

# The Annual of the British School at Athens

<http://journals.cambridge.org/ATH>

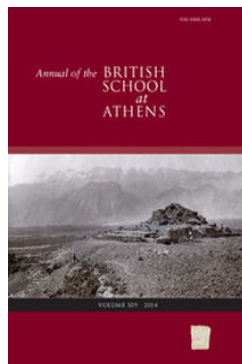
Additional services for *The Annual of the British School at Athens*:

Email alerts: [Click here](#)

Subscriptions: [Click here](#)

Commercial reprints: [Click here](#)

Terms of use : [Click here](#)



---

## Notes from the Cyclades

R. C. Bosanquet

The Annual of the British School at Athens / Volume 3 / November 1897, pp 52 - 70  
DOI: 10.1017/S0068245400000757, Published online: 18 October 2013

**Link to this article:** [http://journals.cambridge.org/abstract\\_S0068245400000757](http://journals.cambridge.org/abstract_S0068245400000757)

### How to cite this article:

R. C. Bosanquet (1897). Notes from the Cyclades. The Annual of the British School at Athens, 3, pp 52-70 doi:10.1017/S0068245400000757

**Request Permissions :** [Click here](#)

## NOTES FROM THE CYCLADES.

(PLATES IV. AND V.)

---

THE following notes deal partly with some results of our first season in Melos, partly with Ægean objects in English collections. Mr. Cecil Smith and Mr. Edgar have given me help which I gratefully acknowledge. Incidentally some progress has been made with the task, which Dümmler deemed hopeless, of identifying the scattered contents of the tombs at Phylakopi. Much remains to be done by the comparative study of objects on museum shelves. Still more necessary is the systematic excavation of cemeteries, a branch of research which Greek archæologists have too often left to peasants in the pay of dealers. It is for the present generation, warned by the squandered riches of Eretria and Tanagra, to ensure that some at least of the Ægean cemeteries are explored in the interests of science.

### I.—PRE-MYCENÆAN POTTERY FROM MELOS.

For comparison with Mr. Edgar's finds I publish some other specimens of early Melian pottery which were obtained at or near the ancient settlement of Phylakopi before the excavations in 1896. The illustrations, re-drawn in ink by Mr. F. Anderson over full-size pencil drawings by Mr. Charles Clark, are in every case one-third linear of the original.

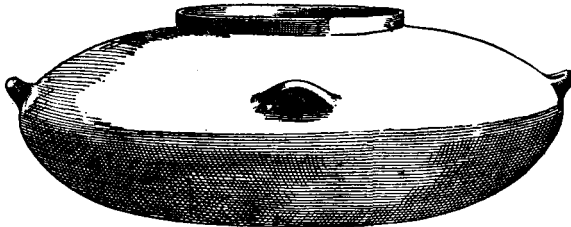
1. Bought with No. 2 from the owners of a cave-dwelling near the ancient site. The one was doing service as a salt-cellar, the other as a receptacle for coffee-beans. The finder was known to have dug in both the Phylakopi cemeteries; he was away from the island, and we could obtain no more precise information. There can be little doubt that both vases come from the graves beside the sea at Kapro, which appear to be earlier than those on the hill behind the fortress.

“In form and fabric,” writes Mr. Edgar, “they belong to the same class as the Pelos vases, but in both respects they are considerably advanced.” No. 1 is of blackish-brown clay with a fine texture, and retains traces of a reddish slip. An earlier instance of the same shape



1.—FROM A GRAVE AT PHYLAKOPI. Height 9 cm.

occurred at Pelos, Fig. 15. In our miniature example there are signs of increased skill in the curve of the foot, the thinness of the walls, and the symmetry preserved between the upper and lower halves of the body, which pass into one another almost at a right angle. The narrow mouth, with its rim to hold a flat lid, marks the pot as a storage vessel and not a drinking-cup. On the shoulder is a tubular projection to which the lid was probably tied. Older vases have four such handles for the double purpose of suspension from the roof of the primitive hut, which had no “cupboard,” and of fastening a lid to exclude the smoke;



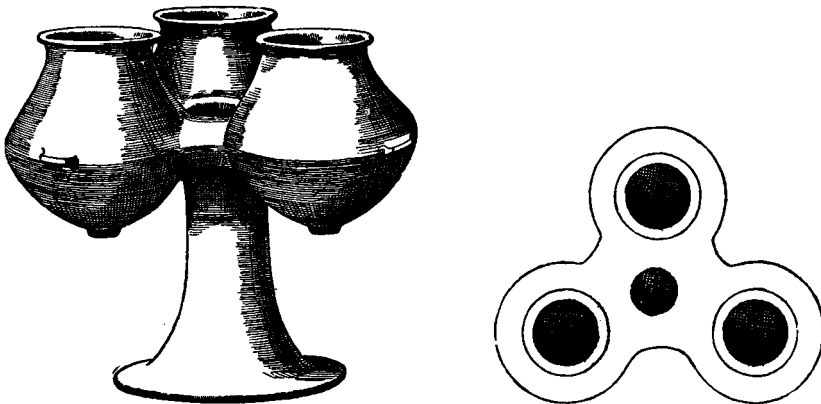
2.—FROM A GRAVE AT PHYLAKOPI. Height 9 cm., width 22 cm.

and on large vessels, such as No. 2, the full number was retained for convenience of carriage : *οὔρα δ'αὐτοῦ τέσσαρ' ἔσαν.*

2. Bought with No. 1, and, like it, hand-made.

Same clay, covered with a dark-brown slip, the surface polished

and without ornament of any kind. The form, but for the greater freedom of the four ear-handles, is that of No. 1 without its foot. It has a special interest, because it outlived a variety of early types with the same returning shoulder and contracted mouth, and remained in use through the Mycenæan period, thus constituting a link between the rude beginnings of industry in the islands and the finished products of Mycenæan civilisation.\* The four suspension handles are pinched out of the substance of the body, not separately moulded and affixed. In spite of their solidity they can hardly have been meant to resist a direct strain; when the vase was carried or hung up, the weight would be borne by cross strings under the body, the handles being merely guides to keep the carrying strings in place.



3.—FROM THE KAPRO CEMETERY AT PHYLAKOPI. Height 15 cm.

3. Found broken in a shallow grave, cut in the soft pumice on the promontory called 's τὸν Κάπρον.† The only other object in the grave was a blade of obsidian, 5 cm. long.

Both the fabric and the form are unusual. The vase is hand-made, of highly micaceous grey-black clay, with a smooth and almost greasy pale grey surface. Its colour, lighter than that of the characteristic grey pottery of the Mycenæan Troy, may be the result of imperfect firing, or may be due to an experiment with the fine white china-clay

\* Furtwängler u. Löschcke, *Mykenische Vasen*, Taf. xlv., 32. Cf. *J. H. S.*, xvii., p. 75.

† An early site in Amorgos bears the same name. *Ath. Mith.*, xi. 28.

which occurs in various parts of Melos, notably a mile south-west of Phylakopi.\*

The form is original and graceful. Round a hollow stem which spreads below into a trumpet-shaped foot (the latter somewhat less flat than it appears in the drawing) are symmetrically grouped three cups with round bases, swelling bodies, and contracted mouths. They have a button-like knob at the base, projecting unperforated handles, and slightly everted rims. They do not communicate internally.

There is no ornament of any kind. The vase seems to mark a stage at which the potter has newly obtained mastery over his material, and finds an outlet for his inventive powers in ingenious construction rather than in external decoration. Groups of three or four cups, without the central pedestal, are fairly common in ancient pottery; they occur, to give a few instances, at Troy, at Ialysus, in Cyprus, in South Italy, at Rome, and in late Hallstatt times in the Rhenish Palatinate.†

But there is no need to go far afield for analogies. Our vase is principally interesting as a forerunner of the elaborate cluster-vases of the so-called *κέρνος* type, and they, so far as I know, have hitherto been found only in Melos. It is the first of a local series, culminating in the remarkable vase with no less than twenty-five cups, which is represented on Pl. IV., and will be discussed in a later section. Meanwhile, it is important to observe that, while the later members of the series are approximately contemporary with the beginnings of Mycenæan art, the prototype has considerable affinity with the pottery of the cist-graves. It is hand-made and hand-polished. The germ of its trumpet-shaped foot is present at Pelos (page 45, Figs. 14 and 15); its cups, regarded singly, have the form of Pelos, Fig. 2; the un-

\* The local name for Cimolite, the *Κιμωλία* of Aristophanes, as well as for the china-clay, which is a different substance, is *Πηλός*. The former gives its name to *Πηλός* in Kimolos, the latter perhaps to the site in Melos excavated by Mr. Edgar. Was the clay for the pottery obtained on the spot? There is also an islet off the north-east coast of Melos, called Pelonesia, Pilo on the Admiralty Chart. For an account of the different clays and their behaviour in the oven, see Fiedler, *Reise durch Griechenland*, II., pp. 392-441.

† In a collection of funeral pottery from the dolmens of Japan, which has lately been acquired by the British Museum, there is a vase distantly resembling No. 3, a cluster of three cups on a high pedestal. See an article by Mr. Gowlands in "Archæologia," IV., pp. 492-500, and Pl. XLI., Fig. 2. Groups of small cups on a common stem occur in modern Kabyle pottery. The remarkable three-bodied jug found at Aphidnae (*Ath. Mitth.* xxi. Taf. xiv.) seems to be developed from the Aegean jug with conical body, incised ornament, and lanceolate mouth, of which there are specimens (a) at Sèvres from Melos, Brongniart and Riocreux, xiii. 7; (b) at Athens from Amorgos, *Ath. Mitth.* xi., Beilage 2, 1; (c) in Brit. Mus., from Christy Collection.

pierced ledge-handles occur on a deep hand-made jar from Antiparos.\* It needed only the caprice of an ingenious potter to combine familiar elements into a composite vase.

The grave in which No. 3 was found lies near a group which had recently been plundered. To judge from fragments which lay in them they had contained pottery of the same early period. Nos. 1 and 2 may have been the fruits of this excavation. A trustworthy local digger told me that marble "mannikins" (*ἀνθρωπάκια*), by which he can only have meant figures of the usual island type, had been found in graves upon this promontory.† This part, therefore, of the Phylakopi cemeteries was in use from the "Amorgos period" of the Bronze Age onwards.

The changed method of making the graves implies an advance of culture, not necessarily a change of population. The transition from small graves dug in the earth and lined with slabs to graves of liberal dimensions cut in the rock is not likely to have come about until bronze tools were in common use. Where the soil was hard it was difficult to dig a large grave with tools of wood or stone. So the corpse seems to have been trussed, as in many other countries, and buried in the smallest possible hole. The lining of slabs made it easy to open the grave and use it again and again. In islands where the rock was hard, Salamis, for instance, cist-burial in the earth naturally lasted longer than in Melos, where with the help of bronze cutting-tools it was as easy to hew a grave in the soft pumice as to dig it in the ground.‡

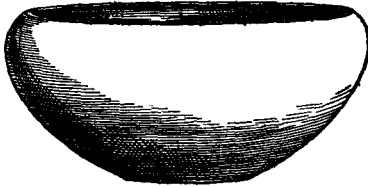
4. Red clay with traces of darker red slip. Perhaps wheel-made. Picked out of the earth thrown from a plundered grave on the hill south of the ancient fortress. The whole of its eastern slope is covered with tombs, which on the whole are later in date, to judge from the pottery round them, than those of the Kapro cemetery, a quarter of a

\* British Museum, A. 98.

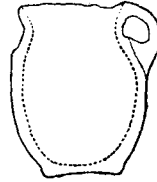
† When Dr. Blinkenberg asserts that no antiquities characteristic of the pre-Mycenæan period have ever been found at Phylakopi (*Antiquités prémycénienes*, p. 36), he is only giving his own interpretation to the facts recorded by Dümmler, not speaking from personal knowledge of the site. His valuable classification of the evidence will be found in *Mém. Soc. Ant. du Nord*, 1896.

‡ The finding of an obsidian blade with No. 3 is no argument for or against this dating, for it is clear that in the Ægean, as in Sicily and Mexico, these cheap and efficient razors held their own after the introduction of bronze, just as in Egypt razors of flint, a worse material for the purpose than obsidian, have only recently been replaced by steel.

mile away, in which No. 3 was found. Most of the fragments here are painted, and many of them belong to large vessels in the early Mycenæan style. Many of the graves are pit-graves, but at one place the rock has been scarped, and more pretentious tombs have been cut into it horizontally; one of these has an inner chamber, and is said



4.—FROM THE HILL-CEMETERY AT PHYLAKOPI.  
Height 7 cm.



5.—FROM THE FORTRESS AT PHYLAKOPI.

to have yielded large quantities of gold. The grave in which No. 4 was found lies farther inland than these distinctively Mycenæan tombs, and can hardly be an outlier from the older cemetery by the sea. Dümmler records the form as occurring in the hill-cemetery.

5. This is a small roughly-made jug of coarse brown clay. Its upper rim is broken. The handle is not of the primitive form; and the vase may quite well be clumsy work of a relatively late date.

## II.—THE SO-CALLED KERNOL.

The graceful triple vase from the Kapro cemetery at Phylakopi in Melos (Fig. 3 above), furnishes a clue for interpreting a little-known series of vases which seem to have come from the same site.

Pl. IV. shows their general appearance, and explains the structure of a more than usually complicated specimen by means of top and bottom views, for the ingenious drawing of which I have to thank Mr. F. Anderson. They are composite vases, consisting of a cylindrical stem with bell-shaped foot, a central bowl, and a single or double circle of cups. The clay varies from yellow to reddish-brown; the surface is covered inside and out with a coarse gritty slip, once white, but now yellow or grey, and decorated with stripes, zigzags, and cross stripes applied in dull brown paint. The component parts were shaped separately upon the wheel, the slip and decoration being added without

its aid after the building up of the whole. The series must be contemporary with certain beaked jugs and other painted pottery of the latest pre-Mycenæan period which have the same white coating and linear decoration in lustreless brown paint.

*First Type.*—The central bowl is a continuation of the stem, and supports a circle of cups which are attached to its circumference by horizontal ties.

- |   |                          |                     |
|---|--------------------------|---------------------|
| I. Lewis Collection, Cambridge.         | Single circle of 8 cups. | Provenance unknown. |
| II. Athens Museum, 838.                 | „ „ 10 „                 | „ „                 |
| III. Sèvres Museum, 1419 <sup>9</sup> . | „ „ 10 „                 | From Melos. „       |

III. is represented on Pl. IV. Fig. 1, after Brongniart and Riocreux, *Musée de Sèvres*, Pl. xiii. 1.

The height of I. is 15 cm., of III. 30 cm.

*Second Type.*—The central bowl and an outer circle of cups are suspended by horizontal ties from an inner circle of cups which springs from the margin of the stem. IV. has only one circle of cups; V. no central bowl.

- |                               |                                |                       |
|-------------------------------|--------------------------------|-----------------------|
| IV. British Museum, A. 1556*. | Single circle of 7 cups.       | From Melos.           |
| V. Athens Museum, 833.        | Inner circle 6 cups, outer 11. | (Provenance unknown). |
| VI. Sèvres Museum, 3552.      | „ 6 „ „ 12.                    | From Melos.           |
| VII. British Museum, A. 1555. | „ 7 „ „ 13.                    | „ Melos.              |
| VIII. Eton College Library.   | „ 9 „ „ 15.                    | „ Melos.              |
| IX. British Museum, A. 1556.  | „ 10 „ „ 15.                   | „ Melos.              |

IX. is the subject of Pl. IV. Figs. 2, 3, 4. VII. is figured in Birch, *Ancient Pottery*, p. 147. The height of IV. is 20.3 cm.; of VII., 33.5 cm.; of VIII., 35 cm.; of IX., 32 cm.

The order does not pretend to be chronological, but it is evident that the more complicated specimens, which are also the better made, are the outcome of a process of evolution. We cannot at present supply the intermediate stages between the triple vase from Kapro and the simple kernoi with seven or eight cups, but we may conjecture that the central bowl, which is absent both in the prototype and in No. V., was originally separable from the stand. The ledge-handles of the Kapro vase are retained on a vase from Melos which consists of two slender cups like those of the later kernoi coupled together.\* We can even follow the transition from the swelling cups of Fig. 3 to the slender alabastoi of No. IX.; the broader cups of the smaller examples, No. IV. in particular, show how the shape was modified to enable a greater number to be packed into the available space.

It is difficult to imagine what practical use a primitive community can have found for these ponderous and fragile clusters of tubes. They have been called candelabra and flower-stands, as well as *ἀλαβαστοθήκαι*

\* At Sèvres. Brongniart and Riocreux, *op. cit.*, Pl. xiii. 3.



and κέρνοι.\* If fragments are found in the dwellings at Phylakopi, it will be worth while to consider whether they may not have been used as lamps; in one of the "New Race" graves Mr. Petrie found a deep vase with a narrow neck, which, in spite of its unpromising shape, had been used as a lamp with a floating wick.†

If, however, they prove to have been made solely for the service of the dead, we may obtain a clue to their original use by comparing the three cups of the Kapro vase with the three hollows of the very early libation-table obtained by Mr. Evans from the Diktaean cave. The antiquity of the *χοαὶ τρίσπονδοι*, the customary Greek drink-offering to the dead and to the powers of the underworld, seems to be carried back beyond the tragedians, beyond Homer, to a period roughly contemporary with the Twelfth Dynasty of Egypt. The three miniature *πίθοι* of the Kapro vase may have contained the elements of the triple libation.‡ The subsequent multiplication and consequent modification of the cups, effected, as we have seen, by a gradual evolution, may be explained by the tendency of barbaric art to magnify and elaborate simple articles for the sake of display, and without any regard to practical convenience.§ We have a further illustration of this tendency in the remarkable openwork stem of No. IX., which displays the potter's ingenuity and audacity at the cost of impairing the strength of the vase and without increasing its usefulness (Pl. IV.). Possibly the idea was borrowed from an imported bronze cauldron-stand. It was certainly in imitation of a bronze λέβης that the potter affixed three flat-topped hooks or handles to the rim of the central bowl

\* Κέρνος is explained by Athenaeus, 478, as ἀγγεῖον κεραμεῶν ἔχον ἐν αὐτῷ πολλοὺς κοτυλίσκους κεκολλημένους. It was used to contain a variety of offerings in the Corybantic rites. Hesychius explains it as στεφανίς. Hence Panofka, who introduced the word into archæological nomenclature in his *Récherches sur les vrais noms des vases grecs* (Pl. V. 53), applied it to a ring-vase surmounted with cups, a form that occurs in early Cypriote, and again in Corinthian pottery. It is not very appropriate as a name for the pre-Mycenæan cluster-vases of Melos, but may be retained for want of a better.

† *Nagada and Ballas*, Pl. V. 23.

‡ Usually milk, honey dissolved in water, and wine, Aesch. *Persae*, 609; Eurip. *I. T.* 162; *Orestes*, 115; Soph. *Ant.* 431. The libation to the Erinyes was made twice with water, the third time with honey dissolved in water, Soph. *O. C.* 479. In *Odyssey*, x. 519, xi. 27, the offerings are dissolved honey, wine, water. See Mr. Evans' remarks on the Cretan libation-table, *J. H. S.* xvii. pp. 350 ff. and 358. Another parallel is the triple *Duenos* vase, found at Rome; its inscription shows that it was designed as a funeral offering. *Mélanges d'arch. et d'hist.*, 1882, Pl. iii.

§ The five-and-twenty receptacles can hardly have been filled with different kinds of food and drink; rather, perhaps, with unguents. Cf. a ring-vase of nine small jugs, from Thebes, *Arch. Anzeiger*, 1895, p. 33, Fig. 1.

(Pl. IV., Fig. 2); they represent the hooks used for hanging the cauldron over a fire, which were to develop later into the familiar griffin's head handles.\*

It was shown at the beginning of this paper that the Kapro vase had characteristics in common with the primitive hand-made pottery of the Amorgos period; we now see that it is the prototype of a series of wheel-made vases which bring us in sight of the far higher achievements of Mycenæan craftsmen. Resemblances in the handiwork of different peoples and periods can so often be accounted for by similarity in the conditions of production, that it is dangerous to infer direct influence even where it seems geographically and chronologically possible. In the present case, however, we can strengthen the argument for continuity of tradition by tracing the kernoi not only to the island, but to the very site where their primitive prototype was found.

On the ground of their fabric the kernoi must be classed with the beaked jugs and other painted pottery of the pre-Mycenæan period. Since they come from Melos there is a presumption that they come from Phylakopi; no other cemetery of that period has been excavated in the island, though others may exist. A strong argument is furnished by the date at which they were acquired. Local tradition in Melos asserts that the tombs at Phylakopi were plundered wholesale by a party of Cretan adventurers about the time of the War of Independence (1821-1829); the same story was told to Dümmler in 1886 and to ourselves ten years later, and there is no reason to doubt it.† Now, of the list given above, Nos. IV. and VII. are part of the collection formed by Burgon, who excavated in Melos, as Mr. Cecil Smith tells me, probably at some time between 1810 and 1815; No. VIII. was obtained by Captain Copeland, R.N., while engaged on the Admiralty survey in Greek waters "between 1826 and 1836"; and No. VI. was a gift from Bory de St. Vincent, who may have obtained it when he visited the Cyclades with the "Expédition Scientifique de Morée" in 1829. Further, among the Burgon vases in the British Museum and the Copeland vases at Eton there are vases labelled "Melos," of pre-

\* The arrangement for suspension is well seen in the case of a red-ware cauldron and stand from Falerii, now in the British Museum. Round the cauldron are griffins' heads with suspension-chains hanging from their jaws. Cf. *Olympia, Die Bronzen*, p. 115; Schliemann's *Atlas Trojan. Alterthümer*, Taf. 154, &c.

† Ross heard of both cemeteries in 1843, but did not visit them.

Mycenæan or early Mycenæan style, which closely correspond with the fragments strewn about the cemeteries and fortress of Phylakopi.\* This is also true of a set of twenty-one vases, including the kernos No. III., which came to Sèvres from Melos in 1831. We may, therefore, conclude that the Melian κέρνοι were found in one or other of these cemeteries, and that they are directly descended from a simpler type which is represented by the triple vase from Kapro.

The form appears to be a local development. On the other hand, the decoration is so closely allied to that of the pre-Mycenæan geometric ware, which has been observed in Attica, Ægina, and Sicily, as well as in the Cyclades, that in the absence of evidence as to their provenance Dr. Stais was inclined to regard the two kernoi in the Athens Museum as of Æginetan fabric.† Melos has a stronger claim. But it would be premature to lay stress on the fact that at present the type seems indigenous at Phylakopi, or to infer anything as to the place of manufacture, until the surrounding area has been more fully explored. The cave of Kamarais in Crete, the Attic tumulus of Aphidnae, the beehive tombs on Mount Ossa, have shown how much we have still to learn about the varieties and the distribution of early pottery.

### III.—TEXTILE IMPRESSIONS ON ÆGEAN POTTERY.

In the last volume of the *Annual*, p. 142, I described a grave in the pre-historic necropolis of Khalandri,‡ near Cape Κροκιδὰς in Syra, and men-

\* A jug from Melos, of the early beaked type, was in the Dresden Augusteum as early as 1830. Fiedler, ii. p. 376; Taf. iii., Fig. 18. The stone pyxis from Melos, now at Munich, has been assigned with great probability to Phylakopi. A beaked jug, which came to the Louvre without provenance in Louis Philippe's reign, is catalogued by M. Pottier as Italian, *Vases du Louvre*, Pl. 29, D. 5. Many antiquities from Melos must have found their way to France in the early part of the century. The French vice-consul was an ardent excavator, and French ships frequented the island.

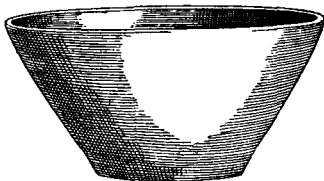
† Έφ. Ἀρχ. 1885, p. 255, Pl. X. 1—7.

‡ Dr. Blinkenberg's contention (*op. cit.* p. 35, note 1), that this cemetery contained graves of late date, was not borne out by my own enquiries and observations on the spot. The evidence offered is: (1) Pappadopoulos speaks of "pyxides en albâtre et à couvercle tournant et se fixant comme celui des théières." Blinkenberg assigns them to the fourth or fifth century B.C. (2.) Dr. Pollak saw two b. f. vases in Hermupolis which were said to have been found many years before at Khalandri (*Ath. Mitth.* xxi., p. 189). The answer to (1) is that the pyxides may well have been pre-Mycenæan vessels like the marble vase, seen by Pollak in Siphnos, which had "Windungen im erhöhtem Halse um einen Deckel anzuschrauben" (*loc. cit.* p. 210). As for (2) the evidence is of a most unsatisfactory kind.

Khalandri, like Phylakopi, is remote from the classical centres of population. The juxtaposition

tioned this vase, found in it, as "a round hand-made bowl of dull red ware, black in the break, without ornament save for a broached pattern under its base." The clay differs from that of the early vases in Melos; it is more friable, and contains a greater proportion of mica. The principal interest of the pot lies in what I then described as the broached pattern under its base. In the light of an important note printed by Mr. J. L. Myres, in the *Journal of the Anthropological Institute*, 1897, p. 178, it becomes probable that these markings are the impressions of a plaited or woven mat on which the bowl was built up.

Mr. Myres publishes a photograph of a fragment of pottery picked up on the site called *τῆς βίγλαις* in Amorgos. "The remarkable feature is that the base bears the clear impression externally of a rush mat upon which the vessel has been formed. . . . It appears probable that the mat thus recorded was used either (1) to prevent the vessel from sticking to the ground while drying in the kiln, or else (2) during the actual



6.—FOUND IN A GRAVE AT SYRA. Height 6 cm.

manufacture of the vessel." He decides in favour of the latter hypothesis, remarking that "small vessels can be handled upon the level surface without much fear of distortion; but a jar of the size of this specimen, with a base of some 10 inches (25 cm.) diameter and walls of considerable thickness, would certainly be so heavy that it could not be turned round, at the convenience of the potter, without great risk of distortion. If, however, its foundation was laid on a circular mat of the size of the intended base, and with a slightly thicker knot in the centre, as in this instance, close or continuous contact with the ground would be avoided, and the central pivot would to some degree supply the place of a turn-table or potter's wheel."

Pl. V. 1 represents the upper side of a paper impression taken on both sites of graves containing marble idols and graves containing painted pottery is a strong argument against an interruption of culture such as has been assumed.

from the base of the Syra vase, and therefore reproduces the general lines of the original mat; the surface of the base is, as it were, a negative from which we obtain a positive. It shows a loosely woven fabric with a warp of thick single straws or rushes, crossed more or less at right angles by a thinner woof. There is no central knot, and nothing to show that the mat bore any intentional relation, in size or shape, to the pot which was formed upon it. The whole has been pulled out of shape by a "circumferential strain" like that of which Mr. Myres detected traces upon his fragment, with the difference that in that case the strain was applied in the direction of the hands of a watch, while here it has been applied in the opposite, or *withershins* direction. The Amorgos pot was so heavy that some means of turning it in the shaping was a convenience, if not a necessity. In the case of the little bowl from Syra, the use of the turning-mat is seen in the regular horizontal streaks in which the thin red slip was laid on; one hand kept the mat turning, while the colour was applied with the other. Mr. Edgar, who has kindly examined the surface for me, thinks that the potter used his thumb instead of a brush.

Mr. Edgar sends me from Athens the paper cast of a fragment bearing similar textile impressions, which he has discovered among the pottery from last year's excavations in the fortress at Phylakopi. It is represented full size in Pl. V. 2. The warp consists of double rushes, and the texture is very distinctly seen.

Thus three instances of a previously unknown technique have come to light in rapid succession. Since discovery begets discovery, we may expect that the method of building up earthenware vessels upon a basket-work mat, which is now recorded for Amorgos, Syra, and Melos, will be found to have been a common possession of the inhabitants of the Ægean, and perhaps of a larger area.\*

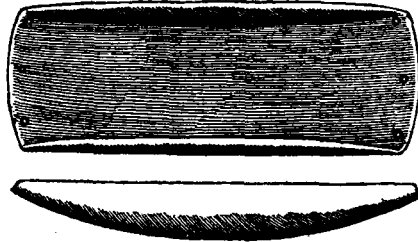
\* Dümmler figures part of an earthenware platter, "Welche wol einen Strohteller nachbildete," from a grave in Amorgos (*Ath. Mitth.* xi., Beilage, ii. c. 2, p. 19), and mentions a similar imitation of a straw-mat from an early grave at Hagia Paraskeve, in Cyprus (p. 38). A large earthenware lid from Antiparos (*Brit. Mus.*, A. 101), bears a pattern which seems to be derived from a rush-work original, which had the same "confused knot in the centre," and "radial warp" as Mr. Myres' specimen. The latter is now in the Ashmolean.

The textile impressions found on primitive pottery in the United States are the result of building up or moulding the vessels in baskets and nets. See the article by Mr. William H. Holmes in the *Third Annual Report of the Bureau of Ethnology*, 1881-2, pp. 397-425, Pl. xxxix.

## IV.—STONE DISHES OR TROUGHS.

Some sixty years ago Fiedler, the German geologist, brought back from Naxos the singular implement of white limestone which is reproduced in Fig. 7. He had reason to suppose that it had been found with a marble idol in a grave near Trymalia.\* It is easy to smile at his suggestion that it served as *eine heilige Schwinge* for the figure found with it, but by no means easy to give a satisfactory explanation of its use. This paper was already written and the block for Fig. 7 prepared from Fiedler's illustration, when I learned from Professor Treu that the original is preserved in the *Königliche Skulpturensammlung* at Dresden. With characteristic kindness Professor Treu has sent me a cast, and thus made it possible to take account of certain defects in Fiedler's drawing † and to compare the Dresden specimen with three somewhat similar objects in English collections.

Pl. V., Fig. 3 (*a*, *b*, and *c*), represents a trough, also of white limestone, which comes from Amorgos and is now in the Ashmolean



7.—LIMESTONE DISH FROM NAXOS. Quarter length of original.

Museum at Oxford. I have to thank Mr. Arthur Evans for permission to publish it, and his assistant, Mr. C. J. Bell, for the drawings, which are reduced on the plate to one-half (linear) of the original. It is smaller and less carefully made than the implement from Naxos. In spite of a slight depression at the centre of the longitudinal hollow it was certainly not meant as a recipient for a liquid. The irregularity

\* Fiedler, *Reise durch Griechenland* (1834-7), Leipzig, 1840, ii. Taf. II. Fig. 3*a* and *b*. Cf. p. 315.

† The underside is less convex than in the drawing; the vessel stands steadily and does not rock. One rim is chipped. The hole at one angle is double; the maker bored from both sides and the two holes did not meet.

of the central depression, considered in conjunction with some striations at one end, suggests that the stone has been used for grinding some hard substance, perhaps for polishing bone pins or arrow-heads, or for mixing colour.

Two flatter and heavier dishes form part of a group of marble vessels, formerly in Lord Belmore's collection and now in the Egyptian department of the British Museum, to which Mr. Edgar has already referred. Wherever they were found, their material and form are strong evidence that they were made in the Cyclades.\* The group consists of two jars, evidently made as a pair, and two flat dishes, also made as a pair—they are of the same length. It is interesting to compare their dimensions with those of the dishes already described.

I. Ashmolean Museum, from Amorgos.	Length 18,	width 6	centimetres.
II. Dresden Museum, from Naxos.	„ 22	„ 8	„
III. British Museum, 4664.	„ 21	„ 14	„
IV. British Museum, 4665.	„ 21	„ 10	„

There is a remarkable resemblance between II. (Fig. 7) and IV., closer than that between IV. and III. I. stands somewhat apart.

They differ in the provision made for suspension. IV. has a hole at each corner, while III. has two knobs projecting at each end, those at one end pierced, those at the other unpierced. II. has three holes at each end, and I. has no holes at all. It follows that the holes were not essential to the use of the vessel, but were used for hanging it up by a string when not in use. It was convenient to have a double set of holes, four or six, in case the friction of the string wore through the outer edge of the holes, as has happened to three out of the four perforations of IV.

We cannot expect to determine with certainty the use for which these objects were made. They are too flat to have served as lamps. The lamp found at Mycenæ and figured in Tsountas-Manatt, p. 80, is a trough of blue schist, 8 ins. long and  $\frac{2}{3}$  of an inch deep. Another of white marble was found at Thorikos. They were probably found in

\* See p. 48; Mr. Cecil Smith's note on the probability that Lord Belmore obtained them in Greece is confirmed by the course of his travels, of which there is an account by Robert Richardson, M.D., entitled *Travels along the Mediterranean . . . in company with the Earl of Belmore*, London, 1822. On their way to the East in 1817 they visited Paros and Antiparos, and "the tombs of Delos and Antidelos." On their return in 1818 they spent four days at Paros, six at Delos, and one at Melos. See vol. i. p. 12; ii. p. 522.

graves, and that narrows the inquiry, for, as Dr. Blinkenberg has remarked, most of the objects deposited with the dead in Ægean tombs are either food-vessels, personal ornaments, or articles connected with the toilet, cosmetic-boxes, razors, tattooing-needles, and the like. Starting from this generalisation, we may regard the marble dishes as plates for food or mortars for the preparation of food, or as palettes for mixing the colours with which the islanders at this period decorated their persons.

The latter possibility is worth considering. In the graves of Naqada and Ballas, which in several respects present a parallel to those of the Greek Islands, Mr. Petrie and his companions found numerous slate palettes, pierced with a varying number of suspension holes and bearing traces of colour, and jars filled with thick palm-oil or vegetable butter. At a much later period, the royal mummies found at Deir-el-bahari "had their hair dressed and their faces painted before burial; the thick coats of colour which they still bear are composed of ochre, pounded brick, or carmine mixed with animal fat."\* In classical Greece the anointing of the corpse is closely parallel to the ceremonial anointing of the statues of gods and heroes, and both customs are a natural extension of the oiling of the body, which was an essential part of the toilet. When, therefore, we find that certain ancient statues of Dionysos in the Peloponnese were smeared with "red grease" or with vermilion,† we may suspect that ritual has here preserved a custom that was once general. Tibullus is clearly echoing a Greek original when he declares that the rural worshippers of Dionysus wore paint.‡ We know that at Rome vermilion was applied not only to the face of Capitoline Jove, but to the bodies of generals at a triumph; and Pliny anticipated the methods of modern anthropology when he pointed out that it was a favourite colour among African tribes and that both chiefs and idols were decorated with it. §

The custom which left these traces in classical Greece and Italy has been brought home to the Ægean islanders by several discoveries

\* Maspero, *Dawn of Civilisation*, p. 54, note 5.

† Paus. ii. 2, 5; vii. 26, 11; viii. 39, 4.

‡ Tibullus, ii. 1, 55. "Agricola et minio suffusus, Bacche, rubenti Primus inexperta duxit ab arte choros." The satyrs in the procession of Ptolemy Philadelphus were painted with ochre and other colours. Athen., 197d.

§ Pliny, *N. H.*, xxxiii. 112, a very important passage; xxxv. 157; xxxvi. 77. Cf. Plut. *Q. Rom.*, 98.



of red and blue pigments placed beside them in the grave, as well as by traces of colour, distinct from imitations of tattoo-marks, on certain marble idols. Just as the obsidian core provided the dead with the means of making new razors, so the palette or colour-slab would enable him to mix a fresh supply of colour. Moreover, the widespread idea that everything which had been in contact with the dead became *tabu*, and must be buried with him, would especially apply to the razors and the vessels containing paint and unguents which had been used in the funeral toilet.

The two marble jars and the two marble dishes from the Belmore collection seem to form a set. The jars may have contained the unguents with which the paint was applied.\* Unfortunately the decisive evidence which can only be obtained at the moment of excavation is wholly lacking in the present case, and we must wait for the final solution of this, and many more important problems, until one of the Archæological Schools undertakes the systematic exploration of the island cemeteries.

#### V.—A PRE-MYCNÆAN WRIST-GUARD.

The object represented in Pl. V. 4 comes from Amorgos, and is now in the Ashmolean Museum. I have again to acknowledge the kindness of Mr. Arthur Evans in giving me permission to publish it, and of Mr. C. J. Bell in making the drawings.

Although at first sight it bears a general resemblance to the marble dishes discussed in the preceding section, it differs in two important respects. In the first place it measures only 9·4 × 4·8 cm. ( $3\frac{3}{4} \times 1\frac{7}{8}$  inches), while the smallest of the preceding class measures 18·5 × 6·5 cm., and is considerably thicker; secondly, the low rim has the same degree of curvature as the interior, whereas in the preceding class the rim on the long sides connects the ends in a straight line. We have to deal not with a heavy trough, but with a small and neatly made concave plate. It might with some plausibility be explained as a palette. But anyone familiar with the stone "bracers" of the

\* Pliny, *loc. cit.*, implies that the vermilion was mixed with unguents, *hac religione etiamnum addi in unguenta cenae triumphalis*. Primitive man finds it convenient to mix his red ochre with animal fat, butter or oil. Cf. W. Jöst, *Tätowieren, etc.*, p. 11, and references there given, and Mr. Frazer's *Pausanias*, vol. iii. p. 20.

northern Bronze Age will ask himself whether it is not more likely that we have here the first example of a pre-Mycenæan archer's wrist-guard.

Bracers or guards to protect the left wrist from the recoil of the bow-string are made nowadays of stiff leather. In the Middle Ages they were often of ivory. A grave-relief from Borcovicus on the Roman wall in Northumberland is thought to represent an archer with a bracer on his left arm,\* and I suspect that we have the bracer itself in "a curious object of bone" which was recently dug up at the neighbouring fort of Aesica.† Going further back, we find it worn as a broad wrist-band on a bronze statuette of an archer found in Sardinia,‡ and in the same form on Egyptian monuments, where it also appears as a long pad secured by thongs about the wrist and elbow. The oblong stone plates which have been found in the British Isles, and more rarely on the Continent, with interments of the early Bronze Age, were first recognised as bracers by Thurnam, and have been fully described by Sir John Evans.§ The commonest material is a greenish chlorite or veined slate. They range from  $2\frac{1}{2}$  to  $5\frac{1}{2}$  inches in length, and from 1 to  $2\frac{3}{4}$  inches in width, the Scottish examples being smaller than the English. The shape varies; most of them are rounded on the outer face and hollowed on the inner, so as to fit the side of the wrist, but a well-known example from near Devizes, about the use of which there can be no doubt, since it was found "between the bones of the left fore-arm" of a skeleton, is quite flat, and several like it are known. There is usually a hole in each corner, as there is in the marble plate from Amorgos (Pl. V. 4), sometimes only one and sometimes three or more at each end, by means of which the stone plate appears to have been sewn or riveted to a leather wrist-band. It is not clear whether the plate was completely encased in leather.

The most instructive of British finds was made in a rich grave near Driffield,|| where a bracer, and a buckle which had probably formed

\* *Lapidarium Septentrionale*, 240. Black Gate Museum, Newcastle-on-Tyne, No. 88. But the indications shown in the engraving are doubtful on the original.

† Figured in *Proc. Soc. Ant. Newcastle*, vi. (1894), p. 297. It is  $3\frac{1}{2}$  inches long, and has a deep transverse sinking to receive a strap.

‡ In the British Museum, *Cat. Bronzes*, No. 337. Mr. Cecil Smith called my attention to it.

§ *Ancient Stone Implements of Great Britain*, 1897, pp. 425—430. Cf. *Catalogue of the National Museum of Antiquities of Scotland*, 1892, pp. 67, 188, 189.

|| Greenwell, *British Barrows*, Fig. 32, and p. 36; *Archæologia*, xliii. p. 427. The grave also contained a bronze dagger, large amber beads, and the skull of a hawk.

part of it, lay under the right arm of the dead. In the four holes of the stone plate, which is now in the British Museum, there are bronze pins or rivets, which must have served to attach the wrist-band, and the heads of the pins are decorated with gold caps.\*

In one hole of the marble plate from Amorgos there is a green stain such as is left by decomposing bronze. Had the stain been deposited by some bronze object with which the marble was in contact in a tomb, we should expect to find traces on the surface, not on the inner wall of a narrow perforation. It is highly probable that the holes were once filled by bronze pins, like those of the Driffield bracer.

If future discoveries or comparisons confirm the suggested interpretation of the object figured in Pl. V. 4 as an archer's wrist-guard, we shall have an interesting proof that the islanders of the Amorgos period were acquainted with the use of the bow.

The absence of arrow-heads, as of other weapons, from the earlier graves, does not prove that the community was ignorant of all weapons, but rather that its life was peaceful. A race that lives by fighting seldom sends its dead unarmed to the lower world. The apparent absence of weapons for the dead and of walled strongholds for the living shows that at this period life in the Archipelago was still secure, and that, in spite of the free intercourse implied by the uniformity of the finds in different island cemeteries, navigation had not yet expanded into piracy. The marble-working island-race had at least a foothold on the mainland of Asia, as is shown by Mr. Bent's discoveries on the Triopian promontory.† Overland traffic to the Carian coast, and communication by small craft along the islands which run westward like a broken pier, will account for the presence of ivory and silver in Amorgos and Antiparos. The use of the bow and other rudiments of civilisation may have travelled to the Cyclades along this path from Asia, or by way of Crete from Africa. Mr. Evans has recently demonstrated the existence of very close and early intercourse between Crete

\* These unusual embellishments, which could hardly have resisted the impact of the bowstring, and the circumstance that the bracer was found under the *right* arm, go to show that this specimen was worn for ornament rather than use. "I remarked no ornaments," says d'Albertis of a tribe in New Guinea, "except the bracelet worn to protect the arm from the bowstring. They use this also as a bag or purse, and put tobacco, or a spare string for their bow, and other little things in it." Dr. Haddon, who quotes the passage, mentions the wrist-guard among the finery which a native would wear "when specially dressed up." *Journ. Anthropol. Inst.*, xix. 370-2.

† *J. H. S.*, ix. p. 82.

and the Libyans of the North African coast, and Mr. Petrie has argued that the oared boats figured on the painted pottery found in "New Race" graves of about 3000 B.C. are likely to have been sea-going galleys.\* The bow was the characteristic weapon of the Libyans, who served as mercenary archers in the armies of Egypt, and also of the Cretans, who served other Greek states in the same way. It was known and used in Crete from ancient times, for the arrow appears on very early seals, sometimes in connection with the wild goat.† If archery was "native" there, as Pausanias says,‡ and nowhere else in Greece, it was because the wild goat was native in the Cretan mountains. In Homer, archery is closely associated with the hunting of this particular quarry. The great bow of Pandarus the Lycian was made from the horns of a mountain goat which he had himself killed.§ Odysseus, a still more mighty archer, hunts the wild goat both on his voyage and in Ithaca.|| Wherever it was found—and its distribution in recent times and its prominence in early art indicate that it once had a wide range in the Ægean ¶—the needs of the chase, if not of war, must have established the use of the bow.

R. C. BOSANQUET.

\* *J. H. S.* xvii. p. 372 ff.; Petrie, *Nagada and Ballas*, p. 49; see however C. Torr in *L'Anthropologie*, vol. ix. (1898), p. 32.

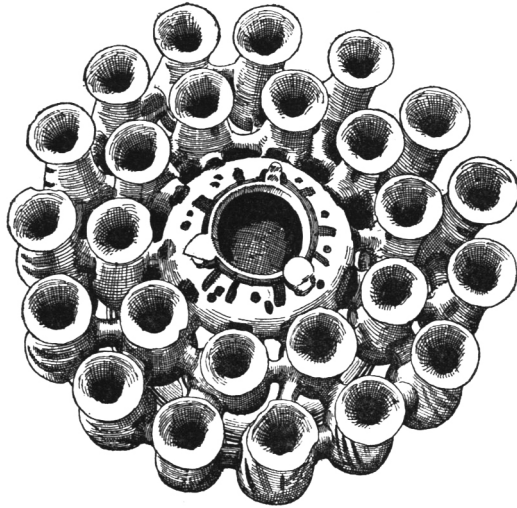
† Evans, *Cretan Pictographs*, p. 36; *J. H. S.*, xiv. p. 305.

‡ Paus., i. 23, 4.

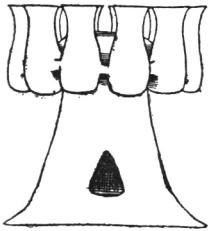
§ *Iliad*, iv. 105—126. So κέρα, xi. 385, and *Od.* xxi. 395, of the bows of Paris and Odysseus.

|| *Odyssey*, ix. 118, 153. The goat-hunt on the desert island was doubtless a familiar incident in early Mediterranean voyages. Cf. xvii. 293—5 and xiv. 50.

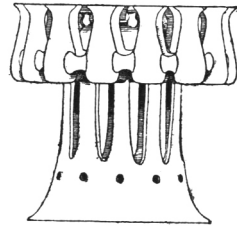
¶ The present range of *Capra aegagrus* is from the Ægean, through Asia Minor, the Caucasus, Persia, and Beluchistan, to the north of India. In the Ægean it survives in Crete, Antimelos, and perhaps in Scopelos and Gioura, and was formerly reported in Samothrace and Carpathos. It is the principal progenitor of the domesticated goat, and since the young are easily caught and reared, it may have been introduced into many of the islands as a domesticated animal, and have reverted to a wild state where conditions were favourable. Homer's measurements—*ροῦ κέρα ἐκ κεφαλῆς ἑκαίδεκάδωρα περὺκει*—are justified by an unusually large twelve-year-old horn at South Kensington, which measures  $48\frac{1}{2}$  ins. along the curve. The native sportsmen of the Taurus (where Pandarus may have obtained his head) told Mr. Danford that they had seen horns of 6 and 7 spans, "which would give the enormous length of 5 ft." See *Zool. Soc. Proc.*, xliii. (1875), p. 458 ff.



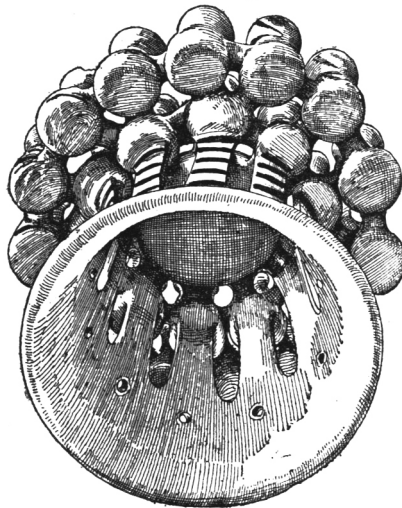
2



1



4



3

1. KERNOS IN THE SÈVRES MUSEUM.

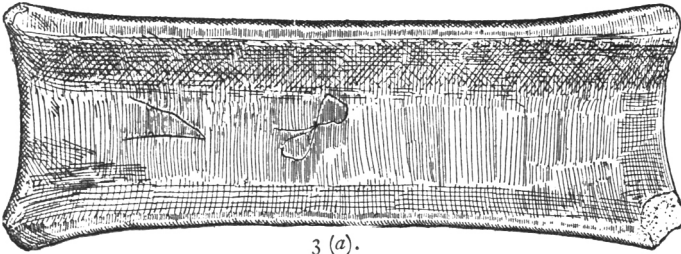
2—4. KERNOS IN THE BRITISH MUSEUM (THREE VIEWS).



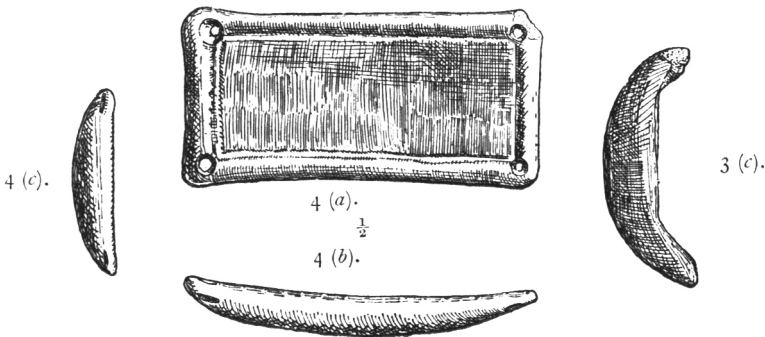
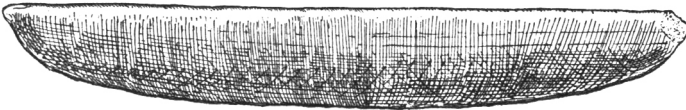
I.  $\frac{1}{4}$



$\frac{1}{1}$  2.



3 (a).  $\frac{1}{2}$   
3 (b).



4 (a).  $\frac{1}{2}$   
4 (b).

1. BASE OF VASE FROM TOMB IN SYRA, AND
2. FRAGMENT FROM PHYLAKOPI, SHOWING TEXTILE IMPRESSIONS.
3. MARBLE TROUGH FROM AMORGOS.
4. MARBLE PLATE FROM AMORGOS.