The pottery

Analysis of shapes

Amphorae

Three fragmentary specimens, **P19**, **P20** and **P49** (Fig. 28). Two of them, **P20** and **P19**, are large amphorae. The first one belongs to a type with relatively wide base and piriform or oval body, c. 30 or more centimetres tall. Its decoration – monochrome upper part – is common to this type of amphorae and other closed shapes. Cf. a jug from Gournia. The second amphora, probably of the same type, preserves the lower body and the wide flat rim. Cf. similar examples of medium-coarse amphorae from Gournia², and an unpainted specimen from the *Cave du Pilier* at Malia. Both vases are made of medium clay.

The third amphora fragment is very small, but it is included in the ME list because it offers interesting information. It belongs to a vase not taller than 20-25 and is made of fine buff-pinkish clay. Its dark-on-light decoration with bands and solid circles, and also the type of clay, connect it to a large group of vases in various shapes, which were produced in one or more workshops in the area of the Ierapetra Isthmus. Specimens of this class were found in Pacheia Ammos, Gournia, Sphoungaras and other sites. For parallels cf. various specimens from Gournia. Especially interesting is the presence of a potter's mark on the handle of this amphora, an incised V. Similar marks are known from other deposits of the Petras excavation. Due to of the very fragmentary preservation of this specimen, it is not easy to decide whether its presence in the deposit of the hieroglyphic archive should be connected to the function of this special room of the palace. Handles with circular sections are common in smaller examples, such as one from Kommos.

Pithoid jar

This small sherd, **P75**, belongs to a medium-sized pithoid jar, with globular or oval body and oblique outcurving rim. The small size of the sherd shows that it was probably not connected to the function of the archive room. These

¹ Boyd et al. 1914, pl. VI, 22; also Betancourt & Silverman 1991, fig. 8, nr 387, 20.

² Boyd et al. 1914, pl. I, 10, 11, 12.

³ Effenterre & Effenterre 1969, pl. LXVIII.614; also from Malia, Pelon 1966, fig. 19.

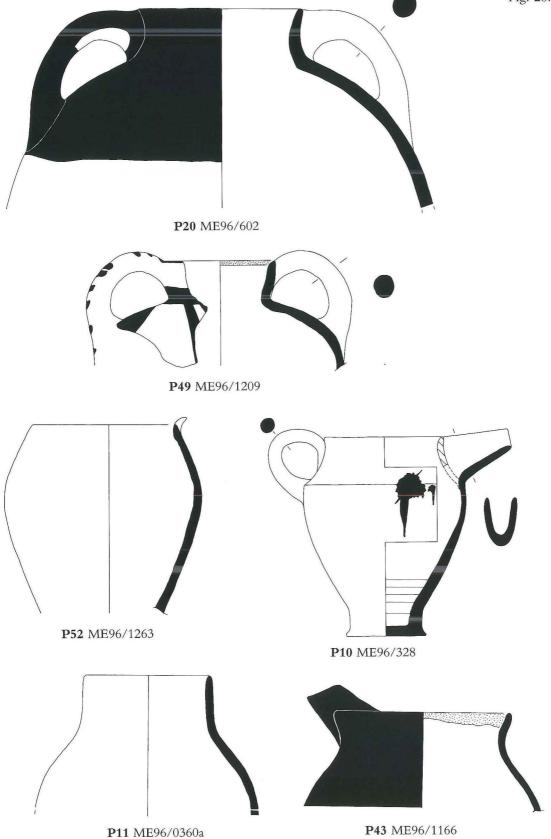
⁴ See Betancourt 1977 for an analysis of this regional style.

⁵ E.g. Boyd et al. 1914, pl. VI, 31.

⁶ Tsipopoulou 1990.

⁷ Betancourt 1990, fig. 23, 428.

Fig. 28. Closed and semi-closed shapes.



pithoid jars usually have a globular-ovoid shape, such as the example from the Cave du Pilier at Malia.⁸

(Tripod) spouted cooking pot

P52 (Fig. 28); large part from a small medium-sized cooking pot, probably tripod, although the legs are not preserved. The rim diameter is only 12 cm. It preserves the largest part of the oval body. The rim is incurving and equipped with a small spout. The clay is the usual for cooking pots at Petras, *i.e.* coarse, reddish in colour with many inclusions and wheel marks on both surfaces. The cooking pot is self-slipped, and has fingerprints on its exterior surface. Small open spouts are not uncommon on Proto- and Neopalatial tripod cooking pots. At Petras it is observed that more than one third or the complete or reconstructed cooking pots are spouted.

Carinated bridge-spouted jug

A complete specimen, **P10** (Fig. 28), made of yellowish Petras clay with splash decoration on both surfaces. It has a torus base, flat underneath with string marks and a low foot. The body is conical, with slightly curved profile, and a carination just below the spout. It has a cylindrical neck, with slightly curved profile. The rim is vertical, following the profile of the neck. The jug is well-proportioned with a graceful form, and is one of the best examples of the shape. Cf. a monochrome example, similar in shape and size from Gournia¹⁰ and another monochrome example;¹¹ other parallels came from Malia, the Middle Minoan sanctuary;¹² the *nécropole sur l'îlot du Christ*;¹³ and from a basement.¹⁴

Wide-mouthed jug

Large fragment from a vessel, **P11** (Fig. 28), which does not preserve any trace of a handle, but was probably either one- or two-handled. The body is oval and the neck cylindrical and wide. The rim is vertical, and follows the profile of the neck. This vase is made of orange medium clay and a thick brown reddish slip covers its exterior surface. Collar neck jars, are common in the Protopalatial period and they can have higher or shorter necks; cf. an example from the deposit of the *Cave du Pilier* at Malia.¹⁵

⁸ Effenterre & Effenterre 1969, pl. LXVI.300; cf. also Nowicki 2001, fig. 5, no. 14, from Monastiraki-Katalimata in the region of Ierapetra.

⁹ Cf. Betancourt 1980, fig. 1, type B, 3.

¹⁰ Boyd 1914, pl. VI, no. 17.

¹¹ Betancourt & Silverman 1991, fig. 9, pl. 7, no. 425, 27-8, with further bibliography.

¹² Poursat 1966, fig. 39, especially the left specimen.

¹³ Hazzidakis et al. 1963, pl. XLIV.7878, 108.

¹⁴ Effenterre & Effenterre 1969, pl. XLVIII, 157.

¹⁵ Effenterre & Effenterre 1969, pl. LXVI, 87.

Wide-mouthed jug with trefoil rim

The sherd **P43** (Fig. 28), belongs to a wide-mouthed trefoil jug, which probably had a piriform body. The interior surface is very worn, but the possibility that it was handmade cannot be excluded. The clay is medium reddish. It was probably monochrome on the exterior surface, and had a band on the rim internally, in brown paint. Cf. closed vases with a trefoil mouth, the so called hydriae from Phaistos. ¹⁶ It is not possible to ascertain whether the body of the Petras vase was identical to the hydriae of Phaistos, but it is interesting to note the similarity of the profile of the rim and upper body; a jug, with a very similar mouth, but higher neck, from Malia; ¹⁷ also similar, a Middle Minoan IIA jug from Kommos. ¹⁸

Wide-mouthed spouted jug

P16 is a one-handled vase, with relatively wide base, oval body and incurving rim with a small open spout. The handle is vertical, with a circular section. It is made of orange medium clay and has wheel marks on both surfaces. No slip or decoration is preserved. Sponge marks and fingerprints on the exterior surface.

The shape is found with slight differences in the profile at the palace of Phaistos, ¹⁹ where a large quantity of similar examples with the same capacity came to light. In one case in particular, these vases were associated with cretulae, presumably used to seal them. It is possible that at Petras this jug had a special function connected with the archive, for example holding a particular amount of water; from Malia with identical shape; ²⁰ also from Malia, various specimens with slightly different body profile. ²¹

Spouted jug

The sherd **P96**, is so small that it cannot be included in the discussion of the activities that were taking place in the room of the archive. Part of a, probably bridged, spout is preserved which could have belonged to a jug similar to **P10** (see above). It has a dark-on-light decoration of oblique bands. Cf. a carinated jug with a spout similar in shape and decoration from Gournia,²² and one of similar decoration and probably shape, from Malia.²³

¹⁶ Levi & Carinci 1988, pl. 25, g, (fase Ib), pl. 26, a, b, (fase Ia, Ib).

¹⁷ Effenterre & Effenterre 1969, pl. LII.2.? 130.

¹⁸ Betancourt 1990, pl. 14.267, p. 84.

¹⁹ Levi & Carinci 1988, pl. 39, a, fase Ia, 88.

²⁰ Effenterre & Effenterre 1976, pl. XII, nos. 3, 30, 107, 36, 40, 67.

 $^{^{21}}$ Demargne & Gallet de Santerre 1953, pl. XIV, from Quartier $\Gamma,$ pl. XXX.5, from Maison Λ

²² Boyd et al. 1914, pl. VI, 17.

²³ Chapouthier & Demargne 1962: pl. VIII.9219.

Jugs and juglets

Three sherds, **P70**, **P76** and **P83**; the first two come from the neck and rim of two different jugs, and the third one from the body of a juglet. **P70** belongs to a medium-sized jug, probably with a trefoil mouth, as indicated by the pronounced incurving preserved part of the rim. It is undecorated, made of fine buff clay and has wheel marks. The second sherd belongs to a smaller jug, with round mouth and outcurving rim. It is also undecorated, made of medium brown clay, and has wheel marks. The third sherd belongs to a globular jug, also undecorated, made of buff clay.

Juglets similar to **P83** are not uncommon, especially in ritual or funerary deposits, although they are not absent from domestic deposits.²⁴

Cooking dish

It is very doubtful whether the small sherd **P92**, belonged to a vessel that was in use when the archive was functioning; for this reason it is not included in the discussion. It represents a common type of cooking dish, with many fragmentary examples at Petras in deposits of various periods, and in all Minoan domestic deposits. These are handmade vases, often elliptical in shape, with a thin base, very rarely preserved, which were used directly on the fire. Although the general shape is very common there are regional variations in the details of the profile, since these vases apparently did not travel outside their area of production. Cf. a Middle Minoan IB rim fragment from Kommos.²⁵

Kantharos with crinkled rim

The drinking vessel, **P38** (Fig. 29), clearly an elite item, has a very lustrous paint and a crinkled rim. Undoubtedly it imitates a metal prototype, as suggested by the very thin walls, the contour of the rim and the treatment of the surface. Parallels from Knossos, an angular cup with crinkled rim; also from Gournia, a silver cup from a house tomb. The Gournia goblet, found with some stone vases is obviously an elite object. From Malia, a very similar example from the *nécropole sur l'îlot du Christ*.

The analysis of the silver kantharos from Gournia is of special interest. Significantly enough, the site has produced a few more clay cups of the same type, indicating that it is probable that all these special cups were in fact produced either in the area of the Gulf of Mirabello, or in the workshops of the palace of Malia.³⁰ The silver cup comes from the elite House Tomb I, and is

²⁴ Popham 1974, fig. 6, nos. 23-25, especially 25.

²⁵ Betancourt 1980, fig. 3, C 561, 10.

²⁶ Evans 1921, 191-3, fig. 139.

²⁷ MacGillivray 1998, pl. 41, 102, (group A, fine buff cups), 126.

²⁸ Boyd 1914, 56b, fig. 40, nr 5.

²⁹ Hazzidakis et al. 1963, pl. XLIV.7883, 109.

³⁰ Davis 1979.

the most precious and best preserved metal vase of the Protopalatial period, found to date. In Middle Minoan pottery, and particularly in better quality vases and/or products of palatial workshops, clay imitations of metal prototypes are not uncommon. This is an indirect indication of how highly developed metallurgy was in the same period. In her article, Davis has collected all the clay parallels for the shape from Malia and Pyrgos Myrtos, which unfortunately lack exact archaeological provenance, and are chronologically attributed mostly to Middle Minoan IB. She suggests that the metal prototypes for the shape should be sought in Central Anatolia. We do not know whether the Petras specimen is of local manufacture as a petrographic analysis was not possible; both the extremely fine fabric, and the importance of the vase, did not allow for a sampling. It is quite probable though that our kantharos also came from the Mirabello area, which had been exporting large amounts of pottery, especially fine wares, to Petras since Early Minoan II. Furthermore, the relationship of Pyrgos Myrtos with Malia is well-known, and the excavator, Gerald Cadogan has suggested that that this important non-palatial site on the south coast was connected with/dependent on the large palace of Malia, and that it belonged to the Malia-Lasithi polity.31

Fig. 29 (opposite). Various shapes of fine ware and cups and bowls.

One-handled stemmed goblet

This gracious drinking vessel **P5**, probably follows metal prototypes, as suggested by the details of the profile, its thin walls, and its decoration with dark brown, initially lustrous paint. It has a high conical base, flat underneath with string marks. The body has a pronounced carination; its lower part is conical, while the upper has a curved profile. The ribbon handle is arched. It is made of buff, fine clay, and has wheel marks and sponge marks on both surfaces.

At Phaistos the shape is encountered with a slightly different, less slender, pro-file.³²

One-handled carinated cups

Seven specimens, **P9** (Fig. 29), **P36**, **P40** (Fig. 29), **P62**, **P73**, **P86**, **P88**, with complete, or almost complete profile are presented here. Among the sherds collected there were more fragments of carinated cups. This is a typical shape for the Protopalatial period. Only one of our examples is fully preserved **P9**; the rest are fragmentary. The bases of the Petras carinated cups are usually flat, while two of them have raised bases (**P9** and **P36**). The base diameters range between 4.4 and 5.2 cm. All the cups have a pronounced angular body profile, with the exception of **P36**. The thin rims follow the profile of the body. The three cups with full profile are 4.5, 6 and 7.5 cm high. The rim diameters range between 8 and 10 cm. The two preserved vertical ribbon handles extend above the rim and end at the carination: the lower part of the handle

³¹ Knappett 1999; Scoep 1999; Knappett & Scoep 2000.

³² Levi & Carinci 1988, pl. 83 f, g, fase Ib.



P38 ME96/1106



P40 ME 96/1160



P9 ME96/326



P23 ME96/0609



P34 ME96/861



P18 ME96/0599



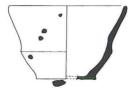
P31 ME96/771



P39 ME96/1158



P60 ME96/1493



P3 ME 96/251



P1 ME96/0172



P45 ME96/1197



P2 ME96/250



P25 ME96/612



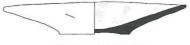
P42 ME96/1165



P47 ME96/1201



P51 ME96/1261



P63 ME97/0053



P54 ME96/1278

is narrower than the upper. Fine clay, usually with no inclusions, is used for these cups. Two examples are made of the yellowish Petras clay (**P9** and **P40**); three are made of buff clay; one of buff-pinkish; and one of beige-buff clay. Only one of the carinated cups **P40**, has wheel marks on the interior surface. The cups are all decorated with one exception, **P88**. The paint used is black or brown-black and usually worn.

Three types of decoration occur:

- a) monochrome P36, P40, P73, and possibly also P86.
- b) splash decoration in combination with a band on the rim, P9.
- c) dipped in paint twice from the rim, P62.

Carinated cups are surely the most common Middle Minoan type of cup, and were probably not produced after the end of the Protopalatial period. At Phaistos they always have flat or slightly convex bases, similar to those of most of the Petras examples.³³ A cup from Malia with a very short lower part, very similar to **P62**.³⁴ Very close parallels from the Isthmus of Ierapetra.³⁵

One-handled straight-sided cups

Eight specimens, P6, P12, P14, P23 (Fig. 29), P34 (Fig. 29), P57, P79, P85, P89, with complete or almost complete profile are preserved in the archive deposit, and a few more specimens are found among the sherds collected. The shape is easily distinguishable, due to the details of the profile and the typical handle. The production of straight-sided cups started during the Protopalatial period and continued into the Neopalatial, when they became most popular and other types of cups, such as the carinated ones, were no longer produced. The specimens that came into light in the deposit of the archive present all the features of the early type: relatively narrow base, rather conical body, and a double angle at the junction of the two parts. The base diameters range between 5 and 9.9 cm (in one case), the average being 7 cm. The body has a truncated conical profile, and the height ranges between 7.2 and 8.1 cm, the average being around 7 cm. The rims are of triangular section, and follow the profile of the body; their diameter ranges between 8 and 16 cm, the average being 9.5 to 10 cm. The largest specimen P14, is also distinguished also by its decoration. The ribbon handles, preserved only in two cases (P57 and P89), are vertical, and arched in shape. They start at the rim, extend above it and end at the middle of the body. A feature which helps to attribute handle sherds to straight-sided cups, is that the lower part is narrower. P89 has a small knob at the lower handle attachment. Most of the straight-sided one-handled cups of the archive deposit are made of the yellowish Petras clay, the rest being made of buff or beige-buff clay. The surfaces are well-smoothed, but wheel marks are not absent, especially on the interior surface, and more rarely on both surfaces. The cups are self-slipped. Three types of decoration are present, using either

³³ Levi & Carinci 1988, pl. 86, 87.

³⁴ Effenterre & Effenterre 1969, pl. XLVIII.155.

³⁵ Nowicki 2001, fig. 5.

brown, or brown-black paint, and added white. P12 is monochrome on the exterior surface, with a band on the rim internally. P23 and P79 are monochrome on both surfaces; P57 and P14 have light-on-dark decoration, with bands and series of dots; P34 has splash decoration on both surfaces.

Parallels from Phaistos, where this type of cups is fairly common, dated to fase Ib-III;³⁶ from Malia, *nécropole des Pierres Meuliéres*;³⁷ for **P57** and **P14**, cf. also an example from Kommos,³⁸ with a similar combination of dots and bands.

One-handled conical cups

In the archive room seven one-handled conical cups came to light, in various degrees of preservation: P8, P18 (Fig. 29), P26, P31 (Fig. 29), P55, P79, **P95**. They have flat bases, usually with string marks, 3.4 to 5.3 cm in diameter. Their bodies are either clearly conical, as in P26 and P95, or have a slightly convex profile, as in P18, P8, P55 and P31. The height ranges between 4.9 and 7.6 cm. The thin rim is incurving, **P8**; slightly outcurving, P31; or simply follows the profile of the body, as in P18 and P26. The rim diameter is 8 cm in all cases. The handles are vertical, of circular section, slightly raised above the rim, ending in the middle of the body, or a little below it. The circular section distinguishes the handles of conical cups from those of the straight-sided and carinated cups, which have ribbon handles. One-handled conical cups are made of fine clay with few inclusions: two of them of the yellowish Petras clay, two more of buff clay and the rest are made of reddish-orange, orange-buff, and beige-buff clay. Wheel marks are present, especially on the exterior surface. All cups are self-slipped, and in one case, 96/1381, there are sponge marks and fingerprints. All cups, with only one exception P95, are decorated. Four of them are monochrome on both surfaces P8, P26, P55 and P79; another one has a wide carelessly executed band on the upper body with dribbles running down from it; and the last specimen P26, has light-on-dark decoration on both surfaces.

An exact parallel for **P18**, for shape and decoration, from the palace of Malia;³⁹ cf. also an undecorated example from Gournia;⁴⁰ a good, undecorated parallel from the refuge site of Katalimata, on the northern part of the Isthmus of Ierapetra.⁴¹

Globular (one-handled?) cup

A fragmentary specimen of this rather rare type, P50. No trace of handle is preserved, but it is probable that there was initially a vertical handle. The

³⁶ Levi & Carinci 1988, pl. 89, 205-12.

³⁷ Hazzidakis et al. 1963, pl. XXXVIII, 96.

³⁸ Betancourt 1990, pl. 18.358, 90.

³⁹ Chapouthier & Demargne 1962, pl. XXXVIII. 8633, 46.

⁴⁰ Betancourt & Silverman 1991, pl. 10, 471, 35.

⁴¹ Nowicki 2001, fig. 4, no. 4.

oblique, outcurving rim is high. It is made of fine buff clay with no inclusions. It has polychrome decoration, being the only example of the typical for the Middle Minoan period Kamares decoration. Its relatively thick walls suggest that this cup was produced by a provincial workshop in eastern Crete, probably Petras itself, and was not imported from one of the big production centres of Kamares pottery in Central Crete. It should be noted in this context that Kamares pottery is generally very rare at Petras.

One-handled globular cups are very common at Phaistos in the Protopalatial period;⁴² close parallels, the cups from Malia, *l'îlot du Christ*,⁴³ also a light-on-dark example,⁴⁴ for a deeper example, but with identical upper body and rim profile, from a basement at Malia;⁴⁵ cf. also the shallow globular cup, with Kamares decoration, from Kommos.⁴⁶

One-handled bell cup

A fragmentary specimen, **P32**, identical to the handleless bell cups, with the addition of a vertical handle, elliptical in section. It is undecorated, and made of medium orange clay. It has a raised base, rough underneath, 4 cm in diameter; its height is 7 cm and the rim diameter 8 cm; consequently the one-handled variety has a more slender profile than its handleless counterparts.

Cf. a complete specimen with a small arched handle from Gournia;⁴⁷ from Malia;⁴⁸ from Phaistos;⁴⁹ from Knossos.⁵⁰

Deep handleless conical cups

A typical middle Minoan shape, which is represented by five, very uniform, examples in the archive deposit: **P4**, **P15**, **P39** (Fig. 29), **P64**, **P72**. The bases are narrow and flat, with one exception, **P15**, which has a somewhat raised base. All bases have string marks on the lower surface. The diameter ranges between 4 and 4.4 cm. The body of the cups is deep, either clearly conical, or with a slightly convex profile. The height ranges between 6.7 and 7.5 cm. The rims are thin and follow the profile of the body, its diameter ranging between 9 and 9.4 cm. Deep handleless conical cups have thin walls, unlike their shallow counterparts, which have thicker walls. They are made of fine clay with no inclusions, two of them of yellowish Petras clay and the rest of orange, buff-orange, or buff clay. Despite the smooth surface of the walls, the

⁴² Levi & Carinci, 1988, pl. 84-5 (fase Ib), 194.

⁴³ Hazzidakis et al. 1963, pl. XIV.7889.

⁴⁴ Hazzidakis et al. 1963, pl. XIL.7890, 111.

 $^{^{45}}$ Effenterre & Effenterre 1969, pl. XLVIII, Λ 285.

⁴⁶ Betancourt 1990, pl. 18.370, 90.

⁴⁷ Boyd et al. 1914, pl. II, 16.

⁴⁸ Pelon 1966, fig. 20, no. 2.

⁴⁹ Levi & Carinci 1988, pl. 90, o, (fase Ib).

⁵⁰ Popham 1974, fig. 6, 11-5.

cups have wheel marks, usually on both surfaces; they are self-slipped and also have fingerprints and sponge marks.

It seems that this type of handleless conical cups was more common in eastern Crete than on the rest of the island. At Malia these cups are fairly common, cf. for example from the *nécropole des Pierres Meuliéres*;⁵¹ also from Malia, from the south magazines;⁵² an example with narrow base, similar to P41;⁵³ also a further example from Malia;⁵⁴ from Katalimata on the Isthmus of Ierapetra.⁵⁵ It is also present, although rather rare, at Phaistos.⁵⁶

Shallow handleless conical cups

Given the large number of drinking vessels in the archive deposit, the rarity of the Minoan cup *par excellence* is surprising. There are only nine handleless shallow conical cups, **P13**, **P28**, **P58**, **P67**, **P68**, **P78**, **P80**, **P93**, **P94**; most of them are found in such a fragmentary state of preservation, that it is doubtful whether they were actually used for the activities that took place in this particular room. It is probable that this rarity is due to the fact that these cups were not produced in large quantities before the Neopalatial period in Crete.

Although this is by far the most common Minoan shape, found in prodigious quantities, or rather, because of this fact, the conical cups have not been published adequately to date, and no complete typology for the shape is available. It is generally accepted that Middle Minoan conical cups are shallower than their Neopalatial counterparts, their rim diameter being larger than their height. Enrica Fiandra's observations in the old analysis of the Phaistos conical cups are valid also for Petras, as far as the typology is concerned. Good parallels for the conical cups in the archive deposit⁵⁷

Handleless bell cups

Two complete specimens, **P3** (Fig. 29) and **P27**, and a fragmentary one, which preserves a full profile, **P60** (Fig. 29). This is a variation of the handleless unpainted cups, which is distinguished by its bell-shaped body. In general terms of shape and technique they do not differ from the handleless conical cups. The bases are in all cases raised, flat underneath with string marks, the diameter ranging between 3.6 and 4.5 cm; the body has a more or less pronounced S profile; the height is between 5.2 and 5.8 cm; the rims are rounded and outcurving, between 8 and 8.6 cm in diameter. The clay is fine, with few inclusions, buff in two cases, and buff-orange in the third; two of the bell cups, **P3** and **P27**, have wheel marks on both surfaces, and all three

⁵¹ Hazzidakis et al. 1963, pl. XXXVIII, 96.

⁵² Effenterre & Effenterre 1969, pl. XLV.

⁵³ Effenterre & Effenterre 1969, pl. XLVIII.154.

⁵⁴ Effenterre & Effenterre 1976, pl. XII.A.

⁵⁵ Nowicki 2001, fig. 5, no. 15, 16, pl. 1, nr 1b.

⁵⁶ Levi & Carinci 1988, pl. 79, b, c, d (fase Ib), 179-81, with an analysis of the typology.

⁵⁷ Fiandra 1975a, pl. 32.

have sponge marks. Only the first example shows evidence of carelessly executed decoration – three drops of paint on the exterior surface. For the shape cf. the Gournia examples;⁵⁸ from Phaistos;⁵⁹ from Malia, south magazines⁶⁰ and elsewhereal;⁶¹ from Knossos.⁶²

Ledge-rimmed bowls

Fourteen examples, complete or securely recognisable are included in the catalogue: P1 (Fig. 29), P7, P17, P35, P45 (Fig. 29), P46, P48, P53, P65, P69, P71, P81, P82, P90. More examples of the shape can be found among the diagnostic sherds. They form a fairly homogeneous group with little variation regarding size and hence capacity, with the exception of the three decorated specimens, which stand out from the rest of the group.

Ledge-rimmed bowls have the following features: the bases are narrow, ranging between 4.2 and 6 cm in diameter, and in one case, **P69**, the asymmetrical and carelessly made bowl has a diameter of 7.7 cm; at least in one case, **P69**, the base has a circular cavity internally; the bodies are shallow, either clearly conical, **P17**, or more often, with a slightly convex profile; the height ranges between 2.9 and 4.7 cm, the average being between 3.5 and 4 cm; the rim diameter ranges between 11.5 and 16 cm, the average being between 11.5 and 12 cm. The special feature of this type of bowl which differentiates it from the other bowls, is its wide, horizontal, flat rim.

Ledge-rimmed bowls are made of fine clay with few inclusions, brownorange, buff, yellowish-buff, yellowish Petras, buff-pinkish, or orange in colour; they are all self-slipped; there are wheel marks on almost all examples, even the decorated ones, either on the interior surface or on both surfaces; fingerprints and sponge marks are common, especially on the exterior surface, and in certain cases on both surfaces. The large majority of the bowls are unpainted, with three exceptions which stand out from the rest for their size, and hence their capacity: **P7** is partially dipped in paint and half of the bowl, including part of the base, is monochrome while the other half is unpainted; P1, which is distinguished from the rest of the group for its larger size, has a well-executed decoration. This bowl is monochrome with an orange-reddish paint, and is covered by drops of added white paint on both interior and exterior surfaces and underneath the base. The third decorated specimen has splash decoration, common in Middle Minoan Petras, especially for open shapes, and in a few cases for closed shapes as well. This type of decoration, which is rare elsewhere, starts at the end of the Prepalatial period there, in Middle Minoan IB, and continues during the Protopalatial. It has been suggested that

⁵⁸ Boyd et al. 1914, pl. II, 15.

⁵⁹ Levi & Carinci 1988, pl. 105 k.

⁶⁰ Effenterre & Effenterre 1969, pl. XLV, K 87.

⁶¹ Chevalier et al. 1975, pl. XVII.5, 6.

⁶² Popham 1974, fig. 4, nos. 17-20 and 22, especially 17 and 22, the latter with splash decoration.

it constituted an elite ware. 63 Cf. a light-on dark parallel on a cup from Malia, Chrysolakkos. 64

Parallels from fase Ib, at Phaistos;⁶⁵ from Malia, *nécropole des Pierres Meuliéres*;⁶⁶ cf. also an unpainted example from Gournia, considered to be Neopalatial;⁶⁷ from Palaikastro a decorated example.⁶⁸

Conical bowls

Conical bowls are related to the abovementioned class; they had a similar use to the ledge-rimmed bowls, but they are simpler, with a smaller capacity. Twenty-four specimens are included in the pottery catalogue: P2 (Fig. 29), P21, P22, P24, P25 (Fig. 29), P29, P30, P33, P37, P42 (Fig. 29), P44, P47 (Fig. 29), P51 (Fig. 29), P56, P59, P61, P63 (Fig. 29), P66, P74, P84, P87, P89, P91, P97; many more sherds belong to this shape.

Conical bowls are small, carelessly executed vessels that in terms of technique and profile details are closely related to the handleless conical cups, the only difference being their smaller height and the wide rim. It is not likely that they were drinking vessels; they were rather used to serve small amounts of solid food.

The features of the shape are the following: the bases are slightly raised, flat underneath, often with string marks, and the diameters range between 3.8 and 6 cm, the average being between 4.5 and 5 cm; the bodies are very shallow, either clearly conical, **P25** and **P66**, or more often with a more or less convex profile; the height ranges between 2.5 and 4.5 cm, the average being between 3.2 and 4 cm. The rim diameters range between 9.1 and 12 cm, the majority being around 10 cm; in most cases, the rims are thin, of triangular section, following the profile of the body. At least wo examples have outcurving rims, **P89** and **P91**.

The conical bowls are made of fine clay with few inclusions, usually buff, or yellowish (Petras), and in fewer cases orange, buff-orange, or buff-pinkish in colour; they are all self-slipped; almost all specimens including the decorated ones have wheel marks, either on the interior surface, or on both surfaces; fingerprints and sponge marks are very common, especially on the exterior surface, and in fewer cases on the interior as well. The majority of the bowls are unpainted; those decorated are either monochrome, P21 and P74, or with splash decoration, P84, P97, P87 and P63. These latter bowls are slightly larger in size than the unpainted and the monochrome ones. For this type of decoration see above the discussion of ledge-rimmed bowls above.

This is a very common type of vessel for the Protopalatial period, found in large quantities, both undecorated, and with a simple, linear, usually dark-on-

⁶³ Haggis, in press.

⁶⁴ Demargne 1945, pl. XIII.c.

⁶⁵ Levi & Carinci 1988, pl. 102 w, a, 244.

⁶⁶ Hazzidakis et al. 1963, pl. XXXVIII, 96.

⁶⁷ Betancourt & Silverman 1991, pl. 12, nr 516, 42.

⁶⁸ Bosanquet & Dawkins 1923, fig. 21, 33-4.

light decoration. Parallels from Phaistos;⁶⁹ Malia, from the basements⁷⁰ and elsewhere.⁷¹

Shallow, carinated bowl

A small specimen with light-on-dark decoration, **P54** (Fig. 29). It is made of fine buff clay with no inclusions and has thin walls.

Discussion

Technique

The pottery from the hieroglyphic archive at Petras is more or less homogeneous, with very few exceptions of outstanding vases in terms of their clay and decoration, and does not differ noticeably from other excavated Middle Minoan IIB deposits either in the palace or in the houses of the settlement. The clay is generally fine or medium, pure with few inclusions, and well-fired. No petrographic analysis has been conducted on this material, however, there are three easily recognisable types of clay prevailing in the pottery of the archive deposit: the orange clay typical of the Palaikastro area, the yellowish Petras clay⁷² and a, probably local, fine buff clay. The surfaces are well-treated and the application of a slip is universal. The decorated pottery forms less than 10 % of the whole material. Paints are usually brown, black or reddish, and unevenly fired.

The most common type of decoration is the so-called splash decoration. Many drinking vessels are also monochrome, probably imitating metal prototypes. The quantity of Kamares pottery in the archive is minimal. This is probably significant and related to the status of the scribes in the palatial hierarchy. It should be noted, however, that the amount of Kamares pottery from all Middle Minoan excavated deposits at Petras (taking into consideration the fact that Middle Minoan material came to light only in stratigraphical trenches limited in space) is not very large.

Typologically, for shapes and decoration, the deposit of the hieroglyphic archive shows close affinity with Middle Minoan IIB deposits from Malia.

Contextual observations

The excavation and the study of the deposit of the hieroglyphic archive of the first palace at Petras offers a very rare opportunity for Minoan archaeology, to examine a more or less intact group of artefacts, found in a well-defined space,

⁶⁹ Levi & Carinci, 1988, pl. 102.

⁷⁰ Effenterre & Effenterre 1969, pl. XLVIII, 150.

⁷¹ Effenterre & Effenterre 1976, pl. XII, C, no. 136, E, no. 24.

⁷² Day 1995.

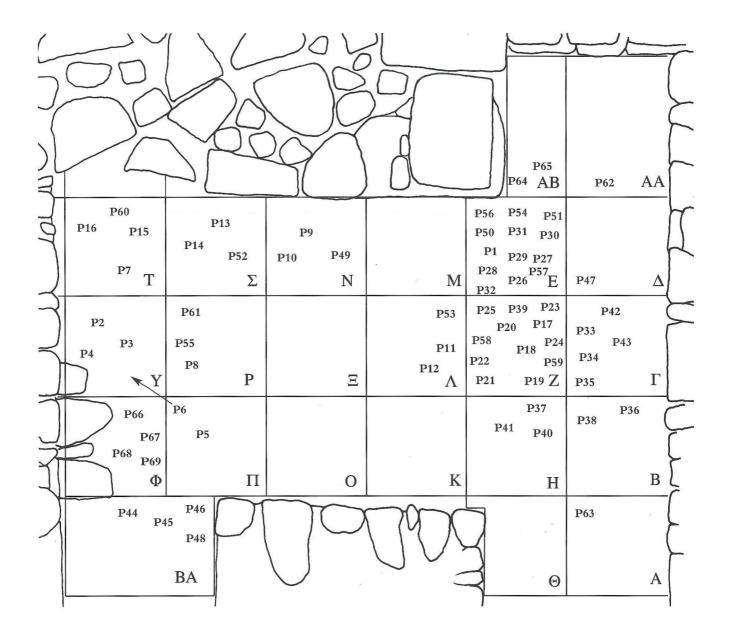
the function of which is well-established. Also, we are dealing here with a closed deposit, since the room of the archive was not cleared of its contents at the time of the construction of the second palace and was never re-used after the destruction of the first palace in Middle Minoan IIB. The assumption here is that we have at our disposal more or less the totality of the material, which was in use at the moment of the room's destruction and the subsequent abandonment of this extremely important area of the palace. This makes it possible to determine the function of the ceramic vases and, therefore, helps to construct a picture of the life and special activities of the users of this space.

Firstly, in accordance with what is already known about Minoan archives, and the way they were organised and functioned, we postulate that a small number of people worked in this room. This hypothesis is also confirmed by its restricted size. This implies that its users spent a significant amount of time in this particular area, because they had to take advantage of the daylight, as no lamps were found in the room containing the hieroglyphic archive. It is not easy to speculate of course, whether the people assigned to work in the archive were always, or even most of the time, busy there. What we have, captured in the destruction deposit, is the moment of the final catastrophe. We do know that they were busy writing tablets on that day, and that they left unfinished documents when they rushed away. Apart from the people connected directly with the archive, other people must have needed to come into the same space on various occasions, and to remain there for a, presumably short, period in order to conduct special transactions. These might have included delivering certain products, which had subsequently to be sealed and catalogued, before being deposited in the storerooms, or moved to other areas of the palatial complex in order to be used.

The general impression given by the group of vases from the room is that there are no vessels which could have served exclusively for any of the archival activities. It is also true that some of the pots found in the archive room (such as amphorae and pithoid jars), could have been connected with such activities, for example they could have stored water or clay. Yet, given the fact that these are common domestic vessels, they could have been use to store water (or other liquids), as well as food, to serve the people working and visiting the archive. If this was the case, one should accept the idea that water and clay for the documents may have been stored in vessels made of perishable materials.

On the contrary, the activities observed with certainty are food consumption and drinking. Two, not mutually exclusive, hypotheses can be presented to explain this fact.

Firstly, that people working in the archive had to remain in their place of work for long hours, and thus took their meals, or at least snacks, in this very room. This was probably due primarily to the delicate nature of their activities, especially to the fact that clay dries very easily and needs to be handled immediately after it is mixed with water, in order to retain its plasticity. Furthermore, the special importance of the bureaucratic, and presumably confidential, character of the documents themselves would have required their constant supervision.



Secondly, that people who visited the archive room in order to have their products sealed and obtain receipts of their transactions, *i.e.* all those participating in the bureaucratic system in various capacities, may have been offered small, token amounts of food and drink, by the archive personnel, as a form of token hospitality, a practice known in many societies.⁷³

The large number of cups and bowls preserved in the archive argues in favour of a combination of these two hypotheses.

These suggestions can be advanced a step further, in connection with a careful examination of the ceramic material available, assuming that the picture offered by the excavation is more or less complete, since the deposit was sealed by the destruction. The room was destroyed by an earthquake and a

Fig. 30. Distribution of more or less complete vases within the archive.

⁷³ Rupp & Tsipopoulou 1999.

subsequent fire, and the people working there, in their hectic attempt to flee from the burning building, dropped not only the unfinished documents they were inscribing at that moment on the floor, but also the (presumably) precious bronze stylus. Thus, it seems highly unlikely that they would have been concerned about, or would even have had the opportunity of taking with them any of the clay vessels they were using at the time. The possibility cannot be excluded, however, that the archive room also contained vases made of precious materials (stone or metal), and that these were moved elsewhere by the scribes at the time of the destruction, especially if these vases were small and easily transportable. This possibility can neither be confirmed nor rejected, and consequently, one has to base the study of the deposit on what has been preserved.

Furthermore, the observations about the find spot of the various types of vessels (Fig. 30), probably suggest that, at least some of them, were stored on shelves (for example most of the conical bowls were found in Square Z, pass 2).

The function of the pottery within the archive activities

The vases can be divided into the following categories, according to their function:

Drinking vessels

The group comprises 43 specimens: seven one-handled conical cups, one one-handled bell cup, one globular (one-handled?) cup, seven one-handled carinated cups, eight one-handled straight-sided cups, nine handleless shallow conical cups, five deep handleless conical cups, one kantharos with crinkled rim, one one-handled stemmed bowl, three handleless bell cups.

Two of the drinking vessels are especially significant and stand out from the rest of the pottery, both for their size and their quality, namely P5 and P38. Both are monochrome footed cups, one- and two-handled. It is interesting to note that the size and the capacity of the two are practically identical.

Serving vessels

The group comprises 39 bowls: 24 conical, 14 ledge-rimmed, one shallow carinated.

The shallow bowls are closely related to the conical cups. They are made of the same clay and have the same general shape, but are much shallower. It is unlikely that they could have been used for drinking; rather they served to hold small quantities of solid food.

The bowls in the archive deposit are so uniform in shape, that one suspects they might have been used to measure a portion of foodstuff. To develop this argument further, it is observed in the case of the Petras bowls, that they occur in various qualities. Along with the simpler unpainted bowls, there are some larger carefully decorated specimens, such as P1, which has a polychrome decoration. This is similar to what was observed in the cups. This more precious bowl could have been used by the same person who used the kantharos P38, as an indication of a superior status in the hierarchy, while the other high quality drinking vessel P5, might perhaps be paired with P7. It thus seems that there were two outstanding sets of serving and drinking vessels which might have been reserved for the elite administrators.

The unpainted bowls are subdivided into two types, despite the fact that they all are almost identical in size and capacity. They differentiate for the rim profile, which is either not pronounced, following the profile of the body, (P51), or more (P45) or less (P47 and P42) pronounced.

Vases for short-term storage of liquids

Two fragmentary amphorae, P20 and P49; these could have contained water used for mixing the clay for the production of documents, and also drinking water, or some other liquid for the people working in the archive.

Vase for short-term storage of solids

Coarse, medium-sized pithoid jar, **P11**; it is capacious enough to have held a quantity of pure clay; alternatively they could have held food.

Vases for serving liquids

At least four jugs were used in the archive, a carinated bridge-spouted jug, P10, two wide-mouthed jugs, P11, and a wide-mouthed jug with trefoil rim, P43. The first is clearly of superior quality and could have served the person who used the fine kantharos with crinkled rim and the ledge-rimmed bowl, P1.

Conclusions

Following the typological analysis and taking into consideration the number of specimens from each shape and type, one can proceed to further hypotheses, in accordance also with the data from the palaeographic and contextual analyses of the documents, namely the identification of two scribes. The presence of these two officials is mirrored in the two sets of vases used for drinking and eating small amounts of food, of considerably superior quality, identified in the ceramic material. The two sets comprise a cup and a bowl/dish which, significantly, are also of larger capacity than their more humble counterparts.

The second group of drinking vessels includes cups of relatively good quality, but with a smaller capacity than the first one, namely carinated cups and

straight-sided cups. It is noteworthy that both types have the same capacity. The bowls on the other hand, belong to only two types, larger and decorated, smaller and plain. The third category of drinking vessels comprises the unpainted handleless cups, conical, bell and globular. It is not certain whether these minor differentiations reflect different uses and/or different users, especially since all the shapes of unpainted handleless cups have practically the same capacity. In any case, one cannot accept that this variety was accidental and had no special meaning, given the hierarchical organisation of Minoan society, and in particular, of Minoan bureaucracy, which concerns us here in this very specialised context.

If the two sets can be easily attributed to two officials, it is not equally easy to speculate about the social status and the actual number of the users of the other classes of drinking vessels. Were the medium quality and capacity sets for the rest of the personnel working in the archive – the scribes, people who prepared the clay for the documents and so forth - or for people who visited this area to conduct special transactions, and carried their own seals? Should one connect the more numerous handleless unpainted cups to the visitors, or even the hierarchically lower personnel of the palace bureaucracy, directly associated with the archive's activities? Both hypotheses have their own value; neither of them is possible to prove with any degree of certainty however. In a previous study the writer has examined the presence of large groups of handleless conical cups in contexts of the Neopalatial period at Petras and expressed the view that they had a very special and well-defined meaning in the framework of token hospitality.⁷⁴ Whether one could extend a similar explanation to the Protopalatial period remains open, but the archive deposit may offer a good argument in support of this hypothesis.

As for the amphora, it could have been used either to hold water or some other liquid for the people working in the archive, as well as visitors, or alternatively, it could have contained water which was used for the preparation of the clay. The latter is more likely, as there were other smaller vessels in the room for short-term storage and/or serving liquids.

The distribution map of the pottery in the archive room (Fig. 30), offers the possibility for more observations. Firstly it is interesting to note that no vessels was found in the centre of the room; the vessels were all grouped near the walls, and one could conclude from this that they were stored on shelves, separated by shape and capacity. All larger vessels, used for short-term storage of liquids and for serving drinks were found in the northwestern corner of the room, and were initially placed on a shelf of the north wall. Vessels for serving food (bowls and dishes) were found scattered in the southwest corner of the room, where another shelf could have been placed. A third shelf could have been placed on the east wall, to store most of the cups.

⁷⁴ Rupp & Tsipopoulou 1999.