

## THE STONE AGE IN THAILAND

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**ABSTRACT.**—A review of the progress in prehistory in Thailand. The author describes the attempts made by a score of scholars to verify the existence of prehistoric people and their migrations as indicated by the stone tools discovered in the kingdom. Among the finds are palaeolithic hand-axes, choppers and chopping-tools, neolithic shouldered celts, microliths and a necked-axe. A fossil of a hippopotamus belonging to the Pleistocene epoch was also found.

### INTRODUCTION

**P**REHISTORY, in its strict sense, is little known in Thailand. Thanks to the exhaustive efforts of a score of learned scholars



and collectors, the veil of Prehistoric Thailand has to some extent been raised. The first paper on prehistory in this kingdom was published in 1926 by I. H. N. Evans: "An Ethnological Expedition to South Siam" (*Journal of the Federated Malay States Museum*, 12, Pt. 2., 1926).

Four years later came A. F. G. Kerr and E. Seidenfaden's "Ethnology" (*Siam, Nature and Industry*, Bangkok, 1930). This was followed by other papers by I. H. N. Evans: "Stone Objects from Surat, Peninsular Siam" and "On some Pottery from Surat" (*Journal of the Siam Society, Bangkok*, Vol. 24, Pt. 2, 1931). The other works are Fritz Sarasin's "Prehistorical Researches in Siam" (*ibid* Vol. 26, Pt. 2, 1933), E. W. Hutchinson's "Megaliths in Bayab" (*ibid*. Vol. 31, Pt. 1, 1939) and "Megaliths in Thailand" (*ibid*. Vol. 31, Pt. 2, 1939), E. Seidenfaden's "On a Find of Neolithic Implements" (*Journal Of Thailand Research Society, Bangkok*, Vol. 32,

Pt. 2, 1941) and "The Peoples of the Menhirs and the Jars" (*ibidem*. Vol. 34, Pt. 1, 1942), H. R. van Heekeren's "Stone Axes from the 'Railroad of Death'" (*The Illustrated London News*, April 5, 1947) and "Stone Age Discovery in Siam" (*Chronica Naturae*, Deel 103 Af 1.1/2 Jan.-Febr. and *Proc. Prehist. Soc.* 1949), Fritz Sarasin's "Researches préhistorique au Siam (*L' Anthropologie* 43 : 1-40), Hallam L. Movius "Lower Palaeolithic Cultures of Southern and Eastern Asia," E. Seidenfaden's "Ethnology" (Thailand, Nature and Industry, Bangkok, 1953). H. R. van Heekeren's "New Investigation on the Lower Palaeolithic Patjitan Culture" (*Bulletin of the Archaeological Service of Indonesia*, 1955, No. 1).

In order to diffuse knowledge among his co-patriots, H. S. H. Prince Damrong, one of the most learned scholars of Thailand, wrote, in 1934, in Thai, a pamphlet on general prehistory. This is the first Thai work of its kind ever written in this country.

The collection of prehistoric artifacts now being exhibited in the National Museum, Bangkok, began in 1927. In that year Abbot Mai of Khao Thamoan Monastery, Petchaburi, gave a stone celt to Prince Damrong. More and more prehistoric objects have since been added to the said collection by purchasing, donating, collecting, or excavating.

## HISTORY OF RESEARCHES

Before the year 1931 no prehistoric researches were undertaken in this kingdom. Only a certain number of polished neolithic axe-heads and potsherds discovered by chance have been collected.

In 1931 prehistoric researches were pioneered by Mr. Fritz Sarasin, a Swiss Professor. He is the first prehistorian to discover palaeoliths in three caves. These most primitive stone implements were personally called SIAMIAN by the discoverer.

The second discovery of old stone age tools was made during the year 1943-1944 at Kanchanaburi by Mr. H. R. van Heekern, who was then a prisoner of war working on the railroad of Thonburi-Wangpho line, (now a Prehistorian of the Archaeological Service of the Republic of Indonesia). There he found some pebble tools that form part of the Chopper-chopping Tool Complex of the Far East. The type-station is Ban-Khao, a small hamlet 35 kilometres north-west of Kanchanaburi Railway Station. As these implements were met with near Kwae Noi, a tributary of the Mekhlong, Mr. van Heekeren proposed to name them "Fingnoian". Eleven years later a group of three archaeologists, i.e., Mr. Chin You-di and Mr. Charoen Phanudhi of the National Museum and Mr. Carl G. Heider of Harvard University, U.S.A., went to explore Kanchanaburi. The expedition was jointly supported by the Thai Government and the Asian Foundation. The area they closely scrutinized is between Ban-Khao Station and Wangpho Station being a distance of 26 kilometres. After pacing up and down along the railroad, sometimes along some streams and gravel beds and entering many caves, they discovered more Fingnoians, two neolithic sites and a Bronze Age settlement. In December of the same year seven students of the Archaeology Faculty, University of Fine Arts, led by their instructor, went to Wangpho. They dug an archaeological trench there and found 7 pigmy tools embedded about 3 metres deep from the ground-level. Information on more prehistoric sites has since been acquired through persons interested in pre-historic researches. In the beginning of January 1957, while digging

post-holes for a camp, two geologists of the Department of Industrial Factories, Mr. Wichit Na-mart and Mr. Thos Phanthoomasen, found some neolithic shouldered celts and potsherds. One of the celts is made of chalcedony.

## HUMAN AND ANIMAL FOSSILS

A search for human fossils in this land is mentioned in Ruth Moore's "Man, Times & Fossils". The author tells us that Dr. Davidson Black, Professor of Anatomy at Peking Medical College, who felt that man must have originated in Asia, went to search for fossil man in Jehol. There he found nothing. Next he came to Thailand, for he thought that early man might have moved up into China from the south. Again he found nothing significant.

In 1953 the National Institute of Culture sent to the Department of Fine Arts, for consideration, a translation of an article on the "Discovery of Neolithic artifacts at Surathani" and a "Search for a Human Skull" by Mr. Tage Wergeni-Anderssen, a Swedish mining-engineer and forestry consultant, who has lived in this country for more than 27 years. From the translation we learnt that Mr. Wergeni-Anderssen had been informed of a discovery of a human skull of an extra ordinary size, i.e., 2 feet in length, in Peninsular Thailand and after long exposure to rains and sun it had rotted into fragments. He himself found a long human upper leg-bone, which he believes to belong to the Eng-jaidai, a hill tribe living in the mountainous region of Indo-China. He concluded that if systematic investigations were made in limestone caves in the Southern Thailand, human fossils preserved by saltpetre might be found under the thick layers of long accumulated excrement of bats, and such human remains might be older than those of the Neanderthal. In 1928 and 1932 he sent some pieces of human bone and specimens of neolithic tools to Copenhagen and asked experts of the Danish Ethnographical Museum to help him in the search for human fossils in Thailand. As the necessary funds were not available, the expedition was withheld. With regard to the



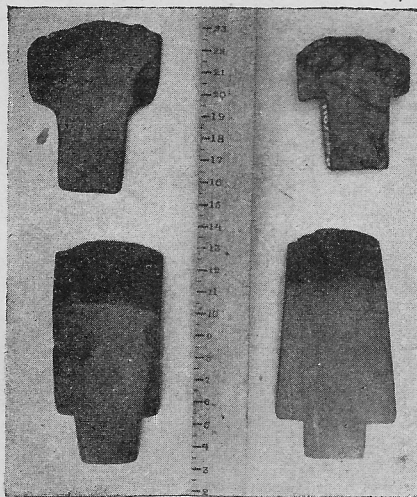


Fig. 1

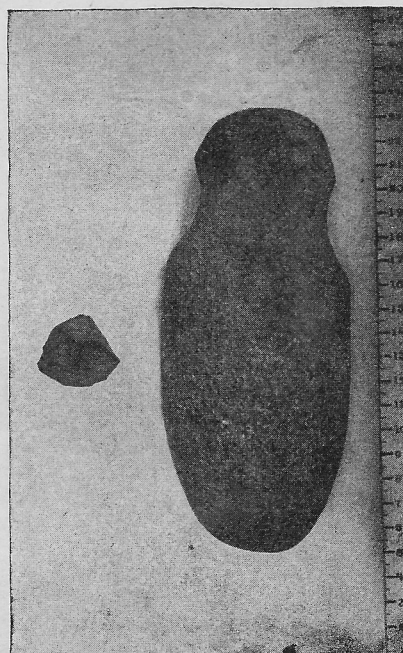


Fig. 2

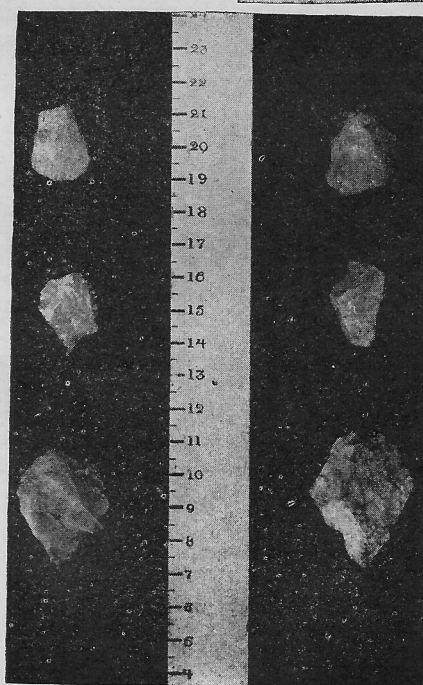


Fig. 3

possibility of finding prehistoric human fossils in this kingdom, two scholars, Mr. A. Kerr and E. Seidenfaden also wrote, "A systematic exploration of the many limestone caves that honeycomb the hills of Northern, Western and Southern Thailand would no doubt yield a rich harvest of the remains of extinct animals and human beings, among the latter probably of both *Pithecanthropus* and perhaps even of *Gigantopithecus*. Such finds would bring us back to the Pleistocene age some 200,000 years ago, may be, even to the Pliocene too".

Prompted by the report made by Mr. Manit Valliphodom, Division Chief of Archaeology, that an identified fossil found embedded on a wall of a limestone cave at Na Sarn District, Surathani Province, a group of Thai government officials was sent to the said locality. This group comprised a professor of anatomy, Dr. S. Sangvichien, a geologist, Mr. Kaset Phithakpraiwan and two archaeologists, M. C. Subhadradis Diskul and Mr. Chin Youdi. The result of the investigation was that the fossil was found to be an ancient mammal which cannot at present be identified. There they were told that in some villages human skulls of extraordinary size were found. Some are as big as Buddhist priests' begging-bowls. They then went to those places and found nothing. The villagers told them that the skulls in question had been burnt many years before their arrival, for there is a firm belief among the people that those who die uncremated can not be reborn.

In 1943 a hippopotamus skull and leg bones were found at Nakorn Swan District, Nakorn Swan Province, in Central Thailand. They were identified as those of the Pleistocene epoch by the British Museum of Natural History. Rib-bones, teeth and a jaw of a very strange animal were also discovered in 1939 about 2.50 metres deep near a canal in Smuthasongkhram Province. According to a scientist, the jaw is assumed to be that of a mammoth.

## PALAEOLITHIC PERIOD

Thailand in the Old Stone Age may be divided into the main cultural provinces—Western Thailand having its type-station at Ban-khao, where the chopper-chopping tools were discovered by Mr. van Heekeren, and Northern and Central Thailand having the hand-axe found at Chiangmai by Professor Fritz Sarasin as its characteristic tool. During their exploration to Ban-khao the group of two Thai archaeologists and a graduate from Harvard University collected 107 pieces of choppers and chopping tools. Most of them are core-tools made on flat or oval pebbles by unifacial flaking along the upper surface of either one edge or two adjacent edges. The ventral surface is flat and unflaked. Among these artefacts there are three flake-tools. The stone used for making these tools by the Palaeolithic inhabitants of the Kwae Noi valley are quartzite, sandstone and claystone. Three months after the re-discovery of the Fingnoians Mr. Karl G. Heider wrote from New Delhi to M. C. Subhadradis Diskul saying "Harvard's collection of 20 artefacts from the Kawe Noi Valley has arrived successfully, and Professor Movius has written me about his reactions. You will be happy to hear that he agrees with you that some of them may have been made only a few centuries ago by people still at a low level of technology. However, he does agree with me that a good number of the artefacts are from the true Palaeolithic age".

In his interesting report Professor Fritz Sarasin informed the world that prehistoric tools with a purely palaeolithic character were discovered in some provinces of Thailand, viz., Chiangrai, Chiangmai, Lopburi and Ratburi. They are: 5 points, 2 scrapers, 1 knife blade, 1 coup-de-poing, 1 disc, 1 hammerstone, 1 plate for grinding ochre, 1 pick, or point, 7 other implements, and ochre. The materials used are

## EXPLANATION OF PLATE 37

- Fig. 1—Shouldered Celts found in Thailand.  
 2—A necked axe found in Satool Province, and a microlith found at Wang-Pho, Kanchanaburi Province.  
 3—Microliths found at Wang-Pho, Kanchanaburi Province.



diabase, slate, chert, quartzite, rhyolite, limestone and bone. These were found at Tham Phra in Chiengrai, Tham Chom Thong in Chiengmai and Tham Kra-dam in Lopburi. "Tham" in Thai means a cave. Professor Fritz Sarasin dug 3 archaeological ditches, two at Tham Phra and the other one at Tham Kra-dam. He described his excavation works as follows; "Near the entrance of the cave (Tham Phra) a longitudinal ditch 2 metres long and 1 metre broad was cut out. The profile was a most simple one. A superficial layer, about 20 cm. deep, was formed by sand mixed with fragments of bricks. Then followed a layer of about 80 cm., consisting of earth coloured gray by ashes. In the upper part of this layer some sherds of plain and cord-marked pottery were found, a little deeper a certain number of crude implements of palaeolithic character, made from rhyolite and other eruptive rocks, also some round pebbles having been used as hammer-stones, some lumps of red ochre and some broken bones of mammals were found. Beneath this gray deposit the earth became yellow, frequently mixed with fragments of lime-stone, but without any sign of human workmanship. A second ditch, perpendicular to the first one, made the following day, gave the same poor results.

Two niches in the background (of Tham Kra-dam) had fortunately been left uncovered, permitting a search. The soil of this part of the cave to the depth of 1 metre and more was literally filled with numberless shells of *Cyclophorus*, intact or intentionally broken. The use of ochre was clearly shown by the red colouring of some of the stones". The form of palaeolithic tool called Siamian, as Professor Fritz Sarasin says in his general conclusions, is only approximately comparable with the skilfully executed implements of the classic Palaeolithic cultures of Europe. One is even frequently tempted to look for their relation with Prechellian cultures.

Who were the makers of the palaeolithic tools found in this land? Thais in the Sukhothai period (13th century A.D.) believed that a Brahma and his followers were the earliest men. They came from Heaven, and, after having tasted some sweet soil, they decided to live permanently on earth. This

myth was recorded in "Trai-bhumi", a Thai cosmology written in the 13th century A.D. Once during my boyhood I was told a tale of "Khon-roo" by an old man. Pointing to the Sra-Bab Mountain in Chantaburi Province, he said "Look! There live Khon-roos. "Khon-roo" in Thai means men and women who live in hollows. They are of small stature. Their feet are as small as the shells of shellfish. These are what the Thai layman knows about the earliest man.

At Choukoutien in northern China stone tools of a type similar to those found at Ban-khao have been found in association with skeletal remains of the Hominid, *Pithecanthropus pekinensis* (Pekin man). This may be considered as a evidence for supposing that the palaeolithic inhabitant at Ban-khao is the *Pithecanthropus*. As for the Siamians, Professor Fritz Sarasin ascribed them to the Proto-melanesian stock.

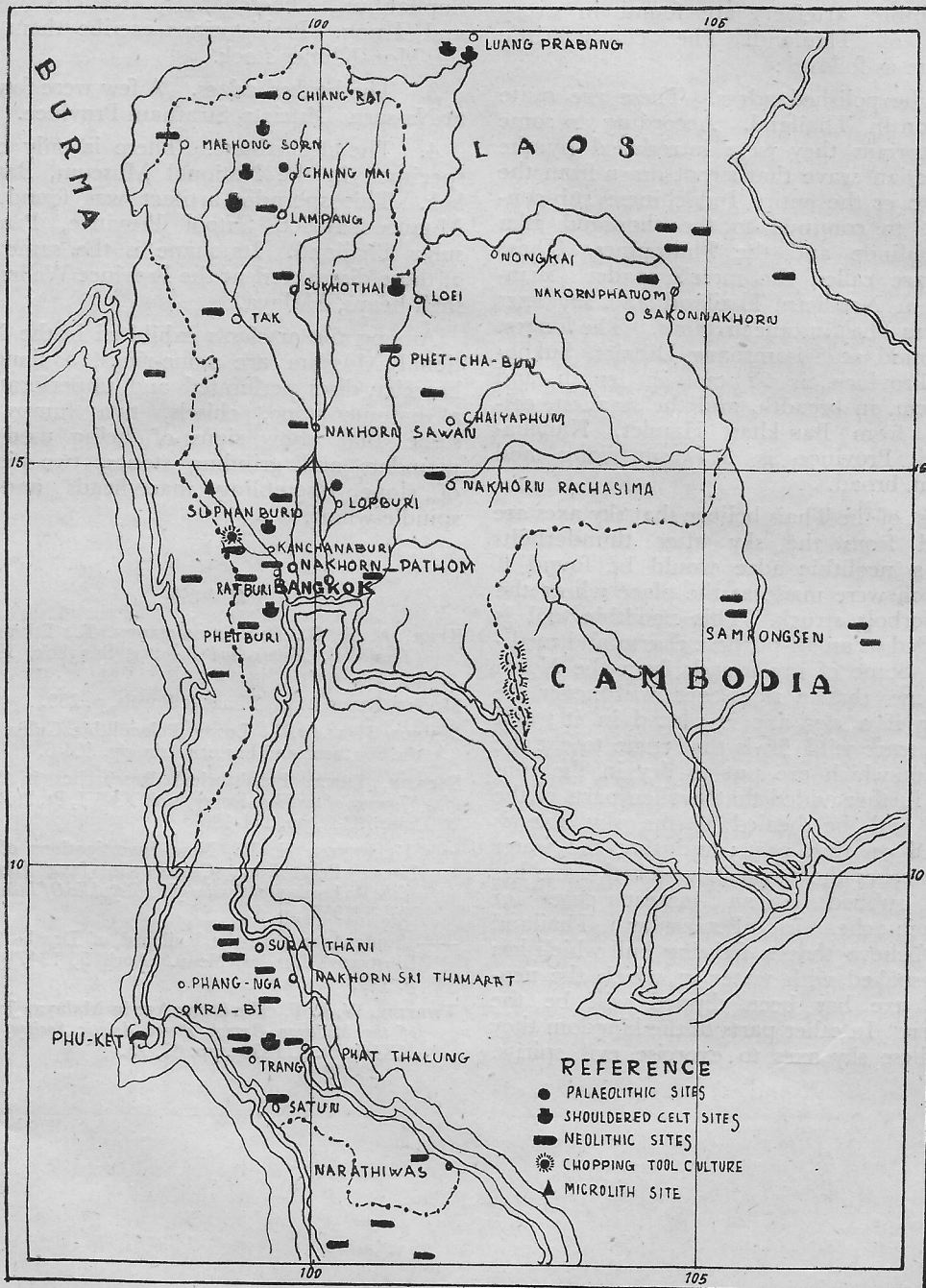
#### MESOLITHIC PERIOD

During the year 1934-1944 Mr. van Heekeren found in a cave at Wangpho, Kanchanaburi Province, a corase and large mesolithic scraper. In 1953 Mr. W. F. T. Tweedie wrote, in his new work, "The Stone Age in Malaya", as follows: "Only superficial investigations have been made in Siam, but they have been sufficient to reveal a similar mesolithic culture (i.e. Hoabinhian) in caves. In the area comprising French Indo-China, Siam, Malaya and North Sumatra the Hoabinhian attains its full development and is the dominant mesolithic culture."

#### MICROLITHS

In their booklet "Ethnology" (Thailand, Nature and Industry, Bangkok, 1953) Mr. A. F. G. Kerr and Colonel E. Seidenfaden have predicted that microliths associated with the Negritoes and Weddid groups might be discovered in Thailand. The prediction was realised when the students of the Faculty of Archaeology, University of Fine Arts, Bangkok, dug a ditch at Wangpho, Kanchanaburi and found 7 microliths about 3 metres deep. The longest is 4.5 cm. and the shortest one 2.7 cm. in length. The associated finds were fragments of cord-

# STONE AGE INDUSTRIES of THAILAND



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Text-fig- 1



marked pottery, and some lumps of red ochre. These microliths are being exhibited in the National Museum, Bangkok.

#### NEOLITHIC PERIOD

Neolithic artefacts are found in every region of Thailand. The characteristic ones are as follows :

1. The polished adzes. These are quite common in Thailand. According to some prehistorians they were introduced by the Indonesian wave that swept down from the north over the entire Indochinese sub-continent, to continue to the thousand isles of Insulinde and the Philippines. These tools are called the mole's spades (Siemtoon) in Northern Thailand and sky axes (Khwan Pha) in other regions. The longest one found at Srisamroang District, Sukhothai Province, is 22 cm. in length and 12.5 cm. in breadth, and the smallest, collected from Ban-khao Hamlet, Kanchanaburi Province is 3.7 cm. long and 2.2 cm. broad.

Most of the Thais believe that sky axes are hurled from the sky after thunderbolts and, a neolithic adze would be found if a search were made at the place where the thunderbolt struck. This neolithic tool is regarded as an all-purpose charm and medicine. Some of my friends from the North told me that a rice barn will never be empty if a sky axe is placed in it ; and it will scare wild fowls that come to eat the paddies which are put to dry in the sun. They further added that swollen parts of the body will be healed if the sky axe is pressed on that part ; and that the water that washes the vessel in which the axe has been rubbed is an instant cure for stomach-ache. In Peninsular Thailand they believe that a fighting bull which has been soaked with water in which the neolithic axe has been dipped will be the winner. In other parts of the kingdom they use these sky axes to exorcise evil spirits.

It is worthy of notice that some of these tools were found among the pious Buddhists' treasure buried under stupas.

2. The shouldered celts. These were found only in some regions ; i.e., in Northern Thailand, and Provinces of Loei, Suphanburi, Phetchaburi, Kanchanaburi and Trang. Prehistorians ascribe them to the Mon-Khmer stock.

3. The beaked adzes. A few were found at Na-sarn Districts, Sirathani Province.

4. The necked-axe. There is only one specimen in the National Museum, Bangkok. This sporadic artifact was found at Muang District, Satool Province, Peninsular Thailand. Its shape is the same as of those discovered at the Province Wellesley shell-heaps, Malaya.

Among the artefacts exhibited in the National Museum are stone-rings, a flanged bracelet, discs perforated and unperforated, a hammer-stone, chisels, two lumps of stone that show signs of being used as pounders and grinding stones, two pieces of stone resembling mace-heads and a spindle-whorl.

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