

# New Directions in Southeast Asian Prehistory

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## RÉSUMÉ

Après avoir mentionné le manque d'intérêt pour l'archéologie du sud ouest asiatique, l'auteur décrit le travail qui y a été accompli à date et il trace certaines pistes de recherches pour chacun des pays qui restent à étudier.

"New directions" for any subject of research require that the subject has been in existence for a time and that there is an apparent change in some major aspect of that research. There are few workers in the field of Southeast Asian prehistory and the field is little known outside the circle of these few workers. It will, therefore, be necessary to establish that there has been such a field of study as Southeast Asian prehistory and then to show the general path along which the research has been moving before I can suggest that a different direction for this research is being established.

"Southeast Asia" I use to mean mainland Southeast Asia from the 30th parallel (roughly the Yangtze) south to the southern end of Singapore and from the Irrawaddy east to the coast on the China Sea, and Island Southeast Asia which includes all the islands offshore from Formosa to Sumatra (as defined at the 11th Pacific Science Congress in Tokyo in 1966 by the Section of Anthropology). I have little information from what is commonly known as South China.

## THE BEGINNINGS

Mention of prehistoric artifacts found in Southeast Asia goes back to the second half of the 17th century when G.E. Rumphius included two chapters on stone and bronze tools in a book which

he wrote on a portion of Indonesia (Heine-Geldern 1945:129). The first recorded archaeological expedition took place in 1873 when A. H. Everett made cave explorations in Sarawak looking for the "missing link," which he did not find (Harrisson 1958:551-560). This was followed by Alfred Marche's work in the Philippines in 1881 (Beyer 1949:205, Solheim 1953:154), results of which have never been published in other than romantic form. The true beginnings of prehistoric archaeology in Southeast Asia began early in the 20th century.

Archaeological activities, including exploration and excavation, cannot be considered true archaeological research until a publication has been made including detailed presentation of artifacts recovered and description of the site, or sites, from which they were recovered. Previous to the beginning of the 20th century, numerous findings had been reported in the literature and a certain amount of summary and conjecture on these findings had appeared. It was not until 1902, however, that a site report appeared, on Somron-seng in Cambodia, marking the beginning of professional archaeological research on the prehistory of Southeast Asia (Mansuy 1902). This was followed in 1905 by a report on field work done in 1902 in the Toala caves in the Southwest Celebes by Paul and Fritz Sarasin (Heine-Geldern 1945:129).

Not until the 1920's did an organized program of archaeological research really get under way when it developed, seemingly independently, in the Federation of Malaya, Indonesia (Dutch East Indies), French Indochina, and the Philippines. Publications were coming out fairly regularly from 1925 on, except for the Philippines where H. Otley Beyer, though active, published only a few, primarily summary, reports. These country programs developed independently for the most part until the meeting of the Fourth Pacific Science Congress in Hanoi in 1932 (Beyer 1956:26-27). From 1929 on, there was communication among some of the researchers active in the field, though this had little affect on the field programs of the different areas. Personnel and funds for research continued in short supply. Ample illustration of the small amount of international interest is a statement by van Stein Callenfels in a letter to Beyer in 1933 where, in discussing type names for stone adzes, he said: "We three being the only men in the world

writing about these things can fix the names" (Beyer 1951:77). The third person referred to here was Robert Heine-Geldern.

Another approach to prehistoric research is to make reconstructions of prehistoric cultures using distributions of artifacts from surface collections, material culture of recent and present-day peoples, linguistics, statistical analysis of a portion of a culture or cultures, or combinations of these. Many such studies have been and are still being done on Southeast Asia by scholars in Europe and the United States. The foremost exemplar of this type of scholarship for Southeast Asia is Heine-Geldern. His first reconstruction appeared in 1923 while the major work on the subject, "Urheimat und fruheste Wanderungen der Austronesier" appeared in 1932. The only changes that have been made to this presentation were made by Heine-Geldern (1958) in answer to a translation made by H.D. Skinner (1957) of Heine-Geldern's main conclusions. All other reconstructions of the prehistory of Southeast Asia are based on this work.

Artifact and site orientation characterized Southeast Asian archaeological research. The purpose of this research was to work out the origins of the present-day peoples in the area and to build up a chronology. Each country worked separately and programs were not coordinated<sup>1</sup>.

## OLD DIRECTIONS REEMPHASIZED

Archaeological field work virtually came to a dead stop during World War II and, for the most part, did not begin again until about 1950. The areas of major activity in the 1950's were Sarawak, the Philippines, and Malaya, with less continuous field research in Formosa, Hong Kong, Vietnam, Cambodia, Thailand, and Indonesia. This work reinstated the old pattern of excavation, usually on a small scale, in sites accidentally found. The emphasis continued to be on comparative materials and did not include any organized program of a long-term nature.

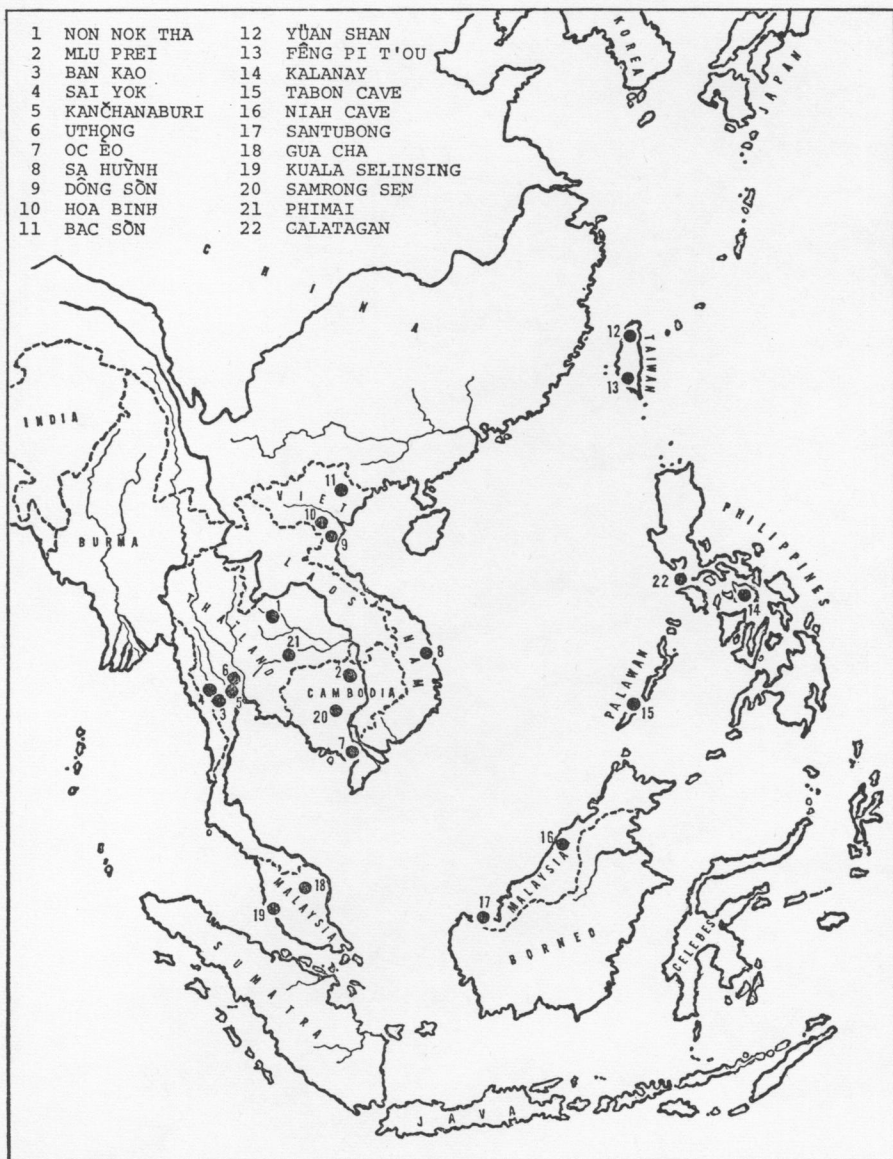
<sup>1</sup> A more detailed history of Southeast Asian archaeology will appear in *Asian Perspectives*, Volume XI, to appear in 1969.

Communication among the scholars working on Southeast Asian prehistory was restored with the fourth meeting of the Far-Eastern Prehistory Association held jointly with the 8th Pacific Science Congress, in Manila in 1953. The second meeting of this organization had been held in Manila in 1934 and the third in Singapore in 1938, while the fourth was to have been in Hong Kong in 1941 (Solheim 1957a:7-10). The two proceedings volumes from the Hanoi and the Singapore meetings are the major publications on Far-Eastern prehistory (Anon. 1932, Chasen and Tweedie 1940). Only a portion of the proceedings of the fourth meeting, edited by Beyer (1956) has appeared though the major remaining papers make up Asian and Pacific Archaeology Series No. 2. *Asian Perspectives*, the Journal of the Far-Eastern Prehistory Association, is a continuation of the first two proceedings volumes. It began publication in 1957 and is now published by the Social Science Research Institute of the University of Hawaii. Detailed and summary reports and bibliography on the archaeological research in Southeast Asia since about 1954 are to be found in the journal.

The only difference between the work done in the 1950's and that done before the war was an improvement in techniques of excavation. Excavations done before the war denied that any stratigraphy was present and so lumped all artifacts in the report. In the 1950's some excavators began to use artificial levels. One of these workers was Tom Harrisson who opened a new area to research, Sarawak. He also, during this period, started the first systematic and long-range programs in limited areas with his work in the Santubong River delta area and the Niah Cave area. Many of the reports on this work are to be found in the *Sarawak Museum Journal* and *Asian Perspectives*. In the Philippines, Robert Fox began an extended program of excavation in Calatogan Batangas on Luzon (Fox 1959), the most ambitious program in the Philippines up until this time.

Archeologists resumed field work in the 1950's, continuing from the point where they had stopped in 1941. With new workers in the field, some changes from the old style program of single site excavation were being started by the end of the decade.

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|----------------|--------------------|
| 1 NON NOK THA  | 12 YÜAN SHAN       |
| 2 MLU PREI     | 13 FÈNG PI T'OU    |
| 3 BAN KAO      | 14 KALANAY         |
| 4 SAI YOK      | 15 TABON CAVE      |
| 5 KANCHANABURI | 16 NIAH CAVE       |
| 6 UTHONG       | 17 SANTUBONG       |
| 7 OC EO        | 18 GUA CHA         |
| 8 SA HUYNH     | 19 KUALA SELINSING |
| 9 DÔNG SƠN     | 20 SAMRONG SEN     |
| 10 HOA BINH    | 21 PHIMAI          |
| 11 BAC SƠN     | 22 CALATAGAN       |



## NEW DIRECTIONS DEVELOPING

The methods of study of prehistory have been evolving rapidly during the last 15 to 20 years. Archaeology is the major method used to study prehistory and it has probably been the most rapidly evolving method of those being used. Many new scientific techniques for dating and reconstructing palaeoclimate and palaeobiology of former periods have been and are being developed. These new techniques are making it possible for the archaeologist to be much more precise in his use of time and allow him to go much further than before into the study of prehistoric culture and cultures. Grahame Clark (1960:17) has said: "Archaeology may be simply defined as the systematic study of antiquities as a means of reconstructing the past." This definition fits the "professional" archaeological research in Southeast Asia before the war, as it does that in North America. The "new directions" of the archaeology in Southeast Asia do not mean that there is a "New Archaeology" but only that new methods and techniques are coming into use in Southeast Asia as in North America and the rest of the world. Clark's definition still fits; it is only that so much more must be included now before we can consider our study to be systematic. Archaeology is evolving or growing; it is not new.

The new and improved techniques, so important today to the study of prehistoric archaeology, have not come into use equally all over Southeast Asia and, to be sure, there is a time lag between the refinement of a new technique in America or Europe and its coming into use in Southeast Asia. The most important change in Southeast Asian archaeological research is the shift of the focus of research from the artifact to the site as a part of a local region. Each country where there has been recent research is somewhat different and I treat them here separately. These countries are: Sarawak, Thailand, Philippines, Formosa, North Vietnam, and Indonesia.

*Sarawak*

The first country in Southeast Asia to have an organized, long-range program for prehistoric archaeology was Sarawak.

Two areas in Sarawak have had intensive exploration and excavation.

Work in the Santubong Delta near Kuching began in 1946 and has continued intermittently through 1966. Relatively little has been published except for two reports covering the ceramics of one small burial site (Harrison, Tom and Barbara 1957, Solheim 1966a). These sites indicate that this area was a major iron smelting center between about the 6th and 11th centuries A.D. with contacts with both China and India (Harrisson n.d.).

The Niah Cave complex of sites in Northern Sarawak, near the coast, is one of the two major cave complexes of known prehistoric importance in Southeast Asia. These caves were thought by Wallace, Darwin, and Huxley to have been a likely home of the "missing link" and through their efforts were briefly explored in 1873, happily with negative results (Harrisson 1958:550-561). Excavation was started by Harrison on a small scale in 1954 and yearly excavation on a large scale started in 1957, continuing into 1967. Hundreds of caves, large (over 26 acres in the Great Cave) and small, have been mapped and explored. Almost all the caves have evidence of human use. The caves were in use from late Pleistocene times up until about 1,000 A.D. A *Homo sapiens* skull was found at a bit over 100 inches in depth and is dated by C-14 at about 40,000 B.C. (Brothwell 1961). Besides extensive archaeological activity in these caves, there has been much research done on the biological contents of the cave and the nearby area for both prehistoric times and the present. Death and burial customs of the present day peoples using the caves have been studied for comparison with the prehistoric practices found. Bibliographies of the published materials on these and other sites in Sarawak, and Island Southeast Asia are to be found in the *Sarawak Museum Journal*, *Asian Perspectives*, and the *Council for Old World Archaeology, Surveys and Bibliography, Indonesia Area 20* (Conklin 1957, Solheim 1961a and 1964a).

### *Thailand*

Very little research was done on the prehistory of Thailand before 1960 when the Fine Arts Department of the Thai Ministry of Education was joined by a group of Danes in the first Thai-

Danish Prehistoric Expedition. In two field seasons from 1960 to 1962 the Expedition explored for sites along the Kwaë Noi up to Three Pagodas Pass, on the Burma border, and on the Kwaë Yai in Kanchanaburi Province. Test excavations made the first year were followed by excavation of two or three major sites the second year. A neolithic assemblage was discovered in this work similar to that known in Northern Malaya (Sieveking 1955, Sørensen 1964). Carbon-14 dating indicates that this culture was present in Thailand early in the second millennium B.C. (Sørensen 1965:307). A second expedition, led by Per Sørensen returned to work in this area in 1965-66.

In 1963 the Fine Arts department, University of Hawaii archaeological expedition in Northeastern Thailand, directed by Wilhelm G. Solheim, II, began a three-year salvage archaeology program in four reservoir areas in the northeast. Several sites were found in a valley west of Khonkaen and one of these, Non Nok Tha, was partially excavated. In this site an intermittent sequence was found from about 3,000 B.C. to less than 200 years ago. A "Bronze Age" without iron is present in this site beginning about 2,500 B.C. by C-14 dating (Solheim, 1968).

A Thai-British expedition, under the direction of William Watson, started work in Thailand in January 1966. After initial exploration in several areas during the first year, they started excavations at a site about one kilometer from Non Nok Tha in the northeast, and at a site near Chaibadan at the eastern edge of the central plains. The material from the latter site is closely related to the early material from Non Nok Tha and the future British and University of Hawaii excavation in conjunction with the Thai Department of Fine Arts will be closely coordinated. Bibliographies of the published materials for Thailand and other Mainland Southeast Asia countries are to be found in *Asian Perspectives* and *COWA, Surveys and Bibliography, Southeast Asia Area 19* (Horr 1959, 1963, Solheim 1966b).

### *Philippines*

In 1962 a number of caves were discovered in a limestone formation near Quezon on the west coast of Palawan. Since the



discovery, by Robert Fox of the Philippine National Museum, intensive excavation has been under way in this area for several months each year. The caves, both large and small, are rich with materials going back over 30,000 years. Other limestone areas to the north have been briefly explored and many more caves with similar materials have been found. From stratified deposits, well dated from charcoal samples, Fox now has a solid sequence from the Late Pleistocene to about 1,500 years ago and from Upper Palaeolithic to Porcelain Age (the period in Philippine prehistory from the time mainland Asian porcelain trade wares started coming in at around early Sung Dynasty times). The first Early Neolithic burials and the first shell adzes found in the Philippines were discovered in one of the Quezon caves (Evangelista 1964:54- 56, Pl. I). No more than very preliminary reports have appeared on these sites in print as of July 1967 but two major reports by Fox should be appearing shortly, one in the memorial volume for H. Otley Beyer, the pioneer of Philippine archaeology, and the other as a monograph in the Philippine National Institute of Science and Technology series.

### *Formosa*

A joint archaeological expedition of the National Taiwan University and Yale University under the direction of Kwang-Chih Chang of Yale and Sung Wenhsun of National Taiwan University has produced the first dated sequence for Formosa (Chang and Stuiver 1966, Chang 1968, n.d.). The sequence has an early Corded Ware culture followed by two cultures which show little relation to the earlier culture; these are the Yuan-shan culture, the most important in the northern part of the island, and a Lunshanoid culture in the south. These two cultures date back to the first half of the third millennium B.C. and are definitely agricultural. There are no C-14 dates for the Corded Ware culture but it was of long duration and came to an end at the sites where it has been found well before the following cultures began. From a C-14 dated pollen core taken from the bottom of Sun-Moon Lake it seems likely that the Corded Ware culture used slash and burn agriculture and entered Formosa as early as 9,000 B.C. (Chang 1968, n.d., Tsukada 1966). All three of these prehistoric cultures

probably have their closest relationships with prehistoric cultures of northern Southeast Asia (South China). The east coast of Formosa is little known but appears to be rather different from the west coast.

### *North Vietnam*

Vietnamese archaeologists first began work in North Vietnam in 1959 and have been active until recently. I have received no word on their research during 1966 and 1967. In 1960-61, at the request of these archaeologists, P. I. Boriskovsky, a well-known Russian archaeologist, worked with them as an instructor and consultant.

The major finds that have been published in English are from a lower Palaeolithic workshop site about 170 km south of Hanoi. Here, along with large numbers of flakes, a few typical Clactonian, Chellian, and Levalloisian tools were found (Solheim 1963:24-26, Boriskovsky 1968). Numerous other sites have been found and excavated including Hoabinhian, early and late Neolithic sites, and sites with bronze and apparent Dongson relationships. Detailed reports on these sites have not yet appeared to my knowledge. Boriskovsky has published a book on Vietnamese prehistoric archaeology in Russian (*Pervobytnoie proshloie Vietnama*, Moscow, 1966) that contains information on this work. I am trying to have this book translated into English and parts or all of it published but do not yet know whether this effort will materialize.

### *Indonesia*

Archaeological fieldwork has been very difficult in Indonesia since the Second World War because of unsettled conditions and shortage of funds for this work by the Indonesian government. In spite of this, R. P. Soejono of the Indonesian Archaeological Service, made extensive surveys on Bali with several test excavations. Unfortunately, very little of this work has been published (Soejono 1963).

### *General*

Previous to the Second World War, stone tools, particularly adzes, were the primary artifacts used in comparative studies. Heine-Geldern's subdivisions of the Southeast Asian Neolithic are based on adze and axe types (1932). In 1948 Solheim began a study on earthenware pottery in Southeast Asia and Oceania to make potsherds an available artifact as well for comparative purposes. Starting with a study of recent pottery manufacture of the total area (Solheim 1952a-b) he moved to Philippine prehistoric pottery (1957b, 1961b-c, 1964b), then to Borneo (1960, 1961d, 1966a), and then to all Southeast Asia (1961e, 1964c, 1965a-b, 1966c-d, 1967a, 1967b, n.d.). When first a general picture of prehistoric pottery could be made out, two primary pottery traditions were hypothesized for all of Southeast Asia (Solheim 1960, 1967a). As is usual for first hypotheses, when more data become available, revision is required. Such a revision is not profitable at the present time but some of the difficulties of the first hypothesis are becoming apparent (Solheim n.d.).

## THE NEW DIRECTIONS

There are several new directions in which the archaeological study of Southeast Asian prehistory is moving. Most apparent during the last 10 to 15 years is the greater concentration on a limited area to work out a meaningful sequence that is reliably dated. Through this is not yet widely apparent in publication, these different programs are including more of a study of the prehistoric ecology as well. Some of the archaeologists are working towards reconstructions of specific cultural practices for which there is evidence in the sites (Solheim 1966a:56-61).

The major new interest in Southeast Asian prehistoric archaeology, it appears to me, is the early beginning of the Neolithic — *possibly the first Neolithic in the world*. Both Chang (1967) and I (Solheim, 1967c) have suggested that for the first time there is archaeological evidence to support Carl Sauer's belief that the first domestication of plants in Southeast Asia is the earliest in the world (Sauer 1952).

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