ARCHAEOLOGICAL FINDS ON LAMMA ISLAND (舶遼洲) NEAR HONG KONG.

PART XIII.

by

The late D. J. FINN, S.J.*

In order to round off the account of Lamma at least provisionally, this present article gives a general description of the three important sites and adds some details to complete the series of representative finds described in the preceding twelve parts : attention is also drawn to two outlying sites on the island. It is important to note how all the sites show certain features in common, yet each has its own characteristic note.

THE THREE MAIN SITES ON LAMMA.

Plate 19 figure 1 shows in one view the three sites that distinguish a considerable area as having been a populous centre in antiquity. In the nearest foreground, there are two bays separated by a slight rocky headland, the spur of a low hill. The one to the right of the spectator is Hung. Shing Ye **注** and the HSY of these articles. The stretch of shore next to the left is Tai Wan 大樹 (TW) where most of the actual excavation work has been done and whence came the bronze material almost exclusively. In the background, indicated by an arrow, a low, slightly humped hill marks the hill-centre of the site Yung Shu Wan 探樹灣 (YSW). The hill rises immediately behind the village which stands on the bay of the same name, the most important *port* in the island : the site lay on the top and sides of the hill, flowed down into the present village at the foot in the trees and extended across a valley-bottom on to the low foothill towards the north.

TW is mainly a terrace of pure sand separated by paddy-fields and drainage from hills at the back. On top of the sand lies a very thin layer of humus beneath which there is not a trace of that discoloration usually marking the layers of a land habitation-site : in the light of the geologists' opinion (H.K.N., VI, p. 130) this suggests that we have here the site of pile-dwellings, perhaps a winter-season station, from which the objects once dropped into loose, slightly submerged sand : the material published in H.K.N., VII, p. 178 figure 16 seems to be the actual lining of the huts built of trellised split-wood frame-work : very similar material from Bronzeand Iron-age finds in Europe (Stockholm, Copenhagen, Cologne prehistoric collections) is interpreted as the inner daub of prehistoric huts.

HSY shows the discoloured layer that we miss in TW and it is there that the artifacts are found. This stratum is covered by a shallow grass cover and is itself about 3-5 feet deep but overlies an absolutely sterile mass of sand of quality like that of TW: this lower accumulation contains no artifacts at least in the next 9 feet deeper and, below that, a harder iron-impregnated sand begins. At each end of the central mass of the

^{*} The Rev. Father D. J. Finn, s.J. died on November 2nd.

site, there are marked traces of water-drainage from the land having crossed it and deposited river-gravels or clays: in these deposits, prehistoric objects are very few. It would seem to have been a site on a bank just emergent from the high tides with fresh-water drainage flowing past on each side.

YSW is a site of character differing completely from these two. Essentially, it is a hill-site, for it is on the top of an acropolis that the most interesting finds are made. The hill-top stands clear of all about and is linked to the back-bone of the island by a somewhat lower saddle : thus the drainage from higher ground could have never affected the site by wholesale redeposition of implements borne down from elsewhere. The top of the hill makes a short but level platform overlooking its own bay directly below, commands Tai Wan at the end of a broad valley-bottom to the left and looks across another valley-bottom to the right: beyond this latter, on the hill-foot, remains of exactly the same type as on the hill-top are found. The finds on this hill-top and on the slopes below it have been revealed by the terracing cut by the present peasant cultivators. Apparently untouched spots still remain at the angles between the steps (the fields) and the "treads" (the banked up ends) of the big stairway made by the terracing, but the cultivation is a jealous defence against further investigation at present. What we get on the top must have been there from the time of prehistoric habitation and, when found loose, must have come from a slight layer, the two or three feet cut away to make the fields : what occurs down the sides may in part have been washed down: what is found on the village level has been mostly washed down. Evidently, this site was, as it is to-day for the islanders, a harbour of importance and there wsa a commanding site of importance on the hill.

Between YSW and TW, there was settlement too, but our evidence is meagre: strangely enough, this small area shows individual variations on the YSW types.

All three main sites have given evidence of bronze, TW and HSY even of bronze-casting, HSY and YSW were sites of very active factories for stone ornaments, notably of quartz rings.

RELATIVE CHRONOLOGY.

We can confidently conclude that, at the period represented by the high-fired "Double-F" ware, all three sites were occupied. But, judging by the abundance of epimioliths, of stone arrow-heads and of soft, lowerfired, gritty pottery, one must judge HSY to be the *earliest*. The greater amount of "Light" pottery and of stone adzes there confirm that. On the estimate of the bronzes and the good, thinner pottery, TW presents the newest elements in greatest number and is the *youngest*, as far as its latest occupation in prehistoric times goes. YSW seems to be *intermediate:* more epimioliths have been found on its top than at TW, more "Double-F" pottery than at HSY but that pottery seems ruder, if more varied than at TW. Thus the chronological order of the characteristic finds would be: HSY: YSW: TW—but it must be always borne in mind that the pottery from the lowest depths of TW (e.g. H.K.N., VII, No. 2, plate 9, figures F, G,) may be as old as or even older than any pottery of HSY. There is undoubted over-lap between the three stations.

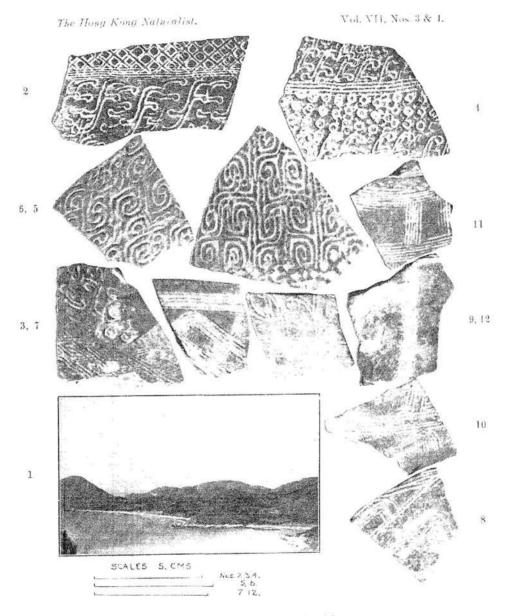


Plate 19. Figures 1 12. For legend see end of article.

Archaeological Finds on Lamma Island near Hong Kong 2

Many arguments have been set out above in favour of the dating of the bronze and "Double-F" parts of the finds to about 500-300 B.C. If one were to accept Professor Karlgren's recent criteria (136) as absolute, one should date the Lamma "B.M. sword" to somewhere at latest about 1,000 B.C. and we should be faced with the necessity of wholly revising our httempt. But still, two considerations call for reserve: (1) as Professor Karlgren himself said of our Hong Kong finds, they represent a "peripheric" Chinese culture-and our objects may show an archaic style surviving hundreds of years after it had flourished and even died in China proper (i.e. the Yellow River region and its immediate radiation): (2) the condition of many of our bronze pieces closely resembles the state of the scrap-bronze collected for remelting and found in European hoards e.g. specimens of Stockholm, Copenhagen and London in Bronze-age finds): such pieces could have been brought from far other places and times. Actually, however, in our Hong Kong finds, they seem to have been at least, of local make. Yet it must be granted that, a much later date is suggested by M. Janse's finds (135) in Indo-China-his Indonesian burials yield penannular rings very similar to our specimens and he dates the burials certainly as belonging to a period about the beginning of the A.D. era. As the whole ensemble of his finds does not fit with ours and grave-deposits strictly give us merely a terminus ante quem, we must wait in the hope that from M. Janse's work and our finds there will result some day a definite rapprochement. For the present, at least as a working hypothesis, we regard the sites as representative of the middle of the first millennium B.C. and extending down over the third quarter of that period.

DETAILS OF THE YSW SITE.

To gain some more detailed knowledge of the YSW site, it may be well here to recall the chief types of artifacts found there and to illustrate with brief notes the more important pieces of pottery. Epimioliths occur, as has been said, more frequent there than at TW: one specimen had those hollows on its faces that suggest grips for hammering or may be the result of being used as a rest or support (an "anvil") for a stone in the process of battering: such pecked-out depressions were also found on a hard polishing stone from there. Seeing the very considerable quantity of quartz corediscs and flakes found on and about the hill, these implements may be interpreted as tools in the fabrication of stone ornaments. Such certainly were some stone "saws", similar to those described in H.K.N., VI, p. 59 sq. There were also fragments of schistic stone spear-heads. At least one fragment of a bronze tanged spear-head came into my hands: but there were reports of sales to travelling pedlars of old bits of bronze in exchange for small groceries!

But it is the pottery that is most interesting. The very interesting speciments of glazed ware have been described above (H.K.N., VI, p. 256 sqq.): there were also cups, glazed and unglazed, with "trade-marks" and one with suspension holes in the walls of the foot : rough pottery especially with ornaments of the type depicted in H.K.N., VII, No. 2, plate 9, A. Then there was the remarkable "horse" of H.K.N., VII, p. 54 made in pottery of paste exactly like the typical YSW "Double-F" ware. And to

December 1936.

259

complete this account, Plate 19, figure 2-12 show types which turn up on YSW, but almost never at TW or HSY ("almost never", for only in *two* cases amid the mass of material from these two sites have we cases like figure 2). A dark grey or even black-blue body is peculiar to this site on Lamma, though other colours occur as at TW. Characteristic of YSW are also the belts of comb-drawn lines, usually *between* different ornament zones: at TW of such style we have only the one good vase, H.K.N. III, Plate 39, figure 28*.

It may be noted that, at An Yang, demarkation of zones by *fillets* of applied slip seems to have been common. From the occurrence of this at HSY and elsewhere in Hong Kong, it might suggest the earlier dating of the site. Figures 5, 6, shows decoration remarkably like the typical "lei" design of Chinese bronzes, of certain bells especially: these designs were analysed and described in H.K.N., VI, p. 247-9 and VII, p. 46, figure 11.

These wares show undoubted bronze features, and one of these should be noted: figure 3 has a little pinched mass of clay stuck on as ornament to the side of a pot: it is not a lug, as it is not pierced, but it is a summary imitation of the small animal mask that occurs at the handles of Chinese vases (e.g. the Yü type) or on the peculiar cruciform tube-junctions studied by M. Janse (134): the end of something like a stout grass has been used to impress four circular imprints suggestive of the two eyes and the two ears. From TW, imitations of metal loop-handles fastenened on with rivets were published in H.K.N., III, Plate 36, frg. 7. Possibly here, it is not only ornament, but also magic (protection) that is intended. Small animal masks are common on the faces of Yin and Chou bronzes, and on the white An Yang pottery: they were probably apotropaeic in value and they often combine with the pattern on the vase to derive from it their bodies : actually, on certain analogies, the "Double-F" as hide-marking and the lozengediaper as scales might represent an animal surface. For any precise chronology this feature does not help, but it points unmistakably to bronze influence, and that influence may well be pre-Han, for there are plenty of prototypes to be found in that period whereas the Han potters worked out their animal heads very carefully and furnished them with imitation rings in their mouths after the model of the bronze handle-rings on the "hu" type of vase.

A very special variety of the ware of "Double-F" body-quality is represented by the fragments, Plate 19, figures 7-12. These pieces are all lighter in colour, tending to a yellow-buff which is intermediate between the most usual tone of the "Double-F" wares and the yellowish cream-white of the glazed variety of the same. The pattern here is of "*band-keramik*" type and must be compared with the comb-lines appearing on such fragments as Nos. 2, 4, above: in the latter cases the line-bands are a mere dividing member, but here they seem to make a main pattern disposed between other horizontal divisions. Fragments 7, 8 have their nearest

^{*} The vase here quoted has now been patched together out of many fragments found in the excavations and subsequently: it shows a central zone wholly undecorated (perhaps intended for glaze or polychrome) between two zones of "Double-F": this plain zone is bordered above and below by the horizontal belts of incised comb-lines. Ornament composed of such lines near the neck is common at TW: cp. H.K.N. III, Plate 38. figure 17. For An Yang analogies, see (58) and (100).

analogies in some equally exceptional fragments found by Mr. Mansay at Luang Prabang[†]: And as to these, we can only hope to get some light from Mr. Janse or Mlle. Colani in the future. Fragment 11 shows a metoped division that occurs at TW (H.K.N., III, Plate 38, 7 where the picture fails to show it). Fragment 12 shows a free curve that is reminiscent of Chinese Ts'in or Han designs. It is possible to place these designs in an intermediate position between rough SSS pot-hooks that occur on the ruder ware of HSY and the unique free-hand decoration of the fragments from TW (H.K.N., VII, p. 52): in all three cases, we have free-hand (not stamped in the usual Lamma technique) decoration based on multiple parallel lines that turn sharply or shortly off at 90°: this scheme produces on bronzes certain zoomorphs that become more popular towards the end of the Chou period, particularly on bells (cp. H.K.N., VII, p. 51 text).

Before leaving YSW, I must confess that, in the absence of stratigraphic evidence for the relation between distinctive TW and YSW types, I should not be surprised if YSW were proved to be contemporary with or even younger than TW. It may owe the roughness of its wares to local characteristics: but, on the other hand, it may owe its more interesting variations to its being the central port of Lamma and these variations may not, for all their earlier date, have inspired the TW people to follow them out in the better finished wares of the latter site. However there is no more notable distance of time than of space between the two sites in their "Double-F" phases (note the "Double-F" visible on the edges of the exceptional fragments 9, 10): they are of the same culture. And until better proof is there, I incline to regard TW as slightly later.

THE ROUGH WARE OF HSY.

It is now necessary to return to HSY to give some idea of the more distinctive patterns on the rough ware there. By rough ware, I mean, in general, wares that are about 8 mm. or more in thickness, whose paste is black to brown or else red to reddish-yellow, of a rather muddy quality, frequently impregnation with a soft charbon, tempered usually with quartz grains or fine sand, not baked at the high temperatures of the "Double-F" wares, of very lumpy fracture, non-resisant to damp-decay—in other words "neolithic" (to use that over-worked word in the very loose sense often used in relation to pottery) in its technique. There is great variation in this ware at HSY. Though we have some all but complete specimens of "bomb"-shaped pots with very distinct "corded" impressions, the more interesting decorations are preserved only on fragments. It is with these that we are concerned here.

Roughly, we may class the patterns under three motive-units: the branch, the "lei" or key, the chevron. The spiral occurs rarely and was noted in its derivatives before. Branch, key and chevron all occur also on the "light" pottery described in H.K.N., VII, No. 2, plate 10.

⁺ Working as I am at a distance from my books, I cannot give the exact reference, but it will be easily found in Mr. Mansuy's contribution to the Bulletins or Mémoires of the Service Géologique de l'Indochine. The whole book deals with finds in the Laos region,

Plate 20 figure 13 shows a typical branch* design and, by comparing the pattern of bars in figure 14, the derivation through stylization from the primitive "corded" pattern becomes evident. Figure 15 shows a typical key pattern in which the inevitable over-cutting between one impression and the next obscures and even distorts the regular pattern : consequently, a sequence of squares seems to become a meander design. Figure 16 gives a peculiar combination of "grid-irons" and keys in a chequer-board arrange-The chequer-board made of hatched squares ("grid-irons") is a ment. design apparently based on textiles, such as mats : it is found on the Yang Shao polychrome wares as a painted design, but it is found on the Oslo Viking ships as a carved representation of scales or hide: thus it is one of those undying tricks of decoration. Plate 20, figures 17-18, show short imprints crossing the main decoration, as if the edge of a wooden stamp or a "cloth-beater" (the Indo-nesian or Polynesian implement) had been brought into use : in our archaeological region that prehistoric tool is attested. Figure 19 shows chevrons that result from the overprinting of impressions of inscribed squares. In figure 20 the potter has with that wrong-headedness so characteristic of this Lamma work confused what should be a neat stamp like H.K.N., VII, No. 2, Plate 9, A, with overstamping of a grid-iron pattern which should be conceived as making alternate zones. It is certainly a link with the "Double-F" potters that neither set of workers chose to or could use their good stamps with proper care of "register." Yet the triangular pattern used here points to a date and place where Chinese bronzes were valued.

Here follow a few instances of decoration more like that on European "neolithic" wares: plate 20, figure 21 is representative of a few fragments decorated with a fillet divided at short intervals by oblique impressions of the finger or of a piece of wood—this is rare at HSY. So too are chevrons built into a wave-band 22, 23. These pieces seem to have sometimes had a rough "bandkeramik" decoration incised on other surfaces above or below the fillet which ran about the neck or shoulder.

Of this rough pottery, there is an enormous quantity of fragments at HSY. Judging by the approach of some of the patterns (published earlier) to the "Double-F" and by the occurrence of a few pieces of "Double-F" wares there, the production of these ruder wares at least overlapped with the typical products of TW. I have stressed before the indications of contact between the two sites.

But there is one specimen from HSY, Plate 20 figure 24 and text-figure 1 which is unique for all the Lamma sites taken together. It is the half of an "incense-burner" obviously copied in pottery from a bronze prototype. This had apparently three legs as such things still have, but beside one fragmentary leg we have only one *tripod* piece from TW (H.K.N., VI, Plate 21, B.) and it is of the usual pot type, but in miniature, much older form than this specimen. We have however an exactly similar piece (as far as form and technique are concerned) from a rather unsatisfactory

* The branch design is very long-lived in the South: glazed Indo-China Han wares show it still.

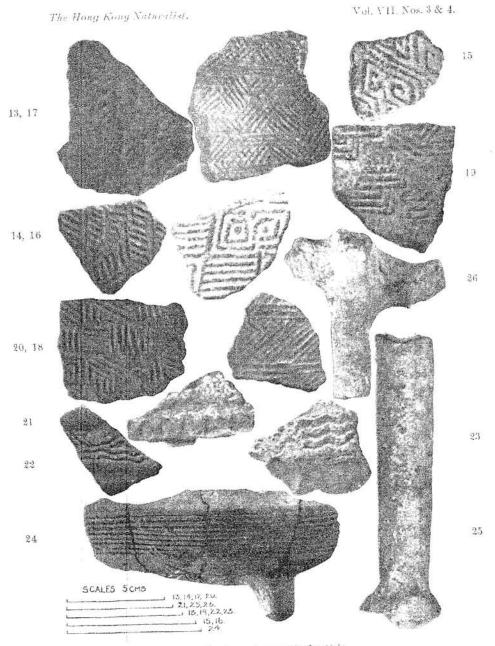


Plate 20. Figures 13-24. For legend see end of article.

site beyond Castle Peak: at that site, this form seems more at home, for we have found more fragments of such pottery legs: there is still a noteworthy difference that the HSY piece is of a paste like that of the usual glazed cups, whereas the other piece is of texture more like Han bricks and later ware. The form itself seems to be unknown in Chou times : yet here it must be contemporary with the rest of the better Lamma ware, for it bears a "trade-mark" text-figure 1 just as they do; the mark is unique and might be interpreted as a symbol for the five-fingered hand, perhaps therefore, meaning "5" (which might be price or number of the batch or of the object in a batch or the distinguishing number of the potter or-or-?).

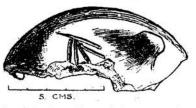


Figure 1: "trade-mark" incised on base of figure 24, plate 20. May be a left hand (prone) with *five* fingers (therefore primitive sign for 5), but it has some resemblance to the Yin form of the character π (? it means "éternal, perpetual, everlasting").

Actually, this piece may give us some clue to the general dating: at present, I should say that it points to a later period than I have adopted so far.

POTTERY IMPLEMENTS (?)

From HSY and other sites, usually those where rough wares predominate such as Aberdeen, Stanley and some of the S sites, there comes a type of pottery which has been turned out in bars or sticks. See Plate 20 figures 25, 26 and text-figures 2, 3. This archaeologically interesting material challenges explanation.

A common form is the stick of pottery 6"-9" long and about 1" sq. in cross section. Sometimes pieces are joined together as if to make a grid : one end very frequently shows trace of an attachment which was originally held by a loose plaster of baked clay. We have never found any complete combinations of these objects, beyond those of two pieces adhering to each other. Now, a possible explanation may be suggested by what I saw recently at Sèvres. When a porcelain statue is in the making, any projecting part must be supported during the periods of drying and firing by a prop of clay exactly similar in quality to the paste of which the statue is made. The identity of material secures that prop and statue contract in the drying and firing at the same rate : when the firing is completed, the prop comes easily away, as it has been kept so far in place by a loose plaster of clay which does not burn hard : out of the debris cleared out of a kiln, I secured one piece which resembled in all characteristic features our Hong Kong pottery sticks (length, thickness spreading plaster about one end, angle of faces of attachment). On this analogy, we should assume that they were used to support big vases (we have one huge fragment of rough ware from TW) of the rough ware during the making: the pottery of these bars is of the black, brown or reddish material like the body paste of the "corded"

December 1936.

263

wares and some of the specimens have a trace of "corded" imprint on themselves.

Text figure 3 shows the attachment of two such pottery sticks to the inside surface of what must have been a big vessel of thick ware : it suggests their use as a grid inside a portable earthenware brazier ("fo-lo"), some prototype of the kind still in use, but they may well have been merely supports : in H.K.N., IV, Plate 12, 2, there was published a fragment which was found later to show a pair of somewhat similar fractures at each of two places facing each other diametrically inside the mouth of the pot.

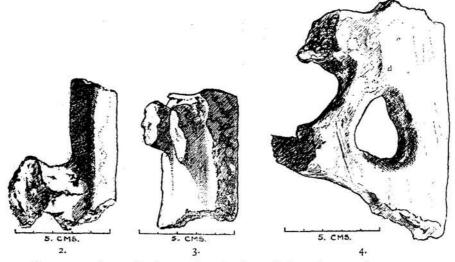


Figure 2. as figure 26, plate 20, but showing typical attachment surface.

Figure 3: a fragment of a very large, rude vessel showing two fractures in interior where pottery-sticks, such as figure 25, plate 20, were once attached.

Figure 4: enigmatic clay object: form and thickness suggest that it is a pottery substitute for something like a frame which might be made of wood: central hole probably used for inserting thumb (as in painter's palette): there are four fractures where the object continued out as bars of pottery. The long straight edge is original and intact.

Text-figure 4 is one of two pieces which made part of some elaborate whole object made of pottery. It seems useless to start on suggestions, beyond that the rough-and-ready finish suggests that it was a potter's device for using his own material to supply his own needs, perhaps where another man would have used wood.

The object in text-figures 5, 6 does not come from Lamma, but from S. PAT. It is placed here because of the context of the pottery sticks. It is only one of many specimens which all have the broken attachments of two arms or rods of pottery coming off obliquely from the top of what resembles the foot of a chalice-cup. Some, not all, have a hole which pierces the upper surface of the stand between the stumps of the arms: this hole was made before the firing and would seem to be intended to take something coming up from below. Working along the ideas suggested by the more widely distributed "sticks", we could see in this the equivalent of "fire-dogs" or a support for something over a central fire. Still, there are

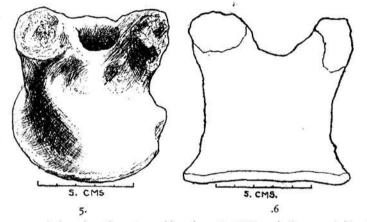
ments in the second second

The Hong Kong Naturalist.

264

Archaeological Finds on Lamma Island near Hong Kong 265

what we may call the mystic possibilities which attract the prehistorian so much: "horns of worship" (with the occasional addition of a central symbol—like the sun-rattles of Chinese bronze): unfortunately, we have at present no more light on the purpose of these things save that, so far, all found were found with old fractures of the arms—and this rather points to some such use as a temporary support exposed to rough use.



Figures 5 and 6: enigmatic pottery object from S. PAT; a hollow stand like the foot of a rude chalice: on top, two stumps of arms of stick-pottery which projected obliquely: between them a hole pierced by potter from central cavity.

This group of objects suggests the similarity of culture between site and site.

OTHER LAMMA SITES.

There are a few other sites on or about Lamma Island, but with nothing of such importance as occurs on the three sites described above. One of these, rather like HSY in situation, but not likely to be so rich, has given a very typical epimiolith type, of a distinctly Asturian type, which may have been used as a fabrication on the quartz material found with it, thin flakes which might have themselves been used very roughly as scrapers or blades. Another site, more like TW, was obviously a settlement where men lived and are the products of their hunting and fishing. This was shown by the presence of partially fossilized bones : the heads of small fish (lo-tau-yü, still know to the local fisherfolk); deer-teeth : a large bone from the head of an animal belonging to the cetacea or the reptilia; small bones, two of which showed signs of human use beyond the cutting and splitting visible on all. Probably, they were contemporary with the pottery which was chiefly of the type published in H.K.N., VII, No. 2, plate 9, A, but contained also a few pieces of "Double-F" type. Epimioliths were present in the same sand-hills (the sand is redder than at TW and there has been much drainage through and over the site): one strange stone implement which might have been used for some kind of smoothening work was found in the watercourse that cuts the sand-terrace into two parts. As all this sand lies immediately at the foot of high, steep hills, there must have been much wash from the hills: in consequence, the site is not satisfactory. Yet, neither bones nor

pottery show any break-down of their sharp surfaces from weathering or rolling. What puzzles one is why such traces of hunting and fishing should so far be absent from our finds at T.W. If that were taken to support the hypothesies that TW is a pile-dwelling site where the animal remains disappeared in the water, why did they not do so at this other site? Perhaps we have some explanation in that the "bone" site is far more sheltered from the open sea and typhoon action. With what I have heard of Hong-Kong's August experience, it may well have been that prehistoric settlements were deserted after one of those near typhoons had passed over the island. It is a possibility that seems to fit certain cases very well : one such typhoon could disrupt a prehistoric settlement and bury everything so that it might really preserve small objects for our future finding.

CONCLUSION.

There is no need to repeat here what has been said above as to the likely chronology of the Lamma finds, the more so as that can only be in the nature of a working hypothesis. There is an enormous amount of research still awaiting the worker in South China. For the present, it is a definite advance to know that there are at least *three* questions for whose ultimate solution Hong Kong can provide material: (1) When and where did the Indo-nesian (and Polynesian) migrations leave the Asiatic mainland? (2) What is the significance of the stream of culture represented by the polished schistic arrow-heads common to Yang Shao, Manchuria, Shantung, Formosa, Hong Kong, Celebes? (3) When did the distinctively Chinese culture reach here and who brought it?

As a working hypothesis, I think that (2) was typical of the coastal population before they took up or were conquered by the Chinese culture so far "eastern Barbarians" and "Southern Yüch" may have been long alike; and that at *no* time was there a water-tight bulk-head between the Southern "barbarian" and the more advanced Northern civilisation: these coastal people were imitating the finer stone work of the Chinese jade ornaments before they were in a position to develop their bronze under direct Chinese influence: and that this last influence began somewhere about the middle of the First Millennium B.C.

I must here acknowledge my gratitude to Rev. Sean Turner, S.J. for the drawings illustrating this article and to Mr. Mak of the Anatomy Department of the University for the photographs. At the close of this series describing the Lamma finds which has now been appearing for over four years in the *Hong Kong Naturalist*, I am under the gravest obligation of confessing my complete indebtedness to Dr. Herklots for the continued publication to which he has devoted so much personal work and in which he has incurred much expense by providing adequate illustration. It is really a public service of no mean order, for archaeological remains tend to continue the hidden life, unpublished and unsung, if there is no inspiration to publish them or no feasible medium of illustration. Dr. Herklots has provided both for the Lamma remains—and four years make a very short lapse of time in which to have made familiar to those concerned such a strange variety of objects.

Archaeological Finds on Lamma Island near Hong Kong 267

• • •

,1

REFERENCES.

- (134) Janse, O.: Tubes et Boutons Cruciformes trouvés en Eurasie. Bulletin of the Museum of Far Eastern Antiquities, no. 4: Stockholm.
- (135) Janse, O.: Mission Archéologique en Indochine, Rapport préliminaire d'une—. Révue des Arts Asiatiques. Tome IX fasc. 3, 4 and Tome X, fasc. 1. Paris, 1936.
- (136) Karlgren, B.: Yin and Chou in Chinese Bronzes. (in "Yin and Chou Researches"; also published in Bull. Mus. F. East. Antiq., no. 8) Stockholm, 1936.

LEGENDS FOR PLATES 19 AND 20.

PLATE 19.

- Figure 1; site HSY is in bay to right of small central headland TW is to the left of that headland: YSW is the low, slightly crested hill seen standing over its harbour in the gap across the island to the left (marked by x). It is separated from the hill in the background by a valley.
- Figure 2: YSW fragment; combination of "Double-F" and diaper.
- Figure 3: from YSW. Note sketchy convention for applied animal mask as ornament (or "vestige" of lug). Certainly, after bronze prototype.
- Figure 4: from YSW; combination of circular (grass stalk in section?) imprints with "Double-F". Combinations of these circular imprints with diaper and with comb-dragged lines also occur.
- Figures 5, 6: from YSW. Pottery with "lei" type of ornament, common on Yin and Chou bronzes. See H.K.N., VII, p. 46 for analysis of double spiral in fig. 6.
- Figures 7-12: from YSW. Yellowish-buff pottery with linear "band" ornament incised. Figures 9 and 10 show combination with "Double-F".

PLATE 20.

- Figures 13-24: Specimens of various typical patterns on HSY "rough" wares. All patterns are impressed, most with regular stamps. Depths of find are given in ins. Otherwise, the piece was found out of position.
- Figure 13: (48") branch pattern, whose origin from stylized "cord" or textile impression is indicated by fig. 14 (21").
- Figure 15: (21") shows a "lei" or perhaps lozenge pattern (these two types run into each other very easily).

Figure 16: Chequer-board combination of "grid-iron" and lozenge-eye.

Figures 17, 18: crossing stamps in which squares and straight lines were the chief elements.

Figure 19: (32") chevron pattern produced by overprinting of squares.

Figure 20: (15") very interesting pattern made up of alternate horizontal bands of (a) squares of "grid-iron" (b) triangular (spiral?) figures fitted to make a continuous band, cp. the Lamma bronze dagger in H.K.N., V., p. 141, 3.

Figure 21: ornament of fillet of applied clay divided by transverse impressions.

Figure 22: (36") and 23; impressed chevrons. 21-23 are types of decoration used at the neck of vessels.

- Figure 24; from HSY (Northern end, old river bed or drainage, c. 24"). Fragmentary "incense-burner" complete in height : or lamp, as mouth is inturned and narrow. Form and ornament point to bronze prototype. Interior bottom has concentric ridges peculiar to this type (wheel-lines). Trade-mark under base as in textfigure 1.
- Figure 25; from HSY: specimen of clay-stick: for Sèvres modern analogy, see text.

Figure 26; same type as 25, but made up of two sticks combined, as if making part of a grid or frame.



Scheme of patterns used in alternate bands (a) and (b) of decoration in fragrant, figure 20, plate 20.

000000 0000 000 00 0