PART I

THE SARAWAK RIVER DELTA EXCAVATIONS

In the summer of 1966 I had the privilege of visiting the Sarawak Museum and the excavation which was taking place on the delta at Santubong near Kuching, capital of Sarawak, the largest state in Malaysia. The name of the state is derived from the river which rises in the limestone mountain on the Indonesian border, drains a wide hinterland, passes by the capital, and which continuing for another fourteen miles enters the South China Sea as a system of great river mouths. One of these is Santubong, where the entrance is marked by two hills, Santubong on the right and Buah on the left, rising above the labyrinthine delta of mangrove and nipah swamp. The river flows in stately fashion between them as if passing through a huge gateway into the sea. It was here that some six sites or localities were being investigated, a project now in its twentieth year.

Standing in front of the headquarters of the excavation party, which was located on a promontory at the mouth of the river, one could be moved poetically by the waves which were forever breaking on the sandy beach. On clear days and with a slight imagination one could even have some faint visions of the mountains of Vietnam, Kwangtung and Fukien more than a thousand miles away on the opposite shore.

Cheng Te-K'un, *Archaeology in Sarawak*, Cambridge, 1969

CHAPTER 1

THE SANTUBONG COMPLEX

Santubong, at the southerly corner of Borneo's 750 mile long west coastline, is, today, the largest community in the Sarawak River delta: an elaborate labyrinth of mud, creek, mangrove and nipah palm swamps, leading intricately into and facing out upon the great, empty spaces of the South China Sea. Heading due north, the next dry land is well over 1,000 miles, to southern China. The delta's seldom-very-dry land covers some 30,000 acres. The people of Santubong today are Moslem Malays, the descendants of pagan "Dayaks" converted from the fifteenth century onward. For some centuries this coastal section was ravaged by maritime anarchy and internal disorder. There is no indication that any humans lived permanently or even regularly in the lower reaches of the delta in historic times, until the advent of a new, European engendered law-and-order less than a century and a half ago. For nearly half a millennium before that, the lower reaches of the Sarawak River were a kind of no-man's-land: human occupation was so erratic and sparse that barely a trace of it has yet been recovered in two decades of intensive archaeological search throughout the delta and beyond across the great bay from Santubong to Cape Datu, the corner of land dividing what is now Sarawak in Malaysia from what is now Kalimantan in Indonesia.

But until the second half of the fourteenth century (to before c. 1375 A.D.) this delta was the scene of an intensive and rather extraordinary activity, most conspicuously associated with the collection, smelting, and export of iron (and probably steel)†, but also richly with trade in Chinese ceramics, western glass beads, gold of local origin and much else. A good deal of this background has been set in our previous Data Paper (= H.O.) and Dr. Cheng's recent book, "Archaeology in Sarawak" (1969), plus a general description and socio-ecological survey of the whole terrain in a book by one of us about the present-day population's way of life (Harrisson, 1970)††[1].

A few points, however, need emphasis by way of introduction here:

(i) The hinterland of the Sarawak River is or was once rich in minerals, including iron, antimony (which brought Sir James Brooke, first White Rajah) and gold. In earlier times the headwater area round Bau rated as a major goldfield (see II.5)†.

(ii) Gold also occurs downriver, and has been won both by washing and shafting into historic times (II.6).

(iii) Downriver, in the delta, there is an abundant supply of excellent wood and charcoal for fuel from mangrove, as well as good anchorage for fleets of sea-going ships --the last for over three hundred miles of coastline.

(iv) There is adequate cultivable land, but a restricted supply of good fresh water in many sectors (cf. I.2).

(v) The area evidently supported (then as now) a virile native population from around 800 A.D. and maybe before that, with a vigorous indigenous culture ready to receive--but not to be dominated by--outside influences, which in effect reached this remote place relatively weak in strength and light though varied in depth of impact (II.8-9, 13, III.18-24, etc.).

(vi) Upriver human clearing of jungle and other factors have supplemented natural erosion under a heavy rainfall to produce constant and rapid silting up in the delta, and consequent frequent changes of river course, creek formation and eventual mud-banks reoccupied by tree vegetation. This has meant that a reach easily navigable in 800 A.D. may be up a tiny creek by 1200 A.D. Thus delta sites are never continuous over the whole occupation period (I.2 and 3). This process continues, with vigor today.

This last point is fundamental in explaining the number of distinct sites scattered around Santubong and over the delta generally; and the seemingly "impossible" isolation now of some of the old sites like Jaong (below). The situation can best be seen from the air, where the Jaong creek meanders on one side and the similar Buah (later site) on the other side of the main river, faint relics of once full river-size channels, now choked. This description underlines the crucial point:

> Fly in a plane over Buntal and Sungei Jaong. You can see from above not only tremendous windings of the rivers, which sometimes loop round nearly into themselves and once in a while do cut through and meet, leaving a long ox-bow and the new course; you see equally where old waterways ran and are now filled (in continuous lines of non-communication) by mangrove swamps ranging from new to old stuff--"losing ground" to the other forces of time, of fauna and flora, of mud for much of it--on towards firm soil. (Harrisson, 1970:52).[2]

The Map will give some idea of the distorted geography in a delta where Jaong today is a little backwater, but a thousand years ago was a focal center of iron-working and overseas trade enmeshed with this iron--with wide access both to the trader's sea and the miner's hinterland.

The Sarawak Museum studies since 1947 have concentrated on three large and several small sites (H.O.:9). Only two of those are considered in any detail in what follows:

I.t2. Jaong, 2 miles upriver from Santubong, in main use before and around 1000 A.tD.

I.t3. Bongkisam, a part of Santubong village itself, in main use after Jaong silted up, from c. 1050 to c. 1350 A.tD.

In addition, the large Buah site, broadly contemporary to Bongkisam, is referred to where relevant in that connection, while the interesting small cemetery headland of Tanjong Kubor, broadly contemporary with Jaong, is similarly invoked where necessary.t[3]

CHAPTER 2

SUNGEI JAONG: CREEK BACKWATER AT NOWHERE

Sungei means river, usually a smallish stream. *Jaong* has no presently known meaning and is applied to several small adjacent waterways in the delta.

The creek-stream with which we are concerned is in reality a tidal creek, meandering through dense *nipah* palm and mangrove swamp on the flat land between the Santubong branch of the Sarawak River eastward towards the Buntal branch--as one small element in the Sarawak River delta complex. It is about 15 yards wide across the mouth at high tide, and can then be navigated in a small rowboat for nearly one mile. On very high tides it is possible to push and drag the boat on through into a connecting creek going in the opposite direction for half a mile, into Bako Bay and the South China Sea, west of Buntal village. At low tide, there is only a trickle of saline water in the bed of the Jaong, the rest dense mud, impassable. When work began there in the early 'fifties even at high tide the swamp had so diminished the creek that a lot of time and money had to be spent cutting and clearing a way in; since 1952, the Sarawak Museum has kept this waterway open, and built two good landing piers from the excavated detritus of iron slag.

There is an overland approach to Jaong, also almost overgrown with jungle scrub until re-cleared (in 1949). This runs over almost flat land behind the true right bank of the main Sarawak River and across the foot of Santubong Mountain, from the Bongkisam side of Santubong village through rubber gardens and orchards (rich in iron slag and pot-sherds) on into very poor sandstone soil clothed in low trees and bushes. From this stoney track one emerges--after an hour's hot fast walk--onto sandy grass southeast 500 yards before the Jaong creek, crossing a tiny brook of perfectly clear, cool, clean fresh water flowing at all seasons off Santubong Mountain into a side branch of the Jaong creek. This, the Raso Brook, is the only steady source of potable water in the vicinity, probably as important for local human activity a thousand years ago as today. On this brook the Sarawak Museum group established a camp of leaf-thatch whenever excavations were conducted extensively there; probably this too was an essential water source for any gold and iron work there long since.

The prehistoric material at Jaong starts at the junction of the brook and main creek, where the deep mud and swamp vegetation gives way to the sandy soils on the left going in and up--

the other bank continues flat and inextricably swampy. On this dry-land bank the land now rises into low undulating hillocks which--where not cleared--support a reduced form of true rain forest. In 1952, when serious research began here, a 200 yard strip between the creek and the open land behind the hillock line held trees up to 150 feet high, most of which had overgrowr and often completely disguised the underlying massive sandstone boulders since proved to be abundantly carved and cut by human hands (III.18 below).i

The focus of this now isolated and superficially unpromisir place remains a single carved rock which alone stood uncovered, though far from conspicuous. It is a little up the side of the aforesaid hillock where this comes down most steeply (for 35 feet) towards the creek bed and a thin edgeline of mangrove along the bank there. A large rock above the reach of highest tides, a sort of foot-hillock, it is carved with a half-lifesize spread-eagle figure in bold relief, a curious "head-dress" protruding to one side. This is locally known as Batu Gambar ("Picture Rock"), rediscovered in the last century by a Malay fisherman, and subsequently copied in plaster-cast and repeated on an artificial boulder at the entrance to the Sarawak Museum in Kuching. The design has been widely reproduced--for instance in Ling Roth (1896: 28), Baring-Gould (1909: 39) and by the French archaeologist Madame Colani (1935, II: 300).[4] The learne French lady points out the similarity of Jaong's Batu Gambar in sandstone to a bas-relief in granite from Na Nong in Laos (her Plate LVI) and there is again a rough parallel with an animal figure spread-eagled on a rock near Keo Tane (her XLIX), in which area there are also some rows of relevant grooves deeply cut into natural boulders (LXI cf. XLVIII). Unfortunately, she then proceeds to strain the relationship beyond endurance by mistaking the Museum cast *copy* for another, second, separate manifestation of the Borneo megalithic. She reproduces this cast fairly accurately (her figure 232), but gives a *double* head-dress to the original *in situ* Batu Gambar figure (fig. 231) while noting with apparent pride that this is copied from a photograph and *not* from Ling Roth's 1896 figure--which in fact is the most accurate of any in this excited argumentation. Colani concludes (1935: 301) that "we are in the presence of a 'megalithic civilization' reaching from Assam through Laos to Borneo" (III.25 below).[5]

This Batu Gambar rock was the *only* indication of anything anciently humanistic having happened when the time came to examine the prehistoric potential of this unattractive, out-of-the way, and currently uninhabited, uncultivated terrain two decades ago. Everything else was under jungle, mud, sand or scrub. Yet the figure was so emphatic that its occurrence in such strange isolation far up a little mud-stream seemed implausible unless connected, invisibly, with some unclear cultural tradition. So it was here among the vicious mangrove

mosquitos, that one of us dug a first trial trench: at the foot of the Batu Gambar rock. Under the surface humus and the sub-surface network of roots, an appreciable admixture of what has since become the standard delta trench materials were revealed: imported hard monochrome stonewares and glass beads, local softer earthenwares, a wide range of iron-slag forms and much else. Out of this--at that stage somewhat surprising--positive result, Jaong was taken seriously as a site, subsequently largely cleared and systematically excavated during three seasons.

From our present point of view Jaong is most significant for three things:

1. Parts of the site (which extends at least 43,500 square yards) are rich in *small pieces of gold*--usually as foil, specifically shaped--and associated with a layer of *laid naturally rounded pebbles*, along with small, rare whole vessels of old Chinese stoneware (III.8, 19, 21).

2. This part, totaling close to 750 square yards (2% of the site) is surrounded by and in places encroached upon by natural rocks *reworked by human agency*, of which Batu Gambar was the only one not covered by later overgrowth or silting up, when excavation began two decades ago (III.18).

3. The whole is part of the primarily iron-working complex and intimately associated with iron in space and time (H.O.: 38).

The exact dating of the Jaong occupation is hard to come by. There are difficulties in the use of Carbon-14 dating, owing to extensive disturbance (H.O.: 17). The large numbers of sherds and small number of whole pieces of stoneware, all made in or about China, provide the best indicator. There is a distinctive and consistent difference here between Jaong and the other two large iron-working sites excavated at Buah and Bongkisam. Jaong is, for instance, strong in Yueh wares, including true Yueh bowls, jars and other shapes, iron-dotted wares, slashed bowls, folded-rim or high-footed bowls in white-ware. These early forms are absent in Buah and Bongkisam. Celadon wares of the Sung dynasty, including Lung-ch'uan, are abundant at Buah and Bongkisam, but wholly absent from Jaong (cf. Zainie and Harrisson, 1967: 85).[6]

We will return to this problem later. Meanwhile, on all presently available criteria, Jaong dates earlier than the other two (Bongkisam and Buah)--they terminated about 1350 and before 1375 A.D. (H.O.: 18). Jaong can be safely put "around and *before* 1000 A.D.," running stoneware-wise through the T'ang dynasty in China into the early Sung, which started in 960 A.D.[7]

CHAPTER 3

BONGKISAM: THE LATER PHASE

Bongkisam is an extension of Santubong village, on the other side of the creek of that time. Later than Jaong (at 1050-1350 A.D.) it is similar in many respects and certainly in the same close, indigenous traditions. The site is now covered in village overspill and rubber gardens. The main excavations have been carried out in the land of our old friend and colleague, A. K. Mericen Salleh, who allowed this work to destroy his rubber assets. The most important feature, for the present study, was the discovery of a stone-built shrine, rich in gold and other relics, on his land. This is fully described in the appropriate following chapters.[8]

To compare Bongkisam with Jaong--both nestling at the foot of Santubong Mountain--as we constantly do hereafter, is to compare two separate but continuous manifestations of the same operations (operations in iron, gold, stone, stoneware, pottery, glass and so on) in the same environment, so that the outside ecological and physical variables are reduced to a minimum, a situation highly desirable but seldom achievable in Southeast Asian archaeology. It is thus possible to trace changes in procedure, style, and whatever else shows from those artifacts which can survive in the open in this soil and climate and disturbance, over those centuriest We have already shown some changes, on a small scale, in iron technology (H.O.: 125, etc.)t Now we shall see some more apparent changes in the fields of gold and stone, though still inside a firm matrix of a Sarawakia character not so much consecutive as strong, persistent and remarkably adaptive.t[9]