

EXCAVATIONS AT VASILIKI, 1904.

THE SITE.

The Kephala of Vasiliki is a low limestone ridge rising in the center of the narrow valley between the abrupt mountain chains which bound the Isthmus of Hierapetra on the east and west. In prehistoric times the settlement of Gournia was without doubt the port of traffic for the trade which must have crossed the Isthmus at that time, as well as in the classical period; and in so fertile a valley surrounded by rugged and inhospitable country, it is only natural that we should find the remains of numerous settlements.

The Kephala lies in a direct line some two miles from Gournia and rather less from the little haven of Pachyammos, where we lived during the excavating season. On the north and west the rock forms a cliff some fifteen feet high, while on the other sides the hill slopes sharply down to the bed of a torrent which for the greater part of the year is dry. Commanding the entire valley and directly above the present Hierapetra road, which must in all times have followed much the same route that it does to-day, this hill was suited in every respect for an early settlement, and the numerous stone celts and sherds constantly turned up on the surface led us, in 1903, to make a trial excavation near the summit where a piece of wall of large and roughly dressed stones showed above the soil. In three days we cleared part of a Mycenæan house of the Gournia period, lying close to the above mentioned wall. Behind this wall we were disappointed to find that the ground had been disturbed long before, and a number of very poor Roman tombs of a late date occupied a space some twenty feet square. There were no traces of earlier habitations, and owing to pressure of work on the main site of Gournia we did not continue further that season.

In the spring campaign of 1904 we resumed work with about thirty men, finished the Mycenæan house and for some days dug numerous but unsuccessful pits in the endeavor to find other house walls. At last, on the top of the hill, within the probable circuit of the large wall which had first caught our attention, well built house walls were uncovered showing a marvellous state of preservation and in places a height of three meters. It was decided to move the whole force of one hundred men to the Kephala for three days, at

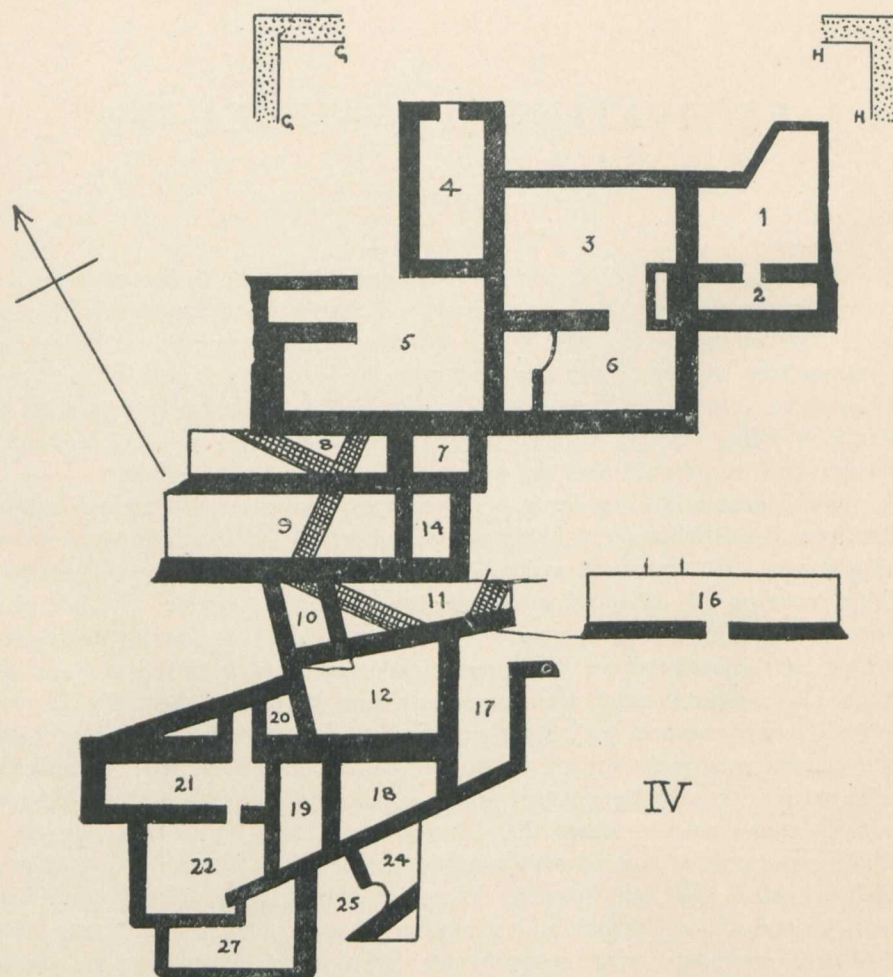


Fig. 1. Plan of Site at Vasiliki.

Period I. No walls; deposits in Rooms 5, 7, 9, 10, 14.

Period II. Walls.

Period III. Walls.

Period IV. Walls overthrown but occupying space marked IV.

the end of which time we should be able to see whether the site was worth a longer examination. The results were to say the least surprising, for in those three days we removed masses of a hitherto almost unknown pottery which, according to the Knossos sequence, lies on the border line dividing the early from the middle Minoan period. For three days about sixty perfect vases were sent to the house at Pachyammos each night.

The most remarkable part is perhaps that so perfect a site was never reoccupied in the full Mycenæan period, as aside from the one house on the north slope no traces of a later settlement were found. The remains, however, show at least four periods, and owing to the depth, the various strata are fairly well defined. The four periods, however, followed one another in quick succession and this rather encourages the tendency to shorten the changes in Cretan civilization, for the development in the various styles of pottery was evidently rapid.

THE ARCHITECTURE.

It is as yet impossible to say whether the buildings uncovered on the Kephala are parts of a very large house or a collection of separate dwellings. The former theory seems, however, the most probable, as no sign of a road was found on any part of the site, while the majority of the walls are those of a rectangular building of good construction.

The digging was necessarily slow owing to the masses of hard plaster, or rather a kind of brick clay, which choked the rooms so that the thirty men who could be spared from Gournia made but little progress in the three weeks of work. In all, twenty-three rooms were cleared and the depth varied from one to four meters owing to the slope of the hill. There are house walls of three periods, and though the lowest building is too much destroyed to admit of any conjecture as to its use and size, it is clear that it was a rectangular structure with neatly built walls of small stones but with an absolutely different axis from that of the larger house above. The walls of this period (Period II) are shown in the plan, Fig. 1, in rooms 8, 9, 10, 11.

Of the house above we have a much clearer idea. The walls are of smaller stones covered by a heavy layer of earthy plaster of apparently the same composition as the bricks which are used in large numbers, and both the plaster and bricks show the same traces of the straw which was used to strengthen them. These walls were, in the majority of cases, further strengthened both by beams of wood running parallel with the wall and by short pieces running transversely. The beams were as a rule, 10 cm. square, but some of the short transverse sticks were apparently the trunks of saplings about 5 cm. in diameter.

The ceilings of the majority of basement rooms, and therefore the floors of the first story, were made of canes heavily covered with the same clay plaster,

and the whole was supported by heavier transverse beams. When the beams gave way, the ceiling sank into the rooms below, making a layer of debris about fifty centimeters and sometimes more in thickness. This debris, owing to the action of fire and water, has become an almost petrified mass on which the picks of the men made but slight impression. Certain rooms had to be abandoned on this account, as little short of actual blasting would have been required to clear them. When, as was often the case, this clay plaster had fallen on a deposit of pottery or pottery from the upper rooms had fallen in with it, the objects were as fresh as on the day of the catastrophe which destroyed the building, but it required the greatest skill and patience to save them unbroken and in some cases to save an unusually fine piece it was necessary to sacrifice inferior ones surrounding it.

As in Gournia and in fact in most of the prehistoric settlements in Crete, the building seems to have been destroyed by fire after the greater part of the most valuable objects in metal had been removed. In fact only three pieces of bronze were found on the site, but fragmentary though they are, they are sufficient to show that bronze was already used and in much the same form as in the succeeding periods. In many cases the supporting beams used in the construction of the walls, though entirely cased in clay plaster, have been reduced to a fine white ash which is as dry and powdery as that of a newly burned stick of wood, but in not one instance did a charred beam remain intact as was often the case at Gournia, and there is every sign that the conflagration which destroyed the building was of an unusually severe character. It is plain that the building must have possessed several stories, as the mass of debris which fills the rooms is far too deep to have been the result of the collapse of a single floor, and in the best part of the house there are sometimes two meters of solid plaster, or more properly speaking brick clay, amid which lie bricks from the upper walls, pottery and pieces of ceiling still bearing impressions of the canes on which they were supported.

The rooms of the southwest corner seem to have been merely sheds without upper stories, for in these poorly built rooms there are no signs of the clay ceilings, and it seems probable that they were roofed only with canes which perished without leaving any traces. Also the majority of these rooms were absolutely empty except for some large oil jars, so that it would seem that the inhabitants, returning to the ruins after the catastrophe, had been able to remove all the portable objects of every sort from under the light deposit of ashes here, while in the better parts of the house the mass of wreckage was so great as to effectually prevent any attempt to exhume the objects buried beneath.

In rooms No. 15 and 16 the walls of Period III stand to a height of two and a half meters and they are connected by a doorway which is almost perfect, owing to the fallen clay ceiling. As to the form or plan of the building

little can be said. The heavy wall H H which I have before mentioned, was doubtless the corner on the east, and the wall G G, a similar corner on the north, but owing to an outcrop of rock the building can not be actually connected with these. Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 15, 16 seem to belong to the original rectangular building, while the more irregular walls of the southwest corner are in some cases rooms of an older period reused or else rebuilt on old foundations, and may have served as servants' quarters or store rooms, as in two were found a number of large and simply decorated pithoi.

On the slope of the hill to the east a number of trial pits showed walls of rooms built of the same materials and on the same axis as the building above, so that it is reasonable to suppose that they were part of the same structure, which in that case must have been a building of considerable extent, equaling perhaps the palace at Gournia. The construction is not materially different from that of the houses of an apparently later period at Gournia, and the chief peculiarity lies in the extensive use of clay plaster on all the walls of the better rooms.

The different levels in the rooms of the northwest quarter were very distinct and are distinguished in many cases by a paved flooring; in cases where this was lacking the clay floor and the break in the plaster covering on the wall put the matter beyond any doubt.

In the southeast corner of the excavation two trial pits led to a discovery interesting in establishing the sequence of settlements in this part of the island. Here, near the surface and built on top of old constructions, were a number of poor house walls, much overthrown, and evidently of another period (Period IV) and, as proved by the pottery found in them, belonging to the Geometric era of white on black ware of which such an enormous quantity was found in a dump at Gournia during the season. Underneath these poor walls are the remains of the original settlements with which we must now deal according to the data furnished by the pottery, for in the early history of Crete this is perhaps the best evidence as to the successive periods.

POTTERY—PERIOD I.

Architecturally there exist three periods at Vasiliki, but there must be added to these one more, the earliest of all (Period I), as it seems clear from various pieces of evidence that before the construction of the earliest house walls there were huts of perishable material on the site.

To start with the lowest half meter, which represents Period I, in rooms 5, 7, 9, 10, 14, where the walls of the earlier house are best preserved and the deposits were only slightly disturbed in the later building operations, we find a number of sherds of a sub-neolithic incised ware in fine grey clay. As a number of these pieces all belonging to one large jar, many of which it was pos-

sible to join, were found in the different rooms, it is clear that this was a house deposit rather than a dump formed by the sweepings of the original houses. This ware is found best preserved in rooms where an outcrop of rock made an uneven floor, so that when the walls of the next stratum were built, with of course a level floor, many deposits of this ware were left in the hollows of the rock, or where the hill fell away and they made a good foundation for the floors of the new house.

Among the fragments, the most characteristic of which will be later represented by more perfect examples of the same style found lately by Miss Boyd at Gournia, certain forms deserve mention: See Gournia, Fig. 1, p. 180.

1. A large jar decorated with complicated designs of bands, herring-bone, dots and concentric semicircles, the largest fragment of which measures 20 cm. in length. The form seems to have been that of a small pitharia. There were two small vertical suspension handles, which were only an ornamental survival of the early type, and at least one large horizontal handle, which would have been convenient for tipping the vessel, in case of its containing a liquid. The clay is remarkably smooth and fine grained, while the incisions are almost mechanical in their regularity, and the work as a whole, shows that this piece must be placed at the end of the sub-neolithic period, when the art of incision had reached its most perfect development.

2. Another very common form of which there were numerous bottoms, was luckily in one case sufficiently complete to allow restoration. It represents a shallow dish with a very broad low rim and supported on a squat foot. The clay is always grey and rather more gritty than with the incised pieces. *cf.* Gournia, Fig. 1, 3, p. 180.

3. Goblets on a slender stem rather like a modern wine glass, but much larger. These are usually of a gritty clay covered with a sticky varnish which has been burnt black and then polished with bone. The finish is remarkably hard and fine considering the inferior material, and the firing to a black color both in the burnished and the unburnished ware is very frequent in the commoner vessels as is shown by the sherds of this deposit. There is no complete specimen of this goblet form, though one 15 cm. in height seems to lack only the rim. See Fig. 2.

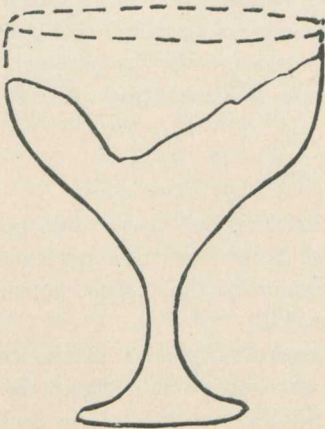


Fig. 2. Scale 1: 3.

Even in this layer we get the necks of 'Schnabelkannen,' always in the grey ware but of the same long slender shape so much in vogue on this site in the succeeding periods. This incised ware differs decidedly from that of

the neolithic (early Minoan) ware at Knossos, inasmuch as there is here no sign of the use of white chalk as a filling for the incisions, while the designs are more elaborate and regular in finish. They closely resemble some fragments from Palaikastro which are described in *B. S. A.* VIII.

On the whole it seems impossible to judge the earliest settlements in the east of Crete by the standard of the pottery of Knossos, for as yet I know of no parallel to that early Minoan incised ware being found in this part of the island.

In this sub-neolithic stratum, we find mixed with the incised ware even at this period sherds of the red and black mottled ware (Pl. XXXV) which characterizes the settlement of Vasiliki as a whole and is fully described under the pottery of Period III. Here, however, the sherds are as a rule fragments of bowls (Fig. 3) and small cups on a foot like the modern egg-cup (Plate XXXIV, 1).

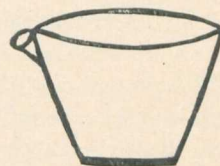


Fig. 3.

POTTERY—PERIOD II.

The next stratum (Period II) is in some places indistinguishable from that of Period I, but it is much larger and deeper, while the house walls belong to this period rather than to the one below which, as I have said, lacked walls of any sort.

Here a new style of pottery has been introduced. It is a ware of buff clay painted in the Cycladic style with geometric designs in dark paint. Here again we get a deviation from the Knossos sequence, as there the white on black geometric ware develops very naturally out of the incised neolithic or early Minoan ware in which the incisions are filled with white chalk. At the same time with this incised white filled ware begins the black on buff ware, which seems at first to follow the traditions as to shape and design of the incised pottery of the earlier period.

At Vasiliki, however, the development materially differs from this school, inasmuch as there is none of the white filled incised ware, and at the end of the period of sub-neolithic incised ware, we find the black on buff geometric ware of the Cycladic style already in its fully developed form, and bearing in design and decoration no very close relation to its incised ancestors, if we presuppose an uninterrupted series of settlements. Also there is no sign of the white on black geometric ware until the end of Period III, when the first white paint makes its appearance. Before the beginning of Period III, however, the sub-neolithic ware and the black on buff geometric have absolutely disappeared from view, while at the end of the period with the first signs of white paint on a dark ground, the mottled ware begins its decline. Therefore to allow for the lives of these two intervening styles we must put an interval of at

least one hundred and fifty years, or even more, between the end of the incised sub-neolithic and the beginning of the white on black geometric wares, while at Knossos the latter seems to develop from the former naturally and without a break.

In the cave burials at Hagios Ioannis on the south coast of the isthmus there were a few vessels of Period III bearing white paint designs on a mottled ground with both sub-neolithic and geometric black on buff wares, but as has often been said, in cave burials where many bodies seem to have been interred it does not follow that all the objects with them refer to a single burial; they may cover a space of some years in which the cave was reopened on the deaths of the various members of a family, and thus the pots of Period III might have been placed there some years after the first interment. At any rate, it is clear that at Vasiliki the various styles followed one another in regular suc-

cession and that the first signs of white on black paint at the end of Period III are the first symptoms of contact with the geometric white on black style of Period IV the makers of which, after the final destruction of the settlement, built their poor huts in the ruins and brought with them their own style of pottery, far inferior at first, in shape and design, to the standard set by the natives of the Kephala in the previous periods.

To return once more to the pottery of Period II of which, owing to the fragmentary nature of the deposit, only one piece was preserved intact, we find that it is usually hand made and of very heavy, clumsy shapes. The one perfect specimen is a round bodied, spouted jug, hand made, of a poor buff clay on which are painted designs in



Fig. 4.

dark brown paint of an inferior quality which flakes off at the least touch. This is however a very characteristic example of the style and combines two favorite motives of this decoration, the cross hatched triangles and the long ribbons of paint running down the body of the vase (Fig. 4).

The sherds all show variations of the same designs. In some cases the paint has been splashed forcibly on to the surface of the vase and has sprayed out in all directions from the central mass, and a variation of this style is found later where the paint is allowed to drip down the body of the vase from the

neck. Some of the vases seem to have been of very large size, the triangles in one case measuring 10 cm. a side.

Almost all the fragments are parts of spouted jugs and sometimes of covers. The common ware is all of a dark, gritty clay which has badly disintegrated. The mottled red and black Vasiliki ware of Period III which had already appeared in the lower stratum (Period I) seems here to have enjoyed an almost equal popularity with the geometric style and in many cases is quite as finished in form and technique as in the succeeding period. One strange fact about this mottled ware is that it is always wheel made, even in the case of fragments found with the incised sherds, and of a clay quite superior in strength and texture to the rival fabrics. In this deposit the forms of the Vasiliki ware are more varied. The tall, slender spouted 'Schnabelkanne' is common; also the deep bowls (Fig. 3), and the spouted bowls (Fig. 5).

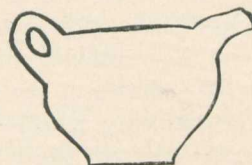


Fig. 5.

POTTERY—PERIOD III.

This seems in every respect to have been the period of greatest prosperity. The older house had evidently been destroyed and the ruins leveled down, most of the walls being utterly swept away in laying the foundations for the new building. In the interval, the geometric or Cycladic style of Period II has absolutely died out and the only traces of it are one or two pieces of the mottled Vasiliki ware which are decorated with black bands or stripes. No fragment of the true black on buff geometric ware appears above the floor levels of the new building, and in one case of an artificial filling of sherds used to support the foundation of the second structure the fragments are all of the mottled style, showing that at the time of the construction the change had already taken place. The varieties of shape seem to have increased, though the old forms of the spouted flower pot (Plate XXXIV, 2), and the egg-cup (Plate XXXIV, 1) still remain unchanged.

This ware, until the discovery of Vasiliki was known in Crete by only one fragment illustrated in *B. S. A.*, Vol. VIII, by Mr. Hogarth, who found it with a much disturbed cave burial near Zakro. It was then considered more or less of an oddity, and no one imagined that it represented a period in the sequence of Cretan pottery and was at one period the prevailing ware in, at any rate, the east end of the island. During the same season one perfect jug and many sherds were found at Gournia, but as it happened that the places in which they were found bore no direct connection with either the house walls or objects of other periods, this may indicate the extensive use of

this ware during the period in question. Among the sherds of the large dump of geometric white on black ware, described by Miss Hall, were found a few fragments, but very few, which proves that, as in Vasiliki, the mottled ware was in its decline as the white on black ware began its existence. The Gournia expedition to Aghia Photia on the south coast also found the Vasiliki ware associated with the incised sub-neolithic ware of Period I in cave burials, as has been before mentioned, and at Palaikastro the British School has found the mottled sherds underlying the deposits of their Kamares settlement.

The shapes of the pottery of this period are all of an exaggerated type, which strongly recalls the similar Trojan ware. Such are the long necked, slender spouted jugs or 'Schnabelkannen' (Pl. XXXIV, 3), the side spouted jars (Pl. XXXIV, 6), and the dipper cup (Fig. 6). The side spouted jar is a fairly familiar form in Crete and has been found in large numbers at Knossos with early Minoan ware, also at Palaikastro with very early pottery (*B. S. A.* Vol. IX, p. 307, Fig. 7, No. 1), and there is one specimen from Syros (figured *Εφ. Αρχ.* 1899, Pl. 9, No. 14).

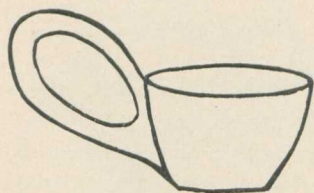


Fig. 6.

The finish is, as a rule, better than the Trojan ware and the clay finer in grain. Some of the shapes are Cypriote, and the hard red finish resembles that of the early incised ware of Cypress, but though there are many points of similarity these vases are the work of a local school, doubtless strongly influenced by outside traditions as to shape and finish. The hard red finish is perhaps the most remarkable and characteristic feature of the ware. At first it recalls the Libyan ware of Dr.

Petrie's Pre-dynastic race, and some of the egg-cup shapes have been fired in the same way by turning the vessel upside down on the coals, which gives it a burnt appearance about the neck. In the majority of cases, however, the burnt parts form irregular patches or streaks which are not confined to any one part of the vessel, and in duplicate shapes the decoration may be entirely different, owing to a different application of the flame.

The body-color is usually a red shading to orange, and the patches black to bronze green, owing to the different degrees of heat to which it has been exposed. Exactly how this effect was obtained has not yet been satisfactorily explained, but possibly the vases were covered with paint and then put into a bed of coals which were heaped over them, the black patches being the effect of a live coal lying actually against the surface of the vase. This would be only a variation of the method used in firing the Pre-dynastic Libyan ware, where the necks, which were in actual contact with the coal, have burnt to a black.

Very possibly this technique may have been strongly influenced by that of Libya, but with his characteristic ingenuity the Aegean potter, not content

with the set form and coloring of the Libyan ware, experimented with the method until he produced this varied and at times gorgeous effect. The greatest charm of the prehistoric ware of the Aegean is that the potters never allowed themselves to remain long tied down by a tradition of style and were constantly inventing new and original ideas of which the Egyptian workman seems never to have been capable. The Aegean peoples were always ready to receive ideas from their neighbors, but they never remained content until these ideas had been changed and beautified to suit their own more artistic tastes.

There can be detected among the vessels various degrees of fineness. Some of the pieces have an exceptionally fine, hard finish, while many others of the same shapes and mode of decoration are formed of a much inferior clay and have poorer paint. The finest pieces came from a deep room (No. 16) in what is architecturally the best part of the building, while a great mass of pottery, evidently a store room lying in the poorer quarter of the house, produced no noticeable pieces, but as a rule only inferior copies of the better class of ware.

The styles may be classed thus.¹

1. Vases of a very fine, hard, pinkish clay, over which was laid a coat of paint which burnt to an even red and was afterwards burnished, giving the whole a remarkable hardness and brilliancy of finish. The commonest forms to which this method was applied are small spouted cups and bowls (Fig. 5). These were never burnt in such a way as to produce the mottled effect and they seem to have been made in a kiln.

2. Vases of poor clay, over which was laid a very thin coat of slightly lustrous black paint.

3. Vases of soft inferior clay, over which a coat of slightly lustrous paint was laid and then fired to the common mottled surface, but left unburnished.

4. Some exceptions where the usual mottled ware has been further decorated by means of white or dark bands. In one case a cup covered with mottled red to black paint is surrounded by nine white bands, and is the first symptom of the style of the following period of geometric white on dark ware. Another side spouted jar shows the same influence in the five white bands encircling the body, which is painted in lusterless black paint. Some little jugs have also a drip pattern, and one small pitharia could not be separated from the later Gournia specimens of this same style of decoration.

¹The plain red finish is a common mode of decoration among the prehistoric Peruvian potters, and in the Trocadero in Paris are many pieces of Peruvian pottery almost identical in finish with that of the Vasiliki style No. 1. This style is also common among the Indians of the Arizona pueblos, from which there are many specimens in the Peabody Museum in Cambridge, and sherds of a similar style have been found lately in Turkestan by the Pumpelly expedition.

POTTERY—PERIOD IV.

The walls of the building of Period III on the southeast were very much disturbed, and later houses of very poor construction seem to account for the confusion in the strata. The deposit of these houses is about one and a half meters in depth; the greater part of the pottery is the fully developed white on black geometric ware, and the variety of forms noticeable with the mottled ware seems to have decreased. The floor levels are impossible to distinguish, as the walls are for the most part overthrown and seem to have been rebuilt one above another, but at the depth of two meters from the surface the white on black ware has practically disappeared, and we once more find ourselves among the much disturbed remains of Period III, where the mottled ware is in undisputed possession. Evidently the houses had been destroyed at the time of the coming of the settlers who brought the geometric style, who built their hovels only over the southeast corner, as there are no signs of their ware on any other part of the hill.

The shapes of this geometric pottery are identical with those described by Miss Hall in the Gournia report, and seem to consist mainly of hole-mouthed jars, spouted jugs and cups. There are no whole pieces and in fact it is hard to account for the disturbed nature of the whole deposit without any signs of a still later settlement on the hillside. The destruction that overtook these settlers must have been very complete, and as at Gournia the invaders seem to have been determined to leave as little intact as possible. Here however the invaders did not make new homes for themselves, and there are no signs of that careful house cleaning and collecting of the ancient remains into one great heap as in the case of Gournia, where all the sherds of the white on black ware were isolated as completely as though they bore contamination in their wake.

In the fragmentary remains of this period one can trace, nevertheless, a gradual development in the pottery, beginning at the crudest white on black geometric and at the end of its existence closely approaching the more finished fabrics of the middle Minoan or, as commonly called, Kamares period.

Whether the invaders who seemed to have such a spite against the makers of white on black ware were the later settlers of Gournia, or whether it was only the result of internal factions and rebellions against the established regime, we must look to future seasons of Cretan exploration to tell us. However on the site of Vasiliki the period of white on black ware would appear to have been one of toil and turmoil, and there is a marked deterioration in the architecture and the pottery with the disappearance of the typical Vasiliki ware of the mottled technique (Period III).

MISCELLANEOUS OBJECTS IN CLAY, BRONZE AND STONE.

1. Aside from the pottery, very few objects were found on the site. In room No. 21 a curious but crude head in terra cotta was found, which showed traces of paint and is interesting, inasmuch as it shows us the method of doing the hair. The eyes are mere holes, the mouth a straight slit, but the eyebrows are painted in black, and also the hair, which falls from the top of the head to below the neck in a heavy triangular mat. The rest of the head appears to have been shaved, leaving only this kind of scalp lock which naturally recalls the lock of hair worn by the Mycenæans as represented by the finds at Knossos and Phaestos.

2. In bronze there were two half axe heads, both broken at the socket, which probably accounts for their being left behind by the spoiler. One flares toward the edge and the other is of the long narrow type, and is no wider at the edge than in the middle. Both were found in room No. 16. From room No. 1 came a bronze knife blade badly corroded. It tapers gradually to a point but has a perfectly straight edge, measures 18 cm. and has two rivets at the hilt.

3. There were two stone celts of a short, bulging type, neither of them remarkable either for material or finish, and several stone rings of the usual Mycenæan type. No stone vessels or even remains of any were found on the site, except for a fragment of a small bowl from amid the house walls of Period IV. The obsidian objects on the other hand were far better than any from Gournia, and of the knives, three were beautifully slender specimens, quite perfect and measuring 8 cm. in length.

A TABLE OF THE FOUR SUCCESSIVE PERIODS AND THE QUESTION OF DATE.

Period I. The earliest settlement was a collection of huts of some perishable material belonging to the sub-neolithic period, amid the refuse of which were found fragments of vases in fine grey clay bearing incised designs. Owing to their superior finish and elaborate decoration these must be placed toward the end of the period. There is also the beginning of the mottled technique of Period III. In the Knossos sequence this ware would probably be placed just at the end of the early Minoan period.

Period II. This deposit is characterized by the appearance of a series of vases painted in the Cycladic style with geometric designs in dark paint on a light ground. The incised ware has disappeared, but the mottled ware still continues its gradual development. This is the period of the first house walls.

Period III. The geometric ware of the previous period has died out and the mottled ware is in universal use. First appearance of white paint toward

the end of the period. The main building belongs to this period, which seems to have been that of the greatest prosperity.

Period IV. The big house has been destroyed and a settlement of poor huts has arisen in one corner of the ruin. The pottery of this period is characterized by geometric designs in white paint on a black ground. The mottled ware is dying out, and there is a marked deterioration in the architecture and the pottery.

This last period is the one which immediately precedes that of the fine Kamares or Middle Minoan ware of Knossos, and therefore it seems probable that the site was occupied for only about four hundred years at most and it does not seem reasonable to suppose that Period IV came to an end more than four hundred years before the full Mycenæan period at Gournia, which would seem to have flourished about 1700 B. C. Therefore, the existence of the first settlement on the Kephala would fall between the years 2500 and 2100 B. C.

The question of date is, however, one on which there is great diversity of opinion, and it is really too soon to make any definite statement as to the age of the prehistoric remains in the Agean. The discoveries of one season might easily increase or decrease the estimated age of these remains by hundreds of years, but it seems safe to say that the date, 2500 B. C., for the earliest settlement at Vasiliki is not an improbable one, and further discoveries may put it even farther back.

R. B. SEAGER.

DESCRIPTION OF PLATE XXXIV.

No. 1. Small vase of egg-cup shape decorated in red, shading to black, and bone polished. It was found in Room 19 and belongs to Period III. Height, 8 cm.; diam. of base 4.3 cm.; diam. of neck, 7.5 cm.

No. 2. Tall, slender cup with long spout and a lip-handle. Covered with red and slightly lustrous paint. Found in Room 19. Period III. Height, 9.5 cm.; base diam. 12.7 cm.; neck diam., 5.5 cm.

No. 3. *Schnabelkanne* with long channelled spout. Two clay buttons, probably in imitation of metal rivets, on each side of the base of the spout. Found in Room 19. Period III. Height, 33 cm.; diam., 19 cm.

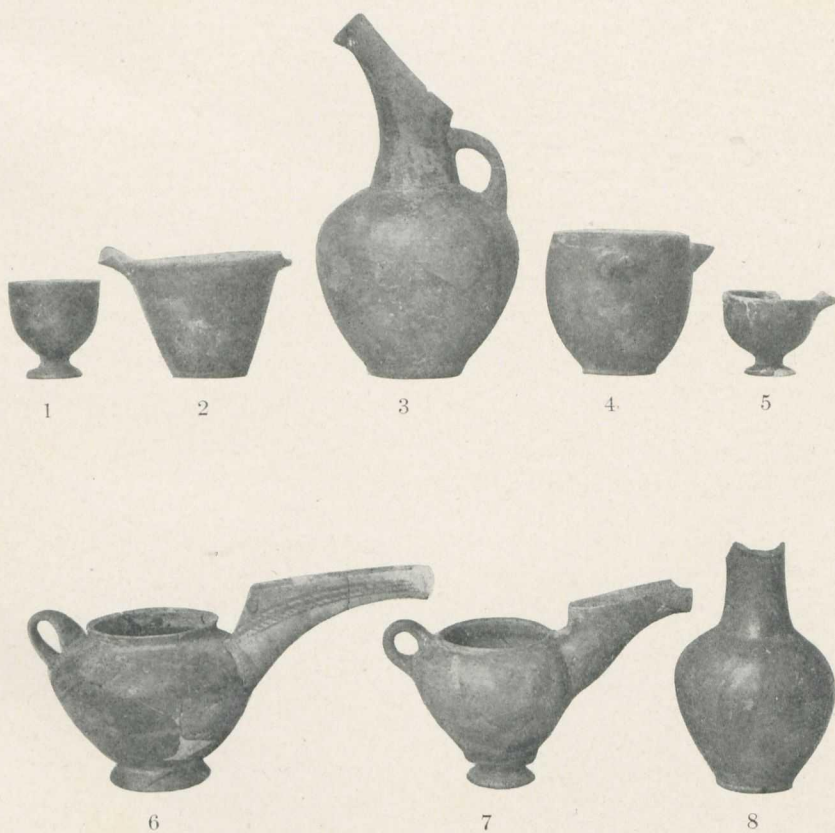
No. 4. Jar with a small side spout and two handles. Covered with rich red paint shading to black and probably polished. Found in Room 19. Period III. Height, 11.5 cm.; neck diam., 11.5 cm.

No. 5. Small spouted vase in hard red ware, painted and highly burnished. Found in Room 16. Period III. Height, 6.7 cm.; neck diam., 7 cm.; base diam. 4 cm.

No. 6. Side spouted jar. Pink and black paint with a snake like pattern due to the irregular firing. Spout very long and covered with a white slip on which are painted three stripes cross hatched. Highly polished. Found in Room 16. Period III. Height, 14 cm.; neck diam., 11 cm.; base diam., 8.3 cm.

No. 7. Side spouted jar on small foot. Very rich colors shading from red to black, and polished. Found in Room 16. Period III. Height, 13.2 cm.; diam., 14.2 cm.; base diam., 5.5 cm.

No. 8. *Schnabelkanne* of Mycenaean type. Red polished ware. Found in Room 19. Period III. Height, 24 cm.; diam., 19.5 cm.; base diam., 8.5 cm.



TYPES OF VASILIKI WARE.



SHERDS OF VASILIKI WARE.