

Archaeological Investigation of Coloane, Macau

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INTRODUCTION

UP UNTIL July 1972, when a field survey of Coloane Island was undertaken by members of the Hong Kong Archaeological Society, there had been no reported archaeological work in the Portuguese province, although there had been rumors of bronze finds on the two islands. After contacts between the Society and the Macau authorities, a field survey was undertaken on the 15th and 16th of July, followed by a trial excavation on May 26 and 27, 1973. The purpose of the field survey and excavation was to investigate the beaches on the island (particularly those on the southern and western coastlines) for evidence of early coastal visits or settlement. Flat raised areas accessible to the sea near areas of possible cultivation and a protected anchorage were selected for study, since such areas have yielded considerable cultural deposits in Hong Kong.

The island of Coloane is the southernmost of the group of two small islands and a peninsula forming the Portuguese colony of Macau, lying to the southwest of the mouth of the Pearl River. The relationship of this island to the river estuary and the South China coast, and its proximity to the islands of Hong Kong to the east (Fig. 1), was of particular interest to the society. Although no reports of discoveries of neolithic pottery or stone implements had been made, there was reason to expect that such early settlements would have existed.

Coloane exhibits geological and geographical characteristics similar to those of the island of Hong Kong, the predominant rock type being granite at various stages of weathering. The land, covered with dense vegetation, rises steeply 100 to 150 m to a central range of mountains, leaving few flat or low lying areas. Areas now under cultivation are in the lower reaches of valleys (below the 20 m level). In three of the areas visited sandbars had formed, the subsequent silting up of the areas behind providing gradually sloping ground that is relatively fertile and easily terraced (Fig. 2).

The authors are members of the Hong Kong Archaeological Society.

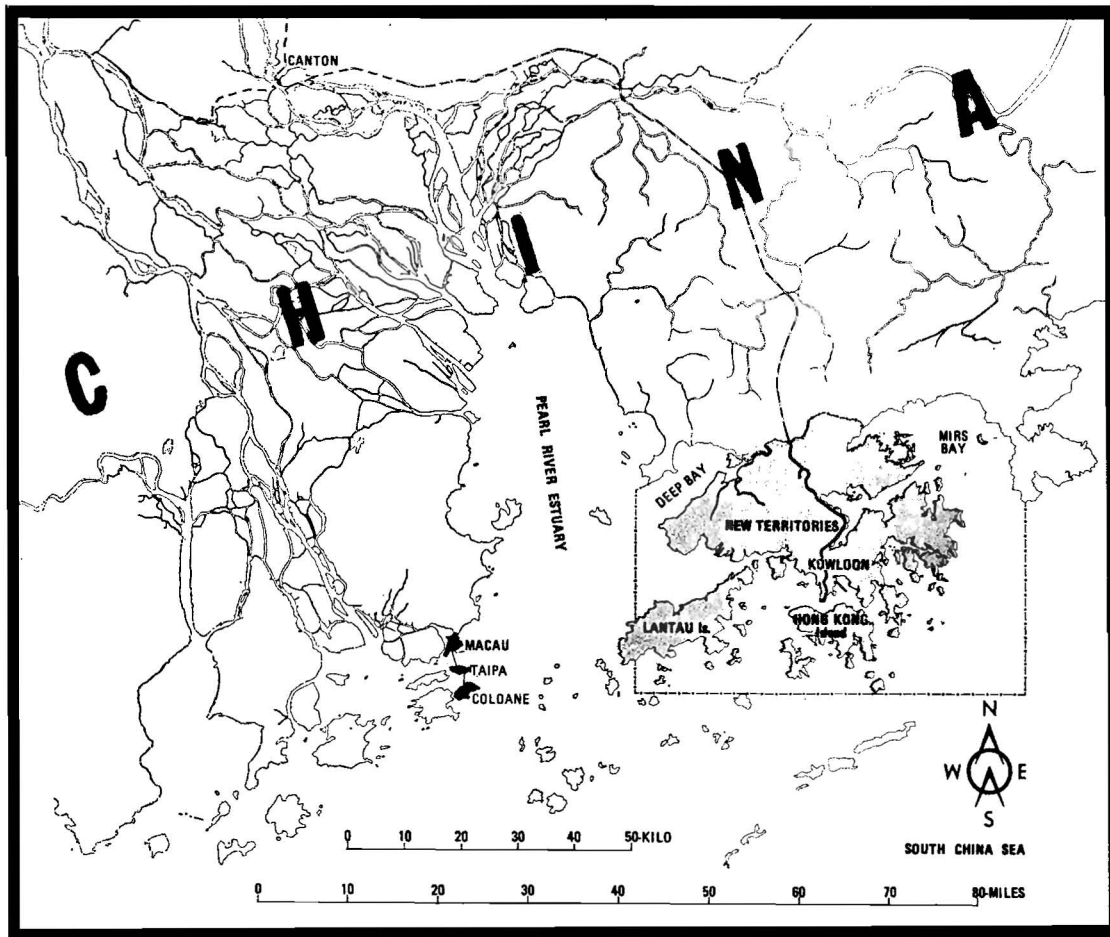


Fig. 1 Macau, Pearl River Estuary, and Hong Kong. (Map and all figures courtesy of the *Journal of the Hong Kong Archaeological Society*, vol. IV, 1973.)

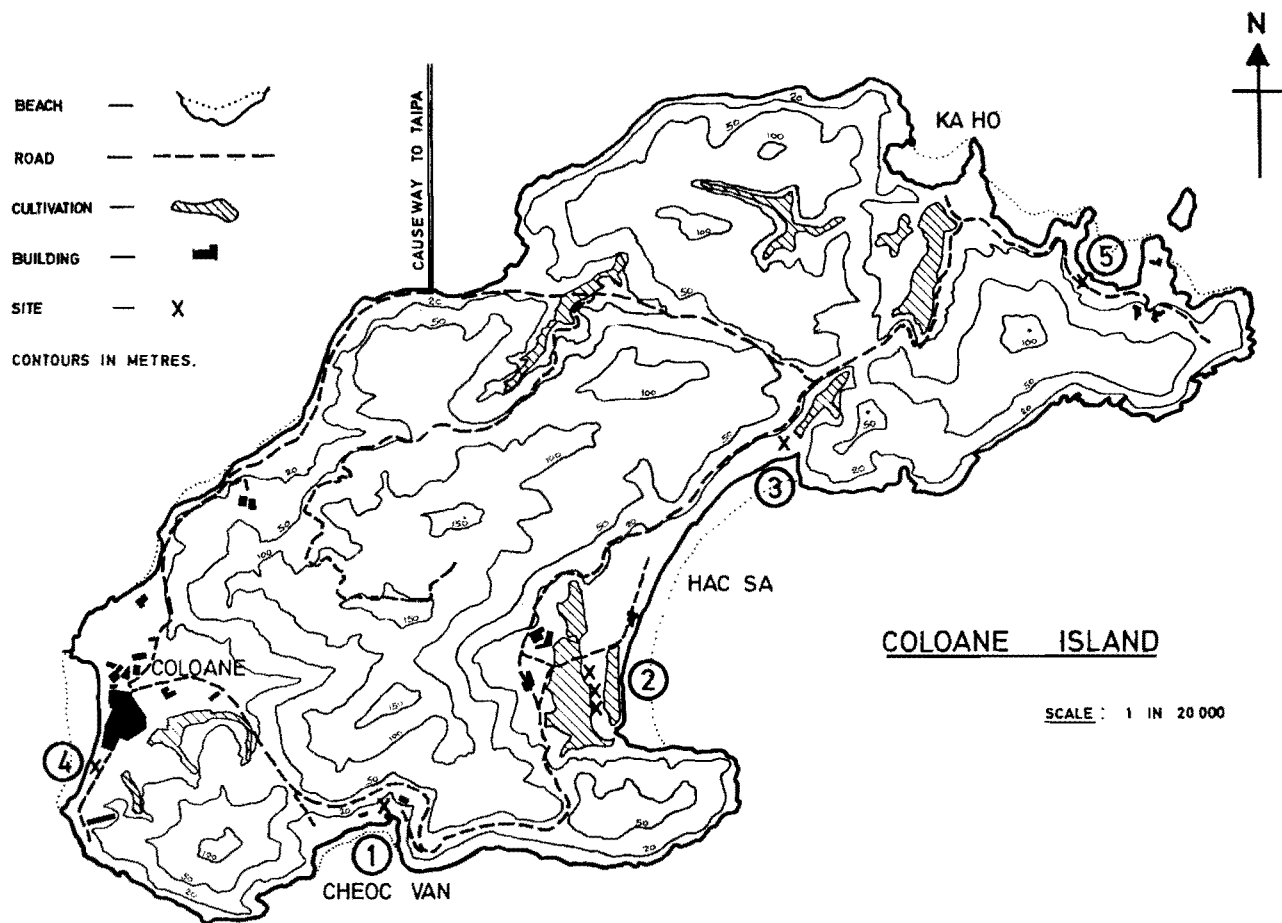


Fig. 2 Location of survey sites.

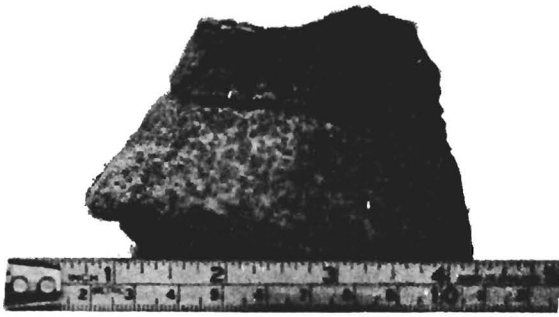


Plate Ia Part of a pot stand with incised pattern, C2.

SURVEY

Five areas behind present beaches were selected as the most promising sites to survey, and short inspections of about two hours were made at each. The sites, in the order visited, were: Cheoc Van, Hac Sa (south and north), Coloane village, and Ka Ho.

C1 Cheoc Van

Cheoc Van is a sheltered bay with a wide sandy beach about 300 m long on the south side of the island. The lower end of a short valley at the western end of the beach, a rock shelter, and the area above the present beach directly below the Pousada Hotel were investigated. Coarse tempered corded and coarse geometric sherds, and a well weathered section of a slotted stone ring of grey slate (Fig. 3), were uncovered at 5–6 m above sea level in the eroded bank of a small creek.

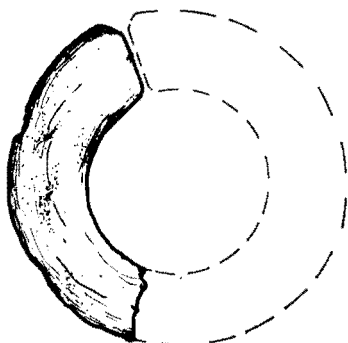


Fig. 3 Slotted slate ring, C1, full size.

C2 Hac Sa South

Hac Sa (Black Beach) South is a sandy beach more than 1 km long within a large open bay. At the southern end of the beach a considerable amount of sand has built up, forming two broad and flat sand bars that are now 3–4 and 6–7 m above sea level. Between and beyond these bars and about 2 m lower are areas of present cultivation. A small settlement has been established at the head of a valley leading to the cultivated areas. Both sandbars were investigated and the second yielded surface finds of numerous coarse corded and coarse plain sherds, part of a pot stand with incised pattern (Plate 1a), pounding, grinding, and sharpening stones, a stone spindle whorl, and a pebble pick (Fig. 4). These objects were in the shallow organic surface layer (to depths of 40 cm) from where they had been eroded by rain. During a subsequent visit to this site an investigation of the depth of activity layer at several locations indicated it to be only about 40–50 cm thick. Several pale green glazed sherds from three pots were also found during this second visit.

C3 Hac Sa North

Hac Sa (North) is at the northern extremity of the beach. The coastline runs in an east-west direction, and a small flat sand bar has formed which is smaller than

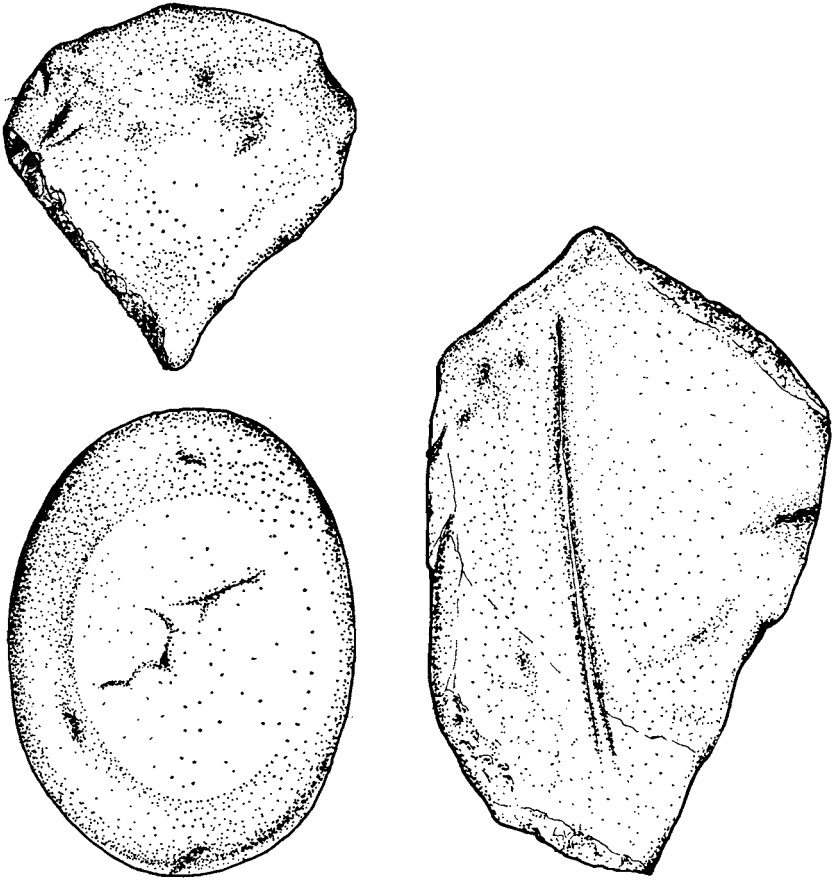


Fig. 4 *upper left*, pebble pick, C2; *right*, sharpening stone, C2; *lower left*, pebble grinder, C2; all half full size.

the bars at site C2; this area is better protected by a high ridge to the east. The bar itself, now covered with dense vegetation, was looked at only briefly, but on an eroded path leading from the present beach to the formed road running along the west side of the valley, coarse tempered and soft geometric (impressed net pattern) sherds were found, along with a shouldered stone adze, a small ring-polishing stone, and two other small polishing stones (Fig. 5).

C4 Coloane Village

A small bay to the south of the village and the fields in the vicinity of the cemetery to the west were investigated, without any finds of particular interest being made. On an unpaved road leading from the south to the village and running behind the houses facing the main beach, numerous surface sherds were found. These, among modern pottery, included coarse corded and hard geometric ware (combined lozenge and net patterns) which had apparently been exposed when the road was formed. Also picked up from the roadway surface in the same area were an unfinished broken quartz ring and a chalcedony scraper about 5 cm × 2 cm showing extensive

work use (Fig. 6). The form of working to all four edges of the scraper indicates that this artifact may be earlier than neolithic in origin.

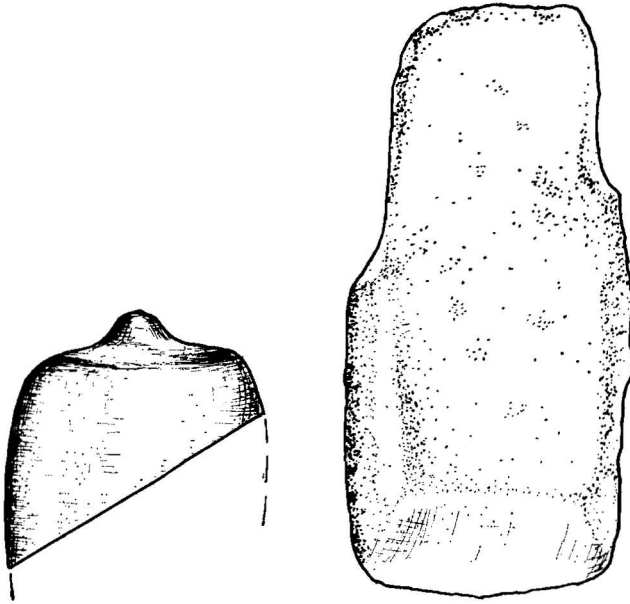


Fig. 5 *left*, polishing stone, C3, full size; *right*, shouldered adze, C3, full size.

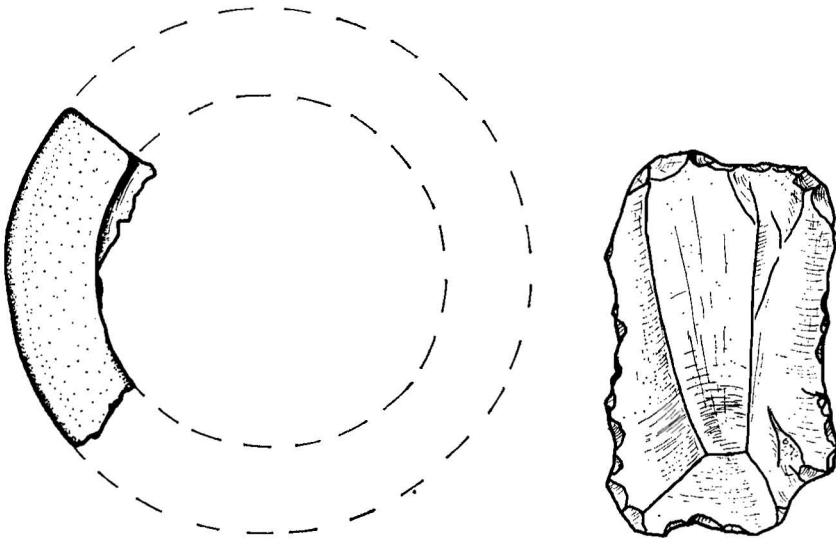


Fig. 6 *left*, quartz ring, C4, full size; *right*, chalcedony scraper, C4, full size.

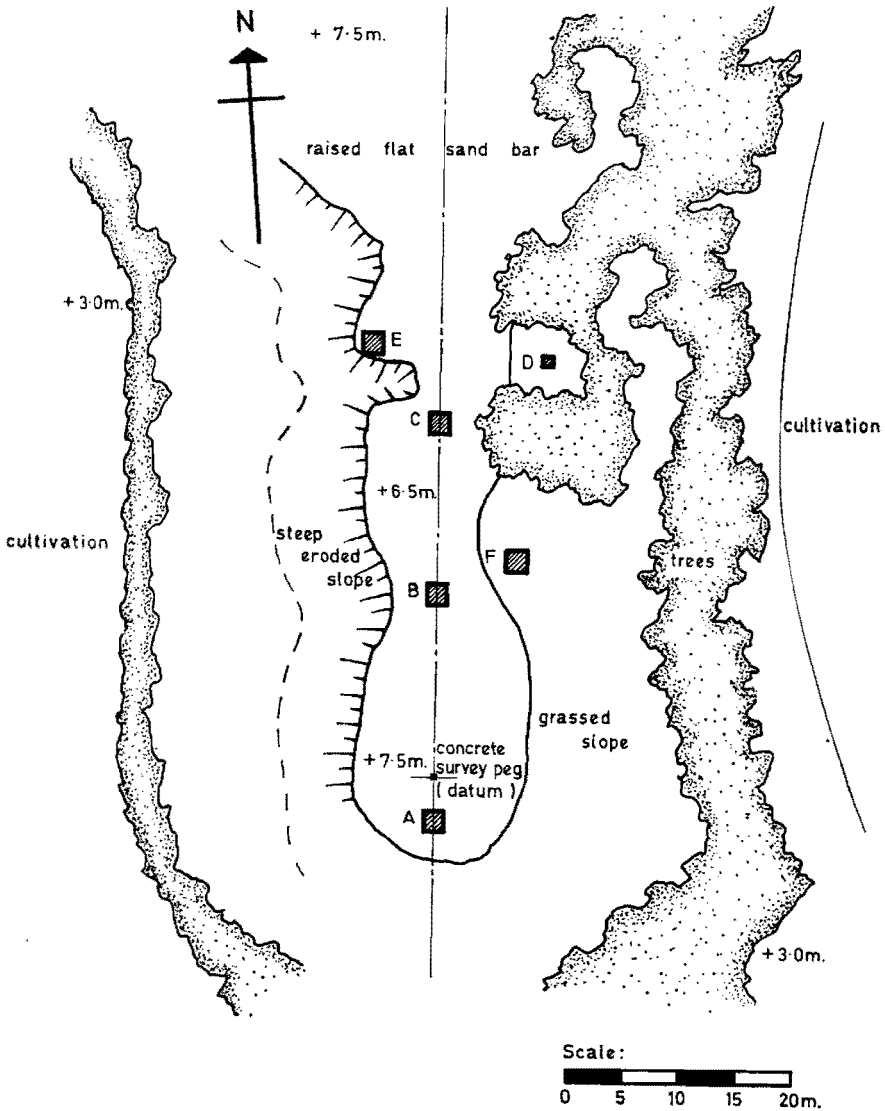
C5 Ka Ho

Four small bays on the northwestern side of the island were examined. Narrow sandy beaches have formed here, but there are no sandbars. At the third bay in

the eroded slopes below the road leading to the Lazaretto to the east of the bay, coarse corded pottery, one soft geometric sherd (herringbone pattern), and several pale green glazed sherds were found. Also picked up in this area was a waisted pebble, probably a net weight.

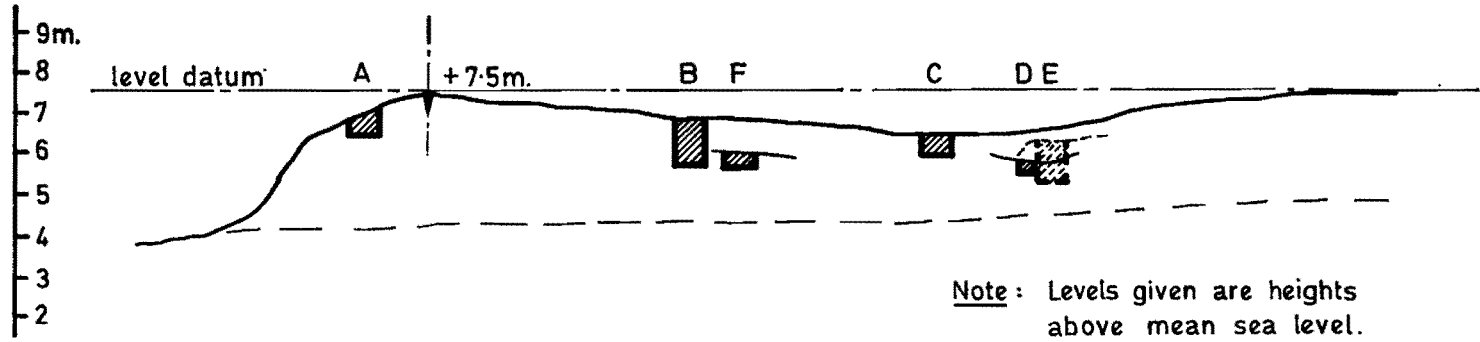
EXCAVATION AT HAC SA (C2)

Of the sites covered by the survey, the second sandbar at Hac Sa (South) was the most promising with respect to the variety and quantity of artifacts, and it was



PLAN

Fig. 7 Plan of Hac Sa site, C2.



Note : Levels given are heights above mean sea level.

Fig. 8 Longitudinal section of Hac Sa site, C2.

recommended to the Macau government that further study of the site be carried out. On May 26–27, 1973, members of the Society, accompanied by W. G. Solheim II, revisited the site at C2 (Fig. 2) to determine the extent of cultural deposit in the raised beach. The party was assisted by Snr. Vital, postal administrator of Coloane, who acted on behalf of the Macau authorities to provide transport and liaison.

The area chosen for excavation was the second (and presumably older) raised sandbar, where most of the surface finds had been noted. Squares were laid out along a datum line down the center of the sandbar, with other trial pits at various points on either side of the line (Figs. 7 and 8; Plate 1*b*). The results of the excavation are summarized as follows:

- Sq. A* Ground surface was sloping away from datum point and eroding. At 20 cm below surface, soil begins to change to light yellow sand. Coarse tempered sherds with cord-marking were found at 20 and 35 cm. Below 40 cm, sand is loose, yellow, and sterile.
- Sq. B* In the first 10 cm, several sherds of light green glazed pottery (Sung dynasty?) were found. From 0–125 cm, soil is consistent, dark brown sand, unproductive of artifacts, except for one coarse corded sherd at 125 cm.
- Sq. C* From 0–70 cm soil is consistent, dark brown, and sterile.
- Sq. D* Same results as in Sq. C.
- Sq. E* In the eroded bank west of Sq. E, a “wu-chu” (五銖) coin of the Han and Six Dynasties period (ca. 110 B.C.–A.D. 500) was discovered. Soil is consistent, dark brown to 90 cm, then changes to loose yellow sand. One coarse corded sherd at 125 cm.
- Sq. F* At 10–20 cm below surface an “activity layer” was encountered, with grayish black soil, numerous coarse pottery sherds, both corded and geometric, and stone fragments. From 20–25 cm pottery sherds are frequent, a few of the “soft geometric” variety, with gray fine paste and stamped mat impression (Fig. 9).



Fig. 9 Rubbings from soft and coarse pottery, C2.

Although the investigation was limited by time, several observations may nonetheless be made on the basis of the excavation results. The cultural deposit in the excavated area of the sandbar was less than might have been expected from the surface findings of the first visit. Apparently, these artifacts were eroded from an “activity layer” outcropping on either side of the bar, and encountered in Sq. F. Possibly deeper excavation in squares A–E would have revealed this productive



Plate 1b Site C2, view from datum point facing north.

layer, but it is equally possible that activity on the site was mainly at the water's edge and thus closer to the present beach. Future excavation should then concentrate on the grassed slope east of the datum line.

CONCLUSIONS

From the number of finds made in the short time available, it is most likely that previous discoveries have also been made. That these have not been reported is unfortunate. Obviously Coloane and the other islands were the scene of much activity in the Neolithic (at least) and it is impossible to judge how much of the cultural record has been lost to erosion and disturbances due to cultivation or curio seekers.

In general, the pottery and stone artifacts which have been noted are similar to prehistoric objects found in Hong Kong. The corded and geometric pottery are known to co-exist at a number of sites in Hong Kong, especially Sham Wan (Bard and Meacham 1972), where polished stone tools and ring ornaments have been found in association with these pottery styles. This Geometric Horizon has been attributed to the Late Neolithic and early Bronze Age in South China, ca. 1500 B.C.-A.D. 200, and the presence of Wu-chu coins at C-2 would tend to confirm the later date.

Corded pottery, however, is known to have existed at an earlier period as well, and the incised potstand (Plate Ia) has some similarity to incised styles on pottery from "pre-geometric" levels at Sham Wan. The scraper from site C4 may be even earlier, or, like the "pebble pick" from C2 and others found in neolithic contexts, may be a survival of the earlier technology.

Many of the questions related to the prehistory of the coastal region of South China will only be resolved with an accurate chronology tied to a series of well-stratified sites. It is to be hoped that, with more detailed investigation and excavation in Macau, further light may be shed on the movements and settlements of the earliest inhabitants in this region.

ACKNOWLEDGMENTS

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REFERENCE

BARD, S. M., and WILLIAM MEACHAM

1972 A preliminary report on a site at Sham Wan, Lamma Island, Hong Kong. *AP* 15(2): 113-126.