

CHAPTER 6 CERAMICS

In Egypt

Egyptian ceramic studies have been severely neglected until recently, due in large measure to the generally perceived lack of need to investigate their development when good dating parameters could be achieved by other means, especially datable inscriptions. Apart from some early investigations, in both senses, little has been done until the past 20–30 years to understand the technical, typological and geographical development of ancient Egyptian pottery. The majority of work concentrated on the earliest Egyptian history and prehistory, especially the Predynastic periods when dated texts did not exist. Petrie's famous 'Sequence Dating' system, developed using 'tomb cards' and published in 1901,⁴⁵⁶ was his attempt to put the vast number of graves and cemeteries being excavated into some form of chronological order; typically, he did not begin his numbered system at '1' but at '30,' realising that room was needed for any earlier material not yet recognised or recovered. George Reisner, in particular, studied some later material, fully typing the later Predynastic, Archaic and Old Kingdom material he had excavated at Giza and other sites.⁴⁵⁷ Other early excavators published ceramic vessels consisting of largely inadequate outline drawings as individual site typologies.⁴⁵⁸ The vast majority lack the interior profile now considered necessary for comparative analysis. These site *corpora* were collected by Kelley⁴⁵⁹ to provide a single handy reference volume, but he did not attempt any further study or, unfortunately, any revision of the dates assigned by the original excavators in light of later research, so this monumental volume remains useful only as a corpus.

This is not the place to discuss the recent history of ancient Egyptian ceramic studies, a subject already possessing a considerable published litera-

ture,⁴⁶⁰ but suffice to say that present investigations consider other aspects of ceramic development beyond the shape typology. Both petrological divisions along and beyond the Nile Valley and technological developments of vessel manufacture have been subjected to much detailed and fruitful research over the past thirty years, including the recognition of regional styles and forms. Individual excavated contexts often may now be quite precisely dated, and vessel movement within Egypt may now be discerned by fabric identification. Ceramic development is now recognised as a phenomenon independent of political upheaval and dynastic history, and as dependent for dating on vessel technology as shape and fabric. Specialist publications concentrating on limited periods have appeared for the majority of pharaonic history, as well as the Predynastic periods, unnecessary to elaborate here as it is not a consideration for material on Crete. Unfortunately, the period most pertinent to this chapter, Dynasty XVIII–XIX, remains a major unpublished gap in this systematic research as yet, although progress continues to be made.

Janine Bourriau has defined four broadly dated periods for New Kingdom ceramics that will be employed in the present study, namely

Period 1: early Dynasty XVIII, reigns of Ahmose through Thutmose II;

Period 2: middle Dynasty XVIII, to be subdivided during the reign of Thutmose III into an earlier and later phase:

2A: early reign of Thutmose III and his co-regency with Hatshepsut, and

2B: later in the reign of Thutmose III to sometime in the reign of Thutmose IV;⁴⁶¹

Period 3: late Dynasty XVIII–early Dynasty XIX,

⁴⁵⁶ PETRIE 1901b:4–12.

⁴⁵⁷ E.g., REISNER 1908:99–111; 1931b:130–201; 1932:36–75; REISNER and SMITH 1955:90–102.

⁴⁵⁸ These were, however, used by MERRILLEES (1968) and others for dating tomb groups within more narrow parameters for Dynasty XVIII (see below, n. 462) but they are not particularly useful for dating the Kommos sherds.

⁴⁵⁹ KELLEY 1976.

⁴⁶⁰ BOURRIAU 1981:*passim*, ARNOLD and BOURRIAU 1993; BOUR-

RIAU, NICHOLSON and ROSE 2000:121, 144. MERRILLEES 1968:3–4 is an earlier attempt to distinguish ceramic phases within Dynasty XVIII. Two recently conceived journals concentrating on Egyptian pottery studies are *Bulletin de Liason du Groupe Internationale d'Étude de la Céramique Égyptienne* and *Cahiers de la Céramique Égyptienne*.

⁴⁶¹ D.A. ASTON 1996b:180 had included the entire reign of Thutmose IV in the second phase.

which may be subdivided near or around the end of Dynasty XVIII:

3A: within the reign of Thutmose IV to the earlier reign of Horemheb/end of Dynasty XVIII, and

3B: later reign of Horemhab/end of Dynasty XVIII to sometime in the reign of Merenptah; and

Period 4: later Dynasty XIX (within the reign of Merenptah) to the end of the New Kingdom.⁴⁶²

Whilst Periods 1, 3 and 4 have been subjects of much detailed research, Period 2 remains somewhat problematic and the only currently available typological corpus spanning Dynasty XVIII as a whole is found in NORDSTRÖM and TROY (1991). Recent investigations, especially at Tell el-Dab^{ca}, have included detailed examination of the Middle Kingdom, Second Intermediate Period and early New Kingdom material,⁴⁶³ providing a systematic ceramic development for the earlier years of Bourriau's Period 1. Reports of the 1920s–1930s Amarna excavations provided a still-useful typology of its ceramics⁴⁶⁴ with (unusually for the date of publication) the interior profile defined. Detailed post-Amarna and Ramesside ceramic typologies⁴⁶⁵ are now available but Bourriau's later Period 1 and Period 2, spanning early- to mid-Dynasty XVIII, remain very little published. This is partly due to the elusive nature of the material, mostly to be

found in tomb situations where study and publication has concentrated on surface decoration and other more visually appealing tomb furniture.⁴⁶⁶ Colin Hope has encoded and, amongst others, published much of the decorated ('blue-painted') pottery,⁴⁶⁷ but most studies have little considered the vessels themselves beyond their relationship to their surface decoration. Other published material concentrates on similarly visually appealing ceramics having painted, sculpted or applied decoration, features that became very popular during the reign of Amenhotep III and whose appearance characterises the transition from Bourriau's Period 2 to Period 3. Unpainted or otherwise undecorated ceramics rarely are discussed, although exceptions exist. Recent excavation research is beginning to fill this gap, but no detailed typology has yet been published and much still remains generically labeled as 'Dynasty XVIII' in the published literature. This presents problems in any attempt to narrow dating parameters for material recovered outside Egypt without prior personal detailed knowledge of Egyptian ceramics, especially when the material to be compared is fragmentary and undecorated, although there are a few exceptions to this general statement.⁴⁶⁸ The most useful publications available for present purposes are the NORDSTRÖM and TROY (1991) typology and a typological review by Hope of

⁴⁶² Adapted from BOURRIAU 1981:72, with emendations as discussed in BOURRIAU, ASTON, RAVEN, VAN WALSAM and HOPE 2005:7–8. My thanks to Janine Bourriau for allowing me to use this recently revised pottery chronology in its manuscript form, although she emphasises that a great deal of research needs to be done and more pottery well published before we can say firmly what types belong to what periods; her research continues. These period parameters follow, in some respects, the cultural stages ascribed to Dynasty XVIII employed by MERRILLEES 1968:4, where her Periods 1–2 correlate to his stages A–B, and her Period 3 correlates in large measure to his stages C–D.

⁴⁶³ BIETAK 1991:27–72 *passim*; FUSCALDO 2000; See D.A. ASTON 1998:85–107 for contemporary material from Qantir.

⁴⁶⁴ PEET and WOOLLEY 1923:135–141, pls. XLVI–LIV; FRANKFURT and PENDLEBURY 1933:110–113, pls. LI–LIV. Note that these include vessel types of Third Intermediate Period and later date, not always identified as such in the text; see D.A. ASTON 1996a:42–43 for identification and discussion of this later material. Pamela Rose has developed a much more detailed, but as yet unpublished, typology for the current ongoing excavations at Amarna.

⁴⁶⁵ D.A. ASTON 1996a and, for nearby Qantir, 1998.

⁴⁶⁶ Many of the early excavators who cleared the Dynasty XVIII tombs did not even bother to mention, much less

illustrate, the ceramics they presumably recovered. This was symptomatic of the times, and the lure of the vast array of other objects to be found there, as well as a general lack of interest in ceramic study. The few published ceramics usually appear as generalised 'type' sketches without interior profile. More recent excavators consider the pottery, or at least publish it; ; see above, nn. 462–465 and below, n. 467.

⁴⁶⁷ HOPE 1997; with further references.

⁴⁶⁸ S.T. SMITH 1992:193–194 provides a list of well-dated tomb contexts at Thebes, together with their references; unfortunately, virtually all lack good ceramic illustrations and discussion. Only those references having good illustrations of ceramics comparable to the Kommos material, but not previously mentioned, are included here. GUKSCH 1995 includes a corpus from the Theban tomb of Nakht-min (TT87), an official under Thutmose III, and BRACK and BRACK 1977 published the Theban tomb of Tjanuni (TT 74), who was born within the reign of Thutmose III and died under Thutmose IV. Both have small but excellent corpora of Period 2B ceramic profiles. GUIDOTTI 1989 is a corpus from the funeral temple of Thutmose IV at Qurna. D.A. ASTON 1996b is a corpus at Tell Hebwa dated to the reigns of Thutmose IV or Amenhotep III, with reference to a number of other closely datable *corpora*; see also discussion of comparable contexts, p. 179.

those New Kingdom amphorae from mostly well-dated contexts.⁴⁶⁹ Profiles in the latter are as previously published, so many still do not include the interior profile. The vast majority of imported Egyptian ceramics recovered on Crete consist of amphorae and storage jars, together with some ‘pilgrim flasks,’ open bowls and a potstand, and discussion here is limited to these forms.⁴⁷⁰ The amphorae and ‘pilgrim flasks’ are handled vessels, a feature virtually unknown in Egypt before the New Kingdom, following their limited introduction by the Canaanite populations and influence during Dynasty XIII and the subsequent ‘Hyksos’ (Dynasty XV) period in the Delta region. Other than in the Delta, handled storage vessels in general are rare before the earlier reign of Thutmose III (i.e., Bourriau’s Period 2A), and they became quite common in Period 2B.

The earliest Egyptian amphorae are of wide diameter, with sloping shoulder and convex lower body terminating in a rounded or keeled base, with two vertical handles attached at and below the shoulder level, and a short exterior-thickened neck, basically following the Canaanite profile.⁴⁷¹ Profile development, apparently beginning in Thutmose III’s reign (Bourriau’s Period 2B) when their popularity grew enormously, tended towards a narrower body diameter relative to height, more tapering lower body with thicker base, higher shoulder and taller upright neck proportionate to body length. Hope defines this type as his *Category 1a*. By the time of Amenhotep III and Akhenaten (within Period 3A), another form began to appear in some quantity, returning to a wider body diameter but with an angular body and straight (not curved) shoulder profile, and a proportionately shorter neck, sometimes with an exterior-thickened rim and sometimes without rim articu-

lation, defined by Hope as his *Category 1b*. These were produced concurrent with the *Category 1a* type, now noticeably taller and leaner in comparison. Smaller versions of *Category 1a* amphorae, designated *Category 1c*, also appeared during the reign of Amenhotep II (within Period 2B), often with a long and sometimes even convex neck, paralleling development in the larger vessels.

Category 2 amphorae, so defined by Hope on the basis of their horizontal rather than vertical handles, located on the shoulder, first appear sometime in the reign of Thutmose III (Period 2A); these have a short nearly globular body and proportionately elongated vertical neck and are defined as *Category 2b*. *Category 2a* amphorae, apparently appearing during the reign of Akhenaten but possibly under Amenhotep III (during Period 3A), instead feature a longer body and shorter neck.⁴⁷²

Category 3 amphorae, defined by Hope by their painted or sometimes applied decoration, appear sporadically before Period 3A, but the common appearance of vessel decoration is a distinguishing feature of the transition from Period 2B. Usually these are ‘blue-painted’ although other colours also are found. Those typed as *Category 3a* have horizontal handles, and otherwise are very similar to *Category 2b* but for their decoration, whilst those of *Category 3b* have long vertical handles most often from near or at the rim to the shoulder, but sometimes on the shoulder only. The neck is both tall and wide, and sometimes convex in profile.⁴⁷³

So-called ‘pilgrim flasks’ were adopted into the Egyptian shape repertoire from the Near East, probably through the strong Canaanite influence characteristic of the period following Thutmose III’s incursions into the region, but possibly earlier.⁴⁷⁴ They do

⁴⁶⁹ HOPE 1989b. Pamela Rose very kindly commented on some of the Kommos material, based only on written descriptions and drawn profiles, not the sherds themselves.

⁴⁷⁰ The vast majority of amphora discussion here is a synopsis of HOPE 1989b, where amphora development is more fully described and from which the ‘Category’ typology is cited. Other storage vessels of forms relevant for the present chapter are difficult to type and compare, partly because so little remains of the vessels on Crete and few are sufficiently published in Egyptological literature.

⁴⁷¹ For contemporary LB Canaanite amphora development, see AMIRAN 1970a:138–141, pl. 43 (see also the decorated ‘storage jar’ version, *Ibid.*: 143, pl. 44, for ‘home’ use). The only sure guide to differentiation between Egyptian and Syro-Palestinian vessels in many cases is the vessel fabric itself. Note that the Canaanite form develops from earlier, MB II storage jars of similar shape and having a similar

variety of handle types; see AMIRAN 1970a:102–103, pls. 31–32. Early examples in Egypt itself are at Dynasty XIII Tell el-Dab^ca (VIENNA 1994:221 #259–260) and SIP Memphis (BOURRIAU 2004:*passim*), but generally are quite rare before the reign of Thutmose III. Egyptian stone vessels of similar shape are discussed in Chapter 4, Appendix A.2.

⁴⁷² No evidence for horizontal handles was recovered at Kommos.

⁴⁷³ As Kommos amphora fragments have no evidence of painted decoration, it is unlikely that *Category 3* is represented there.

⁴⁷⁴ On Canaanite development of the type, see AMIRAN 1970a:166–169, pl. 51. She notes that the type may have originated beyond Canaan. An anhydrite lentoid flask (without handles) dated to Dynasty XVII is said to be from Girgeh; FAY 1998:26 fig. 10.middle.

Another suggested origin for this vessel type in Egypt is the

not, in any case, seem to have appeared before mid-Dynasty XVIII, and continued in use through into the Islamic period. Characteristically baseless and lentoid in shape, with tall narrow neck and exterior-thickened rim, they possess two loop handles mid/upper neck to upper shoulder. Some of the earliest Egyptian examples follow the Canaanite habit of painting concentric circles on the two 'bowls' that constitute the body. This decoration continues to be found throughout the New Kingdom, but the type normally is undecorated.⁴⁷⁵

Both amphorae⁴⁷⁶ and 'pilgrim flasks' by definition are produced in the white marl clay obtained from the desert, whereas most storage jars⁴⁷⁷ and most bowl forms almost universally are produced in the red silt of the Nile valley. Bowl forms are common in most periods and are notoriously difficult to date other than by context and the production technology employed.

On Crete

Egyptian ceramics have been reported as yet from only one site, Kommos on the south-central coast.⁴⁷⁸ Other Minoan sites have reported Syro-Palestinian material (e.g., Khania, Knossos), as have several Mainland and a few Cycladic sites as well as the Uluburun shipwreck,⁴⁷⁹ and it is possible that misidentified or as-yet unidentified Egyptian material lies amongst these or other collections. Nonetheless, study of the material from Kommos alone is elucidating, and emphatically has altered the generally simplistic notion that imported Egyptian ceramics consists solely of 'transport amphorae' of a particular general shape.

It must be emphasised that half the Egyptian

ceramic material at Kommos consists of small individual body sherds and most of the rest are small individual rim or handle pieces, and one near-base fragment. Although a few have been found to join with others usually having fresh breaks, mostly in fill or debris contexts, no complete or even restorable vessels have been recovered. Thus, they appear to be mostly individual remnant fragments of the original vessels, their context dates being merely *termini ante quem* of questionable longevity from their importation and use. Associated context material and dating ranges from LM IB (late) {**332**} to LM IIIB {**350; 357**} and then through post-Bronze Age fill {**331; 358; 359**} and, whilst some are found amongst relatively homogenous or well-sealed material, the sherds themselves still often are worn. Thus, dating the sherds in Egyptian terms is the key to understanding their probable importation to, and use at, the site. The Kommos *context* dates overlap or at least are contemporary with Bourriau's Periods 1-3B; Period 4 material is highly unlikely, and possible only in post-LM IIIB contexts.

The variety of vessels represented includes the following, although as only sherds survive, likely some forms described actually represent different portions of the same vessel form:

Marl fabrics:

1) a medium-size amphora with externally thickened rim {**348; 355(?)**; **356; 359**}, tall neck {**336; 339**}, high sloping shoulder {**321; 323; 331; 347; 350; 353; 354**}, diagonal or steeply tapering lower body {**322; 330; 351**}, mould-made probably keeled base {**360?**}, and two vertical handles from shoulder/body junction to lower body {**321; 343**} – Hope's Category 1a;

Mycenaean flask form. It is unlikely that the characteristically footless Egyptian form is derived from the Mycenaean, or even the Minoan, footed flask type. The Mycenaean flask is adopted in LH IIIA1 from the Minoan flask form, which first appears in LM II (one example)–LM IIIA1. Minoan flasks are globular rather than lentoid, and both Minoan and Mycenaean flasks characteristically have a distinct base. LH IIIA1 flasks are rare although the form is popular in LH IIIA2; see MOUNTJOY 1993:71 fig. 151, 72 and, for Minoan flasks, see TZEDAKIS 1971. An early, footless, example was recovered at Kato Zakro, dated to MM IIIA; see EVANS *PM* II.1 fig. 121.b and MOUNTJOY 1993:71 fig. 151.upper left, but it appears to be unique. EVANS's MM IIA example, *PM* II.1 fig. 121.a from the South-East Polychrome deposit at Knossos, is a large footed single-handled lentoid *jug*; see also his pl. IX.e in the same volume. Later Minoan flasks, including that from LM IA Palaikastro cited by EVANS *PM* II.1 fig. 121.c, all are footed. These are earli-

er than the reign of Thutmose III, but the Minoan form in large measure postdates his reign.

⁴⁷⁵ Examples of both can be seen at, e.g., Riqqeh (ENGELBACH 1919:pl. XXXVIII:93c–e). A similar and undoubtedly related form, also lentoid with two loop handles but with a funnel neck, also appears about this same time in travertine; see discussion in Chapter 4, Appendix A.1. Ramesside examples are found in HOPE 1989d:73 fig. 13.h, 74 fig. 14.f.

⁴⁷⁶ The very few amphorae found in red silt fabric are exceptions that prove the rule.

⁴⁷⁷ Other than the neckless 'meat jar' storage vessel type, e.g., PEET and WOOLLEY 1923:pl. XLIX:XX/234 for an example of this form.

⁴⁷⁸ The stone footed Minoan vessels also called amphorae, are unrelated to the clay forms recovered at Kommos. These are discussed together with Egyptian footed forms in Chapter 4, Appendix A.2.

⁴⁷⁹ See CLINE 1994:163–221 *passim*, 263–268 *passim*.

- 2) a large size amphora of generally similar profile, steeply tapering lower body {332; 352}, mould-made probably keeled base {360?}, and two (or perhaps four?) vertical strap handles attached at the shoulder only {345} – also Hope’s Category 1a;
- 3) a medium-size amphora with concave lower body profile {346};
- 4) a medium-size jar form with steeply tapering lower body {327};
- 5) a ‘pilgrim flask’ of lentoid profile {329; 335; 338} having an overhanging exterior rim with interior lip {335}, and two vertical strap loop handles neck to shoulder {335}; and possibly also a larger ‘pilgrim flask’ form with similarly overhanging exterior rim {357?}. One {338} has concentric circles painted on the body.
- 6) a jar of same description, with burnished exterior and steeply tapering lower body {327};
- 7) a possible ‘juglet’ with short neck and exterior-thickened rim {324};
- 8) a potstand with concave profile and exterior thickened rim and base, with slipped exterior {358};

Nile silt fabrics:

- 9) a large-size storage jar with tall, slightly tapering neck and bulbous rim {328; 355}; this vessel is handleless, with an ovoid body profile, and often has a slight bulge at the neck/shoulder junction;
- 10) a small hemispherical bowl of c. 10 cm diameter {333; 340};
- 11) a relatively shallow carinated bowl of 25–35 cm diameter {337; 349};
- 12) a deep straight-sided bowl of 26 cm diameter {326};

No ‘amphora’ fragment can be associated with Hope’s Category 1b, nor can any be considered within his smaller-scale Category 1c. No Category 2 forms can be identified, with the possible exception of near-base fragment {360}, nor any Category 3 (painted) ‘amphorae.’

Most essentially are variations on a general theme, an elongated, shouldered form of closed vessel with restricted neck and exterior-thickened rim and a rounded or keeled base, that may have two vertical handles. This description suggests that the well known ‘transport amphora,’ whilst a purpose-designed form, merely was the ideal. Any available vessel to hand possessing the required general characteristics – large internal capacity, neck with lipped rim that could be securely sealed, and the bonus of vertical handles for security – could be seconded for the purpose of transporting goods by sea. Two general vessel size groups, large and medium scale, are represented amongst the collection, although this is difficult to ascertain by rim diameters alone.⁴⁸⁰ Although some of these forms are found decorated to varying degrees in Egypt, none of these vessels is painted although many are slipped on the exterior. This is not surprising, given their context conditions, but it is just possible that they might originally have been painted *if* they were transported as objects in themselves.

Many of these forms parallel the Syro-Palestinian vessels recovered at Kommos, having generally similar profiles, typology and presumed functions and contents.⁴⁸¹ The Egyptian vessels cannot, however, be considered *de facto* evidence that Egyptian goods had been transported in them to Kommos, either directly or indirectly. Such vessels clearly were employed for transporting goods, else they would not have been found at Kommos. Many must have been discarded or sold at various ports of call by their original owners as the contents were dispersed on arrival, then reused or resold by their new owners to other needy customers with goods to transport elsewhere. Their initial origins were unimportant to all concerned, only their availability and function, and they would have been passed along so long as they could be employed. Other than the clay vessels and one glass vessel {334}, no Egyptian goods have been recovered at LM Kommos, and few others at the nearby sites in LM contexts where perhaps these would be expected⁴⁸² – an inconclusive negative argument, yes, but nonetheless perhaps telling.

⁴⁸⁰ Three general size groupings (small, medium and large) were noted amongst the Uluburun collection of ‘Canaanite jars;’ see PULAK 1998:201.

⁴⁸¹ Compare the Egyptian profiles with WATROUS 1992:figs. 71–72. Development of the Egyptian amphorae in Egypt generally follows that of the Canaanite vessels; see HOPE 1989b:93 and *passim*.

⁴⁸² Aghia Triadha has a stone alabastron {4} in an LM IB con-

text and an ovoid seal {18} not earlier than LM IIIA1. The LM IIIA Kalyvia cemetery has two stone alabastera and two glass vessels {89–92}. At least one Dynasty XVIII scarab {39} is amongst the Aghios Onouphrios collection. Nothing Egyptian was recovered at Phaestos, and no Egyptian (or even Syro-Palestinian) ceramics are reported from these or other Mesara sites.

The Egyptians employed two basic methods of sealing a restricted vessel. The first was to cover it with a malleable material such as a cloth, then securing this with rope or string just below the rim. Numerous vessels have been recovered in Egyptian tombs and other contexts, still sealed and with contents intact. The second, employing a mud covering or ‘bung,’ was most useful for liquid contents.⁴⁸³ Most Kommos rim sherds include a slight internal lip, a feature useful for covering the aperture with something hard (a broken sherd often served the purpose) to protect the contents from loose mud before securely sealing the entire opening with the bung. Both methods were made easier by an exterior-thickened rim, in one case to ensure the cloth and string stayed in place, the other to ensure that the bung did. The first seems to have been preferred for small vessels, and the second for larger forms.

As with the imported stone vessels on Crete as a whole,⁴⁸⁴ the ceramic material represented at Kommos nonetheless still remains a decidedly limited corpus. No neckless closed vessels are represented here, no everted rim forms are found, nor have any sherds bearing incised, stamped or painted inscriptions or marks. Only one vessel, a ‘pilgrim flask’ **{338}** retains painted decoration, although it is just possible that some of the large amphorae and jars might have been decorated. No thick Egyptian base fragments such as those associated with ‘transport’ amphorae have been recovered, although such heavy solid bases are recovered amongst the Levantine amphorae.⁴⁸⁵ Egyptian amphorae also are keeled, flat- and round-bottomed, and sometimes even moulded, but only one such Egyptian near but not actually base fragment **{360}** has been recovered. No indication of knife trimming or any hand-manufacture (excepting pulled strap handle fragments) is evident, although such technological features are common throughout Dynasty XVIII on larger vessels. Nor have any horizontal looped handles been recovered. Despite the variety of recognisable vessel types found, much wider in range than expected, the Egyptian vessels from Kommos, as represented by these sherds, on the whole appear to represent a gen-

erally uniform purpose, transportation of the material contained within.

The usual explanation for the presence of the bowl fragments would be their employment with the convex exterior surface face down as ‘lids’ for the larger necked vessels, except that the hemispherical bowls **{333; 340}** are too small in diameter, the carinated forms **{337; 349}** far too large, and the straight-sided bowl **{326}** impractical for the purpose. The individual fragments that survive may have been used to seal the larger vessel before adding the mud bung itself, if they arrived as individual fragments. However, if they had arrived as complete vessels, it may be they were part of the ship’s equipment, or were the particular conceit of those who lived in House ‘X,’ where three of the five were recovered.⁴⁸⁶ We have no way of knowing their condition on arrival at Kommos.

The vessels have been recovered in various areas of the site but their contexts can be divided generally into those from the ‘Civic Centre’ and those from the habitation areas. These will be discussed separately.

The Civic Buildings of the ‘Southern Area’

Final Palatial deposition: **{345}; {346}; {351}; {352}; {353}; {354}; {355}; {360}**.

End Palatial deposition, with significant Neo-Palatial material: **{342}; {343}**.

End Palatial deposition: **{347}, {348}, {350}; {356}; {357}; {359}**.

Mixed context, Final Palatial and later: **{358}, {359}**.

A depositional pattern emerges by correlating context date and location of material in the Civic Centre of the Southern Area, that suggests a general use of deliberate fill, possibly from one or more dump/debris locations nearby, that was deposited at different phases during the construction, alteration or use of these buildings, especially Building P. Some sherds can be shown to be older than their context date and thus remnant in context, whilst others can only have been imported and discarded not long after their manufacture.

Recovered in Final Palatial and End Palatial,

⁴⁸³ Examples of vessels sealed by cloth and string are illustrated in PARIS 2002:87 #16.a, 89 #18. Vessel sealing types employing a ‘bung,’ and a ‘bung’ typology are discussed and illustrated by HOPE 1978:3–60, figs. 6–8, and in EL-KHOULI *et al.* 1993:91–96, fig. 1; see also PARIS 2002:87 #16.b–c.

⁴⁸⁴ See Chapter 4.

⁴⁸⁵ WATROUS 1992:fig. 71.750, 1959.

⁴⁸⁶ The straight-sided bowl **{326}** was recovered in the Central Hillside, also a domestic area. Only carinated bowl **{349}** was recovered in the civic area.

contexts in the region of Building N, but together with predominantly LM IB sherds are **{342}** and **{343}**. Sherd **{342}** cannot be dated any closer than Dynasty XVIII–XIX, and thus *could* be generally contemporary with its associated predominantly LM IB material. Sherd **{343}** probably is Dynasty XIX in date, and thus must have been imported and deposited in LM IIIB. These contexts should be reused fill, probably removed from the adjacent Building J area, to raise the surface level in Building N. Thus, old remnants as well as recently discarded fragments may be amongst this fill as re-deposited.

The Housing in the ‘Hilltop’ and ‘Central Hillside’ Areas, and ‘House X’

Neo-Palatial deposition: **{332}**.

Final Palatial deposition, but in otherwise ‘pure’ MM III context: **{326}**.

Final Palatial deposition: **{321}**; **{328}**; **{329}**; **{351}**; **{335}**; **{336}**; **{340}**.

End Palatial deposition, with significant Final Palatial material: **{323}**; **{330}**, **{331}**.

End Palatial deposition: **{322}**; **{324}**; **{327}**; **{333}**; **{337}**; **{338}**; **{339}**.

The vast majority of this material is found in or immediately nearby the major large house of each excavation area, the ‘North House’ **{321}**; **322**; **323}**, ‘House of the Snake Tube’ **{327}**; **328**; **329}**; likely also **326}**, and ‘House X’ **{332}**; **333}**; **335}**; **336}**; **337}**; **338}**; **339}**; **340}**. Deposit contexts within these buildings mostly are limited to LM IIIA1 and IIIA2 dates, and most often consist of an interface (‘floor makeup’) associated with building remodeling between phases of use, suggesting LM IIIA1 fill being used in LM IIIA2 domestic remodeling. The only exceptions are an LM IB (late) fill or dump context **{332}** above the LM IB floor of ‘House X’ and the LM IIIA2–B early floor deposit **{327}** in the ‘House of the Snake Tube,’ the latter a similar ‘floor interface’ situation at a later date.

A dump deposit, associated with LM IIIB early material **{324}**, is found immediately south (downhill) of a large house, the ‘North House.’ The material from the isolated fill context in the north-east corner of the main ‘Central Hillside’ area **{330}** is from a room, whilst another is from an exposed slope **{331}**. Thus, few sherds can be associated directly

with their deposition date throughout the site, and again either may have been old or recently discarded at the time of their final deposition.

Only one sherd was recovered in an LM IB context, an unhelpfully unarticulated individual large amphora body sherd in House X **{332}**. Nonetheless, it represents a large amphora similar to those recovered in Final Palatial and later contexts and at least indicates that vessels of Egyptian origin were being imported onto Crete in early–mid-Dynasty XVIII when amphorae still were uncommon except in the Delta.

These vessel forms seem to have had no influence on Minoan ceramics or other material. Their fragmentary state would leave some room for possibility, but all known Minoan storage and transport vessels appear unrelated.⁴⁸⁷ The only possibility for correlation is the ‘pilgrim flask’ form with the large Minoan ‘globular flask’ of LM II–IIIA2⁴⁸⁸ but, as the imports are of lentoid shape and Tzedakis has shown an indigenous development for the Minoan flasks, this seems highly unlikely.

Nonetheless, their presence as residual sherds in contexts ranging from LM IB (late) through LM IIIB (early) does suggest importation at least from the LM IB (late) period, at least until the period of Building P’s initial phase(s) of use in LM IIIA2 (i.e. end of Dynasty XVIII), as so many Egyptian sherds are recovered in fill contexts associated with its construction. Only a few sherds are themselves demonstrably or most likely later in date, and thus would have arrived after this time. Thus the vast majority of vessels represented by these sherds was produced in, and exported from, Egypt during late Dynasty XVIII, following the reign of Thutmose III. In Minoan terms, they were imported to Kommos during the LM IIIA1–2 or Final Palatial (and probably End Palatial) period. Some, however, were made and imported before this, earlier in the dynasty, as indicated both by vessel type and context dating.

Whilst we cannot be certain of any dates, the appearance of at least one probably Dynasty XIX handle sherd **{343}** deposited in the ‘Civic Centre’ area indicates Egyptian vessels continued to be imported to Kommos into LM IIIB, although not necessarily directly from Egypt. Those in other LM IIIB contexts here **{350}**; **357}** also may well be Dynasty XIX products contemporary with LM IIIB,

⁴⁸⁷ See BETANCOURT 1985: *passim*.

⁴⁸⁸ TZEDAKIS 1971.

and thus imported to Kommos at that time. The juglet(?) rim sherd **{324}** in a habitation deposit of largely LM IIIB (early) material together with other imported pieces in the dump at the 'Hilltop' summit does suggest that vessels of Egyptian origin also con-

tinued in use in the town at least until this time (= early Dynasty XIX, latter part of Period 3B), and well as continuing to be imported at a time when very little Egyptian material demonstrably must have arrived on Crete.⁴⁸⁹

⁴⁸⁹ It should be stressed that this particular sherd **{324}** may or may not be a remnant in context, and may or may not be of Dynasty XIX date. The other probably Dynasty XIX sherd **{343}**, from the 'Civic Centre' area, also should have arrived and been deposited in its excavated context in LM IIIB. The only objects elsewhere that *could only* have

arrived on Crete in LM IIIB are two Dynasty XIX scarabs **{265; 482}**, both found in generally contemporary contexts in the Knossos area, although a surprising number of other Dynasty XIX scarabs have been recovered on the island; see PHILLIPS 2005b.