

THAI-DANISH PREHISTORIC EXPEDITION 1960-1962.

*Some notes on the Bronze Age of Thailand and the Excavation  
of the Sawmill site at Wang Pho*

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**Dongson in Thailand:** It may not be out of place to mention that there is an interesting collection of Bronze Age objects housed in the National Museum in Bangkok. For the greater part they belong to the so-called Dongson culture (named after the type site in North Annam), which penetrated Southeast Asia about the 4th or 3rd century B.C.. Heine Geldern has tentatively proposed that the term Dongson culture should be used for the whole of the Bronze Age; future research may compel us to restrict its use considerably.

The overwhelming proportion of the objects, to be considered, has been gathered by accident rather than by design, and must be classified under the heading, stray finds. They consist a.o. of bronze socketed axes and spearheads, pottery, beads and bronze cone-shaped bells with a loop on top, presumably worn as pendants. The excellence of the metalcraft, however, is seen at its best in the superbly cast and highly ornamented bronze kettledrums of the Heger I type, stored in the museum. The drums have a bulbous upper section, a vertical middle part, a conical hollow foot and a tympanum which always shows a sun—or star motif in the central field: two pairs of handles, imitating plaits of fibre, are attached to the upper and middle part of the body.<sup>1</sup>

Nowadays it is well-known, that quantitative analyses of artificial alloys of prehistoric bronzes of the Far East have proved that in the majority of cases, such bronzes were made with a surprisingly high proportion of lead in their composition. It is also known that copper is rather scarce and expensive in this part of the world and, therefore, the possession of bronze ornaments, tools and weapons was the prerogative of a relatively small ruling class and was beyond the reach of the ordinary peasant. It follows that, stone continued to play an important part throughout the Bronze Age and, in fact stone axes were still widely used.

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1. Guehler, U. 1944: Studie über alte Metall-Trommeln. The Journal of the Thailand Research Society, Vol. XXXV, Pl. 1, pp. 17-71.

The origin of the Dongson culture is much disputed. Two main distinct points of view are known. Heine Geldern<sup>2</sup> argues for a Hallstatt-Transylvania-Caucasian source, migrating across Central Asia to Western China and Indochina respectively. Karlgren<sup>3</sup>, however believes he has traced the origin of this culture back to the Huai Valley in South China.

By now it is well-known, that this culture is widely spread geographically, covering South China, Indochina, Thailand and the greater part of Indonesia as far as lake Sentani in West Irian (New Guinea). *The Ongbah cave*: During our first stay in Kanchanaburi, prior to the first reconnoitring trip in 1961, the Governor showed us a beautiful and well-preserved bronze kettledrum of the Heger I type. We were told that the drum had been found some years ago in the Ongbah cave upstream of the Kwae Yai and approximately ten kilometres west of Sri Sawat village; a second drum was lost during transport to Bangkok.

In the central field of the tympanum we saw a sun emblem with twelve rays and a row of flying herons. In addition there were rows with geometric motifs in the form of small circles connected with tangents, which can be looked upon as a late simplification of the double spirals; there was also a great assortment of feather symbols on the body and tympanum such as semi-artificially ocellated plumes or wings, which were the chief emblems of head-hunters at that period.<sup>4</sup> All the conventional and magic symbols were done in low relief.

The drum lacks, however, the ritual scenes such as plumed warriors in spirit boats, hunting scenes and scenes of festivals with which the early Dongson drums from South China, Indochina and the eastern part of Indonesia were often embellished.

All in all, the drum displays the decorative and stylistic features, familiar to us of the late Dongson culture, and it must therefore be assigned to that period.

2. Heine Geldern, R. 1951: Das Tocharerproblem und die Pontische Wanderung, *Saeculum*, Vol. 2, pp. 225-225.

3. Karlgren, B. 1942: The date of the Early Dongson culture. *Bulletin Museum of Far Eastern Antiquities*, Stockholm, Vol. 14, pp. 1-28.

4. Schuster, Carl 1953: Head-Hunting Symbolism on the Bronze Drums of the Ancient Dongson Culture and in the Modern Balkans. *Actes du IV Congrès International des Sciences Anthropologiques et Ethnologiques*, Vienne, Tome II, pp. 278-282.

In the beginning of December 1961, we took the opportunity of paying a visit to the cave mentioned above, for the purpose of collecting more objects of the Bronze Age. In the course of our investigation we found that deep pits had been dug by treasure hunters who obviously were interested only in the valuable Sawankalok ware and who left behind the other prehistoric relics which were unearthened. All the same, we managed to obtain from the surface a great wealth of prehistoric objects notably a.o. 29 mesolithic tools, 4 polished stone axes, 4 grinding stones, 88 fragments of bronze armrings, a number of ancient iron implements, a large amount of potsherds, and 41 complete earthenware vessels of the Neolithic and Bronze Ages respectively. Large wooden coffins were lying scattered around. The lids were removed and contents taken. Other precious relics were larger and smaller ornamented fragments of at least four different kettledrums; the fragments will be cleaned and studied in Copenhagen.

Finally we observed a bronze conventional frog in a village house near the river; it was said that the object belonged to one of the drums in the Ongbah cave.

*Sai-Yok* : Only a few additional remarks are needed on some Bronze Age findings unearthened in the course of the Sai Yok excavation. In the upper layers of the large cave of this locality some carnelian beads and a number of small, pale-blue glass beads were found, together with Bronze Age pottery. The most important single find, however, was a beautiful bronze bell, round in shape and with a loop on top. The object was adorned all over, with spiral designs in low relief.

*The Sawmill Site at Wang Pho* : Prior to the activities of the Thai-Danish Expedition in the Kwae Noi Valley, a Sheldon Travelling Fellow of Harvard University, Karl G. Heider, had explored the same area, in 1956. We know from his report<sup>5</sup> that in the course of the construction of the sawmill, one year earlier, a large amount of soil was removed, down to a depth of more than three metres. During the operations, urns with human skulls, socketed bronze axes, polished stone axes, carnelian beads, spindle whorls and pottery were exhumed. One vessel contained ten conical bronze bells; another, which is now on display in the National Museum at Bang-

5. Heider, Karl G. 1957: New Archaeological Discoveries in Kanchanaburi The Journal of the Siam Society, XLV, 1, 61-70.

kok contained a socketed bronze axe and a polished stone axe; it is a grey coloured pot, 15 cms in diameter.

On November 25 and 26, 1961, we were in a position to visit the site in question; from the vertical wall were taken a conical bronze bell, a perforated stone plate, a small yellow pot, a number of grey, yellow, red and black sherds, some metal slags and some quartz flakes. All the evidence suggested that we were dealing with a rich burial site of the Bronze Age, and from an efficiently conducted excavation we might have expected many finds. Actually we encountered the exact opposite of our expectations. By general consent, Wang Pho was selected for more detailed study and stratigraphic excavation. The locality is situated south of the sawmill and there were no indications that it had suffered any disturbance.

I left Sai Yok early in the morning on Wednesday, February 7th, 1962 by speedboat and arrived at Wang Pho in the afternoon of the same day. At once preparations were made for excavation and agreements were obtained from the owner of the sawmill. Next morning, the first step taken was to strip the site of vegetation next, to lay out two trenches, 3 metres long and 2 metres wide with a horizontal interval of  $2 \times 2$  metres. Later two more trenches were opened, measuring  $4 \times 3$  metres and  $5 \times 3$  metres respectively.

The excavation, conducted by the author with the much appreciated assistance of Mr. Tjirapat, commenced on February 8th and continued for 20 days.

A 7-14 men digging crew was employed, operations proceeded sector by sector and a daily progress report of the work was kept.

Every object or sherd found was recorded carefully by three-dimensional projection. The depth was levelled from an arbitrarily chosen point of departure. In the process of excavation profiles with stratigraphic soil formation were established. The finds were found in sufficient depth to be suitable for stratigraphic analysis.

For the time being we will have to be satisfied with a brief description of the most important data obtained in the course of excavation, sector by sector. Only when the boxes with finds have arrived and have been properly studied, will it be permissible to give a full archaeological account and to make more definite statements.

A tentative summing up of the results may be as follows:

**Sector 1:** In this sector we had a distinct soil formation sequence. At least two cultural phases are apparent, notably a historical horizon (Choukoutai) overlying a Bronze Age horizon.

The first sherd came to light at 62 cms below the present surface. These sherds were rather small, unadorned and waterworn with round edges: they continued to be found to a depth of 124 cms. Beneath this level the first Bronze Age sherd could be observed; the sherds of this period were larger and found in unrolled condition, among them large rim- and bottomsherds. Some sherds were cord-marked, others decorated with incised straight lines. Nondescript stone flakes without secondary finish, some of them showing a distinct bulb of percussion were found throughout this horizon.

A striking find was made at a surface depth of 127 cms.: it was a peculiar, thin-walled, yellow-grey vessel or coffin of earthenware measuring 55 × 35 cms, rectangular in shape with round corners. The coffin was covered with an inverted coffin of the same shape, and both were stepped. The whole had been buried intact and was still complete.

It was placed in east-west direction, resting on a 25 cms. thick hard layer of sand. The basal face of the vessel was decorated all over with incised circles and curvilinear geometric designs; it contained fine sand but no cultural relics of any kind were found.

Its particular importance lies in the fact that it has perhaps great classificatory value, because if I remember well, stepped vessels have their counterpart in the Indochinese Bronze Age. They were probably brought to this region by some ethnic movement from Indo-China. A simple stone knife was found at a depth of 205 cms and a large concentration of sherds was observed at 215 cms. Sherds continued to be found to a depth of 227 cms.

At a low level, namely 305 cms, much charcoal was found over the whole surface of the sector, but there were no cultural remains. Excavation was stopped at a depth of 335 cms without encountering a clearly defined bottom.

**Sector II:** Broadly speaking this sector presents the same picture as the former one. Thus, at least two different phases of civilisation can be observed; the stratification too is the same as in sector 1. The historical horizon runs from 80 to 140 cms, the Bronze Age

horizon to 269 cms. Among the potsherds are black ones with incised parallel lines and cord-marked ones. We finished excavation at a surface depth of 350 cms.

**Sector III:** It was not possible to distinguish soil formation sequences here. The sandy soil was very hard and difficult to excavate. The first sherd came at a depth of 50 cms. Among the historical sherds was a quantity of glazed ware. Metal slags were unearthed at 112 cms. and a large polished stone axe at 127 cms. Some cord-marked sherds were found at the same horizon. At a depth of 170 cms excavation was stopped.

**Sector IV:** There was a complete absence of soil formation sequences. Some glazed sherds were unearthed in the upper horizon at a depth of 130 cms, a broken globular pot was found; the pot is restorable.

Lack of time forced us to abandon the excavation of this sector after a surface depth of 150 cms had been reached.

To summarize, a first effort has been made to obtain a sound knowledge of the Bronze Age of this area. From the above notes it can be concluded that this aim is still far from being realized.

This does not in any way affect our impression that it is fairly probable that further investigation of other Bronze Age sites in the Kwae Noi Valley will enable us to obtain fuller knowledge of this interesting period.