

A BRIEF SURVEY OF THE SAI-YOK EXCAVATIONS, 1961 - 1962
SEASON OF THE THAI-DANISH PREHISTORIC EXPEDITION.

by

H.R. van Heekeren

This year's excavations at Sai-Yok were a direct outgrowth of the previous year's successful test excavation at the same site (one rock shelter and two adjacent caves, located south of the well-known Sai-Yok waterfalls).

The information gathered from the test excavation has been briefly summarized in "The Journal of the Siam Society", November 1961. A second short note devoted to the Sai-Yok neolithic pottery is in the press. It is the first Palaeolithic-Mesolithic-Neolithic locality to be scientifically investigated in Thailand.

Engaged in the excavations were: Eigil Knuth (Denmark) Chin You-Di (Thailand) and H.R. van Heekeren (Netherlands). Ten local men were enlisted for the diggings. All finds were measured in vertical and horizontal plans, numbered and catalogued. Many maps, plans and profiles with registered phenomena have been made by Eigil Knuth in the most accurate way and are founded on minute observations. A daily record of the progress of the work was also kept by all three members.

The excavations started on December 2.

The Sai-Yok shelter stands alone in affording a very deep deposit representing several occupation layers and providing pretty definite stratigraphy. The main phases from top downwards, read in broad terms as follows:

The uppermost layer was composed of dusty rubble of angular limestone fragments containing a mixture of historic potsherds and some discarded pebble tools. This overlies a shallow layer with a neolithic bowl and some neolithic polished axes, among them one shoulder axe (which type is quite common throughout South China and Indo-China; some scholars link this type to the culture of the first Munda-speaking peoples).

This layer in turn overlies a thick, non-ceramic layer of typical mesolithic, monofacially chipped Hoabinhian pebble tools, plano-convex in section. Leading forms are: Sumatraliths, disc and tortoise scrapers and small, finely dressed oval scrapers.

In addition to stone tools, there are some bone points, hardened in the fire.

A wholly unexpected feature was the intrusion of bladelets (small, narrow flakes with relatively long, parallel sides and non-descript flakes with well defined bulb of percussion and mostly made of shiny textured rocks). This blade-flake horizon with which we are here concerned, does not seem, as far as present knowledge goes to link up with prehistoric cultures from Indo-China and South China, nor as far as I can determine from Malaya. This is not without interest in the present context, because it is also considered possible now that some other outside influences may have arrived occasionally, either by migration or diffusion.

It is naturally tempting to attempt to correlate them with similar mesolithic industries from India but these are things about which we can only speculate at the moment.

At a depth of approximately $3\frac{1}{2}$ metres, there is a break in the deposits and we had to dig down into a hard, red layer to a final depth of 4.50 metres where the rock bottom was reached.

This lowest and oldest layer revealed a fair quantity of large, primitive pebble tools and flakes. Most of them were coated with a very hard clay which is difficult to remove from the object.

In the same layer, bivalve river shells and charred mammal bones and more rarely, teeth were found. The tools show an archaic appearance. Obviously this is a real palaeolithic horizon in which mesolithic forms, as mentioned above, are lacking. Moreover, larger and heavier pebbles were utilized, the working is much cruder.

The difference between mesolithic and palaeolithic, therefore, lies more in terms of refinements than in technological aspect.

Taking all this into consideration, there seems to have been relatively little change in culture through time. The long persistence of pebble tools through several periods of time is perhaps due to local ecological conditions in an essentially unchanging environment.

In the course of a long period the hunting-food-gathering economy must have been based on riverine and forest environment.

During the process of excavation, at several levels, series of flat stones were encountered, together with accumulations of charred bones, mussels, and stone tools, suggesting that we were dealing here with successive living floors.

Besides, we met horizons which were devoid of stone implements, indicating that occupation perhaps was temporarily or seasonal in character.

Waste—and refuse flakes from the manufacture of the pebble tools were found throughout the deposits. A large quantity was collected for closer study. Bivalve fluviatile mussels and charred bones were found from top to bottom. Shellfish, it seems, was an important article of diet.

To our dismay good charcoal was absent. Instead we took shells and charred bones from successive layers for carbon testing. At a rather high level we found a fragmentary human skeleton of which the skull was lacking. It was embedded in a hard breccia.

So far as systematic excavation is concerned, our activities have not only been confined to the rock shelter proper.

Reference, therefore, should also be made to a trial trench, 1.50 metres wide, down the talus slope. In this trench, a great number of pebble tools were collected, a few in the upper part, increasing in number downwards, with an accumulation at the junction of the slope with the upper terrace, eight metres below the surface of the rock shelter. Here a pit was sunk, more than four metres in depth.

Pebble tools were found at all levels. In order to get better information about the stratigraphy, a large trench was laid out, $4\frac{1}{2} \times 3$ metres and perpendicular to the slope trench.

Here it was found out that in the course of a long period, all kind of archaeological material has been washed down from the slope, forming a confusing mixture of cultural elements together, in the first 1.50 metres notably neolithic potsherds, an iron axe, a polished axe and mesolithic tools.

Deeper we observed, what is at first sight at the same level:

- a) along the north wall of the trench, a floor with an abundance of pebble tools of a mesolithic habitus, and many refuse flakes suggesting a working place or atelier from that period.
- b) along the south wall, in a soft red clay layer, a concentration of neolithic broken vessels.

This can adequately be explained on the basis that the surface of the site is sloping to the south. Actually the neolithic horizon lies 183 cm. and the mesolithic floor 228 cm. below the surface respectively. The excavation here is not finished.

Finally, in the left cave (when facing the rear wall of the rock shelter) a trench has been excavated 3.40×1.65 metres.

The upper layers were much disturbed. Neolithic potsherds, some mesolithic tools, fragments of a bronze Buddha figurine, a spindle whirl of baked clay, iron tools and Bronze Age beads and potsherds and charred human bones were found in one and the same layer.

In an archaeological context, however, a small, beautiful Ming (?) vessel was unearthed. It was covered with a lid and containing some ash and small bones of a child. On the rock-bottom was found a neolithic burial "in situ". Except for some bones, the skeleton was disintegrated. It had been lying in an east-west extended position with the head pointing to the east. At the head, funeral gifts in the form of three large broken vessels (of the Black Pottery class) were found. At the middle part of the body, a beautiful polished axe of chalcedony, another polished axe and a finely chipped chisel were unearthed. Vessels, laid down at the foot-end, have been excavated last season in an adjacent sector.

All by all the Sai-Yok sites have revealed a great quantity of well-documented data starting with palaeolithic, followed by mesolithic and neolithic and a few traces of Bronze and Iron Age.

We have achieved to arrange the prehistory of the Kwae Noi Valley in broad terms in their relative chronological order.

With last year's finding of Sawankalok ware, and a fine bronze Buddha head and this year's Ming ware, we begin to emerge into the full light of history. The excavation is to be continued.

Sai-Yok, February 3, 1962.