sup> and at Tell el-Maskhuta, where the evidence would suggest that they were imported there as finished products.<sup>217</sup> Whether the examples in L81 were imported or locally produced must await further study by a specialist. Others have also been found in contemporary strata at Tell Arqa,<sup>218</sup> although this is not to imply that the examples found at these sites have a common origin. The curious ivory (?) object, 9356R, fig. 12 no. 112, finds an exact parallel in Tell el-Ajjul.<sup>219</sup> None of the stone vessel pieces, which are few in number, have yet been studied, whilst, with one exception, the rare bronze items are very fragmentary. Nevertheless at least three bronze toggle pins (9349P, 9349Q and 9366, the latter being the only complete example, fig. 12), were found. They have a plain shaft with little or no thickening to the head, and are identical to contemporary pins found in graves at Tell el-Yahudieh,<sup>220</sup> Tell el-Maskhuta,<sup>221</sup> Tell Hebwa I,<sup>222</sup> Tell el-Ajjul,<sup>223</sup> Tell el-Farah (south),<sup>224</sup> and Tell el-Farah (north).<sup>225</sup> A fragmentary, corroded bronze bracelet (?), 9350H–I, was probably similar to TD 5499 found in a tomb k/9-35, dated to Phase D/2,<sup>226</sup> and to two examples found in tomb

<sup>205</sup> Cf. BEHRMANN, 1996, 150–161.

<sup>206</sup> WINLOCK, 1923, 20; KEIMER, 1948, 18–19; BEHRMANN, 1989, Dok. 142b.

<sup>207</sup> ABD EL-MAKSOU, 1998, 255, 256, no. 431.

<sup>208</sup> ABD EL-MAKSOU, 1998, 255, 257, nos. 439–440

<sup>209</sup> The beads were drawn by Irina Huller and Elisa Priglinger.

<sup>210</sup> There is no general consensus on the bead terminology. The above list is adapted from RANDALL-MACIVER and WOOLLEY, 1911, 222, where similar beads, there dated to the New Kingdom, although the tombs in which they are found clearly date to the Second Intermediate Period, have been found.

<sup>211</sup> HOLLADAY, 1997, 197, fig. 7.9.

<sup>212</sup> ABD EL-MAKSOU, 1998, 260–261 nos. 454–458.

<sup>213</sup> PETRIE, 1932b, pl. xxv.

<sup>214</sup> For a brief introduction to the flint material found in Tell el Dab<sup>a</sup>, see TILLMANN, 2004, IDEM, 2007, 124–125, 188–189.

<sup>215</sup> The illustrated flints, bronzes and ivory (?) objects were drawn by Marian Negrete-Martinez.

<sup>216</sup> MACKAY and MURRAY, 1951, pl. xxi.

<sup>217</sup> HOLLADAY, 1997, 194, fig. 7.7.

<sup>218</sup> THALMAN, 2006, pls. 136–142.

<sup>219</sup> PETRIE, 1933 pl. xxviii.41.

<sup>220</sup> PETRIE, 1906 pl. vi; TUFFNEL, 1979, 86, 91.

<sup>221</sup> HOLLADAY, 1997, 197, fig. 7.9 19–20.

<sup>222</sup> ABD EL-MAKSOU, 1998, 262, 263, no. 476.

<sup>223</sup> PETRIE, 1931, pls. xvi.6, xix.45; IDEM, 1933, pls. xix.12, xxiv.165, xxv.184, 187; IDEM, 1934, pl. xxi.205, pl. xxxiii; MACKAY and MURRAY, 1951, pl. xiv; TUFFNEL, 1962, 18.

<sup>224</sup> PETRIE, 1930a, pls. vi, ix, xi.

<sup>225</sup> MALLET, 1989, fig. 30.7.

<sup>226</sup> TD XVI, 348 no. 2.

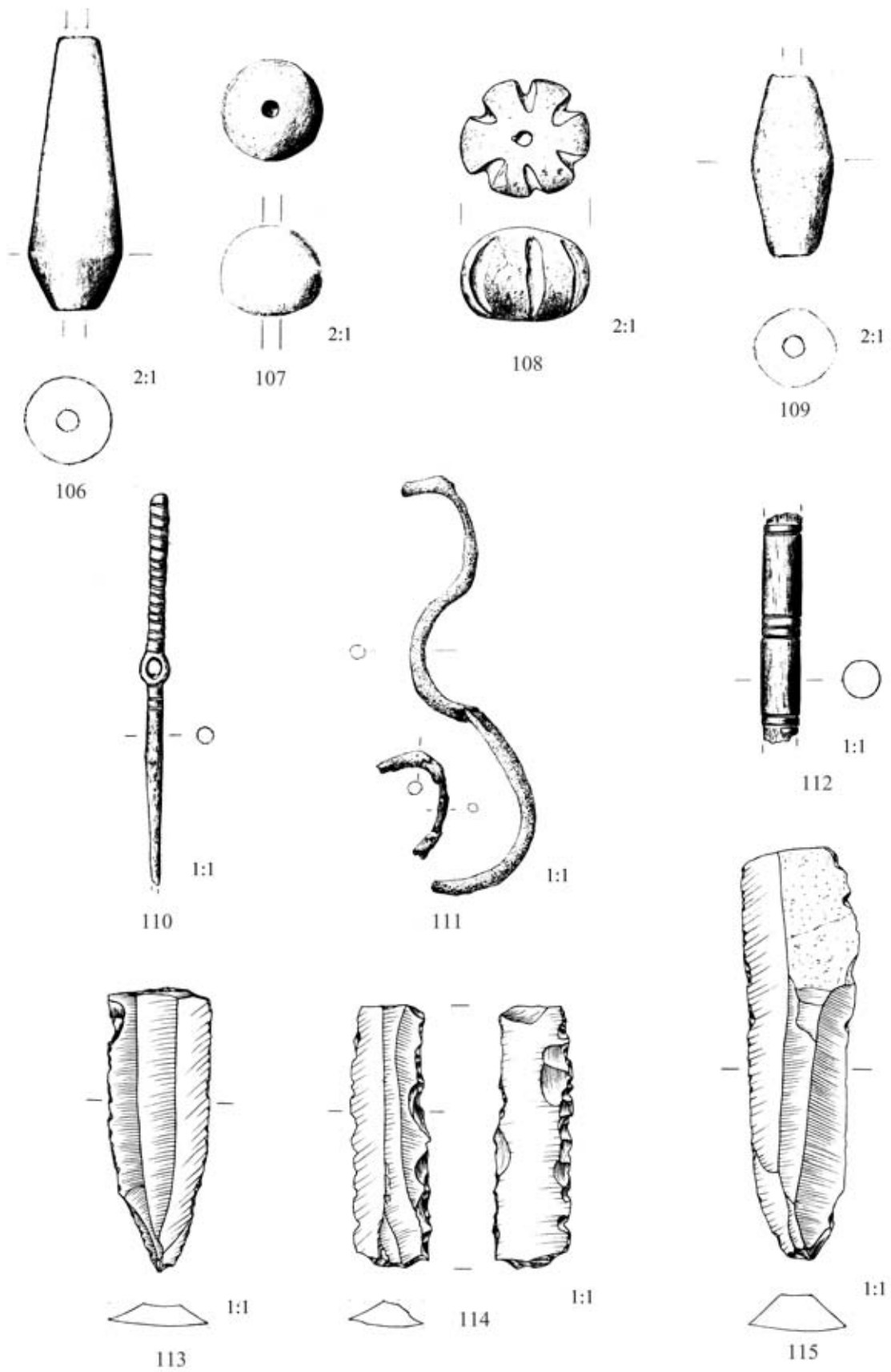


Fig. 12

L12.12312 at Tell el-Maskhuta,<sup>227</sup> as well as examples from Tell el-Ajjul.<sup>228</sup>

106. 9349M. L81/1. ZN 48/2007, Fig. 12, Lentoid faience bead.

107. 9348V. L81/1 ZN 85/2007, Fig. 12, Spheroid faience bead.

108. 9359A. L81/1 ZN 2/2008, Fig. 12, Nasturtium-shaped faience bead.

109. 9347N. L81/1 ZN 48/2007, Fig. 12, Barrel-shaped faience bead.

110. 9366. L81/1 ZN 49/2008, Fig. 12, Bronze toggle pin.

111. 9350. H+I ZN 169/2007, Fig. 12, Bronze bracelet (?)

112. 9356R. L81/1 ZN 63/2007, Fig. 12, Ivory (?) stick.

113. 9311. L81/1 ZN 164/2007, Fig. 12, Flint.

114. 9309. L81/1 ZN 165/2007, Fig. 12, Flint.

115. 9308. L81/1 ZN 165/2007, Fig. 12, Flint.

### C. ANIMAL REMAINS FROM OFFERING PIT L81 – PRELIMINARY REPORT

by Karl G. Kunst

The animal remains from pit L81 included in this report comprise the whole sample from the 2006 season and about one third of the material from the 2008 spring season. In 2008, the dry-sieving of the excavated sediments was started, which had an important effect on the composition of the collected faunal samples. Both the number of small elements from the smaller domestic mammals (ovicaprines, pigs) and smaller vertebrate groups (micromammals, birds, fish) retrieved was enhanced considerably by this procedure.<sup>229</sup> From the 2008 material, both hand collected and dry-sieved samples from the sections 6, 12 and 15 were studied. For this preliminary report, the ani-

mal bone remains are treated as a whole, although the samples from the two seasons may not be comparable in a strict sense.

Altogether, 8089 bone specimens with a total weight of 103075g have been analysed so far. Out of these, 3182 specimens with a combined weight of 61177g could be assigned to a species or species group. Therefore, the final number of determinable pieces is likely to surpass the 10,000, which appears to be an outstandingly great amount for a single context. The percentage of determinable pieces among the whole sample, both in regard to specimen counts and weight, looks comparatively low. This is due to the high degree of fragmentation observed and to the effects of sedimentary pressure. In some cases even large fragments or aggregates of bone substance, which, in all likelihood, may belong to cattle, cannot be ascribed to species or element, because the shape has been totally deformed. Some of these aggregates, weighing well above 200g and partially covered by calcareous incrustations, make it hard to decide whether they belong to a skull, a shoulder blade or a pelvic bone of a large ruminant.<sup>230</sup> Ironically, the more fragile and tender bones of ovicaprines, birds and fish are far less affected by these deteriorations, which are probably linked to the soil having been waterlogged for certain periods.

Regarding numbers of identified specimens (NISP), there is a clear dominance of the main domesticates, namely cattle (1278 remains) and sheep/goat (ovicaprines; 1200); together, they make up about 78% of all remains. Among the ovicaprine bones, of which the genus could be identified a ratio of about 6:1, favouring sheep over goat, could be found. The cattle remains account for almost 82% of the weight of the identified sample, with the ovicaprines taking second place (11.7%) again. This is also due to the fact that cattle are well represented by large and heavy bones of the skull, the trunk and the limbs. The abundance of the third group of domesticates, the pig, is comparatively poor, with about 3%

<sup>227</sup> REDMOUNT, 1989, 907.

<sup>228</sup> PETRIE, 1931, pl. xvi.20–21.

<sup>229</sup> The influence of recovery on species composition has been repeatedly discussed in literature, see e.g. PAYNE, S., Partial recovery and sample bias, in: A.T. CLASON (ed.) *Archaeozoological Studies*, New York 1975, 7–17,

and T. O'CONNOR 2000, *The Archaeology of Animal Bones*, Stroud, for a pragmatic approach, esp. 28ff.

<sup>230</sup> For the results of sediment overburden weight and other post-depositional effects see LYMAN, 1994, *Vertebrate Taphonomy*, Cambridge, 423ff.

regarding numbers and 1.6% of the weight. Apparently, no bones or teeth of dogs and equids are present within the material. Therefore, all other remains (about 20% of NISP) belong to wild species, resulting from the hunting, fowling and fishing activities of the residents. This may appear as a high value for a developed community, but is mainly the result of the high number of fish and bird remains retrieved through sieving and may not be comparable to former data concerning faunal remains from Tell el Dab<sup>ca</sup>.<sup>231</sup>

Among the wild mammals,<sup>232</sup> the remains of hare (*Lepus capensis*) make a constant appearance in several samples and are likely to result from animals hunted for eating, whereas the bones of middle-sized rodents (probably *Arvicanthis niloticus*, Nile rat) may represent intrusives. Marks resulting from the gnawing activity of rodents were frequently observed, especially on the ovicaprine bones. A spectacular find from L81/12 (Sit. 5) is a complete left rib of a hippo (*Hippopotamus amphibius*) with a total length of about 60 cm and a weight of over 1 kg.<sup>233</sup> From L81, at least one more pachyostotic rib fragment can also be ascribed to this species.

There is a total of 132 bird bones (ca.4% of NISP) resulting from species ranging in size from small ducks and waders up to that of a goose. Most bones are from the wings and the posterior extremities and can be interpreted as food remains. Five shell fragments of the African soft-shell turtle (*Trionyx triunguis*) are the only reptiles identified so far. Parts from the carapace and plastron of a particularly large individual were found at the same level of L81/12 as the hippo rib mentioned above.

Fish<sup>234</sup> (424 remains; 13.3% of NISP), take the third place in numbers behind the domestic ruminants. Because there are some outstanding

large cranial and shoulder girdle elements and vertebrae of Nile perch (*Lates niloticus*) and catfish (*Clarias/Heterobranchus*), they account for even 1.7% of the total bone weight, surpassing the percentage of pigs! These specimens are also found in hand collected samples, in close association with heavy cattle bones and in a similar state of preservation (incrustation). A detailed analysis of the fish and bird remains from L81 appears as a promising research goal, both for the sake of clarifying the role of these two taxonomic groups within the offering ritual and for ecological considerations, as to which parts of the river system and the surroundings had most relevance in fishing and fowling. There is also a small amount of both freshwater and marine bivalves and marine gastropods within the sample. Some of the marine bivalves exhibit boreholes and represent artefacts.

As for taphonomic features,<sup>235</sup> cut marks were only observed on 15 cattle and 14 ovicaprine bones, respectively, and there are two more observations on pig bones. This appears as a rather low figure of slightly more than 1% for the ruminant species, which can only partially be explained by the state of surface preservation in cattle, but seems to be related to the way the carcasses were treated. Quite often, vertebrae and distal limb elements of cattle and ovicaprines were found in a still articulated state, likewise pointing at a less intensive butchering procedure than commonly observed in ordinary settlement refuse. Traces of heat influence were identified on cattle and sheep/goat bones about twice as frequently as cut marks (ca 30 observations each). They correspond mainly to a low temperature regime, resulting in greyish-blackish colourings of the bone substance, and show no regularity regarding the elements affected.

<sup>231</sup> BOESSNECK, J., 1976, *TD III, Die Tierknochenfunde 1966–1969*, Vienna; BOESSNECK, J. and DRIESCH, A. von den, 1992, *TD VII, Tiere und historische Umwelt im Nordost-Delta im 2. Jahrtausend v. Chr. anhand der Knochenfunde der Ausgrabungen 1975–1986*, Vienna.

<sup>232</sup> For a good overview see OSBORN and OSBORNOVA, 1998.

<sup>233</sup> Ribs of wild hippos are rare in comparative collections, and specimens from zoos often exhibit a deformed shape. A picture of a specimen largely resembling the one mentioned in the text, is depicted in: MANHART, H. and VON DEN DRIESCH, A., 2003, *Bronze- und eisenzeitliche Tierwelt nach den Knochenfunden vom Tell*

el-Oreme am See Gennesaret und ihre kulturhistorische Bedeutung, in: G. FASSBECK, S. FORTNER, A. ROTTLOFF, J. ZANGENBERG (eds.), *Leben am See Gennesaret. Kulturgeschichtliche Entdeckungen in einer biblischen Region* (Sonderbände der antiken Welt), Mainz 2003, 25–30.

<sup>234</sup> A complete list of the fish species studied from Tell el-Dab<sup>ca</sup> so far is given in VON DEN DRIESCH, A., 1986, *Fische im alten Ägypten – eine osteoarchäologische Untersuchung*, Documenta naturae 34, München.

<sup>235</sup> See LYMAN 1994 for an extensive overview.

		n	g	%n	%g
Cattle	Bos	1278	50137,2	40,16341	81,95499
Sheep/Goat	OC	1200	7167,1	37,71213	11,71544
Pig	Sus	95	978,9	2,985543	1,600124
	other mammals	21	1374,4	0,659962	2,246614
	Birds	132	111,2	4,148334	0,181769
	Turtle	5	289	0,157133	0,472403
	Fish	424	985,9	13,32495	1,611566
	Molluscs	27	132,8	0,848522	0,217076
	total	3182	61176,5	100	100

Table 4 Bone Species found in L81 - Preliminary Findings

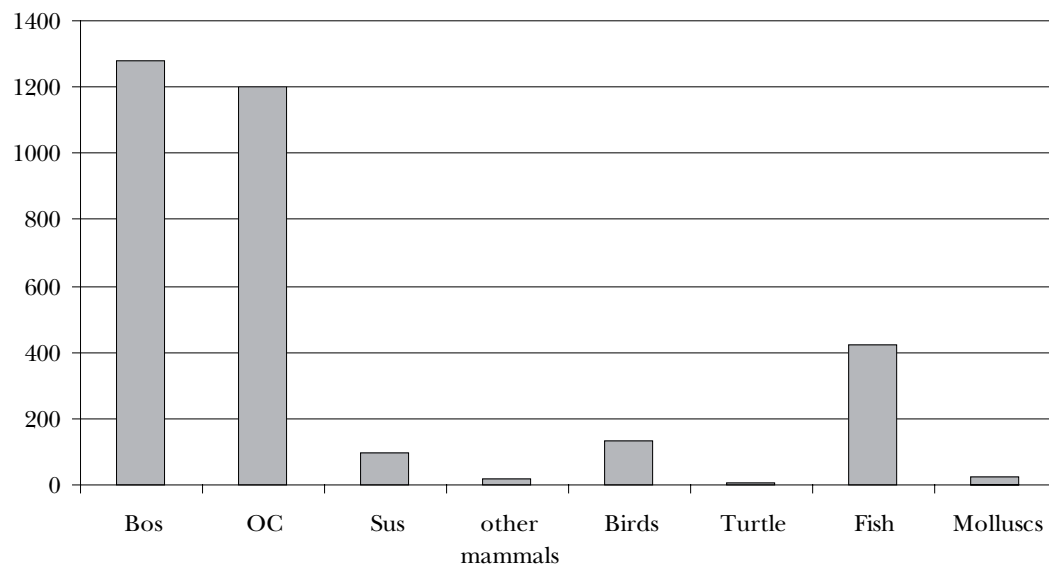


Table 5 Number of identified specimens

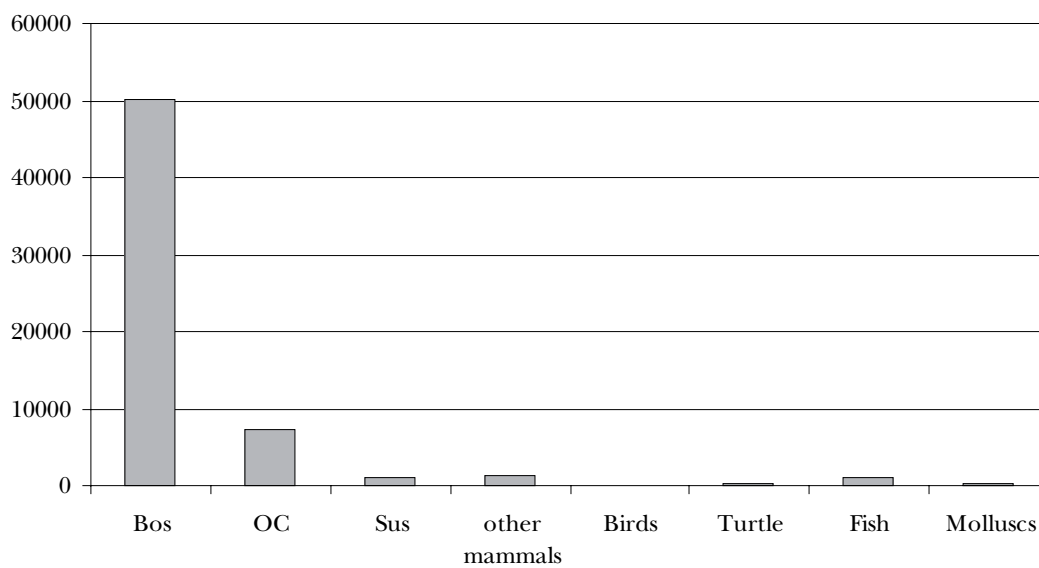


Table 6 Bone weight (g) of identified specimens

## D. CONCLUSIONS

The above short tour of a small sample of the material from Locus 81 leads to the following preliminary conclusions. The pit complex must have been open to the elements for the remains of several meals, and other rubbish, to be thrown in, and to allow rats to gnaw on the discarded bones. The main element on the menu seems to have been beef followed closely by mutton, and, to a lesser extent, wildfowl and fish, but strangely very few large liquid containers were found so it is not at all clear what the partakers of said meals drank. Beer jars, if they really held beer, wine amphorae and marl clay zirs are rare with, estimating on a visual analysis of the sherds of these types which still remain to be restored into complete pots, perhaps about twenty of each. On the other hand the tall beaker-jars were very frequent so perhaps water, probably scooped out of the Nile may have been the usual liquid refreshment. The presence of hippopotamus bones in the pit are extremely interesting since it adds to the belief that hippopotamus meat was indeed eaten;<sup>236</sup> its apparent

rarity perhaps being due to the fact that hippopotamus meat is, at least according to Diodorus, tough and hard to digest!<sup>237</sup> No analysis of any plant remains has yet been undertaken, but one would not be surprised to find traces of wheat, barley and lentils as other components of these meals. Some of the participants may also have been careless enough to lose their bead necklaces, shell pendants, bronze bracelets and toggle pins which all found their way into L81.

The pottery corpus as a whole is reminiscent of both Phases E/1 and D/3, but when compared to pottery from the tombs and offering pits from areas F/I and A/II, the material, as a whole has much more in common with Phase E/1,<sup>238</sup> and it is thus likely that this material was all deposited in the short space of circa thirty years covered by this Phase, although a possible extension into the beginning of Phase D/3 cannot entirely be ruled out. When compared to other known Hyksos sites we can say that this material is certainly earlier than that found at Tell el-Yahudieh, and would appear to be earlier than the Hyksos material from both Tell el-Maskhuta and Tell Hebwa I.

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<sup>236</sup> BEHRMANN, 1996, 51–52.

<sup>237</sup> DIODORUS SICULUS, *Bibliothèque* I, 35. Trans. OLDFATHER, 1968, 119.

<sup>238</sup> Cf. *TD XII*, 359–371, Phase E/1 with *TD XII*, 372–378 the changeover from Phases E/1–D/3 and *TD XII* 379–382 Phase D/3. Cf. also KOPETZKY, 2004, and MÜLLER, *TD XVII* passim.

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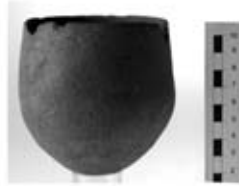
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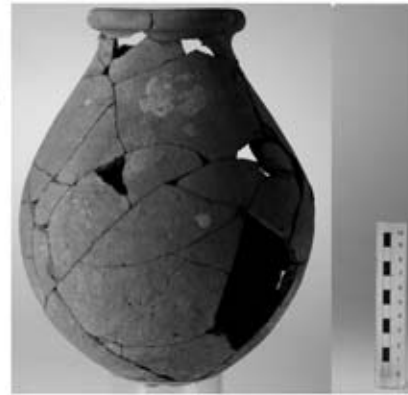
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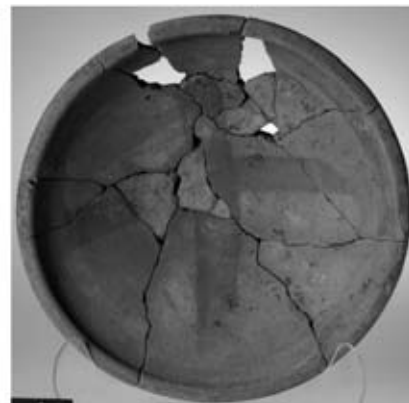
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Plate 1



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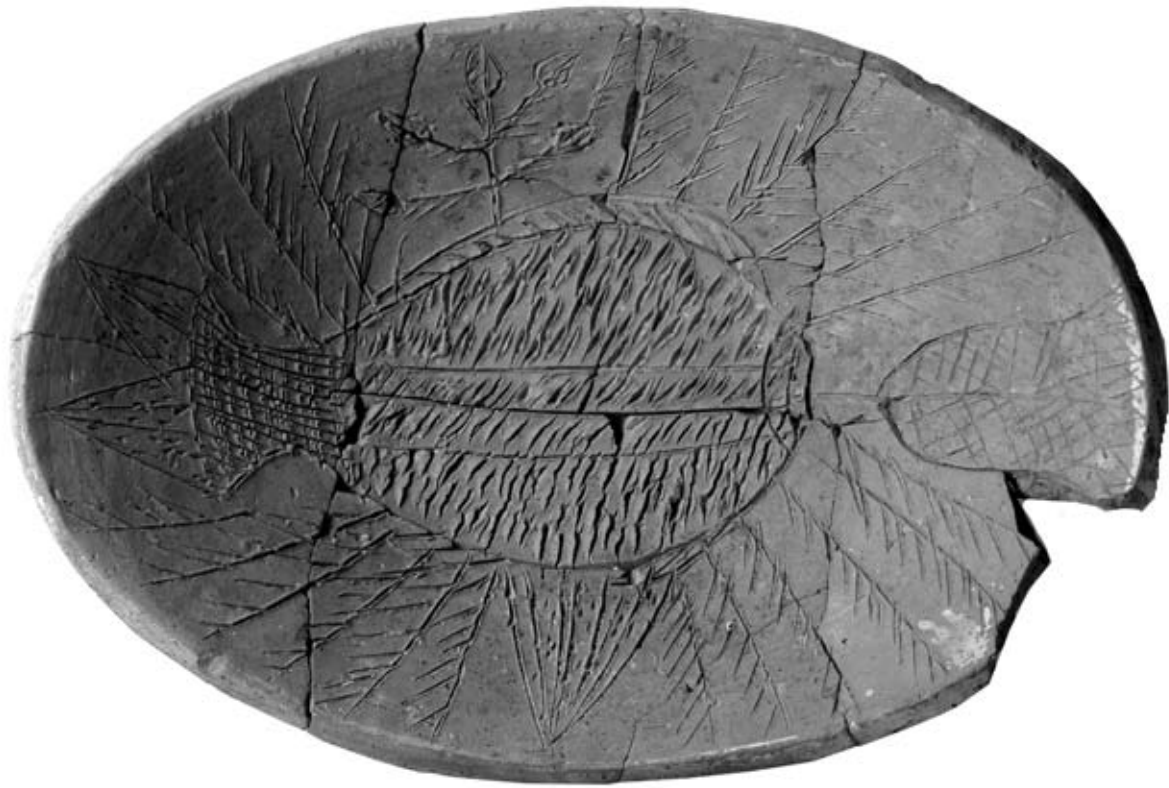
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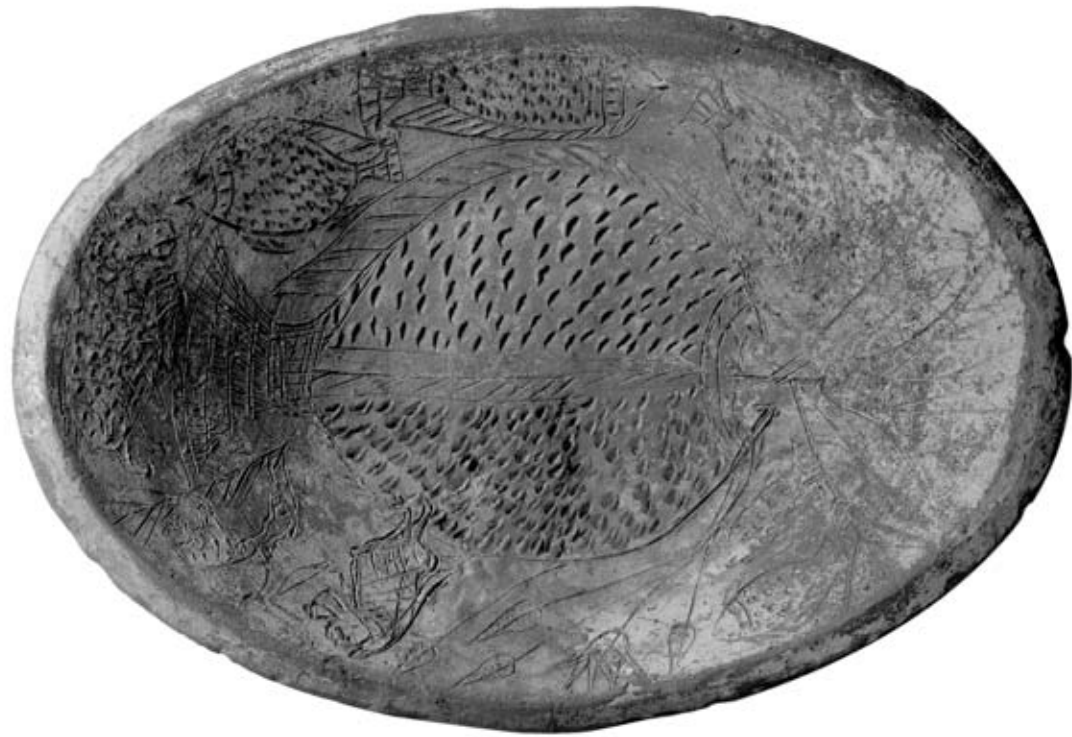
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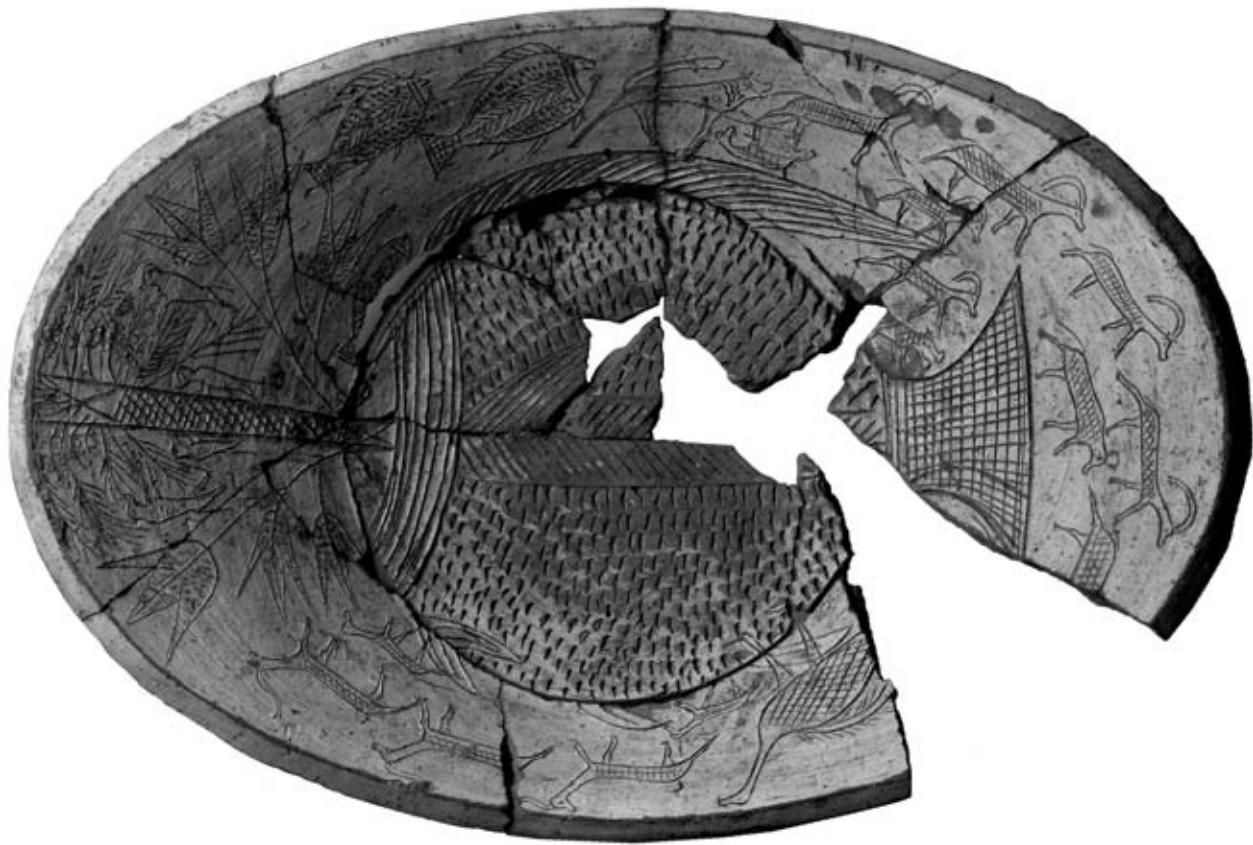
Plate 3



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Plate 4



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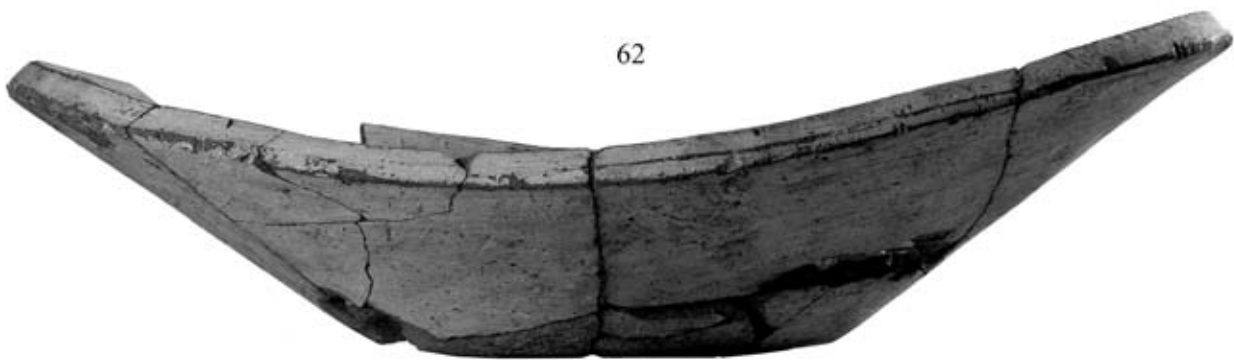
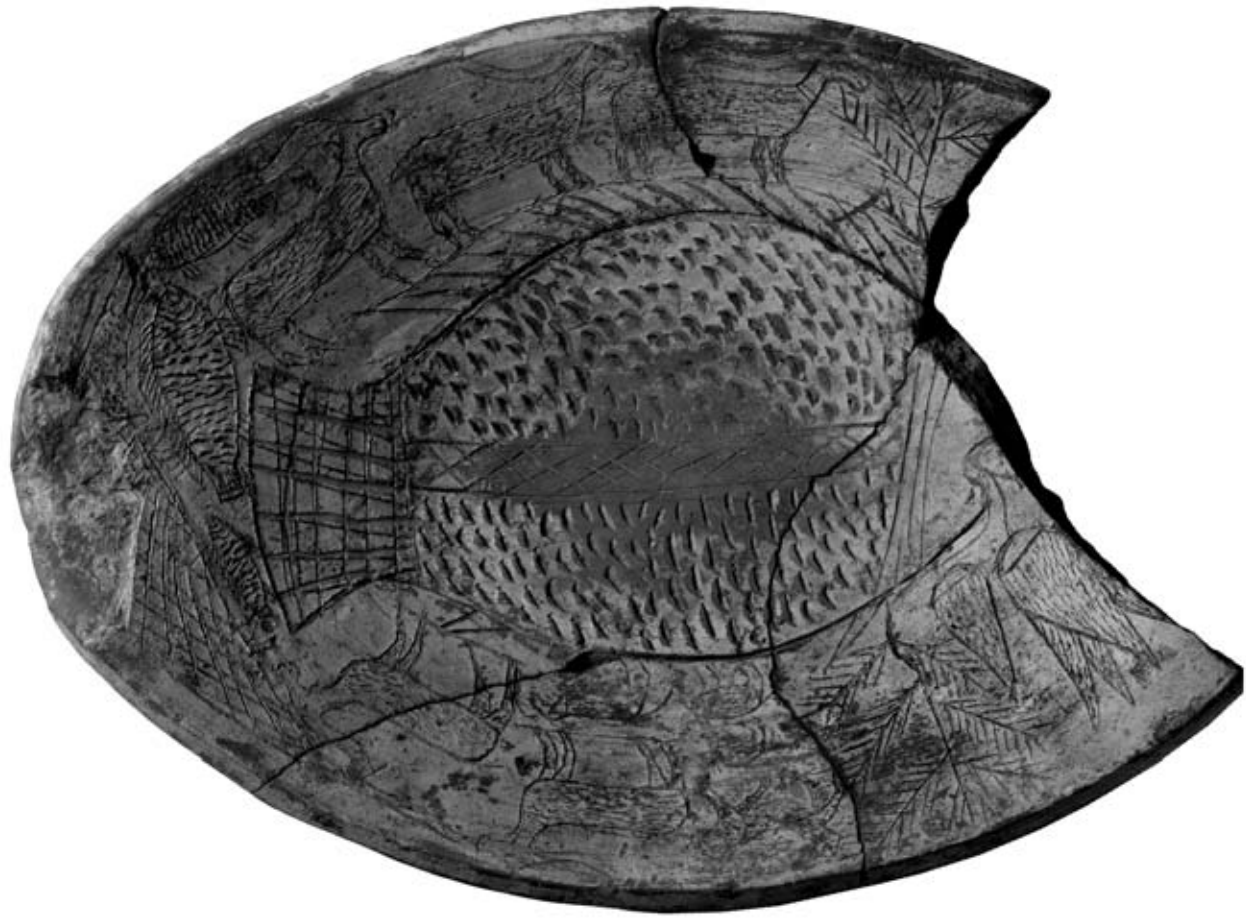


Plate 5





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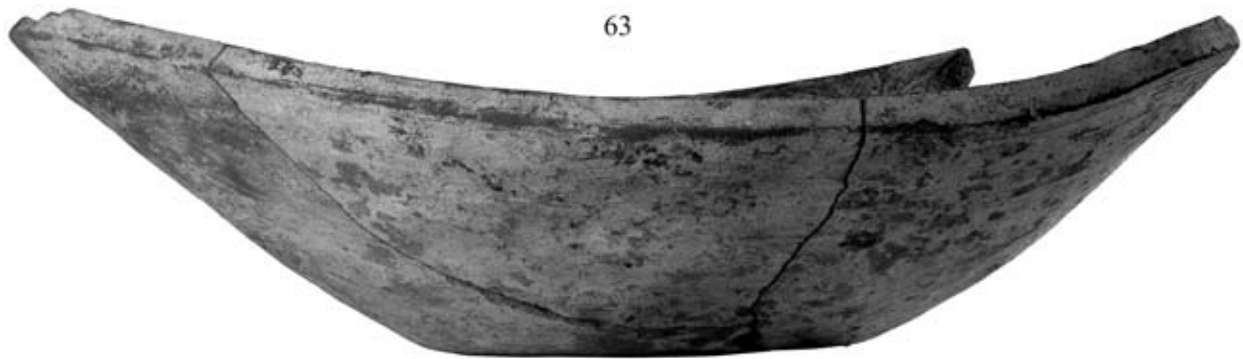
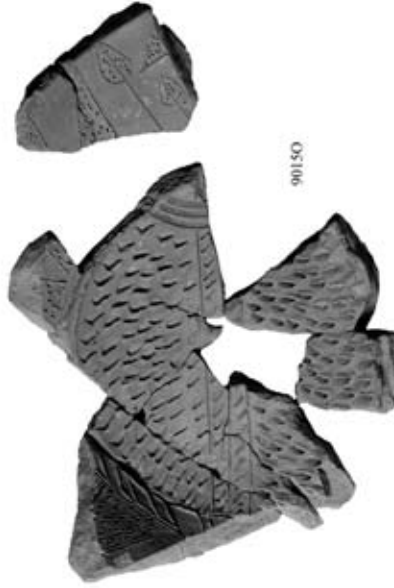


Plate 6



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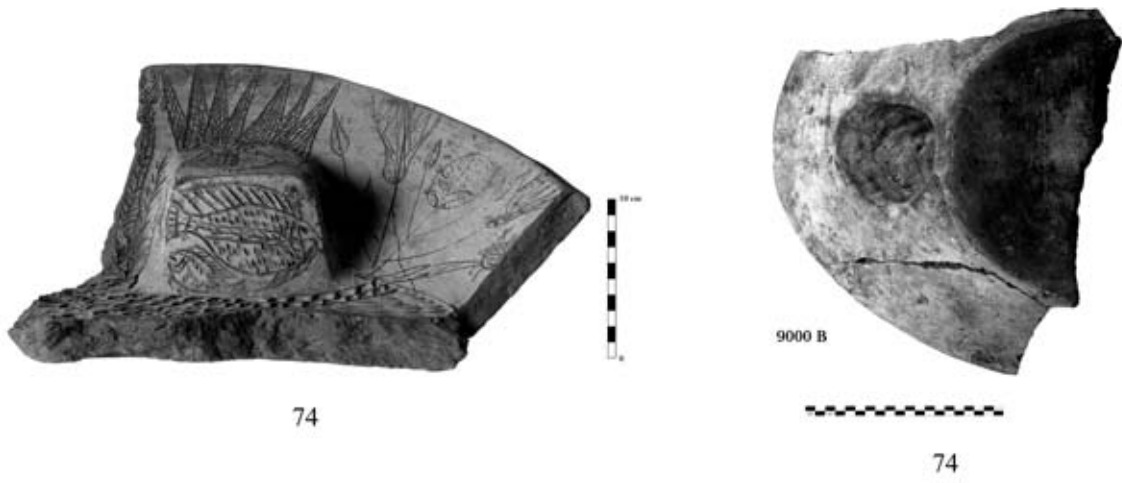
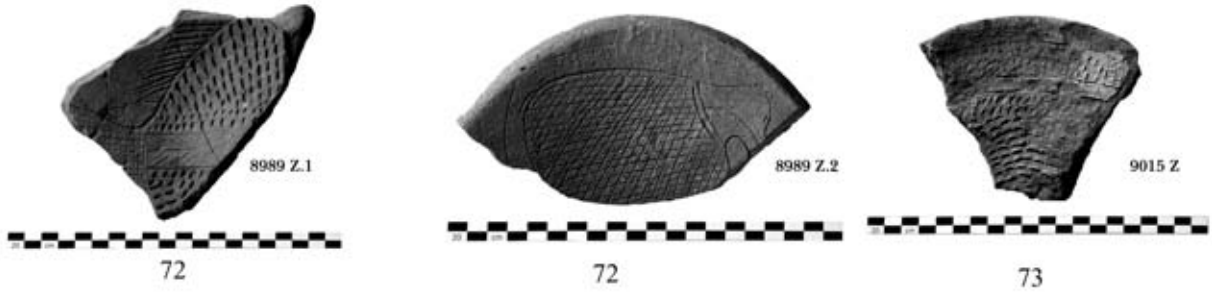


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Plate 8



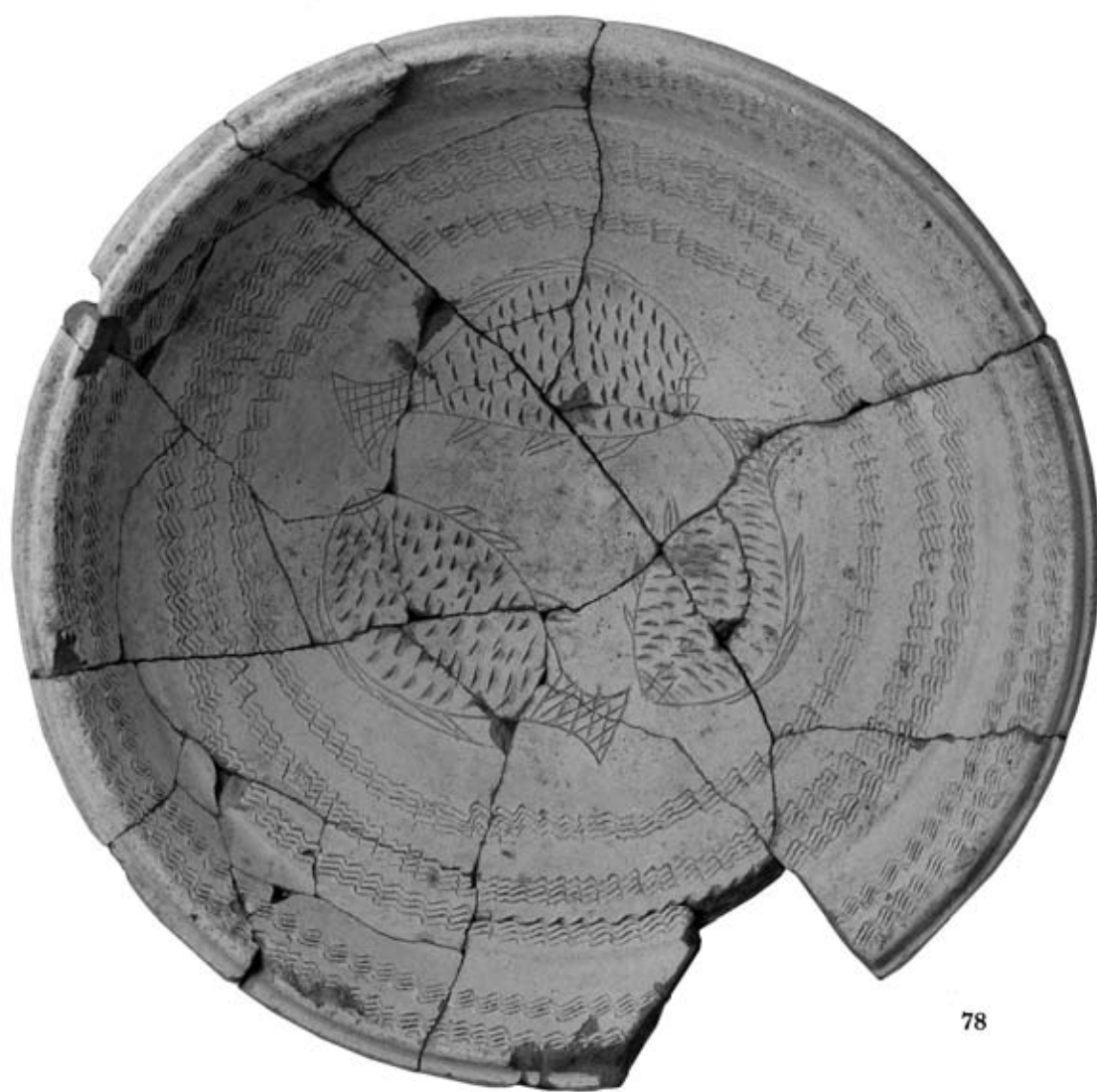


Plate 10



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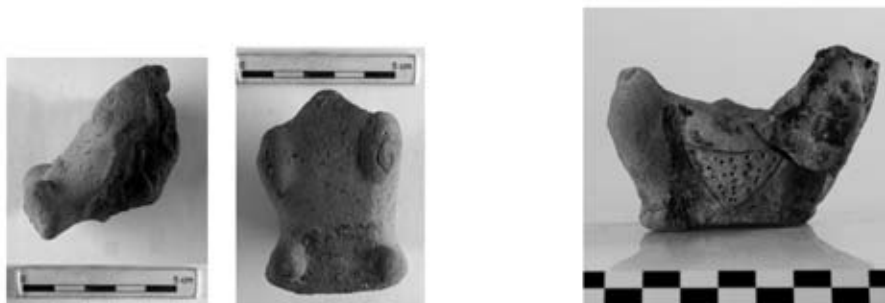
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PLATE 12

Plate 10

