

Editor's Foreword

The British-Australian Archaeological Expedition, led by Dr (later Professor) William Watson, then Assistant Keeper of Oriental Antiquities at the British Museum, and Dr Helmut Loofs-Wissowa of the Australian National University, with the involvement of staff of the Thai Fine Arts Department, carried out archaeological excavations at the prehistoric burial site then called Khok Charoen in Northern Thailand, between 1966 and 1970. Following the completion of the excavation programme, Dr Watson wrote and published several papers on aspects of the Khok Charoen site and pottery, and his PhD student Wendy Ho, wrote her PhD thesis on an analysis of the pottery from the site called Khok Charoen II. Dr Loofs-Wissowa also published some papers on the excavations at the time. (Some of these works are cited in this work). The major process of analysis and identification of the finds and reporting on the excavations was left to Dr Loofs-Wissowa to carry out and to document. This process required the reconstruction of many hundreds of vessels or pots, from a great number of scattered sherds (done by Mrs Sigrid Loofs), together with other finds, and their graphic depiction in accordance with accepted academic practice, as well as writing descriptions and analyses of all of the finds, pots, bones, artefacts, etc. and drawing conclusions from the data. This process took many years of part-time, and later, full-time work. I became involved in the subsequent formatting and editing of the completed report.

Prior to the publication of the Hill of Prosperity Report, the re-assembled pots and unmatched sherds were returned to the Thai Government through the Australian National University. They are now in the storage at the Kanjanaphisek National Museum in Pathum Thani, north of Bangkok city. Researchers wishing to access the material should contact The Director-general, The Fine Arts Department, Na Phra That Road, Phra Nakhon District, Bangkok 10200, Thailand.

In 2017 the completed Khok Charoen report was published by British Archaeological Report (BAR Publishing) under the title *Hill of Prosperity: Excavations at Khok Charoen, Thailand; A Burial Site at the Stone-Metal Junction* (BAR International Series 2844).

During discussions on the form of the Khok Charoen report, in its development, Dr Loofs-Wissowa and I had considered including an illustrated catalogue of all the pottery found at the site, but we decided at the time that the pot data was best presented in relation to other objects from the same burial, wherever possible, or in conjunction with pots from the same hoard if found in aggregations, to allow best understanding of the relationship between pots, skeletons, artefacts and other objects. Also, the catalogue, if added to the report, would have made the report very large, over 600 pages. So that idea was set aside.

Once the original Khok Charoen report was published in 2017, we revisited the value of presenting the pots, the major and most interesting part of the finds from the Khok Charoen sites, as an illustrated structured catalogue of all the pots, presented in such a way as to allow the reader to see, as far as possible, the development over time of the shape and decoration of the various classes and sub-classes of pots. In this document, illustrations from the previous report were to be included, together with others, but in a different and a structured sequence.

In addition to the more than 400 complete or virtually complete pots suitable for inclusion in the catalogue, a great many isolated sherds were found at the three Khok Charoen sites, many of which showed at times quite elaborate decoration, but which had no matching fragments. These we regarded as useful to be included, in addition to the catalogue of whole vessels, to record, again in a structured way, the forms of decoration used by the potters of the area at the time. In this case, previously unused illustrations were to be presented.

This then was the form that this new report was to take, and it was constructed so as to form a companion volume to the already published 2017 Khok Charoen report. Its value was to lie in both the perception of the development over time of pots within the Khok Charoen site, as well as as a source of comparison with contemporaneous pots from other Southeast Asian sites.

Dr Loofs-Wissowa then set about preparing the textual part of the report, and I assembled the tables of pot types, and the tables of individual decorated sherds, together with some minor commentary. This work proceeded satisfactorily with regular joint meetings and reviews, and by end May 2018, the work was substantially complete, with only the final Observations and Conclusions chapter to be completed. Unfortunately at about this time, Dr Loofs-Wissowa's health started to deteriorate rapidly, and he was not able to make further contributions to the work, and, sadly, he died in August 2018 at the age of almost 91.

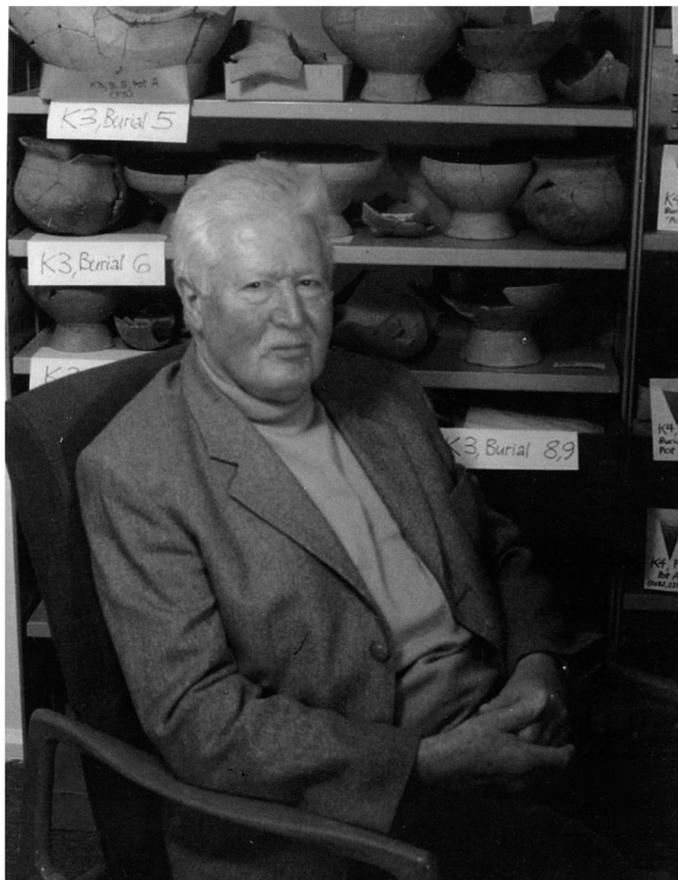
It was Dr Loofs-Wissowa's wish that the work be completed and by then BAR had shown an interest in the project, so it has become my responsibility to complete the work and present it for publication. During the hiatus caused by Dr Loofs-Wissowa's illness, a draft of the work then to date had been submitted to BAR for peer review. These reviewer comments were received, evaluated, and were incorporated, as far as possible, into the final result. Where reviewers called for additional material, it has only been able to be added if it was still available to me. Also, as far as I am aware, Dr Loofs-Wissowa did not make photographs of individual pots, possibly trusting his own considerable graphics skills to give a better idea of the shape and decoration of a pot rather than a photograph. However, I have added four

pairs of photographs and line drawings of the same pots on Page 13 to illustrate the benefits and disadvantages of either medium.

What follows is the structured text and illustrations prepared by Dr Loofs-Wissowa, and presented in the form that we had agreed. Where it has been necessary for

completeness to add other material, it has been in the form of paragraphs linking with the earlier work, and between the chapters.

John Crocker
Editor
December 2018



Dr Helmut Loofs-Wissowa together with some of his reassembled Khok Charoen pots

Author's Foreword

It may well be asked why we need a special volume in the form of a long *catalogue raisonné* of the pottery of Khok Charoen when these pots have already all been documented and drawn in detail, often even with additional explanatory notes or illustrations, in the site report (*Hill of Prosperity*) itself? The answers to this seemingly simple and straightforward question are, however, anything but simple and straightforward, consisting as they do of two different angles of viewing the topic.

The first, almost obvious, answer is that the method information about these pots (origin, identification, classification, description, measurements etc.) is gathered and presented, namely in order of the place of their discovery, such as burials or layers, does little for the understanding of the overall character of the site, nor of pottery itself. To use a somewhat crude simile, it is as if somebody puts a pile of bricks and other building material in front of you, saying that this is everything you need to build your house: now build it!

The other answer is more esoteric as it refers to the underlying question of why only pottery? Why not also a catalogue of stone tools or other implements which also played an important rôle in the life of the society under scrutiny? It is because the advent of pottery is much more than an addition to the material equipment and the way tools or other objects are made and used. As has often been pointed out, most convincingly by V. Gordon Childe,

that pottery making "must have seemed a sort of magic transubstantiation - the conversion of mud or dust into stone. It may have prompted some philosophical questions as to the meaning of substance and sameness." (Childe 1970: 90). [Because] "The constructive character of the potter's craft reacted on human thought (...). In making a tool of stone or bone he was always limited by the shape and size of the original material; he could only take bits away from it. No such limitations restrict the activity of the potter. She can form her lump as she wishes." (ibid.: 93).

However, pottery could not replace the tool kit developed by early humans over millennia as it was restricted to vessels, figurines and other small objects or even large statues but was not suited for making cutting instruments and the like. These additions came with the use of metals which completed this epochal revolution of not only human technology but also of our concept of what matter is all about; but this further development into the "Bronze Age" would not have been possible, or at least as seamless without the help of pottery in the form of moulds, vessels for molten metal and other objects facilitating metallurgical processes (Crocker 2017).

Keeping the above in mind, as inconsequential as it may have appeared at first sight, I hope it has helped to see the present catalogue as what it is meant to be: a means to a still better understanding of the importance and uniqueness of the site of Khok Charoen.

Preface

The discovery, excavation and finally publication of the site of Khok Charoen (*Hill of Prosperity*), a large burial ground in the northeastern corner of Central Thailand, was a rather drawn-out, complicated and multi-faceted enterprise. This was not because of lack of goodwill of which there was plenty all over, on both sides, but because of lack of experience with regard to Thai prehistoric archaeology of which there was hardly any, not even by Thai archaeologists themselves who traditionally concentrated their efforts on monuments above ground and had no time left to dig into it in search of skeletons. In this matter we were pioneers which may also help to understand the necessity - or at least the desirability - of the present catalogue.

By definition, pioneers must find their way in uncharted territory with care and foresight but do not always get it right at their first attempt, and the *Thai-British Archaeological Expedition*, founded by William Watson of the British Museum, later professor of Chinese Art and Archeology at the University of London, is no exception. The *TBAE* was launched in 1965 to fill a void left by the first two "western" post-war expeditions, the *Thai-Danish Prehistoric Expedition*, 1960-1962, with the aim "to make a study of the almost unknown prehistory of Thailand"(!), excavating mainly mesolithic and neolithic sites in Kanchanaburi Province, western Thailand, and an American one, the *University of Hawaii -Fine Arts Department Expedition*, 1963-1964, in the northern part of the Khorat Plateau, northeastern Thailand, excavating burials containing bronze objects. Between these two, there is thus not only a geographical gap, i.e. the whole of Central and North Thailand, but also a time gap which is the more important as it includes the transition from Stone to Bronze "Age" and even the nebulous one from Prehistory to History. Big gaps by any means.

To fill this latter gap in an all-encompassing and yet economical manner, given that time and resources at our disposal were not unlimited, the following brief was elaborated and ways and means were sought to reach its aims: "to gain more information on the obscure period preceding the establishment of the first so-called 'Indianized States' in Mainland Southeast Asia by investigating the Late Neolithic period and the spread of the use of metals in central and northern Thailand." Translated into down-to-earth terms, this meant ideally to look for diagnostic surface finds, in this case mainly potsherds, square metre by square metre in an area of roughly 300,000 square kilometres, surely a somewhat aleatory undertaking with no hope of exhausting all

opportunities. The first year of the expedition was, notwithstanding, spent in surveying this region from north to south in search of suitable sites to be trial-excavated for further, more thorough excavation in the following five planned seasons, with the result that only three sites were considered: a cave near Chiang Mai which was quickly excavated, yielding a few interesting iron implements; an open site near U-Thong which turned out to also be an iron-working centre but one which yielded some pre-Dvaravati pottery, indicating early Indian influence, and was therefore further excavated during the first, fourth and fifth season; and finally the burial ground of Khok Charoen near Chai Badan in Lopburi Province which proved to be the site corresponding most closely to what we were looking for as its burials contained sophisticated pottery but no bronze whereas a site only a few hundred kilometres to Northeast on the other side of the Phetchabun Mountain Range had burials with a similar but slightly less ornate pottery but accompanied by bronze objects. This was thus the exact junction of Stone and Bronze "Ages" we had been hoping to find.

One part of Khok Charoen was "trial"-excavated in the first season 1966, and two more parts more fully during the second and third seasons, 1967 and 1968; finally, during the fifth and last season 1970, the first trial-excavated part was enlarged by more exact excavations of as many cuttings as time allowed and yet with the most exciting results of the whole campaign as an entirely new cultural influence was discovered. Pottery was the main and almost sole indicator of the influence of cultures coming from outside the three cemeteries of Khok Charoen. However, the fact that different excavators worked on these three cemeteries at different times following different excavation methods, resulted in different ways to define and describe the pottery they found. The situation in this regard became even more complicated with the first full account of pottery finds of the largest cemetery of Khok Charoen, KC II, excavated in 1967. In this unpublished PhD thesis, the author established a totally new pottery typology (Ho 1984, I: 22-44; II: 92-94) and declares that "The classification here supersedes those published by Watson & Loofs (1967) and Loofs & Watson (1970)" (Ho 1984, I: 44). With the publication of *Hill of Prosperity* which endeavours to finally put all the diverse cultural strands of Khok Charoen together, we now have yet another pottery typology of that site claiming to supersede the others before it (Loofs-Wissowa 2017: 12-20). One more reason for the establishment of a catalogue like the one we submit herewith.

Abstract

The present Catalogue of the Pottery of Khok Charoen, although an independent work in its own right, is meant to be a companion volume to the final report of this site entitled *Hill of Prosperity: Excavations at Khok Charoen, Thailand; A Burial Site at the Stone-Metal Junction* (BAR International Series No 2844). Like with almost every other neolithic or Bronze Age burial site, the largest and in many ways most important category of finds of Khok Charoen is its pottery, be it plain or decorated. However, this situation is difficult to perceive if the more than four hundred pottery vessels found in the three cemeteries making up the site are presented, as they are in the report, embedded in the description of all the finds of a particular burial, one after the other, rather than as an *ensemble* which has to be analysed independently. The Catalogue is the outcome of the realisation of this desideratum.

The excavation, 1965-1970, of the site of Khok Charoen is to be seen in the context of post-war Thailand, the only Southeast Asian country which had not been the colony of a western power and as such the only one where western archaeologists were welcome to begin a detailed study of its prehistory which until then was very little known. After a Danish expedition excavating neolithic sites in western Thailand and an American one in northeastern Thailand excavating sites containing bronze, the Thai-British Archaeological Expedition began in 1965 to prospect North and Central Thailand in search of suitable sites for excavation. This was the more difficult as this expedition had in its brief, in addition to find out where Stone meets Metal, also to look out for signs of early Indian influence. The site selected as the one most likely to fulfil these conditions was Khok Charoen, situated in the northeastern corner of Central Thailand near the Phetchabun Mountain Range which, as it turned out, is the line separating Stone to the west from Bronze to the east. Although no direct proof of Indian influence was found in Khok Charoen itself, there was convincing evidence of it in the only other site selected by the expedition for further excavation, U-Thong, further to the southwest, in the form of potsherds of the Dvaravati style, the earliest "Indianised" Kingdom in what is now Thailand.

Chapter 1

Introduction



Photograph 1.1, Photograph of the Khok Charoen II excavation site, with the Hang Talat Hills in the background

1.1 Introduction

During the excavation process at Khok Charoen, detailed in the BAR report S2844: H. Loofs-Wissowa, *Hill of Prosperity: Excavations at Khok Charoen, Thailand, Oxford, 2017* (the 2017 Khok Charoen Report) many burials were investigated, and together with the skeletal remains and other items, the fragments of many pots were recovered. These fragments fell into two distinct groups, first, fragments which could be directly related to adjacent fragments in such a way as to determine that they originally formed parts of the same vessel, and second, single sherds which bore no relation to the surrounding sherds, as determined by shape or surface pattern. Those sherd fragments which could be assembled into more or less whole pots were so processed and formed the material for the Catalogue shown at Chapter 2 below.

The unmatched single sherds were set aside for later study as “Reserved” sherds. These are depicted and analysed in Chapter 3 below.

Before considering the excavated pots and sherds in detail, an outline of the excavation environment is provided below.

1.2 Short Introduction to the Geography and Geology of Khok Charoen

Given the fact that the geographical and geological setting of any prehistoric site determines this site's basic material culture, a closer look at the location of Khok Charoen within Thailand and Southeast Asia in general is indispensable. This mainly concerns three aspects of the environment: climate, rainfall and geology in the sense of the availability of raw materials, such as certain kinds of stone and clay.

The site is situated 13.5 km north of Chai Badan at about 150 m west of the road from Lopburi to Phetchabun and directly opposite, i.e. on the other side of the road, to a group of three low mountains (up to 468 m), the Khao (hills) Hang Talat, clearly visible on Photograph 1.1 above. Note: In administrative terms, the site is actually located in the modern "Sila Thip" Subdistrict, "Chai Badan" District of Lopburi Province, east-central Thailand, not the current "Khok Charoen" District. In a strict sense, there were no villages next or near the site; there were just a few houses scattered in the area. The site was and is situated near the Highway No. 21." (Private communication from Dr. Thanik Lertcharnrit, Silpakorn University, Bangkok, August, 2018).

Through the rivulets surrounding the site that eventually flow into the Nam Pasak, the site is thus connected with the Gulf of Siam (or Thailand). While this particular situation applies to the burial ground only and not necessarily also to the settlement using the cemetery, it stands to reason that settlement(s) in the area are also situated near the many streams criss-crossing the area to join the Pasak River which is only 9 km distant from the site.

Photographs 1.2, 1.3, and 1.4 show the site conditions before and during the excavation process.

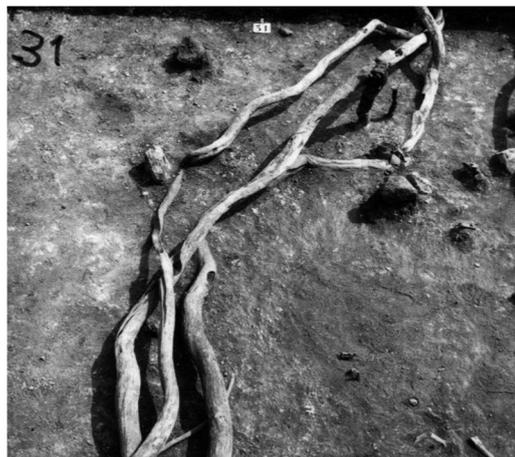
The more down to earth geographical situation of Khok Charoen is the following. The site is situated in the western part of the "Central Highlands", i.e. the massive Phetchabun Range which separates Central Thailand from north to south, or the Menam Chao Phraya drainage basin from the country's northeastern part,

the Khorat Plateau, draining towards the Mekong. To the west of this dividing line there would thus be the large and fertile alluvial plain of the Chao Phraya, the heartland of Thailand as it is at present, whereas to the east, the dry and infertile plateau is now mainly known archaeologically for finds of ancient bronze in its northern part. As the spread of the use of this metal towards the west seems to have been stopped by the Phetchabun Range west of which there are only late neolithic sites at the same time, this mountain chain can also be seen as dividing Stone- and Metal "Ages".

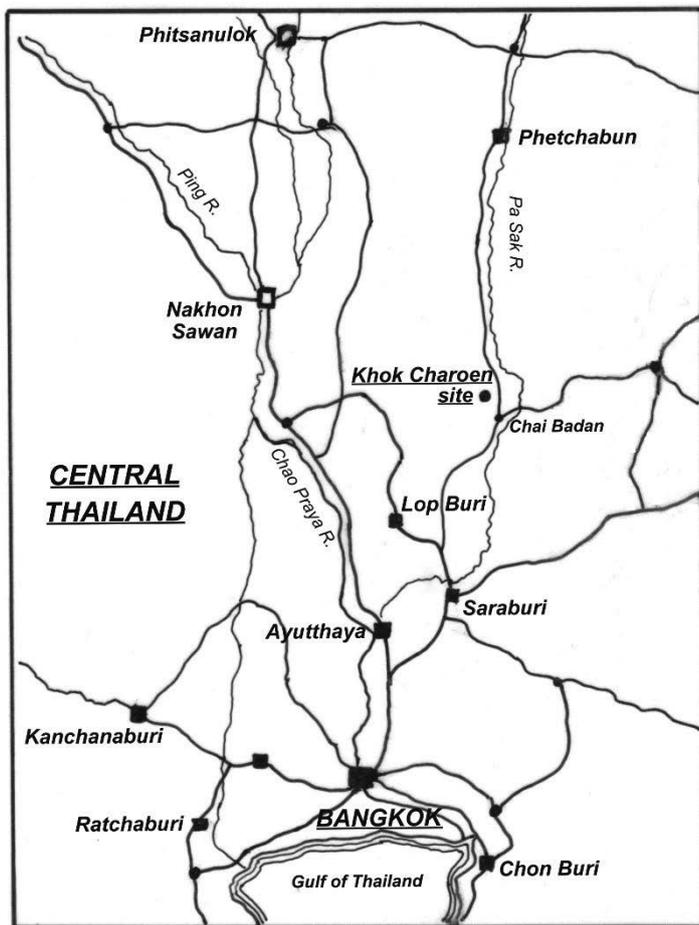
The solid Phetchabun Range is, however, divided into at least two individual chains, the main one being the Phetchabun Range itself, in Thai *San Khao Phang Hoei*, and the smaller Luang Prabang range, *San Khao Luak* in Thai, to the west. In between the two, there is the Pasak, a relatively modest river which flows north-south through a bed apparently created for it by the Mekong before this river was forced by geological developments to turn sharply to the east and which, near the site, turns to the west. From there on, this area is already considered to be part of the Chao Phraya delta region and shows the characteristic features of such a situation. The river itself runs through a bed of Lopburi clays, and next to the river to the east a band of limestone buttes which are also evident on the western side of the Pasak river. The general soil is derived from lava plateaux and volcanoes, and consists of mainly shallow, undifferentiated deposits, undulating to steep. It is in this region of low limestone mounds that the site of Khok Charoen has been discovered.



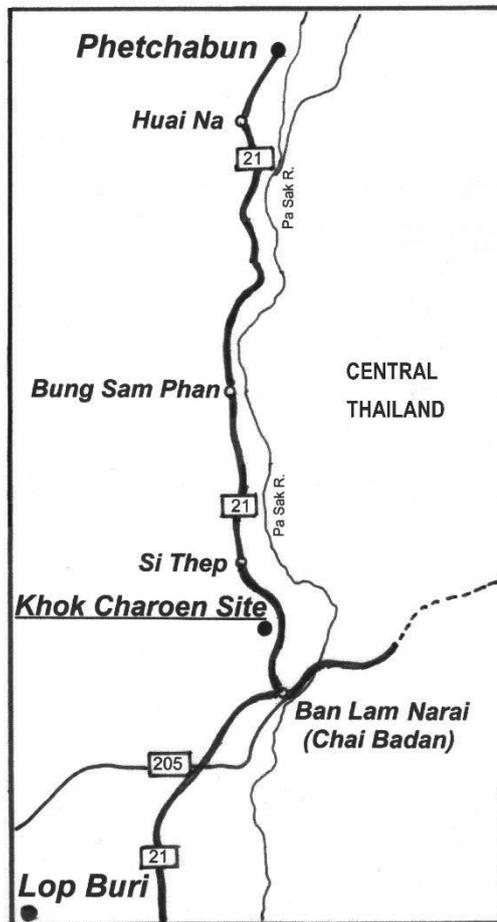
Photograph 1.2, Preparation of the Khok Charoen site for excavation, with the Hang Talat Hills behind



Photographs 1.3 and 1.4, Some of the tree roots which impeded excavation at the Khok Charoen site



Map 1.1, General map of Thailand showing Khok Charoen site in relation to major centres

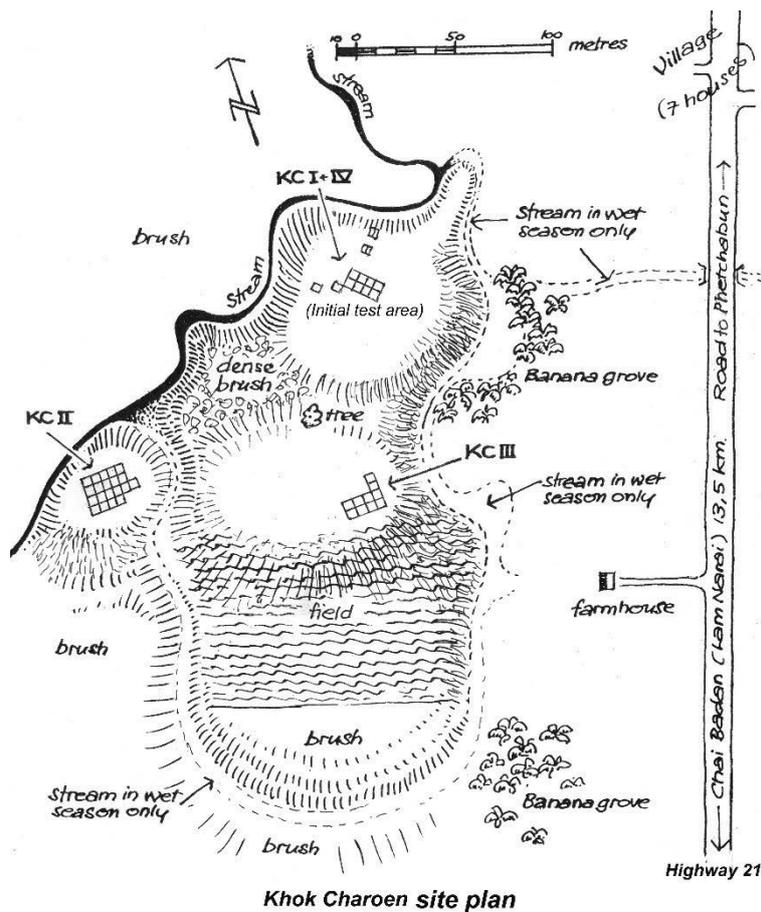


Map 1.2, Map of Central Thailand showing Khok Charoen site near Highway 21

(maps by John Crocker)

Geological maps show that on two accounts the settlements near the site of Khok Charoen seem to fulfill the conditions for becoming pottery-producing; they are: water being available all year around through a system of streams, rivulets and rivers connecting it ultimately with the sea via the Chao Phraya at Bangkok, and the availability of suitable kinds of clay

in the immediate vicinity of the settlement. However, a third condition commonly thought as being linked to pottery-making, namely the nearness to forests providing trees for firewood, is of little or no importance as societies in Southeast Asia, New Guinea or the Pacific islands which still now produce pottery in the traditional way, show the need for wood to fire



Map 1.3, Detailed plan of the Khok Charoen site

handmade pottery being rather modest. In most cases all sorts of combustible material, such as dried fronds or leaves of certain plants or trees, twigs or small branches and the like, is heaped together in a particular way to fire the dried newly-made pots which are laid out on top of the stack within an hour or so.

That this situation may also have prevailed at the site of Khok Charoen itself is attested by the following observation. On the western side of the site plan, between KC I+IV to the north and KC II to the south, near a curve in the stream bordering the site, there is an area of about 40x50 m, labelled "dense brush" which, from all we know, is a remnant of the original "brush" which may have covered the entire region at the time of the burials.

Between the time of the first settlers in the 1950s (of the same generation as we intruders in the 1960s!) and the abandonment of the burials about three millennia earlier, there were only very sporadic signs of human presence in the area apart from the occasional settlements well until the first millennium AD. These were rare finds of the time of Sawankhalok or other sites of the same period, leaving open the possibility that the entire vast area of northeastern Central Thailand remained indeed a wasteland without permanent human occupation till the middle of the 20th century.

With regard to the climatic conditions in which this kind of dense but not very substantial "brush" (*brousse* in French) could thrive, the most likely conclusion would be that it could not have been much different from that of the present, i.e. in spite of being part of tropical Southeast Asia and of a region influenced by the Monsoon regime, it only has a moderate annual rainfall of 1000 to 1500 mm and an equally relatively moderate temperature.