

JOHN L. MYRES, Esq., B.A., F.S.A., read the following paper on some pre-historic polychrome pottery from Kamárais, in Crete:

"The vessels and fragments of pottery published in the accompanying plates were found by peasants in the neighbourhood of the Cretan village of Kamárais, which lies in one of the principal valleys opening on to the Plain of Gortyna (the Messarà) from the south side of Mount Ida (Psiloríti). The exact find-spot is said to be a cave in the side of the ravine, of a kind which is not uncommon in the island, and of which the most famous example hitherto is the cave of Zeus, on the north-eastern slope of the same mountain, which yielded some years ago the magnificent series of early bronzes and other remains, published in the *Museo Italiano* (II. 689, &c.), by MM. Orsi and Halbherr, and further described by Dr. Fabricius in *Ath. Mitth.** The antiquities from Kamárais, like those from the cave of Zeus, are now in the museum of the Sýllogos at Heráklio (Candia), and it is to the kindness of the president of that body, M. Chatzidhákis, that I owe not only the permission to study and publish this interesting find, but also all the information which is forthcoming with regard to the circumstances of the discovery, and no little personal assistance in the work of sorting and photographing.

So far as I know, no European visitor had reached the site itself, when I saw the fragments in Heráklio. I had intended to explore it, and the seaward part of the Messarà below it, in the spring of last year, and hoped to be able to give a more complete account of the matter. But as circumstances prevent the execution of this plan for the present, it seems better not to delay any longer the publication of what is known already, in view of the very peculiar character of the find, and of its apparent importance as evidence for the early history of the island. Mr. A. J. Evans tells me that he ascended the Kamárais valley this spring, but was prevented by the snow from visiting the cave.† The coloured plates are executed from water-colour drawings. The tints are necessarily rather brighter than those of the originals, but are matched as nearly as the difference of material will permit. The occasional errors of perspective are explained by the fact that the outlines were in all cases traced with a *camera lucida* at short distance, so as to make the original drawings, with one or two exceptions, as nearly full size as possible.

* X. (1885), p. 59 ff.

† I also hear that Signor Taramelli has since explored the cave, and will publish his results shortly.

The clays of which the pots are made vary greatly in quality; the coarsest is blackish brown or grey in colour, full of small grains of limestone and other foreign matter, and showing a tendency to redden when over-fired; the finest very closely resemble some varieties of 'Mykenaeon' clay, but almost all contain occasional grains of the same impurities as are found in the commoner sorts; and the presence of a practically unbroken series of qualities between these extremes confirms the impression that they are all representative of the same local industry, with the one possible exception, which will be referred to later on.

Nearly all the specimens appear to be covered with a 'slip' of the same clay more finely levigated; but this point is much obscured by the surface decoration. Most of the finer clays were thrown upon a wheel; but some specimens of these, as well as nearly all of the coarser kinds, were built up by hand. This distinction of technique is, perhaps, in some cases due to the shape of the vessels themselves; but certainly some of the hand-made pots are of quite simple shapes; in particular, a fragmentary *pyxis* (?) with upright sides, which is one of the roughest of the whole series (Plate iii. 17).

One remarkable and not at all common hand-made variety shows a peculiar treatment of the slip, which has been pitted all over, while moist, with the finger or a blunt instrument, so as to give an irregular surface of intersecting ridges, except on certain bands, which are left smooth, and form the basis of the scheme of the painted ornament. The slip of this variety is dark grey, turned to chocolate-brown by overfiring; the spots of white paint are laid on quite without regard to the irregularities of the slip, except on the handle, where each of the row of warts is emphasised by a dab of white on its upper side.

The coarsest specimens have the painted ornament laid directly on to the dark slip (Plate ii. 17), and one or two specimens of fine cream-coloured or pinkish clay (Plate i. 4) are treated in the same manner. But by far the majority are wholly covered outside, and in some cases inside as well, with a strong black glaze of varying quality. On the coarse porous clays it sinks into the ware like inky mud, leaving the surface dull; but on the best specimens of the thin, finely levigated, wheel-thrown clay, it has a lustre like that of the best Hellenic glaze. On intermediate specimens of uneven texture the glaze is lustrous here and dull there, as is occasionally the case also with the *firnisfarbe* of ordinary Mykenaeon pottery; and with the ordinary pigment of the painted Bronze-age pottery of Cyprus.

On this blackish varnish the ornamentation is executed in four strongly-contrasted pigments: white, a brilliant orange, a brick-red which is variable in tint, and a dark purple-red

which resembles that used on early Hellenic vases, and is very liable to sink into the brownish-black background of the coarser wares. All these colours are dull and powdery, especially the white and the orange, and have often flaked away, leaving only a stain upon the background. The orange, which is the least common, and only occurs upon the finer fabrics, is an iron-ochre; the two reds also seem to be ferruginous. The white occurs alone on several specimens, and has *generally* been laid on before the other colours which overlap it. It is possible to conjecture from this, that, in biological phrase, 'the ontogeny recapitulates the phylogeny'; and that the other colours came into use later than the white, and as accessories to it. In Cyprus a dull black ware with white decoration appears, in the later Bronze Age, along with Mykenaeen importations, and independently a rare, lustrous black-glazed variety, with ornamentation in the brick-red only.

The patterns are derived partly from floral, partly from textile motives. None are wholly naturalistic, though the 'sunflower' design (Plate iv. 26) and the garland of leaves and flowers (Plate ii. 13) show an extraordinary boldness of touch, and no small sense of design. There is no retouching, and no trace of guiding lines or preliminary sketching; every petal, for instance, of the great 'palm-leaf' or 'sunflower' (Plate iv. 27) is executed with a single stroke of the brush. Nothing is so nearly parallel to this style of work as the decoration of the primitive pottery, and fragments of fresco from the settlement below the volcanic layer at Thera;* though the potters of Thera had a far greater appreciation of the forms of the living plants.†

Exact analogies to the 'basketwork' and 'gourd' motives are more difficult to find, though there is some suggestion of the more geometrical schemes which can be illustrated both from Mykenae and from Cyprus. One fragment (Plate i. 6), a neck of reddish clay with slip of the same material, which has been already referred to as being of a different character from the rest, and apparently not of the same fabric, has, in dark brown lustreless paint, the simple quatrefoil which is characteristic of the white slip 'Schnabelkanne' of the primitive Cyclades, and is common to Syros, Thera, and Amorgos. (Cf. several specimens at Athens, in the Polytechnion, and in the museum of the French Archaeological School.)

Two other representations occur, which though at present

* See Fouqué, *Santorin et ses éruptions*; Dumont, *Ceramique*, pl. i. ii.; Furtwängler and Löschke, *Mykenische Vasen*, pl. xii.

† Compare also Plate iv. 21 with the Mykenaeen fragments from Knossos. Dümmler, *Ath. Mitth.* xi. (1885), p. 22.

unique at Kamárais, may be of importance in assigning its proper position to the find. One very rude hand-made bowl, with a dark slip, apparently modelled after a stone prototype, bears upon its side a fish, carelessly executed in white, which is, so far as I know, without exact parallel, the nearest being on an unpublished Cypriote vase of Graeco-Phoenician red-ware in the Ashmolean Museum, but which, being wholly barbarous, is of no stylistic value. But a drawing in red paint, on a well-made necklance vase with good black glaze, is unmistakably the upper half of a human figure, and is executed according to a recognisable convention (Plate ii. 12). Only the circular head, with staring eye and five streaming locks behind, the long neck, the upheaved right shoulder, and the enormous outspread hand remain. The man is in violent motion towards his proper left, and raises his right hand behind him as if to deal a blow. The style of the head is exactly paralleled on a potsherd from the XVth grave of the lower town of Mykenae.* If the agreement were less striking, or in a less appropriate quarter, it might be dismissed as casual, or, in so childish a performance, as inevitable; but in the instance before us it will probably be admitted that it has its force. The white object behind the man still wants an explanation: it may be a shield hung up by its sling; compare the flexible shield on the 'lion hunt' dagger from Mykenae, and elsewhere.

No other animal forms can be recognised on the pottery from Kamárais; but there is a fragment of a terra-cotta bull's head in the collection, of rather coarse reddish clay, like that of Plate i. 6.

The shapes of the vessels, like their decorations, point especially to a connection with Aegean civilisation, and in particular with that of Thera. The shape of many of the vessels is characteristically Theraean, also is closely parallel, both in shape and scheme of ornament, to the Theraean pot.† Similar forms are found in pottery from Syros, Antiparos, and Amorgos, and in marble from Naxos (unpublished specimens in the Ashmolean Museum).

The general character of the pottery of the Kamárais valley thus points to the conclusion that it represents a probably local and very specially developed industry, most nearly related to that of the primitive inhabitants of Thera, and more remotely to that of the other Cyclades, and of Mykenae. It is worth noting that several vases exactly in this style are ascribed, in the Heráklio Museum, to the early necropolis at Dibáki, near the site

* Figured 'Εφημερίς. 'Αρχαιολογική. 1888. P. 161, fig. 14.

† Dumont, l.c. pl. i. 5. Rayet and Collignon, fig. 12.

of Phaestòs, almost on the coast at the west end of the Messarà, and about four hours south of Kamárais; and that from the same necropolis have been obtained not only rude marble figures like those of Amorgos, but also a number of Mykenæan gems, and rudely engraved trefoil and quatrefoil seals of steatite, and also porcelain scarabs of types which in Egypt are referred to the XIIth dynasty. Note particularly the fine 'Schnabelkanne' with cream-coloured slip and fine red lustreless painting, from Dibáki, now in the museum of Heráklio. The continuation of the pattern across the *bottom* of the vessel has been hitherto regarded as characteristic of the style of the Bronze Age of Cyprus.

It only remains to chronicle the few isolated specimens of this class of pottery which have been found elsewhere, and to form such an estimate as may be possible of its range in time. After what has been said, it will not be surprising to find, in the collection from Tiryns, that the little hand-made one-handed cup, figured by Schliemann,* and the fragment of similar polychrome fabric† are fairly characteristic specimens of Kamárais pottery.‡

From the Vth grave at Mykenæ comes a fragmentary vase nearly 20 inches (c. 50 cm.) high, of the form *Myk. Vasen, Formentafel* 42, § with purple red bands on a dull black scaly slip, the clay of which, so far as can be seen (now that the vase has been restored with plaster), might pass for one of the Cretan varieties. And Prof. Furtwängler showed me lately in the Berlin Museum a fragment, also from Mykenæ, of the same fabric. In the VIth grave, the black pot of the form *M.V.* 79, though allied in shape to a type common both at Kamárais and at Thera, || is, however, not at all of the same ware: it is quite differently modelled, and has no white or polychrome ornament. It is much nearer to the fabric of the black tripod vase of the Vth grave (*M.V.* 113) and of that numbered 12 in the collection from Spata. With regard to the VIth grave, however, it should be noted that the dull red paint, which, so far as Mykenæ is concerned, is almost confined to it, is not unlike one of the Kamárais colours, *e.g.* the five large 'schnabelkänne' (*M. Th.* ix. 44), and the two-handed vase (*M. Th.* viii. 43). The only other instance of red paint at Mykenæ is on a vase from the Ist grave, figured *M.V.*, pl. xxxvii. no. 382, form 57.¶

* *Tiryns*, pl. xxvii. d.

† Pl. xxvi. d.

‡ Cf. pp. 105-6.

§ Cf. a vase from the Vth grave, and Polytechnion No. 2,200.

|| Cf. an unpublished vessel from Amorgos, in the Ashmolean Museum.

¶ Red and white on black. *M. Thongefasse*, vi. (IVth grave).

No other specimens of this ware appear to be known from any Greek site; but among the fragments of 'Ægean' pottery from Kahun, presented by Professor Flinders Petrie to the British Museum,* a large proportion are quite clearly of the same make; in particular, a fragment with white spirals on black glaze, and the handle of a rimless globular bowl with black glaze and white transverse lines, every detail of which is as characteristic as it can be; the red also, on a little scrap with red and white alternating rays, on very thin black-glazed ware, is exactly of the Kamárais tint, while the drawing has the Kamárais touch. The correspondence between Professor Petrie's lithographs and my own may not be very striking, but I was fortunately able to travel direct from Heráklio to London, and so to see the two series of fragments within the same ten days; and I can only repeat that the two wares are almost identical.

Mr. D. G. Hogarth has kindly made inquiries for me in Egypt with regard to other reported finds of the same character, and tells me that M. Naville has found fragments of a red and black painted ware with white dotted ornament at Khetaneh, four miles south of Fakus; and others which may be comparable with a 'so-called Cypriote bugelkanne' and terra-cotta coffins, 'probably late' at Tell-el-Yahudieh, near Zagazig. Some specimens of each went to the British Museum, but I have not yet been able to identify them. Messrs. Petrie and Griffith assign the Tell-el-Yahudieh finds to the XIXth dynasty.

Professor Petrie assigns his pottery from Kahun to the time of the XIIth Egyptian dynasty, and at the same time insists that it is not of Egyptian make. It has not yet reappeared in Egyptian rubbish heaps of certainly later date, and there is nothing, meanwhile, in regard to the examples from Mykenae and Tiryns which compels us to regard them as of very late occurrence there. On the other hand, though the closest correspondence is with the pottery of the Cyclades, it would be very unsafe to assume that the manufacture ceased early. In fact, the existing evidence so far points to its continuance over a considerable period. If Professor Petrie's attribution is correct (and there is no valid reason to doubt it), we may consider that the Kamárais pottery began at least as early as 2300 B.C., and that it continued until the later centuries of the second millennium.

And perhaps we may feel ourselves one step nearer to one of the fatherlands of the 'Peoples of the Sea,' who come and go on the threshold of Egyptian history."

Thanks were ordered to be returned for these exhibitions and communications.

* Published in *Journal of Hellenic Studies*, xi. Pl. xiv. and *Illahun*, Pl. i.



PREHISTORIC POLYCHROME POTTERY FROM KAMÁRAIS, CRETE.
($\frac{1}{2}$ linear).



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