Neolithic Sha Lo Wan, Hong Kong: Field Methods and Results

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The Late Neolithic Site at Sha Lo Wan, Hong Kong (Fig. 1) was excavated during 1993, prior to destruction by the construction of the new Hong Kong Airport.

Field Methods

Phase I of the excavation was an attempt to assess the archaeology of the site with the view to establish the need for further excavations. This involved the excavation of two lines of 1 m x 1 m test pits (Fig. 2). One line ran in a north-north-east to south-south-west line. These eight test trenches were numbered N1-N6 and spaced at 5-metre intervals. Trench N1 was on solid granite, so no actual excavation took place, and Trench N7 was offset to avoid tree disturbance. At right angles to this line, nine trenches were planned in an east-south-east direction, again at 5-metre intervals. Trenches E4, E5, E7 and E8 were not excavated, partly for reasons of time and partly because they were located on a steep slope. All trenches produced variable quantities of Neolithic material while N5, N7, E1 and E2 also produced humanly-dug subsoil features. It was therefore decided to investigate these features further by excavating a 6 metre square linking N7 and N8 (Area A) and excavating a 5 metre square around E2 (Area B). A 50 cm. extension was also made to E1.

In the light of the data recovered during Phase I, a major excavation was undertaken in the summer of 1993 (Fig. 3). This consisted of a large open area excavation 19 m x 14 m (Area C). In addition, a linear transect was excavated between E3 and E6 (Area D with extensions, Areas M and N). This enabled a substantial area of the settlement to be seen in plan while also examining the hillslope, a possible area for horticulture.

The entire excavation was undertaken by hand. The test trenches showed that the surface layer (Context 1) was some 10-20 cm deep and contained virtually no cultural material. Having established this in the test trenches, this layer was hoed off in all subsequent excavation. All lower layers were removed using small hand tools, predominantly the mason's pointing trowel. Samples of soil from all undisturbed contexts were taken for water flotation.

The excavation and recording system was based on an attempt to define, excavate and record discrete contexts. A context refers to any discrete archaeological entity on site, and so could be a layer, a pit or a posthole. It is often the result of a single action, whether it leaves a positive or negative record on the site. The cut of a posthole, for example, leaves a negative record (i.e. something has been removed) whereas the fill of a posthole leaves a positive record (i.e. the content of the posthole has been added to the sequence).

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Each area was given discrete context numbers. Each test pit, therefore, had its own context numbers (e.g. N4, Contexts 1, 2 and 3), Area A, Contexts 1-19; Area B contexts 1-11; Area C, Contexts 1-150; and Areas D, M and N, Contexts 1-3. Each context has an individual context record form which describes the nature of the context and its relationships. The context numbers appear on the plans and sections as well as all finds. Thus finds can be related directly to contexts. The full set of context record forms constitutes part of the Primary Site Archive held in the Antiquities and Monuments Office.

All general finds, potsherds and burnt clay were recorded by discrete context, but in addition special finds like whole pots, polished stone tools and rings were three-dimensionally recorded. This record remains part of the Primary Site Archive while a plot-out appears in this report as Fig. 4.

Results

Stratigraphy

The headland of Sha Lo Wan is an area of erosion rather than deposition, so the stratigraphy of the site was very simple. Context 1 across the whole site consisted of some 10-20 cm of friable, mid brown clayey-silt with many eroded granite fragments. It contained many recent roots and tree stumps. Below this, Context 2 was of variable thickness as it rose and fell over the eroded surface of the granite. The majority of cultural material was found in Context 2, which consisted of a dark brown friable clayey silt with granite fragments. On removing Context 2, the eroded granite surface was revealed with many humanly-dug features cut into it. Virtually no features cut into other features (49 cutting Burial Pit 1 and 47 cutting 123 are exceptions). This would suggest the features were broadly contemporary, a fact largely borne out by the finds.

The areas excavated, N1-8, E1-9, and Areas A, B, C and D, are important in terms of the process of the excavation and its recording, but not in terms of the structure of the site. Rather than describing the results of this excavation by trench, they will therefore be described by classes of feature.

The Enclosure

It should be stressed from the start that this enclosure remains an hypothesis (Fig. 3). The enclosure is indicated by eleven postholes (79, 68, 18, 10, 30, 105, 103, 70, 62, 131 and 32). A further post may have existed outside Area C, to the south between 32 and 79 (Fig. 3). The posts are spaced between 2.2 m and 5.1 m apart. This would suggest main supports for some form of wickerwork fencing. The pairing of posts 62 (Plate I) with 70 (Plate II) and 103 with 105 may suggest an entrance in the north-east corner of the enclosure. The variation in size and type of packing within the postholes is probably a result of the very variable nature of the underlying bedrock.

Structures 1 and 2

Two alignments of posts some 2.5 m long were located. The posts are close-set, and each alignment has one offset post (Fig. 3). Variation in posthole size and packing may again be the result of bedrock variations. Structure 1 (Contexts 89, 21, 64, 95, 91 and 93) is within the enclosure (Plate III), while Structure 2 (Contexts 113, 127, 115, 12 and 97) is outside the enclosure to the north east. The nature of these structures is unknown, but given the almost identical nature of the two structures, a specific type

of Neolithic building is suggested. The line of posts could represent a central ridge, a facade, or some form of platform support. It is also possible that Structures 1 and 2 are part of the same structure some 10 m long, pre-or post-dating the enclosure. Few comparative data are yet available from Hong Kong, so we must await the excavation of similar structures on better preserved sites.

Burial Pits

Four possible burials pits were located (Fig. 3). Due to the acid nature of the site no bone survived, either in the burial pits or elsewhere. The suggestion that these pits are burial pits, therefore, rests on their morphology and contents. All contained what appeared to be deliberately buried objects.

Burial Pit 1 was 2.3 m x 1 m, dug some 50 cm into the decomposed granite (Fig. 4). When originally dug, the pit would have been about 1 m deep. It is therefore clearly big enough for the burial of an extended adult. Deposited in the pit, probably as grave goods, were two complete pots (SF 9 and SF 225), a polished ring (SF 230) and a projectile point (SF 4).

Burial Pit 2 (Fig. 4) was of similar size to Burial Pit 1, being 2.5 m x 1 m (widening to 1.5 m at the northern end) and 50 cm deep (originally *c.* 1 m.). The pit contained a complete pot (SF 198) and a waisted stone weight (SF 141). Postholes appear to have been cut into both Burial Pits 1 and 2: Posthole 49 was cut into Burial Pit 1 and 23 was cut into Burial Pit 2. These may represent later posts but could equally well have been marker posts for the burials.

Like Burial Pit 2, Burial Pit 3 (Fig. 4) was orientated north-south. Buried in it was a complete pot (SF 7) and two stone artefacts, one an adze and the other a roughly worked stone (SF 68 and SF 69). Unfortunately, this burial pit was badly disturbed by ants and several large pot sherds possibly represent a second pot. The burial pit itself was much smaller than Burial Pits 1 and 2. It was only 1.3m long, some 50 cm wide and dug 50 cm into the decomposed granite. It is possible that this may represent a child burial.

There is some uncertainty as to whether Context 77 represents a burial pit or not (Burial Pit 4 on Fig. 4). It is similar in depth to the other pits and possibly had a marker post (Context 78) cut into it. The pit was only 1 m x 0.8 m. It did, however, contain two complete pots (SF 210) and two polished stone rings (SF 167 and SF 179). As with Burial Pit 3, it could represent a child burial.

Ritual Pit and Deposits

Nine whole pots were recovered from Area C, one from Area A, and one from Area D. These whole pots were presumably put into shallow scoops in the Neolithic topsoil and immediately buried. Evidence for these scoops has vanished in the process of transformation of the Neolithic surface horizon into lower contexts. It appears extremely unlikely that the pots would have survived had they not been deliberately buried.

The whole pot recovered from Area A (SF 55) was carefully placed in an inverted position within Context 10. The positioning of pots in the ground does not appear, however, to follow a regular pattern. The pot found in Area D (SF 252) was also inverted, but SFs 116 (Plate IV), 133, 166,

164 and 235 (Plate V), were all found upright in Area C, while SFs 122 and 207 were lying on their sides.

The deliberate burial of pots in the Neolithic (and later periods) in Hong Kong and Guangdong, and indeed in the Neolithic in many other parts of the world, may best be interpreted as having a ritual or ceremonial significance.

A second class of artefact which may have been deliberately buried for ritual or ceremonial purposes is the complete, and apparently unused, polished stone adzes (Plate VI). Adzes have been argued to represent a singularly potent symbol in the Neolithic and clearly involved a great investment of time and skill. Nine complete adzes were found in Area C (Fig. 4) and three in Area A. Fragments of others which were perhaps in daily use were found across the site, but especially in the north east corner of Area C. This could represent either a working or rubbish dumping area.

Finally a pit located in Test Trench N5 (Context 6) was dug 50 cm into the decomposed granite (Fig. 2) and a trimmed quartz crystal was placed on its floor (SF 14). The pit was then backfilled and marked by a large granite boulder placed in the top.

Other Features

In addition to the postholes interpreted as part of an enclosure, structures 1 and 2, and possible burials markers, a further nine postholes were found in Area C (Fig. 3) and thirteen in Area A. Postholes b4, b3 and b7 are in an alignment running northeast to southwest, the posts being about 1.3 m apart. This may, however, have no significance as a further four postholes (b8, b9, b10 and b11) are irregularly spaced in the same area. Likewise Postholes 139 and 73 represent posts of uncertain function.

The remainder of the features in Area C consist of three clusters of irregular hollows (Fig. 3) and two isolated hollows (121 and b5). The cluster of hollows on the western side of the trench includes Contexts 14, 83, 56, 87, 85, 8, 16 and 4. On the northern side of the trench a cluster is formed by contexts 6, 51 and 137. Finally on the eastern side of Area C is a cluster of hollows including 99, 107, 117, 111, 119, 125, 47, 123, 143 and 145. The hollows tend to be rather irregular and there was no evidence of burning to suggest their use as cooking hollows. It is possible that they were small quarry pits used to extract both decomposed granite, for use as a filler in the cord-impressed pottery, and quartz for the manufacture of rings.

More extensive evidence for quarrying was found in Area A. Here a network of irregular hollows had been cut into the decomposed granite and then filled in with dark soil and domestic rubbish. An irregular pattern of postholes may possibly represent shelters used both during quarrying and perhaps for craft activities.

Terracing

Following the removal of Contexts 1 and 2 from Area A, three bands of dark humic soil were noted running diagonally across the trench. This material contained high concentrations of domestic rubbish including pottery, burnt clay and fragments of stone tools. The soil appeared to be in slight terraces. Similar slight terracing was noted on the eastern slope of Sha Lo Wan in Area D. Both examples of terracing were shallow and badly disturbed by erosion and root activity. However, if the Neolithic community on Sha Lo Wan were cultivating

tubers, legumes or vegetables, then such terraces, containing domestic waste, would be suitable areas for cultivation.

Evidence for the range of activities which took place at Sha Lo Wan is largely indirect, but can be broadly grouped into five areas of activity: construction, food procurement and preparation, craft activities, ritual and burial, and social activities.

Assuming that Sha Lo Wan was forested when first settled, the site must have been cleared of all or some of its forest cover prior to construction on the site. The adzes found could have been involved in this process. To construct both the enclosure and structures 1 and 2, postholes had to be dug into the underlying decomposed granite. As the decomposed granite is fairly soft, this could easily have been achieved with stone adzes or wooden digging sticks. The adzes would also have been used in the preparation of constructional timbers.

It remains uncertain what exactly the population of Sha Lo Wan ate, but indirect evidence suggests hunting and fishing, while collecting wild plants may be presumed. Evidence for horticulture and animal husbandry remains entirely speculative. The location of the site, overlooking the sea, indicates that marine resources were a likely major source of protein. The site is ideal for catching fish, and perhaps turtles, while shellfish had locally available both rocky and sandy habitats. The waisted stones from the site may therefore be best interpreted as net sinkers, although they could also have been used as weights in other processes such as weaving, or as roof weights. There is no direct evidence for collecting wild plants, but they could have been collected in pots and stored in both pots and pits. The many fire bars suggest cooking on site. The possible terraces on the south and eastern slopes may have been used for horticulture. If so, tubers, legumes or vegetables could have been grown in such a location, together with other crops. If rice had been introduced it would have had to have been grown on the wetter, low-lying land to the southeast. It is more likely, however, that it was not introduced until the Bronze Age, which is possibly why the focus of settlement shifted after 1500 BC. Without any bone evidence, little can be said about animal husbandry. Dogs, pigs and fowl had been domesticated by the Middle Neolithic further north, so their presence at Sha Lo Wan may be one explanation for the need of an enclosure. This could equally well have had a purely social function, or even been defensive although this is less likely given its rather flimsy construction.

Evidence for craft activity survives rather better, although this is largely restricted to lithic and ceramic crafts. The presence in the pottery of fillers derived from Cheung Chau Granite indicates it was probably made on-site, although bonfire firing leaves no direct trace. Stone tools were certainly polished at Sha Lo Wan, as attested by the presence of polishing stones. Several stone flakes also suggest some roughing-out on site. Quarry pits on the promontory may have been dug to obtain granite for ceramic fillers, but also to obtain quartz for the manufacture of polished stone rings. A ring core suggests their manufacture on site.

Spindle whorls indicate spinning at Sha Lo Wan. A variety of plant fibres and animal hairs could have been spun. Both

hemp and silk were being spun further north in China by at least 2000 BC. How such fibres were woven at Sha Lo Wan remains uncertain, but if any form of vertical loom was used, then the waisted stones could have functioned as loom weights.

Burial and the ritual deposition of adzes, whole pots and stone rings indicate that the inhabitants of Sha Lo Wan had a complex belief system. Both polished stone adzes and pottery were potent symbols associated with humans' relationship with nature. Cutting trees, breaking soil, collecting and storing wild foods, all involve human interference with nature.

As well as food procurement, many of the craft activities at Sha Lo Wan no doubt had a social as well as purely functional dimension. Personal decoration and ornament may also have had a role in social differentiation. The only surviving ornaments are the polished stone rings which may have been used to differentiate between sexes, social status, or social groups. Their full significance is not known, but their use in burials suggests that they represented a potent symbol, perhaps of status. The enclosure, if not simply a stock enclosure, may equally have had a social significance in terms of who lived inside as opposed to outside it, or what activities took place inside as opposed to outside it. Wider social contacts may be presumed, but are difficult to define archaeologically. Some of the polished stone tools are not of immediately local stone, so may represent part of an exchange network.

The excavation of the Neolithic site at Sha Lo Wan had added a new dimension to the Neolithic of Hong Kong and the Guangdong province. Apart from Sai Wan, most contemporary sites so far excavated to any large extent in Hong Kong are beach-head sites. Clearly the range of sites in Hong Kong is likely to be much more variable, as indicated by the range of sites excavated in Guangdong province. What is now required to answer the many questions posed by the Neolithic sites in Hong Kong is a programme of intensive landscape surveys, and the excavation of sites with surviving organic remains.

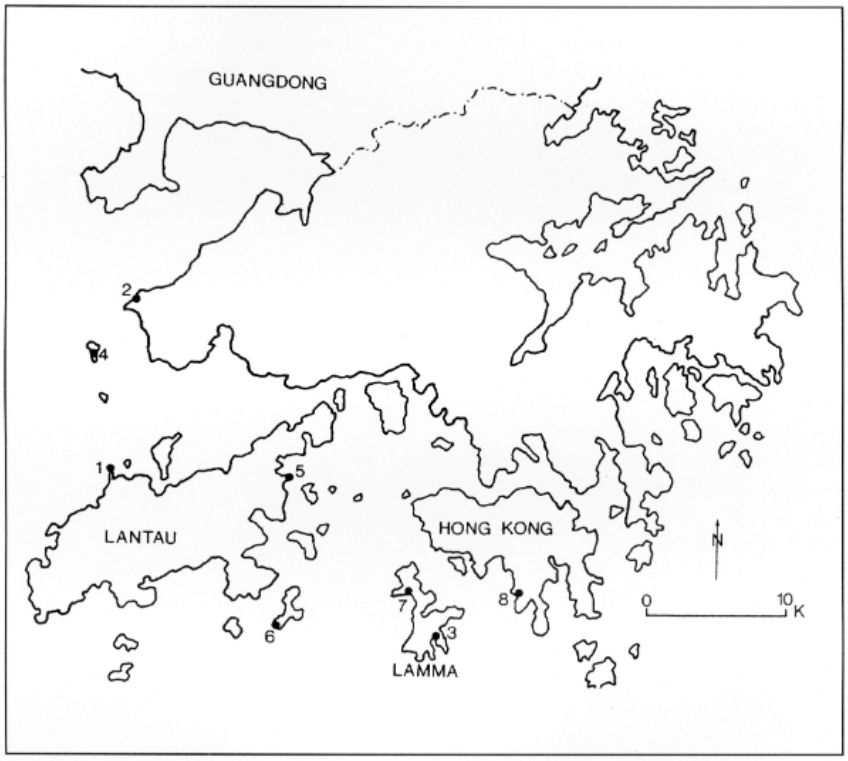

Fig. 1 Location of Sha Lo Wan (Site 1), Lantau Island, Hong Kong, in relation to major contemporary sites (2-8).
沙螺灣(1號)位置圖

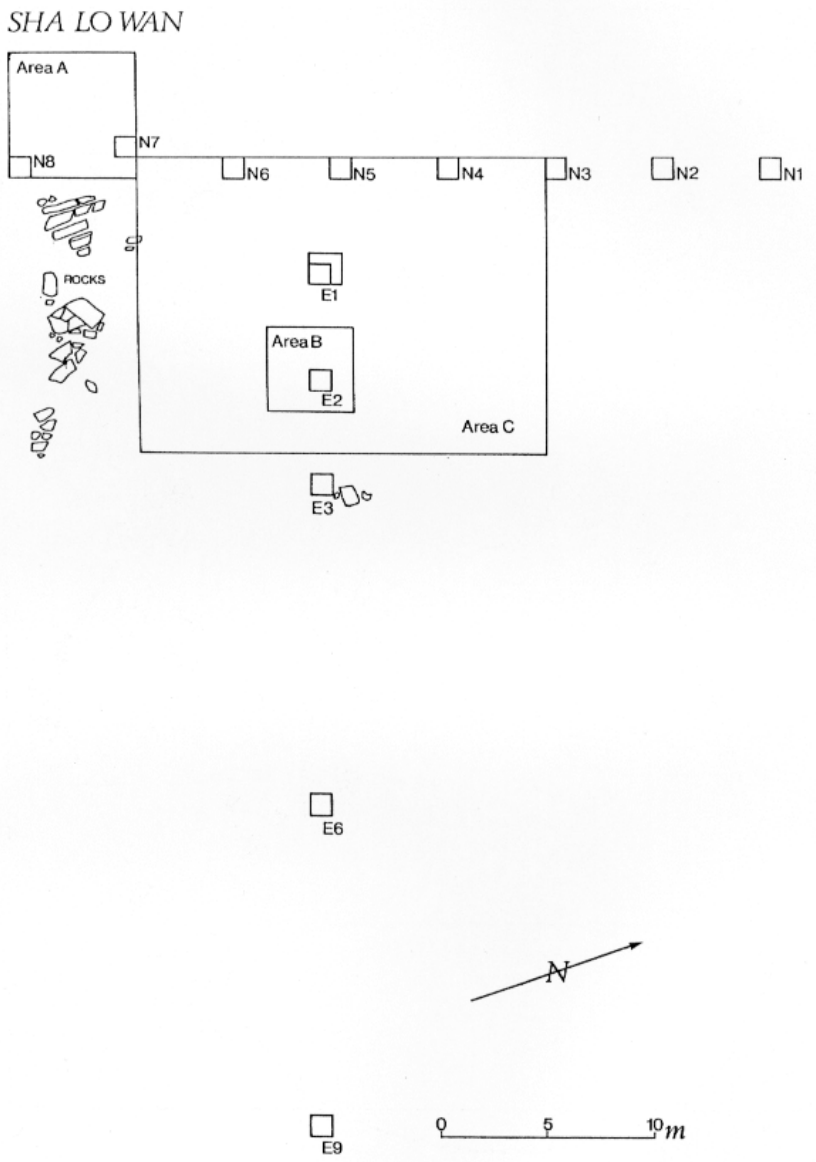

Fig. 2 Sha Lo Wan 1993. Test pits (N-N8 and EI-E9) and Area excavations, Areas A-C.
沙螺灣遺址探方位置圖

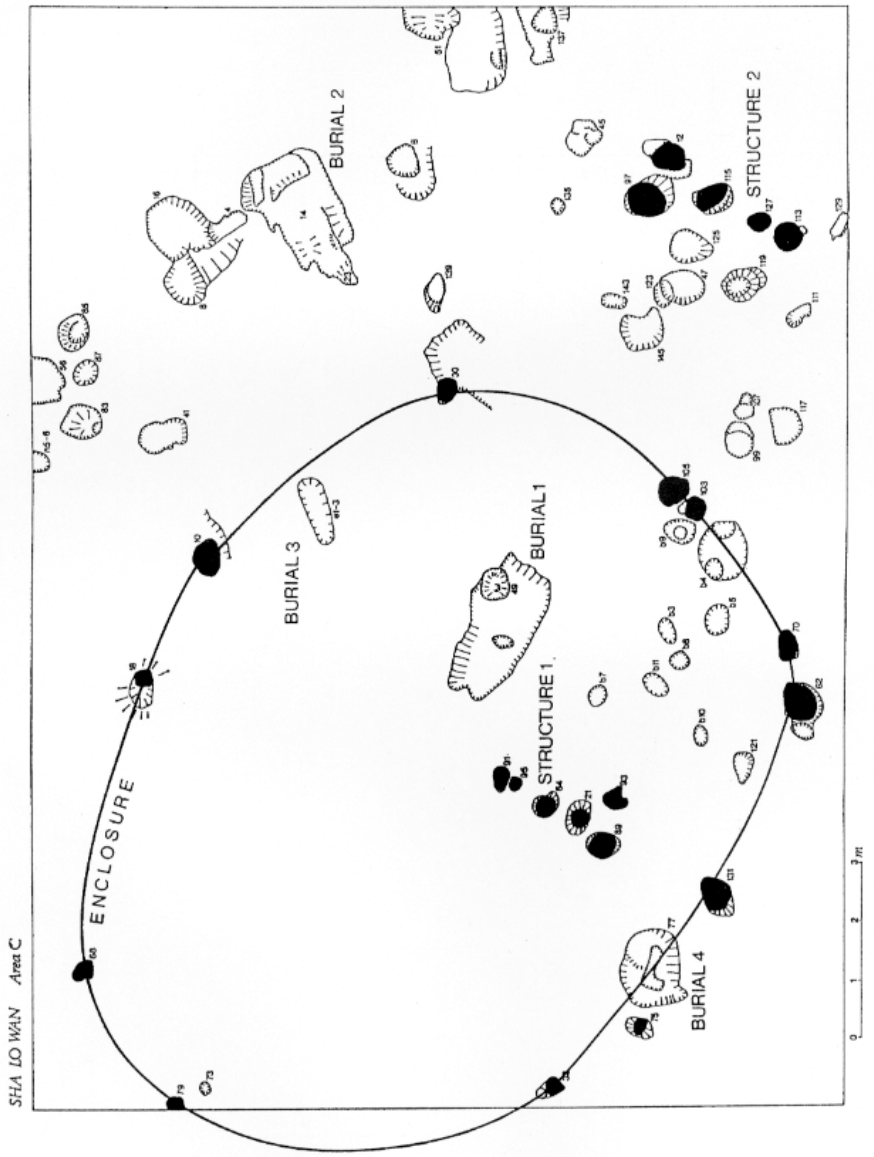

Fig. 3 Sha Lo Wan 1993. Area C subsoil features and possible interpretation of structural postholes (black) as an enclosure and domestic structures.
沙螺灣遺址柱洞位置圖

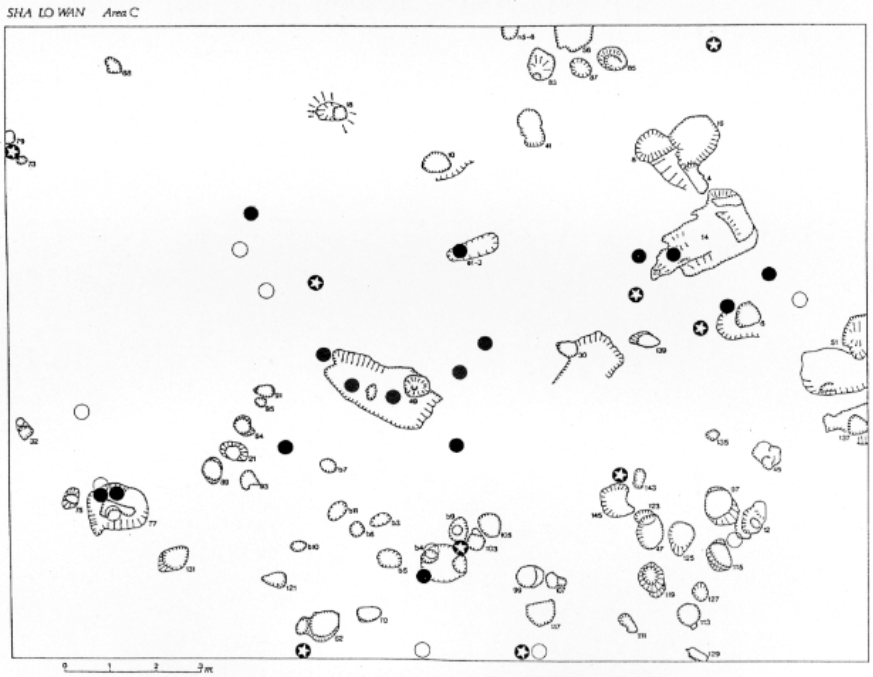

Fig. 4 Sha Lo Wan 1993. Area C. Distribution of whole pots (black circles) and polished stone adzes (stars).
陶罐(黑圈標記)及石鋂(星形標記)位置圖

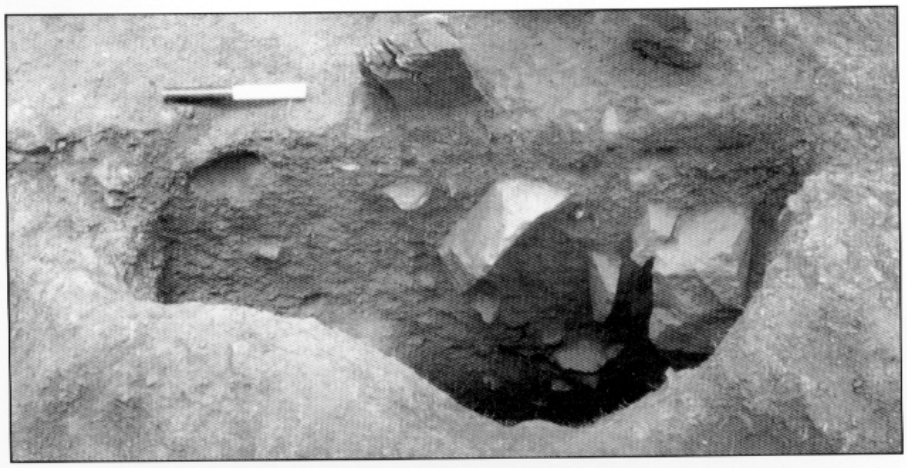

Plate I Sha Lo Wan 1993. Enclosure posthole Context 62 half-sectioned to reveal post packing stones. Scale 20cm.
柱洞

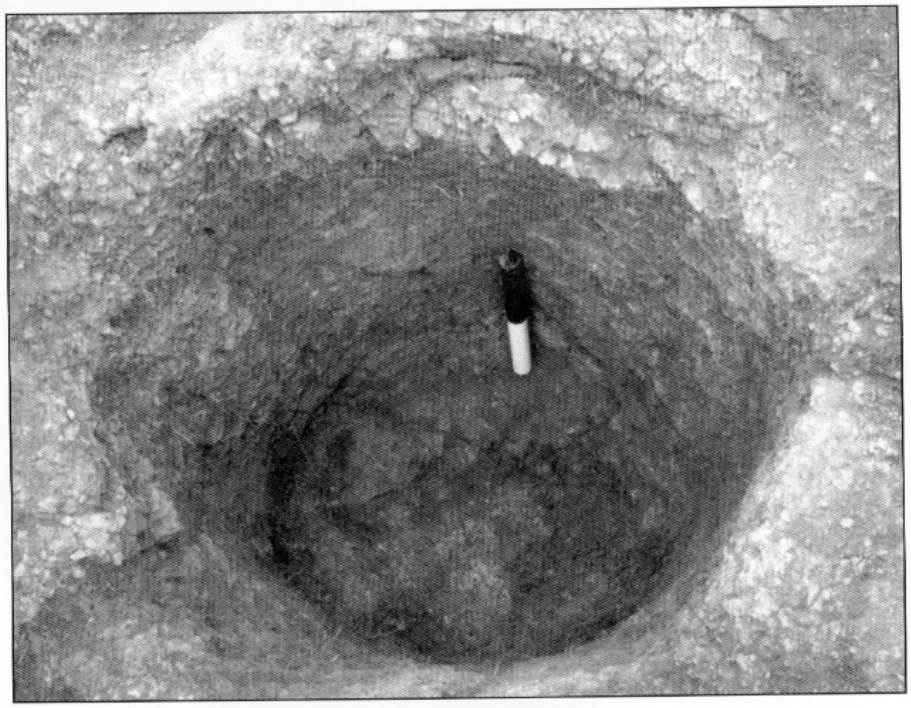

Plate II Sha Lo Wan 1993. Excavated enclosure posthole Context 70. Scale 20cm.
柱洞

Plate III Sha Lo Wan 1993. Postholes of Structure 1. Scale 2m.
柱洞

Plate IV Sha Lo Wan 1993. Pot, SF 116 *in situ*. Scale 20cm.
出土陶罐

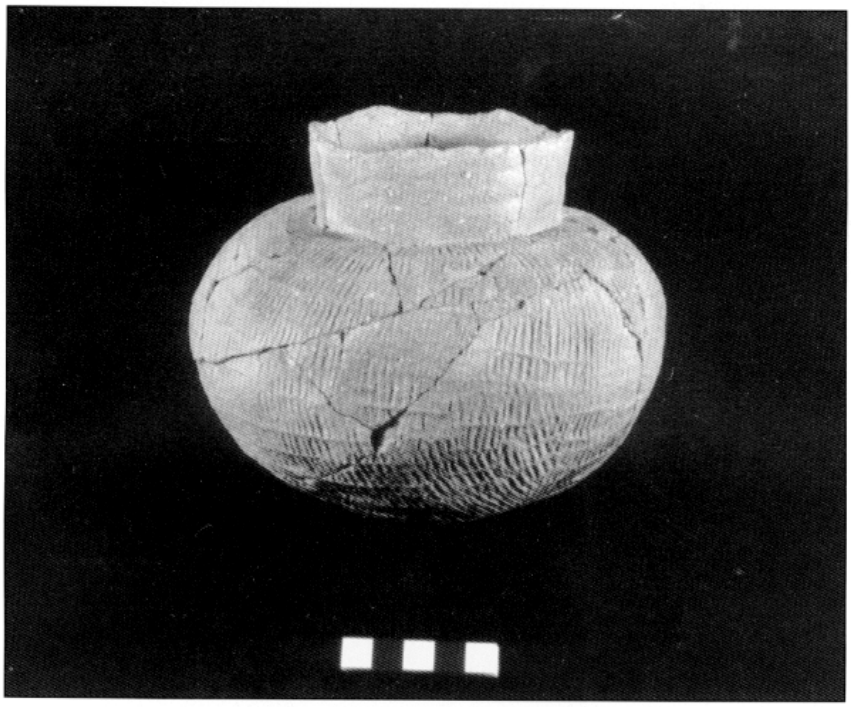

Plate V　Sha Lo Wan 1993. Pot, SF 235 after conservation. Scale 5cm.
修復完成的陶罐

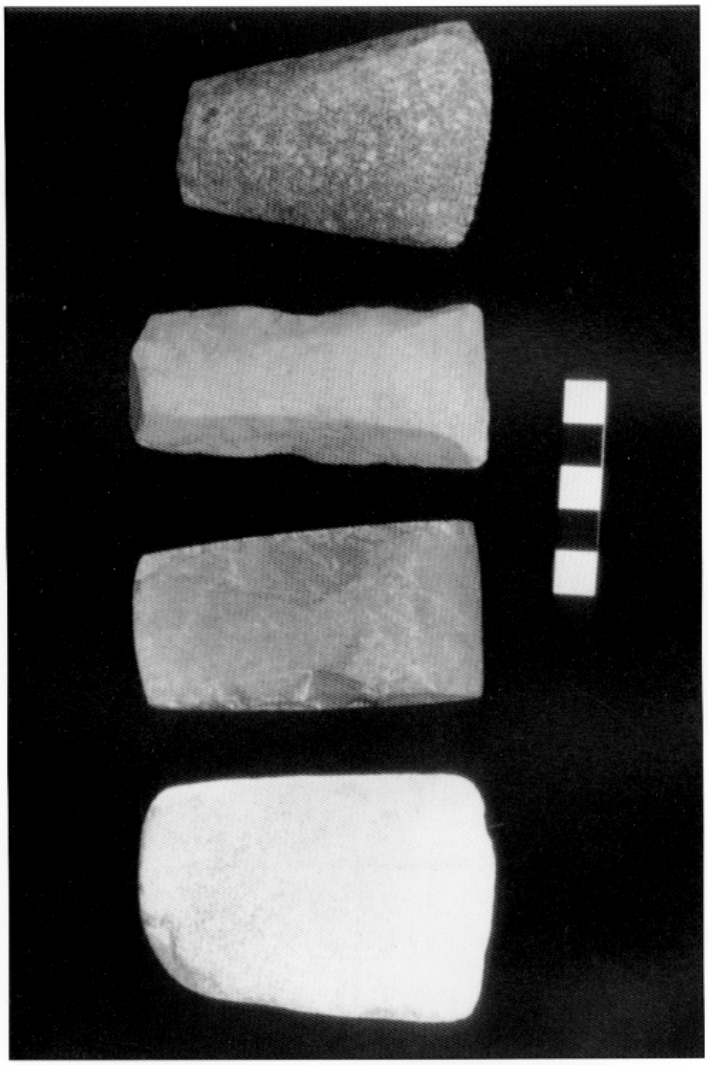

Plate VI Sha Lo Wan 1993. Polished stone adzes SFs 68,149,83 and 73. Scale 5cm.
石錛

香港沙螺灣新石器時代遺址的發掘方法及結果

祖彼德

【摘要】

香港新機場的興建工程使大嶼山北部廣泛地區受到影響，沙螺灣是其中之一。在破壞展開之前，香港古物古蹟辦事處在這一帶進行了一連串的搶救挖掘，1993年在沙螺灣一岬角發現了一處新石器時代晚期遺址。發掘人員首先掘出探方，繼而進行大面積的開挖；所得資料，不論存疑與否，全依Context系統分別詳細存檔；所有出土器物亦按此系統逐一登記，並註明尺寸。此遺址層位簡單，從堆積中發現有可能作架設圍欄或支撐房屋用的柱洞、骸骨已無存的墓穴、以及石英坑遺蹟。出土物包括磨光石製工具、磨光石環、石網墜、礪石、石彈子、紡輪、完整的陶製器皿，及相當數量的陶片和燒土等。大部份陶器都屬新石器時代晚期的夾砂陶，其中有光素無紋，亦有飾繩紋；此外，亦有和粗細夾雜的幾何紋陶(約公元前2900-2000年)。

此遺址屬新石器時代晚期。居民的活動大致可分五類：建設、覓食及配製食物、製作工藝、舉行禮儀及殮葬，和社交活動等。聚居之初，可能須要伐木墾土，鑿地豎柱以興建房屋和其他結構，因此石製和木製工具當派上用場。由於有些石材並非本地所產，估計此地與其他區域有一定的交往。此處採得的石英可製成石環，既作裝飾品用，亦可能是禮器，或是身份與社會地位的象徵。除石器製作外，還有陶器的生產。墓穴中的磨光石鋪、磨光石環和完整陶器，有一定的禮儀意義，與先民的信仰有密切關係。由於地質屬酸性，骨和貝類無法保存下來，但網墜的發現意味著捕魚活動的存在；石彈子或與捕獵活動有關。貝類、介殼類和野生植物的採集亦是食物來源之一。至於紡輪的發現，則顯示紡織工藝的存在。雖然沒有農耕實證，但東面及西南面的梯形山坡正適合種植各類莖類、豆類及蔬菜，而東南不遠處的低地亦適合耕種稻米。圍欄結構可能與飼養牲口有關，亦可能有特殊的社會意義，與階級或社交活動扯上關係。