

SECOND EXPEDITION TO THE MRABRI ("KHON PA")
OF NORTH THAILAND

by

J. J. Boeles

On 21st January 1963 a second expedition of the Siam Society Research Centre, to make further investigations into the "Khon Pa" Hill Tribe, started from Nan.¹ It consisted this time of four members of the Siam Society again under the leadership of Mr. Kraisi Nimanahaeminda, supported by his secretary and men. The expedition was most fortunate in having as participant G. Flatz M.D. from Bonn. Dr. Flatz had been working on blood research among the Hill Tribes of Northern Thailand for the German National Research Council. His observations and discussion of the results appear in a separate article in this Journal. Other participants included the Changvat Commissioner of Changvat Nan, a captain of the Border Patrol Police (B.P.P.) and his men and three camera men. It was quite an expedition requiring some fifty bearers for the journey up the mountain.

An outline of the historical background of what is known about the Khon Pa has been given in the account of the first expedition.² By previous arrangement by our leader and the B.P.P. we were able once more to meet the Khon Pa, this time on Doi Khun Sataan, a hill of 1260 M, East of the highway, Prae-Nan; we had climbed slowly in one day from Wang Phueng. (See map)³ The meeting place was a large Meo (or Mong Njua) village, consisting of 76 roofs (houses) on two levels, having in total 711 inhabitants. There was a primary school run by the B.P.P. Our camp was pitched on part of a recently constructed helicopter platform above the village. (Photo 1.). The 9 Khon Pa men we met on arrival were the same group of men that had been studied at the first encounter

1. Kraisi Nimanahaeminda, Julian Hartland-Swann;
Expedition to the "Khon Pa" (or Phi Tong Luang?).

The Journal of the Siam Society (JSS.) Vol. L. Part 2. Dec. 1962. p. 165-186

2. idem J.S.S. Vol. L. Part 2. p. 165/6

3. The map for this article is based on Map L 509. Ed. 1-AMS (First Printing, 5-58) prepared by the Army Map Service (PV), Corps of Engineers. U.S. Army, Washington D.C. Sections NE 47-7 and NE 47-8.

at Ban Khum on the West side of the highway Prae-Nan. (See map) They must have crossed that highway, going in a Southern direction. The distance between these two meeting places is not more than 35 km. as the crow flies.

Our friends the Khon Pa were pleased to meet us again and Mr. Kraisri as a fatherly friend was at once able to hold a lively conversation in Thai Yuan and Khamu. They were greatly puzzled when presented on the spot with their own image: photographs taken on the previous expedition. They finally recognized themselves but looked at the back of the picture several times, still puzzled. The cloths that had been distributed in August last year were gone; they were again wearing the loin cloth made of discarded pieces of cloth; we would say rags. They were cold and some shivered in the evening wind. Cotton blankets and tobacco were distributed with the promise that the next day more presents would be given when they would come back with their women and children. This was agreed upon after which the Khon Pa disappeared in the darkness of the jungle. In the meantime Mr. Kraisri had been able to establish that they call themselves Mrabri in their own original language.

Bri-forest, the same word as in Khamu. Mra-Khon-human being. The correct general Thai designation is Khon Pha-people from the forest. The Meo or Mong Njua call them Mangku. The best known name among the Thai for the Mrabri is "Phi Thong Luang", or "the spirits of the yellow leaves". This is a misnomer because the Mrabri are human beings. The Mrabri resent the word "Phi" (Ghosts). The word Yumbri (Bernatzik) was not known to them, though they recognized the word "bri" for forest.⁴ It is therefore correct to designate these elusive tribes people as Mrabri and we shall use this name in our further description.

During the stormy night the temperature dropped to 5°C. but there were no mosquitoes. The next morning our group of Mrabri returned. Unfortunately without women and children. We knew from the previous encounter that the Mrabri were hiding their women. In squatting position our friends took a substantial meal of Thai food, white rice and canned sardines-they even could eat with spoons-after which it became possible to do real work. Mr. Kraisri settled down to linguistic

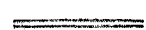
4. J.S.S. Vol. I. Part 2, p. 178.

SCALE 1 : 250,000

0 5 10 15 20 25 Kilometers



RIVER



ROAD



CHANGWAT BORDER



CHANGWAT CHIENGRAI

CHANGWAT PHRAE

CHANGWAT NAN

CHANGWAT UTTARADIT

BAN KUM
(1st Expedition 1962)

BAN FANG MIN

BAN SON MAE KATHONG

WANG RUM

(2nd Expedition 1963)

BAN MED KUNBATHAN (1260 m)

DOI CHANG HOOM

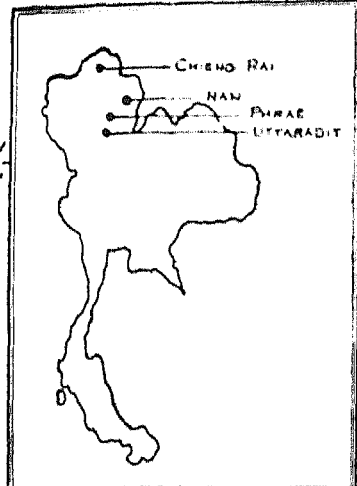
1740 m (1680 m) DOI THONG

BAN MED KAO

CAMP MRA BRI

NA NOI

THE SIAM SOCIETY RESEARCH CENTRE



45° 16'

45° 16'

15° 16'

15° 16'



research whilst Dr. Flatz started his anthropometric and medical examinations. The other members of the expedition assisted in both undertakings, whilst taking numerous photo's. We were surrounded by almost the entire Meo population of "mu 11, Tambol, Santah, Amphur Na Noi, Changwat Nan"; the official administrative designation of this Meo Village, the second largest in the province of Nan.⁵ Mr. Kraisi held a serious session with Ai Plaa (Photo 2), the brightest Mrabri, that continued intensively for many hours on end in order to establish and to check and recheck the vocabulary of the Mrabri which he had commenced during the first expedition.⁶ Mr. Kraisi with his unique knowledge of Thai Yuan, was able to interrogate the Mrabri directly in this language-often using Khamu as a medium-because that language was spoken by the Mrabri, also among themselves. The intensive linguistic field examinations were recorded on tape by Mr. Kenneth J. MacCormac of USIS who is a Research Centre committee member. It is hoped that it may now become possible to transcribe this taped vocabulary in phonetics and to establish an inventory of the phonemes of this apparently non-tonal language.⁷ In that way further analysis and a comparison with other languages in the Mon-Khmer group becomes profitable.⁸ Ai Plaa gave full cooperation and seemed completely aware of the importance of the linguistic discussion and showed no mental tiredness not even after hours of absorbing work. Stating and repeating and repeating again those words which were not clear and explaining the meaning of these words also. This work requires long and intense mental concentration in a specific direction; an intellectual performance incompatible with the concept of "primitivity". On the contrary after such a session we came away with a feeling of awe. Later in the day after having distributed more cloth, tobacco, cotton blankets,

5. Mu (baan) - village; Tambol; Amphur = district; Changwat = Province. There are 5 Amphurs in Changwat Nan.

6. *idem* J.S.S. Appendix I pp. 180-183.

7. It is realised that a transcription of a non-tonal language into the script of a tonal language like Thai, is not satisfactory. Therefore a phonetic transcription of the tape recording of the Mrabri vocabulary made by a linguist = phonetician would be desirable.

8. P.W. Schmidt; *Die Mon-Khmer-Völker, ein Bindeglied zwischen Völkern Zentralasiens und Austronesiens*. Braunschweig, 1906.

knives and other useful things, amongst others a flat steel bar "Apollo" brand to forge knives, the collective Mrabri gave a dance of joy accompanied by their own handclapping and singing. (Photo 3). Recordings were made of this singing in Thai Yuan; one of their songs had been translated into English after the previous expedition.⁹ The pattern of their music, when they sing together, is pure counterpoint and quite pleasing. The Mrabri remained the same inveterate beggars. The number of Mrabri meanwhile was increased by a small group of not more than 5 including a very ill woman, her son and her grandson, a young boy. (Photo 4). They all left again before dark. The next morning a group returned and later also a new group of not more than 5 men with very interesting faces whom we had not seen before, neither on the first expedition. (Photos 5, 6).

They all were given a meal. On the whole it could be said that the Mrabri were quiet and shy and some of them scared and not talkative. They showed no surprise to see Thai, or farangs and showed no eager curiosity like the Meo men and their women. Still their presence made us realise that we were meeting people from an entirely different world, so much different that in comparison, the Meo of Doi Kun Sataan looked like a sophisticated "race". We shall see that the Mrabri depend on the Meo for their barter trade. (Photo 7). The superiority of the Meo towards the Mrabri was manifest. Although it is not likely that the Mrabri wash themselves very often and their bodies are therefore dirty with a high smell they were in no way repulsive, probably because they were well built and their features very interesting to observe. Some of them were very handsome and some moreover showed a great sadness in their faces. Flatz has given a thorough physical description of the Mrabri in his article in this journal. The expedition had not been able to meet the women of the Mrabri, with the exception of the old (?) and ill woman mentioned above. During the last day of our stay it became possible with Mrabri guides to visit and to discover their real though temporary camp site deep in the jungle behind Doi Thong. Velder in his separate note gives a clear description of that discovery. It seem that the most significant item is the discovery that three persons had been sleeping each on

9. idem J.S.S. Appendix II, pp. 185-6.



Photo 1. Doi Khun Sataan. Part of Meo village below our camp.



Photo 2. Kraisri N. establishing Mrabri vocabulary with Ai Plaa (split ear).



Photo 3. Doi Khun sataan. Joyful Mrabri perform a dance.

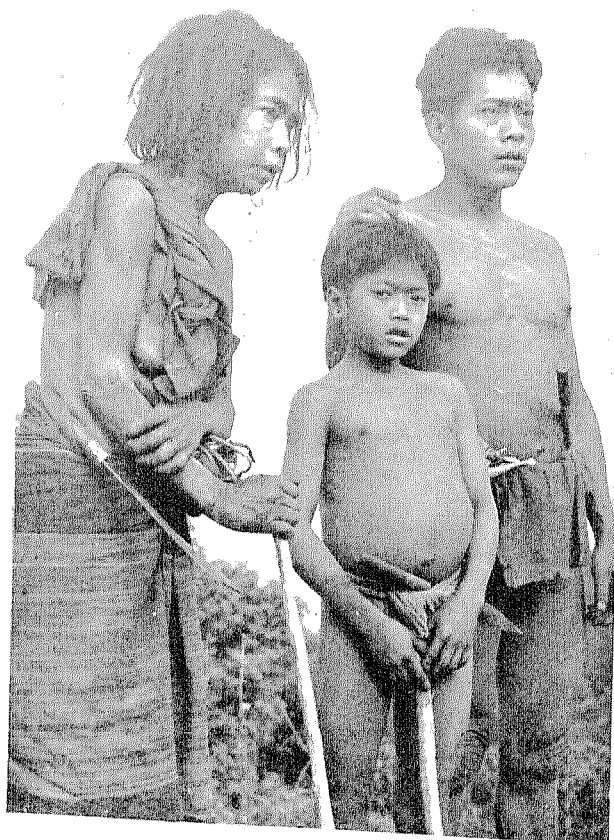


Photo 4. Doi Khun Sataan. Three generations Mrabri.
Grand mother (ill), son and grand son.

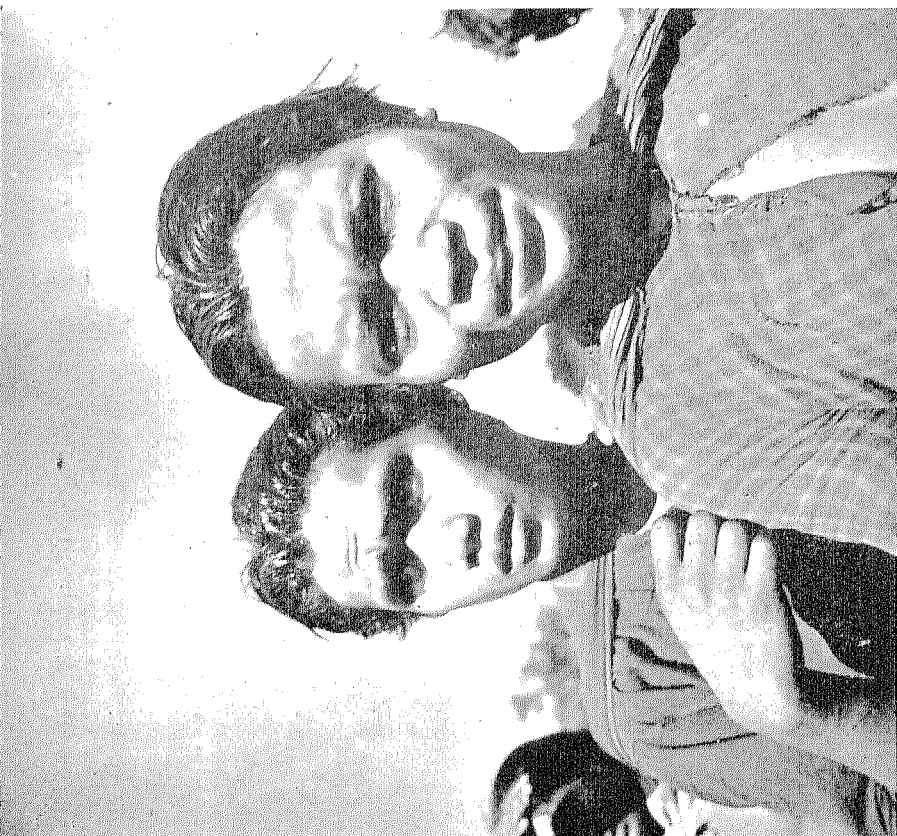


Photo 5. Doi Khun Sataan. Mrabri not previously encountered.



Photo 6. Doi Khun Sataan. Profile of Mrabri not previously encountered.



Photo 7. First Expedition. Mrabri one carrying sling-bag; basket and 2 rolls of woven mats are for barter trade.

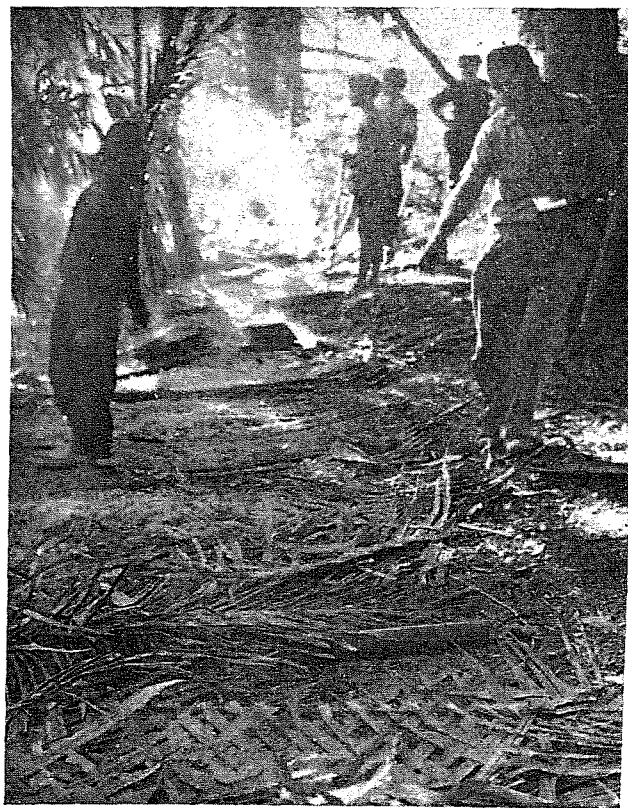


Photo 8. Doi Thong. Abandoned Mrabri camp. Velder's sketch 2, dwelling place 1. Meo stands on bark sheet. Sleeping mat of woven leaves in foreground.

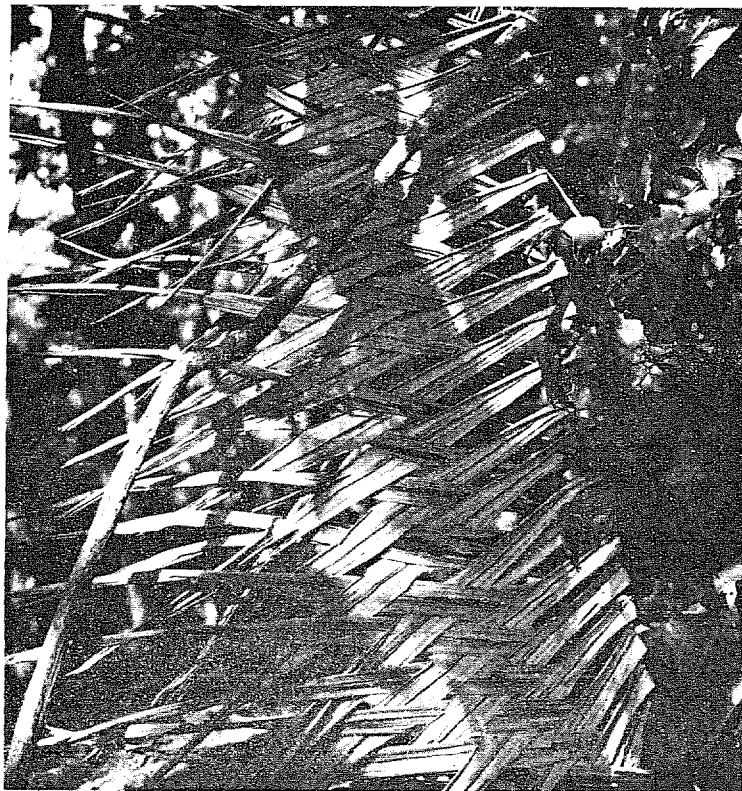


Photo 9. Doi Thong. Abandoned Mrabri camp. Withered windscreen placed vertically



Photo 10. Doi Thong. Mrabri posing to play flute (plate 3. VI). Cluster of filled bamboo water containers standing against tree in abandoned camp.



Photo 11. Doi Thong. Abandoned Mrabri camp. Four Mrabri pose in sleeping position in dwelling place 4 of Velder's sketch 1.
No bark mats. Fire still burning.

one sheet of freshly stripped bark.¹⁰ The Marbri may be designated as sleepers on bark. (Photos 8, 9, 11).

During these few days that we were privileged to meet the Mrabri a slim body of facts regarding their culture was collected, resting on the following evidence :

1. photographs ; films (black and white and colour)
2. tape recordings of vocabulary and songs.
3. verbal " examination " as basis for vocabulary.
4. collected artifacts of the material culture of the Mrabri.
5. collected facts concerning the medical and physical aspects of the Mrabri.
6. description of the actual camp site of the Mrabri.

Our reunion with the nine Mrabri men from the previous expedition confirms the clear description given in JSS. Vol. L. pt. 2. The results of this second expedition, where more Mrabri were met, have given the opportunity to penetrate deeper into the various aspects of the Mrabri and our knowledge, acquired through splendid teamwork, now rests on more solid ground.

Some of these aspects are described here as follows :

Material Culture. Description of techniques.

Isolated groups of nomads in South East Asia like the Mrabri, living in mountainous areas as food gatherers and hunters, who are unable to weave their own clothes, are not likely to possess an extensive material culture.

The examination of the artifacts obtained by the expeditions on the spot in barter, demonstrate however that the Mrabri are accomplished in various techniques of handicraft and tool making.

The following techniques are in use :

1. Plaiting, weaving	split rattan	in patterns	See Plate 1
2. Carving	bamboo surfaces	in patterns	See Plate 2
3. Knotting	threads of fibre	in nets	See Plate 3. II
4. Weaving (?)	threads of fibre	in straps	See Plate 3. IV
5. Forging	steel implements		See Plate 4.

10. The tree from which the bark was stripped is *Antiaris Toxicaria*. The size of the largest sheet of bark is 173 × 77 cm. The bark is slept on as evidenced by the position on the cleared soil and by the body smell still clinging to it.

The Mrabri moreover make their own tobacco pipes carved from the rootstock (*rhizome*) of a bamboo tree; mouth pieces are often separate. Since we saw one Mrabri man play a flute as drawn in Plate 3, VI, it is quite likely that they are also able to make this simple musical instrument. (Photo 10).

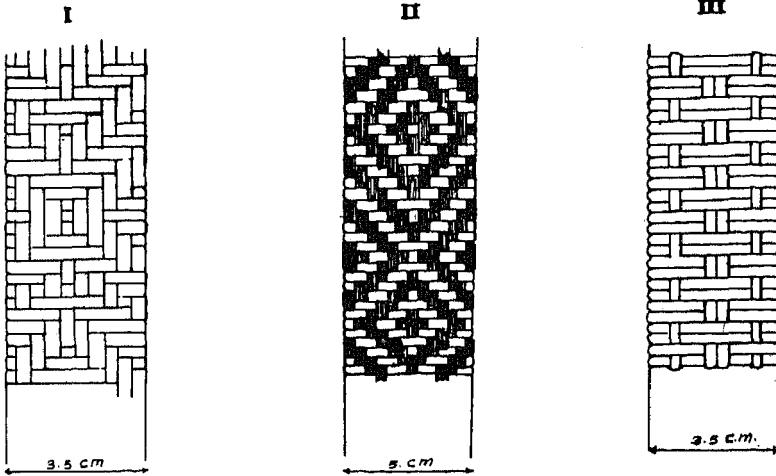
Comparison with similar techniques applied by other tribes may lead to observations as to whether some of these techniques are original Mrabri inventions or whether these were obtained from other tribes. Such a comparison of the material cultures of the hilltribes in North Thailand as well as in neighbouring countries would reveal at the same time more about the intricate phenomena of the migration of techniques and patterns of ornamentation. (Photo 15)

Plaiting and Weaving. Plate 1. The technique of weaving split rattan in patterns is applied by the Mrabri in the first place to produce large lidded standing baskets and broad sleeping mats which they do not use themselves but which are made specifically for the "export" trade; for barter trade with the Meo, or with the Thai as was observed during the first expedition. These products are sturdy and made with skill; it is quite likely that the mats are woven without the assistance of any kind of loom. The fact that these baskets and mats are not used by the Mrabri themselves indicate that they do not belong to the original material culture of the Mrabri. It may also turn out therefore that the technique of rattan weaving in geometric patterns was introduced from outside and therefore at a later stage. In that case the plaited rattan knife sheaths could also be of later development. We possess one plaited rattan knife sheath in two colours. One colour is formed by the natural colour of the split rattan while a dark red colour is provided by plaited soft reed strips that are not rattan. See Plate 1, II. The black pattern is formed by the dark red plaited strips.

Carving. Bamboo containers. Plate 2. Plate 3, I.

On the short bamboo containers that are used to hold rolls of beeswax or fire-making equipment we see bands of carvings on the smooth surface prepared for that purpose. See Plate 2, I-IV and Plate 3, I. These carvings, showing an intricate pattern, could have been made with the point of a sharp knife, by artists with a sure hand and if it were not done

MRABRI PATTERNS PLAITING



WEAVING

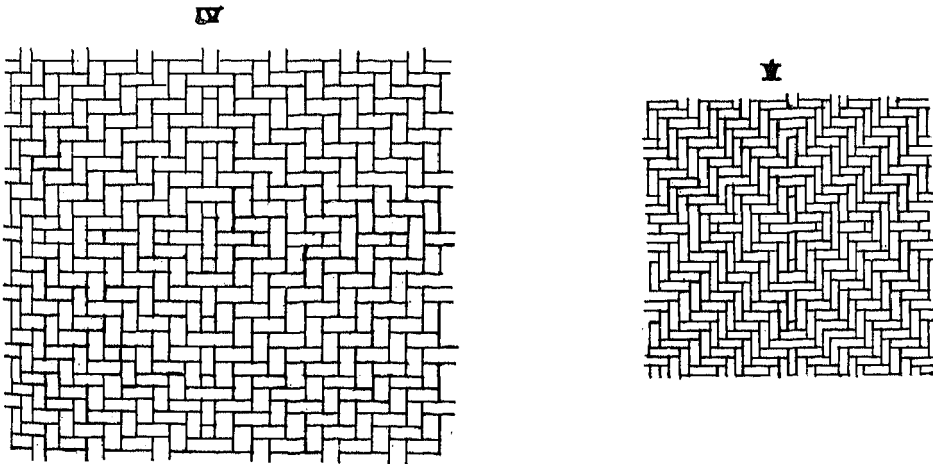


PLATE 1. I, II, III, Patterns of plaited rattan knife sheaths. The shaded area in pattern II represents dark red colour.

- IV, Pattern of plaited rattan mat.
(See JSS. Vol. L. pt. 2, 1962, photo opp. page 176)
- V, Pattern of plaited rattan basket. (See Bernatzik;
Die Geister der gelben Blätter, Abb. 59)

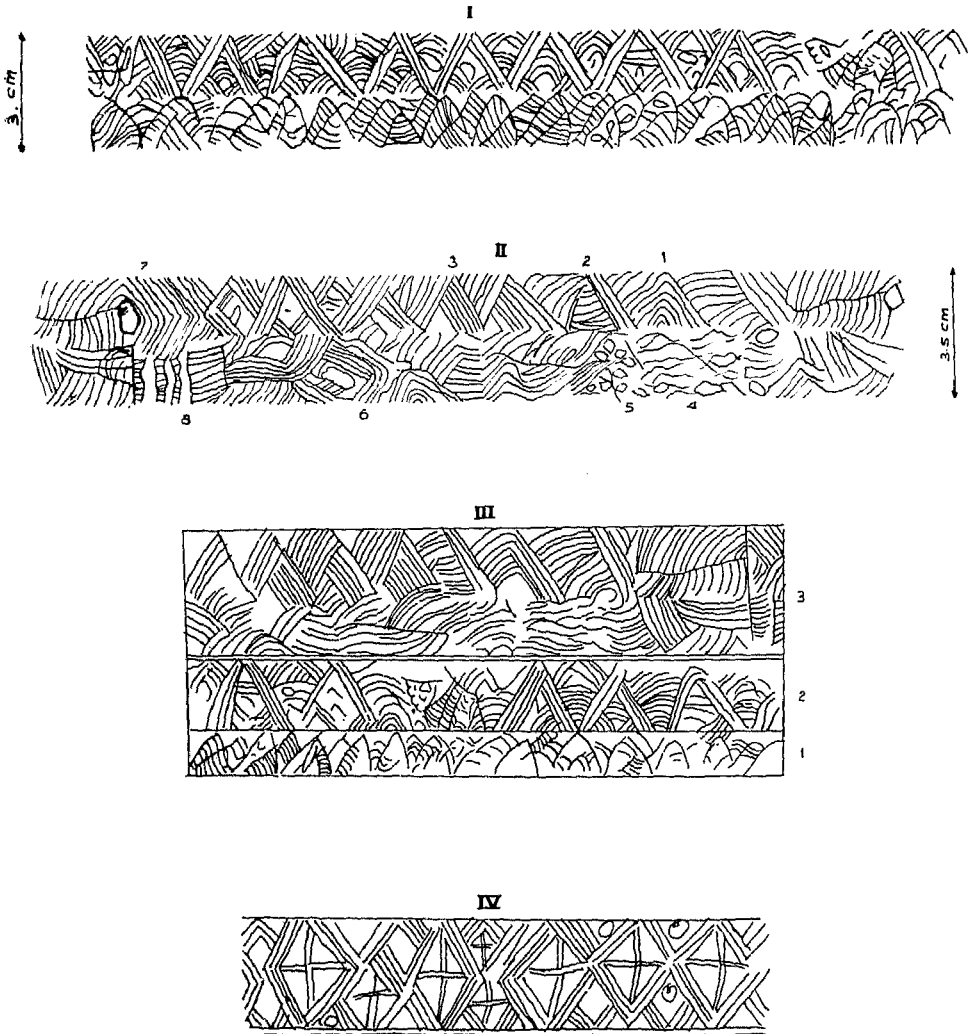


PLATE 2; Carving on bamboo containers. See also Plate 3. I.

- I. Carving not just ornamental. Top part may represent mountains; lower part may represent a rocky landscape in the jungle. See also Plate 3, I (2.I).
- II. Carving on upper part of container may represent the closed universe of the Mrabri on two levels. Top level with mountains, lower level with mountain stream, rocks, 3 palm trees and the fiery rising sun. See also Plate 3, II (2. II). Uncertain whether the upper part of the container belongs to the body; the fit is not satisfactory.
- III. Same; shows position on container :
Plath 2; III, 1 and 2 equals Plate 2, I
Plate 2; III, 3 equals Plate 2, II
- IV. Carving on a body of another bamboo container, showing a geometric pattern.

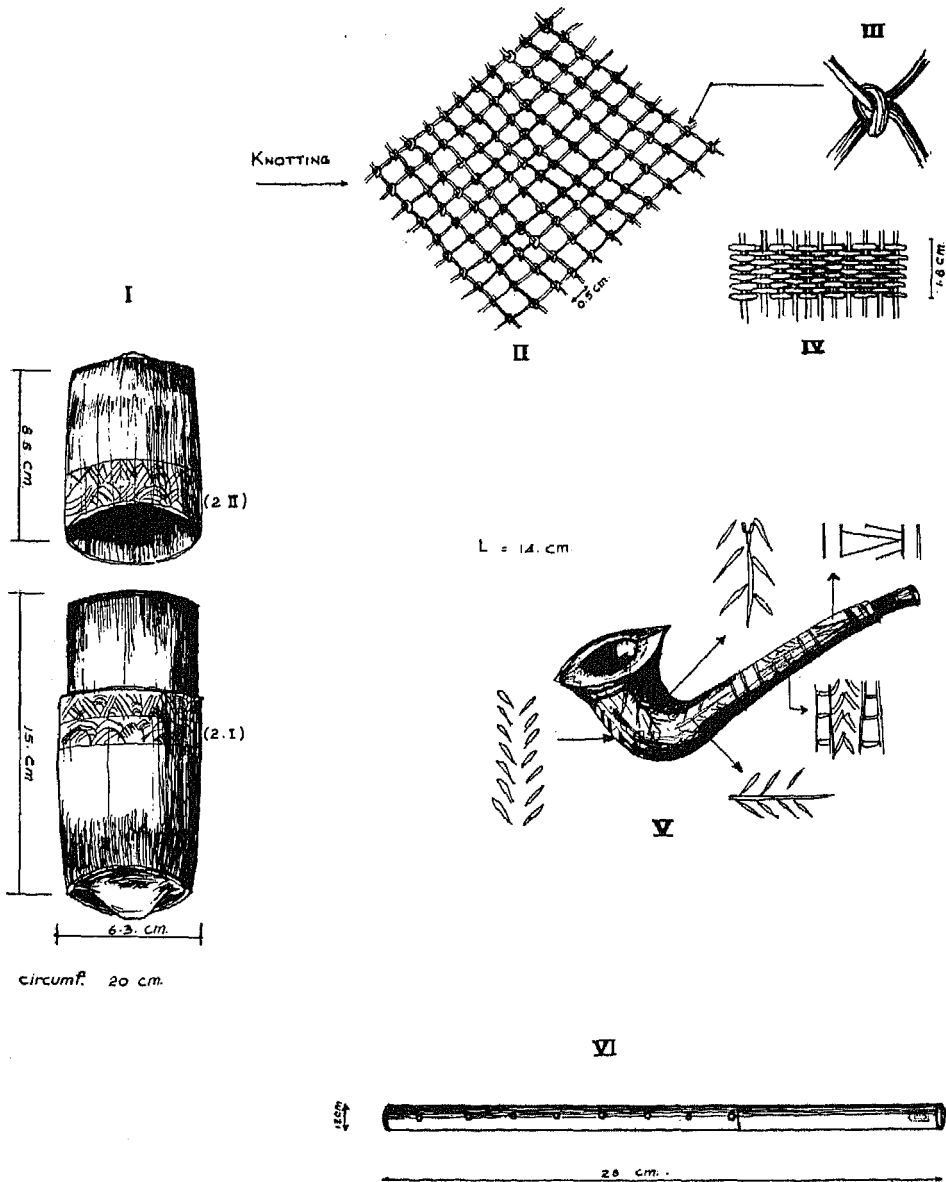
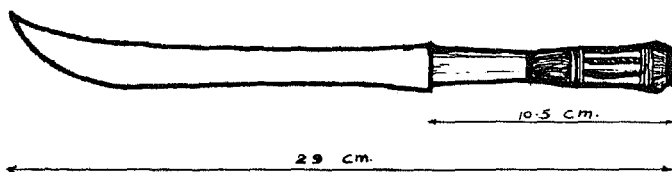


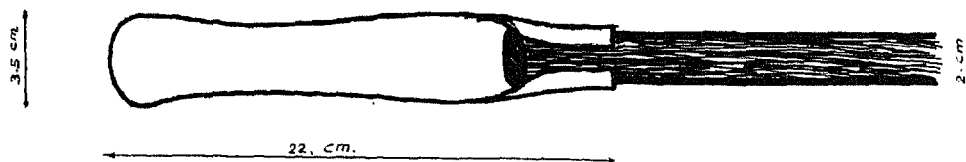
PLATE 3; I. Bamboo container for wax etc.
 Carving in detail on Plate 2; I, II, III.
 II, III. Knotting pattern of slingbag.
 IV. Weaving pattern of shoulder band of same slingbag.
 (See JSS. Vol. L. pt. 2, 1962, photo opp. page 176)
 V. Tobacco pipe with leaf ornaments.
 VI. Bamboo flute with 8 holes.

STEEL IMPLEMENTS

I



II



III

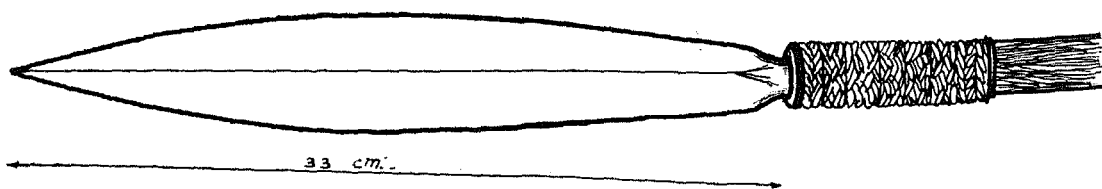


PLATE 4; I Small knife, single edge. Plate 1; I shows sheath pattern.

II. Steel uprooting tool; possibly fashioned from existing narrow digging tool common in North Thailand.

III. Spear with double edge blade. Total length 265 cm.

on wood one would call it rather engraving. There are two kinds of carving. One shows a geometric pattern as in Plate 2, IV whilst the carvings of Plate 2, I-III seem to represent much more than a row of triangular ornaments at the top and of which we shall attempt an interpretation under the heading "spiritual culture". The geometric pattern of Pl. 2, IV, showing the sign of the cross in the centre of the repeated ornament, is new to us.

Knotting. Sling-bags. Plate 3. II-IV.

Many Mrabri men carry on their back a network slingbag with a shoulder strap. These network bags could have been the proto-type of today's knotted plastic shopping net for the supermarket and are very handy indeed. The Mrabri use it to carry their personal belongings such as the short bamboo containers. The slingbag is also used to carry forest products like honey combs; this is apparent from the crusty wax deposits on the threads around the bottom in several of those network bags collected. The nets are also said to be used for catching fish in the mountain streams. We have not seen that these slingbags are used as a commodity in the barter trade; the Meo and the Thai in the North weave their own type of textile shoulder bag called Tung Yaam (ตุงยาม). On the other hand, Bernatzik maintains that the few network slingbags that he had seen in use with the Yumbri, had been obtained by them in regular barter from the Lao people.¹¹ In his later monograph on the Meo and the Akha (E-Kaw) Bernatzik mentions that the Akha use network slingbags which are carried on their back and shows in detail how these bags are produced.¹² The Akha work with a netting tool made of wood with a horn point called *putsa* (T. 407). The connection between the Akha and the Mrabri on this use of a similar or identical network slingbag needs further investigation. It is possible that at one time the Mrabri obtained the network slingbags and the technique of making these from the Akha or even from still another tribe and that later on the Mrabri, having acquired the technique of manufacture, produced their network slingbags independent from the Akha.

11. Hugo Adolf Bernatzik; *Die Geister der gelben Blätter*; München, 1938. p. 152

12. Idem; *Akha und Meau, Probleme der angewandten Völkerkunde in Hindien*. Innsbruck. 1947. 2 Vols. I Abb. 40 and II T. 402-405, 407, p. 416.

It is doubtful that the Akha would have obtained this technique from the Mrabri considering that in general a technically more developed society - such as the Akha - is not likely to acquire techniques from a less developed society. However since we have as yet not been permitted to watch the Mrabri produce anything in their own surroundings, in their own camp, conclusions as to techniques used in making their handicrafts, or the origin thereof, cannot be established. We have collected however a bunch or bundle of long dried hemp fibres in the Mrabri camp which could have been used to make threads for those network slingbags consisting of similar fibres. It is however not excluded that these fibres are also used for other purposes like making carrying-strings. We have not encountered netting tools. Apparently since Bernatzik's days more slingbags have come into use which explains why we were able to collect 4 specimens. These circumstances justify the conclusion that the Mrabri now produce their own slingbags. For their fabrication great skill is required. Each bag reveals that 4 different techniques have been applied by the maker :

1. A *crochet* technique is used for making the band that forms the mouth of the slingbag. This band which holds the net together is made in one piece in the round, somewhat like a ladies' seamless stocking. (See plate 3. IV)
2. Emerging from this band downwards, is the body of the bag; a network produced by an even *knotting* technique. See plate 3. II. III. In the good-sized slingbags the knots are double; the meshes are uniform.
3. The two ends of this circular net (again no seams) are joined at the bottom of the bag by *braided* strings.
4. The shoulderstrap consists of one long narrow, tightly *woven* band, the ends of which are rather crudely sewn on the outside of the band that forms the mouth of the bag as mentioned under 1. It is not clear which technique is used in making this shoulderstrap, it was however not produced on a movable handloom. The technique rather resembles that of the weaving of basketwork. One band measures 58×4.5 cm.

A definite description of the construction of these intricate slingbags could only be established when we have seen the Mrabri actually producing

them. Until that time it will also remain uncertain whether any implements have been used in this handicraft. There will remain also uncertainty as to the way the hemp threads are produced that are used in the bags. It could very well be the technique as demonstrated by Bernatzik which is still in use in the more remote parts of the North. The fibre is held tight and is twisted by hand rubbing on the thigh and in this way made into a thread.¹³

Without having seen the actual plant, from which the fibres-through a process of retting - were made, it will not be possible to establish the exact botanical names, as there are various alternatives possible, it seems most likely however that this plant is a hemp. Bernatzik arrived at the same conclusion.¹⁴

In further research it is of particular interest if it could be established that the technique of making a slingbags belong to the original material culture of the Mrabri, who are still not yet in the stage that they have learned to weave their own cloths on a movable handloom. (Perhaps they may skip this phase in their culture entirely.) Because in that case a theory might be developed to the effect that in this part of the world, the technique of knotting and braiding (including plaiting) preceded the technique of the movable handloom. The invention of the movable handloom is known as an industrial revolution.

Forging steel. Knives, Spears. Plate 4, I - III.

The technique of forging steel was most likely learnt from neighbouring tribes like the Meo, Tin and Kamu. The assumption that the Mrabri now know how to forge steel is based on three considerations:

1. The Mrabri say they make steel knives and spear blades themselves.
2. The Mrabri have asked us specifically and several times to bring them a steel bar (and hammer and anvil) to forge steel implements. When we brought for them one imported short flat bar of hardened steel ("Apollo" brand), they considered this a treasure. Also ideal are motor-car springs which are made of hardened steel.

13. Bernatzik; Die Geister der gelben Blätter, Abb. 58. p. 152

14. Bernatzik; Akha und Meau, Band II. p. 416. However only as regards the material for sling-bags used by the Akha.

3. In the Mrabri camp we found a heap of charcoal. No tools and no heating contraptions.

On day we may be permitted also to watch the Mrabri in the process of forging steel, until that time it is not established with certainty that the Mrabri have indeed acquired this technique.

The range of steel implements of the Mrabri is restricted to knives; spear-blades (and spear endtips) and to an occasional uprooting tool. Plate 4, I, II, III. The short knife of Plate 4, I, is not at all representative of the variety of shapes of knives in use by the Mrabri; it is just a specimen. The usual knife is larger and double-edged. All men carry a knife in their belt, very often without a rattan sheath and with the sharp cutting edge almost in direct contact with the bare stomach. The ill woman also carried a knife. There are no engravings of any kind on the steel implements.

Steel uprooting tools as in Plate 4, II, are not common. It is not at all certain that this is a tool developed by the Mrabri; it rather resembles a spade like digging tool called *siem* (เสียม) which can be bought in almost any market in the North. The Mrabri however may have flattened the surface of this tool by forging in order to bring it into the present shape. It is not a weapon. The obvious designation of this tool as a "digging stick", is in this case to be avoided, because digging sticks are used to dig holes in the soil in which to put seeds for a crop. As such a digging stick becomes an agricultural tool. The Mrabri use this implement in the jungle to disturb the top soil by digging with the sole purpose of gathering roots and other edible material like yams, but not to dig holes to plant seeds. To mark the difference in purpose we propose to use the word "uprooting tool" for the steel implement of Plate 4, II, though we admit it is an adaptation of an existing digging tool. The original uprooting tool could have been just a stick with a sharpened end, most likely still in use by the Mrabri. Could it also be the forerunner of the agricultural digging stick belonging to the people of the "Grabstock Kultur".

The number of spears in use by the Mrabri is limited; during the second expedition we saw only one spear, which we acquired in barter. (See drawing 4, III.) The total length is 265 cm (8' 10"); it balances at 99 cm. from the steel top. The long black polished hardwood shaft has

been identified as being made from of the kernel of the Maklue tree (*Diospyros sp.*)¹⁵ Some authors say that sometimes the tip of the spearblade is poisoned with the poison from the tree (*Antiaris Toxicaria*) that also supplies the poison for the arrows of the Meo. The steel blade is fixed to the spear shaft by a plaited strip of split rattan. When the Mrabri demonstrated this spear for us we could not detect any particular skill in throwing (underhand) the spear. We have heard however that the Khon Pa (Mrabri?) in Laos are considered to have deadly skill in throwing the spear. The Centre has now received on loan a small collection of spears from the Mrabri, the Kamu and the Tin belonging to Reverend Garland Bare from Amphur Pua, Changvat Nan, who is writing an account for the JSS. on the use and the meaning of those spears. Therefore more information on this subject may become available later. We understand that these spears are used in hunting small animals. We have not seen any traps.

Articles made of bamboo have been mentioned:

- a. Tobacco pipes, often with leaf ornaments Pl. 3. V
- b. Bamboo containers with tight lid. Pl. 3. I
- c. A bamboo flute. Distances between holes 2-2.5 cm. Pl. 3. VI

The above mentioned objects of the material culture of the Mrabri are specified in Appendix A.

The objects used by the Mrabri in their jungle camp beyond Doi Thong have been described in Dr. Velder's comprehensive eyewitness account elsewhere in this journal. Appendix A also mentions a number of these objects which were taken to the Research Centre for further identification.

One of the amazing aspects of the life of the Mrabri that came to light is the fact that several of them sleep on one single sheet of bark, as a mattress and placed between two campfires. This discovery constitutes a major characteristic of the Mrabri; to us it indicates an early stage of man and we wonder which other tribes are known to have the same sleeping habit. (Photo 8) It should be mentioned here that as in the

15. The lower end of the shaft is pointed as if to stick in the soil. Garland Bare will have to say more about this peculiarity which is also to be observed on the steel bladed uprooting tool.

other resting places, the area of resting place 1 (Velder's sketch 2) was entirely cleared of all vegetation before the fire places, woven palmleaf mats and the 3 sheets of bark used as sleeping mats were placed directly on the soil. As Velder's sketch 2 shows, only one sleeping place in the camp showed these mats of bark. The bark is not rough to the Mrabri skin, especially not when freshly cut from the tree called *Yaang Nong* (*Antiaris Toxicaria*). It seems a coincidence that this is the same tree that supplies the poison for the arrow tips of the Meo. In the North, bark mats of this tree are used by Khamu elephant drivers to put on the back of their work elephants so that the "howdah" placed on top will not chafe the skin of the elephant. In the jungle camp at night these Khamu elephant drivers often use the bark mats to sleep on, just as the Mrabri do. The Khamu and the Mrabri have various things in common; both have a non-tonal language with many words identical in both languages as will appear from the comparative wordlists of Mr. Kraisi Nimanahaeminda in this journal. Both languages form part of the Austro-Asiatic group of languages.⁸

In the Mrabri camp we saw no shelter constructions of any kind. Apparently in the cold season—a rainless period—there is no need to build shelters with a roof. It is quite likely that lean-tos are constructed in the rainy season, but we have not seen these. Some of the vertically installed wind-screens had indeed withered (withered leaves: in Thai, *tong lüang* ทองเหลือง) (Photo 9.) When the hunters from other places come across an abandoned camp like we came, they say "Phi tong lüang" (ผีทองเหลือง)

Leaning against the trees in this-temporarily-abandoned camp we saw clusters of bamboo water containers, many of them still holding fresh water; often the top was closed with a wad of green leaves to prevent dirt from falling into the drinking water. (Photo 10) The discarded "cooking utensils", sections of bamboo, half scarred by the camp fire, proved that the Mrabri do not use any pottery for cooking (Photo 13) No ceramics nor sherds of any kind were found in the camp which indicates that the Mrabri have not known the stone age. No evidence of stone implements or even stone ornaments were found. It is to be noted further that the Mrabri, neither men, women or children, as we have seen

them, wear no ornaments. The large holes in the earlobes are indications that some ornaments-or earplugs-are worn but we have not seen them. These earlobe holes were all empty. We noticed some Mrabri men without holes in their earlobes.

Food.

We have mentioned the incredible diet of the Mrabri of which Flatz will have more to say in this journal. Rice does not belong to the staple food of the Mrabri though they eat rice when offered, both white and glutinous. Our meagre collection of plants used for food is specified in Appendix A. The staple diet seems to consist of roots, yams, nuts (when available), bulbs, wild fruits and vegetables together with the meat of whatever small animals they can catch without traps. Fish from the streams is also a possible source of food but not observed by us. Domesticated pigs are obtained from the Meo in barter and eaten after having been offered to their spirits (*Phi*); we have not witnessed an offering. Apart from beeswax, the wild honey is bartered-stored in sections of bamboo-but there are reports that honey is also consumed by the Mrabri and their children. The great allround nutritive value of honey is well-known.¹⁶ We have not been able to ascertain in what way the Mrabri add salt to their diet. Mr. Krasri is of the opinion that the Mrabri may obtain salt from the Meo who are able to find salt wells where salt is available as brine. In mountainous forests it seems to be no special problem for the Mrabri to obtain fresh drinking water from small streams.¹⁷

16. See Reader's Digest, May 1963; Donald Culross Peattie: The Golden Wonder of Honey. pp. 160-162. Condensed from Nature Magazine.

17. On our way to the camp of the Mrabri on Doi Thong, far beyond the abandoned poppy fields, we saw how two of our guides squatted at a small stream of water coming down the rocks, The Mrabri folded each a large leaf into a cup from which they drank the water scooped from the small stream. Their squatting position while drinking water is the same as depicted by Bernatzik (Abb. 46). It refutes however Bernatzik's statement (op. cit. p. 144-5) that the Yumbri only drink water available in bamboo trees and "In obedience of a religious prohibition they do not drink either running water or spring water..." (quoted from the English version pp. 133.) Bernatzik's subsequent observation with regard to the absence of struma (goitre) or from cretinism among the Yumbri, so frequent among other tribes living under similar environmental conditions, is therefore not at all satisfactory.

On the way to the Mrabri camp we bought a number of fresh green cabbages grown by the Meo instead of poppies. We gave these to our Mrabri guides who devoured the cabbages raw and with gusto as one eats apples. A very healthy habit.

As to human weaknesses we know that they will drink locally distilled alcoholic spirits (*lao*) when given to them by the Meo. They refuse to smoke opium and said that this would kill them. It might however be used in isolated cases of illness, usually toothache. The Mrabri are great smokers of tobacco in pipes; they also smoke cigarettes made from tobacco rolled in leaves. This tobacco is possibly obtained in barter or just taken from deserted plots. We distributed considerable quantities of locally grown tobacco.

Spiritual Culture, Beliefs.

Our attempts to find an approach to the mind of the Mrabri have not been entirely in vain. We have heard the Mrabri speak in at least two languages, tonal and non-tonal, Thai Yuan and Mrabri, sometimes also in Khamu; a language related to Mrabri. The Mrabri sing moving songs often impromptu: the "troubadours" of Condominas. One Mrabri played a simple pleasing melody on a bamboo flute. We have seen the Mrabri express their feelings in a dance of gratitude. Many of them are inveterate beggars, others are very shy. The Mrabri have great fear of the outside world. The Mrabri have no concept of names for colour other than black and white. They use numerals (possibly up to 20) but have no concept of expressing age in a number of years. Time is expressed by pointing to the position of the sun. Food is shared equally. We know almost nothing of their beliefs other than that the Mrabri believe in "Phi", spirits; good ones and bad ones. They wear no amulets but have asked us for them. The only magical protection we saw was the tattooing on the bodies of several men. This tattoo is often of the *yantra* type; one man was carrying a wrist watch tattoo.¹⁸ It seems that the spears of the Mrabri have a great magical quality, the nature of which is presently under investigation by Garland Bare.

18. One of the Mrabri mentioned the name of the place Sayaburi (Laos) in connection with the tattoo that some of them could have obtained from there. This is quite possible because we have recently heard that a band of "Kha Thong Luang" had been observed three years ago around Sayaburi which place is situated South of Luang Prabang, inside the big bend of the Mekong, a distance from Baan Khun Sataan of not more than 200 Km. as the crow flies. To verify this report another expedition to the Kha Thong Luang, on the other side of the border with Laos, would have to be made. Sayaburi also appears in the account of the first expedition to the Mrabri. (See J.J.S. Vol. I. part 2, p. 178)

We were fortunate enough to establish in their own camp at least one taboo with certainty: The Mrabri refused to accept the cheap bazaar mirrors we presented them with and refused to look in the mirror. It was a polite but unanimous refusal expressed by stretching out the right arm with the palm of the hand raised. We do not as yet know whether they permit themselves to look at their own image reflected in water. It is most likely that their knowledge of the forest, the trees, the plants, and the animals is profound; this knowledge means survival. The Mrabri move through the forest and green jungles in silence; it is entirely their world. We believe we have found an artist's expression of this world which could be interpreted in the following description as:

The closed world of the Mrabri.

The carvings (engravings rather) on the band around the bamboo container of Plate 2, II seem to reveal the closed world of the Mrabri as they see it. On the upper level of that band we recognize a long range of mountain tops all around the spectator - the Mrabri - who is in the centre of this circular universe. On a lower level closer to us a turbulent mountain stream is coming down. At one point rocks strewn in this stream show the way across the waters to the world of the mountains. The mountains in Plate 2, II are indicated with 1, 2, 3. and the turbulent stream in the same Plate with 4, 5, 6.

Their world of the evergreen thick jungle is represented by the three trees - possibly palm trees - of Plate 2, II, 8. Finally, with some effort, we see the rising sun of the Mrabri above the trees, fiercely burning as indicated by the bundles of rays shooting all around. There is no indication of the sky above and though this may be due to the *horror vacui* of the ancient, it may also signify that the Mrabri see their universe as a closed world which consists of mountain ranges all around, the life-giving mountain stream, the silent evergreen jungle, the forest of which the palm trees are its symbol and the blazing sun, source of light, heat and energy. There are no living creatures in the endlessness of that world; it is a true picture; no human beings, no animals, no fish are to be seen in the reality of the silent jungle. There is no phenomenal world beyond or above. The end of the universe is the horizon represented by an endless repetition of triangular mountain tops placed around us. The compactness of

the picture indicates that endless dense mountainous jungle through which we had been climbing in our journey on Doi Thong in search of the home of the wandering Mrabri. The picture is therefore at once familiar. It is at the same time a picture of their universe in synopsis and of which the Mrabri is the centre. If we consider the limitation of the vehicle of expression, a section of bamboo having a circumference of 22 cm and a knife or stylus (?) for engraving, then we have again a feeling of awe when confronted with this evidence of creative expression, again incompatible with "primitivity".

Social structure.

During our investigations we were never certain whether the elusive Mrabri would turn up the next day, as promised and therefore our research was deliberately concentrated on three major aspects:

1. Physical anthropology.
2. Linguistics (establishment of vocabulary)
3. Material culture.

This aim has resulted in the articles in the present Journal. As a result we have not been able to establish as yet a clear social structure. We were moreover handicapped in that we have not seen their younger women and young children. From our visit to their camp it became clear however that the Mrabri live together in at least one group, forming one society. In the camp there were 6 separate dwelling places (sketch 1 of Velder) and though not all of them were in use, this indicates that the group is split up into families. Each family (up to 8) sleeps in a separate dwelling place. From their behaviour on Doi Khun Sataan there is no doubt that the man is the head of the family which basically consists of the triangle: father, mother, son. The position of the woman is not clear by lack of evidence. We have not seen such a triangle and therefore classification of social structure cannot now be established; a patrilineal system might however be the rule. We saw one ill woman: a grandmother who received medical treatment by Dr. Flatz; she did not speak. We were told she came with her son and grandson and these three generations of Mrabri were photographed together (Photo 4). A later visitor to the same group of Mrabri on Doi Khun Sataan, Hans Berthel from München, saw two more women (one of them is pictured with her child on



Photo 12. Doi Khun Sataan. Mrabri woman and child met by Berthel's party.



Photo 13. Doi Khun Sataan. Mrabri men cooking pig's meat in bamboo sections. Berthel's party.

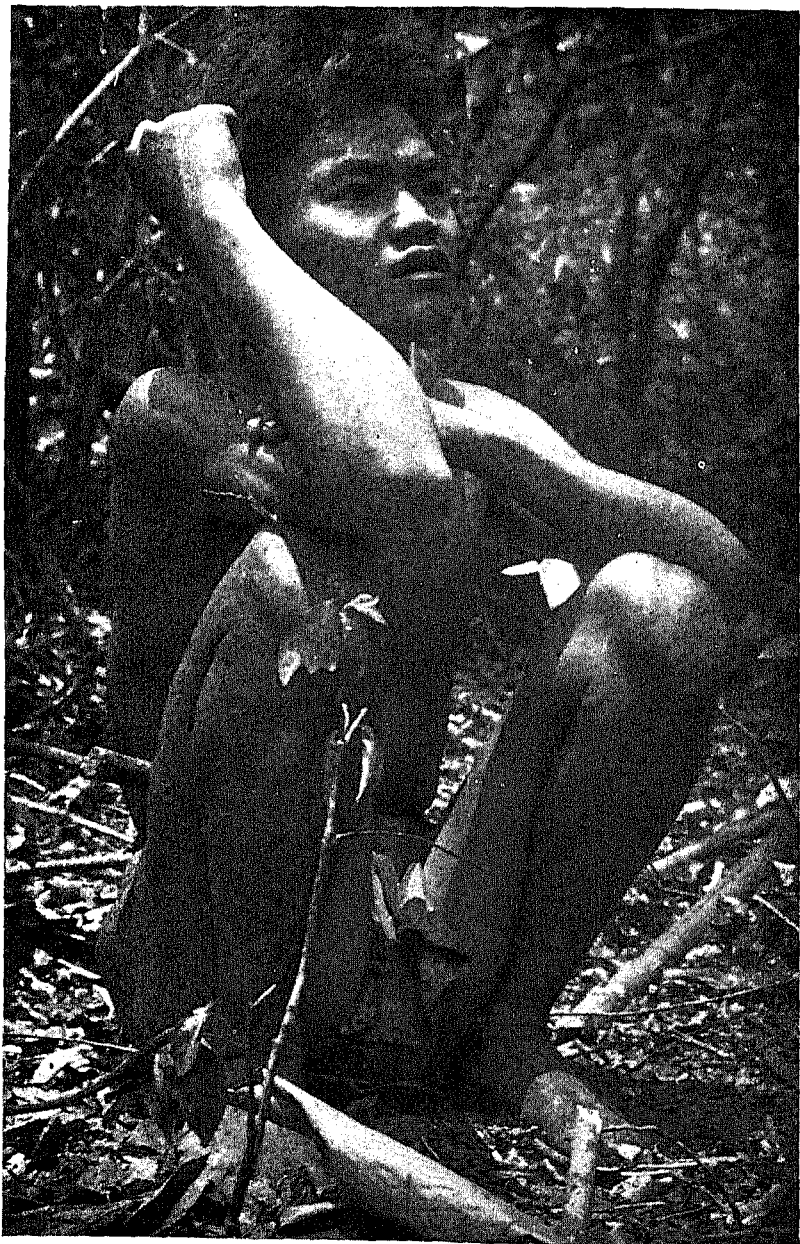
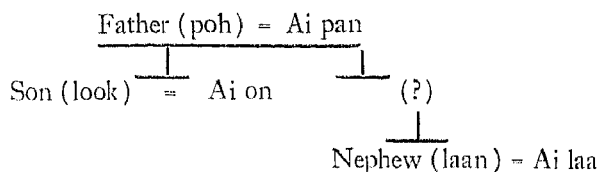


Photo. 14. Doi Khun Sataan. Mrabri man in squatting position. Berthel's party.

photo 12). Both women looked starved and exhausted and their faces were covered with dirt. Dr. Flatz asks himself, "Why is it that the men look healthy and strong and why are the women starving?" These questions must remain unanswered for the present. In one case we noted down the following fragment of family structure among three Mrabri men standing together. Their names were; Ai pan, Ai on and Ai laa. Ai on pointed to Ai pan and said that Ai pan was his father. Ai on then pointed to Ai laa and said that Ai laa was his nephew (laan manu) or:

fragment of family structure Mrabri:



As far as we have been able to ascertain, the Mrabri are an endogamous group and therefore do not marry outside their tribe. Insufficient knowledge however requires reservation in this respect.

As we have not seen the family together in the camp in their daily work it is not possible to establish a division of work according to sex. The men are the hunters but they know also quite well how to cook in the bamboo containers.

Conclusion and Discussion.

When trying to determine the place of the culture of the Mrabri in the scale of evolution of man we find an obstacle in our way. It is generally concluded that the evolution of *homo sapiens* at one time has passed through the stone age; through palaeolithic and neolithic phases. The man from the palaeolithic age used crude stone tools and the more advanced neolithic man used polished stone tools and earthenware pots for various purposes. We have not found any evidence however that the Mrabri have known a stone age; the expedition has not found traces of stone implements nor of earthenware pots. They seem to have missed that stage. One concludes that the Mrabri belong to the bamboo age and moved from

there into the steel age and into the atomic age. This early stage of human evolution of the Mrabri is characterized by the absence of evidence of various basic criteria of material culture :

1. The Mrabri have not known a stone age.
(no stone implements, no pottery of any kind)
2. Having no concept of the moveable handloom, the Mrabri do not make their own clothing. They are no (longer) pounders of tree bark.
3. The Mrabri do not practice agriculture.
4. The Mrabri do not build houses.
5. The Mrabri wear no ornaments.

It will be difficult to find groups of human beings in this world that still live in similar conditions.¹⁹ On the other hand some of their accomplishments are impressive. The products of their limited material culture are often made with great skill, like the woven rattan mats and lidded baskets. Their strong and practical slingbags show a variety of 4 techniques in the production of one bag. They have now learnt how to forge steel into knives and spear blades. On a narrow strip of bamboo their artist has been able to create the closed world of the Mrabri, represented by the jungle, the mountain stream, the mountain range and the blazing sun.²⁰ Many Mrabri speak several languages; their moving songs are often impromptu and when sung together the melody is often pure counterpoint. One of them (we called him "split ear") was able to keep up hours of concentrated linguistic discussions for the establishment of the Mrabri vocabulary, without getting mentally tired, nor even bored.

19. Society member John H. Brandt observes that since the Mrabi and the "Negrito of Peninsular Thailand" (J.S.S. XLIX, Part 2, 1961, pp. 124-160) are the only hunting-gathering nomadic groups known to live in Thailand it would be useful to make further cross cultural ecological studies of the two groups. (Communication of 13. 2. 1963).

20. The symbolism of a closed world is found also in other civilisations in Asia. Cf. Paul Mus; Barabudur. Troisième partie. Le symbolisme du Barabudur, Chapitre I. Barabudur, Monde Clos.

BEFEO. Tome XXXII — 1932, 353 etc.

Notwithstanding their incredible diet they beat all of us when it comes to exercises of physical culture like tree climbing and jungle exploration.²¹ On both expeditions within a period of 7 months it was possible only to meet the Mrabri on a few days on each occasion. The first time it was not possible to see their own camp in the jungle, the second time this became possible, though the inhabitants had fled upon our arrival. The meetings therefore have been much too short to arrive at definite conclusions. The ideal set-up in the future would be that a very small number of anthropologists (3) could stay with the Mrabri in their camp and move around with them for a period of several months. This group would have to include a linguist to make tape recordings and a physical anthropologist M.D. who could take care of the blood research. The third anthropologist could establish the pattern of the material culture of the Mrabri. One of them should be an expert photographer. Our present efforts are to be seen as a pilot project and the results have been encouraging mainly resulting from the skilful preparations of our experienced leader Mr. Kraisri Nimmanahaeminda from Chiangmai. We see both expeditions together as an entity and in our methodological approach it is to be classified as a "divided field trip". This is a device for ensuring accuracy and it enables the researcher to check and recheck the results of the first

21. Tree climbing — the speciality of the Mrabri men — is responsible for their well developed pectoral muscles as shown on the illustration opposite page 173 of JSS. Vol. L Part 2. This is the conclusion at which Dr. Flatz is arriving in his article in this Journal.

This rules out another explanation which however in view also of the growing Western interest in the field of Ethno-Medicine should be mentioned here. Kraisri N. has been asking himself whether the Mrabri, as part of their diet, could have consumed the tuberous roots of the *kwao khru'a* (กวาวเครือ or *Pueraria mirifica*), a plant growing in North Thailand and Burma and wellknown as a rejuvenating herbal medicine. The possible value of this plant was first reported by A. Kerr in J.S.S. Natural History Supplement 8, 336 (1932). Thorough biological, chemical and even preliminary medical research has been published in Dec. 1950 in: Nature, Vol. 188, No. 4753, pp. 774-777:

Miroestrol: An Oestrogen from the plant
Pueraria mirifica

by Dr. James C. Cain.

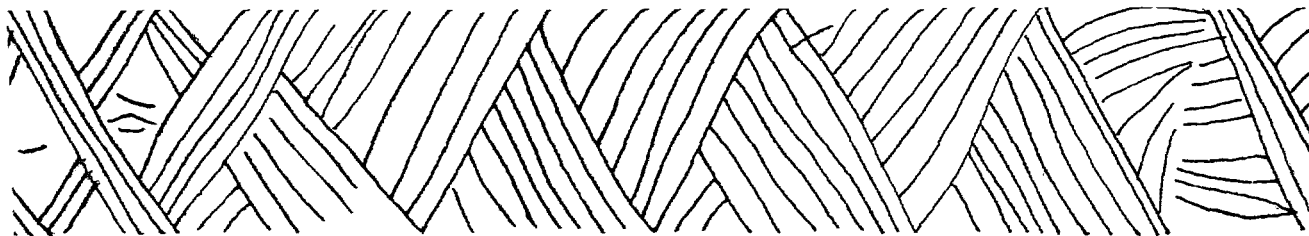
National Research Development Corporation, London, WC 1.

trip and to improve on his methods in the second. For this reason it became possible for Khun Kraisri Nimmanahaeminda, after the second trip, to establish an extensive Mrabri vocabulary in comparison with 7 other Mon-Khmer (non-tonal) languages. The expedition has been particularly fortunate to be able to carry out Anthropometric, Genetic and Medical examinations by blood researcher Gebhard Flatz M.D. from Bonn. Dr. Velder from Chiangmai prepared a note on the actual camp of the Mrabri. These studies in the field are published in this issue of the Journal of the Siam Society dealing exclusively with the Mrabri. This issue moreover contains a number of photos, drawings and one map of the area. The make-up of the expedition was such that it became possible to eliminate interpreters and informants other than the Mrabri themselves by which method the risk of ethnocentric interpretations was considerably reduced. The standard field technique of the rigid and prepared questionnaire was deliberately set aside for the same reason. It is realised that the time to write another monograph on the Mrabri has not yet arrived. This would only become possible after a fieldstudy of the Mrabri in their original habitat had been made. To mention only a few gaps in our knowledge to be the filled:

1. A comparison with similar Mon-Khmer language groups in Laos and in South-Vietnam, together with a comparison of other aspects of their cultures.
2. Further blood research; to acquire greater statistical accuracy.
3. The establishment of the phonology of the Mrabri language.
4. A full description of the techniques used in making the artifacts of the material culture of the Mrabri as well as comparison with related techniques in other hill tribes.
5. A study of the social structure of the Mrabri and their behaviour patterns in dry and wet seasons.
6. A study of their psychology and religious beliefs.
7. A study of the attitude of the Mrabri towards the outside world; the Meo, Kamu, Tin, Thai, as well as with tribes like the Khon Paa in Laos.

There will be additional problems of human relationship waiting to be solved before such a second monograph could be established. In the meantime it will remain unprofitable to attempt a systematic evaluation of the work of Bernatzik on the Yumbri. It is hoped that further

II



I

Photo 15. Comparison of crosshatched patterns on rim of neolithic vessel of Sai Yoke with carving on bamboo container of Mrabri. (I).

plans to visit the Mrabri for longer periods may materialize so that ultimately the missing gaps in our knowledge may be filled. At this moment we are inclined to believe that the Yumbri of Bernatzik belong to the same group of people-ethnic and linguistic-as our Mrabri. A comparison of the material published by Bernatzik in his monograph on the Yumbri with the results of the two last expeditions in the same province to the Mrabri would strongly indicate this. The linguistic evidence is however not convincing enough to remove all doubt on this point. More research has to be done and more linguistic material will have to be collected before a definite position can be taken. To Bernatzik goes the credit of having published the first monograph on the elusive Yumbri; the first monograph written on any tribe in Thailand. Without our curiosity having been roused by his book, we would not have tried to find them again. The present exposition of the Mrabri as a still living primitive society within Thailand is of importance because there are a great many people in this country who are still in doubt whether these Phi Tong Lüang, the Mrabri, are human beings or Phi (spirits). Tribesmen have been known to kill Mrabri by shooting and this may explain their great fear of human beings. It is indicative for the interest of the people in this problem, that the news story in the Thai weekly *Kon Muang* in Chiangmai, bringing the first account of our expedition to the Mrabri, was awarded the first prize as the best news story of the year.

The origin of the Mrabri is as yet unknown. It is possible however that they belong to remnants of autochthonic people, possibly to be designated as palaeomongoloid, that roamed in South East Asia long before the arrival of the Thai. There is a link to be found with the past. Photo 15 shows two identical patterns of ornament. Fig. I shows the cross hatched motif of the Mrabri of today, whilst Fig. II shows the same pattern on the rim of an earthenware pot from the neolithic cave man of Sai Yok (Changvat Kanchanaburi). We found no evidence that the Mrabri have known a stone age; however patterns are persistent.²²

It is possible and even likely that there are still other remote mountain "pockets" where similar isolated groups live akin to the Mrabri possibly in Laos in the region of Sayaburi between the Mekong and the

22. We are indebted to H.R. Van Heekeren, National Museum of Ethnology, Leiden for permitting us to publish the rim of the neolithic pot of photo 15. This pot is from the big cave of Sai Yok on the Kweh Noi, Changvat Kanchanaburi; the pattern on the rim is not at all common. See: H.R. Van Heekeren. A brief Survey of the Sai-Yok expedition. J.S.S. Vol. L. Part 1 1962.

Fig. I of photo 15 was drawn from the bamboo container appearing on Plate 3, I and on Plate 2, II, III.

'Thai border. This will have to be investigated. The number of Mrabri around Doi Khun Sataan maybe 40. Our group and Berthel together have not seen more than 35. Their future is grim as will be explained by Flatz. It is hoped however that a way may be found whereby it would become possible for the Mrabri to survive. Survival will depend in the first place on the possibility of earning food through work, through barter or otherwise.

Acknowledgements.

Both expeditions to the Mrabri in 1962 and in this year, under leadership of Mr. Kraisri Nimmanahaeminda of Chiangmai, were organised and have been financed by the Siam Society Research Centre. The Centre is financed through a Grant awarded by the Ford Foundation in New York for the purpose of carrying out research. This publication represents the results of the field studies. The Centre is grateful for the assistance and cooperation of the Commissioner of Changvat Nan and of the Border Patrol Police of Nan. When working out the results in Bangkok the Centre was furthermore fortunate to have the benefit of the information on botanical matters so readily supplied by Dr. Kasin Suva-tabandhu, Professor of Botany, Chulalongkorn University and by Mr. Tem Smitinand of the Royal Forestry Department. We are indebted to Government teacher Miss Prangthip Patanapakdee for her valuable information on the techniques used in producing basketry and sling-bags. Research Assistant and Librarian Mrs. Chuchee Thiarabongs Boyle of the Centre in here untiring efforts showed ingenuity in the approach to the understanding of the material culture of the Mrabri. However none of these studies could have been written without the leadership of Mr. Kraisri Nimmanahaeminda whose deep knowledge of things of the North and whose superb organisation proved again to be a delight to all participants.

The frontcover, drawings and sketches were done by Prasert Povichien. Photos Nos. 3, 5, 6, 9, 10, 11, were made by the author. Photo 15 is reproduced by courtesy of the National Museum for Ethnology, Leiden.

*A research study by
The Siam Society Research Centre
August 1963.*

Objects of material culture of Mrabri obtained in barter
during first and second expedition in Changvat Nan, 1962/3

Appendix A

Pieces	Description	Plate	Size in cm	Plant name		Purpose or use
				Thai	Latin	
External Barter : Trade						
1	large lidded basket of woven split rattan	1. V.	48 × 52 × 43	หวาย	<i>Calamus</i> or rattan	in barter trade; (against pigs)
2	large mats of woven rattan strips	1. IV.	170 × 190 180 × 223	หวาย	<i>Calamus</i> or rattan	in barter trade; (against pigs)
3	cylindrical blocks of beeswax (yellow and white)	—	6 × 5 5 × 3.5			in batik process for Meo skirts? Candles?
	dry roots for medicin			เถาวัลย์ ยี่	<i>smilax</i> sp.	medicinal
Steel implements						
1	Steel knife with 1 cutting edge; short bamboo handle. Rattan sheath.	4. I	28 29	—	—	carried by men and woman
1	spear, <i>hardwood shaft</i> with steel blade, double edge. Fastened with split rattan strip.	4. III	Total length 265 Length blade 41	ไม้มะเกลือ หรือ ไม้ตำตง	<i>Diospyros mellis</i> , or <i>Diospyros</i> sp.	Hunting of small animals
1	steel uprooting tool: <i>hardwood shaft</i> ; steel blade shaped to fit shaft.	4. II	Total length 165 Length blade 21.5	ไม้มะเกลือ หรือ ไม้ตำตง	<i>Diospyros mellis</i> , or <i>Diospyros</i> sp.	food gathering; roots, bulbs, yams.

Pieces	Description	Plate	Size in cm	Plant name		Purpose or use
				Thai	Latin	
3	Personal gear (not of steel) plaited rattan sheaths	1. I 1. II 1. III	29 37 20	หวาย	<i>Calamus</i> or rattan	to sheath a steel knife
2	cylindrical bamboo containers with tight lid;	3. I	18×6 18×7	—	—	to keep beeswax and fire equipment
4	slingbags (knotted network)	3. II	60×39	—	(Possibly a hemp) (<i>Cannabis</i> ?)	general; specific : to carry honey comb.
1	small rectangular lidded rattan basket	1. V	23×16×8	—	—	to carry small belongings
2	Tobacco pipes each made from a bamboo rootstock (<i>rhizome</i>)	3. V	14 14	—	—	To smoke tobacco
1	bamboo flute with 8 holes	3. VI	28	—	—	to play a melody
2	Equipment for the dwelling place sheets of flattened bark freshly cut. Bark upside. (Width equals tree circumference?)	—	173×77 122×45	ต้นยางน่อง	<i>Antiaris toxicaria</i>	sleeping mat placed between 2 fires
2	interwoven windscreens	—	142	ตำว, ลูกขิด	<i>Arenga pinnata?</i> <i>Caryota uren?</i>	wind protection
1	set of bamboo watercontainers	—	70	—	—	to carry and to store fresh water
1	set of bamboo cooking utensils, partly charred by use (Length of a typical shaft)	—	various 56	— —	— —	to cook, broil roots and meat
5	Plants used as food nuts (<i>maak kom</i>)	—	—	หมากขม มะขม	<i>Pittosporopsis kerri</i> Craib	eaten raw in July
1	green bulb (when fresh)	—	—	มะเดื่อหลวง	<i>Ficus pomifera</i>	eaten in January
2	roots for consumption (yams)	—	—	มันเส้า	<i>Dioscorea</i> sp.	eaten in January

Selected Bibliography.

Previous reports on the Phi Tong Luang or Kha Tong Luang (Mrabri).

The earliest source is possibly :

SEIDENFADEN, E.

" Further Notes About the Chaubun, Etc.
" JSS. XIII, pt. 3 (1919) 49-51.

Gives a third hand account of the Kha Dong Luang (the withered leaves' savages) living in the jungle on the slopes of the big Pu Kio mountain, which in the west separates Amphō Pak Bang from the Petchabun changvad. Names of Tambol given, Description given fits with that of the Mrabri, except that the Kha Kong Luang are said to go naked.

KERR, A.F.G.

" Ethnological Notes". JSS. XVIII, Pt. 2, (1942)

" The Kā Tawng Luang", 142-144.

An informant relates that the Ka Tawng Luang lived on the plateau of the large sandstone mountain, Pu Kading, on the boundary between (the former) muang Loi and Muang Lom. They had been seen in a band of 30 in Bāñ Sītāñ. It was said they had curly hair; wore a loin cloth; no women. They said there were plenty more East of the Mekong.

SEIDENFADEN, E.

" The Kha Tong Lu'ang. " JSS. XX, pt. 1 (1926) 41-48 Reports on the meeting of Mr. T. Wergeni with Phi Tong Lu'ang in 1924 at Ban Nam Pu on the Road from Prae to Nan, about 50 km. north east of Prae. Description in general agrees with that of the Mrabri.

The report mentions that the Phi Tong Luang know how to fashion steel (obtained from the Lao or the Khamu) for their lances. The spears are often poisoned. They do not fish as they seldom descend into the valleys.

Exogamy is strictly practised; the position of the woman is very low. They sometimes carve their earplugs and the bamboo tubes for carrying their fire implements (they use tinder and steel for producing fire.”)

BOURKE-BORROWES, D. “Further Notes on the Phi Tong Lu'ang”. JSS. XX, pt 2 (1926) 167-166

Reports that 6 or 7 Phi Tong Luang had been seen in Ban Siew, Amphur Saantaw, Changvat Uttaradit. (p 168).

WINIT WANADORN, Phra. “Some information concerning the “Phi Tawng Luang” obtained from a few residents of a village in the Nam Wa district, east of Nan.” JSS. XX, pt. 2 (1926) 171-174. Sofar the most complete and most accurate account. The account states that these people wear loin cloth made of woven bast fibre of the *Antiaris toxicaria* tree, beaten out. Mattresses and blankets are also made of the same material. (171).

BIBLIOGRAPHY : John F. Embree and Lillian Ota Dotson. Bibliography of the peoples and Cultures of Mainland Southeast Asia. New Haven 1950. See: Thailand Tribal and Ethnic Minority groups. pp. 540 etc.

BIBLIOGRAPHY : Bibliography of Material about Thailand in Western Languages. Chulalongkorn University. Bangkok 1960. See Ethnic Groups.

EICKSTED, Egon Freiherr von. Rassendynamik von Ostasien. Berlin, 1944.

BERNATZIK, Hugo, Adolf. Les Esprits des feuilles jaunes. Paris, 1955.
Translation from the German edition by Alphonse Tournier with Notes and bibliography by Georges Condominas.
French sources quoted by Condominas but not all accessible in Thailand are :

- CUISINIER, Jeanne. les M'ong. Géographie humaine et sociologie. Paris, Institut d'Ethnologie, 1948, Plates, ill. maps bibl. index.
- FROMAGET J. Études géologiques sur le nord de l'Indochine centrale. Hanoi. Bulletin du Service géol. de l'Indochine, vol. XVI, fasc. 2, 1927. Plates, maps, bibl. index. (See pp. 17-41 and pl. IV. D).
- GUIGNARD R.P. Th. Note sur une peuplade des montagnes du Quang-Binh; les Tac-Cui. B.E.F.E.O. T. XI, 1911, pp. 201-205.
- SKINNER. G. William. Review of H.A. Bernatzik, Les esprits des feuilles jaunes. J.S.S. Vol. XLIII. Pt. 2. (1956) pp. 163-170.
- ROBERT W. Weaver. Through unknown Thailand. Natural History, June 1956. 289 etc.
- Weaver and Goodman were possibly the first Western explorers having met Phi Thong Luang since Bernatzik. The meeting took place in the mountainous region of Amphur Dan Sai, Changvat Loey in North East Thailand. It is quite possible that the people described in this general account were Mrabri.
- ROUX, Henri Quelques Minorités Ethniques du Nord-Indochine. France Asie. 92-93. 1954.
- BERNATZIK, Hugo. Die neue grosse Völkerkunde. 3 Vols. Frankfurt 1954. For the Yumbri see Vol. 2. p. 231 etc. and index.
- CONDOMINAS, Georges. Nous avons mangé la forêt. Paris. 1957. Description of the Mnong Gar; a proto-indo-chinese tribe North of Dalat (South Vietnam).
- HERMOGENS F. BELEN. Philippine Creative Handicrafts. Manila 1953.
- Description of various techniques of rattan weaving, plaiting and basketry work.

ERIK SEIDENFADEN.

The Thai Peoples. The Siam Society, Bangkok 1958, p. 135/6.

GORDON YOUNG.

The Hill Tribes of Northern Thailand. The Siam Society, Bangkok 1962, p. 65-68.

BRANDT, John J.

"The Negrito of Peninsular Thailand".
J.S.S. Vol. XLIX Pt. 2. 1961 pp. 123-158.
Map, 6 pl.

Report on the Socio-Economic Survey of the Hill Tribes in Northern Thailand.

Department of Public Welfare. Ministry of Interior, Bangkok, 1962. 112 pp. Stencil.

PATYA SAIHOO.

The Hill Tribes of Northern Thailand. Bangkok, 1963. 72 pp. App. Stencil.

Kraisri Nimmanahaeminda and Julian Hartland-Swann.

Expedition to the "Khon Pa" (or Phi Tong Luang)? J.S.S. Vol. L part 2. 1962 pp 165-186.

In Thai :

บุญช่วย ศรีสวัสดิ์

ชาวเขาในไทย กรุงเทพฯ ๑๙๖๓

บุญเสริม สาทราบัย

ผีตองเหลือง. เชียงใหม่, หนังสือพิมพ์คนเมือง
ฉบับที่ ๔๐ วันที่ ๑๐ กุมภาพันธ์ ๒๕๐๖ หน้า ๑๕