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A Forgotten Island: Kalymnos in the Late Neolithic Period

Mario BENZI

ABSTRACT: In the early 1920s three prehistoric caves were excavated by A. Maiuri on the island of Kalymnos, at Vathy above the harbour of Rhina, and at A. Varvara and Cheiromandres near the modern town of Pothia. Unfortunately, the excavation is virtually undocumented. The excavation notebook has long disappeared and the excavator's preliminary report is disappointing in terms of both stratigraphy and related finds. Therefore, the materials have to be dated by parallels with comparative finds from other sites. The Vathy cave yielded substantial material, witnessing a long, though not unbroken occupation of the site. Three main groups of material are clearly recognisable: a substantial Late Neolithic deposit; a tiny but highly characteristic EB III deposit and a mixed LB deposit extending from LM IA to LH IIIC middle. The earlier phases of the EB and the MB are missing or elusive. The earliest occupation of the cave is likely to date from an early phase of the Late Neolithic period, broadly contemporary with phases I-II at Tigani on Samos. The bulk of the material is, however, contemporary with phases III and IV at Tigani and with Late Aegean Neolithic 3 and 4 sites in the Dodecanese such as Partheni Lerou, Iali Nisyrou, Archangelos and Kastro Alimnias. No EB I pottery has so far been identified. The material from A. Varvara and Cheiromandres is more difficult to assess because of its very fragmentary condition and the fact that only a small portion of the finds have been identified with certainty. At both sites, however, pottery belonging to LAN 3-4 seems safely recognisable. In addition to pottery, all three caves have yielded a rich array of stone tools and plenty of Melian obsidian. An outstanding group of fine obsidian tools, including thin blades and an "arrow-head", comes from Cheiromandres.

In the early 1920s three caves with prehistoric remains were excavated by Italian archaeologists on the island of Kalymnos: at Vathy in the bay of Rhina in front of the Carian coast and at S. Barbara and Cheiromandres near the modern town of Pothia.

The cave at Vathy is by far the most important of the three by either quantity and quality of the finds and the wide time span they cover. In fact this site still provides the longest, though not unbroken, settlement sequence found in the Dodecanese with more or less substantial traces of occupation in the Late Neolithic, EB (mainly during the final phase)¹, MB (scanty remains) and throughout the LB from LM IA to middle LH IIIC². There is evidence that in LM I the cave had become a cult place³. Had this site been properly published at the time of its discovery almost every aspect of the prehistoric SE Aegean, as we know it today, would have been known

several decades in advance. Unfortunately, the excavator was able to publish only a short preliminary report, which provides very little information on such basic issues as stratigraphy and related finds and virtually no illustrations of the finds⁴. The cave opens into the northern side of the Vathy bay and consists of a spacious chamber about 25 m long and 12 m wide. In front of the entrance and along the west wall very mixed finds were recovered in various unstratified pits in the bedrock. A deep and apparently undisturbed deposit was found in two soundings dug along the back wall where the bedrock slopes down. In the first sounding at 1 to 1,60 m below the surface many sherds described as "Neolithic" (but also an EB III duck vase) were recovered⁵. A large pithos with its lid (a round pumice stone slab) still *in situ* was deeply sunken in the "Neolithic" deposit; some comparable pithoi were found at about the same level in second sounding. Though sunken in the "Neolithic" stratum, they are no doubt later and are likely to date from LB. In the second sounding a floor of clay and beaten earth was met at 1,50 and traces of a hearth were found at 1,60 m. below the surface;

¹ Benzi 1997.

² Benzi 1993.

³ This suggestion, first made by the present writer on the basis of a characteristic Minoan stone ladle of a type usually found in cult contexts (Benzi 1993, 279, 281, pl. 36: c bottom), has been strengthened by the recent chance discovery of a bronze figurine of the Minoan worshipper type, to be published by T. Marketou.

⁴ Maiuri 1928.

⁵ Maiuri 1928, 115, fig. 94; Benzi 1997, 388-390, pl. 3: a.

grinding stones and much “Neolithic” pottery were recovered. Further down a 0,30 / 0,50 m. thick stratum of grey, soapy earth mixed with ashes and food remains (including a large amount of seashells and a few sheep bones) was met at 2/2,30 m. below the surface. Several grinding stones and much “Neolithic” pottery were recovered; the only vase mentioned by Maiuri is a bowl with handle surmounted by a wart to be identified with the bowl in Fig. 15.

At S. Barbara two caves were explored, an outer and an inner one⁶. In the southeast sector of the outer cave at 1/1,50 m. below the surface a stratum of whitish earth mixed with ashes and food remains (sheep/goat bones and many seashells) was found. A group of 43 fine bone tools (points, chisel ended tools and finely crafted double-ended chisels), obsidian blades, working debris and stone “burnishers” were recovered. Underneath that stratum at 1,50/2 m. below the surface was discovered a cobbled floor lying on a 0,30/0,50 m. thick layer of beaten earth, which reached down to the bedrock. The excavation in the small (30 m²) and dark inner cave proved extremely difficult. The deposits examined reached a depth of 4 to 5 m. The first prehistoric stratum was found at 1,50/2 m below the surface. It consisted of black earth mixed with charcoal and food remains. Two clay figurines and plenty of pottery were recovered, including a group of sherds with incised decoration⁷. From 2 to 3 m below the surface several hearths were discovered; further down to a depth of 4 m a thick layer of food remains consisting of decomposed bones was uncovered.

The precise location of the cave of Cheiromandres is unknown. According to Maiuri it opened into the western slope of the valley behind the modern town of Pothia, but apparently no traces of it are preserved today. At the time of the excavation the cave was no more than a rock shelter but evidence was found that it was considerably larger before much of the roof collapsed⁸. The excavation proved difficult and only a small area of the original cave was investigated. The prehistoric

deposit came to light at about 1 m below the surface and yielded the richest group of obsidian tools found so far in Kalymnos, a number of stone axes and abundant ceramic finds. At 1,80/2 m below the surface several hearths were discovered. Set apart from the others was an outstandingly large hearth (2,10 m in diameter) partially surrounded with stones. In a pit in the bedrock were recovered bone tools and food remains. Underneath the level with hearths was found a further stratum consisting of earth mixed with animal bones. In the NW corner of the cave a deposit of bones and burnt debris reached 4/5 m. below the surface.

At the beginning of the war the materials from Kalymnos were stored in boxes. The inventory numbers were unfortunately written on paper labels, most of which were deteriorated when the boxes were opened after the end of the war. In addition, some time after the war the bulk of the material was sent back to Kalymnos while a small portion of it was much later tracked down to the storeroom of the Rhodes Museum. Therefore, reassigning the finds to their original contexts proved an extremely difficult task. Such work was based on two sources: the Italian inventory and some 30 old photographs showing either whole vessels and groups of sherds and tools. Particularly useful proved a photograph showing the glass show-case in which a selection of the materials was exhibited in the Rhodes Museum before the war. In the glass case the finds from each cave were kept separated from those of the others. In the following discussion the objects are identified by their inventory numbers (e.g. **5675**) or their location in the show-case (e.g. **I:6:2**)⁹ (those from S. Barbara and Cheiromandres are marked **SB** and **CH**); objects of unidentified provenience are marked **UP K** (stored in Kalymnos) and **UP R** (stored in Rhodes).

⁶ Maiuri 1928, 106-108.

⁷ Maiuri 1928, fig. 88.

⁸ Maiuri 1928, 108-110, fig. 89.

⁹ The showcase had three sections. Sections I and II were entirely devoted to the materials from Vathy while those from S. Barbara and Cheiromandres were exhibited in the upper and lower part of Section III respectively. Sherds and small finds were fixed on paper panels by means of strings. The Roman number refers to section; the Arabic numbers refer to the paper panel and the object in question respectively. Both panels and objects are numbered in clockwise order.

A selection of prehistoric pottery from Kalymnos was published in 1956 by Furness as coming from Vathy. In fact some of the sherds illustrated by Furness come from S. Barbara and Cheiromandres¹⁰. Though recognising that much of the pottery from Samos, Kalymnos and Chios predate Troy I, Furness regarded it as a single series dating to “an early phase of the well documented EB culture of West Anatolia”¹¹. Since Furness wrote her pioneering article, however, our knowledge of the Neolithic period in the Eastern Aegean has undergone profound changes. With the full publication of the materials from Emporio and Ayio Gala, the new German excavations at Tigani and the Greek excavations at a number of sites in the Dodecanese (Kalythies and Archangelos on Rhodes, Kastro Alimnias, Partheni Lerou and the islet of Yali), the picture has become much more detailed than it was in the middle 1950s. The new evidence places most of the materials assigned by Furness to the EB firmly within the Late Neolithic of the Eastern Aegean¹².

Being virtually unstratified, the materials have to be dated on typological and stylistic grounds and by comparison with related materials from other sites. It comes as no surprise that Phases I-IV at Tigani (according to Felsch) and the LN sites discovered by Sampson in the Dodecanese provide the closest parallels to our material. Less marked affinities exist with Ayio Gala, Emporio, the few and mostly unstratified LCh. sites so far discovered on the coastal strip of western Anatolia and with the more remote site of Beycesultan. Therefore, the chronological sequence suggested here is chiefly based on the stratified sequences found in the new excavations at Tigani and in the Dodecanese and on the overall chronological scheme set up by Sampson., who divides the Late Neolithic of the Aegean into four phases: Late Aegean Neolithic 1-4

(hereafter LAN 1-4)¹³. However, though commonly regarded as broadly contemporary, such sequences do not fully overlap and there are many local peculiarities and some striking differences. Our sequence is largely based on the material from Vathy, which yielded evidence for a possibly unbroken occupation through a large part of the LN period, but comparable finds from the less documented caves of S. Barbara and Cheiromandres seem to indicate that these sites were inhabited at about the same time as Vathy.

At present three main phases of occupation seem detectable at Vathy, hereafter they will be referred to as Phases I, II, III.

The fabric of the Kalymnos pottery is fairly uniform. The clay is rich in mica; gold mica is the rule, but silver mica also occurs. The paste includes pebbles of various sizes, which are quite obvious to the eye even in the finest wares. Straw impressions showing in both the inside and outside surfaces are extremely common. The firing is uneven. In most cases there is a difference in colour between the core and the parts near the surfaces, though a fairly good number of sherds show an even firing right through. In general the material can be divided in the following classes according to surface treatment and type of decoration.

A) *Coarse Unburnished Ware*. The fabric is coarse with mediocre firing and dark inner core. The surfaces are more or less carefully smoothed and mainly variegated. The cheese-pots/baking pans bear traces of light whipping on the inner and/or outer surfaces.

B) *Medium Coarse Burnished Ware*. The surfaces are generally given a careless, uneven burnish (“scribble burnish”) and are often variegated; in most cases the traces of the burnishing tool are conspicuous.

C) *Fine Burnished Ware*. The burnish is of very good and often quite outstanding quality. Although the finest pieces are full black, there are others which are dark brown and/or variegated.

¹⁰ Furness 1956, pls. 19: 7, 8: 20: 1-3 from S. Barbara; fig. 10: 12, pls. 19: 2-4, 6, 10, 13-17 from Cheiromandres.

¹¹ Furness 1956, 188-193, 203 ff. and fig. 16.

¹² The only exceptions being some red slipped and burnished bowls with incurved rim and some duck vases of Phylakopi I type from Vathy (Furness 1956, figs. 10: 15; 11:1, pl. 20: 4-7) dating from a late phase of EB, Benzi 1997, 384 ff., 390 ff., figs. 1: a-c; 3: a-c.

¹³ Sampson 1983; 1984; 1989.

D) *White-painted Ware*. The surfaces are well burnished and mostly black/dark brown variegated¹⁴. The matt white paint flakes away easily from the burnished surface.

E) *Incised Ware*. The fabric is the same as in the previous classes; the surfaces have a burnish of variable quality and are mainly black/dark brown and variegated. This decoration is extremely rare on the Kalymnos pottery. The FN “scoop”/rhyton from Vathy is an outstanding example of this class (**5667**) (Fig. 33). A group of fine incised sherds comes from the upper level of the outer cave at S. Barbara (**SB 6024–6033**). Some of them have incised designs filled with dots (*pointillé*) and encrusted with white paste¹⁵.

F) *Red Slipped and Burnished Ware*. Although extremely rare, sherds of this class occur in all three caves. They come from a number of different shapes: hemispherical bowls (**CH 6182–6183**¹⁶), open bowls (**II:4:6. SB 6022. CH 6178. UP R 13**) (Fig. 30), bowl/jars (**5740. SB 6013**) (Figs. 40, 43), jars with inward leaning rims (**SB 6016. CH 6222**) (Fig. 44), low-necked jars (**I:9:2. CH 6215**). On **SB 6013, 6022, CH 6182-6183, 6215** the outside surface and a band round the interior of the rim are slipped; on bowl/jar **5740** (Fig. 40), and open bowls **II:4:6** and **UP R 13** (Fig. 30) only the inner surface is slipped. **5740** is an outstandingly fine piece with dark burnished outside surface and a highly burnished bright red slip on the inside. The inside surface of **II:4:6** has an unusually thick, highly burnished slip which is in sharp contrast with the rough dark outer surface. In the eastern Aegean this class of pottery was first noticed by Heidenreich and Butler in the old excavations at Tigani¹⁷. Though not common evidence, it has also come to light in the new excavations (described by Felsch as “*rot inkrustiert*”). The earliest examples occur in Phase IIIb. In Phase IIIc a number of open bowls of various types have their inside surface covered in a thick

bright red slip, which extends to a narrow band on the outside of the rim; open bowls with thick red slip on the interior are a hallmark of Phase IVa¹⁸. Unlike Tigani, red slipped pottery is very common at Kalythies III and Archangelos I (LAN 3)¹⁹ on Rhodes and also occurs, though in variable quantity, at the LAN 4 sites of Kastro, Partheni and Yali²⁰. In light of this evidence, the red slipped ware from Kalymnos is likely to date from an advanced stage of Phase II and/or Phase III, as some characteristic shapes also suggest.

G) *Pattern Burnished Ware*. The use of burnish as a decorative feature is extremely rare in the Dodecanese²¹ and Kalymnos is no exception. The only outstanding piece is a Phase III open bowl from Vathy, which is likely to be an import from Samos (**5727**) (Fig. 20) (see infra Phase III).

A unique example of “Gold Ware” comes from Vathy; it is an undiagnostic body sherd possibly coming from a bowl (**5876**). A few vessels made in this ware have been found in Phase III deposits at Tigani III²².

Quite surprisingly, classes B and C are much more common than A, but this is likely to reflect the choice of the excavator rather than the actual situation.

Phase I

The pottery assignable to this early phase has good parallels at Kalythies I-II, Tigani I-II and, to a lesser degree, Emporio Periods X-IX and should be broadly dated to LAN 1-2. It remains uncertain whether Phase I is contemporary with both early phases of LAN or with one only and, if so, with which.

Open Shapes

The deep hemispherical bowl with inward leaning rim is a common shape at several LN sites in the eastern Aegean. Bowls of this type from Vathy, S. Barbara and Cheiromandres were made in a variety of

¹⁴ The unique example of white paint over a red slip mentioned by Furness 1956, 190, fig. 10: 15, occurs on an EB III bowl, Benzi 1997, fig. 1: a.

¹⁵ Maiuri 1928, fig. 88; Furness 1956, pl. 20: 1-3.

¹⁶ Furness 1956, fig. 10: 12

¹⁷ Heidenreich 1935-36, 153 F 60, pl. 64; Butler 1935-36, 189; Furness 1956, 187, fig. 5: 60.

¹⁸ Felsch 1988, 57, 58, pls. 62: 264; 63: 267, 268; 67: 238 IIIb; 60-61, pls. 65: 299, 300; 67: 352; 78: F 60 IIIb; 64, pl. 68: 359-362 IVa.

¹⁹ Sampson 1987, 32-33 Open Shapes 8, 9, 10; 72.

²⁰ Sampson 1987, 82, 88; 1988, 102.

²¹ Sampson 1987, 43-44.

²² Felsch 1988, 52, 63.

fabrics: coarse plain (**5797**)²³ (Fig. 1), fine plain (**5871**), dark burnished (**5819. 5867. UP K 10. CH 6238**) (Fig. 4) and white-painted (**5726a. 5726b. II:7:2. II:7:4. SB 6039**)²⁴ (Figs. 2-3). At Tigani such bowls are characteristic of Phase I²⁵. At Kalythies they are common in Phases I-II and are still occasionally found in Phase III²⁶. They also occur at Archangelos I contemporary with Kalythies III²⁷. At Samos and in the Dodecanese the shape (in spite of some later survivals) seems more at home in the early rather than middle or late LN. At Emporio, however, it is common throughout the period while at Ayio Gala it is not seen before Phase II²⁸.

At Tigani I such bowls are usually provided with a simple (“*Griffzapfen*”) or elaborate (“*Griffplatte*”) tab handle²⁹. Some tab handles from Vathy and Cheiromandres are likely to come from bowls of this type, as the preserved portions of rim suggest (**5819. CH 6217. CH 6238**) (Figs. 5-7). Such elaborate “*Griffplatten*”-handles with one or two perforations and horned tops are closely paralleled at Tigani I and Emporio, where they make their first appearance in Period IX³⁰. Tab handles of comparable type (but sometimes with elaborate multi-horned tops) occur at Kalythies I-II on white-painted bowls³¹. Tab handles of various shapes are also found at Saliagos³². Quite surprisingly **CH 6216** with white-painted decoration (Fig. 8) is the only example of “*Griffzapfen*”-handle known so far

from Kalymnos³³. The horizontal oval-sectioned side-handle of **5797** (Fig. 1) is quite unusual. No handles of this type are reported from any other LN site in the Dodecanese and those from Tigani referred to by Furness are in fact vertical handles coming from jugs and bowls³⁴. At Emporio horizontal side-handles are not seen before Period VI at the very end of the LN period³⁵.

The white-painted bowls deserve some further comment. White-painted pottery is scarcely represented on Kalymnos. In addition to those already mentioned, there are two more examples from Vathy and S. Barbara, a group of tiny sherds from Cheiromandres³⁶ and a rim sherd of unknown provenience (**UP R 16**). Most of them come from bowls and clearly fall into two groups: a) deep hemispherical bowl with inward leaning rim and white decoration painted on the exterior dark burnished surface (**5726a. 5726b. II:7:2. II:7:4. SB 6039**) (Figs. 2-3) and b) large open bowls with decoration painted round the interior of the rim (**5835. SB 6038. UP R 16**) (Figs. 31–32). The undiagnostic body sherds from Cheiromandres are difficult to assess but are likely to belong with the first group. From Cheiromandres also come two fragmentary handles: the already mentioned tab handle **CH 6126** and a flattened, most likely vertical handle (**CH 6209**)³⁷, possibly coming from a closed shape, which is not unlike some vertical handles from white-painted jugs of periods VII-VI at Emporio³⁸. This class of pottery occurs at many sites in the Aegean and Anatolia through different phases of the Neolithic period, often showing striking similarities in designs and layout, and is notoriously difficult to date where not in found in stratified contexts³⁹. Its occurrence on Samos and in the Dodecanese is a case in point. At

²³ Furness 1956, fig. 10:1.

²⁴ Furness 1956, fig. 10: 14, pl. 19: 11-12.

²⁵ Felsch 1988, 42, pls. 50: 4, 15; 51: 16, 17, 19; 54: 82.

²⁶ Sampson 1987, 24, figs. 10-11 (*Plain Ware: Open Shape 8*); 33, figs. 36-37 and pl. 4d (*Burnished Ware: Open Shape 7*); 38, figs. 51-53 etc. (*White-painted Ware: Open Shapes 1, 3*); 44. Sampson 1988, fig. 89: Shapes 5, 20, 23.

²⁷ Sampson 1987, 71 (*Plain Ware: Open Shape 3*); 72 (*Red Burnished Ware: Open Shape 4*); 73 (*Dark Burnished: Open Shape 2*); 73, figs. 86, 88-90 (*White-painted Ware*).

²⁸ Hood 1981, 41, 175, 253 ff., 312.

²⁹ Felsch 1988, 43; Heidenreich 1935-36, fig. 3; Furness 1956, fig. 9.

³⁰ Felsch 1988, 43, 73, pls. 79: 3b, 3i, 4a; 80: 46, 3; Hood 1981, 282-283, fig. 135.

³¹ Sampson 1987, figs. 51: 571; 54: 612-613; 55: 616; 56: 625; 1988, fig. 89: Shape 5.

³² Evans & Renfrew 1968, 39, fig. 58: 3-10; pl. 31: a.

³³ cf. Felsch 1988, pl. 79: 3g. For tab handles in Anatolia, cf. Hood 1981, 283.

³⁴ Furness 1956, 182, 188 (Heidenreich 1935-36, pl. 47: 1-3, 5-8); cf. Felsch 1988, 50, pl. 80 “*Stabhenkel*”. The same fragments are attributed by Hood 1981, 280 to arched handles set on top of bowl rims.

³⁵ Hood 1981, 208, 340, 341, figs. 104; 144: 480.

³⁶ Furness 1956, pl. 19:13-17.

³⁷ Furness 1956, pl. 19: 13.

³⁸ Hood 1981, pl. 50: a.

³⁹ For recent comprehensive discussions of this class, cf. Evans & Renfrew 1968, 82-83; Hood 1981, 225-226; Sampson 1987, 40-42; Sotirakopoulou 1996, 583 ff. with further references.

Tigani it is well attested in phases I and IV, but is virtually unknown during Phases II and III⁴⁰. At Kalythies it is found throughout the three main phases at the site, which are thought to be roughly contemporary with Tigani I-III⁴¹. White-painted pottery also comes from Archangelos I (contemporary with Kalythies III)⁴², but is conspicuously absent at the LAN 4 sites of Archangelos II, Kastro, Partheni and Yali, which must be regarded as broadly contemporary with Tigani IV. At Tigani open shapes are painted on the exterior in phase I and round the interior of the rim in phase IV. At Kalythies both exterior and interior decoration are found throughout the three phases at the site; their distribution through the successive layers is not clearly assessed by the excavator, who simply states that the former is more common in the lowest levels. According to Sampson, white decoration on dark burnished surface is considerably more common in the lowest levels (Kalythies I-II) and is superseded in phase III by white decoration on red slipped surface, a class not attested at Kalymnos⁴³. The bowls from Kalymnos with exterior decoration (consisting of multiple chevrons painted on the upper part of the body) are very similar in shape, decoration layout and surface treatment to those from Kalythies⁴⁴ and a white-painted bowl from the old excavations at Tigani, assigned by Felsch to phase I⁴⁵. Bowls of this type with white-painted decoration also come from Grotta on Naxos and Akrotiri on Thera, while at Saliagos such decoration is usually found on flaring-rim bowls⁴⁶. The open bowls with decoration round the interior of the rim are closely paralleled at Tigani IV and are discussed below (phase III).

⁴⁰ Felsch 1988, 46, 67. Cf. also Heidenreich 1935-36, 156-156 F 69, F 70, pls. 39: 1-7; 40: 1-4.

⁴¹ Sampson 1987, 36-42, figs. 51-62; pls. 12-18.

⁴² Sampson 1987, 73, pl. 31.

⁴³ A bowl from Vathy assigned to this class by Sotirakopoulou 1996, 587, note 36 (Furness 1956, fig. 10: 15) is in fact an EB III red slipped and burnished bowl, cf. *supra* note 14.

⁴⁴ Sampson 1987, figs. 51-62, but also pls. 88: 34b-c; 89: 47 from Archangelos I.

⁴⁵ Felsch 1988, 46, 212, pl. 81: UP 1, as already pointed out by Felsch himself; Treuil 1983, 33, and Sotirakopoulou 1996, 587.

⁴⁶ Hadjianastasiou 1988, 17, fig. 3:3; Sotirakopoulou 1996, 587-589, fig. 3, pl. 3; Evans & Renfrew 1968, figs. 48 ff.

Closed Shapes

There is little evidence for closed shapes from this early phase. The body of a closed vessel with angular profile from Vathy is not unlike that of a jug from Tigani II and has been restored in drawing accordingly (**5673**); (Fig. 9)⁴⁷.

Phase II

This phase is contemporary with Tigani III, the LAN 3 sites in the Dodecanese (Kalythies III and Archangelos I) and Emporio VIII.

Open Shapes

The most characteristic shape of phase II is the deep conical bowl with carinated rim (**5737. I:4:12. SB 6096. UP R 10**) (Figs. 10-12). The two bowls from Vathy are in fine black burnished ware; **SB 6096** is slightly coarser; **UP R 10** is made in a different fabric (black to dark grey in colour) with well polished yet unburnished surfaces; its slightly thickened rim foreshadows the rolled rim of **5727** (see *infra* phase III). Bowls of this type with straight, convex or concave rims come from a number of LN sites in the Eastern Aegean. At Tigani they appear as early as phase II⁴⁸, but become very popular throughout phase III, during which they were produced in a number of variants; the interiors are often decorated with pattern burnish, a characteristic Samian trait⁴⁹. Bowls assignable to this type are not uncommon at LAN 3 sites in Dodecanese. From Kalythies III come several dark burnished and white-painted bowls with straight or inward leaning carinated rims⁵⁰ and burnished bowls of similar shape were found at Archangelos I⁵¹. At

⁴⁷ Felsch 1988, 48, 50, pl. 57: 155.

⁴⁸ Felsch 1988, 48, 49, pls. 57: 142-145, 153.

⁴⁹ Felsch 1988, 52, pls. 58: 187; 59: 198 IIIa; 56-57, pls. 60: 231, 232; 61: 242; 62: 255, 255a, 263; 66: 313, 315, 321; 67: 330 IIIb; 59-60, pls. 65: 296; 67: 350, 351 IIIc, and pls. 77: F 43, F 49; 78: F 65, F 66; 80: 59, 61; 81: UP 20; 82: UP 26 all assigned to Phase III. Cf. also Heidenreich 1935-36, F 49, F 51, F 66-68 & Furness 1956, figs. 5: F 49, F 51; 6: F 66-68; 7: 6, 7.

⁵⁰ Sampson 1987, 33, 34, figs. 38: 389, 394; 41: 426, 427, 440 (*Burnished Ware: Open Shape 9*); 39, fig. 54: 605, 607, 614 (*White-painted Ware: Open Shape 4*); 1988, fig. 89: Shape 39.

⁵¹ Sampson 1987, 72, figs. 88: 28, 30, 33; 89: 41-42, 44, 49; 95: Shape 2.

Emporio bowls of this type with rounded or sharp carination are assigned by Hood to Types 7 and 8 respectively. The earliest examples of Type 7 (coming from levels of Period X) are sometimes provided with lug-handles rising above the rim; bowls from levels of period VIII are very similar in profile to those from phase III at Tigani, whereas those from periods VII-VI have thickened and often club-like rims of types which are not found at Samos⁵². Though sporadically attested in periods X-IX, bowls of Type 8 are much more common in levels of period VIII and again in VI. Bowls of comparable shape also come from the upper levels of the Upper Cave at Ayio Gala⁵³. Although this type of bowl did appear earlier and lasted longer at Emporio than at Samos and in the Dodecanese, there is no doubt that it is a mainly LAN 3 shape in the Eastern Aegean. Bowls of the same overall shape, though with slightly concave rims, are characteristic of LCh.3 at Beycesultan and were at home in the LCh. of Western Anatolia⁵⁴. In the Aegean bowls with rims of this kind are virtually absent at Saliagos but are not uncommon at the FN site of Kephala on Keos⁵⁵. They also occur in Euboea, Attica and at a number of sites on the Greek mainland in FN as well as early contexts⁵⁶. Recently bowls of comparable shape have come to light in a FN horizon at Nerochourou in western Crete⁵⁷. At Samos and the Dodecanese there is no evidence for the survival of the shape into the final phase of LN.

Two bowls from Vathy (**5720**⁵⁸, **5833**) (Figs. 13-14) seem related to and are likely to have evolved from the carinated shape

discussed above. On such bowls the carination has virtually disappeared and the vessel has taken on a true conical shape with slightly closing rim. At Tigani bowls of similar type are first seen in phase IIIb and are found alongside the carinated ones to the end of that phase; apparently they are not found in phase IV⁵⁹. There is little evidence for bowls of this type from other sites in the Dodecanese⁶⁰. The bowls from Vathy are in fine dark burnished ware. The small bowl **5720** has a dark green tinge on the outside surface, a very unusual feature which is also found on some vessels from Tigani⁶¹.

A bowl of unknown provenience (**UP K 3**) (Fig. 17) with deep hemispherical body and sharply carinated, concave lip is unique. Though lacking the deep incision on the carination and the plastic "Rippen"-decoration, it is not unlike some bowls with funnel-like rims ("*Trichterrandschalen*"), which are typical of phase III at Tigani⁶².

The cup-bowl **5675** (Fig. 15) with globular body and flaring rim is unique. It was most likely provided with two round, arched handles set from rim to swelling and surmounted by short cylindrical warts. The vase is of outstanding quality with very fine burnish both inside and outside. In the eastern Aegean handles surmounted by warts are mainly found in LAN 3 contexts. Some jars from phase III at Tigani have elaborate handles surmounted by rounded or pointed warts; handles of this type are also found on a footed kantharos from phase IIIb⁶³. At Emporio warts occur on vertical handles as early as period X, and are very common in period VIII mainly on small jars (see infra **5671**). An unusually elaborate handle from Vathy (**5798**)⁶⁴ (Fig. 16) is also likely to date from this phase. Although no bowl closely comparable with **5675** has been found in the

⁵² Hood 1981, 175, 253-254, fig. 122: 112-129; 312,314, fig. 144: 488-506. Cf. also Felsch 1988, 78.

⁵³ Hood 1981, 41-42, fig. 24: 133, 134, 138, 141.

⁵⁴ Lloyd & Mellaart 1962, 93 Shape 19 "*Carinated bowls with slightly concave rim*", figs. P.8: 6-7, 11; P.9: 13, 16-20). Hood 1981, 176 points out that bowls of comparable shape from Hacilar and Çatal Hüyük show that the type was current in Anatolia from much earlier times.

⁵⁵ A few carinated bowls from the upper strata at Saliagos are of quite different shape, Evans & Renfrew 1968, 37, 83-84, fig. 35: 15, 17; Coleman 1977, 14, pl. 29: B-D, F, H.

⁵⁶ Several examples are listed by Hood 1981, 176. See also Spitaels 1982, 16 ff., 40-41, figs. 1.4-1.9 from a FN horizon at Thorikos.

⁵⁷ Vagnetti, Christopoulou & Tzedakis 1989, 61 Types A7-A9; Vagnetti 1996, 31, fig. 1: 2, 3.

⁵⁸ Furness 1956, fig. 10: 5.

⁵⁹ Felsch 1988, 56-57 "*Schalen mit kurzer, verdickter Lippe*"; 59-60 "*Schalen mit einziehender Lippe*", pls. 62: 255, 263; 64: 291; 65: 296; 67: 350.

⁶⁰ A bowl from Kalythies III and a few rim sherds from Archangelos I may tentatively be assigned to bowls of this shape, Sampson 1987, figs. 44: 445; 89: 44, 51.

⁶¹ Felsch 1988, 41 Phase I; 60 Phase IIIc.

⁶² Felsch 1988, 54-55, pls. 60: 235; 65: 300.

⁶³ Felsch 1988, pls. 63: 265, 273; 77: F 34 and 79, note 205.

⁶⁴ Furness 1956, pl. 18: 7.

eastern Aegean, a type of bowl/jar with S-shaped rim and small handles set on or below the rim from Partheni and a bowl of uncertain dating from the old excavations at Tigani seem related to the vase from Vathy ⁶⁵.

Closed Shapes

From Vathy comes a small-sized jar with differentiated cylindrical neck and lug handles surmounted by small rounded warts (**5671**) (Fig. 18), which has good parallels from Tigani and Emporio. At Tigani jars of this type, though of considerably larger size, are commonly found in phase III⁶⁶. They are similar to jars of Type 41 from Emporio period VIII, which have the same handles joining neck to shoulder, and in some cases these are surmounted by warts⁶⁷. The simple incised decoration of **5671**, however, is no match for the lavish incised decoration found on many jars of this type from Emporio VIII ⁶⁸. A jar bearing incised decoration of the kind typical of Emporio VIII from the old excavations at Tigani was regarded by Heidenreich as an import ⁶⁹.

A large base fragment of unknown provenience (**UP K 2**) (Fig. 19) is likely to come from a jar. Jars with swelling low down on the body and horizontally perforated lug handles set on the swelling come from phase III at Tigani and periods IX-VIII at Emporio⁷⁰. Some of the bowl/jars of less distinctive shape, which are described below, could also date from this phase.

Phase III

This phase, which must be equated to the Final Neolithic, is contemporary with the LAN 4 sites in the Dodecanese (Kastro, Partheni and Yali), Tigani IV, Emporio VII-VI and early Kum Tepe IB, as the appearance of rolled rims suggests. A “scoop”/rhyton with incised decoration from Vathy indicates connections with the area of the Attica-Kephala culture and the West (**5667**) (Fig. 33).

Open Shapes

The bowl **5727** (Fig. 20) with curving sides and slightly carinated, outward-leaning rim may be considered as a later version of the conical bowls with carinated rims discussed in the previous section. This is a piece of outstanding quality with a very good burnish on the outside and a pattern burnished decoration of alternating full burnished and cross-hatched panels on the inside. It is no doubt the most flamboyant example of pattern burnished pottery found so far in the Dodecanese, where such class of pottery is exceedingly rare. The thickened and internally differentiated rim is an embryonic form of the rolled rim characteristic of Phase IB at Kum Tepe⁷¹ and commonly found in pre-Trojan deposits in the Northeast Aegean - at both Poliochni Black and Emporio VII-VI- and the Troad, especially on bowls with incurving rims, which were to become very popular in the early phases of the EBA⁷². Rims of this type come from surveys and unstratified deposits along the coastal strip of Western Anatolia at Coşkuntepe and Arapkahve in front of Lesbos, Kömüradası in the Akbuk gulf in front of Leros, and Iasos⁷³. In the Cyclades the bowl with rolled-rim makes its first appearance in the FN levels in the Zas cave on Naxos along with pottery characteristic of the Attica-Kephala culture and Lakkhoudes type pottery⁷⁴. Rims of this type are also found at the FN site of Paoura on Keos, which is contemporary with

⁶⁵ Sampson 1987, 89, pls. 119: 51; 121: 63-65; 122: 73 (*Plain Ware: Open Shape 12*); fig. 125: 95 (*Plain Ware: Closed Shape 2*); 1988, fig. 90: Shapes 21, 30; Felsch 1988, 213, pl. 81: UP 16 tentatively assigned to Phase I or III.

⁶⁶ Felsch 1988, 55, 57, 62, pls. 58: 157 (Phase II/III); 58: 178; 63: 270; 64: 289; 76: F 26; 79: 30,2 and 31,2; 80: 43, 6; cf. also Heidenreich 1935-36, 140, 144 F 24-27.

⁶⁷ Hood 1981, 194-196, 205, 272 ff., 285-286, fig. 131, pls. 34-35. The similarities between such jars from Tigani III and Emporio VIII have been stressed by Hood 1981, 126 and Felsch 1988, 79.

⁶⁸ Hood 1981, 227 ff., 295 ff., figs. 111-112; pls. 33, 34, 39-42.

⁶⁹ Heidenreich 1935-36, 135, 157, pl. 34: 1-2 corresponding to Felsch 1988, pl. 79: 31, 2.

⁷⁰ Felsch 1988, pl. 64: 27 & Hood 1981, 267, fig. 125: 176.

⁷¹ Sperling 1976, 327, 330, 332.

⁷² On bowls of this type, see Renfrew 1972, 72 ff.; Hood 1981, 179-183; Treuil 1983, 229-235; Sotirakopoulou 1986, 300 ff.; Manning 1995, 43-44. See also Seeher 1985, 176, fig. 17 from Beşik-Sivritepe in the Troad.

⁷³ Seeher 1990, 10, fig. 2: 6; Meriç 1982, fig. 106: 2; Voigtländer 1986, 621, 638, fig. 17: 2-3; Pecorella 1984, 86, fig. 16: 15, 16.

⁷⁴ Zachos 1987, 698, fig. 10; Zachos 1990, 30; Manning 1995, 44; Alram-Stern 1996, 466, fig. 58.

Kephala⁷⁵, and at a number of FN sites in Euboea and Attica⁷⁶. At Kephala itself, however, such rims are not attested. Bowls with rims of this type occur in EC I to II contexts at a number of sites in the Cyclades⁷⁷. In Crete bowls with incipient rolled rims have come to light in a FN horizon at Nerochourou⁷⁸. Quite surprisingly, no bowls with rims of this type have been found at Tigani⁷⁹. In the Dodecanese there is only one bowl with incipient rolled rim from the LAN 4 site of Yali⁸⁰. At Kalymnos such rims also appear on a number of large open bowls, which are discussed below (Figs. 27–29). It must, however, be stressed that rolled rim bowls of classic Kum Tepe IB type and Emporio Type 11 are not attested in the Eastern Aegean islands south of Chios. The pattern burnish decoration of **5727** is characteristic of Samian pottery. At Tigani this kind of decoration is especially popular on conical bowls and “*Trichterrandschalen*” from phases II and III⁸¹ and is still found on splaying bowls from phase IV⁸². Despite the fact that bowls with this type of rim have not been found at Tigani, **5727** may well be an import from Samos.

The large open bowl is the most characteristic open shape of this phase. Bowls of this type appear in number of related variants: with straight (**5714**⁸³, **5815. II:4:6. SB 6094. UP K 12**⁸⁴, **UP R 16**) (Figs. 21–22) or curving (**5835. SB 6038. UP K 19**) (Fig. 23)

sides and pointed or rounded rim; with convex-concave sides (**I:6:2. UP K 20**) (Fig. 24); with S-shaped profile and flaring rim (**5778. 5838**⁸⁵, **II:9:15**) (Fig. 25); with bead rim (**5846. I:4:10**) (Fig. 26); with rolled rim (**I:4:9. SB 6012. UP K 11**⁸⁶, **UP R 9. UP R 11**) (Figs. 27–29); with vertical handles set on rim (**UP R 13**) (Fig. 30). Three of them have white-painted decoration round the interior of the rim (**5835. SB 6038. UP R 16**) (Figs. 31–32).

In the absence of context, some of the bowls with undifferentiated rims are difficult to date because open bowls of similar shape are found throughout the LN at a number of sites in the eastern Aegean. Large bowls with straight and curving sides are very common at Kalythies I-II, where they were made in a variety of fabrics⁸⁷. In comparison with those from Kalymnos, however, they have more closed profiles, more sharply pointed rims and are usually provided with unperforated lug handles. At Ayio Gala bowls of this type come from both the earlier deposits in the Lower Cave and the later deposits in the Upper Cave⁸⁸. At Emporio bowls with straight or curving sides are not uncommon in periods X-VIII but in periods VII-VI they seem to have been as popular as in the earlier periods⁸⁹. Bowls of this type, however, are much less in evidence in the early phases at Tigani. Some bowls with closing profile, pointed rim and tab handles from phase I can hardly be compared to those from Kalymnos⁹⁰. In fact, bowls of comparable shape are not seen at Tigani until Phase IV⁹¹. Open bowls of very similar shape are commonly found on LAN 4 sites in the

⁷⁵ Caskey 1972, 358, fig. 1: P2; Renfrew 1972, 153–155, fig. 10.1.

⁷⁶ Listed by Hood 1981, 176. See also Sampson 1981, 153–154; Sampson 1993, 161 ff. from Tharrounia & Spitaels 1982, 35–36, 41–42 from Thorikos.

⁷⁷ Sotirakopoulou 1986, 300 ff., fig. 1: 1484; Karantzali 1996, 119–120 Shape XXIV with full references.

⁷⁸ Vagnetti, Christopoulou & Tzedakis 1989, figs. 25: 132; 28: 164–165, 170.

⁷⁹ Felsch 1988, 80–81.

⁸⁰ Sampson 1988, fig. 53: 268; 69a: Open Shape 24.

⁸¹ cf. e.g. Felsch 1988, pls. 57: 143; 60:231, 233, 234; 62: 255; 64: 291, 295; 67: 350, 351 etc.

⁸² Felsch 1988, pls. 68: 367, 368; 71: 435–437. On pattern burnish pottery in the Eastern Aegean, see Fischer 1967; Hood 1981, 221–225; Sampson 1987, 43–44; Felsch 1988, 103–107. Several bowls with pattern burnish decoration on the inside come from Beşik-Sivritepe in the Troad, Seeher 1985, 174, fig. 16. For a bowl from Lesbos already discussed by Felsch, see now Lambrianides & Spencer 1997, 83–84, fig. 4.

⁸³ Furness 1956, fig. 10: 4.

⁸⁴ Furness 1956, pl. 18: 11.

⁸⁵ Furness 1956, fig. 10: 3.

⁸⁶ Furness 1956, pl. 18:10.

⁸⁷ Sampson 1987, 23, 25, figs. 6–7 (*Plain Ware: Open Shapes 1, 5, 27*); 32, 34, figs. 35, 41 (*Burnished Ware: Open Shapes 1, 2, 16*); 39, figs. 54, 55, 57–58 (*White-painted Ware: Open Shapes 6, 7, 9*).

⁸⁸ Hood 1981, 14–15, fig. 5: 3–5; 38, figs. 19–20; 39–40, figs. 21–22.

⁸⁹ Hood 1981, 175, 249–250, fig. 120; 309–310, fig. 142 Type 4 “*Bowls with Straight or Slightly Curving Sides*” and Type 5 “*Open Bowls with Curving Sides*”.

⁹⁰ Felsch 1988, pl. 55: 90, 91, 100.

⁹¹ Felsch 1988, 65, 68, pls. 68: 359 Phase IVa; 69: 381–391 Phase IVb; 71: 430–438; 74: 492 Phase IVa-b; the bowls from the old excavations referred to by Sampson 1987, 23 (Furness 1956, fig. 8: 2, 3, 14) are assigned by Felsch to Phase IV.

Dodecanese, at Kastro, Partheni and Yali⁹². Bowls of this type also come from surveys or unstratified deposits along the coast of western Anatolia at Coşkuntepe, Arapkahve⁹³ and in the areas of ancient Myletus⁹⁴ and Iasos⁹⁵. The bowls (**5835. SB 6038. UP R 16**) (Figs. 31–32) with white-painted decoration round the interior of the rim have close parallels from phase IVb at Tigani⁹⁶.

Bowls with convex-concave sides (**I:6:2. UP K 20**) (Fig. 24) occur in phase I at Tigani and Periods X-VIII at Emporio⁹⁷. In comparison with those from Kalymnos, however, they have more closed profiles, more sharply pointed rims and tab handles rather than lugs. At Emporio bowls of very similar shape are still very common in periods VII-VI but they are not much in evidence at Tigani IV⁹⁸. In the Dodecanese bowls of this type are scarcely represented at Kalythies I-II⁹⁹ and are only slightly more common at Partheni and Yali (LAN 4); none of them is very typical¹⁰⁰.

Bowls with S-shaped profile (**5778. 5838. II:9:15**)¹⁰¹ (Fig. 25) are quite common in FN levels in the eastern Aegean. At Tigani they occur throughout Phase IV¹⁰². In the Dodecanese they are attested at Partheni and Yali¹⁰³. From Partheni comes a cheese-pot very similar in shape to **5838**¹⁰⁴. At Emporio some flaring rim sherds from periods VII-VI assigned to Type 14 are likely to come from bowls of this type¹⁰⁵.

Bowls with bead rims (Fig. 26) are common in deposits of phase IVa and b at Tigani and are one of the distinctive features of the period¹⁰⁶. Though not much in evidence, bowls with rims of this type come from Partheni¹⁰⁷.

The bowls with rolled rims (**I:4:9. SB 6012. UP K 11. UP R 9. UP R 11**) (Figs. 27–29) may be safely assigned to the Final Neolithic (see supra **5727**). Open bowls with rims of this type first occur at Emporio in periods VII-VI¹⁰⁸. At Kum Tepe there are some comparable bowls from phase IB2¹⁰⁹. Such bowls are not found at either Tigani and the LAN 4 sites in the Dodecanese. On the coastal strip of Western Anatolia comparable bowls are sporadically attested at Coşkuntepe and Arapkahve, Kōmüradası in the Akbuk Gulf and Iasos¹¹⁰. In western Crete a rim sherd possibly coming from a bowl of this type comes from a FN horizon at Nerochourou¹¹¹.

UP R 13 (Fig. 30) is the only example of an open bowl with vertical handle(s) set on rim. Two bowls of this type come from Yali (LAN

⁹² Kastro: Sampson 1987, figs. 101: 19; 108: 87; 109: 96; 110: 103, 105; 1988, fig. 90: Shape 11; Partheni: Sampson 1987, figs. 117: 2-4, 9, 10, 15; 118: 43 etc.; 1988, fig. 90: Shapes 5, 15, 19; Yali: Sampson 1988, 75, 84, 87 figs. 23: 53; 31: 147; 32: 153; 35: 171; 46: 226 and bottom; 48: 242; 69: Open Shapes 16, 20; 69a: Open Shape 29.

⁹³ Seeher 1990, 10, fig. 2: 2-4 & Meriç 1982, 104, fig. 106: 1, 3. It is significant that from Arapkahve also come bowls with rolled rims, see supra note 66.

⁹⁴ Voigtländer 1982, 33 ff., fig. 1: 1-2; 2: 5-6 west of the Bouleuterion; Voigtländer 1983, 17-18, fig. 4:1 Killiktepe; Parzinger 1989, figs. 1; 2: 1-2 Heroon III. The dating of the Miletus materials is difficult to assess. Voigtländer and Parzinger suggest a relatively early LCh. dating, contemporary with Emporio IX/VIII, Aghio Gala I, Kum Tepe IA and the LCh. 2-3 levels at Beycesultan. Both scholars wrote before the LN finds from the Dodecanese and the new excavations at Tigani were published. In the light of the new evidence it cannot be excluded that at least some of the materials from Miletus are later than previously suggested.

⁹⁵ Pecorella 1984, fig. 16: 4-6.

⁹⁶ Felsch 1988, 69, pl. 69: 381-388.

⁹⁷ Felsch 1988, pls. 53: 57; 55: 91; 56: 118; Hood 1981, 250-252, fig. 121 Type 5 "Open Bowls with Curving Sides".

⁹⁸ Hood 1981, 310-312, fig. 143: esp. 465, 466, 474; Felsch 1988, pls. 71: 443; 72: 456.

⁹⁹ Sampson 1987, figs. 6: 16; 35: 356.

¹⁰⁰ Sampson 1987, fig. 117: 3; 1988, 78, Table 5: Rim Type 25; figs. 23: 57; 42: 207; 47: 231; 49: 248; 53: 268.

¹⁰¹ Furness 1956, fig. 10:2, pl. 19: 1.

¹⁰² Felsch 1988, 64, pls. 68: 360-362; 69: 396; 78: F 69, F 72; 83: UP 48.

¹⁰³ Sampson 1987, 89, fig. 119: 50; 1988, 75, 83-84, 87, figs. 23: 54, 56, 59; 35: 170; 50: 250; 69: Open Shapes 19, 20; 69a: Open Shape 31.

¹⁰⁴ Sampson 1987, 89-90, fig. 128: 115.

¹⁰⁵ Hood 1981, 321-322, fig. 149: 616, 617, 631.

¹⁰⁶ Felsch 1988, 64 "Schalen mit nach außen umgelegter Lippe", pls. 68: 367; 69: 392; 72: 447, 449, 451; 74: 495; 79: 39,2.

¹⁰⁷ Sampson 1987, figs. 117: 16, 17, 19; 118: 33, 39. 1988, fig. 90: Shape 20.

¹⁰⁸ Hood 1981, 182, 321, fig. 149: 607-610 Type 12 "Bowls with straight rims, thickened and usually differentiated inside".

¹⁰⁹ Sperling 1976, fig. 13: 402, 404-406.

¹¹⁰ Seeher 1990, 10, fig. 2: 6; Meriç 1982, fig. 106: 4; Voigtländer 1986, 621, 638, fig. 17: 2-3; Pecorella 1984, 86, fig. 16: 15, 16.

¹¹¹ Vagnetti, Christopoulou & Tzedakis 1989, fig. 28: 170.

4) and a phase IVa-b context at Tigani¹¹². Bowls of comparable shape but with vertical handles set below the rim occur at the LAN 4 sites of Kastro and Partheni¹¹³.

Closed Shapes

The “scoop” with incised decoration from Vathy (**5667**)¹¹⁴, (Fig. 33) is characteristic of the very end of the Neolithic. The body is set on a hollowed disk base and was most likely cut away obliquely at the front to form a large mouth, which is not preserved; three broad flattened handles (now missing) rose from the back and either side of the body and joined above it. Such highly distinctive vases are commonly regarded as ritual vessels and are described by some scholars as rhyta, but their purpose is still unclear. “Scoops”/rhyta of this shape, although in a variety of local types, occur in early Rachmani horizons in Thessaly¹¹⁵ and are particularly common in the area of the Attica-Kephala culture, at Kephala¹¹⁶, Tharrounia and Karystos in Euboea¹¹⁷, the Athenian Agora, and Kitsos cave and Thorikos in Attica¹¹⁸. In the eastern Aegean there are several fragmentary examples from both the old and new excavations at Tigani, the latter coming from contexts of phase IVb¹¹⁹. The meander-like decoration of 5667 is well paralleled at Tigani IVb¹²⁰.

Some Jugs/Jars with swollen shoulders and differentiated neck are very characteristic of this phase (**5843. 5844. UP K 6. UP K 7**) (Figs. 34–36). They are made in coarse plain and dark burnished wares. Jugs and jars of this type are very common in Phase IVb at Tigani;

many of them have white-painted decoration, but plain and incised examples also occur¹²¹. Such elaborate shapes seem to be a Samian speciality, rarely found at others FN sites in the Eastern Aegean. In the Dodecanese there is little evidence for shapes of this type. A unique example from Kalythies, however, should predate those from Tigani¹²². A few neck sherds from Archangelos II, Kastro and Partheni (LAN 4) might well come from vessel of this type, but shoulders are not preserved¹²³. At Chios there are some shoulder sherds from Emporio periods VII-VI and Ayio Gala II¹²⁴.

In addition to the previous distinctive shapes, which fit well into the suggested sequence, there are some shapes that cannot be closely dated in the absence of context.

Plates

Fragments of a low-rimmed circular plate come from Vathy (**5861**) (Fig. 39). It is made in coarse fabric; the inside surface is burnished, but bottom is rough with many straw impressions visible in it. At Emporio plates of this type are relatively common in periods X-VIII, but are virtually absent in periods VII-VI¹²⁵. At Tigani they are not common, but an example comes from a phase IIIc context¹²⁶, and fragments of two such plates in plain ware were found at Kalythies¹²⁷.

¹¹² Sampson 1988, 75, 88, figs. 42: 207; 69: Open Shape 23; Felsch 1988, pl. 72: 453.

¹¹³ Sampson 1987, figs. 103: 43; 118: 41.

¹¹⁴ Furness 1956, 191 mistook it for “the lower half of a seated figurine”, pl. 19: 19; Felsch 1988, pl. 45: 1-4

¹¹⁵ For references and full discussion of this shape and its chronological implications, see Felsch 1988, 70, 113-116.

¹¹⁶ Coleman 1977, 16-17, 101-102, pl. 36.

¹¹⁷ Sampson 1993, 160 ff.; Keller 1982, 64, fig. 2.18: P 127.

¹¹⁸ Immerwahr 1971, 12-13, pls. 8: 111-124; 69: 111, 122; Lambert 1981, 288, pls. XXVII-XXVIII; Spitaels 1982, fig. 1.13: 45-46.

¹¹⁹ Felsch 1988, 70, 113-16, pls. 45: 1-4; 75: 507; see also Heidenreich 1935-36, 137-139, pls. 32-33.

¹²⁰ Felsch 1988, pl. 75: 507; Heidenreich 1935-36, pl. 32: 2-3; 33: 2,4, 6. See also Coleman 1977, pl. 82: 98 from Kephala.

¹²¹ Felsch 1988, 66, pls. 69: 399-407; 72: 459-462; 74: 494, 496; 75: 497; 77: F 40; 83: UP 50-51.

¹²² Sampson 1987, fig. 50: 516 to be assigned to Sampson 1988, fig. 89: Shape 14.

¹²³ Sampson 1987, 73, fig. 92: 73 (cf. Felsch 1988, pl. 69: 399); 81, fig. 105: 64; 89, fig. 123: 86, 91.

¹²⁴ Hood 1981, 52, fig. 36: 223; 324, fig. 150: 717; 337-338, fig. 156: 726-730, 739, who lists some earlier examples from Beycesultan and Kum Tepe.

¹²⁵ Hood 1981, 172 Type 1 “Plates”, fig. 98; 246, fig. 118: 1-6.

¹²⁶ Felsch 1988, 67: 354.

¹²⁷ Sampson 1987, 26 (*Plain Ware: Open Shape 22*), figs. 14: 156; 16: 165 not dated precisely by the excavator; Sampson 1988, fig. 89: Shape 30. Sampson lists among the parallels for this shape a large tray with arched handles set on top of the rim from the old excavations at Tigani (Heidenreich 1935-36, 168 F 77). A fragment from a very similar vessel comes from Vathy (**5944**). The dating of the tray from Tigani to the LN is, however, extremely uncertain. In fact it was found in a bothros, which yielded pottery assignable to a LB I horizon, see Furumark 1950, 200; Davis 1982, 38.

Cheese-pots/Baking Pans

Fragments of a number of vases of this distinctive type come from Vathy (**5736a-g. 5860**¹²⁸ (Figs. 37–38) and Cheiromandres (**CH 6189–6190. 6192. 6194**). They are made in a characteristic coarse fabric and have a row of holes below the rim. The holes were made in the soft clay before firing. No complete examples are preserved, but most if not all of them appear to have been variants of the same basic shape, a sort of large dish with upright or slightly outward-leaning sides. Although pots of this type are attested in SW Anatolia and the Levant in much earlier phases of the Neolithic, in the Aegean they are mainly found in LN and EBA contexts¹²⁹. On the islands of the Eastern Aegean their distribution is uneven. At Emporio they occur as early as period X and are attested throughout the LN, being particularly popular in periods IX–VIII; at Ayio Gala they are attested in the upper levels of the Upper Cave¹³⁰. At Tigani a few scraps of cheese-pots come from deposits of phase I, but they are much more at home in phase III and are still found, though less frequently, in phase IV¹³¹. On Samos cheese-pots appear again in the EB at the Heraion site¹³². In the Dodecanese scanty remains of cheese-pots come from levels of phase III at Kalythies¹³³, but the shape is very common at the LAN 4 sites of Kastro¹³⁴, Partheni and Yali. At Partheni 50 per cent of the sherds found belonged to cheese-pots, which were made in a variety of shapes¹³⁵. At Yali no less than six types of cheese-pots were found¹³⁶. In the light of their abundance in the

SE Aegean, Sampson suggested that such pots originated there and were later transferred to the Cyclades and the Greek mainland. However, their early appearance at Tigani and Emporio casts some doubt on Sampson's view. In the Cyclades the cheese-pot is first seen at Kephala and other sites on Keos in the FN and also appears on several sites of the Attica-Kephala culture in Euboea and Attica¹³⁷. In the Cyclades it is also very common in the early phases of the EB¹³⁸. The inward-leaning tab handle set on top of the rim of **5860** is unusual, but is paralleled at Partheni¹³⁹. The type of tongue-shaped ledge-lug handle set on the inside of the vase, which appears on many such pots from various sites¹⁴⁰, is not represented among our material, but a cheese-pot with a handle of this type from an open-air prehistoric site in the valley of Vathy is reported by Burton Brown¹⁴¹. Straw and mat impressions are commonly found on the outside and bottom of many cheese-pots from Kastro, Partheni and Yali, suggesting that they were covered by mesh. No such impressions appear on the pots from Kalymnos. In the light of the evidence summarised above, it seems likely that most of the cheese-pots from Kalymnos date from phase III.

Bowl-Jars

A number of rim sherds with inward leaning rim cannot be assigned with confidence to bowls rather than jars. The term bowl-jar adopted by Hood to describe similar vases from Emporio is the most apt to point out their uncertain nature¹⁴². Rims of this type come from Vathy (**5740. I:4:5. II:8:5**) (Figs. 40–41) and Cheiromandres (**CH 6222**) (Fig. 44) and are particularly common at S. Barbara (**SB 6013. 6016. 6020. 6021**) (Figs. 42–43); two are of unknown provenience (**UP K 22. UP R**

¹²⁸ Furness 1956, pl. 18: 2.

¹²⁹ For recent discussions of this type of pot, see Hood 1981, 172–174 Type 3 “*Baking Pans*”; Sampson 1987, 30–31; 1988, 96–102, 261–262; Felsch 1988, 109–111.

¹³⁰ Hood 1981, 37, fig. 19: 91–93; 247–249, fig. 119; 309, fig. 141.

¹³¹ Felsch 1988, 45, 58, 62, 66, 109–111, pls. 22: 192, 193; 31: 280 and 7; 54: 80; 59: 233a; 61: 243; 35: 308; 70: 424–425; Heidenreich 1935–36, 139–141, pl. 34: 6.

¹³² Milojevic 1961, 81, pl. 35: 74.

¹³³ Sampson 1987, 30–31, Table I: 11, fig. 10: 89.

¹³⁴ Sampson 1987, 80, figs. 102: 24–32 (*Plain Ware: Open Shape 8*); 1988, fig. 90: Shape 25. For other examples from the Dodecanese, see Hope Simpson - Lazenby 1973, 170.

¹³⁵ Sampson 1987, 89–90, figs. 126–128, pl. 47 & 1988, pl. 90: Shapes 32–34, 36.

¹³⁶ Sampson 1988, 97 ff., 261–262, figs. 28: 105; 37: 181–182; 59: 68c; pl. 62.

¹³⁷ Coleman 1977, 17–18, pls. 37: F–L; 84: A–V; Caskey 1972, 358, 360, figs. 1, 2, pl. 76 Paoura, Sykamias and H.Irini; Keller 1982, 60, fig. 2.14 Karystos; Spitaels 1982, 31, fig. 1.15: 47–48 Thorikos and others.

¹³⁸ Karantzali 1996, 124–125 Shape 3.

¹³⁹ Sampson 1987, 90, fig. 128: 116, pl. 47c right.

¹⁴⁰ E.g. from Emporio (Hood 1981, fig. 119: 24, 28), Tigani (Felsch 1988, pl. 61: 243; Heidenreich 1935–36, pl. 34: 6), Partheni (Sampson 1987, 90, fig. 127: 108–109; 1988, fig. 90: Shape 33), Kephala (Coleman 1977, pl. 37: J–L).

¹⁴¹ Burton Brown 1947, 128.

¹⁴² Hood 1981, 190.

12)¹⁴³. There is a considerable variety in fabric: medium coarse burnished (**I:4:5. II:8:5. SB 6021**), fine dark burnished (**SB 6020**) (Fig. 42) and fine red slipped and burnished (**5740. SB 6013. 6016. CH 6222**) (Figs. 40, 43–44); **5740** (Fig. 40) with black burnished outside surface and bright red slip on the inside is an outstandingly fine piece. As stated above this class of red burnished pottery should date from phase II late and/or phase III. The unusual plastic band around the exterior of the rim of **SB 6013** (Fig. 43) is paralleled on a LAN 4 bowl from Yali¹⁴⁴. Since all the vessels are not sufficiently preserved for it to be possible to distinguish their shapes when complete, they have been divided into two groups according to whether they have undifferentiated or differentiated lips.

Bowl-jars with undifferentiated lips (**I:4:5. II:8:5. SB 6016. CH 6222**) (Figs. 40–41, 44) are quite common in the eastern Aegean throughout the LN. At Tigani they appear as early as phase I and again in phase III and perhaps IV¹⁴⁵. The shape is much more in evidence at the LN sites in the Dodecanese. At Kalythies there are two types of bowl-jars with undifferentiated lip, to which may be referred a number of rim sherds made in a variety of fabrics and apparently coming from levels of all periods¹⁴⁶. From levels of phase I at Archangelos comes an outstandingly well preserved example with pointed base; rim sherds of this type occur in both phases I and

II¹⁴⁷. The shape is also well attested at the LAN 4 sites of Kastro¹⁴⁸ and Partheni¹⁴⁹. At Yali the shape is very popular and appears in a number of variants¹⁵⁰. At Emporio bowl-jars with rims of this type occur from periods X to VI¹⁵¹.

The bowl-jars with differentiated lips (Fig. 42) are no less difficult to date. Rims of this type are common on bowl-jars from the LAN 4 site of Yali¹⁵²; low-necked jars with everted or out-turned rims also come from the LAN 4 sites of Kastro and Partheni¹⁵³. At Kalythies bowls and jars with rims of this kind are not uncommon and are found as early as phase I¹⁵⁴. Bowl-jars of this type are not common at Tigani, but a fine black burnished rim sherd comes from a phase I deposit and a large bowl from the old excavations is assigned by Felsch to phase III¹⁵⁵. On Chios bowl-jars with differentiated lips of various types are present from the very beginning of the LN. At Ayio Gala wide-mouthed bowl-jars with everted rims are found in both the Lower and Upper Cave. The earliest examples are quite different in overall shape from those from Kalymnos, which are better compared with later examples from the upper levels of the Upper Cave¹⁵⁶. At Emporio bowl-jars with everted rims are firstly seen in levels of period VIII. Like those from S. Barbara, most of them have

¹⁴³ The large bowl-jar Furness 1956, fig. 10: 10 is apparently missing.

¹⁴⁴ Sampson 1988, 77, fig. 29: 125. Bowl rims with plastic band come also from FN horizons at Paoura and Kephala, Caskey 1972, 358, fig. 1: P8; Coleman 1977, 12, pl. 44: A, G, M. A bowl rim of this type from Miletus: Killiktepe is tentatively assigned to EBA by Voigtländer 1983, 17, fig. 4: 11.

¹⁴⁵ Felsch 1988, pl. 51: 20; 52: 38a Phase I; 60: 237, 238; 63: 273; 65: 304 Phase III; 68: 377-379; 73: 474-475; 81: 17 assigned to Phase I; 83: UP 53 assigned to IV.

¹⁴⁶ Sampson 1988, fig. 89: Shape 11 with incurving rim to which could be assigned; Sampson 1987, 25, fig. 11: 112, 114, 116 (*Plain Ware: Open Shapes 12, 13*); 26, fig. 24: 241-242 (*Plain Ware: Closed Shape 8*); 33, fig. 37: 375, 380 (*Burnished Ware: Open Shape 7*). Sampson 1988, fig. 89: Shape 15 with straight inward leaning rim to which could be assigned: Sampson 1987, 26, figs. 20: 207-210; 24: 246 (*Plain Ware: Closed Shapes 3, 9*).

¹⁴⁷ Sampson 1987, 71, fig. 85, pl. 32a (*Plain Ware: Closed Shape 11*); 72, fig. 88: 32 (*Red Slipped Ware: Open Shape 3*); 74, fig. 91: 56, 59, 62 assigned to Phase II.

¹⁴⁸ Sampson 1987, 80, fig. 101: 7, 9, 18 (*Plain Ware: Open Shape 2*); 81, figs. 103: 34; 104: 54, 57 (*Plain Ware: Closed Shape 12*); 82, figs. 107: 81; 108: 86 (*Red Burnished Ware: Open Shape 2*); 1988, fig. 90: Shapes 27, 28.

¹⁴⁹ Sampson 1987, 89, fig. 121: 66, 67 (*Plain Ware: Open Shape 13*); 1988, fig. 90: Shape 29.

¹⁵⁰ Sampson 1988, 77, 94, pls. 69: Open Shapes 2, 4, 9; 69a: Closed Shape 4.

¹⁵¹ Hood 1981, 267 ff., figs. 127, 128; 329 ff.; also from the upper levels of the Upper Cave at Ayio Gala, Hood 1981, 47-48, figs. 30; 31: 179-187.

¹⁵² Sampson 1988, 7, 77, 83, figs. 19: 6, 9; 29: 119; 37: 179; 49: 249; 69: Open Shape 3; 69b: Closed Shapes 14, 18.

¹⁵³ Sampson 1987, figs. 110: 98; 122: 78.

¹⁵⁴ Sampson 1987, 46, 183, figs. 22: 229; 26: 267-268; 47: 502, 505-506; 58: 638; 1988, fig. 89: Shape 13.

¹⁵⁵ Felsch 1988, 140, 202, pls. 51: 31; 76: F 30.

¹⁵⁶ Hood 1981, 48-49, fig. 32: 192-194.

finely burnished surfaces. They are still very common in periods VII-VI¹⁵⁷.

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¹⁵⁷ Hood 1981, 272, fig. 129; 330-331, 334-337, figs. 155-156.

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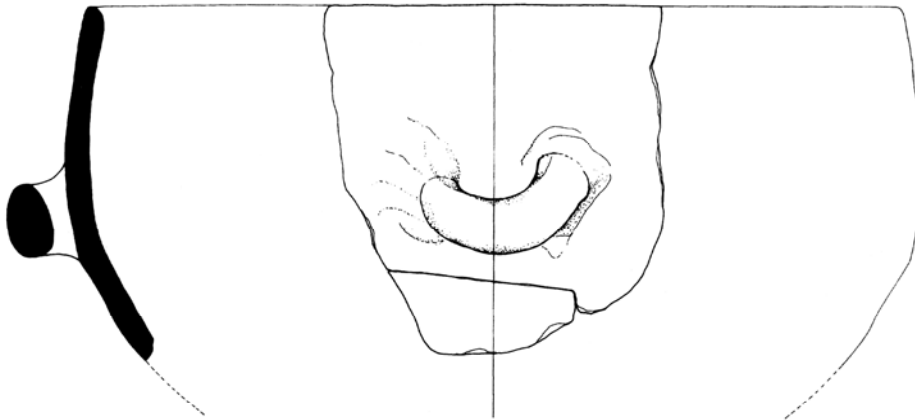
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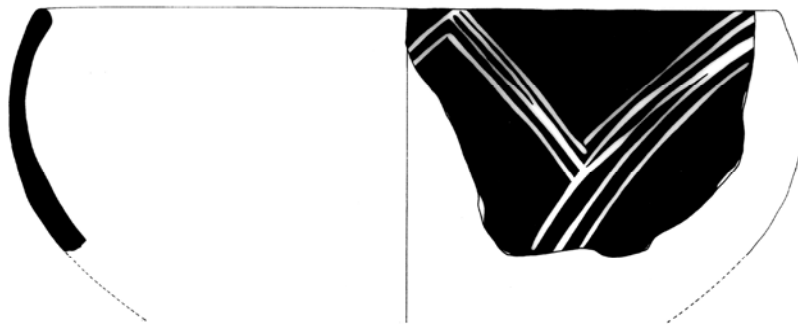
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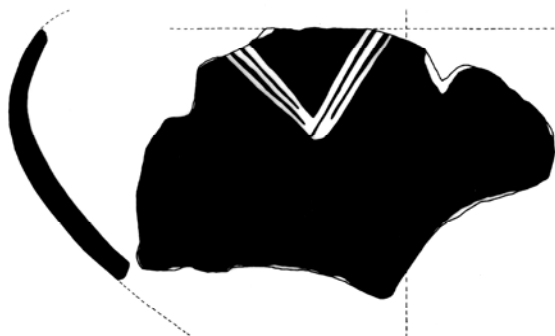
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1. (5797)

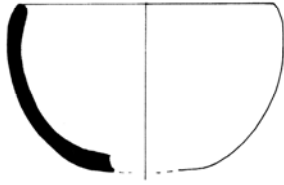


2. (5726a)

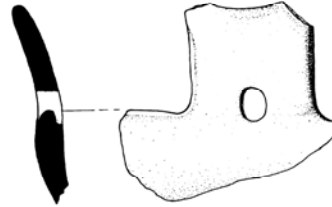


3. (5726b)

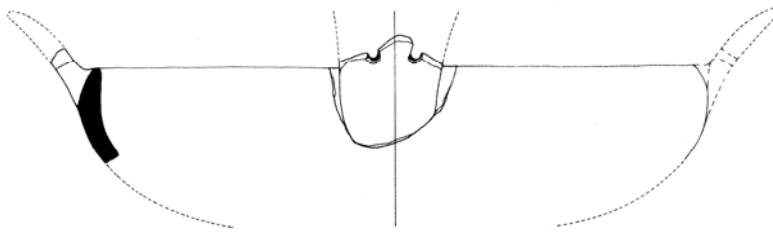




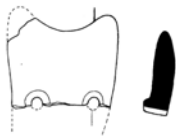
4. (5867)



5. (5819)



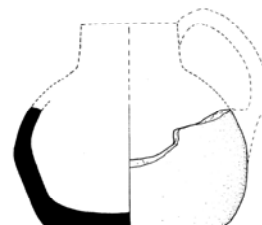
6. (CH 6238)



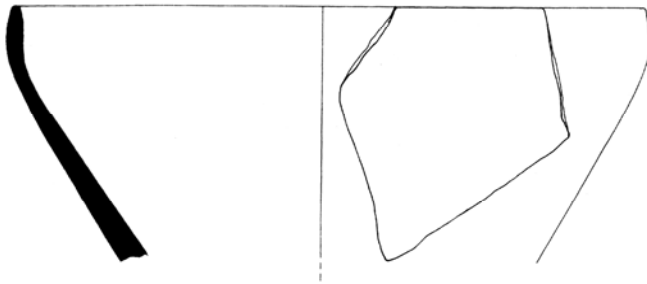
7. (CH 6817)



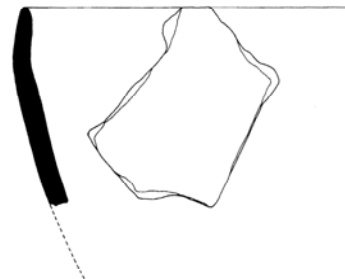
8. (CH 6219)



9. (5673)

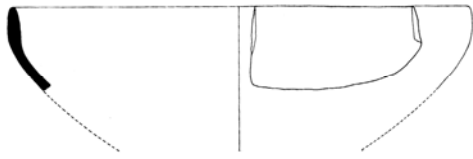


10 (5737)



11 (I : 4 :12)

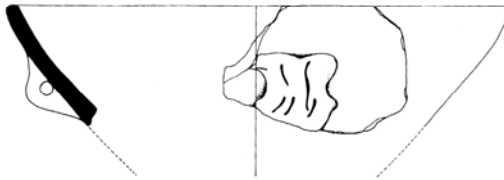




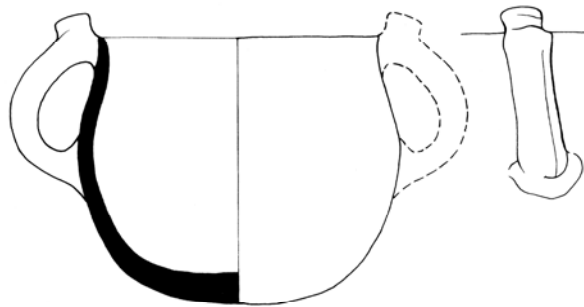
12 (UP R 10)



13 (5720)



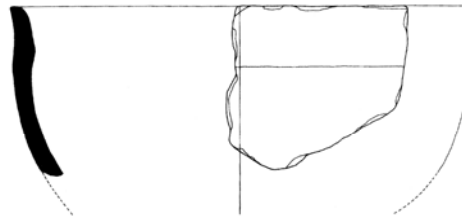
14 (5833)



15 (5675)



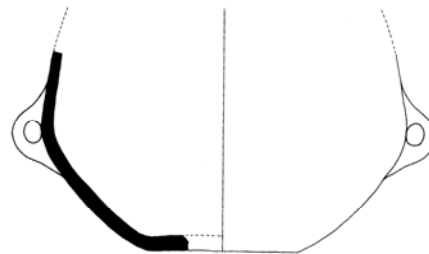
16 (5798)



17 (UP K 3)

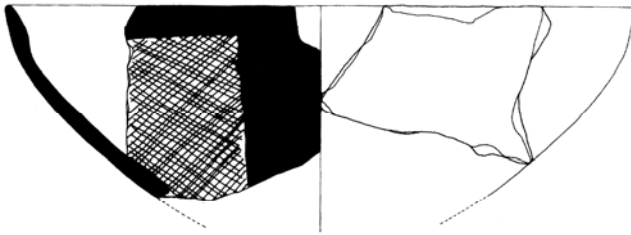


18 (5671)

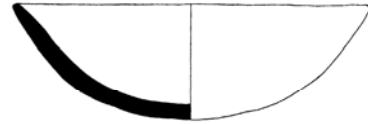


19 (UP K 2)

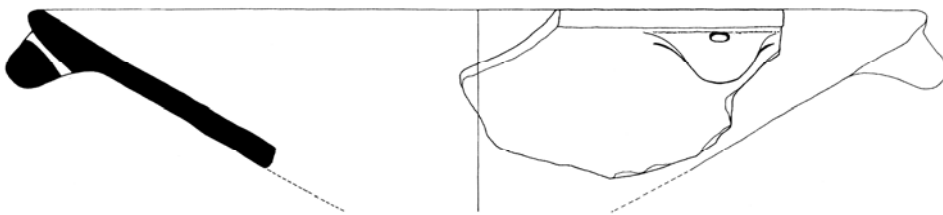




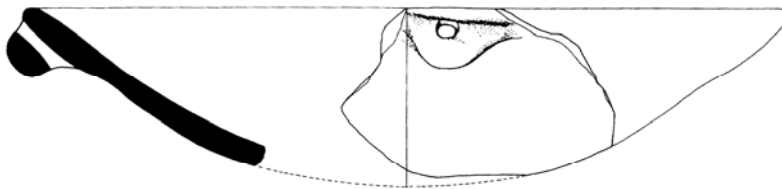
20 (5727)



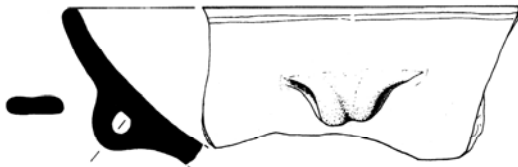
21 (5714)



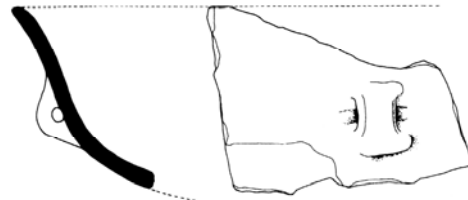
22 (5815)



23 (UP K 19)

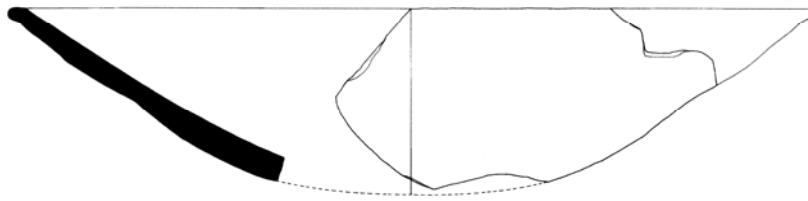


24 (I : 6 : 2)



25 (II : 9 : 15)

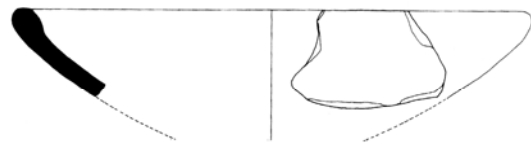




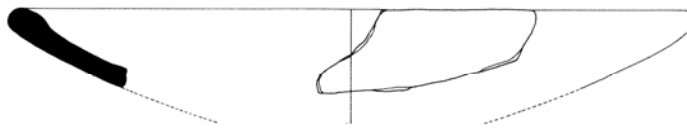
26 (5846)



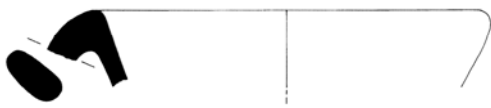
27 (I : 4 : 9)



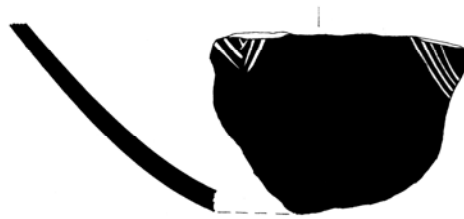
28 (SB 6012)



29 (UP R 9)



30 (UP R 13)

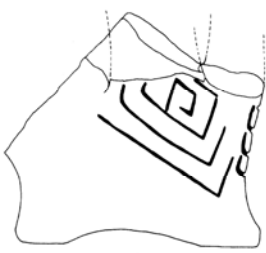


31 (5835)

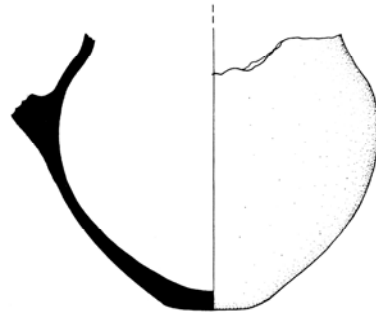
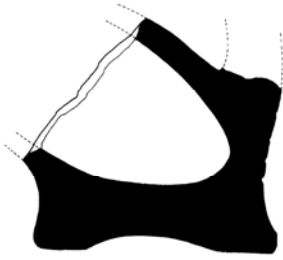


32 (UP R 16)

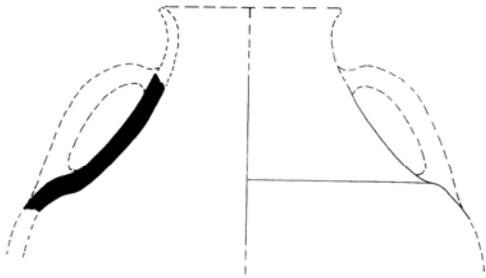




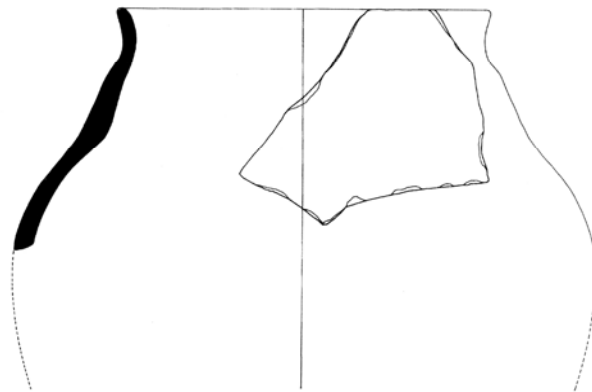
33 (5667)



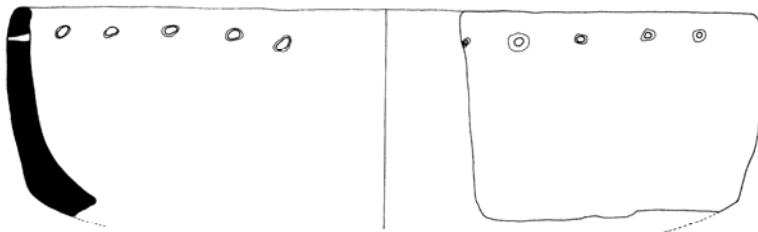
34 (5843)



35 (UP K 6)



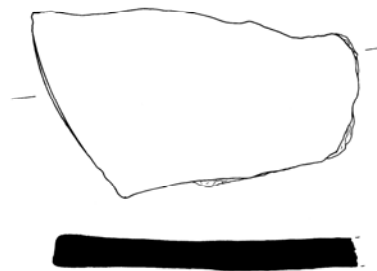
36 (UP K 7)



37 (5736a)

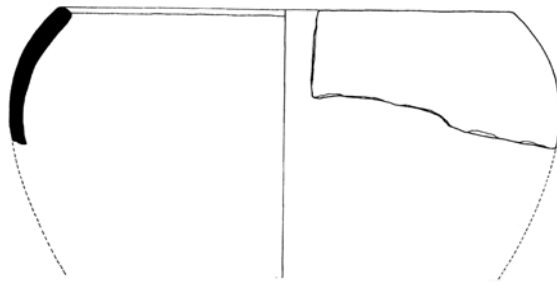


38 (5860)

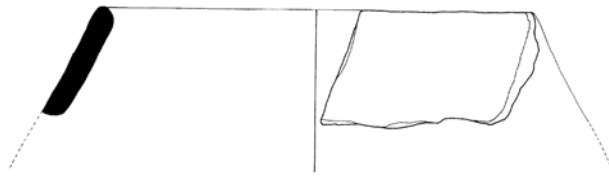


39 (5861)

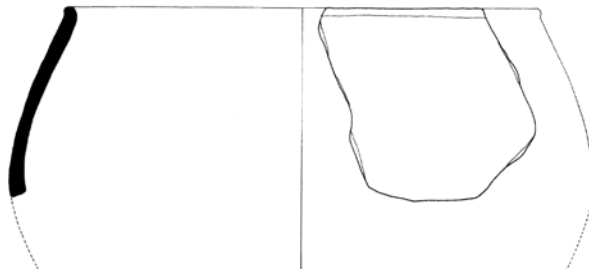




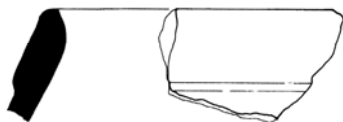
40 (5740)



41 (1 : 4 : 5)



42 (SB 6020)



43 (SB 6013)



44 (CH 6222)