#### **CHAPTER 9**

# LATE DYNASTIC POTTERY FROM THE VICINITY OF THE SOUTH TOMBS

by

#### Peter French

### 9.1 The private tombs at el-Amarna

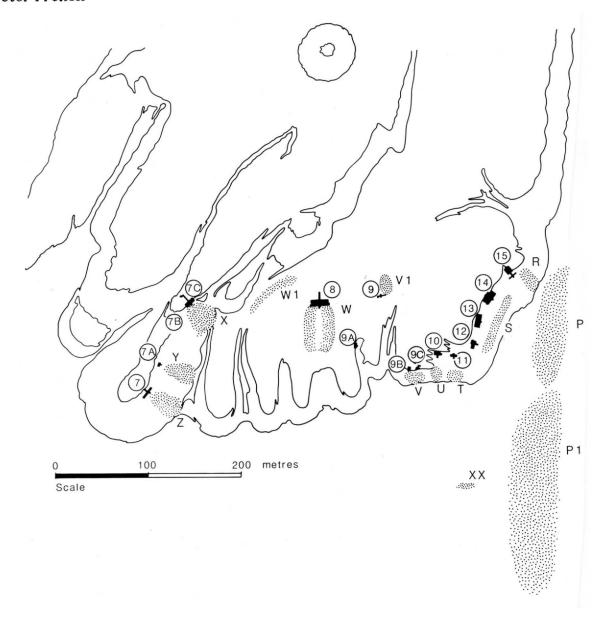
In the sweeping semi-circle of low cliffs that enclose the site of the city lie two groups of tombs begun, but not completed, for the great men of Akhenaten's court (general description in Davies 1903: 1-6). Although construction and decoration were in many cases well advanced, it is probable that all or most remained empty of their intended occupants, and the combination of their exposed position and the high winds which sweep the area would have ensured that they rapidly filled with sand, their position betrayed only by the adjacent limestone debris from their construction.

A northern and a southern group may be distinguished, and their subsequent histories appear to have been rather different. On the walls of the northern tombs is much evidence of Christian occupation, and ruinous stone structures around their entrances must also date from this period, as noted already by Davies (Davies 1905: 4; Badawy 1953; Badawy 1978: 62-3). Almost all surface sherds in the area are Coptic. In contrast, the southern tombs (description in Davies 1906: 7-11) were apparently little used at this time but utilisation in the Late Dynastic Period is eloquently attested by quantities of sherds nearby. Davies (1906: 10-11) explains that these were deposited here by 19th century excavations, and that some coffins from the tombs were removed to Cairo. [1] It is with these sherds that the present study is concerned. Permission to work on the surface material was granted by the Egyptian Antiquities Organisation, to whom grateful thanks are due; no permission was sought to excavate sherds lying beneath the present surface. The work was carried out by the writer from 19th January to 12th March 1985 and the meticulous drawings were made by Andrew Boyce.

### 9.2 The sherd-sites

Close to the tomb entrances lie concentrations of sherds. Some cover the surface of substantial sandy mounds, others are more thinly scattered on low banks of sand, and yet more have been carried by storm-water down the gentle slope and spread a surprisingly long way into the desert plain below. Also in evidence are large dumps of limestone chips, assumed to be the spoil heaps of

<sup>[1]</sup> John Taylor of the University of Birmingham, who is studying coffins of the Late Period, has not so far located these.



the 18th Dynasty tomb excavators, and ignored in the present study unless pottery is also associated with them. There can be little doubt, however, that the sandy mounds and banks derive from the re-excavation of the tombs in modern times; it is impossible to tell whether the sherd concentration upon their surfaces is representative of the interior fill, but certainly the removal of sherds from the surface usually reveals others half-buried below and there is every reason to suppose that the total number of vessels represented is considerable.

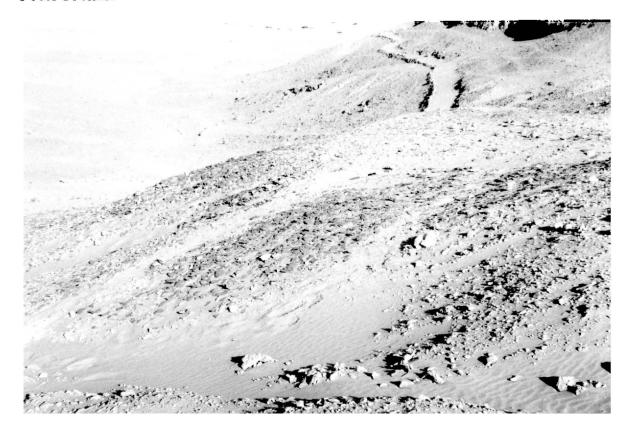
The sherd-sites were lettered in approximate sequence from south-west to north-east and sketched in on the plan published as Davies (1906) Plate XIII, here reproduced as Figure 9.1. All measurements are approximate, no detailed survey having been made. Very small scatters were usually ignored. As an aid to identification a brief description follows; as will be seen, it is sometimes clear which tomb yielded a given group of sherds, but in other cases material from two or more tombs may have been deposited in one place.



Figure 9.1. Map of the South Tombs, showing sherd sites (after Davies).

Tomb 25 is separated from its neighbours to the north by a broad wadi, and sherds in its vicinity appear to derive from it alone. south-west of its causeway stands a large flat-topped dump (A) with sherds lying thickly on its sloping sides. Across the causeway, (A1) is a thin scatter running down the slope, and (A2) in the plain below consists of water-borne material. The large limestone chip dump (B) was so designated because recent quarrying had revealed a few sherds within it. In the wadi mouth is a light scatter (C), apparently water-borne but from which site is uncertain.

Tombs 24 and 24A lack associated pottery, the large sandy dump (D) and the low mound (E), with its light sherd scatter, apparently both deriving from Tomb 23. Some 12 metres of clear ground intervene before the low dump and scatter (F), cut up by two modern tracks whose kerbs incorporate some of its sherds. Beyond the causeway to the sanded-up Tomb 22 a similar low dump and scatter (F1) runs to a north-south ridge of limestone chips. North-west of (F1) are four



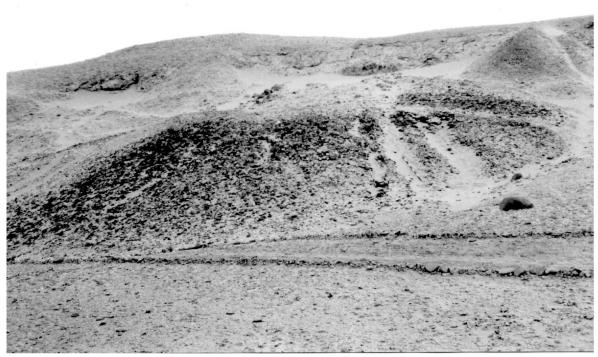


Figure 9.3. Sherd-site X, looking north-east, before work.

linked dumps of chips on the three smallest of which, collectively (G), sherds lie fairly densely. (F) and (F1) seem to derive from Tomb 22, (G) from Tombs 21 and/or 22.

High up on the slope alongside the sanded-up Tomb 21 is a substantial scatter (H), its north-west end cut by a modern track. Sherds washed down the causeway from here are designated (H1). North-west of the track are two dumps, of which one is only of chips, but the other (J) is thickly strewn with sherds. (H), (H1) and (J) may all derive from Tomb 21. Some 10 metres east of (J), a low chip dump of three parallel ridges carries a thin sherd-scatter (K), perhaps from what may be one or two unnumbered tombs which appear as sandy depressions.

Beyond a small wadi, Tombs 19 and 20 have no associated sherds. A scatter (L) probably derived from Tomb 18 starts above it to the north and spills down the north side of its causeway. Probably also from Tomb 18 is a thin scatter on top of a small chip dump (M), at a lower level. Along the south side of a minor wadi behind Tombs 17 - 20 a dump (Q) is likely to derive from Tombs 19 and/or 20.

A little way up a major wadi, Tomb 16 has yielded the large dump (N) (Figures 9.4 and 9.5). In the wadi itself an extensive scatter (P) is mostly water-borne from (N) though other sources may have contributed. The same is true of its continuation (P1) into the plain beyond the wadi-mouth, some sherds of which have been carried up to 3/4 km. A few sherds from (P) and (P1) may, however, have been dropped by travellers along this wadi route.

A thin scatter (R) derives from Tomb 15, but from here to Tomb 11 only occasional sherds occur and the entire stretch is designated (S); both contain occasional Coptic sherds. There are also very few sherds in area (T) in front of Tomb 11, area (U) in front of Tomb 10 and area (V) in front of Tombs 9B and 9C. Up a small wadi, adjacent to Tomb 9, lies a small dump (V1) derived from it.

About 130 metres east of Tomb 11, on the plain in the vicinity of three small buildings, apparently modern but now ruinous, is a small group of sherds (XX) of unknown derivation.

Some 80 metres north of (V1) the scatter of sherds upon and around the causeway to Tomb 8 is called (W); it includes Coptic pieces and derives from this tomb, as does the thin scatter (W1) on top of a pile of chips to the east of it. The large dump (X) derived from Tomb 7C lies in a fan-shape before its mouth (Figures 9.2, 9.3). A few sherds lie in area (Y) in front of Tomb 7A and a few more in area (Z) in front of Tomb 7. The proportion of Coptic sherds in (X), though not high, is higher than in other major dumps, and (Y) and (Z) consist mainly of Coptic material.

### 9.3 Method of work

When the initial survey had been completed, two programmes of work were successively carried out. First, the largest available rim- and base-sherds were collected at random from all sherd-sites, together with a few others exhibiting features of particular interest. Type-series were built up from these and subsequent collection could be confined to new types, until eventually no more were found. In the figures illustrating the type-series, the site of origin of each sherd is stated but no statistical inferences should be drawn from this, the collection of a sherd-type from one site rather than another being frequently a

matter of chance.

The second programme was designed to yield statistically valid information upon which both the sherd-sites and the vessel-types could be evaluated. Eight sherd-sites in various areas were selected, mostly amongst the largest. The thin and scattered site L was studied completely except for some outlying sherds; in all other cases an area was laid out with string to enclose an estimated 10% of surface sherds (Table 9.1 and Figures 9.4 and 9.5).

All rims, bases and handles were extracted, together with sherds exhibiting decoration, string-marks or other interesting features, and classified according to ware and form, the process of classification producing a few additions to the type-series. The remaining body-sherds were classified according to ware, and all sherds were counted. Detailed differentiation of the marl wares was not always carried out, nor was it possible to classify in detail all bases, many of which were fragmentary and weathered.

New Kingdom sherds, from sampled areas and from random collection, are detailed in Appendix A, identifications being kindly supplied by Pamela Rose. Coptic sherds, mostly fragments of silt amphorae, are not further described. One possible Old Kingdom rim is illustrated as Figure 9.22.5. These sherds are not included in the ware descriptions or type-series.

#### 9.4 Wares

Examination of sherds was made at fresh breaks with a 10x lens, in bright sunlight and in shadow. With the exception of one sherd, perhaps of the Old Kingdom (Figure 9.22.5), all were wheel made.

Silt Ware. Used for more than 95% of vessels (see below). The clay is alluvial silt deposited by the Nile. No satisfactory subdivision of this ware was found possible; occasional sherds with an unusual amount of included matter are individually mentioned. Most sherds contain both mineral and vegetable inclusions.

Mineral: (a) plentiful yellow and white particles of limestone (positive to dilute hydrochloric acid) c. 0.1 cm. diameter. Numerous pieces with hollow centres may be forams; [2] (b) also considerable numbers of smooth quartz grits of varying sizes, the smallest often brown or black, the largest predominantly milky white, clear or pale brown.

Vegetable: normally fine or fairly fine, showing on the surface as troughs (sometimes with faint marks from the structure of the vegetation), and in the break as short white lines. SB8.2.1, 11.1.1, 11.2.1 and SP1.1.1 contained much more than usual, and larger pieces.

Colour and hardness vary with firing. Underfired examples are soft, yellow-brown with a barely perceptible pink core; mid-range are harder, brown-red with a clear pink core; overfired examples are brittle, dark brown to grey or black. In all degrees of firing a black core-streak is often present in the thicker sherds. Surface-treatment is frequently lost due to weathering, but most vessels seem

<sup>[2]</sup> Information kindly supplied by Paul Nicholson. Janine Bourriau suggests that alternatively they may be rims left by particles decomposed during firing.



Figure 9.4. Sherd-site N, looking north before work. Scale is 2 metres.



Figure 9.5. The same, after sorting but before removal of sherds.

Table 9.1 Sherd-sites sampled.

Sherd-site	Area sampled (sq. metres)	Estimated % of sherd-site sampled
Α	24	10%
D	20	10%
$\mathbf{F}$	6	10%
F1	16	10%
J	14	10%
L	ca 40	90%
N	20	10%
X	20	10%

to have been at least wet-smoothed. Examples of some types (see type-series) retain traces of a deep red exterior slip and/or white wash or thin slip, perhaps applied to the upper parts only. The white is sometimes applied in bands, and better preserved pieces from East Karnak show them to be a continuous spiral line, no doubt applied on a rotating wheel.

Painting seen on one sherd only (Figure 9.22.4) and applied decoration on three (two best-preserved examples, Figure 9.22.3).

Marl Ware 1a. Used for almost all marl vessels except amphorae and kegs. Hard. Usually pink through buff to grey, but some examples green and prone to surface flaking. No large grits but occasional red inclusions, perhaps crushed sherds. Myriads of tiny black grits. Sometimes small amounts of vegetable matter. Positive dilute hydrochloric acid reaction proves presence of limestone. Probably wet-smoothed, but not slipped. In common with all the marl wares, never painted.

Marl Ware 1b. Related to preceding. Rare. Pale brown in break, tending to pink exterior, with grey-green core. Moderate quantity of quartz grits: pale grey, pale brown, white and clear. Plentiful small limestone flecks on surface (dilute hydrochloric acid positive). Moderate quantity of vegetable matter. Orange, pink or red-brown slip with some evidence of polish.

Marl Ware 1c. Closely related to 1a and 1b. Rare. Brick-red throughout. Large numbers of quartz grits, mostly pale brown or clear. Considerable quantity of vegetable matter. Traces of red-brown slip.

Marl Ware 1d. Related to 1a, 1b, 1c. Two sherds only, probably from small round-based jugs or jars. Pale pinkish brown. Myriads of tiny black grits as 1a. Limestone (dilute hydrochloric acid positive) inclusions, some quite large (up to 0.1 cm). A few quartz grits. Slightly micaceous. Exterior orange, probably slipped, apparently polished.

Marl Ware 2a. Commonest of the amphora wares. Normally pale brown, exterior tending to orange, but firing variations are white throughout and red throughout. Broad grey (carbon?) core. Frequent lumps of unincorporated clay. Densely packed with large grits, commonly 0.05 and occurring up to 0.5 cm. across, predominantly grey to whitish with some brown and clear.

Limestone flecks (dilute hydrochloric acid positive). Occasional large, angular purple-brown or red mineral fragments as seen much more commonly in 2b. Some (shell?) and occasional traces of vegetable matter. Exterior pale brown to orange, perhaps a (self?) slip. Poorly resistant to weathering: the surface flakes easily and the vessels break up into rectangular or polygonal pieces. Somewhat resembles Canaanite wares of the 18th Dynasty but less well made and fired. Assumed to be an import.

Marl Ware 2b. Related to 2a, and also fairly common. Pale yellow-brown to midbrown, sometimes with a pink tinge. Sometimes a grey (carbon?) streak. Far fewer grits than 2a, but many are large, 0.05 - 0.1 cm. across, white, pale brown and clear. Limestone flecks (dilute hydrochloric acid positive). Frequent large, angular, purple-brown, deep brown or red-brown mineral fragments, often iridescent. Occasional large pieces of (shell?) and occasional traces of vegetable matter. Exterior brownish-red, perhaps a slip. Reacts to weathering as 2a. Assumed to be an import.

Marl Ware 2c. Closely related to 2b. Yellow-brown, orange-brown or pale red-brown. Usually a grey (carbon?) streak. As 2b, contains few grits, these being white, pale grey, pale brown and clear. Contains only a few of the mineral fragments observed in 2a and 2b. Some (shell?) and large pieces of white stone, as well as large lumps of unincorporated clay as 2a. Only slight traces of vegetable matter. Where the surface survives it is off-white, perhaps a slip. Assumed to be an import.

Marl Ware 2d. One body-sherd only. Orange-brown with pink core. Fairly sparse quartz grits, pale brown and clear. A few mineral fragments as 2a-2c. Many small pieces of limestone, most with hollow centres. Moderate amount of vegetable matter. Remains of an off-white surface, perhaps a slip. Brittle, perhaps overfired. Assumed to be an import.

Marl Ware 3. A distinctive ware used chiefly for "kegs" - elongated vessels with two round ends and short neck centrally placed, seen by the writer at North and East Karnak, Hermopolis and Memphis. The clay takes on a variety of colours according to firing: the exterior is brown or black; the remainder may be yellow, sometimes with black (carbon?) streak centrally or on interior surface; otherwise, the colours may include pink and/or blue-grey. Contains great quantities of tiny dark grits and smaller numbers of larger rounded quartz grits, generally white, pale brown, clear, etc. Some quite large, angular, purple-brown or red fragments and large pieces of limestone (dilute hydrochloric acid positive) occur, with a moderate quantity of vegetable matter. The exterior surface is usually rough, and probably unslipped. May be an import.

### 9.5 Type-series of rims

In the almost total absence of complete profiles the major type-series had to be constructed from rim-sherds, with the exception of SB12.1.1 and SG1.1.1, distinctive vessels whose rims had not survived. A basic distinction was made between jars and bowls, jars being restricted forms (including amphorae), i.e. those whose greatest diameter is not at the mouth, and bowls being open forms. One sherd from a footed bowl was classified as a goblet and one from a flat

vessel as a platter. Abbreviations used are:-

SJ = Silt Jar

SB = Silt Bowl

SG = Silt Goblet

SP = Silt Platter

MJ = Marl Jar

MB = Marl Bowl

The first numeral distinguishes major divisions within the category "jar" or "bowl". The second distinguishes what appear to be consistent subdivisions. The third, which was not taken into account when the sherds from sample areas were classified, designates minor differences of form representing the range of variations found within a subdivision. Inevitably such classification is largely subjective; furthermore its usefulness is limited by the virtual absence from the corpus of complete profiles. Nevertheless, it may perhaps serve as a starting-point for future work. Distinguishing features are as follows:-

- SJ1. Neck usually at least 3 cms. long, making fairly sharp angle with shoulder. Most are probably from round-based, globular vessels 20-30 cms. tall, the smaller ones having no handles but the larger sometimes carrying vertical handles set low on the body. Usually thin-walled and well made, and well fired to produce a red exterior, underfired and overfired examples being rare. A white wash on the exterior of neck and shoulders is common, perhaps universal before weathering, and most spiral-decorated sherds probably derive from these vessels. The silt equivalent of MJ1 and MJ2.
- SJ2. Rim and neck usually of greater diameter than SJ1. Neck usually slopes inwards towards rim, with a more-or-less pronounced intermediate bulge in the majority of examples. There is a very great variety among the rims. Bodyshapes probably range from globular (height c. 30 cms.) to upright (height c. 50 cms.), with round bases. Handles are common, especially on the larger vessels, and are normally vertical though horizontal handles are known. The fabric is generally thicker and heavier than that of SJ1. It is seldom underfired but frequently overfired to a brittle black with evidence of collapsed or distorted areas in spite of much use of string binding. Most "wasters" probably derive from these vessels, which clearly caused the potters problems. A white wash, sloppily applied, is common (perhaps before weathering invariable) on shoulders, not normally applied in spirals. Some are the silt equivalent of MJ5. Late in the season one complete vessel, not seen by the writer, was excavated in an intrusive context in the area of the Workmen's Village (Chapter 1.5; Figure 9.21.4).
- SJ3. Wide-mouthed jars; rather uncommon. SJ3.2.1 has a handle joined to the rim. Some may have been white washed. No evidence of shape of bases, but statistically likely be have been round.
- SJ4. Large or fairly large vessels whose rounded shoulders indicate globular (largest perhaps bag-shaped) bodies. Hole-mouths or rims with little or no neck. Some had handles, some a white wash, but the majority probably had neither. As SJ3, bases statistically probably round. Firing generally good but some larger examples are overfired. Silt equivalent of MJ3 and MJ7.
- SJ5. Upright vessels, probably 15-30 cms. tall, with little or no neck and without

clearly-defined shoulders. No handles. Several have ribbed bodies. Bases various (see below). Soft, underfired examples are common and some overfired ones occur. No evidence of white wash.

SJ6. Similar to SJ5 but with little or no thickening of the rim. No handles. A few bodies are lightly ribbed. Bases various (see below). Soft, underfired examples are common. Only SJ6.1.1 exhibits a white wash.

SJ7. Heavy, thick-walled upright vessels. Probably no handles. Form of base not known.

SB1. Shallow bowls with outcurved rims. Diameter generally 20-30cms.

SB2. Shallow bowls with incurved rims. Diameter generally 20-30cms. The distinction between SB1 and SB2 is not always clear-cut, many rims being almost straight.

SB3. One example only. Upright form, slightly incurved rim.

SB4. Various bowls with an external groove below the rim.

SB5. One example only. Upright form with thickened rim.

SB6. One example only. Fairly heavy bowl, with rather thick, rounded rim.

SB7. One example only. Perhaps used as a lid.

SB8. Various bowls with apparently related shapes.

SB9. Various upright bowls.

SB10. One example only. Heavy, deep bowl with thickened rim.

SB11. Two examples only. Thick, shallow bowls.

SB12. One example only. Large, heavy, flat-based bowl; rim lost.

SG1. One example only. Goblet or footed bowl.

SP1. One example only. Platter or tray. Rather a small example of this vessel form.

MJ1. Short, fairly upright necks of variable form but without external groove. Vessels small to medium-sized, some (most?) with handles. All ware 1a except the unique MJ1.1.5, which is 1c.

MJ2. Similar to MJ1 but characterised by external groove below rim. All ware 1a except the illustrated example of MJ2.1.1 which is 1c; other examples of MJ2.1.1 are of ware 1a.

MJ3. Globular vessels of various sizes with short necks, some having handles. All ware 1a.

MJ4. Rounded, out-turned rim separated from shoulders by a well-marked constriction. All ware 1a.

MJ5. Tall, wide neck sloping inwards towards rim, sometimes with intermediate bulge. Uncommon; only the illustrated examples and a second MJ5.2.1 occur. MJ5.1.1 is ware 1a; MJ5.2.1 (two examples) and MJ5.3.1 are ware 1b; MJ5.4.1 is ware 3 though perhaps rather large to come from a "keg"; MJ5.4.2 is ware 2a.

MJ6. Low necks from amphora-type jars with square or rounded shoulders, varying considerably in detail. All six examples of MJ6.1, including the three illustrated, are ware 2a, as are MJ6.2.1 and 6.2.3. MJ6.2.2 is ware 2c.

MJ7. Large hole-mouth jar. Two examples only, wares 1a and 1b.

MB1. Shallow bowl with slightly outcurved rim. One example only, ware 1a.

MB2. More upright form than MB1, with more-or-less marked external groove below rim. Four examples only, all illustrated, all ware 1a.

MB3. Incurved rim. One example only, ware 1a.

### 9.6 Type-series of bases

This was drawn up from large fragments collected at random, supplemented by smaller pieces from the sample areas. In some cases it proved possible to suggest which rim types might be associated with a particular type of base.

Silt base type 1. (Figure 9.19.1; Figure 9.21.1, 2, 3). Round. Interior ribbed, exterior left unsmoothed. Very numerous. Surviving parts of the lower body demonstrate that these bases derive from vessels of many types and of widely varying diameter. It seems probable that all of SJ1 and SJ2, and at least a proportion of SJ4, 5, 6 and 7 had round bases. Hypothetical reconstructions combining this type of base with rims of types SJ1.1.1 and SJ5.10.1 are drawn as Figure 9.21.7 and 9.21.5 respectively.

Silt base type 2. (Figure 9.19.2). Flat. Thick, heavy, poorly-finished, many marked on underside with evidence of having been string-cut from the clay on the wheel. Finger-impressed around the base of the body, the only wholly-preserved example having eight impressions. Base diameter normally 8-10 cms., but one example 6 cms. only. Where part of body survives it is always fairly upright with indication of maximum diameter 14-20 cms. Of four examples where external ribbing could be looked for, two were certainly ribbed and two probably so. Two examples lightly fired. Indications are that this type of base belongs to type SJ6, and particularly SJ6.3 or 6.6, though it may not be common enough to belong to both.

Silt base type 3. (Figure 9.19.3). Flat. Not finger-impressed. Base diameter normally 7-8 cms. but one example 4 cms. only. Better made and less heavy than preceding; only the 4 cms. diameter example appears to have been string cut, all others sufficiently preserved to show features having concentric grooves and ridges showing they were completed on a wheel. Where part of body survives it is more rounded than on type 2, with indications of maximum diameter 16-24 cms., producing a vessel that would not have stood very firmly on a flat surface. Some bodies were certainly ribbed but others probably not. Three examples were lightly fired, two badly overfired. Indications are that this type of base belongs to SJ5, and particularly SJ5.8, 5.9 or 5.17, though it may not be common enough to belong to all three. A hypothetical reconstruction combined with SJ5.8.2 is drawn as Figure 9.21.6.

Silt base type 4. (Figure 9.19.4). Flat. Base diameter normally 4-8 cms., but one example 10.5 cms. Body angle variable but always shallower than types 2 and 3. Relatively smooth interior suggests this type derives from bowls.

Silt base type 5. (Figure 9.19.6-8). With base-ring. Fairly thick and heavy. Base diameter (over ring) 8-13 cms. No evidence of external ribbing. Body-shape apparently somewhat globular and in one example maximum diameter probably about 19 cms. Lack of internal smoothing suggests a restricted form, possibly among SJ4.4 - 4.9. Note considerable variability, including one example whose round base projects below base ring (Figure 9.19.8).

Silt base type 6. (Figure 9.19.9). Closely related to foregoing. Only one example seen. Unusual version of the silt ware, with many large vegetable inclusions. Lack of internal smoothing suggests a restricted form.

Silt base type 7. (Figure 9.19.10). Recessed base. Only one example seen. Well made, and carefully smoothed inside so probably from a bowl, the most likely

type being SB4.

Silt base type 8. (Figure 9.19.5). Round, with intentional central hole made before firing. Only one example seen. Interior smoothed so probably from a bowl or lid. Bases with such holes occur, infrequently, in New Kingdom contexts at Amarna but are of a somewhat different type [3] as are those seen by the writer in late 18th/early 19th Dynasty contexts at Memphis.

Note that one further silt base is classified as a silt bowl, SB12.1.1

Marl base type 1. (Not illustrated). Round. Much the commonest marl base type. All examples seen were of marl ware 1a. It seems probable that all of MJ1-4 had bases of this type.

Marl base type 2. (Figure 9.19.11-13). With base-ring. Four examples seen, all slightly different. All of marl ware 1a. In spite of considerable variations in thickness of wall and of base-ring, diameters over base-ring all 9-11.5 cms., suggesting vessels of different sizes may have had bases of similar diameter. Degree of internal smoothing is variable, but all probably derive from bowls. Note one example whose round base projects below base ring (Figure 9.19.13) (compare silt base type 5).

Marl base type 3. (Figure 9.19.14). Round, amphora-type base. One example only, marl ware 2a. Assumed to belong to type MJ6.

#### 9.7 Miscellaneous features

Handles. Sherds with handles were fairly common, vertical predominating but horizontal ones (on silt ware) also being seen. No attempt was made to create a type-series, but analysis was undertaken of those found in the sample areas (see below). Unfortunately there were few cases of rim and handle on a single sherd, only the following (all with vertical handles) being identified: SJ1.1.3, 2.2.3, 2.6.1, 2.6.4, 3.2.1, 4.1.1, 4.4.1, 4.5.1, 4.8.1; MJ3.2.2.

Two sherds were found, each with a pair of vertical handles close together. One of Silt Ware is probably from a jar of type SJ2 at least 35 cms. in diameter (Figure 9.6a); the other, of Marl Ware 1a, from site P1, is also from a jar, of unidentifiable type but (surprisingly) not especially large (Figure 9.6b). One sherd of Silt Ware carried a complete horizontal handle and, 8 cms. away, the stump of a second, probably vertical. It may derive from a jar of type SJ1 or SJ2.

String-impressions. A number of sherds with string-impressions were seen; a statistical analysis of those from the sample areas is given below.

White spiral slip or wash. This treatment of Silt Ware sherds has been described above and a statistical analysis is given later.

"Wasters". Eight Silt Ware sherds from the sample areas, and several others noted at random, were fired black and so grossly distorted that in the vicinity of a kiln they would undoubtedly have been described as wasters. Since it is inconceivable that kilns should have been constructed so far from sources of silt clay, water and fuel, an alternative explanation needs to be sought. Unless they were brought, as sherds, for a purpose we can hardly even guess at,

<sup>[3]</sup> Information kindly supplied by Pamela Rose.

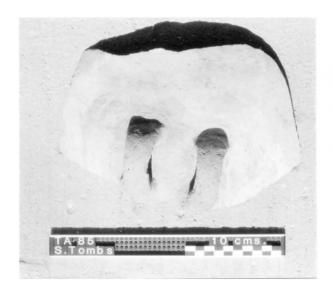




Figure 9.6a (left) and 9.6b (right). Sherds with paired handles.

presumably we must suppose that some seriously malformed vessels were actually deposited in the tombs along with the perfect examples. Alternatively, is it possible that a conflagration in one or more of the tombs could have had this effect? If so, why are there so few such sherds? Insofar as they could be identified they appeared to derive from type SJ2, which the potters sometimes had difficulty in firing satisfactorily.

Pierced body-sherds. Six Silt Ware sherds, one from a sample area, each had a hole 0.5 - 1.0 cm. diameter intentionally pierced from the inside before firing (Figure 9.7). They do not appear to be from jar-stands, as such sherds often are, because the exterior of the vessel is convex at this point and because one has a probable handle-stump. Might the holes have served to allow fermentation gases to escape? If so, and if the jar contained liquid, it must have been only half full since the sherds seem to come from the central part of the vessels. Alternatively, could the jars have been ritually "killed" during manufacture? [4]

Applied decoration. Three Silt Ware sherds (two drawn as Figure 9.22.3) from sites A, L and N, carry fragments of relief decoration, all clearly parts of human arms and in one case a breast. The decoration has been applied to the vessel, not pinched up from it; the breast has no pierced hole so did not function as a spout. The silt ware appears to be of the usual kind, and the good finish, wall thickness and curvature would best suit jars of type SJ5. Janine Bourriau points out that similar features are not usually later than the New Kingdom and the present examples may be of that date, though statistically the probability should be low.

Painted decoration. Only one sherd of this period (?) was found with painted decoration (Figure 9.22.4). The ware appeared to be the usual silt but had been red slipped before being painted in black. The combination of careful finish, thick wall and upright stance cannot easily be ascribed to any vessel in the existing type-series.

<sup>[4]</sup> I owe this suggestion to Janine Bourriau.

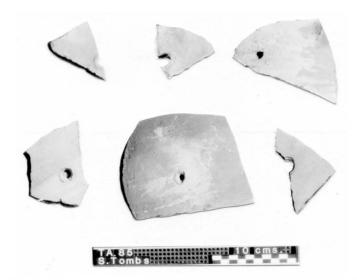


Figure 9.7. Silt sherds with holes pierced before firing.

Potmarks. Only three sherds with potmarks were found, and only one of these was from a sample area, so their use can hardly be said to have been general at this time. One (Figure 9.22.2) is incised on the exterior of a keg body-sherd (Marl Ware 3); another (Figure 9.22.6) on the exterior of a silt base; the third (Figure 9.22.7) on the interior of a silt sherd so carefully smoothed internally it must derive from an open form.

"Stoppers". In sample area L there occurred two almost flat Silt Ware sherds trimmed to an approximately round shape. One (Figure 9.22.9) is fairly regular, diameter about 7.5 cms.; the other is less carefully cut, with a diameter varying from 6.5 to 8 cms. They would both be too small to fill the mouths of any but the very smallest vessels, but could well be used for this purpose if packed around with mud or vegetable matter. It is perhaps surprising that no others were found. No mud sealings were found either, but these could hardly have survived a century of weathering.

"Gaming Counter". One Silt Ware sherd from site J had been similarly trimmed to a diameter of about 3.5 cms. (Figure 9.22.8). Such sherds abound on domestic sites, where they are generally interpreted as gaming counters. That only one should have been found in this assemblage is significant.

Crucible fragment? One Silt Ware sherd from site J (not illustrated), approx. 3 x 2 cms., black and distorted, had clear traces of copper or bronze adhering to one surface.

#### 9.8 Statistical analyses

These were carried out to attempt to answer the following questions:-

- (1) What size and shape were the vessels represented by the sherds?
- (2) What were the relative numbers of vessels of different wares and forms, and can this cast light upon the use to which they were put?
- (3) Is there any significant difference between the sherds found at different sherd-sites, which might suggest that the tombs associated with them were used for different purposes or at different periods?

At each of the eight selected sites every sherd within the sample area was classified and counted, except that at site X there were seen to be a number of Coptic sherds, not always easy to distinguish in their weathered condition, and which could bias the sample. At this site, therefore, only rim-sherds were considered, Coptic ones being distinguishable by form as well as fabric.

Rims. All rim-sherds from the sample areas were classified according to the type-series, except for a few too fragmentary or too weathered to be identified. The percentage of the vessel rim represented by each individual sherd was then estimated and these figures totalled to show the equivalent number of complete rims present (though of course the number of actual vessels contributing the fragments would have been much higher). [5] The detailed results are given in Appendix B. There may be some significance in the high proportion of SJ1.1 at sites N and X and of SJ5.9 at J and L; however, the similarities are far more striking than the differences and it seems clear that the tombs concerned were all receiving vessels of similar types over a similar span of time. Furthermore, inspection of the sherd-sites which were not sampled leaves a very clear impression of a similar pattern of deposition.

Table 9.2 Summary of Appendix B.

Vessel Category	Equivalent Vessels	%
Silt Jars	153.95	92.0
Silt Bowls	6.35	3.8
Silt Platters	0.05	=
Marl Jars	6.90	4.1
Marl Bowls	0.10	0.1
	167.35	100.0
Jars 96.1%	Silt Vessels 95.8%	
Bowls 3.9%	Marl Vessels 4.2%	

Bases. In the sample areas silt bases were classified only as round or flat since the latter were often too fragmentary to be subdivided; there were no ring-bases. All marl bases were round. The percentage of the base represented by each sherd was estimated by eye, and these percentages totalled for an estimate of the equivalent number of complete bases.

The total figures correspond well to those derived from rims (150.4 silt and 6.3 marl excluding site X: Appendix B) though individual sites are not always in accord. They demonstrate that some 97% of the silt vessels and almost all the marl vessels had round bases; it is permissible to deduce from the evidence of the rims and the bases that round-bases jars, chiefly of silt ware, predominated in the assemblages.

<sup>[5]</sup> Measurement of the rim diameters was greatly speeded up by the kind loan of a set of Diametron templates by Pascale Ballet of the Institut Français d'Archéologie Orientale in Cairo.

Table 9.3 Equivalent number of bases.

Sherd-site	Silt Round	Silt Flat	Silt Total	Marl Type 1	Marl Type 3	Marl Total
Α	41.0	0.7	41.7	2.0	-	2.0
D	20.0	1.0	21.0	1.0	-	1.0
F	8.5	-	8.5			-
F1	20.0	-	20.0	0.2	-	0.2
J	13.0	0.5	13.5	2.0	-	2.0
L	30.0	1.5	31.5	-	-	-
N	*14.5	0.7	15.2	0.5	1.0	1.5
	147.0	4.4	151. <b>4</b>	5.7	1.0	6.7

<sup>\*</sup>Includes 0.5 type 8, with hole.

All marl type 1 are Marl Ware 1a; marl type 3 is Marl Ware 2a.

Handles. Wherever possible, handles were classified as vertical or horizontal, otherwise "uncertain" (though there are indications that most of these were actually vertical). A completely preserved handle was counted as one unit; where only one end was preserved as 0.5 unit. Two units per vessel were assumed, in spite of evidence (see above) that occasionally there were more.

Table 9.4 Equivalent number of vessels with handles.

Sherd-site	e Silt	Silt	Silt	Silt	Marl Ware	Marl Other	Marl
	Vert.	Horiz.	Uncert'n	Total	1a(Vert.)	(Vert.)	Total
Α	3.25	0.50	2.00	5.75	0.50	-	0.50
D	3.25	-	-	3.25	0.50	-	0.50
F	1.75	0.25	0.50	2.50	-	0.25	0.25
F1	3.75	0.50	1.50	5.75	1.50	=	1.50
J	1.50	-	0.50	2.00	1.00	-	1.00
L	9.00	-	2.50	11.50	0.50	0.50	1.00
N	2.00	-	0.75	2.75	1.75	-	1.75
	24.50	1.25	7.75	33.50	5.75	0.75	6.50

All marl handles were vertical

On the basis of the 150.4 silt and 6.3 marl vessels derived from the number of rims, it appears that rather more than 20% of the silt vessels had handles, horizontal ones being rather uncommon, and that most marl vessels had vertical handles.

String impressions. The imprint of string used to hold pots in shape before hardening is found in many periods. Sample-area sherds so marked were separated from other body-sherds, but it must be stressed that some silt sherds

Table 9.5 Equivalent number of string-impressed vessels.

Sherd-site	Silt Ware	Marl Wares
A	4.25	0.25
D	0.25	-
F	1.50	0.20
F1	1.00	0.10
J	2.00	=
L	4.25	_
N	2.25	-
	15.50	0.55

may have had such traces obliterated by weathering and the number of silt vessels is thus a minimum figure. The diameter of the part of the vessel with string-impressions was measured with the Diametron and the percentage of the girth at this point represented by the sherd was calculated. The percentages were then totalled to arrive at the equivalent number of vessels.

Table 9.5 demonstrates that at least 10% of silt vessels and a similar proportion of marl vessels seem to have been manufactured in this way. Not surprisingly, most sherds are from the central area of the vessel and it was observed that the diameter was normally 25-30 cms., implying that vessels with a maximum diameter below this range were not normally so treated.

White spiral slip or wash. Sherds displaying evidence of this decorative treatment were measured in the same way as those with string-impressions and the equivalent number of vessels calculated. This should again be regarded as a minimum figure since weathering may have obliterated other examples.

The sherds appear to derive solely from jars; the vessels are equivalent to 3.3% of silt jars (3.2% of all silt vessels). If they derive from type SJ1, as size and shape appear to indicate, then it is unlikely that all of SJ1 were so decorated.

Table 9.6 Equivalent number of white spiral decorated vessels.

Sherd-site	Silt Ware only
A	1.0
D	0.1
$\mathbf{F}$	: <b>-</b>
F1	0.2
J	2.0
$\mathbf{L}$	0.5
N	1.0
	4.8

Other body-sherds with features.

Table 9.7 Silt body-sherds with features, present in insignificant numbers.

Shard-site	"Wasters"	Pierced sherds	Potmarks	"Stoppers"
onero-site	Hasters	rierced sherds	I Utiliai Ko	DIODDCIS

Α	1		1	-
D	1	-	-	-
F	3	-	-	-
F1	2	-	-	
J	:=	=	_	-
L	1	-	-	2
N		1	-	-
	8	1	1	2

Body-sherds. The total number of body-sherds from the sample areas, excluding rims, bases and handles but including sherds in tables 9.5 - 9.7, was as follows:-

Table 9.8 Total body-sherds.

Sherd-site	Silt	Marl	Total
Α	3445	221	3666
D	974	39	1013
F	900	39	939
F1	2406	73	2479
J	4038	142	4180
L	5066	177	5243
N	2106	226	2332
	18,935	917	19,852
%	95.4	4.6	100.0

The close accord between the silt percentages in tables 9.2 and 9.8 confirms that silt and marl vessels were of similar general shape, since the proportion of rims to body-sherds is very different in open and restricted forms, a bowl producing many more rim-sherds than a jar.

Sherds of other periods. Sherds of the New Kingdom from the sample areas are included in Appendix A. Sherds of Coptic date from these areas numbered six from site A, one from site L and an unknown number from site X. None was found at the five other sites.

### 9.9 The nature of the assemblage

Around 96% of all vessels represented by the sherds were jars, and the remainder almost all bowls. Large coarse-ware storage jars and cooking-pots are totally absent, and the single platter is a small example. Only one "gaming counter" was found. Such an assemblage is totally uncharacteristic of a domestic site and rules out actual habitation of the tombs. It is, however,

perfectly consistent with their use for burials, the vessels having presumably held food-offerings for the dead, and mention of late coffins by earlier excavators leaves little doubt that this is what occurred. The few New Kingdom sherds are mostly of the 18th Dynasty and may have been left by the workmen; the occasional later New Kingdom examples were perhaps associated with an initial re-use of one or more tombs for burials, but it seems likely that the majority of the tombs remained unused until the period under consideration.

#### 9.10 Parallels

Local parallels. Silt Ware sherds of the Late Dynastic Period may pass unnoticed among quantities of earlier material, but the marls, and particularly Marl Ware 1, are fairly conspicuous. Nevertheless, the writer found only four such sherds in the course of a number of forays into the Main City in 1981 and 1985: two body-sherds lay in the wadi due east of the modern water tower, and two more (joining) just west of the house of Ra-nefer (N.49.18, see COA I: 9-15, Plate I). Occasional examples have turned up during excavation in the area of the Workmen's Village, notably a rim sherd of type MJ2.1 (E.E.S. No. 812 of 1980 from N18.(2)) which underlay the collapsed south perimeter wall. None has been noted in the North Tombs area. Two sherds of Marl Ware 1, both from jars and one again a rim of type MJ2.1, were seen at the Hatnub quarries.

A few kilometres north of Amarna are the rock-cut tombs of Sheikh Said. Most sherds in their vicinity are of Coptic date, but those of the Late Dynastic Period are not uncommon. Rim-sherds of SJ2.6 (two examples), 5.3 and 5.7 were seen, as well as a rim of MJ2.1 and 7 other marl body-sherds, which is sufficient to make re-use of these tombs for Late Dynastic burials quite likely. All sherds seen at el-Bersheh were of other periods. Across the river at Meir, sherds seen in the vicinity of the tombs included just one heavily-weathered Marl Ware rim, apparently Marl Ware 1a, probably form MJ1.1.1. Marl Ware 1a body-sherds were also noted by the writer in surface contexts on the city mounds at Hermopolis (el-Ashmunein).

Unpublished parallels elsewhere in Egypt. Sherds of Late Dynastic date have been examined by the writer at sites elsewhere and are mentioned here by kind permission of the Field Directors concerned.

In particular, an extensive series of the marl jars, together with examples of silt and other marl vessels, has been drawn up by Helen Jacquet-Gordon from work at Karnak North, as a contribution to the forthcoming Manual of Egyptian Pottery. Special thanks are due to Mme Jacquet-Gordon for her generosity in making this work available in advance of publication and for many helpful discussions of the pottery of this period. The abundant marl sherds seen by the writer, here and at East Karnak, are almost all of Marl Ware 1, visually indistinguishable from those at the Amarna South Tombs in respect of both ware and form, except that at Karnak a greater number of rim-types occurs.

Even in the far south of Egypt, at Qasr Ibrim in Nubia, the same Marl Ware 1a and some of the same rim forms are found, including MJ1.1.3, 2.1.2, 2.1.3, 3.1.1, 3.2.1 and 3.2.2, MB2.2.1 and 2.3.1. In the north, at Memphis (Kom Rabi<sup>c</sup>), a few Late Dynastic sherds lay in disturbed material overlying New Kingdom strata

excavated in 1984. Once again these were of Marl Ware 1a and rims belonging to the MJ1, MJ2, MJ3 and MJ4 series were all seen, including one MJ2.1.2, though others differed a little from the examples at Amarna and may be of slightly different date. In November 1985 excavation of a closed context (a grain silo) produced part of a keg neck in Marl Ware 3.

Published parallels. In the short time available between the completion of fieldwork and preparation of this report it has not been possible to research the published material thoroughly. However, at Qurna the store-rooms of Seti I and secondary burials in cemetery B yielded jars and bowls very similar in form to some of the South Tombs vessels, including several whose description as "greenish-grey" points strongly to marl Ware 1 (Petrie 1909: 15 and Plates XLIX-LI).

#### 9.11 Dating

Petrie (1909: 15) dates the Qurna pottery to "about the XXIInd dynasty" but David Aston [6] believes it is unlikely to be earlier than 750 B.C. Vessels found with the keg-neck in the grain silo at Memphis are provisionally dated by David Aston to the second half of the 22nd Dynasty. At Qasr Ibrim, where there is a temple of Taharqa (Plumley and Adams 1974: 229), occupation of the site is certain in the 25th Dynasty but so far unattested in the preceding or succeeding dynasties, when there is quite a strong possibility that it was deserted. At Tell el-Fara'in (Buto) in the Delta, where the writer is preparing for publication pottery of the Saite period excavated by the Deutsches Archäologisches Institut in Cairo, preliminary work indicates an assemblage different from the South Tombs material, though having some points of similarity to it. Thus it seems most probable that the South Tombs were used for burial purposes, over a short span of time, in or about the 25th Dynasty. Where the people concerned lived it is impossible to say at present, but in view of evidence from Sheikh Said we need not assume that it was nearby, and one obvious candidate is the town of Hermopolis across the river. The long occupation of the "River Temple" site beside el-Hagg Qandil (COA I: 133), from the Amarna Period to Roman times, points to another and more local possibility.

#### 9.12 Place of manufacture

The amphorae of Marl Ware 2, and perhaps also the kegs of marl Ware 3, are likely to be imports from somewhere in the Levant. Use of Marl Ware 1 for bowls as well as jars points to an Egyptian origin, but in view of the wide distribution of this ware we need not suppose it to be in the neighbourhood of el-Amarna; it is so very common at Thebes that the kilns may be somewhere not too far distant. Wherever they lie, they were clearly able to cater for customers throughout the country, whose desire seems to have been for the vessels and not merely for their contents; a large and well-organised industry is to be postulated. The silt

<sup>[6]</sup> Unpublished thesis on "Tomb Groups from the end of the New Kingdom to the beginning of the Saite Period", Birmingham University.

ware vessels, on the other hand, were probably a fairly local product, some of whose forms, as perhaps also the white wash finish, appear to imitate the marls.

### Acknowledgements

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Appendix A. Table 9.9. Sherds from the South Tombs sherd sites which are certainly or possibly of New Kingdom date (identifications by Pamela Rose).

Sherd-	Ware	Form-	Style	Description	Remarks
site		Group			_
A •	I.6?	?	3	2 rim-sherds from short-necked jars	Perhaps late N.K.
A	III.2	24?	4	Handle	
A*	III.4	?	3	Body-sherd	
A	IV.3	?	7	Body-sherd of imported amphora	
SA	I.5	17	?	Sherd from neck and shoulder of jar	Not certainly N.K.
A2	III. 1	?	1	Ring base, perhaps from large bowl	
D•	I. 1	?	91	Blue-painted body sherd	Very weathered
D•	I.4	17?	2	Slipped neck of large jar	Rim lost
D•	I.4	?	3	Body-sherd	Probably Ramesside
D	III.2?	20?	4	Part of amphora base	
D•	III.5?	?	4	Handle from large jar	
J•	I.4	?	3	4 body-sherds	
J•	v.z	?	3	Body-sherd	
L•	III.3	?	3	Body-sherd	
N*	I.4?	?	3	Body-sherd	
N	III.1	?	1	2 handles from large jars	1 short for Dyn.18
N*	III. 1	?	?	Body-sherd	Surface weathered
N	III.2	?	3	1 shoulder-sherd, 1 body-sherd	Probably 2 vessels
N	IV.2	?	2	Body-sherd of imported amphora	
N	IV.3	?	3	2 Body-sherds of imported amphora(e)	
N	IV.3	?	7	3 Body-sherds of imported amphora(e)	
Nr N	IV.3	?	7	Body-sherd of imported amphora	
P	III.1	21	3	Complete amphora base	
P	III.1	?	1	Handle from large jar	Short for Dyn.18
P	III.3	21	3?	Handle from amphora	
P	IV.2	?	2	Body-sherd of imported amphora	
P1	III.1	11?	1	Ring-base of large bowl	
P1	111.2	13?	3	Complete amphora base	
P1	III.5	21	3	Complete amphora base	
P1	IV.2	?	2	2 body-sherds of imported amphora(e)	
P1	IV.2	?	7	Body-sherd of imported amphora	
P1	IV.3	?	7	Body-sherd of imported amphora	
R	IV.2	?	2	Body-sherd of imported amphora	
S	I.1	17	2	Biconical jar, base lost	From near Tb.12
S	S.III	21?	3	Sherd from neck and shoulder	
T	I.1	11	?	Rim-sherd of large dia. bowl	Very weathered
Т	III.6	13?	3	Body-sherd of ?large jar	
U	1.1	11	?	Rim-sherd of large dia. bowl	Very weathered
v	1.3	17?	?	1 neck-, 1 shoulder-sherd. Same jar?	Not certainly N.K.
W	E.III	21?	3	Sherd from neck and shoulder	
W	E.VI	?	7	2 body-sherds of imported amphora	Probably same vesse
XX	III. 1	?	1	Body-sherd of amphora	
Y	V.4	21	3	Part of amphora base	

<sup>\* =</sup> from sample areas; remainder from random collecting.

Appendix B. Table 9.10. Frequency of occurrence of rim-types in sample-areas. Excluded from count: 2 Late New Kingdom (?) sherds from A, 1 Coptic sherd from L, and 9 Coptic sherds from X.

Туре			No. o	f sher	ds per	site				Equivalent no. of vessels per site								
	A	D	F	F1	J	L	N	X	Total	A	D	F	F1	1	L	N	X	Total
SJ			•						~									
1.1	56	9	2	4	61	16	27	41	216	6.8	1.4	0.4	0.4	8.0	2.4	3.8	5.6	28.8
1.2	4	-	•	2	3	-	1	1	11	0.5	-	-	0.2	0.4	-	0.1	0.2	1.4
1.3	5	4	1	1	5	2	3	5	26	1.0	0.7	0.2	0.1	0.9	0.4	0.5	0.6	4.4
1.4	-	: <del>-</del>	-	-	-	-	=	-	-	-	•	-	-	*	<b>=</b>	-	=	=
1.5	-	-	•	1	•	-	-		1	-	•	-	0.4	-	-	-	-	0.4
1.6	1	.=	-		3	=	-	-	4	0.4	-:	-	-	0.6	×	-	-	1.0
1.7	-	7 <del></del>	-	-	-	-	-	0 <del></del> 11	•	×	=	=		-	-	-	-	-
1.8	-			1		-	1	-	2	_	-	_	0.2		-	0.1	-	0.3
	66	13	3	9	72	18	32	47	260	8.7	2.1	0.6	1.3	9.9	2.8	4.5	6.4	36.3
																		200 540
2.1	•	2	-	:=	1	-	-	s <del>.</del>	3		0.2	*		0.1			-	0.3
2.2.	4	3	7	4	3	13	4	1	39	0.5	0.4	1.1	0.5	0.4	1.5	0.5	0.2	5.1
2.3		•	-	:	-5	-	-	1	•	-				-	-	-	-	-
2.4	1	1	2	2	2	18	1	2	29	0.2	0.2	2.0	0.3	0.3	2.4	0.1	0.2	3.9
2.5	5	-	3	2	2	5	æ	3	20	0.5	-	0.5	0.3	0.2	0.6	( <b>-</b> 0)	0.4	2.5
2.6	5	2	5	3	4	20	3	3	45	0.6	0.4	8.0	0.4	0.5	3.1	0.3	0.4	6.5
2.7	1-	-	-		*	1	i <del>s</del>	•	1	-	=	=	-	-	0.2	3-3	1-1	0.2
2.8		•	2	2	-	-	-	1	5	-	-	0.2	0.3	-	•		0.2	0.7
	15	8	19	13	12	57	8	10	142	1.8	1.2	2.8	1.8	1.5	7.8	0.9	1.4	19.2
										r								
3.1	-	•:	-	-	•		-	=		-		•	-	-	-	•	-	0.05
3.2	*	*	*	1	-	1	-	-	1	-	•		=	•	0.05			0.05
3.3	1	1	-		•	•	1	=	3	0.1	0.1	-		-	-	0.1	-	0.3
3.4	1		•		1		3 <del>=</del> 3		2	0.05			-	0.1	- 0.05			0.15 <b>0.5</b>
	2	1	=	-	1	1	1	*	6	0.15	0.1	1-2	=	0.1	0.05	0.1	•	0.5
4.1	1	_	_	_	2	1	_		2	0.1	-			_	0.1	_		0.2
4.2	2	=		_	_	•	-	_	2	0.3	_	1 <del></del> .	_	_	-		-	0.3
4.3	~	_	_		_		-	-		•	-		( <del>-</del> )	_	-	-	-	
4.4	1	_	-			-	-	-	1	0.1	_	K.	<u> </u>		=		-	0.1
4.5	-	_	10			1	•	_	1	-	_	-	-	_	0.2	-	_	0.2
4.6	1		-	1	-	1	1	_	4	0.2	-	-	0.4	_	0.2	0.3	-	1.1
4.7	-	-	1	-	-	-	-		1			0.3	-	-	-		-	0.3
4.8	2	-	1	-	-	1			4	0.3	_	0.2	-	-	0.2		=	0.7
4.9	-	-	-	-		.=	-		-	-	-	-		_		-	-	
Ŧ.0	7		2	1		4	1		15	1.0		0.5	0.4		0.7	0.3		2.9

	A	D	F	F1	J	L	N	X	Total	Λ	D	F	F1	J	L	N	x	Total
5.1	1	•				=	-	-	1	0.1	•	-	1.	-	-	-	-	0.1
5.2	-	-	-		4	-		-	4	3 <del>-</del>		-	-	0.5	=0	-	-	0.5
5.3	14	4	3	7	8	6	3	=	45	2.0	0.6	0.3	0.9	1.2	0.7	0.4	**	6.1
5.4	4	-	1	1	8	3	2	-	19	0.4	-	0.2	0.2	0.9	0.3	0.3		2.3
5.5	1	•		-	3	2	1	-	6	0.05	-	-	-	0.2	0.1	-	•	0.35
5. <b>6</b>	-	•	-		-	-	-	-	-	-	=	=		•	•	•	•	-
5.7	1	•	*	-	•	-	n <del>e</del> r	-	1	0.1	-	-	-	-	•	-		0.1
5.8	6	11	1	3	4	1	3	-	29	0.6	1.5	0.1	0.5	0.4	0.1	0.3	•	3.5
5.9	1	14	3	11	72	34	15	-	150	0.1	1.6	0.5	1.1	8.8	4.1	1.6	-	17.8
5.10	9	3	2	5.00	10		2	-	26	1.1	0.6	0.3		1.6	Ĭ.	0.4	=	4.0
5.11	3	1	1	1	5	•	1	1	13	0.3	0.2	0.1	0.1	0.7	-	0.1	2.0	1.7
5.12	7	-	•		5	•		1	13	8.0	-	:=		0.6	=	•	0.1	1.5
5.13	14	7	4	8	18	6	5	6	68	1.8	0.7	0.6	0.9	1.9	8.0	0.5	8.0	8.0
5.14	-	=	*	:: <b>-</b> :	•	-		-	-	•	•	-	-	-	-		•	-
5.15	14	4	-	2	6	-	3	-	29	1.4	0.3	•	0.1	0.6	•	0.2	=	2.6
5.16	2	1	*	4	4	-	1	-	12	0.2	0.1	; <b>-</b>	0.6	0.3	-	0.1	•	1.3
5.17	2	1	-	3	29	2	3	•	40	0.1	0.1		0.3	2.8	0.2	0.3	* <del>-</del> 7	3.8
5.18	1	•		II <del>-</del> N	•	-	1	-	2	0.1	-	-	•	-	-	0.1		0.2
5.19	_1	•	-		-		-	-	1	0.1	-	-	-	-	*	•	*	0.1
	81	46	15	40	176	54	39	8	459	9.25	5.7	2.1	4.7	20.5	6.3	4.3	1.1	53.95
6.1	1	•		-	*	2	-	-	3	0.1	-	-	-	-	0.7	•	•	8.0
6.2	1	•	•	•	•	•		-	1	0.2	-	-	1		-	-	*	0.2
6.3	36	3		1	9	4	7 <u>-</u>	•	53	4.5	0.4	-	0.2	1.2	8.0	-2		7.1
6.4	23	2	-	i <del>-</del>	1	2	2	1	31	3.3	0.3	.=	-	2.0	0.5	0.3	0.1	4.7
6.5	14	3	1	1	14		<b>:</b>	=	33	1.4	0.3	0.1	0.1	1.4		•	•	3.3
6.6	16	4	4	5	14	7	1	•	51	1.8	8.0	0.5	1.0	1.9	1.1	0.1	•	7.2
6.7	5	5	1	2	6		1.	=	19	0.5	0.5	0.1	0.3	0.5	-	-	-	1.9
6.8	10	7	-	5	19	8		-	49	1.3	0.9		0.7	2.0	1.6	-	-	<b>6</b> .5
6.9	1	3	•	1	4	=	1=	=	9	0.1	0.4	-	2.0	0.4	•	•	•	1.1
6.10	3		•	1	•	-	-	-	4	0.2	-	-	0.05		-	<b>=</b> ,	-	0.25
6.11	-	-	-	=	1	=	l <del>-</del>	-	1	•	•	=	i <del>s</del>	0.2	*	*		0.2
6.12		*	•	7000	1				2	0.1		-	-	0.2		-	-	0.3
	111	27	6	16	69	23	3	1	25 <b>6</b>	13.5	3.6	0.7	2.55	8.0	4.7	0.4	0.1	33.55
		_				-			_									
7.1	1	2	-	•	-	2	-	-	5	0.1	0.2	•	=	*	0.2	•	-	0.5
7.2	1	-				-	1		2	0.05		-	-	-		0.1		0.15
	2	2	-	-	-	2	1	-	7	0.15	0.2	-	=	-	0.2	0.1	-	0.65
Unidentified SJ																		
Unid			2	10			_	_										
	32	3	1	4	20	23	3	6	92	2.7	0.2	0.1	0.3	1.2	1.7	0.2	0.5	6.9
TOTA			. 2 22						4000	00.0-	40 -				04.55	100		150.05
-	316	100	46	83	350	182	88	72	1237	37.25	13.1	6.8	11.05	41.2	24.25	10.8	¥.5	153.95

	A	D	F_	F1	1	L	N	x	Total	A	D	F	F1	J	L	N	х	Total
SB																		
1.1	1	1	-	-	-	1	=	=	3	0.05	0.05	-		-	0.05	-	-	0.15
1.2	1	-	•	*	-	1	1	•	3	0.05	-	-	-		0.05	0.1	-	0.2
1.3	17	4	•	11	7	3	9		41	1.1	0.3	-	0.1	0.4	2.0	0.5		2.6
	19	5		1	7	5	10	-	47	1.2	0.35	-	0.1	0.4	0.3	0.6	-	2.95
2.1	4	2		1	5	3	5	-	20	0.2	0.1	_	0.1	0.2	0.2	0.2	_	1.0
2.2	1	-	•	-	-	1	1	-	3	0.05	U.1		-	-	0.05	0.05	_	0.15
~.~	5	2	-	1	5	4	6	-	23	0.25	0.1		0.1	0.2	0.25	0.25	-	1.15
	10Th																	
3.1	Ξ	-	=	_	1	-	3		4	-		-	-	0.2	-	0.4		0.6
4.1	*	-	=		-	-	-	1-	-	-	0-2	-	-	-		-	-	-
4.2	-	1	<u>=</u> ,	-	-	-	•	=	=	-	3-3	=	_		•	•	-	-
4.3	Ψ.	1	•	-	1	1	1	-	4	-	0.05	-	=	0.05	0.1	0.05	æ	0.25
4.4	-	•	-	-	Ä		*	•		=	12)	-	•	-	-	-	•	•
4.5	-	5 <del></del>	-	-	1	1	-	-	2	-	(=)	-	=	0.1	0.05	•	-	0.15
4.6	<u> </u>	-		-		2	-	-	2	-				0.15	0.1	0.0E		0.1
	-	1	-	-	2	4	1	-	8	-	0.05	-	-	0.15	0.25	0.05	-	0.5
5.1		1	_	1		_	1	_	3	_	0.1		0.1	-	_	0.05	_	0.25
5.1	•	1	-		-	-		-	J	-	0.1		0.1			0.03		0.20
6.1	_		-	-	-	-	_	-	_	_	6 <b>-</b> 1	_	-		-			_
<b>U.1</b>																		
7.1		-	-	-	-	-	-		•	-	•	-	-	-	-	:-		=
8.1	=	-	*	-	-	-	-	-	-	-	-	-	-	:-	-	a <del>-</del>	-	
8.2	-		1	-	.=	-	1	-	2	-	=	0.1		<del>-</del>	-	0.1	•	0.2
8.3	-	-	-	-	1	-	•	-	1	-	-	-		0.05		•		0.05
	-	*	1	-	1	_	1	-	3	-	=	0.1	-	0.05	Ħ	0.1		0.25
9.1	-	1-	•	-	:•	-	-	1	1	-	=	=	=	=	-	-	0.05	0.05
9.2	=	*	•	•	<b></b>	•	1	2	3	-		-	-	-	-	0.1	0.3	0.4
9.3	•	1=	-	-		-				-	•	•	•	-		0.1	-	0.1
9.4	-		-	-		<u> </u>	2	3	1 5							0.1	0.35	0.55
	-	-	•	-	-	_	E	J	J	_	_	-		_	_	0.2	0.00	0.00
10.1	_	2.					-	.=:		-		=		-		•	-	=
10.1																		
11.1	-		•				1	.=1	1	-			=		-	0.05	-	0.05
11.2	-			*	•	1	-	-	1	-	-	_			0.05	·		0.05
	_	-	-		-	1	1	=	2	-	-	-	-	-	0.05	0.05	-	0.1
12.1	-	•	-	-	11-1	-	*	4.	=	-	*	=		-	-	: <del>-</del>	=	*
TOTA	L SB													-				
	24	9	1	3	16	14	25	3	95	1.45	0.6	0.1	0.3	1.0	0.85	1.7	0.35	6.35

	A	D	F	F1	J	L	N	x	Total	A	D	P	F1	J	L	N	x	Total
SP																		
1.1	1.	-	-	-	•	•			1	0.05	-		-	•		£.	•	0.05
SG																		
1.1	•	=	**	-	-	•	-	-		=		•	-	=	=	•	-	
MJ	7			_	1		1	4	13	1.2	-	-	_	0.2	_	0.2	0.7	2.3
1.1	,	•	-	_	1	_	•	-	10	1.~				٠.~		0.2		
2.1	6	•	•	2	.=	3	2		13	1.1	-	•	0.7	-	0.8	0.3	=	2.9
3.1	•	-	•	-		-	-	•	-	-	:=:	-	-	-	-	-	-	=3
3.2	1			1	-	2	2	•	6	0.2	ni <del>-</del> pr	-	0.1	-	0.1	0.3	=	0.7
3.3	1			1		-	-	-	2	0.2	-	-	0.3		-	-		0.5
	2	-	=	2	-	2	2	•	8	0.4	10 <del></del> 4	=	0.4	-	0.1	0.3	7	1.2
4.1	_				1	_	_	9 <b></b> 0	1	_	=			0.2	-		-	0.2
4.1									-									
5.1	=	18	-	-	-	-	-	* (•)	-	-	•		*	-	E	-	-	-
5.2	-	( <b>-</b>	-			=	-	•	•		•	-	•	-	•	-	-	-
5.3	*	-		-	-	-	-	9-1	-	-	-	-	=	-	æ	=	•	Ξ
5.4	-	•	-	•	-	=	-	•	-	-	-	-	-	•	-	-	-	-
	-	-	E	*	-	-	_	-	-	-	-	-	<b>*</b>	-	-	=	-	-
6.1	_	_	2				-	-	_		_	_		•	-	•		
6.2	-		-		-	_	1		1				17	227	•	0.3		0.3
			-		-	-	1	<del>-</del>	1	-	-	_	-	-		0.3	-	0.3
7.1		•	=	-	=	=	1-1	•	•	-	-	-	-	-	=	Ħ	-	=
TOTA																		
	15	-		4	2	5	6	4	36	2.7		-	1.1	0.4	0.9	1.1	0.7	6.9
МВ																		
1.1	-		-	-	-	-	-	-			=	-	•	-		-	-	0 <b>=</b> 0
2.1		-		•	-	-	-	-	-	-	1.	-	-	=		-	*	-
2.2	19	-	:=	-	-		4.	-	-	-		*	•	-	-	-	-	•
2.3	•	=	=	*		s=	-	•		-	/ <del>-</del>	•	-		=	•	-	•
2.4	•	-	-	-	-		-	•	•	-	-	-	_	-	-	-	-	-
	-	-	-	=		:=:	-	-	S=1	-	-	-	-	-	8	-	-	=
2 1		VEX	80-	_	1		_		1	_		-	_	0.1	-	-	-	0.1
3.1 TOTA	л, <b>м</b> в	•	-	•	1	-	-	-	1		,			V. A				5.1
1015	<u>-</u>	-	-	-	1		_	-	1	-			-	0.1	-	-	-	0.1
	-						,				-	-330						
GRAI	ND TO	TAL.											-					
	356	109	47	90	369	201	119	79	1370	41.45	13.7	6.9	12.45	42.7	26.0	13.6	10.55	167.35

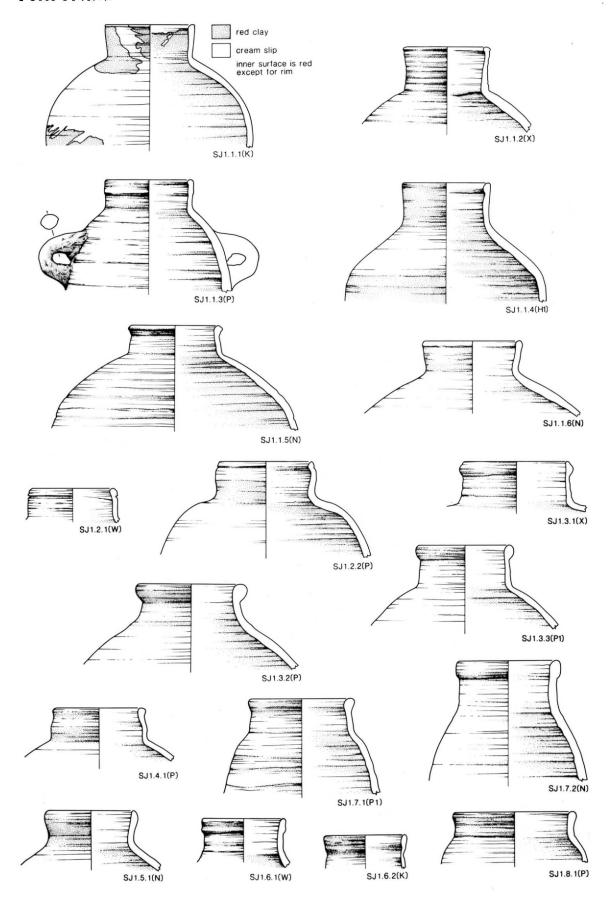


Figure 9.8. Silt Jars (drawings by A. Boyce, at one-quarter scale).

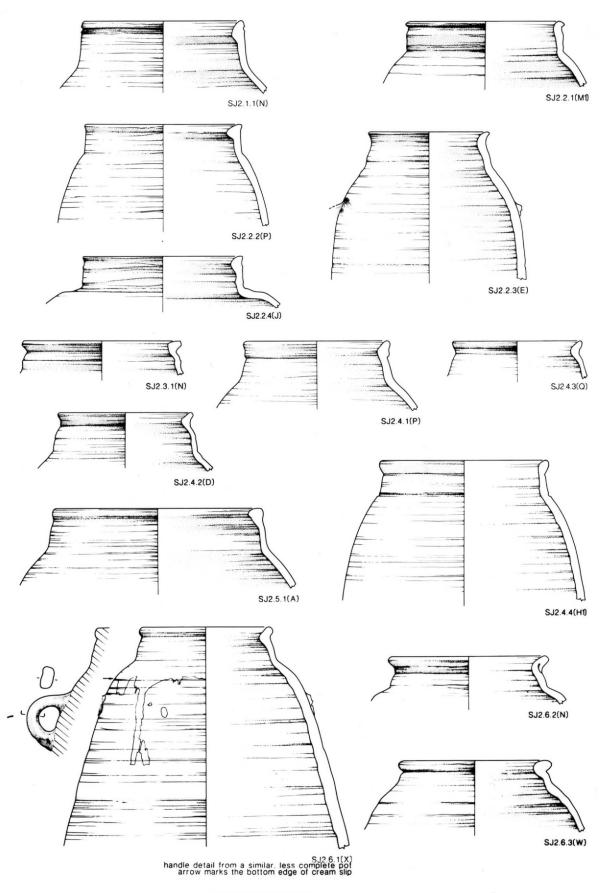


Figure 9.9. Silt Jars (drawings by A. Boyce, at one-quarter scale).

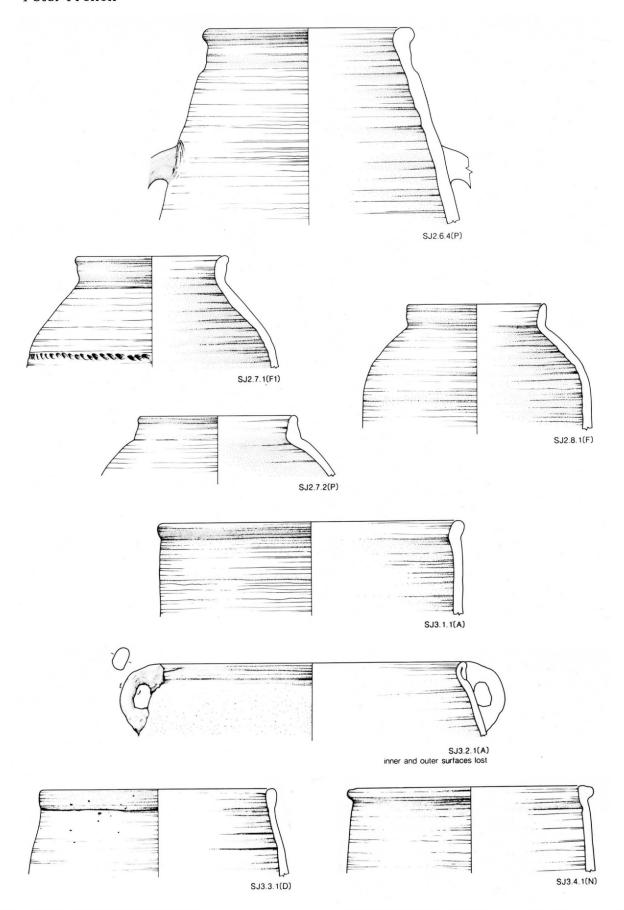


Figure 9.10. Silt Jars (drawings by A. Boyce, at one-quarter scale).

# Late Dynastic pottery

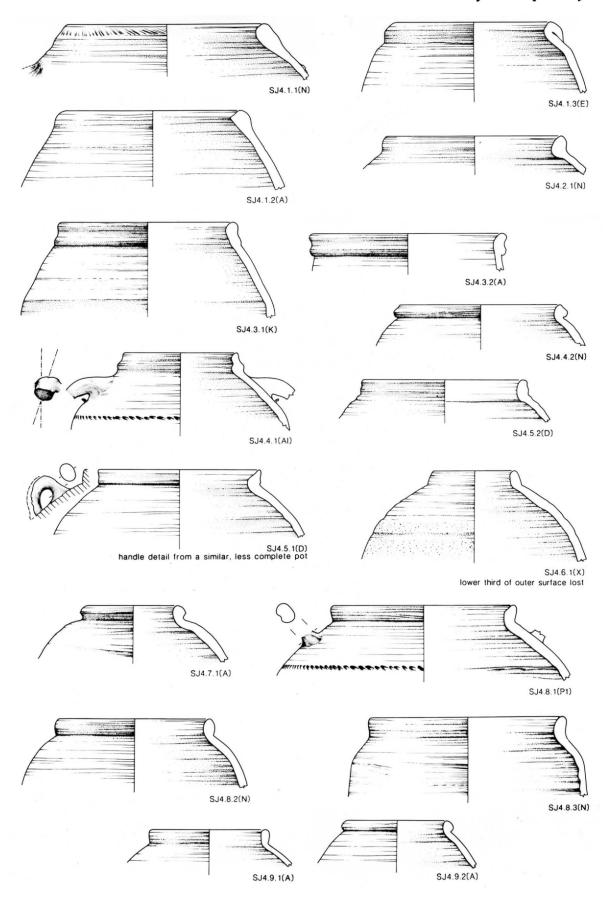


Figure 9.11. Silt Jars (drawings by A. Boyce, at one-quarter scale).

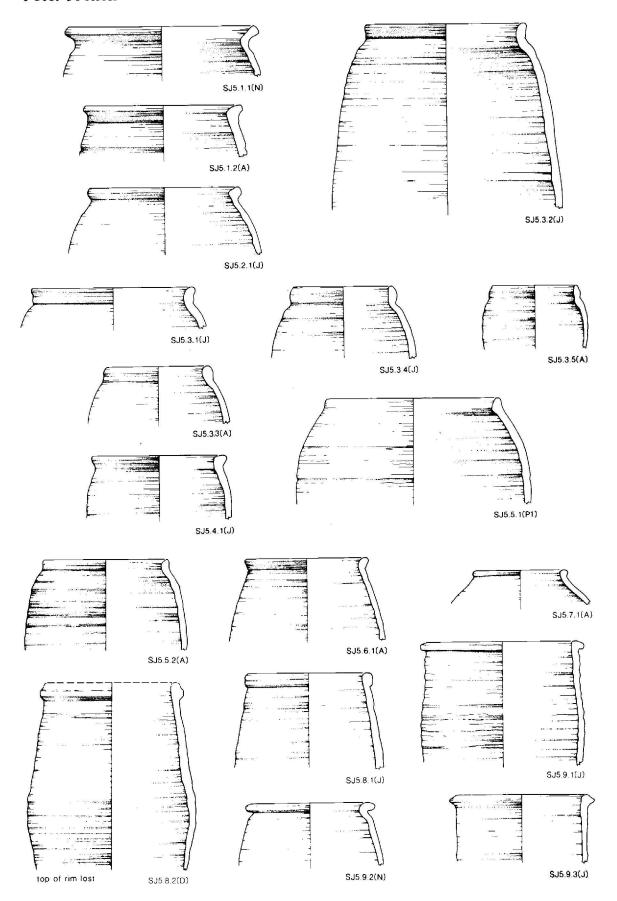


Figure 9.12. Silt Jars (drawings by A. Boyce, at one-quarter scale).

# Late Dynastic pottery

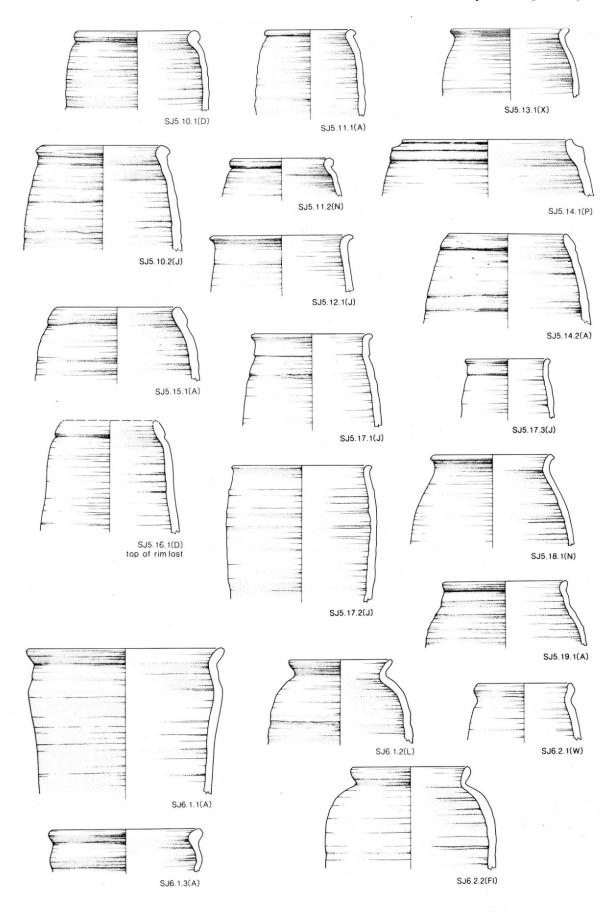


Figure 9.13. Silt Jars (drawings by A. Boyce, at one-quarter scale).

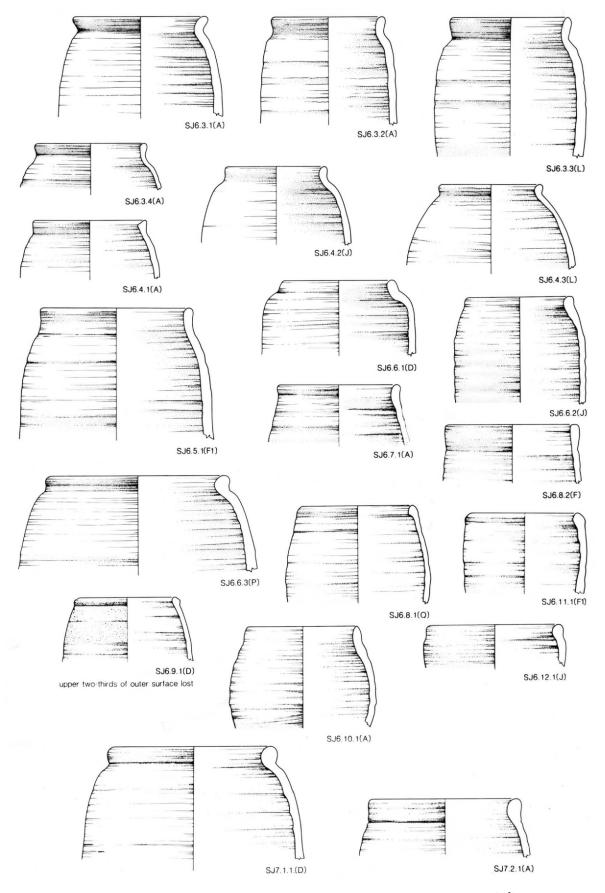


Figure 9.14. Silt Jars (drawings by A. Boyce, at one-quarter scale).

# Late Dynastic pottery

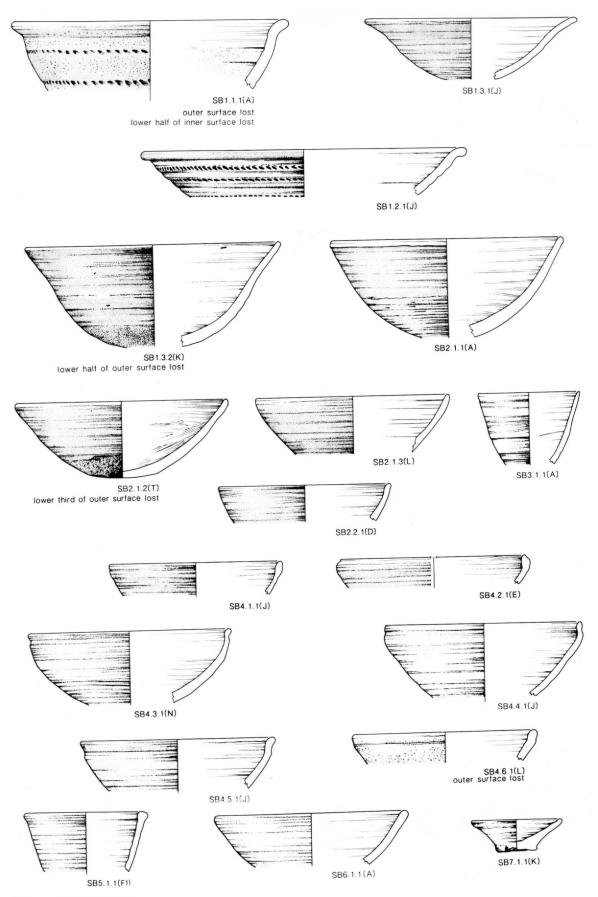


Figure 9.15. Silt Bowls (drawings by A. Boyce, at one-quarter scale).

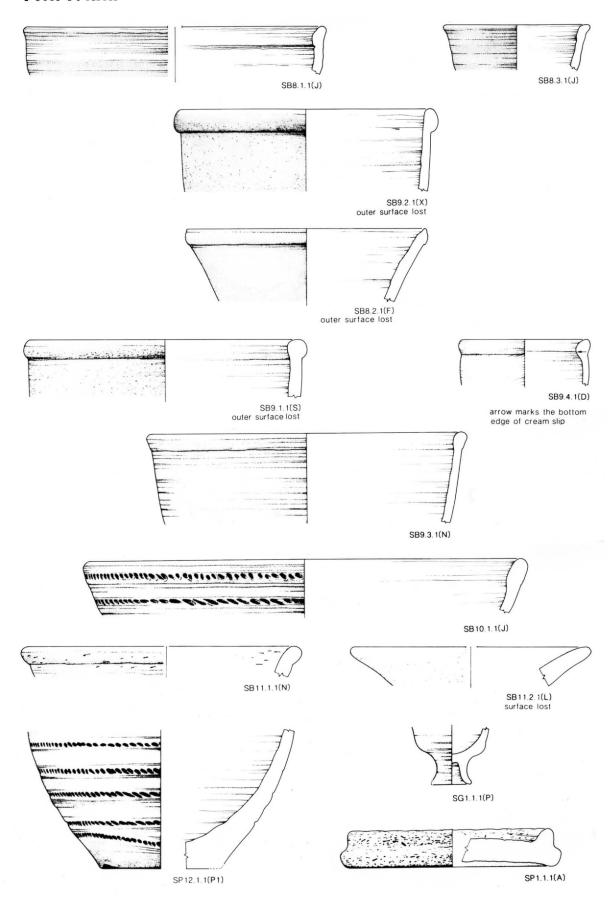


Figure 9.16. Silt Bowls, Goblet and Platter.

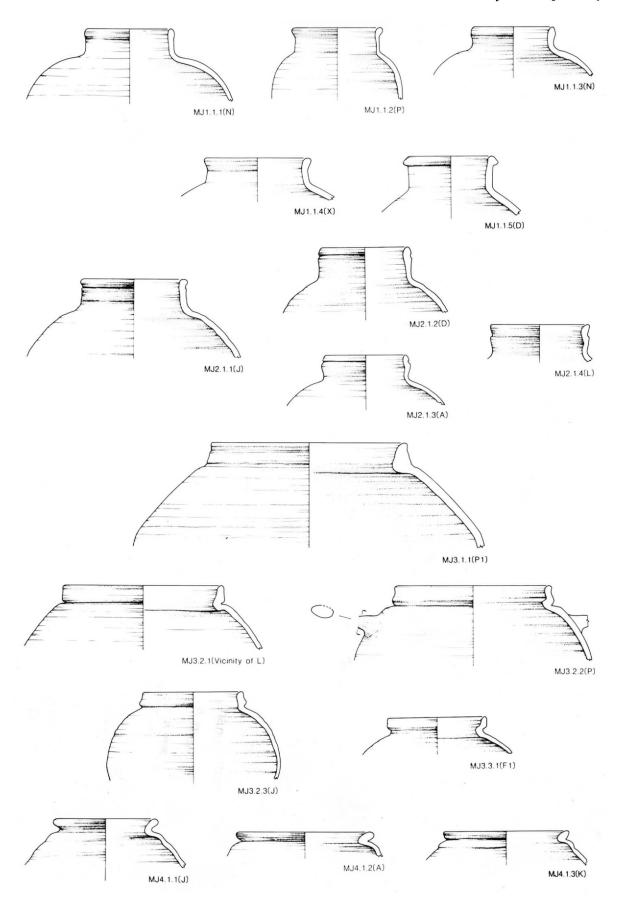


Figure 9.17. Marl Jars (drawings by A. Boyce, at one-quarter scale).

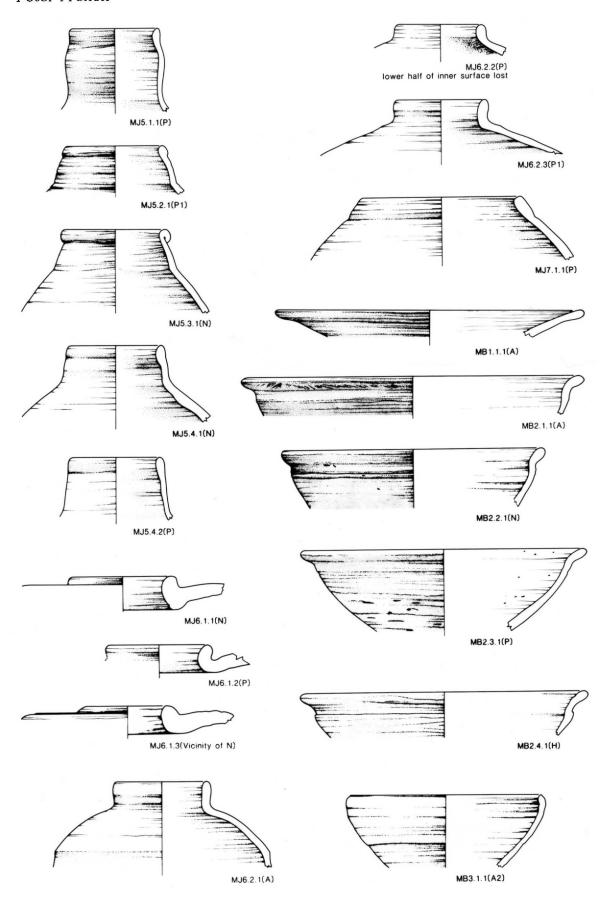
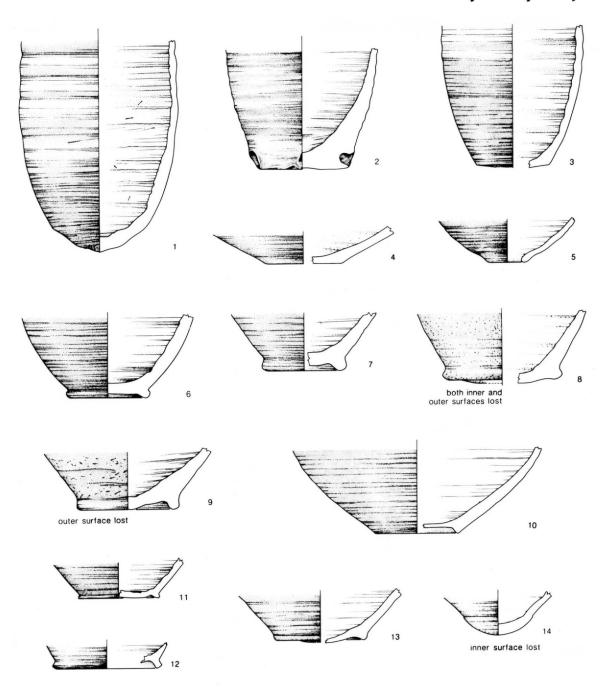


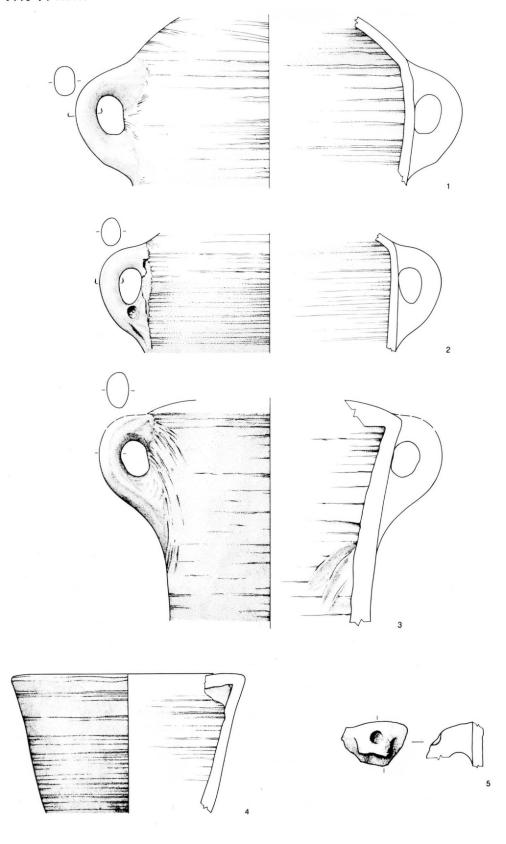
Figure 9.18. Marl Jars and Bowls (drawings by A. Boyce, at one-quarter scale).

# Late Dynastic pottery



- 1. Silt base type 1 (L)
- 2. Silt base type 2 (N)
- 3. Silt base type 3 (H)
- 4. Silt base type 4 (D)
- 5. Silt base type 8 (N)
- 6.-8. Silt bases type 5 (P1, P, A2 respectively)
- 9. Silt base type 6 (just south of P)
- 10. Silt base type 7 (A)
- 11.-13.Marl bases type 2 (A, XX, A respectively)
- 14. Marl base type 3 (N)

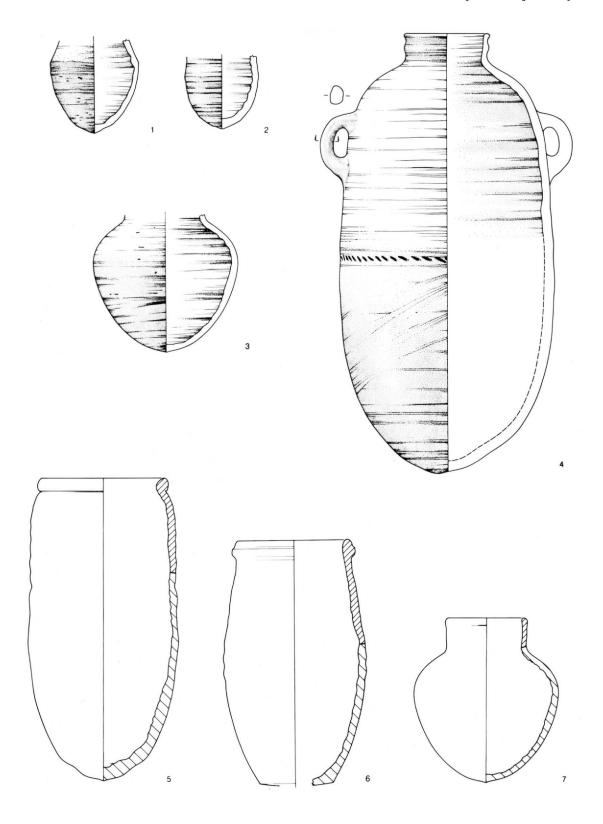
Figure 9.19. Bases (drawings by A. Boyce, at one-quarter scale).



Provenance: 1 (N); 2 and 4 (P1); 3 (P); 5 (vicinity of N).

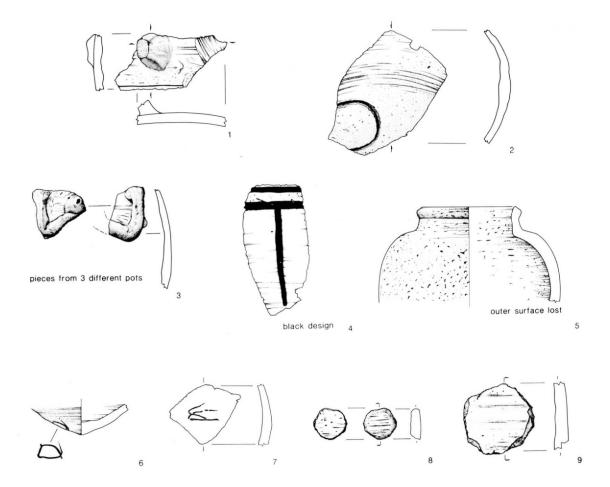
Ware: all Marl 2a.

Figure 9.20. Body and handle details of amphorae of Type MJ6.



- 1.-3. Profiles of small globular vessels, rims lost (N, E, L respectively).
- 4. Complete vessel from Workmen's Village, West Street 2 (see Chapter 1).
- 5.-7. Hypothetical reconstructions.

Figure 9.21. Silt Jars (drawings by A. Boyce, at one-quarter scale).



- 1.-2. Body sherds from "kegs", with handle-stump (from A1), and potmark (from N) respectively. Both Marl Ware 3.
- 3. Body-sherds with applied decoration, from N (left) and A (right). Both silt ware.
- 4. Body-sherd with black painted decoration, from N. Silt ware.
- 5. Rim-sherd. Hand made. Silt ware with abundant inclusions. From P. Perhaps Old Kingdom.
- 6.-7. Potmarks on base and body-sherd. Both from A. Silt ware.
- 8. "Gaming counter" from J. Silt ware.
- 9. "Stopper" from L. Silt ware.

Figure 9.22. Various sherds (drawings by A. Boyce, at one-quarter scale).