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THE SOCIAL AND ECONOMIC ORGANIZATION
OF TWO WHITE MEO COMMUNITIES IN NORTHERN THAILAND

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Preface

To the White Neo villagers of Mae Nai and Khao goes my gratitude for allowing me not only to observe and take disconcerting notes on, but also inviting me to participate in, many of their activities which are normally off-limits to non-Neo. After the initial suspicion wore off, I was shown hospitality and acceptance at weddings, burials, rituals propitiating ancestors and lunar new year celebrations. There were villagers who partially due to curiosity in the outside world and my work, but more often from a sense of pride in their people, contributed specific and time-consuming information on such topics as cultivation techniques, supernatural phenomena and specialist activities. I would especially like to thank Qua Sae Lis of Mae Nai and Ying Sae Yaj of Khao for imparting some of their knowledge of White Neo agriculture to me. Without the warm hospitality and confidence of He Ju Sae Yaj I would never have understood the White Neo supernatural world. If a White Neo reads this account of his people, I hope he will accept my thanks to his people for the part they played in making it possible.

Many people and several institutions have made
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The Social and Economic Organisation of Two White Heo Communities in Northern Thailand

The main objectives of this dissertation are the study of the socio-economic organisation of two small swidden or shifting cultivation communities and a descriptive analysis of the structure and content of the system of shifting cultivation practiced by these White Heo villages in northern Thailand.

The presentation proceeds from a general description of the topographical and demographical setting to an analysis of the specific form that such systems of shifting agriculture may exhibit within a given ecological and social context. Illustration is made of the edaphic, biotic and climatic factors affecting the technology of shifting cultivation, thus progressing from the inorganic to the organic factors which are most amenable to artificial modification. The organisation of the agricultural year is directly determined by activities connected with the cultivation of crops providing the most desirable foods. The method by which time is calculated corresponds with the six successive phases of cultivation: selecting, cutting, burning, planting, harvesting and fallowing. The first three phases, which
involve the removal of old vegetation, vary little in practice, while the latter phases concerned with the control of new vegetation require modification on the technological level. The manner in which the environmental components and their inter-relations are categorised and interpreted by the cultivators themselves demonstrates the sophistication of the ethnoecological process.

In spite of, and perhaps due to, pressures from the lowland macroculture which surrounds them, the White Heo have maintained a high degree of social solidarity which complements their distinctive agro-economic system. The political values depend on residential relations. The basic units of the White Heo political structure are the household and the village. The household (vim) includes all those who live under one roof and are under the authority of the respective household's head. Villages are composed of two or more households, usually connected by kin or affinal ties and under the leadership of an elder household head from the dominant lineage group. Higher units of political solidarity are evident where separate villages have a common appointed headman for administrative purposes.

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The social system which is based on the lineage system and the organisation of kinship relations
supersedes the lack of political unification, moulding the White Meo into a complex network of interdependencies.

Members of each household are related to other members of their community in two primary ways: as lineage kin and as affines through the institution of marriage.

While the term *vim* is used to refer to the household spatial group, *cuab* which often corresponds to the household is the smallest lineage segment, being composed of all agnatic kin and their affines living within one household under the authority of one household head, and possessing common property. A lineage *kwiti* is a group of patrilineal descendants within a system of such groups. The men who live in the smallest or minimal segment are a lineage within a lineage system. They are distinguished as an enduring group consisting of all the patrilineal descendants of a single ancestor. Since *xeem* is used to refer to the largest group of agnates, it is comparable to its lesser segments, in that it is not an entirely unique group as a segment in a system of groups. Lineages are not always corporate, localised groups, although they are frequently associated with territorial units. Members of a lineage who live in an area associated with it often conceive of themselves as a residential group. It is often these patrilineally
related clusters which determine the residence patterns within a community. Lands surrounding the community are referred to as liaj la, lands and territory belonging to the minimal lineages of that community. Cultivation rights over land are of fundamental importance to the White Neo and the values which support the right to cultivate appear to be the foundation of their socio-economic system. A cultivator's primary concern is to maintain cultivation rights over sufficient land to support the needs of his minimal lineage, while at the same time maintaining his position in the agnatic groups through which he is assured the support of his lineage members in any dispute he may have over his cultivation rights. This results in an effort to maintain the equilibrium between having adequate land for cultivation and at the same time living in a community where there are sufficient supporters to maintain these rights.

Marriage is the means by which the White Neo create ties between lineages; good marital relations are conducive to good lineage relations, which in turn stimulate further marriages between lineages. Marriage is not permitted between members of the same maximal lineage, close kinsfolk by adoption, close affines or persons who stand to one another as fathers and daughters.
in generation. In contrast to these restrictions, which certain relational ties exercise on the choice of a wife, other ties, such as the cross-cousin relationship, predispose relatives to marry. By virtue of marriage a woman is transferred from her father's maximal lineage to that of her husband. While her husband alone has sex rights in her, all of his minor lineage have residual rights since they shared in her bridewealth. Bridewealth, involving contributions from the minor lineage as a whole, creates new social ties between persons and regulates inter-relationships between these persons until the relationships become assimilated into the kinship system. At that point the social group identifies itself with common ancestors, common interest in property, wives and children, and corporate rights in a territory. Rights in land resources are equated with the prosperity of the household, that socio-economic unit upon which the White Neo economy depends.

An attempt is made to demonstrate that the two communities not only operate within an established structural framework which is not necessarily in a stable equilibrium, but also exist within a particular ecological environment which determines what people do.

The dissertation as a whole illustrates the pattern
by which two White Meo communities have become adapted to their environment. It progresses from a discussion of how they transform their natural resources into goods and services primarily through the cultivation of crops, to an examination of the way in which these shifting cultivators are organised on the ground, both in terms of local grouping and in terms of individual activity.
Note on Orthography and Tonal Patterns

The White Meo language consists of monosyllabic words with nine tonal variations. A comparison of the languages indicates that the White Meo are a branch of the Miao-Yao language group (Davies, 1909:331-347).

Although the Meo people speak of themselves as Kmoob, which many informants signify as meaning "fortunate people", they are most commonly referred to as Miao or Meo which sounds like the Chinese word for cat. However, the Chinese character most often used for these people is the grass character above the character meaning field (Graham, 1937:13). Western authors and other sources from Southeast Asia have borrowed from the Chinese usage.

No claim is made by the writer to expertise in descriptive linguistics. During the period of field work names for cultivation techniques, plants, village and household divisions, and terms of social and economic significance were recorded. The syntax, phonemics and tonal patterns were compared and correlated with the three source references available to the White Meo language (Bertrais, 1953; Heinbach, 1966; Savina, 1928).

In the phonemic orthography Romanised letters have been used, but in many cases they symbolise a different sound than represented in European languages.
Each syllable has a basic tone. The tone is indicated by a consonant letter at the end of each syllable. Since no syllable ends in a consonant, the tonal indication should not cause confusion. One consonant followed by a vowel is the basic syllable pattern; however, there are clusters of one to three consonants pronounced as a unit.

The tone (b) is high and the pitch is kept level. Tone (j) begins at (b) and descends to (v). Tone (v) begins at a middle tone and ascends to (b). Tone (x) is similar to (v) but is given a special inflection. Tone (s) is middle low and remains level. Tone (g) is low-middle and is characterised by considerable breathiness. Tone (d) begins low and ascends to (s). Tone (m) is low and level ending in a glottal stop. The middle tone is not given a tonal character but remains level.

Pronunciation includes a number of specialised sounds represented by letters. (n) is used to indicate nasalisation; (h) aspiration; (np) vibrating vocal cords; (d) glottal stop and (ng) a sound similar to the (ng) in "sing".

There are thirteen vowels which are designated by English equivalents and specific combination thereof. Vowels range from high front non-nasal to low back nasal depending on their pairing with other vowels.
Since no syllable ends in a final consonant, the tone (except the mid tone) is indicated by an English consonant letter written at the end of each syllable and corresponding to the chart above. Where no special tone mark is written the word has a mid tone. Relative pitch, length and contour of the tones is indicated on the chart.

The tone chart is drawn to indicate the tones as heard in isolation. That is, as heard on separate unconnected syllables. In the normal flow of speech tones tend to vary somewhat in pitch and quality depending both upon patterns of stress and upon the influence of other contiguous tones. This should be carefully noted.

Note that tone —m ends in a glottal stop and is said with some constriction of the throat. Tone —g is characterized by considerable breathiness.

Intonation pattern —X indicates a particular tone contour given some words to express wonder and surprise. It appears most often in final particles. It is not a tone morpheme in the same category as the other tones here indicated but is symbolized in the same way for convenience.

Tone —d appears only in only in certain classes of words. It is most noticeable in words indicating time or location. The majority of these words are nouns but illustrations also include verbs.
CHAPTER I
THE SETTING

History and Related Publications

The White Hmoob call themselves Hmoob Dawb. The heartland of the Hmoob people is the province of Kweichow in south China, but they are also found in the adjacent provinces of Kwangtung, Kwangsi, Fukien, Hunan, Yunnan, Szechuan and the islands of Hainan and Tonkin (Graham, 1937:18).

References to the Miao or Hiao in Chinese literature give frequent accounts of warfare between the Chinese and Miao peoples which resulted in the migration of the Miao southward into the mountainous regions of China's southernmost provinces. The White Miao in Thailand often recall historically vague legends of almost constant conflict with the lowland Chinese. Perhaps because of this verbal history which is passed on from generation to generation in the form of song, the White Miao conceive of their world as composed of two sets of people: those who live in the plains, mab daum, which includes the more specific term mab muay, all Chinese people; and those peoples with whom the White Miao identify themselves who live in the hills and mountains. A emic dichotomy
exists between these two groups; the former are con-
sidered shrewd, unscrupulous, powerful and must be
treated with suspicion, while the latter are simple,
hardworking types. Following their migration into
Southeast Asia those beliefs persisted through the
geography and peoples changed. In Laos the los tsuas
replaced the Chinese, in northern Thailand the sœv phuy
represented the plains people.

It is speculated that the migrations of the Hmoob
into Laos, North Vietnam, Burma and northern Thailand have
taken place over a span of fifty to one hundred years.
In the province of Chiangmai a reasonable estimate might
be forty to fifty years. Frequently the Hmoob are dis-
tinguished by missionaries, ethnographers and local
authorities by their mode of dress. Thus in China alone
we have records of Long Skirt Black Miao, Short Skirt
Black Miao, Flowery Miao, Hlie Miao, Red Miao, Magpie
Miao, Cowrie-shell Miao, Ch'uan Miao and White Miao. All
of these Miao people speak related dialects of the Miao-
Yao language and are socially and culturally distinct
from the Chinese (Huey, 1960). In Thailand there is
somewhat less confusion over names, primarily because of
the relatively small number of Hmoob residing there. The
most recent estimate places them at somewhat less than
50,000 (Young, 1961:39). It should be emphasized,
however, that this figure cannot be considered reliable due to inadequate census methods and the mobility of the Hmoob villages and villagers. There are usually three, sometimes four groups of Hmoob cited as living in Thailand: the Blue Heo, the White Heo, the Guana Heo and less frequently the Black Heo.

The White Heo villagers themselves distinguish two major and two minor groups of Hmoob. On the first level there is the Hmoob Ntsuab, Blue Heo, and the Hmoob Dawb, White Heo. These two groups are often designated as separated tribes, for they are not only distinguished by custom and dress but also by differing but mutually intelligible dialects with notable variations in idiom. Other observable disparities include the white formal skirt of the Hmoob Dawb girls compared with the blue embroidered skirt of the Hmoob Ntsuab, or the fact that the Hmoob Dawb girls wear a cloth headband, while the Hmoob Ntsuab place their hair in a bun held in place by combs. There is also a slight difference in the construction of houses. The Hmoob Dawb house has two doors, one of which is considered the entrance for guests, while the other near the rear of the house is more commonly used by household members in carrying out their chores. The Hmoob Dawb are conscious of being different from the
Hmoob Ntsuab, but primarily they consider themselves as
Hmoob, to be descendants of the same ancestor, the
legendary first man and woman *pauj ntsuab pauj naab*,
and to have common beliefs. Villagers also distinguish
two less significant groups, the Hmoob Quas Npab, striped
or armband Nao, and Hmoob Yob Tahuub, the flowery Nao.
Neither of these groups speaks a language linguistically
differing from Hmoob Ntswab or Hmoob Ntsuab, and the
villagers note that they are only considered separate,
*Kao pauj*, because of their distinct mode of dress.

Since the concern of this thesis is focussed on two
particular White Nao villages in Chiangmai Province no
further consideration will be given to Nao groups other
than the White Nao.

Although the Nao (Kiao) population living in China
is estimated at over three million and inhabits mountainous
regions in most of the provinces of southwest China,
the literature on this numerous minority group is
scarce.\(^1\) Except for brief references to the Kiao as a
stubborn and troublesome people in the Book of History
(*Wilhelm*, 1951:77), there is almost no historical record
of the Kiao from known Chinese sources.

In 1909, H. R. Davies published his account of

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\(^1\) In the literature from China and Indochina *Kiao*
is the common term used for the Hmoob people.
travels in Yunnan in a book entitled *Yunnan: The Link Between India and the Yangtze*, in which the Miao are mentioned as one of the tribes of Yunnan. Several years later J. R. Clarke wrote *Among the Tribes of South West China*, which presents a sample of comparative Miao vocabularies. Later papers on the Miao of China include those by D. C. Graham in 1937. Most of the publications describing the Miao in southwestern China have become outdated and those that are not, notably de Beauclair (1961), Its (1960) and Ruy (1960), are each concerned with particular communities in China whose social and economic organization is not fully described.

Sources on the Miao peoples in Southeast Asia are more numerous, but again largely ignore an account of the means of livelihood and the social organization of the Miao communities, for their contact with the Miao was slight and the impressions they recorded were often superficial. Among those publications partially concerned with the Miao in Thailand are Barnatzik ('747) and Credner (1935a). The latter is primarily concerned, as the title *Das Land der Tai* indicates, with a geographical and cultural survey of Thailand. Miao ethnography is not discussed with any depth nor does it purport to include sociological descriptions of Miao village life. Credner's
survey certainly has some relevance for most contemporary areas in Thailand, but it is a broad, undifferentiated study which provides no detailed illumination of the structure or processes involved in a Neo community.

Bernatzik's compendious study, *Akha und Henu: Probleme der angewandten Volkerkunde in Hinterindien* (1947), covers two volumes. This study, although thorough in the details of folklore, could not be termed a social anthropological work. The ethnographic content is of considerable interest when applied to a relatively undefined people. Bernatzik's own observations are supplemented by his background in the German geographical school, and it is evident that he has adjusted his synthesis to fit ancient documentary sources. These volumes comprise a collection of well documented folklore.

The 1961 the Siam Society published a survey of O. Gordon Young entitled *The Hill Tribes of Northern Thailand* (1961). Although this publication served its limited purpose in drawing tribal areas within the boundaries of the Thai state, it can in no sense be termed a scientific study. It is neither a case study nor does it employ scientific method.

The most recent ethnological study on the Neo is an article entitled, "The Neo of Xieng Khouang Province, Laos"
by C. L. Barney and was published in *Southeast Asian Tribes, Minorities and Nations*; however, this article and the unpublished paper entitled, "The Noo of Xieng Khouang Province", give only a brief summary of the socio-economic organization of the Nee in Laos.

**Problems and Objectives**

Solutions to the major problems affecting the livelihood and social organization of the White Nee people in Thailand depend upon the value judgements of the lowland macro-culture which surrounds them. Emphasis has been placed on the most effective means of integrating the Nee into the socio-economic and political life of the Thai nation (Ceddes, 1967:550-556). Various proposals recommending solutions to the integration problem have been presented, among which are the prevention of further forest destruction by assisting the White Nee and other so-called hill tribes in developing a more "rational" system of shifting cultivation or, if possible, promoting stabilized farming in the hills while at the same time replacing opium cultivation without striking a deathblow to the economy of the opium cultivators.

The Ministry of Interior of the Thai Government published in 1962 "A Brief on the Hill Tribe Development and Welfare Programs in Northern Thailand". After the
brief has been completed several specific problems became evident. These specific problems were related to topics such as soil preservation, land use, hill agriculture techniques, preventive veterinary and sanitary methods, development of an effective transport and marketing mechanism, livestock raising and pasture improvement. Secondly, they were related to those problems in which human factors play an important role and for the solution of which more intensive anthropological and sociological studies would be required. These studies should primarily serve the practical purpose of preparing a basis for formulating realistic plans directed toward the improvement of the social and economic conditions of tribal minority groups. Apart from this they should contribute to the general knowledge of the people concerned, their cultures, their way of life and their history.

It was also noted that there have been repeated cases in which the lack of essential knowledge or an error in judgement, due to the lack of research, have resulted in catastrophe, in social and economic disintegration or even less of life and examples where ill-considered agricultural innovations, undertaken precipitately, have led to damage to the soil and vegetation.

As Geddes (Geddes 1967:564) has critically pointed
out, there has been a general assumption that shifting
cultivation is bad for the environment, economically
inefficient, "that it must be abandoned, and that,
therefore, it is not a fit subject for agriculture study".

General suggestive classifications of shifting
cultivation are obviously misleading and assumptions, drawn
on such classifications, are particularly so. Until quite
recently discussions of shifting cultivation were con-
 fined to descriptive elements and did not attempt to list
the effective distinguishing characteristics. Conklin
(Conklin 1957:2-3) has distinguished two major systems of
shifting cultivation which he termed "partial" and
"integral" systems. The former indicates the use of the
technique as a technological expedient for a given
purpose, while the latter reflects the "traditional, 
year-round, community-wide, largely self-contained and
ritually-sanctioned way of life". Integral shifting
cultivation is thus the only form of agricultural
practiced by members of such groups. The White Neo in
northern Thailand may be included in the latter category
although some earlier writers have indicated that the Neo
shifting cultivation practices were in a transitional
stage to irrigated rice cultivation. Two observers of
the Neo people writing three decades apart give the
following descriptions:

Abadie (Abadie 1924:159-60) writes of the Neo of Tonkin, "Maize is the basic food of the Neo. It is boiled, steamed, dried, or reduced to meal in order to be eaten in the form of cakes. The Neo also cultivate mountain rice, but like the Han Yao they are coming more and more to cultivate permanent irrigated rice fields, the working of which is easier and more remunerative. To this end they have taken over as much as possible of the favourable terrain, valley bottoms or sides of hillocks on which water may be brought by a simple canalization and have laid out these areas into terraced rice fields where they often successfully cultivate rice and opium."

Bernatzik (Bernatzik 1947:348-50) writes that among the Neo he studied in northern Thailand maize ranked in eighth place as a cultivated crop, after rice, opium, sugar cane, yams, cucumbers, radishes and beans. He also found the Neo abandoning the use of a plough in favour of swidden agriculture, due to cultivating steep slopes without terracing. He found a few old Neo still familiar with the use of the plough. When asked why the Neo no longer used a plough, an elderly Neo replied, "The land on which we live, and the regions we had to cross before we came here, were mountainous and stony and did not
permit the use of a plough". While there appears to be no indication that the White Hae in Chiangmai Province have in fact a stabilized form of agriculture, there is no evidence that they intend to alter their present agricultural practices.

The Hae engage in shifting cultivation of a style which in its general outlines is comparable to that practised throughout the forest-covered mountain regions of mainland Southeast Asia. The system was outlined in the following terms by Qua Sae Lis of Mae Mae village in response to my showing his photographs taken in Luzon, Philippine Islands, of a terraced rice field.

"The pictures of fields (tea muei—dry rice fields) which you have are nice. They look like padi fields liai in the mountains. It must have required many people, working over a long period to cut and rearrange the earth (tea field, earth, ground). I don't think we could gather so many people to work on one thing. Not much point in it. The fields would soon become jungle (hox zooy nui treaj wild virgin jungle) when they no longer produced a good crop or when the village moved."

"Our fields are easy to work. Clearing is the hardest work. (Here he refers to the cutting and piling of forest cover before burning.) There is not much
weeding for the first two years, and if the field gives a poor crop we can leave everything without angering the jungle spirit zocy dab. The jungle spirit would be angry if we changed things as the Thai do. The spirits dab do not become angry if you clear and cultivate land and make sacrifice to them when it is appropriate. To take the land permanently and change its shape would make them angry and you might not get anything from the land. We know that the padi field liai gives bad rice year after year, but we don't want to eat this rice. Padi fields in the mountain slopes would be washed away every rainy season. A new rice field in the forest gives four times as much rice and the rice has a good taste. After the rice crop, we can plant maize, vegetables and poppy all in the same field. The field can grow maize for four or five years and poppies for ten or more years. When the fields around our village are tired and it takes five hours to reach new fields, we can move the village to another place. The fields we have left behind become young forest tæbæaws quay poj, for the seeds from the forest soon grow into trees. In ten years the trees are big. You see we have not destroyed the land like the Thai farmer or the farmers in your picture. This is why we don't believe the Thai forestry people when they say
we are destroying the land. We have done this for many years and know more than they do."

The main objectives of this thesis are twofold: firstly, it attempts to describe analytically the structure and content of a particular system of shifting cultivation practiced by two White Hmong communities in Thailand. Illustration is made of the general type of agriculture involved and of the contexts within which alternative social solutions to major problems faced by the shifting cultivators may be investigated. Secondly, it is a study of the social structure and organization of a small "swidden" (Izikowitz, 1951; Conklin, 1954; 133; Ekwall, 1955; Fagg, 1956), or shifting cultivation community. An effort is made to avoid "purely pragmatic assumptions" (Leach, 1961:197), which imply that social systems are intrinsically in stable equilibrium and that all parts of such a system are mutually consistent. Rather, an attempt is made to demonstrate that the structural relationships are but abstractions of the continuing socio-economic environment, which can best be understood through the concepts of the people studied. Although White Hmong society is a particular society and the two communities described herein are in some degree peculiar to that particular society, they are representative of a
kind of society found among many of the peoples
inhabiting the mountains of Southeast Asia. White Neo
society in northern Thailand is tribal, in the sense that
it has a cultural tradition that is distinct from the
surrounding lowland civilizations (Lohman, 1963:1), but
there is no tribal or political organization that extends
throughout the entire ethnic group residing in Thailand.
If the White Neo are a tribe, it is due to the fact that
they have a common social organization, language, customs,
ideals and culture. These common attributes often bind
people together more effectively than any political
organization.

The White Neo people are isolated by virtue of the
fact that they are generally excluded from the mainstream
of the social and political life of the surrounding low-
land civilization. They have no higher political
institution of their own, they are illiterate and their
religion is a combination of ancestor worship and animism.
Nevertheless, the structure of their social and economic
organization, demonstrates a viable adaption to the eco-
system from which they obtain their livelihood and of
which they are an integral part. White Neo social and
economic organization can only be understood in terms of
adaption to an environment by means of a particular
technology.
Only through a detailed knowledge of White Neo social and economic organization will such programmes as those designed to integrate that society into the macroculture which surrounds it be effective. To understand White Neo society, it is first necessary to understand the cultural and environmental characteristics and to examine in detail the agricultural system, which is the basis of the shifting cultivator's economic reality. The organization of the White Neo household, family and village illustrates the interdependence of the social and economic organization. Once these factors are understood it is possible to describe the lineage system, which is the network of ties which bind the White Neo people together. To completely understand the lineage system it is necessary to also discuss marriage, for this is the institution through which ties are created between lineages. In conclusion, the transitional nature of the two communities will be discussed in the light of the descriptive account.

The Physiographic Setting of the Communities

The main objectives of this thesis are to describe the system of agriculture currently practiced by two small but differing White Neo communities in Chiangmai Province, Thailand, and to demonstrate the relation of
this agriculture system to a specific geographical setting and to the social structure of the communities.

On the basis of differences in topography, climate and human activity, Thailand can be conveniently divided into four regions: northern, central, northeastern and southern. Northern Thailand designates that area between the Salween and Mekong rivers, north of 13° N. latitude. The area is in part drained by the four main tributaries of the river Chao Praya, which is Thailand's largest river and primary source of water for irrigation. The region occupies an area of approximately 35,000 square miles and perhaps 9% of the land is under wet-rice cultivation. This is due, in part, to the predominant topography which is parallel mile-high north-south limestone ranges interdispersed with deep valleys which lie at elevations of 1,000 feet and higher. As with the other areas of Thailand, wet-rice is the major crop and where adequate irrigation is available, two crops of rice per year are harvested. Tobacco and cotton are also cultivated primarily for export to other areas of Thailand.

For administration purposes Thailand is broken down into fourteen "mukthon", or divisions, which in turn are divided into seventy "changwat", or provinces. The provinces
are subdivided into 406 amphur, or districts, within which there are more than 5,000 tambol, or municipalities. The most important administrative division is the changwat whose governor is directly responsible to the minister of interior. Changwat Chiangmai lies some 450 miles north of Thailand's capital city, Bangkok. It takes its name from the city of Chiangmai, which is second in size and population to Bangkok with around 100,000 inhabitants. Chiangmai lies along the course of the river Mae Ping, as do other but much smaller commercial towns of the province, Mae Rim, Hong Dong, Chon Thong and Hot. Roads and trails radiate in all directions from Chiangmai, which has been and continues to be the center of commerce and transportation for the northern area of Thailand. The fertile valley in which Chiangmai is situated is twenty miles wide and eighty miles long. The annual flooding of the Mae Ping river and its tributaries has created an alluvial plain which is situated about 950 feet above sea level. Surrounding this plain are wooded mountains ranging in height from 2,000 feet to over 8,000 feet. The highest peak in Thailand, Doi Inthanon, which is 3,514 feet above sea level, is located in Chiangmai Province, thirty-five statute air miles southwest of Chiangmai. On the lower slopes of these mountains are
teak and dipterocarpus forests which range from 800 feet to 2,000 feet above sea level. Up until after World War II teak from northern Thailand accounted for one-third of the world's total production and was operated by British firms and the Thai government. A rotation system of cutting was used: half the area was set aside for reforestation over a fifteen year period and half was actively exploited.

A bird's eye view of the Neo-inhabited areas (Plates I, II) reveals dense forest growth along the upper slopes and ridges interdispersed with cleared fields and open grassland ranges. The fields stretch out along precipitous slopes in all directions from the village which is separated from them by a protective forest which is not cleared. It is in these fields, sometimes four hours by foot from the village, that the Neos do their work or rest overnight in their field huts during periods of intensive cultivation. The distribution of the fields for the village is roughly rendered by Figure VI. Recently fallowed fields (two years or less in fallow) are indicated by diagonal lines, older fields which have reached some stage of secondary forest growth are distinguished by vertical lines. Fields under cultivation at the time of the study are open spaces. Field
houses, usually equipped to sleep no more than three adults, are scattered throughout the cultivated areas. The pattern can generally be described as one of outward or centripetal cultivation with the village as the focal point. Areas near but separated from the village by at least one hundred yards of forest are cleared and cultivated first. Gradually the circumference of the circle widens until fields may be as far as four hours from the village. The villagers are usually located on the top of interfluvial ridges near streams or springs. Drinking water is either obtained by split bamboo aqueducts resting on stakes downhill from a spring, as in Hae Nei, or is carried in buckets from the source of the spring itself, as in Khae village.

White Meo houses (Figure III) differ conspicuously from those of other Meo in that there are two entrances, one enters into the cooking area and the other main entrance into the living, ritual and general entertainment area. The main entrance is always exposed to an open area at the edge of the ridge or crest. This has both a ritual and practical function, since it prevents flooding in the principle area of the house. On the uphill side of every house is a drainage ditch which channels the rainwater to the downhill side. The houses
are built from split tree planks lashed, notched or nailed to the frame. They are rectangular in shape and are on the ground. All households, whether nuclear or extended, have field shelters ที่ซ่อนหลบ in which they spend a great deal of time. They are constructed on the ground and are often no more than lean-tos.

Besides village houses and field huts there are other types of structures: work sheds ที่ซ่อนหลบ, used by the blacksmiths; small storage barns ที่ซ่อนหลบ, built on piles; and animal sheds ที่ซ่อนหลบ, usually constructed near the back entrance or on the lower side of the house.

The limited hunting and fishing activities do not alter the landscape near the village, and there are no areas specifically set aside for this purpose. Trails radiating from the villages vary in width from hardly visible footpaths to well travelled five foot wide horse trails. The Neo maintain no roads of their own as terrain prohibits this, and they have no specific use for them.

Mae Sai. The small subsistence villages of the Neo, which are situated on the mountain ridges well above 2,000 feet, contrast sharply with the Thai commercial centres. The white Neo village of Mae Sai takes its name from the
stream which runs thirty yards from and parallel to the ridge on which the village is situated. During the wet season the stream joins the Mae Sa tributary that terminates in the Mae Ping river nine miles north of Huang (city) Chiangmai. The village and stream are located on the northeastern extension of the Doi Pui mountain mass which rises to a height of 5,523 feet at 18°45' N,Lat., 99° Long. Mae Nai village is 2,850 feet above sea level. For more than twenty years the Kao have settled on the mountain slopes of Doi Pui and adjacent ranges in Mae Rim district. The movement into the district was gradual and the most recently settled hamlet in the area is only three years old. Each village in the Pui (Hong Dong Mae Rim) sector is designated by the number following the chronological order of settlement. The original village, Kaesa, is located in Mae Rim district approximately two hours distant on foot from Mae Nai. The Kao refer to Kaesa as luab 1b, or the first village, Pui as luab ob, second village, Mae Nai as luab neb, third village, with Jak Kyn and Kong Hae, fourth and fifth respectively.

All of the villagers express a certain unity due to their common original and kinship ties. This unity is demonstrated in a variety of ritual activities and in the fact that all of these villages have a common
administrative headman, who is elected by the male villagers and then given official appointment by the Thai authorities. He must represent the villages in his own area in all matters not restricted to village or lineage affairs, and is the host and spokesman for his people. There is also a steady stream of commerce and social interchange between the villages. Young men from the area often visit relatives in one of the other villages during slack periods in the agricultural cycle and when they are courting girls. Consequently it is difficult to mention one village without including the other when relevant.

Jak Kyn village is only ten minutes walk from Mae Nai and can be reached by a trail leading around the source of the Mae Nai stream at the south end of the village. The combined households of Mae Nai and Jak Kyn number seventeen, ten of which are in the former village. The total number of inhabitants in both villages is one hundred and twenty-three, of which fifty-seven reside in Jak Kyn. Because the village of Jak Kyn had just been settled at the time of the field study and only by households from Mae Nai, statements concerning Mae Nai will include Jak Kyn, except when otherwise indicated.

Both Maesa and Pui villages are somewhat larger, consisting of thirty or more households, some of which are
occupied by the same extended family that for reasons of trade and agriculture maintain houses in both villages. Kong Hae village is to a great extent divorced from the interchange between the other four villages by the fact that it is Christian. Also the administrative headman of the other four villages has no control over Kong Hae, although the five households in this village have been segmented from Maesa for less than three years. The trip to Kong Hae takes ten hours on foot from Mae Nai and more or less the same time from the other villages, and it is located in Samnong District due west of Mae Him.

Khao. Khao village, the second village on which this study focuses, sits on the southwestern face of the mountain ridge at 18°46' N.Lat., 99° Long. overlooking the lower altitude Karen villages of Om Tieng and Khun Pae. The village is within the district of Choa Thong, whose trading centre is Choa Thong town, some fifty miles south of the city of Chiengmai, on a partially paved highway. Unlike Mae Nai, which can be reached by a two hour walk from Chiengmai, Khao is relatively isolated from Thai officialdom and commerce. The two approaches to Khao from the east require six to seven hours on foot on trails with grades of more than 60°. The village is at an altitude of 5,000 feet surrounded by fallowed and cultivated fields.

1. Number of households in Pui and Maesa = 47.
ranging from 4,000 to 5,800 feet. The village occupies an area 304 meters long and 116 meters wide. Households vary in distance to each other, but as in all White Meo villages the main entrance to a house must be faced toward a downhill open exposure, preferably a valley of forested escarpment. The mean distance between houses is eleven yards, but this applies only to the main sector of the village. Three households occupy an area 220 metres from the nearest point in the main sector of the village. Khae village was originally located approximately five miles to the northwest of the present village site, near the Karen village of Ton Phoeng, but was relocated about ten years ago. The paramount reason for relocation was proximity to swidden.

The village consists of twenty-seven White Meo households, fifteen with the surname Sae Wa and twelve Sae Ya clan houses. In addition there are two Thai households and one Hau (Chinese) married to a White Meo girl from a neighbouring village. The total village population of 270 does not break down neatly into average size, about ten per household unit. One household has twenty members, while another has only two. Houses are situated on the left and right of a central open ridge. The open spaces within the village serve as a central

1. The surname groups correspond to exogamous clans.
meeting place for the villagers and playground for the children as well as a general scavenging arena for pigs, goats, chickens and dogs. There are four paths leading from the village in the approximate four directions of the compass. At about one hundred yards from the village each trail has its chi, or ceremonial bridge, which protects the village from ritual contamination and prevents evil spirits and persons from entering within the limits of the village area.

Khao village has an elected headman, who has also been appointed by the chief Thai official of the district (the Nai Amphur). He acts as a mediator for village disputes and represents the village in its contacts with the outside world. Like the headman of Mae Nai village, he leads and represents only one village. The only White Neo village which has proximity and numerous kinship ties with Khao is Khun Klang village which rests on the southern slope of Inthanon mountain at 4,300 feet. However, there is no administrative headman for these two villages as in the case in the Hong Dong Mae Rim villages.

Population

The Neo population of Thailand numbered about 34,000 in 1957, of which perhaps less than half are White Neo (United Nations Statistical Year Book, 1969). Because no
continuous registration of births and deaths has been carried out, I used only figures compiled from Mae Nai and Khao during the period of fieldwork. The residents in both villages are recorded on the population pyramid (Figure XXI) for the year ending in December 1966, including those who might be temporarily absent from the village. Those temporarily residing in the village but living in resident households are not included in the table. Such transients number six in Khao village and one in Mae Nai. Although the land commonly identified as Mae territory in the Hong-Dong Mae Rim area covers approximately fifty square miles, only some twenty square miles are either recently fallowed or cultivated areas used for residential or agricultural purposes, the remainder being climax or late growth secondary forest. Of these fifty square miles less than five are used by Mae Nai villagers. In Khao the area fallowed and cultivated by the White Mae is considerably smaller, including roughly fifteen square miles of upland slopes. The Karen villages occupy most of the cultivated area up to 3,000 feet. Using the estimated figures for the area visibly fallowed or cultivated, the density of population in Mae Nai village is five per square kilometre, while in Khao it is eight per square kilometre. Leaving a broad margin

1. The figures for cultivated and fallowed areas are roughly determined by pacing off fields in the area. They are estimates only and inconclusive.
for error, these figures indicate a relatively sparse population per land area in cultivation and recent cultivation. If fallowed areas of up to two years were not included in the estimate, the density figure would drop somewhat, but not more than 2½ per square mile.

The population figures (Figure XXI) indicate that in Ha Nei eighty-nine, or 66½ of the population, is under twenty years of age. ¹ Khue village has a similarly weighted segment of the population under twenty with 63½ in that category. Taken together the villages show a very slight differentiation between the males and females in the under twenty age group, with 125 males and 127 females, and this ratio appears to be more or less maintained in the elder generations. The greater numbers of children in the 1-10 age group, when contrasted with the 11-20 group may be due to the high rate of infant mortality. ² Another possible explanation may be that more girls marry out of the villages than into them, but this seems unlikely since the number of boys in the 11-20 age group drops at about the same rate. The number of births.

¹ Information regarding an individual's age was obtained from the individual himself or his parent. Thus there may be doubt about the exactitude of given ages.

² The following table applies to the twelve months of 1966 only:

<table>
<thead>
<tr>
<th></th>
<th>Ha Nei</th>
<th>Khue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of births</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Number of deaths (children under 3)</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Number of deaths (total)</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
and deaths during the year 1966, which were recorded for both villages, gives a statistically unreliable, but nevertheless significant, indication of the net increase of births over deaths. There are six individuals in the 61-70 age bracket, and, except for a specific case in Mae Nai of a woman who claims she is eighty-five, there are no villagers over seventy. Life expectancy can be said to be short by modern standards, but when compared to the recorded longevity of many shifting cultivators it is not significantly short.

Health

None of the males in either village were physically disabled or seriously crippled. In Mae Nai the youngest brother of the headman was retarded and treated as such by the villagers. Two women were partially disabled. One from Mae Nai had a congenital deformity which made her partially crippled; she nevertheless married and had three children at the time of the field study. An elderly woman from Khae claimed that she was deformed inside because she could not have any children. Two sisters in the 11-20 age group from Mae Nai had six fingers and toes. Reliable informants said that this was quite a common occurrence among heo children and that this would not impair their chances for a good marriage.
During the cold and rainy seasons, June through February, the children, especially those in the 1-10 age group suffer from chronic conjunctivitis. Although I found no medical records to confirm my lay diagnosis, it appeared that the major cause of death was pneumonia aggravated by dysentery. The common treatment for any illness consists of a five-pronged attack enlisting first the services of the Fub plig, or diviner, who performs a ceremony which consists primarily of a chant exorcising the spirit which has caused the illness or pain. If this is unsuccessful a medicine man (usually a woman), Dab tshua, is called in to administer White Neo herbal medicines, of which fifteen were noted in Khao village and seven in Mae Nai. They usually consist of herbs or roots and are commonly brewed in tea for specific illnesses. If results are still negligible, 'Thai' medicines, such as aspirin or Tiger Balm, are employed, then the witch doctor See nang, is invited to call the spirits of the sick person's ancestors. When all the above cures have failed, the man will usually resort to opium, if he has not already done so.
Citizenship

Not all those who reside in the village are considered villagers. The criterion utilized to determine who is and who is not a villager is based on kinship ties, language and economic pursuits, rather than ethnic background. Because of the proximity of Mae Hai to Chiangmai (city) and the absence of other hill tribes in the area, there are no non-Meo living in the village. In contrast Khae has two Thai residents and one Haw, in addition to a large number of seasonal traders who visit the village in late January and February when the opium is cropped. Transients are not considered members of the village community; however, the Haw is settled in Khae, married a White Meo girl, who bore him five children, lives in a house which in all respects is identical to a White Meo household, speaks fluent White Meo and is superficially engaged in farming. Although he does not observe Meo ritual on most occasions and does not have White Meo spirit platforms in his house, he is considered to be a member of the village. He is addressed and referred to by his White Meo name and has kinship status through his wife's relatives. The Thai residents have a

1. There is some question as to whether farming is his sole source of income, since he has only one hectare in cultivation but lives well above the standard for the village.
somewhat different position within the community. Neither the elderly woman nor her daughter spoke White Hmoob, nor were they married to Hmoob. Their economic pursuits included both large-scale trading and commercial hired labour agriculture. The villagers considered them undesired residents in the village, for they were only there, it was said, because they had been able to purchase the villagers' land, animals and housing at a low price when the village had temporarily moved to Laos in 1959.

Dress

Mode of dress is an important factor for the White Hmoob and may be an added factor in determining who is and who is not accepted as a villager. There is great variation, for example, between the clothing worn on festive occasions, such as New Year xyou and the ordinary work-day black, Chinese-type trousers and White Hmoob jacket (jerkin), but both costumes are typically and specifically White Hmoob. Regional variations in White Hmoob form are also common. The photographs (Plates III, IV) demonstrate the variations between two White Hmoob groups in northern Thailand. Plate III is of a White Hmoob girl from Chiangrai Province, while Plate IV is from Hhooe Hmoob village. There are three ways in which a Blue Hmoob male Hmoob Rtauab can be distinguished from a White Hmoob male:
dialect, dress and family or clan name. Dress is usually the first and the most obvious indication. For the males the differences in clothing are slight: the jacket of the White Ndo covers only the upper portion of the chest leaving the lower section exposed. White Ndo women always wear a white, grey or blue cloth band around their hair which is placed up on their heads and wear a white skirt instead of the elaborately designed blue ones of the Blue Ndo. Silver collars are worn by most Ndo woman as signs of status and wealth.

In the cool season from October through January and during the rainy season, June through September, the White Ndo rarely bathe, except to wash their faces. During the hot season, from February through June, the men and women often bathe on their way back from the fields. The women wash only with a wet cloth. Clothing is not often changed or washed during the cool season, except in the case of young boys who are courting who change every evening, or in the event of a burial or other specific ritual occasion. At other times clothing is changed perhaps once a month. Grooming is linked with age and sexual activity. Young men often comb their hair ten or more times a day and keep as neat and clean as can be expected under the conditions of
agricultural work. Younger children and many married 
 couples pay little attention to grooming.

Crafts and Art

When questioned on what they would like for their 
sons, more than two-thirds of the household heads in Kae 
Nai and Khae mentioned proficiency in some craft. Fore-
most among such crafts were smithy, gunsmith, silversmith, 
expert housebuilder. Ritual positions within the community 
were by and large placed on a lower level, perhaps because 
they were not transferable by the living parent. Many 
children learn crafts by imitating their elders; however, 
blacksmithy, jewelry making and the elaborate embroidery 
and weaving done by the women require concerted instruction 
by a parent or relative. As a result children are often 
taught the skill which the parent knows best. Consequently 
the mastery of a craft creates a position of authority and 
prestige for the craftsman who also gains extra income 
for his skill. Outstanding embroidery and weaving may 
also be an important bargaining point when determining 
the bridewealth of a woman.

The White Neo do little carving or graphic art. 
Occasionally on a tree along the trails the figure of a 
girl or animal will be carved into the bark (Plate V). 
Wooden bowls, spoons, axe and hoe handles are carved from
wood but there is no pottery made by the villagers. Although plaited mats and baskets are woven, there is no attempt at elaborate designs.

A great deal of time is devoted to music. Flute playing by men and boys accompanies many feasts and ceremonies, but individuals often play for their own amusement. Flutes are many sizes and are made of bamboo; they vary in the number of pipes from three maj-ntiv obed to twelve ntiv kaun ob. On certain ritual occasions musicians are hired to perform and have specific ceremonial functions. The Jew's harp is the instrument of courting. Young boys and courting males always seem to have one tucked into their pants. Each tone (key) played has a specific romantic meaning as do combinations of tones. In the evening it is a common event to hear the muted tones of the harp coming from a villager's house.

Singing is also popular. Girls often sing laments and involved tales while working in the fields. Parents sing to children, lovers compose songs of their adventures. A type of musical wailing nia takes place at burials. Singing is almost always associated with a tale and often supplements storytelling, recounting experiences and simply gossip.
Gathering, Hunting and Fishing

To supplement the cultigens and cultivates which the White Neo grow or encourage to grow for food, they collect a wide variety of leaves, roots, tubers and plants for poison, medicinal use and as ritual materials.1 Certain of these semi- and non-domesticates are gathered and eaten throughout the year, others have specific uses. For four days following childbirth, the recuperating mother must eat nothing but a soup made from hot peppers, pig’s fat and two herbal medicines consisting of leaves taken from two plants. This soup is fed to the mother three or four times a day. Table I lists the primary medicinal plants and the ailment for which they are used. Local

1. From Conklin, 1957, p. 44. Cultigen: a plant fully dependent on man for survival; cultivate: plant requiring special treatment but not necessarily artificial propagation; domesticate: a plant that at any time is artificially propagated rather than depending fully on wild reproduction; first degree semi-domesticate: wild plant specifically preserved and protected when clearing for a new cropping because of its utility to man; second degree semi-domesticate: wild plant not protected when clearing for new cropping but not otherwise intentionally killed; non-domesticate: plant that is neither protected, sowed or planted, nor specifically considered in any way that would affect its reproduction rates. The recognition of these varying degrees of relationship to man is an important element in understanding the total ecological process.
TABLE I

Semi- and non-domesticates medicinal plants according to use:

<table>
<thead>
<tr>
<th>Medicinals: Mae Nai</th>
<th>Diagnosis</th>
<th>Application</th>
<th>Season available</th>
</tr>
</thead>
<tbody>
<tr>
<td>K'aaS (ginger)</td>
<td>headaches</td>
<td>boiled and rubbed</td>
<td>cool-dry</td>
</tr>
<tr>
<td>Cho'eav (root)</td>
<td>stomach</td>
<td>eaten raw</td>
<td></td>
</tr>
<tr>
<td>Tahuaaj nong (tree leaf)</td>
<td>cough</td>
<td>eaten cooked</td>
<td></td>
</tr>
<tr>
<td>Mo tshuaj cod pusaq</td>
<td>muscular</td>
<td>crushed and rubbed</td>
<td>rainy-cool</td>
</tr>
<tr>
<td>Tshuab Mov kos jev (leaf)</td>
<td>earache</td>
<td>drip sap in</td>
<td></td>
</tr>
<tr>
<td>Tshuab (tree splinters)</td>
<td>causes</td>
<td>boiled liquid</td>
<td></td>
</tr>
</tbody>
</table>

Medicinals: Khae

<table>
<thead>
<tr>
<th>Medicinals: Khae</th>
<th>Diagnosis</th>
<th>Application</th>
<th>Season available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chua mav niav (tree bark)</td>
<td>toothache</td>
<td>boiled and chewed</td>
<td></td>
</tr>
<tr>
<td>Chua mav bud (root)</td>
<td>fever</td>
<td>boiled liquid</td>
<td></td>
</tr>
<tr>
<td>Chua mav jus (leaf)</td>
<td>boils</td>
<td>crushed and rubbed</td>
<td>boiled liquid</td>
</tr>
<tr>
<td>Chua mav plab (root)</td>
<td>stomach</td>
<td>boiled liquid</td>
<td></td>
</tr>
<tr>
<td>Chua mue plam (opium)</td>
<td>pains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chua muab nees (leaf)</td>
<td>diarrhoea</td>
<td>eaten with garlic</td>
<td>eaten with chicken</td>
</tr>
<tr>
<td>Chua tat tav bod (bleeding)</td>
<td>induce</td>
<td></td>
<td>cut and leached</td>
</tr>
<tr>
<td>Joks kend maub med uav (mixed leaves)</td>
<td>contraceptive</td>
<td>boiled in water</td>
<td></td>
</tr>
<tr>
<td>Joks kej as (plant leaf)</td>
<td>fever</td>
<td>boiled liquid</td>
<td></td>
</tr>
<tr>
<td>Chinh tokv ky (plant leaf)</td>
<td>open</td>
<td>crushed and rubbed</td>
<td></td>
</tr>
<tr>
<td>Medicinals: Khae</td>
<td>Diagnosis</td>
<td>Application</td>
<td>Season available</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Quab lav tos (plant leaf)</td>
<td>broken bones</td>
<td>crushed and</td>
<td></td>
</tr>
<tr>
<td>Teb Muang (plant leaf)</td>
<td>backache</td>
<td>rubbed</td>
<td></td>
</tr>
<tr>
<td>Chev dad (plant)</td>
<td>keeps away</td>
<td>carried</td>
<td></td>
</tr>
<tr>
<td></td>
<td>malevolent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>spirits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tons duj (plant)</td>
<td>stomach ache</td>
<td>boiled liquid</td>
<td></td>
</tr>
<tr>
<td>Huuv dees (plant)</td>
<td>fever</td>
<td>boiled liquid</td>
<td></td>
</tr>
<tr>
<td>Yab liab (plant)</td>
<td>abdominal pain</td>
<td>boiled liquid</td>
<td></td>
</tr>
<tr>
<td>Ched tows reng (plant)</td>
<td>post childbirth</td>
<td>boiled liquid</td>
<td></td>
</tr>
<tr>
<td>Jot tawv (plant)</td>
<td>headaches</td>
<td>boiled liquid</td>
<td></td>
</tr>
</tbody>
</table>
and regional variations are evident, thus the separation of the medicinals into two groups, one from Kao Mai, the other from Khae village. Where possible, the botanical name has been included so that the plants can be easily identified. As already noted, such herbal medicines are often employed in combinations with 'modern' medicinals, ritual exorcism and the panacea, opium. Since a number of these medicines are available only during certain periods of the year, seasonality has been indicated on the table. Type of application is also noted.

Most of the medicines are boiled and taken in liquid form, but there are many variations, the majority of which follow an application of medicine to the area of pain. These medicinal plants noted under Nos. 5 to 14 from Khae were grown by the medicine woman as well as collected in the wild.

Many forest roots and plants are gathered in January or during the rainy season, prior to the cropping of opium. This is not a time of scarcity, since the rice crop is harvested during the preceding months. Wild roots and wild plants are rather a supplementary food, often used to add taste or variety to the diet. They are commonly prepared with meat and vegetables. Among the forest crops gathered in the rainy season by the White Hoo are mushrooms...
yeq kai, fern leaf blong chuab, and a plant yov niab.

In January a green plant yov niab and leaves from a certain tree ras chuab quau are collected in the forest. The villagers say they do not cultivate these plants, because they are plentiful in the forests. White Kao food is tasteless when compared to the highly seasoned dishes of most of Southeast Asia. Salt is used, however, especially in the preparation of meat, which is placed on the smoke rack over the cooking fireplace.

Livestock

Not every household in a white Kao village owns horses, cattle or goats but they all have at least one pig and a number of chickens. In Khae there was a total of 149 chickens niab, 196 pigs nrna, 54 horses neek, 25 goats tshaia and 16 cows nvaj (Table II). Pigs and chickens far outnumber the other domestic animals. The household of Wu Sae Ya has the largest total number of animals in Khae. Conspicuous wealth is in particular expressed in terms of the number of horses and cattle owned by a household. If this were the sole criterion of wealth, the households of Seng Sae Vaj, Wu Sae Yaj, Bua Sae Vaj and Chung Sae Vaj would be the richest in the village, which is in fact a close approximation as
<table>
<thead>
<tr>
<th>Household</th>
<th>Chickens</th>
<th>Pigs</th>
<th>Horses</th>
<th>Goats</th>
<th>Cattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>La Sae Yaj</td>
<td>6</td>
<td>15</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Seng Sae Vaj</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Ying Sae Vaj</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wa Yee Sae Vaj</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Yang Sae Vaj</td>
<td>5</td>
<td>10</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tu Sae Vaj</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Teng Sae Vaj</td>
<td>4</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wong Sae Vaj</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sophia Sae Vaj</td>
<td>9</td>
<td>12</td>
<td>3</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Chung Sae Vaj</td>
<td>4</td>
<td>10</td>
<td>7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wu Sae Vaj</td>
<td>12</td>
<td>16</td>
<td>10</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Sang Sae Vaj</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pu So Sae Vaj</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bua Pa Sae Vaj</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Chung Sae Vaj</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pi Sae Vaj</td>
<td>5</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dua Sae Vaj</td>
<td>9</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tua Sae Vaj</td>
<td>14</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yia Sae Vaj</td>
<td>8</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chee Sae Vaj</td>
<td>7</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tur Sae Vaj</td>
<td>9</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pia Sae Vaj</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Ko Sae Vaj</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Chung Sae Vaj</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Duan Dua Sae Vaj</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wa Sae Vaj</td>
<td>4</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pia Sae Vaj</td>
<td>2</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickens</td>
<td>149</td>
<td>5.5</td>
</tr>
<tr>
<td>Pigs</td>
<td>191</td>
<td>7.1</td>
</tr>
<tr>
<td>Horses</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>Goats</td>
<td>25</td>
<td>.09</td>
</tr>
<tr>
<td>Cattle</td>
<td>16</td>
<td>.04</td>
</tr>
</tbody>
</table>
will be demonstrated later.¹

In Kae Nai none of the households own cattle, but there are 12 horses and a herd of 15 goats. The average number of pigs per household is 4, with the household of Pow Sae Lis owning one. Chickens are common to all Kae Nai households. There are 6 ducks on in Kae Nai owned by the household of Neng Sao Lee.

The value of livestock in Khae and Kae Nai during the latter part of 1966 was:

<table>
<thead>
<tr>
<th>Livestock</th>
<th>Khae</th>
<th>Kae Nai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cows</td>
<td>Tcs. 400-700</td>
<td>Tcs. 700-1000</td>
</tr>
<tr>
<td>Bulls</td>
<td>700-1000</td>
<td>1000-14000</td>
</tr>
<tr>
<td>Pigs (2 yrs)</td>
<td>800-1000</td>
<td>1000-10000</td>
</tr>
<tr>
<td>Chickens</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Goats</td>
<td>100-400</td>
<td>100-300</td>
</tr>
<tr>
<td>Horses</td>
<td>2000</td>
<td>1500-2000</td>
</tr>
</tbody>
</table>

Variations in price between villages seem to be determined by supply and demand. Kae Nai village has no cattle and thus it is totally dependent on non-village sources. There is the additional expense of transporting or herding the cow to the village for the ritual killing. Chickens, an easily transportable livestock, are cheaper in Kae Nai, probably due to the fact that they can be purchased at any time in the Chiangmai market.

¹ Tonal orthography is used throughout the text for White Hoo surnames, except in cases of certain figures. Correspondence between tonal and non-tonal spelling for the twelve White Hoo surnames in: Lis-Lee, Hawj-Taw, Xyooj-Chung, Huas-Hua, Yaj-Ya, Lauj-Law, Tseb-Cha, Vwj-Wu, Ham-No, Thej-Chow, Faj-Fa, Vaj-Wa.
All livestock, with the exception of horses, are slaughtered for ritual sacrifice to the spirits of dead ancestors and supernatural deities only. In almost every minor propitiation, whether it is the calling of a dead man's spirit plur or a supplication to the Field Spirit Dab tab, a chicken is killed for the spirit to feed upon. After the ritual has ended and often before the correct moment, the household which made the sacrifice begins the meal which always follows a sacrifice and is considered by many White Neo to be an extension of the ceremony. The White Neo do believe that the plur and dab do partake of the sacrificial food. Pigs are sacrificed on more important ceremonial occasions, such as the feast which precedes the coming of the New Year or when the shaman feels a situation, such as a major illness or calamity, warrants a larger sacrifice. If a household does not have, or cannot afford, a pig, goats are sometimes substituted. Cattle are only sacrificed at the burial of important persons. Since it is the sons or youngest son of a dead man who must provide the cow, there is almost always a major effort to have one at every burial of a household head. The cow, unlike other sacrificial animals which are killed by cutting the jugular vein, is given a blow on the head with an axe.
The household head keeps the head and the hide. Three ribs and part of the flank is given to the relative charged with feeding the dead man. Three ribs and a portion of flesh are given to the flute players. The remainder of the carcass including the horns are kept by the household, while the bones are thrown to the dogs.

Almost all parts of the slaughtered livestock are used by the villagers. In the case of a pig, the flesh is eaten, the fat made into lard or kept in strips, the entrails boiled and eaten, while the remainder is given to the dogs. Chickens and goats are similarly consumed, the goat skins being dried and used as rugs. No effort is made to use the animal by-products, such as cow’s or goat’s milk, although chicken eggs are frequently eaten. The White Neo have no taste for milk and do not consider it as part of their diet.

Livestock are left to roam at will around the village, although at feeding times pigs and chickens belonging to households segregate themselves or are segregated by the feeder. The cattle and goats graze on fallowed land near the borders of the village and rarely roam into the forests. Occasionally the cattle find their way to a cultivated swidden and play havoc with whatever crop is under cultivation. Horses are allowed to graze in fallowed
swidden during the day and are brought to the village at night packed down with fodder for the pigs. Goats prefer roots and bark, seldom doing damage to crops. They return to the village at night of their own accord.

White Neo Time Reckoning

The villagers concern themselves with the passage of time only as it directly affects their lives and crops. The units of time nhú, represent intervals between various daily activities, the seasonal cycle and the reflections on the relationships between members of the community. All three refer to successions of events that are of sufficient interest to the villagers for them to be noted and conceptually related to each other. These three divisions of time will be discussed separately under the headings: daily time, ecological time and relational time. As conceived by the White Neo, the sun nhú, is the point of reference for the first division. Besides being the common way of indicating the time of events, by pointing out the position of the sun in the heavens nhú, it also signifies the passage of days. Ecological time is based upon the yearly cultivation cycle. It is interrelated with the seasonal changes of the environment and the cultivators response to these changes. Such climatic variations are thought of as being related to the phases
of the moon hli. By following the lunar patterns, the
cultivator can estimate his agricultural activities in
advance and organize his life accordingly. However, the
moon is only an approximate gauge. It is the growth of
the crops, rather than the phase of the moon which
determines the activities. The final chronological device
is geared to people with whom an individual associates and
the groups of which he is a member. This time reckoning
device is calculated on points of reference within the
lineage and community and depends upon the ages of inter-
acting individuals hriub nyoog, the sequence of generation
tian, and the relational differences within the kinship
system. Examining each of these convenient dimensions of
White Neo time reckoning, will provide an insight into
the regulation of the villager's and cultivator's life.

Daily Time Intervals(hriub) Each day begins with the
first cock-crow and ends at a time designated as midnight
ib tas hnu, when everyone within the village should be
asleep tab caij nek hriub ntsiag zog. The points of
reference to the sun, however, make up the greatest number
of daily time divisions (Table IV). In fact the White Neo
term for day is hriub, which means sun. One day is ib hriub,
daytime is nriub hriub, day before yesterday is hriub hriub.
Thus days are intervals in the passage of the sun and are
described as such.
### The Divisions of the Day:

- **qai b qua thawj taig**
- **hauv ntu j ntaa, hauv ntu j ntaa iab**
- **kaj ntu g txoog**
- **kaj ntu g huv, (or) kaj ntu g plaws**
- **hnub tawn**
- **tav tshaits, (or) menyuam tshais**
- **tav niq g tshais, (or) niag tshais**
- **tav menyuam su, (or) menyuam su**
- **tav niag su, (or) tav su**
- **tav su dua montsais**
- **hnub qai j**
- **hnub tial**
- **hnub liab ploo g, (or) hnu b dai npoo nou v**
- **hnub poob, (or) hnu b poob qhav**
- **tsaus ntu j zmaq, tsaus zem zmaq**
- **tsaus ntu j ntais**
- **tu ntu j sia**
- **tav cai j neeg nce chaw pw**
- **tav cai j neeg ntub ntsiag zog**
- **ib tag hmo**
- **ib tag hmo dua**

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>first cock crow</td>
<td><strong>early dawn</strong></td>
</tr>
<tr>
<td>first light</td>
<td><strong>daybreak</strong></td>
</tr>
<tr>
<td>early dawn</td>
<td><strong>sun appears</strong></td>
</tr>
<tr>
<td>daybreak</td>
<td><strong>about 8-9 a.m.</strong></td>
</tr>
<tr>
<td>sun appears</td>
<td><strong>about 10 a.m.</strong></td>
</tr>
<tr>
<td>about 8-9 a.m.</td>
<td><strong>about 11 a.m.</strong></td>
</tr>
<tr>
<td>about 10 a.m.</td>
<td><strong>noon</strong></td>
</tr>
<tr>
<td>about 11 a.m.</td>
<td><strong>just after noon</strong></td>
</tr>
<tr>
<td>noon</td>
<td><strong>early afternoon</strong></td>
</tr>
<tr>
<td>just after noon</td>
<td><strong>late afternoon</strong></td>
</tr>
<tr>
<td>early afternoon</td>
<td><strong>sunset time</strong></td>
</tr>
<tr>
<td>late afternoon</td>
<td><strong>sun disappears</strong></td>
</tr>
<tr>
<td>sunset time</td>
<td><strong>dusk</strong></td>
</tr>
<tr>
<td>sun disappears</td>
<td><strong>nightfall</strong></td>
</tr>
<tr>
<td>dusk</td>
<td><strong>full darkness</strong></td>
</tr>
<tr>
<td>nightfall</td>
<td><strong>bedtime</strong></td>
</tr>
<tr>
<td>full darkness</td>
<td><strong>everyone fully asleep</strong></td>
</tr>
<tr>
<td>bedtime</td>
<td><strong>midnight</strong></td>
</tr>
<tr>
<td>everyone fully asleep</td>
<td><strong>after midnight</strong></td>
</tr>
</tbody>
</table>

### The Divisions of the Year:

- **ib xyoo s**
- **ib hlis**
- **hli xiab**
- **hli nqeq**
- **ib hli xiab**
- **kaum tsib nqeq**

<table>
<thead>
<tr>
<th>Time of Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>one year</td>
<td><strong>first month</strong></td>
</tr>
<tr>
<td><strong>first month</strong></td>
<td><strong>waxing moon</strong></td>
</tr>
<tr>
<td><strong>waxing moon</strong></td>
<td><strong>waning moon</strong></td>
</tr>
<tr>
<td><strong>waning moon</strong></td>
<td><strong>first day of waxing fortnight</strong></td>
</tr>
<tr>
<td><strong>first day of waxing fortnight</strong></td>
<td><strong>last day of waning fortnight</strong></td>
</tr>
<tr>
<td><strong>last day of waning fortnight</strong></td>
<td><strong>midnight</strong></td>
</tr>
</tbody>
</table>

### The Divisions of the Seasons:

- **lub cai j ntu j lo mag**
- **coq npleg**
- **las npleg**
- **taeb yeeb**

<table>
<thead>
<tr>
<th>Season</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rainy season</td>
<td><strong>rice planting</strong></td>
</tr>
<tr>
<td><strong>rice planting</strong></td>
<td><strong>second rice weeding</strong></td>
</tr>
<tr>
<td><strong>second rice weeding</strong></td>
<td><strong>broadcast opium poppy seeds</strong></td>
</tr>
</tbody>
</table>
lub caij ntuj no
sau npleg
hlais yeeb
lub caij ntuj ghua
blaww teb
coq pokkws

cool season
rice harvest
opium cropping
dry season
firing swidden
planting maize
The time intervals which mark a villager's day are not spread throughout twenty-four hours as equal intervals of one hour, but as intervals called *team* which represent more or less a span of two or three hours. However, the villagers do not think of it as a definite period, and it is alternatively used to signify a little while *ih team*, now *team no*, and in a while *nyob team*. An examination of Table III will illustrate that the *team* is the approximate measurement for the significant divisions of the villager's day. The points of reference can be arbitrarily separated into three groups which correspond to our day, morning, afternoon and evening. Each of these divisions and the points of reference therein during the hours of sunlight reflect the awareness of the position of the sun in the heavens. Early afternoon *hmub gaj* means that the sun is leaning on its side. *hmub tiai*, the reference for late afternoon reflects the fact that the sun is level or reaching the point when it will be lying flat on its back. Those points of reference which are not direct reflections upon the sun's position describe a particular activity which takes place when the sun is at a certain position in the sky, such as *tav tsbaig*, which is the time for eating the morning meal, or *tav niag su*, the time of every day when the midday meal
is eaten. When the sun disappears from the sky, reference is made to the darkened sky, tsau nu nu lu na. The middle of the night is one completed night ib tag hno, while the time between midnight and the first cock-crow is one complete night again ib tag hno dua.\(^1\) It is, perhaps, significant that there are so few direct references to the activities taking place at the points of reference. This reflects to some extent the variations within any one cultivation day. From the felling of trees in the second month to the gathering of rice in the eleventh and twelfth, the daily work activities within the community are never the same. Thus it is the repetitious activities of the day which serve as points of reference, the daily cock crowing which awakens the village and heralds dawn, the meals signalled by the movement of the sun. Between the time of the first cock-crow and the first meal of the day there are five points of reference, for it is at this time that the sharpest contrasts in the position and effects of the sun are highlighted. It is also the time when many of the daily activities are initiated. This contrasts with the interval between noon and sunset when the movement of the sun is not dramatic and activities are often slowed. Except for references to meals, the daily

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1. *Dua* means again, another, to repeat, as in *dual ib hnuab*, another day.
clock is the sun, which heralds the succession of activities for the cultivator. Since cultivation activities change with the seasons, there is no other effective means of dividing the day. The cultivator rarely says that it is harvesting or weeding time, since these activities depend upon the conditions prevailing on certain days occurring in particular seasons.

**Geological Time hli and ntui.** The cycle of agricultural activities based upon seasonal variations is given reference by the waxing and waning of the moon and the changing of the seasons caii. The three seasons are spoken of as dry lub caii ntui nhua, cool lub caii ntui no, and rainy lub caii ntui lo mag. A season is always related to the sky or heavens. Thus lub caii ntui is the common term for seasons. The dry season means the time of sickness and also the time of visiting those agnatic relatives living in other regions, while the monsoon season is the time of sticky mud. Thus, reference is made to the characteristics prevailing during those periods of time determined by the weather. They represent severe changes in the climate which result in relevant changes in the cultivation cycle. A crop planted too soon or too late after the rains may fail to germinate properly. During the cool season certain agricultural tasks can be
accomplished which cannot be attempted during the rainy season and vice versa. Daily agricultural tasks follow one another, in a precise routine dependent upon the seasonal conditions. The success of these tasks are totally interrelated and dependent upon the season changes. During certain seasons such as the beginning of the rainy and the end of the cool, greater co-ordination and co-operative action is required because of conditions permitting planting and harvesting of rice. However, it is the stages of growth of the crops themselves which determine the actual task. It is because of the inter-relationship between seasons, crops and activities that the White Neo time-reckoning system must be adjusted to the phases of the moon. The three seasons split the year into three unequal divisions. The cool and dry periods cover together six months of the year which corresponds to the six month rainy season (Figure V). Thus the year could conveniently be divided into two segments, the dry, cool segment and the rainy, wet segment. The White Neo have chosen however, the three seasonal divisions because of the three extreme changes in climatic conditions dividing up the year - extreme wetness, extreme cold, and extreme dry heat. Cultivation activities must take these seasons into account or there would be no guide for the
WHITE MEIO SEASONS

FIGURE V

- Feb.
- Mar.
- Apr.
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.

"Blow yeeb" "Coq plegs" "Lub caj NTUS nq" "Lub caj NTUS ghua" "Lub caj NTUS NO" "Lub caj NTUS lo naq" "Lois plegs" "Tax plegs" "Sal plegs" "Hais yeeb""
timing of cultivation tasks. The diameter of the circle
drawn from November to May designates the main seasonal
division of the year, representing the planting activities
associated with the beginning and the end of the wet
season and the harvesting activities coinciding with the
dryer seasons.

The wet season is also divided into three major
phases: the rice planting at the beginning of the fifth
month coq muleg, the second weeding las muleg in the
seventh month, and the broadcasting of poppy tseb yeob in
the ninth month. Thus the rainy season is divided into
three equal sections which correspond to important
agricultural activities. The cool season has two sub-
divisions: the rice harvest sau muleg, occurring in the
eleventh and twelfth months, and the opium cropping blais
yeob, in the first and second months, while the dry season
is evenly separated between the burning of swidden bilaw
tab, in the third month and the planting of maize coq
pobkva, in the fourth month. Since ecological time is
calculated as much by cultivation activities as by
climatic seasons, it is not surprising that the cultivators
use agricultural reference to divide up periods within
the seasons. Either the cultivation activity or the
season can be referred to in designating ecological time
and it is common for both to be used. A cultivator may say "when we plant rice, it is the beginning of the rainy season", thus expressing the relationship between the activity and the seasonal change. Thus by associating activity with season, time and events are more sharply defined. The first month of lub caai ntui lo mag is a time of afternoon thunderstorms and cloudy mornings, but as the rainy season progresses, rain often falls throughout the day, as is common in August. Consequently, August or thereabouts is the height of the rainy season and the period when opium poppy is broadcast. As soon as the maize is harvested, the heavy rains abate and the weather turns colder.

One of these cultivation activities may be delayed or the usual sequence altered for one reason or another, but it is not critical to the cultivator, for he is concerned with his crops and his ecological time is based upon what is actually taking place in his swiddens. Table IV illustrates the range of variations which can occur in any cultivation cycle. The White Nao informants column indicates the ideal dates on which cultivation activities are geared, while the real timing of cultivation activities in Khae and Mae Nai are listed under the column headed Agricultural Activities: General Schedule Khae and Mae Nai.
An examination of these schedules will show discrepancies in the timing of cultivation activities of up to six weeks.

Besides cultivation activities, the cycle of crop rotation and fallow period are also used when referring to longer periods of time. Such time spans may extend to ten or more years. A cultivator may refer to the time when he took a particular fallow out of production, in order to correlate that even with another which took place at the same time and to which he is making reference. By the correlation of two such events almost any event within the life-cycle of an individual can be related to other events making a meaningful sequence which is used as a referent. Thus when the Khae villagers were asked when they moved from the old village site to the new village, they replied in terms of children born in that year or swidden sites which were cleared.

Just as the seasonal divisions bisect the cycle of activities, so the social activities of the villagers are affected. The lack of continuous activity during the dry season months allows villagers time for inter-village visiting as well as housebuilding and other village activity. This is the season associated with the village rather than the swiddens. The rainy season is a period of continuous swidden activity, whereas the cool season heralds the maize and rice harvest and the New Year festivities.
Every White Neo year conceptually has twelve months. They are divided between the seasons, but the months do not correspond exactly with the beginning and end of each season. Months are calculated upon the waxing and waning moon. The word used for month is moon, hli, and the villagers count moons in succession from one to twelve. Each month beginning with the first is divided into two parts, the first fifteen days hli riab, coinciding with the waxing moon and the last half coinciding with the waning moon hli naag. The fifteen consecutive days comprising the waxing moon are designated as the first riab 1b, to the fifteenth riab kaum taib, day of the waxing moon. The last half of the month hli naag, is spoken of in the same manner naag 1b, through naag nab caus. Thus the white Neo month is divided into two consecutive approximate fortnights corresponding to the waxing and waning of the moon. Since the months are referred to numerically, it is easy for the cultivator to remember that by the sixth month rau hli, the rains have usually begun in earnest. A White Neo moon usually covers two Gregorian months. During the year of 1965, the White Neo months bisected them almost exactly. Thus 1b lub hli began on the 16th of December and ended on the 15th of January. The first month of the New Year begins on the
first day of the first lunar month, which the villagers call hli nuain saih, the time when the new moon comes up after the chickens have gone to roost. The cultivators would find themselves in difficulty if they consistently counted the succession of moons, since the ecological year has to fit with seasonable adequacy into a 365-day year, and their twelve month lunar cycle only contains 354 days.

The fact is that their succession of moons is relevant only in its relation to the cycle of cultivation activities. When the conceptual cycle and the cultivation cycle do not coincide adjustments are made in the conceptual cycle. Consequently, the counting of moons is a device with which the all important seasons are broken down into smaller units. The months are dependent upon the season changes. Thus the cultivators say in huih lub hli we must plant maize, or in kauu lub hli rice must be harvested.

There are normally twelve months, hli in a year, but in order to fit the cultivation cycle, which is geared to the ecological year into a 365-day year, the villagers interpolate a thirteenth moon every three years into their lunar calendar. New Year's day is the first day of the new moon following the completion of rice harvest. The White Hau adjust their lunar calendar every year to their
agricultural system, by computing the first day of every New Year on the basis of the rice harvest. By the intercalation of a thirteenth month every three years, the problem of a major discrepancy between the lunar sequence and the seasonal agricultural activity based on the relation between earth and sun does not require them to use two disparate means of time reckoning.

The decision to postpone the New Year's ceremonies for one moon at three-year intervals is made by the elders and household heads of the village. This decision is made after it is observed that the lunar months are falling behind the sequence of cultivation activities to such an extent that practical time reckoning based on the lunar sequence no longer coincides with the timing of agricultural activities. In the year 1966 certain cultivators in Mae Nai already appeared to be behind in their cultivation cycle in relation to the sequence of moons (Table IV). Although it was not ascertained whether 1963 would, in fact, have thirteen months it is quite possible that the lunar calendar was indeed falling behind the sequence of agricultural activities. Another plausible explanation may lie in the fact that from rice sowing to harvest may take from 120 to 145 days, depending on weather conditions and other variables. Unlike felling, clearing, burning
and planting, the harvesting of crops cannot be precisely timed by calculation, but is dependent on the environmental accidents of rainfall, soil and sunshine. Rice is, therefore, harvested when it is ready for harvesting. Thus to the cultivator the rice harvest often appears to fall either early or late depending on the year of intercalation and the variables of seasonal weather. On the year of intercalation when the harvest occurs early, the period between harvest and the first new moon is occupied by social activities, the preparation of the grain and its storage. Since weather conditions and other ecological variables also play a part in determining the time when the grain ripens and harvesting must begin, the harvest can appear to occur as much as six weeks earlier than on the previous year. In contrast, on the second year following intercalation, even an early harvest will occur at a later date because of the loss of approximately a fortnight. Cutting, clearing, burning, cropping and harvesting of crops must be adjusted to the growth processes of a particular crop and these are dependent on climatic conditions. These climatic conditions are in turn determined by the position of the earth in its rotation around the sun. Without the annual adjustment to coincide with the agricultural activities of the lunar
calendar, the White Meo would find that in one year the
twentieth day of the seventh moon was the time for plant-
ing maize, while on another year, after the intercalation
of a month, the rainfall on the same lunar date would be
more suitable for the sowing of rice.

Subordinating their traditional lunar calendar,
which may or may not have been borrowed from the Chinese,
to the time sequence of agricultural activities, they
have adapted the calendar to their environment and
agricultural pursuits within the seasonal cycle in which
they happen to find themselves. For a semi-nomadic
people this constitutes a critical step in their adoption
to and corresponding with the prevailing ecological
system. The climatic changes incurred during migration
south from Yunnan, Honan and Kwelichow, in China, may not
have been dramatic, but there were substantial variations
in rainfall, temperature and sunlight, and more important
the dates on which these seasonal changes occurred varied.
This climatic diversion forced the White Meo to reorganize
their agricultural calendar in accordance with the
seasonal variance.

The cultivators do not often use their sequence of
moons when referring to the timing of cultivation
activities. Consequently, they speak of the major activity
in process when an event happened. If a cultivator wants to refer to a particular event which occurred during the tenth month, he will probably do so by saying that such-and-such happened during the broadcasting of poppy seed. Alternatively, when requiring less precision, he may say this happened just before the cool season. Since the White Heg refer to the year by counting the three seasons, this appears to them the most convenient means of estimating events in relation to activities. The occasions on which the moons are used as a reference are in short time spans, such as the phrase ḫwab nīmāb hliq, which refers to the one month period following childbirth when a woman is no longer required to eat only certain foods. Moons are also counted by pregnant women, who want to keep track of their pregnancy. This is a frequent subject of conversation among married women interested in determining their stage of pregnancy. When a villager notes an event which is to occur within a period of three to four weeks he will often refer to the phases of the moon by saying that when the moon is ḫwab pah, on the third day of waning, or ḫwab hb, on the first day of waxing, that such an event will take place. If it is not necessary to specify the day he may simply refer to any time during the full moon ḫhλ nmrn, or half moon
phua aab thob. On many occasions when a hunting party is organized, the group says they will hunt during the period of saim hli, bright moonlight, which is usually during the moon's second quarter.

The White Kao count recurrent natural units such as hunb suns, hli moons, caii seasons, and divide these units into smaller fragments yet; such as day and night, hunb-hne and the twenty-one subdivisions of day and night, the three seasons caii pem, and the reference to particular cultivation activities throughout these seasons, the twelve moons hli kaum ob, and the fifteen days counted for the waxing and waning moon, the year xveea, which is comprised of twelve or thirteen moons. Even large spans of years up to a millennium are designated as txhiab niaa tia ngea xveea, meaning hundreds and thousands of years. Series of years are also counted. Caaj ub two years ago, caaj no last year, but in terms of the passage of seasons. Despite the apparent precision with which they count recurrent events, they do not have a vocabulary for measuring time in chronological sequences. Days are natural events and can be counted without a calibrated mechanism, but minutes and hours are artificial divisions. In Mae Nai village most of the men do wear watches. The words used to describe such concepts as
hours and minutes are borrowed from the Thai language. Thus one hour is ลบ ชัน น้อย from the Thai word ชั่วโมง. Hours and minutes are equated with Thai civilization and have not been fully adopted into the White Neo time reckoning system. In Khae village here only one or two individuals have wristwatches and rarely use them; time spans shorter than the day are spoken of as ลบ นิด, a moment or instant, ลบ ถี่ a short time, ลบ ช้า a slightly longer period than ลบ ถี่ and ลบ นาน a period of usually less than three or four hours. Those smaller intervals of daily time are determined by reference to the sun and the divisions of the White Neo day.

Relational time ตั้งย่อ. For the White Neo time is divided by natural, agricultural and social events into different sorts of periods, which are often correlated when the time of a specific event is being sought. Relational time is based upon reference of significance to local groups. These references may or may not be within the life-cycle of an individual, but they must be recognizable by two or more persons within the community. If unrelated events occur within the life-cycle of an individual, a correlation can be made with other events which happened at about the same time; but what of longer term events which relate to periods of time removed from
a single life span? The White Kao terminologically recognize four ascending generations and three descending generations in their kinship system, which include the highest ascending generation, great-great-grandparents yeuy suah, and the great grandchild xoab nuirum. These generations give a time depth to which other members of the descendant group can refer. For example, the villagers in Mae Nai often speak of the time when their ancestors migrated from China because of persecution. They usually begin the story by saying this happened, txhib nias tim nuas zyoo, which refers to any time from one hundred to several thousands of years ago. The plot evolves with references to a large White Kao village which was under attack and the general opposition to war among the young men of the village, who fled with their families to the mountains. When the war ended these refugees were frightened to return to their old village, so they cultivated their mountain fields. In order to live comfortably these families moved their village whenever their new fields were too far away. Each time they moved they would go very far from the first place. Since that time the Kao have kept moving. That is why they can be found in many different places.

When pressed to provide a more specific time reference
to this event most villagers said it was before the time of our yam-supab. Others said it was during the life of our yam-supab. Although there is a general vagueness, the event itself is related to the furthest genealogical event in each individual's ascending line of descent.

In another tale explaining why the Keo live in the mountains rather than the plains, the events relate a confrontation between the Keo king wy-i-tam-chal and the Thai ruler in the area. Both competed to build a high edifice. The Thai ruler won by shrewdness and treachery. Thus the Keo were forced to live in the mountains, where they remain today. All informants agreed that this happened in the lifetime of yam-supab.

From these and other historical reconstructions, it would appear that the White Keo use genealogies to represent time notions. If there is any accuracy to those reference, the approximate period in which the Keo began to live in close contact with the Thai peoples could be estimated by relating this with other events during great grandfather's lifetime. Relational time, heretofore mentioned in opposition to specific individuals within the genealogy, is also expressed in terms of the lineage structure. Beyond the ascending generations of the major lineage are the unknown group of agnatic ancestors to
which only vague reference can be made. This category of ancestors is without relational time, for their distance from the living is not known. Therefore, beyond the immediate and most recent generation of living, the spatial distribution is considered in a quite different manner from the linear genealogies. It is true that the end of myth and legend begins, for the house and persons in the plots have no spatial reference words. The suggestions beyond this point are usually stated by referring to such spatial prefixes as 'primeval times', 'from the beginning of men's generations', or 'several generations of people ago', as in the following myth about the moon:

Many generations ago when there was no moon, a beautiful girl named Ri took a walk in the forest near her village. She met a rabbit in the forest and after speaking with him, they fell in love and she became his wife. They went to live in her house for she lived alone. After a while they had a baby and the rabbit promised always to tell the truth. Then one day the baby began to cry and the rabbit said to it, "Don't cry, your mother is coming". But the mother was not coming. Then she came home that evening she said to the rabbit, "You have lied to the baby, so now we cannot live
together”. But she loved her husband, so she told him that she and her baby son must die, but that they would be reborn as the moon. So she became the moon and her son the shadow of a rabbit on the face of the moon. Now one always sees the rabbit looking at the moon and dancing at night.

Such myths are not related as history, but as an explanation of what is established and tradition. The placing of the event in time which could only be accomplished through the use of genealogies is not necessary. The phrases, pua taaw pwa j tla and ob pab tla nqor are only useful because they set the stage by providing authority and reality to the myth. This is accomplished by placing the myth somewhere within the time sequence of the lineage system. It then becomes impossible to prove that these events did not occur as to prove that they did. Thus relational time is not an element of myths. White Kao time is not a calibrated artificial device, but an integral part of agricultural and social activities.

Summary

In this introductory chapter, I have described the geographic distribution of the Kao Kmoob peoples, with a brief reference to what is known of their historical
movements from earlier writings. The problems which are immediately affecting the social and economic organization have been raised and the objectives of this thesis have been outlined. The physical geography and demographic setting of the two White Heo villages has been described. Cultural factors affecting the livelihood and habits within the communities have been discussed. Animal husbandry, which is a minor part of the White Heo economy has been presented in the context of types, quantities, ownership, principal uses and functions. Finally the methods of time-reckoning have been described in terms of the White Heo conceptualization. Ecological time is conceived in terms of activities within the annual cycle and the seasonal parts of the cycle. The selection of points of reference is determined by the significance which natural changes have on agricultural activities. In contrast, relational time, based on social events and co-ordinated, co-operative activities marks the time depth to which other members of the descent group can refer.

I now turn to an examination of the agricultural system itself, describing the timing and major environmental factors: first in order to ascertain the natural resources which these shifting cultivators have at their disposal and to discover to what extent environment influences the type of cultivation practiced.
CHAPTER II

THE AGRICULTURAL SYSTEM

To the observer, unacquainted with shifting cultivation cycles and techniques, many of the environmental nuances go unrecognized. The repetition and sameness of the daily routine dulls the untrained mind until the first rains turn dust to mud or the path which the villager takes to his swidden leaves the south instead of the north end of the village. Once awareness of the agricultural activity is maintained, however, the framework in which the villagers work and live becomes varied and alive with new experiences. The sameness of the agricultural routine becomes an annual cycle of activity, manifested in the ripening of the rice, which is followed by the feast celebrating the first newly harvested rice, nej mplej tshiah, or the planting of the maize which is preceded by a promise of sacrifice to the field spirit.

Each season represents a particular condition superimposed upon the villagers' lives as well as changes in their way of life. The hot, dry season from March until June, lub caii ntuj ahue, is described as a time of no energy, when one feels like falling asleep.
under a tree; the monsoon season from June to October, lub caii ntuj lek naek, is a bad time because many of the villagers get sick, dysentery, sores on their feet and chronic catarrh, but it is also the time when the village has many vegetables. From November through to February is the cool season, lub caii ntuj no. It is the season for cultivating the opium crop but also the time when they must work hard to keep warm, a time of long nights and short days.

Seasonal changes such as months of maximum rainfall, July, August and September, determine the work and living routines of the White Meo cultivator far more than the sedentary cultivator in the lowland villages. The shifting cultivator must adapt his agricultural timetable quickly to the vagaries of the weather. He becomes, out of necessity, acutely sensitive to the wind, the moon, the sun, the soil, the slope of a hillside and the flora which abound in his environment. Some of the problems the observer of White Meo cultivation must examine are, when do all the various agricultural activities take place and to what extent are agricultural activities dependent upon the climate, soil and vegetation of the pre-cultivation environment?
Cultivation Cycle

As the White Meo Ecological calendar is adapted to the most important events in the agricultural cycle, for example the harvesting of rice, all the agricultural activities in Table IV are dependent upon that calendar. For the year of 1966 the New Year ceremony occurred on the thirteenth of December in Mae Nai village or on the day after the full moon. The New Year commenced when the first cock crowed on the morning of December 13th and at that moment a new agricultural cycle began for everybody in the community. It is a repetitive cycle and almost everyone in the village is aware that during Raub lub, the sixth month, the rice should be planted and that if the maize is not harvested in cuaj lub there will not be time to broadcast the poppy seeds and attend to the rice swidden before the rice harvest.

The five most critical events in the agricultural calendar are rice planting during the sixth month, maize planting during the fifth month, maize harvest in the ninth month, poppy planting in the tenth month and the cropping of opium during the second month. Once the seeds are in the prepared soil there is little that the cultivator has to do except weed, keep predators away, and ritually invoke the climatic conditions which best suit the crop.
<table>
<thead>
<tr>
<th>Agricultural Activities:</th>
<th>Mean growth period for major crops</th>
<th>White Heo Informants Calendar</th>
<th>Ritual Calendar 1966-67</th>
</tr>
</thead>
<tbody>
<tr>
<td>lb lub</td>
<td>Harvest 2nd potato swidden</td>
<td>&quot;thauj npleq&quot;, carry rice to village.</td>
<td>&quot;dab ntnw ng&quot;-sacrifice to sky spirit.</td>
</tr>
<tr>
<td>ob lub</td>
<td>Crop poppy swidden</td>
<td>&quot;thauj yeep&quot;, opium.</td>
<td>&quot;dub zoov&quot;-occasional sacrifice to forest spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Pull out dead poppy stalks</td>
<td>&quot;huaj yeep&quot;, clear swidden to opium swidden spirit.</td>
<td></td>
</tr>
<tr>
<td>lub</td>
<td>Hoe maize swiddens</td>
<td>&quot;huaj yeep&quot;, weed maize swidden.</td>
<td>&quot;lwaj teb&quot;, burn field.</td>
</tr>
<tr>
<td>hli</td>
<td>Plant maize</td>
<td>&quot;dub mroj teb npleq&quot;, weed rice swidden.</td>
<td></td>
</tr>
<tr>
<td>txeb</td>
<td>Plan squash, bean, leafy vegetables</td>
<td>&quot;lwaj pokkbwa&quot;, weed maize.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>lub</td>
<td>Plant 1st potato crop</td>
<td>&quot;ins npleq&quot;, 2nd rice weeding.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Maize: 105 days</td>
<td>&quot;ma teb yeab&quot;, prepare opium swidden.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>rau lub</td>
<td>Plant potatoes</td>
<td>&quot;fua teb&quot;, hoe maize swidden.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Maize: 105 days</td>
<td>&quot;tseb yeab&quot;, broadcast poppy.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>xmb lub</td>
<td>Weed maize, potato swidden</td>
<td>&quot;ntai pokkbwa&quot;, harvest maize.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Plant peach trees</td>
<td>&quot;maub npleq&quot;, cut rice.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>yim lub</td>
<td>Turn soil, hoe maize field</td>
<td>&quot;thawj pokkbwa&quot;, carry maize to the village.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Harvest 1st potato crop</td>
<td>&quot;paew npleq&quot;, stack rice.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>cuaj</td>
<td>Harvest potatoes, early</td>
<td>&quot;dab yeab&quot;, stack rice.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>lub</td>
<td>Turn soil in maize swidden</td>
<td>&quot;ins yeab&quot;, 2nd potato swidden weeding.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Harvest late maize</td>
<td>&quot;ntai pokkbwa&quot;, harvest maize.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>kaum</td>
<td>Plant 2nd potato crop</td>
<td>&quot;mub npleq&quot;, cut rice.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>lub</td>
<td>Maize: 105 days</td>
<td>&quot;thawj pokkbwa&quot;, carry maize to the village.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Harvest lat maize</td>
<td>&quot;paew npleq&quot;, stack rice.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>laum</td>
<td>Weed maize swidden</td>
<td>&quot;dab yeab&quot;, stack rice.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>lub</td>
<td>Weed potato swidden</td>
<td>&quot;ins yeab&quot;, 2nd potato swidden weeding.</td>
<td>Promise to maize swidden spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Cut, clear new swidden</td>
<td>&quot;ntauj npleq&quot;, thresh rice.</td>
<td>&quot;noj npleq tahiab&quot;-celebration of first newly harvested rice.</td>
</tr>
<tr>
<td>laum</td>
<td>Plant root crops</td>
<td>&quot;yaj npleq&quot;, winnow rice.</td>
<td>&quot;koom pliq&quot;-calling of the pliq for New Year.</td>
</tr>
<tr>
<td>lub</td>
<td>Plant root crops</td>
<td>&quot;thawj npleq&quot;, carry rice to village.</td>
<td>&quot;dab qhov roog&quot;-sacrifice to frontdoor spirit.</td>
</tr>
<tr>
<td>hli</td>
<td>Cut, clear new swidden</td>
<td>&quot;yaj npleq&quot;, winnow rice.</td>
<td>&quot;dab qhov tuoe&quot;-sacrifice to pig fire spirit.</td>
</tr>
<tr>
<td>laum</td>
<td>Plant root crops</td>
<td>&quot;thawj npleq&quot;, carry rice to village.</td>
<td>&quot;dab cuab&quot;-cooking fire spirit.</td>
</tr>
<tr>
<td>lub</td>
<td></td>
<td>&quot;dab tshuad&quot;-medicine spirit.</td>
<td>&quot;dab tshuad&quot;-medicine spirit.</td>
</tr>
<tr>
<td>hli</td>
<td></td>
<td>&quot;dab nuawj&quot;-smithy.</td>
<td>&quot;dab nuawj&quot;-smithy.</td>
</tr>
<tr>
<td>laum</td>
<td></td>
<td>&quot;dab neeb&quot;-lineage spirit.</td>
<td>&quot;dab neeb&quot;-lineage spirit.</td>
</tr>
<tr>
<td>lub</td>
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<td>&quot;dab ntnw ng&quot;-sacred to father spirit.</td>
<td>&quot;dab ntnw ng&quot;-sacred to father spirit.</td>
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<tr>
<td>December</td>
<td>Planting dry-land rice</td>
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**Notes:**
- Use the schedule as a guide for planting and harvesting.
- Adjust dates based on local weather conditions.
An examination of Table IV will show the overlapping which occurs in the cultivation of these three main crops. The climatic conditions prevailing in the Highlands of Northern Thailand are ideally suited to the type of cultivation and crop succession practised by the White Meo. The lack of extreme temperature variation permits a continuous growing season with only brief intervening periods for cutting, clearing, burning and the preparation of the soil. Maize and opium form a compatible inter-crop succession. Poppy seed is broadcast in the maize swidden approximately ten days prior to the maize harvest. Thus, the maize-opium swidden is in continuous cultivation from the fifth month to the second month, leaving a period of perhaps a month in which the field is not under crop. Intercropping in a maize-opium swidden is the common practice for all White Meo cultivators. Such vegetables as squashes, broad beans, cucumbers, tubers, potatoes, cabbages and other leafy vegetables are seeded in a section of the maize-opium swidden or inter-dispersed amongst the maize stalks. These crops are planted in the fifth month and harvested in the seventh month. A second association including turnips, onions, cabbages and leafy vegetables are planted during the end of the ninth month and harvested two months later. Thus in the maize-opium swidden there is not only a
succession of major crops but also a continuous association of supplementary crops.

The cultivating activities in Mae Hai are broken down into a favourable work schedule. Only the first four months of the year provide occasional respite from arduous field work and even this period is often completely occupied by the cutting and clearing of new swidden. The cropping of the poppy must also be accomplished within a limited period in January and February. Climatic conditions must be dry and sunny during the opium cropping (harvest) or else the opium sap will not coagulate and may even drip from the bud. The cultivation phases of the few major crops seem to create a continuum of planting and cropping, always overlapping in such a way that the cultivators are never required to plant or harvest two major crops during the same period. Maize is planted in the fifth month just before the onset of the monsoon season and is harvested during the ninth month. Rice is sown in the sixth month, following the first rains, and is harvested during the twelfth month at the end of the rains. Opium poppy is broadcast on the tenth month during the final month of the monsoon period and cropped during the second and third month during the height of the cool season. Thus from the fifth through the second months major crops are in some stage of growth,
yet there is no one period when two or more crops must be planted or harvested at the same time.

Khao village offers a somewhat different sequence of agricultural events. The fact that rice is not cultivated by any of the households and that potatoes are grown as a supplementary cash crop to opium has created an agricultural calendar requiring more intensive period of cultivation. The first and principal crop of potatoes must be planted during the fifth month or at the same time as maize. This potato crop is harvested during the eighth and ninth months often conflicting with the maize harvest. The second crop of potatoes is planted during the tenth month, immediately following the maize harvest which is at the same time as the poppy seed is broadcast in other and often non-contiguous swiddens. The first weeding which is a critical stage in poppy cultivation must be completed in both the potato and poppy swidden during the eleventh month.

Due to the fact that it is not necessary to cut and clear climax and secondary forest each year for the rice crop, it might be assumed that less clearing would be attempted or required in Khao village. However, this is not the case. Where maize, rice and opium are the main cyclical crops a rotation pattern of swidden
usage prevails. Newly cleared forest is always planted in rice for the first year, or often the first two years, then maize and opium are intercropped for the next five. After the fifth year when the soil loses much of its fertility, the swidden is cultivated exclusively in opium poppy. This crop may be cultivated for as many as ten to fifteen successive years. This method of cultivation requiring the use of a field for up to fifteen years, is extremely deleterious to the soil, especially since the swidden must lie fallow during the monsoon season when soil erosion is most likely to occur.\footnote{Reference to section on edaphic factors, p. 84.} The opium is cropped only six weeks before the advent of the monsoon. This crop cycle does however keep land in production for an extraordinarily long period and minimizes the need for cutting and clearing new forest every year. Potatoes cannot be grown in the maize opium swidden since the growing cycle conflicts with both of the latter crops. Therefore separate swiddens must be set aside for potatoes, which can only be grown productively for three successive years in one field. New land must then be cleared for the fourth year potato crop. The net result is that more forest is cleared.
under this crop combination than for the rice, maize, opium succession. As a consequence more cutting and clearing per household is done in Khao village during the first, third and twelfth months than in Mae Xi. These months remain, nevertheless, the period of greatest leisure for the villagers of Khao.

The growing periods for the principal White Maos crops vary from swidden to swidden. A selection of ten households from Khao formed the basis for averaging the number of days between planting and harvest for maize, opium and potato. Maize requires a longer growing cycle averaging 109 days from sowing to harvest in 1966. Variations between different swiddens were as much as 25 days. This gap might be attributed to the availability of labour at the time of harvest as well as soil topography and biotic factors. Often an underhanded household will be obliged to postpone the maize harvest while turning the soil and broadcasting opium poppy seed. As a result maize harvest may be delayed as much as two or three weeks. The great diversity in maize which exceeds that of any other plant may also provide a possible explanation for variation in growth. There are early maturing varieties which take an average of 60 to 70 days which contrast with others taking 4 to 5 months to reach maturity. Eight different types of maize were noted in Khao, which indicates that the likelihood of
variations in the length of the growing season might be high (Plate VI). During the agricultural cycle in 1966, maize was planted in Mae Nai between the tenth and twenty-eighth of the fifth month and harvested late in the ninth month. Of the ten households in Mae Nai the average growing period was 115 days, six days longer than in Khae village. Such variations between villages may be attributed to differences in altitude and the accompanying changes in climate and soil. The White Meo distinguish fifteen stages in the growing of maize (Table Va). Each stage represents an instant in the

**TABLE Va.**

Stages in the Growth of Maize.

- **ua raj ncas** - the stem appears from the ground
- **dauv tw qasio** - the leaves have begun to bend over (like a cock’s tail)
- **txij hauvcaug** - as high as the knee
- **txij dua** - as high as the waist
- **ua nplais taws** - the leaves fully formed
- **ua npuav npaug tshaws** - the heart of the stalk has begun to appear
- **ua tw yaj tshaws** - the tassels appear on the top
- **ua nplais taws** - the corn pods appear
- **ua ntxhuav liab** - the corn silk is becoming red
- **team pom** - the corn pods are filling out
- **tuag ntxhuav (or) yeob ntxhua (t.o.)** - the silk is drying off
- **ua pos nyuj** - the corn kernels are forming
- **ntom kab** - the kernels are fully outlined
- **siax (or) ci plhaub vog** - ripe (shiny husks)
- **daj daj plhaub** - drying corn pods on the stalk
growth cycle when a calculation is made as to whether the crop has progressed according to customary expectations. Reference is made to the stage of growth followed by comments on what the maize was like at that stage in other years, for example a cultivator might say that maize in the fifth week of growth has a cock's tail which looks like the seventh week's growth. He might also note whether a particular crop was early or late with reference to the stages of growth and determine the appropriate time for broadcasting poppy seed based on the stage of the cycle.

A late maize crop in a succession swidden does not normally prohibit the broadcasting of poppy, however, but the shade provided by the maize would inhibit the growth of the poppy plant and thus set back the cropping pattern. An early maize crop allows the cultivator to broadcast poppy on cleared ground which accelerates the growth of the plant. These minor adjustments in planting techniques are taken into account by the Kao when referring to the stages in the growth cycle.

The traditional trading crop for the Kao peoples in China takes 31 days to reach the stage in which it is cropped. It is the miniature fruit of the poppy plant which releases the sap which when coagulated forms the raw opium product. Depending on the maize growth cycle
poppy can be broadcast either in the pre-harvest or in the post-harvest maize swidden. In Mae Mai most households had finished broadcasting by the tenth day of the tenth month, the planting in Khæw was started and completed in the last half of the tenth month. The planting of the second potato crop in Khæw may account for the late planting of poppy. Whereas Mae Nai has no intensive agricultural activity between the maize harvest and the poppy seed broadcast, many of Khæw's cultivators attempt to plant a second crop of potatoes during that period, thus creating pressure on the labour units available. The eight days allowed for maize harvest, followed immediately by potato planting forces the usual household unit to break up and, in households that can afford to do so, hired labour is taken on. Four stages in the growth cycle of the opium are recognized by the White Neoi: the planting (tseeb yeeb), the first weeding (dob yeeb), the second weeding (las yeeb), the harvest (hlaai yeeb). In each of these stages intensive work is necessary in order to ensure a good crop. Weeding, essential in many crops, is critical for opium poppy. During the first weeding the young plants must be separated and thinned in order for any of them to produce a significant yield of opium. This
is considered by the White Mao to be the most tedious
and time-consuming job in the cropping cycle of any of
their major agricultural activities. During the second
weeding in the first month the leafy vegetables (kahu)
which are sown at the same time as the poppy must be
harvested or else these faster growing plants will
completely shade the young poppy plants.

Although rice is not grown by any of the households
in Khae, it has been and continues to be the staple
subsistence crop for most White Mao villages. In Kae
Nai the rice crop took 137 days to mature. Sown at the
beginning of the monsoon season in the sixth month, it
is harvested in the twelfth month. In combination with
maize and poppy, rice makes an ideal, balanced cultivation
cycle. Sown on the month following maize planting in
different swiddens and harvested well after the broad-
casting of opium poppy it does not create undue stress
on the household labour units. The swidden used for
dry land rice cultivation must be either newly cleared
secondary or climax forest, for any field more than two
years under cultivation will not produce rice seed.
Thus there is no succession conflict as sometimes occurs
in the maize/opium swidden. When the rice swidden ceases
to be productive it is transferred into the category
maize/opium swidden creating a rotation system for the three major White Keo crops. For as maize and opium are transferred to rice swidden, the older maize/opium swiddens are either fallowed or turned into exclusively opium swidden and the secondary/climax forest areas are cleared for new rice swidden. As rice is the staple diet of the White Keo, the villagers of Mae Nai have no need to allocate savings acquired from the sales of opium on their main food. This provides a cash saving with which they buy luxury items such as cooking pots, radios and oil lamps. It would appear that the maize/opium and rice cropping system is the best adapted to the environment at least when compared to maize, opium and potato cropping of a village such as Khae. There are thirteen stages in the rice growth cycle which are distinguished by the White Keo (Table Vb). As with maize and opium poppy each stage is correlated with the amount of time that has elapsed since planting. If the rice is not as high as the waist (txij duav) by the end of the third month, concern will be demonstrated.

Potatoes, though a minor crop in Khae, and not cultivated in Mae Nai do have an effect on the cultivation cycle by causing periods of intensive overlapping agricultural activity. The first crop of potatoes is
TABLE VB.

Stages in the Growth of Rice.

- nplej ua koob not av - rice sprout just appearing
- nplej ua duav phauj - one leaf has formed
- nplej dauv tw qaib - the leaves are bending over
- nplej txij hauvcaug - up to the knees
- nplej txij duav - as high as the waist
- nplej nuqas yas (or) nkoov kav - the stem has formed
- nplej ua plab hnab - seed pod has formed
- nplej paim tahawas lawm - the growing heart has appeared
- nplej siag pag tehaws - soft kernels have formed
- nplej too - the rice is filling out
- nplej daq qab hnab - the rice kernels are ripening at the top of the head
- nplej siaq nto nqob - the rice is ripe to the base of the head

planted in a separate swidden after the maize planting in the sixth month and harvested before the maize harvest at the end of the eighth month. Because both crops have approximately the same planting, growing and harvesting schedule, there develops a conflict in the division of labour between the two crops which can only be resolved by a long period of very intensive work.

The other minor crops such as bananas, sugar cane, peaches and vegetables have little effect on the cultivation schedule since they are grown in limited quantities and normally intercropped with maize and
opium. The fact that the White Neo cultivator recognizes no less than fifteen distinct stages in the growth and maturity of the maize plant is but one indication of the sophistication and precision of his agricultural techniques (Table Va). It is also an indication of his economic interests and of the importance of establishing interrelations between White Neo time-reckoning and the seasonal changes in the environment as a whole.

Climate and Crops

The cycle of agricultural activities throughout the year is regulated by a time sequence and that sequence is directly dependent on climatic conditions. The important components of the White Neo ecological calendar are the length and timing of the dry season, the timing of the onset of the rainy season and the length of the monsoon. Of these three considerations, the White Neo stress the critical period at the beginning of the rains. These concerns over the seasonal climatic changes are expressed by discussions on whether the dry season will be long enough for cleared vegetation to dry out sufficiently for a good burn and whether the rains will come soon after what is interpreted as the proper burning period. The major topic of conversation poses
the question, "Will the rainy season be normal and good, or will it be too wet or too dry to produce good crops?"

Microclimatic factors controlling plant growth and maturity include the length of light and dark periods; the cyclical occurrence of changing lengths of such periods; the timing and amounts of moisture; sunshine-cloudiness ratios; and the temperatures at different stages of plant growth.

The climatic changes incurred during migration south from Yunnan, Honan and Kwangtung, in China may not have been dramatic, but there were substantial variations in rainfall, temperature and sunlight, and more important the dates on which these seasonal changes occurred varied. This alteration of climate forced the White Hsio to reorganize their agricultural calendar in accordance with the seasonal variance.¹

The importance of rice as a staple crop of the White Hsio cultivator cannot be over-emphasised. The very fact that his annual calendar is dovetailed to the rice harvest indicates the significance which he attaches to this crop. Rice is distinctly a seasonal plant in its

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¹. The shaman of Mae Nai recalls his father telling him about the frost conditions in China when planting was only possible at certain times of the year.
maturity patterns. The planting calendar appears to be much more critical for rice than other crops. Two other crops are of critical importance: maize is the principal fodder for the animals and on occasion it serves as supplementary food for the household, and opium is the traditional cash crop. These three crops serve as the basis of the agricultural economy of the village. Other minor crops are intercropped with maize. Different crops vary physiologically in their response to the climate, so that the climatic conditions to which they are exposed to some extent limit and determine the crops which can be successfully cultivated. Table IV is an integrated reference to the agricultural calendar of the White Neo. It demonstrates in graphic form how climate, agricultural activities and the ritual attending these activities are organized in the calendrical time. The period of time covered by the table concerned is the 12 months of 1966. Because these factors are co-ordinated in time by virtue of the nature of agriculture, the table is drawn up as a series of vertical and horizontal co-ordinates. The annual temperature and rainfall figures roughly divide themselves into three groups which correspond to the seasons in Northern Thailand: the cool season from late October through to the end of January,
the hot season from February until mid May and the rainy season from late May through to October. There is seasonal variation as demonstrated in the precipitation figures for May and June, but these seasonal discrepancies tend to be stable. In both 1965 and 1966 the month of maximum rainfall was August with 403.2 mm and 435.7 mm respectively (Table VI). In 1966 August was also the month of highest humidity. Both February and March had no rainfall in 1966 while March and April were the months of highest evaporation. The totals and averages for 1965 on Table VI are misleading since the table is incomplete from January through May. In 1966 the average temperature was 70° Fahrenheit and there is little variation between maximum and minimum temperature and average maximum and minimum temperature. It should be noted that the temperature and rainfall figures do not represent a span of years but only the last half of 1965 and the 12 months

1. Rainfall and humidity figures were supplied by Kiwat Ruanpunich, Faculty of Forestry, Kasetsart University, Bangkok, from measurements taken at Doi Sui during the year 1966. The location where these measurements were taken is approx. 8 miles from Mae Hai village and within the same climatic zone. The elevation difference is approx. 600 m. Similar figures are not available for Khao village at 1,683 m.
## TABLE VI

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of 1966. That there are considerable variations in seasonal rainfall is illustrated by figures for June 1965 and 66. The monthly rainfall was 135.8 mm for the former and 61.9 mm for the latter. The high seasonal variation in precipitation which amounts to 435.7 mm in August, but totals only 5.4 mm in January, is typical of a monsoon climate which in this case begins suddenly in May and tapers off in October. Temperature readings are fairly consistent for the recorded month in both years; however, this may be due to relatively slight annual variation in temperature throughout the year. The difference between August the hottest month in 1966 with an average temperature 90.5° F is only 17.0° F; however, the average temperature for August 1965, 70° F is significantly lower than that for 1966, representing a seasonally lower temperature.

At what should have been the beginning of the monsoon season in 1965, there was apparently a great deal of anxiety among villagers at Mae Nai, because of the lack of early rains in May. The months of June and July were also considered drier than usual. Thus when the rains arrived early in May of 1966, dropping 209.7 inches, three cultivators in the village had not completed their burning. The apprehension within the households
which had not been prepared increased as they waited for a break in the rains, so that they could complete the field preparations. However, the rains continued without intermission for a week or more, soaking the unburnt vegetation. The total number of days of rain for that month was fourteen, well over the villagers' estimate of normal precipitation. The result was that many households produced little or no rice, while others which had completed the burning ahead of the rains had a bumper crop. Despite the fact that rainfall in June 1966 was well below normal and the total monthly rainfall during the 1966 monsoon season was 227.6 inches less than the comparative period in 1965, the White Hao indicate that the climatic conditions in 1966 favoured the rice crop more.

In the environs of Khao village, where no complete data on climate was gathered, the villagers showed less concern over the beginning of the monsoon. This apparent disinterest in the commencement of the monsoon was due to the lack of rice cultivation by the Khao villagers. Without rice cultivation the advent of the monsoon becomes less critical for the shifting cultivator.

The cultivators from both Mae Nai and Khao indicated certain general climatic preferences which are related
to cultivation practices. In the rainy season they prefer many days of light rain to heavy rainfall dispersed over a short period. At the beginning of the monsoon heavy rains often came in the late afternoon and lasted only a few hours; however, cloud cover was often constant in the higher elevations. During the end of the cool season everyone in the village complained if there was the slightest sign of rain. This preference can be attributed to the necessity of dry weather during opium cropping, for when the cropping ended the villagers spoke of their desire for rain. The cold nights common during the cool season when temperatures fell to $48^\circ$ and below were favoured by many villagers despite the fact that many children had pneumonia and respiratory ailments.

Edaphic Factors

The second factor determining crops grown in a shifting agriculture system is the nature of the soil. Different crops require different soil. The factors in the ecological system which affect soil are climate, parent material, topography, biological fauna and flora and the age of the developing soil material. These factors are closely interrelated, and a change in nature or intensity of one directly or indirectly activates a
change in nature and intensity of the others. Some crops may be more suited to the soil in the region where a village is located than others. The clearing and cropping of a swidden formerly carrying a mature vegetative cover often produces relatively large returns for the first two or three years, regardless of the often low soil fertility, the system of clearing, the nature of the crop or the technique of growing the crop. Such initial success is based on a shallow surface soil containing a source of nutrients. This surface area is reinforced by what organic matter remains after clearing and the ashes resulting from burning. Without replenishment of the organic matter or some alternative form of nutrients, continuous cropping results in a steady decline in the crop yield. Soils which have been protected by jungle or forest, when first cleared, are commonly loose and permeable, so that planting can be accomplished without necessarily turning the soil for aeration, as in the case of dry-land rice cultivation, or only turning a shallow six-inch surface area, as in the case of maize and opium poppy. Soils covered by such a forest canopy are kept from oxidation, from baking hard through drying out in full sun exposure, and from direct packing by heavy rains. Because of the packing of soil in swiddens, the White Miao move variable amounts
of soil, either by the use of a hoe, as in opium poppy planting, or by making relatively large holes, required in maize and vegetable planting.

There is a high correspondence between the characteristics of soils recognized by the White Meo cultivators as suitable for specific crop cultivation and the results of scientific tests on soils sampled from particular areas. However, this correspondence varies in relation to the pH factor, that soil characteristic commonly regarded as essential for the cultivation of opium poppies.

In this section on edaphic factors the scientific analysis on Table VII is first discussed, followed by a brief review of how the White Meo distinguish soils.

**Types of Soils in Northern Thailand;**

The dominant soils found in the area surrounding Mae Nai and Khao belong to the soil group, Reddish-brown latosols (Dudal, R. and Moorman, P., 1962). These soils are deeply weathered with a surface layer containing a low content of humus. Below this is a dark reddish-brown clay. Erosion is slight due to a rather stable structure. The reddish-brown latosols have a pH factor of between 5.5 and 6.05, which is higher under forest or in recently cultivated swidden. Swiddens cropped over long periods tend to lose their natural nutrients as is common with most tropical soils.
Another soil common to these areas is the Red Brown Earths, which have similar red-brown colours; their structure however is blocky. They are less permeable and more susceptible to erosion. The pH values are more neutral, ranging from 6.0 to 7.0.

Lithosols are found covering rocky areas. These are very shallow soils and poor in nutrients. Alluvial soils are found in the narrow valleys. These are brown soils, rich in plant nutrients and humus. Red Yellow Podzolic soils form the last group found in the area. They have a thin surface and practically no humus and as a result leach quickly. Their pH factor is around 4.5 to 5.5. When cultivated this soil erodes, often into gullies and ravines. After the first crop, what soil nutrients accumulated from burning quickly disappear, and rapidly decreasing yields are common.

Table VII illustrates the relationship between the categories of the soils known to the White Meo and samples of their composition when subjected to soil tests. Also noted are the cultivator, the location of the swidden from which the soil sample was taken, the crops cultivated during 1966, the number of consecutive years under cultivation and a rough estimate of the yields from each. The information provided in the table
<table>
<thead>
<tr>
<th>Location (Ground)</th>
<th>Cultivar</th>
<th>White Nodules</th>
<th>Crops Cultivated</th>
<th>Yield</th>
<th>Years Cultivated</th>
<th>Description and Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAE NAI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>TAN SAE LEI</td>
<td>RED RICE</td>
<td>FAIR</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CHENG SAE LEI</td>
<td>RED STICKY MAIZE-OPium</td>
<td>GOOD/FAIR</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TAN SAE LEI</td>
<td>RED STICKY MAIZE-OPium</td>
<td>FAIR/FAIR</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SLED SAE LEI</td>
<td>RED MAIZE-OPium</td>
<td>GOOD/FAIR</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>NEW SAE LEI</td>
<td>BLACK MAIZE-OPium</td>
<td>GOOD/FAIR</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>LEE SAE YA</td>
<td>BLACK MAIZE-OPium</td>
<td>GOOD/GOOD</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>LEE SAE YA</td>
<td>BLACK RICE</td>
<td>GOOD</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>RON SAE LEI</td>
<td>RED MAIZE-OPium</td>
<td>FAIR/GOOD</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>TAN SAE LEI</td>
<td>BLACK PEACH TREES</td>
<td>—</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description and Composition**

- **SM - SC (USDA)** sandy loam (USDA) contained about 60% very coarse to very fine sand, with some fine silt and clay. Its color was light yellowish brown to medium brown (10 YR 3/4). Soil was slightly plastic and slightly sticky when wet. pH = 6.2

- **SM - SC (USDA)** gravel-loamy sand (USDA) contained about 20% gravel size and some fine silt and clay. Its color was light yellowish brown to medium brown (10 YR 7/6). Soil was slightly plastic and slightly sticky when wet. pH = 6.2

- **SM - SC (USDA)** clay loam (USDA) contained about 70% very coarse to very fine sand, with some fine silt and clay. Its color was dark brown (10 YR 3/4). Soil was slightly plastic and slightly sticky when wet. pH = 6.2

- **ML (USDA)** very dark brown to dark brown (7.5 YR 2/2-2/1) silt loam (USDA) contained about 70-80% medium to very fine sand and silt. Soil was slightly plastic and slightly sticky when wet. pH = 6.2

- **SM (USDA)** brown to dark brown (10 YR 3/4) silt loam (USDA) contained about 70-80% very coarse to very fine sand and silt. Soil was slightly plastic and slightly sticky when wet. pH = 6.2

- **SM-SC (USDA)** dark brown (10 YR 3/4) sandy loam (USDA) contained about 70-80% very coarse to very fine sand and silt. Soil was slightly plastic and slightly sticky when wet. pH = 6.2

- **ML-SC (USDA)** dark brown (7.5 YR 3/2) organic silt loam (USDA) contained about 50% sand and silt. Soil was slightly sticky and slightly plastic when wet. pH = 6.4
<table>
<thead>
<tr>
<th>Location</th>
<th>Cultivation Category</th>
<th>Cultivation</th>
<th>Yield</th>
<th>Description and Composition</th>
<th>SLOPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>TOS SAE RED</td>
<td>BLACK</td>
<td>GOOD</td>
<td>2 yrs. follow</td>
<td>30°</td>
</tr>
<tr>
<td>11</td>
<td>TOS SAE RED</td>
<td>FALLOW</td>
<td>-</td>
<td>3 yrs. follow</td>
<td>20°</td>
</tr>
<tr>
<td>12</td>
<td>TOS SAE RED</td>
<td>MAIZE-ORUM</td>
<td>FAIR/FAIR</td>
<td>3 yrs. follow</td>
<td>30°</td>
</tr>
<tr>
<td>13</td>
<td>TOS SAE RED</td>
<td>FALLOW</td>
<td>-</td>
<td>3 yrs. follow</td>
<td>85°</td>
</tr>
<tr>
<td>14</td>
<td>LEE SAE YR</td>
<td>MAIZE-ORUM</td>
<td>FAIR/Fair</td>
<td>4 yrs. follow</td>
<td>30°</td>
</tr>
</tbody>
</table>

**SOIL CHART: R.A.**

**Description and Composition**

1. **SM-ML (USDA)** fine sandy loam to silt loam (USDA) contained about 50% fine and very fine sand in very pale brown (10 YR 7/4 dry). Its consistency when wet was slightly sticky and slightly plastic, pH 4.8.

2. **SM (USDA)** fine sandy loam (USDA) contained about 95% fine to very fine sand, in light brown to light yellowish brown (10 YR 6/4 dry). Its consistency when wet was slightly plastic and slightly sticky, pH 4.8.

3. **SM (USDA)** silt loam (5% sand), brown (7.5 YR 4/4 dry) in the surface layer of yellowish red (5 YR 4/4 dry) and brown to dark brown (7.5 YR 4/4 dry). It was medium plasticity and slight stickiness when wet, very hard when dry. pH 7.5-7.8.

4. **SM (USDA)** dark brown (10 YR 5/4 dry) fine loamy sand (USDA) contained some humus and about 60% fine to very fine sand which was medium plasticity and medium stickiness when wet, pH 5.8-6.0.

5. **SM (USDA)** dark orange (10 YR 5/5 dry) fine loamy sand (USDA) contained humus and about 20% fine to very fine sand which was medium plasticity and medium stickiness when wet, pH 7.3-8.0.
<table>
<thead>
<tr>
<th>X/a</th>
<th>Cultivar</th>
<th>Color</th>
<th>Cultivated?</th>
<th>Yield</th>
<th>Notes</th>
<th>Description and Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Casava</td>
<td>Black</td>
<td>No</td>
<td>Good/Dir</td>
<td>5</td>
<td>SI (USDA) fine sandy loam (USDA) contained about 50 - 60 % fine to very fine sand, in brown to dark brown (7.5 YR 4/2-4/4 dry). It was slight to medium plasticity and slight to medium stickiness when wet. pH = 6.1.</td>
</tr>
<tr>
<td>7</td>
<td>Nangara</td>
<td>Red</td>
<td>Potatoes</td>
<td>Good</td>
<td>1</td>
<td>SI-L-L-L (USDA) dark brown (7.5 YR 3/2 dry) organic sandy loam to silty loam (USDA) with humus, which was slight plasticity and slight stickiness when wet. pH = 6.3-7.0.</td>
</tr>
<tr>
<td>8</td>
<td>Bung Mase</td>
<td>Red</td>
<td>White</td>
<td>Poor</td>
<td>3</td>
<td>SI-OO (USDA) gravel-sandy loam (USDA) contained about 70-80 % gravel and sand with some silt sized, which was slight to moderate plasticity and slight to medium stickiness when wet. Its color varied from brown to pinkish gray to light brown to pink (7.5 YR 5/2-6/2-4/4-7/4 dry). pH = 6.2-6.7.</td>
</tr>
<tr>
<td>9</td>
<td>Bung Mase</td>
<td>Red</td>
<td>White</td>
<td>Good</td>
<td>5</td>
<td>SI-OO (USDA) sandy loam (USDA) contained about 60-70 % very coarse to very fine sand with some gravel, 3 mm. maximum silt, and some silt sized, which was slight to medium plasticity and medium stickiness when wet. Its color varied from dark brown to brown (7.5 YR 3/2-4/2-4/4-5/4 dry). pH = 6.3.</td>
</tr>
<tr>
<td>10</td>
<td>Bung Mase</td>
<td>Red</td>
<td>White</td>
<td>Gravel/Good</td>
<td>4</td>
<td>SI (USDA) sandy loam (USDA) contained about 60 % medium to very fine sand with some of coarse sand and gravel size of granite fragments. It was dark brown to dark yellowish brown (10 YR 3/2-3/4 dry) with brown (10 YR 5/2) mottles. Soil was very slight plasticity and slight stickiness when wet. Humus present in this soil. pH = 7.2-7.4.</td>
</tr>
</tbody>
</table>
was acquired by observation of these particular fields during the 1966 cropping cycle, except for the estimated yields, which were given by the individual cultivators and the soil tests.¹

The selection of the twenty-four samples was based on these criteria: the apparent variety exhibited by the growing crops, varied locations (including degree of slope), willingness of the cultivator to discuss matters relating to his swidden. Even to an untrained eye, it is not difficult to determine a healthy maize or opium crop, where the plants and fruits are large and evenly dispersed. In Kae Nai the fourteen samples represent soil from the main cultivation areas for the village. Since the general pattern of field shift is unidirectional, in that new swiddens are cleared in one predominant direction and the clearing usually flanks the site of the former swidden, a banded cultivation area near Kae Nai was chosen for the sampling. The Kae Nai cultivation area had little slope, the terrain being predominantly a slightly graded plateau between two mountain ridges. Slope varied from 5° to 50°, while in a few cases swiddens were cleared on the sides of mountain

¹ Tests were made by Sommart Sukavongse, Agriculture Chemistry Division, Department of Agriculture, Bangkok.
ridges with 70° slope. Outside of this area swiddens cultivated by the villagers were on steep slopes, usually culminating in a bowl formed by ridges. Soil samples in the Mae Nai area, where swiddens were one to five years under cultivation or fallow, were primarily in a succession of maize/opium cropping. The maize/opium swidden cultivated at location No. 5 was very dark grey-brown to dark grey-brown sandy loam. It contained about 60-70% very coarse to very fine sand and some stone fragment of granite with mica flakes and humus. It was of very slight plasticity and had a slight stickiness when wet. The pH factor was 6.0. The swidden from which this sample was taken belonged to and was cultivated by Meng Sae Lis, who described the soil as ay dub, or black. This three year old field had followed the general crop succession pattern and was intercropped with maize, opium and leafy vegetables. The estimated yield was considered fair by the cultivator whose household had the highest over-all maize/opium yield in Mae Nai. In contrast to this sample was that taken from a two-year fallowed field of Tua Sae Lis, one of the poorest cultivators in Mae Nai, at location No. 13. This fallow swidden had light brown to pink sandy loam with some brown to dark brown humus mixture. Its coarse-grained
soil was mainly quartz and feldspar in sub-angular shape and 3 mm in maximum size. The soil had no plasticity and no stickiness when wet. The pH factor was 7.2. Tua said that he had fallowed the field because he could no longer grow opium on it. It is noteworthy that Meng's field with a pH factor of 6.0 grows good to fair poppies with a good opium yield, while Tua's fallowed land has an extremely high pH factor, but was fallowed because the opium yield was poor.

Other samples taken in Khao village indicated a close correlation between a high pH factor and a good opium crop. In location No. 10, a field which was universally considered by the White Meo villagers to be the best opium swidden in the area, the pH factor was 7.0 to 7.2. The soil was sandy loam and contained about 60% medium to very fine sand with some coarse sand and granite fragments. It was dark brown to dark yellowish brown with brown mottles. When wet the soil had little plasticity and stickiness. Humus was present in the soil. This swidden had a 30° slope and had been under cultivation for four years.

This contrasted with soil from location No. 8 only one-hundred metres distant, which produced dwarfed opium
plants with very small buds. This field had a pH factor of 6.2 to 6.3. The soil was sandy loam and contained about 70-80\% gravel and sand with micaceous flakes. Its colour varied from brown to pinkish grey. Plasticity and stickiness were slight. The slope of this swidden was 65° and erosion was quite evident. This field had been worked for ten years, followed by a five-year fallow, and at the time of the sample testing in 1966 had been under cultivation for four years.

However, another field directly adjacent to location No. 8 produced fine poppy plants and a medium yield of opium in the 1966-67 harvest, with a pH factor of only 6.3. Soil from location No. 9 had sandy loam with some gravel, about 5 mm. in maximum size. It had medium plasticity and stickiness when wet. Colour varied from dark brown to brown. The slope was approximately 20° and there was little evidence of erosion.

**White Meo Categories of Soil.**

The White Meo recognize many characteristics about soils. In general they will seek out areas with the best soils available or the soil most suitable to the particular crop they wish to grow. The prevailing method for determining the value of a particular swidden for growing a crop is by a combination of taste and texture.
Soil with an oily texture, moderate stickiness and porosity is often sought. In addition the soil when tasted should impart either a salty or a sweet flavour. A soil which tastes sour is considered very poor and such a site will be abandoned even if other conditions are favourable. The White Meo divide soil into four main groups: sticky soil av blog, black soil av dub, red soil av liab, and white soil av dawb. Sticky soil is considered the best for wet rice cultivation because it holds water for long periods with little absorption. Since the Meo do not cultivate wet rice, this type of soil is never sought after. It is also a poor soil for other types of crops. White soils, usually containing a large quantity of sand or lime, are always avoided. Crops either will not grow or grow very poorly in this type of soil. Because of the high porosity in this soil it dries up almost immediately after a rain. Nutrients and minerals percolate and wash out so there is very little fertility. Under the four inch surface of this type of soil there are usually small stones which make digging and cultivation difficult. Both in Mae Nai and Khao the predominant soil is red. The villagers feel that this is the best soil in which to cultivate their dry-land rice. Many of the villagers claim that only
Rice will grow well in this type of soil. One
villager experimented with Karen rice in red soil,
planting it in his swidden. The crop turned out very
poorly, both in quantity and quality. Due to the fact
that weeds do not grow so quickly in it, red soil is
preferred for the rice swidden; however, it is acknowledged
by all the villagers that black soil is the best for
any type of crop. This soil is found in recently
cleared swiddens, normally on the surface and not more
than three to four inches deep. It is made up of
decomposed leaves and grass. This humus soil is very
beneficial for maize and opium crops.

The white Kao soil categories appear to be some-
what arbitrary, although soil colour provides information
as to the condition of and elements active in the soil.
Different colours are indicative of variations in conditions
which influence productivity. Soil colours are formed
by three main sources: decomposed organic matter, certain
iron compounds, and other soil minerals such as quartz,
kaolin and mica. Soils low in organic matter with iron
absent or unoxidized are coloured by soil minerals. A
portion of the humus, the most stable portion of the
soil organic matter, is a dark brown or black residue
coating the mineral soil particles. Soil colours tend
to be mixtures resulting in tints and shades (Buckman, 1943). The categories used by the White Yao involve broad judgements relating to the total composition and colour of the soil. Location No. 10 in Mae Nai was placed in the black soil category by the cultivator, yet its colour, in fact, was more reddish in hue than the soil from location No. 5 in Khae which was described as red soil. After considerable questioning about the determination of soil category, the informants reinforced the presentiment that it was not just colour which determined category, but colour in combination with taste and texture. In practice it made little difference if a soil was in the red or black category, for both of these soils had the nutrient elements to produce good crops of rice, maize, opium and vegetables at least for a limited time.

**Erosion.**

The extent of damage to soils by erosion is dependent upon many factors which vary widely from place to place. Among these are vegetative cover, climate, kind of soil, man and slope. A bare soil erodes more than one on which a crop is growing. Crops such as maize and opium permit more erosion than small grains, such as rice. Grass which produces a heavy sod
completely covering the surface and a mass of fibrous roots which permeates all parts of the surface soil also offers protection.

Both steepness and length of slope influence erosion. Other factors being equal, the steeper and longer the slope, the greater the erosion. The variation in slope from a sampling of White Kéo swiddens indicated a strong correlation between degree of slope and run-off. Location No. 8 with its 55° slope affords an extreme example. After three years of cultivation, the soil had been leached, the humus layer run off, and the crops grown there were of poor quality. Just below this swidden at location No. 9 the soil had a similar appearance but produced a good crop of opium. That swidden had been under cultivation for five successive years with no decomposition of organic matter to revitalize the soil. The run-off from location No. 9 had carried with it the topsoil from that field which was deposited on the swidden below.

Most White Kéo cultivators are aware of the erosion on swiddens cleared on steep hillsides, but find the clearing of such land the best of a very limited number of alternatives. If the land has good soil they will inevitably clear it during their term of residence in
a village site. The amount of suitable cultivation land available at over 4,000 feet is limited to the few areas where the steep ridges round out into small plateaus or mountain valleys. These areas are the first to be cultivated after a new village is settled, and gradually as the villagers radiate out farther and farther from their household in search of good land liaj in tebchawa, the selective process becomes less rigid. Distance from the village must be considered, for if it takes more than three hours to reach a swidden and an equal time to return, there is little time left to work the land. Elder villagers point out that in the "old times" such steep land would not have been cleared, but with the pressure on land becoming greater it is difficult to find a location for a new village.

The localised pressures on land differ in Nae Nai and Khae, but the outcome is the same: scarcity. Khae village is surrounded by Karen(Yang) cultivators, who are themselves seeking out new land for cultivation. The Karen village of Tho Ba Nua is only half a day's walk east of Khae, while Tho Ba Tai is an equivalent distance to the west. As a result the competition for land is extreme. It is true that the Karen prefer and usually construct their villages at lower elevations in
the floors of mountain valleys. Their major crop, rice grown in upland terraces, does not do well in the topographic setting of most Kao communities, but through observation and inclination they have borrowed Kao cultivation techniques, especially with respect to opium growing. Disputes between the villagers of Khao and Tho Ba Nua increased from two in 1965 to nine in 1966 due to the desire of the Karen to cultivate opium, which requires a more temperate climatic zone.

Where culture groups, such as the White Kao, have been forced to shorten their rotational cycles of land use to the point that vegetative regrowth is restricted, soil erosion may become a serious problem. These conditions often obtain when neighbouring culture groups invade territorial ranges and restrict the original occupants to cropland areas too small in total area.

In the districts of Hong Dong and Mua Ram, where Mue Mai is situated, the mountainous areas above 1,000 feet are populated only by Kao. Other hill tribes have not penetrated the area, due perhaps to the fact that the lower elevations are inhabited by a large Thai population clustered around the provincial capital of Chiangmai. Until 1960 there had been little contact
between the mountain-dwelling Neo and the low-land Thais. This situation has changed radically during the past decade. The creation of a forestry reserve, encompassing most of the Neo cultivation areas, the Border Police school in Pui village, and the construction of better roads have led to increased trade and social exchange. The results have been mixed, but the controls placed on Neo cultivation have drastically contracted the land available for cultivation. The Neo have consequently not been able to practice shifting cultivation as they know it should be practiced. Soil erosion has become a serious problem. It is equally true that the Neo have made only a limited effort to control erosion, but it is because of lack of techniques rather than intent. Growing crops protect the soil from erosion in varying degree depending on the characteristics of the crop. The white Neo are aware of this. Their crop rotation system in the maize/opium swidden, for example, is designed to minimize wind and rain erosion by keeping the swidden almost constantly under cover. During the windy months from February through April, the innumerable small roots of the opium poppy permeate the soil and aid in holding the particles in place. Maize planted just before the onslaught of the rains remains in the swidden.
until nearly the end of the monsoon season when the
rains abate. The maize swidden is intercropped with
squashes and beans which also help to hold the soil.
The usual practice is to sow the poppy seed between the
maize stalks, thereby maintaining a continuous cover on
the soil.

Biotic Factors

Soil in its relation to plants provides a medium
for root development and supplies nutrients for plant
growth. There is an ever-present intimate plant and
soil relationship, and this relationship can be extended
to man, the cultivator and consumer, since the plant
life is the ultimate subsistence of all life.

The major plant communities can be grouped into
six categories or formations. They are expressions of
major climatic types, and climates fluctuate in the
intensity of their expressions from year to year, and
consequently, in their marginal effects. Increases in
elevation result in a telescoping of climates within
comparatively small areas. Thus in ascending a mountain,
such as Pui Mountain in northern Thailand, one may pass
through plant communities expressing climates which on
level terrain might encompass hundreds of miles. The predominant formation in the mountain areas of 1,000 feet and above, which constitutes the White Neo environment, is forests, more specifically the tropical and semi-tropical monsoon forest. The attributes of a plant community are structure, which pertains to the growth forms present in a particular area, and composition, which concerns the succession of plant life in that community. Thus a forest is dominated by trees of one or more species, the individuals exhibiting definite spatial relations to one another. In a tropical monsoon forest environment the canopy of higher vegetation prevents sunlight from penetrating the ground cover below, thus setting up specific and varied associations.

Succession involves change in both structure and composition and moves toward a condition of relative equilibrium characterized by little change, known as the climax community. The species of a climax community must have the ability to reproduce themselves under the conditions which they largely determine. A climax community, once established, maintains itself unless disturbed by physiographic, climatic or biotic change. Such disturbances, for example, would result from serious
erosion, shift in available moisture or temperature patterns, evolution or immigration of new species, fire, clearing, drainage, and other effects directly linked with man. The climax community is a close-knit and delicately balanced system which stores and uses solar energy. Any change in the climax forest would cause the delicately adjusted relationship between nutrient and reproductive cycles to lose energy. Thus, it could be said, that the climax community represents the maximum in organic economy (Weaver, 1933:242).

The climax vegetation in the Mae Nai area is what Credner (1936) described as lower montane coniferous forest. This classification continues to be used by the Royal Thai Forestry Department. On the ridges and slopes surrounding Mae Nai and extending from an elevation of 800 metres to 1,685 metres one recognizes a two-layered lower montane forest. Descending to the plains near Mae Rim one follows the ridgeline of a spur from coniferous and hill evergreen forest at 1,500 metres to 800 metres into lowland dipterocarp deciduous forest. Mae Nai itself, at approximately 950 metres, is located in a transitional zone where the evergreen terrace forest and the deciduous forest of the slopes above merge into a semi-evergreen transition belt dominated
by dipterocarpus. At about 1,000 metres (3,300 feet) the first zone of the lower montana becomes very distinct. This zone includes oaks, such as C.tribuloides, Castanopsis acuminatissima and Lithocarpus leucostachys. The dominant pine along the ridges above 800 metres is Pinus insularis which forms small groves and stands about 25 metres (80 feet) tall. Under these pines there is little undergrowth since the forest is covered with needles.

The secondary forest areas constituted by swiddens fallowed for more than five years have 8–10 metre high thickets of small trees, shrubs and climbers. The grassland which invariably precedes this secondary reforestation is composed of tall grasses such as Imperata cylindrica, Imperata arundinacea, Sporobolus indicus, and Themeda arundinacea. In areas where forest regeneration is apparent, Castanopsis is seen among the grasses. Ferns and sedges are also common in these grassland slopes.

The swiddens themselves consist of corn, rice, poppies and a variety of vegetables ranging from the squash to the bean family. Often the less cultivated swiddens show signs of being invaded by grasses, especially Imperata cylindrica. Herbs and bushes, such
as Sladenia calastrifolia, Cycas pectinata and Aporos wallichii also appear to invade swiddens left temporarily unattended.

Khao village, at approximately 1,500 metres (5,000 feet), has a tall mixed lower montana forest. Here the climax forest has trees over 40 metres in height, which form a dense undulating canopy. A random sample of these towering trees might include Quercus rex, C.tribuloides and Lithocarpus oxycarpus. The smaller trees under this canopy range from 10-25 metres and include such species as H.terminalis, S.magnifica, Polyosma elongata. There is little shrubbery under this layer. The ground is composed mostly of seedlings of the upper layers. The ground itself is covered with rotting logs surrounded by leaf litter and humus. Lianes and climbers abound in some areas, as do ground ferns and epiphytes, which include numerous members of the orchid family.

The secondary forest and swidden vegetation approximates that of Mae Nai with slight variations mainly in the herbs (Forrestia clabrata, Anodic calycina) and the seedlings which correspond to the climax forest cover.

The White Neo classify the biotic environment in which they subsist into two distinct categories, which
are distinguished by the terms que, roughly that sector of the environment which is wild, uncultivated and unproductive, and to a certain degree hostile, and tab, the areas which they have cleared and are under cultivation and provide them with the crops from which their livelihood is maintained.

The wild sector is represented by the forest spirit, zooy plig, and all representations of this spirit are fearsome and connotate a direct threat to individuals if they do not observe correct behaviour while in the forest, or ignore their dead ancestors. White Neo children frequently speak of poob zooy, getting lost in the forest, or lad zooy, the edge of the forest, with fear and awe until they are instructed in the complex survival apparatus of the older generation. Even amongst adult White Neo the fear and respect of wild areas remains, and the forest spirit is symbolic of ill will. The classification of flora under the wild que category is inclusive of all tree foliage and vegetation, taob, not planted or at least tended.

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1. Tua Sae Lis returned from Hesa with a severe pain in his right leg. The pain was not diagnosed by the 'diviner' hub plig until Tua had reiterated every event on his journey. Then the spirit caller determined that it was caused by the anger of zooy plig because Tua did not show proper respect to a termite mound.
by man. This includes the variety of grasses in recently fallowed fields, such as the most common White Meo designations: elephant grass *tauil ntxhw*, bitter grass *tauil iah*, black grass *tauil dub*. Besides these three varieties, they use a more generic term, *piam liai* for the grasses and underbrush found in fallowed fields.

Under the category of field *tab* is the total gamut of cultigens, cultivates and domesticates (Conklin, 1957:44). All these field crops have at some time been artificially cultivated by the Meo. They are, therefore, approached in a ritual sense through sacrifice to the field spirit *tab plia*. In contrast to the forest spirit, this spirit is a benevolent entity so long as he is given attention by appropriate sacrifice throughout the agricultural cycle (Table IV). The grains and vegetables considered in this category include the leafy vegetables *zaub* of which ten have been noted in the Mae Nai area and six in the Khae region (Table VIII). The discrepancy between the two villages may be attributed to the proximity of Mae Nai to the gardening area surrounding the city of Chiengmai. The Thai gardeners in this area cultivate a great variety of vegetables for local consumption, an increasing quantity of which are
### Table VIII

**List of Cereals, Vegetables and Fruits**

#### Leafy Vegetables (taub)

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>looj pwn</td>
<td>raddish</td>
<td></td>
</tr>
<tr>
<td>paj</td>
<td>cauliflower</td>
<td></td>
</tr>
<tr>
<td>txawj qaib</td>
<td>parsley</td>
<td>grown only in Mae Nai</td>
</tr>
<tr>
<td>ntsuab dawb</td>
<td>white cabbage</td>
<td></td>
</tr>
<tr>
<td>txoom</td>
<td>leafy cabbage</td>
<td></td>
</tr>
<tr>
<td>ceob lauq</td>
<td>cabbage</td>
<td></td>
</tr>
<tr>
<td>nplaus roj</td>
<td>cabbage w/ shiny leaves</td>
<td>grown only in Mae Nai</td>
</tr>
<tr>
<td>ntsuab khaub</td>
<td>mustard grass</td>
<td></td>
</tr>
<tr>
<td>hlab</td>
<td>cabbage</td>
<td></td>
</tr>
<tr>
<td>ntsuab</td>
<td>head cabbage</td>
<td>grown only in Mae Nai</td>
</tr>
<tr>
<td>po</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Squashes (taub)

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>yellow-green, ovoid</td>
<td></td>
</tr>
<tr>
<td>dag</td>
<td>small round pumpkin</td>
<td></td>
</tr>
<tr>
<td>dib pas</td>
<td>yellow-white, striped melon, ovoid</td>
<td></td>
</tr>
<tr>
<td>dib iaj</td>
<td>light green, ovoid</td>
<td></td>
</tr>
<tr>
<td>twq</td>
<td>white-green, elongated</td>
<td></td>
</tr>
<tr>
<td>tiv</td>
<td>orange-yellow, gourd-shaped</td>
<td></td>
</tr>
<tr>
<td>tow</td>
<td>dark green, small pumpkin (Cucurbita moschata)</td>
<td></td>
</tr>
</tbody>
</table>

#### Root Vegetables (looj pum)

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>qos faiv</td>
<td>tuber</td>
<td></td>
</tr>
<tr>
<td>qos yaj ywv</td>
<td>white potato (S. tuberosum)</td>
<td>grown only in Khae</td>
</tr>
<tr>
<td>qos liab</td>
<td>sweet potato (Ipomosa batatas)</td>
<td>grown only in Mae Nai</td>
</tr>
<tr>
<td>qab daj</td>
<td>dryland taro (Colocasia esculentum)</td>
<td>grown only in Mae Nai</td>
</tr>
<tr>
<td>doq duv</td>
<td>blackish tuber</td>
<td></td>
</tr>
<tr>
<td>jau das</td>
<td>turnip</td>
<td></td>
</tr>
<tr>
<td>qej</td>
<td>garlic (Allium sativum)</td>
<td></td>
</tr>
<tr>
<td>chiav</td>
<td>ginger</td>
<td></td>
</tr>
<tr>
<td>qos tao teeb</td>
<td>tuber</td>
<td></td>
</tr>
</tbody>
</table>
### Beans (taum)

- qaib qua: string beans, grown only in Mae Nai
- suav: short beans
- laq: long bean (*Phaseolus*), grown only in Mae Nai
- pauj yeu: string bean, grown only in Mae Nai
- moq: green pea (*Vigna sinensis*), grown only in Mae Nai
- pauv: soybean, grown only in Mae Nai

### Fruits (txiv)

- tsawb: banana
- mav: coconut
- cuab thoj: guava
- plab nyuq: jackfruit
- lwa chi: lichee
- txhais: mango
- duaj: peach (*Prunus vulgaris*)
- lwj soo: pomelo
- nyuj kub: a sour wild fruit shaped like a horn

### Grains (qoob loo)

#### Rice (nplej) *Oryza sativa* L.

- nplaua dawb: dryland glutinous rice, grown only in Mae Nai
- nplaua liab: dryland glutinous rice, grown only in Mae Nai
- nplaua daq: dryland glutinous rice, grown only in Mae Nai
- ntsawab: common dryland rice (*Oryza sativa*)

#### Maize (pobkws) *Zea mays* L.

- chuaj dawb: large orange-yellow
- chuaj liab: large white-yellow
- nplaua daq: large white-yellow
- nplaua dawb: small white-yellow
- nplaua xiav: small purple-yellow
- nplaua nhoq: small reddish-yellow
- nplaua nhoq: small whitish-yellow
- liab: popcorn
Millet (piaa juas) Setaria italica L.

Opium poppy (yeeb) Papaver somniferum L.

liab red-flowered

dawb white

chuaj lavender, medicinal

paj pink

Fibres (ntaub)

paj cotton
daj tawv bark
grows from western seed. Errors in identification and listing are also possible, although the whole list was confirmed by a number of villagers on different occasions.

White Kho Vegetables

Squashes are the most common type of White Kho vegetable. They are interspersed with the maize, and two months before maize harvest it is almost impossible to walk between the stalks without tripping over a vine belonging to the squash family. Among the squashes noted are the following types: dib, a large ovoid type with yellow-green colouring at maturity; tow, a small dark-green type shaped like a pumpkin; dib long, a yellow-white type with irregular stripes. The tiv is the most common type of squash and can be seen in every household during September.

White Kho root crops include: gas va1 wzy, the white spring potato; abh daw, dryland taro; doq daw, an indigenous tuber; jaa gas, turnips; and gas garlic. All of these root crops are cultivated in the maize/opium swiddens usually on one side of the main field near the field shelter, except for white potatoes which are not cultivated at all in Kao Khae, but form the second cash crop of Khae. The Khae villagers have large and often newly cleared swiddens seeded in potatoes. The potato
crop is second in size only to maize and opium in the number of rai (hectares) cultivated, and second only to opium as a trading commodity. If opium growing were successfully curtailed, potatoes would be the major cash crop for the Khao villagers.

Varieties of beans are grown in both villages, with six types being grown in Mae Nai and two in Khao. Again this disparity between the varieties cultivated in the two villages may be best explained by the nearness of Mae Nai to the truck gardening industry surrounding Chiangmai.

Fruits

Fruits are not extensively cultivated by the White Neo. Clumps of banana trees are usually planted near the maize/opium swiddens in low marshy areas and on the banks of streams. The common type of banana found in the fields is *Maep*, which is eaten by the cultivators in the field whenever the mood strikes. In Khao two households grow bananas commercially but on a limited scale.¹ Peach trees of the type, *Prunus vulgaris*, are grown in both Khao and Mae Nai, however, only in Mae

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¹ La Sae Yaj and Ying Sae Yaj have together over 40 banana trees planted in an abandoned swidden. The anticipated market for this crop is the Thai trader, Chan Do.
Kai are they grown commercially by the households. In 1966 they constituted the main cash crop for ten out of seventeen village households, if cash income were used as the basis of measurement. They are often sold or traded amongst the villagers for approximately Tcs.1-2 each. Peach seedlings are kept in flat boxes in the village until they are 4-5 inches high. The seedlings are transplanted after one year, when they are over one foot high. After four years they produce the first fruits. Providing that the weather and soil conditions are favourable, in the seventh year the crop may be between 50-100 kilos per tree. In 1966 the Neo received Tcs.3-5 for one kilo of peaches from the Chiangmai traders.

Cereals.

Maize is the primary fodder for the pigs and is used as a supplementary food for the horses and poultry. The list of White Neo crops includes eight varieties of hybrid maize. This list could be easily expanded and is somewhat arbitrary, having been based on the variations in maize which are distinguished by the Neo themselves. Since the thousands of varieties of the genus and species *Zea mays* crossbreed very readily, mixtures are a common sight, especially in White Neo fields where no *peach seedlings*
precautions are taken to prevent crossing. This accounts for, among other things, variations on a single ear.

The Neo separate maize into two major groups; these varieties which are fit for human consumption are prefixed by the word sticky, nplaum. Five varieties of this type are distinguished (Table VIII). The other group of two varieties are fed to the animals. An informant in Mae Nai estimated that over half the maize grown belongs to the variety which is called chuaj dawb, a large white-yellow kernelled variety. This figure appears reasonable in light of the fact that nearly two-thirds of the maize harvested by Mae Nai village is fed to the pigs. The sticky nplaum maize of the White Neo falls predominantly into the flint category of maize, although some maize, such as nplaum xiay, shows characteristics of both flint and dent (Plate VI). Cultivators claim that colour does not influence the quality of the maize. The fodder maize from Mae Nai and Khao all belonged to the category described as dent and appeared to be a well-adapted variety and fairly uniform in type.

Millet, a minor crop for the White Neo, was used in a variety of ways as a supplement grain. It is quite common for the children to chew stalks of millet while walking to or working in the fields. The sap from the
millet is moderately sweet, and both children and adults eat steamed cakes made of millet, ncuav piek, between and following meals.

The White Meo plant both plain and glutinous rice. They distinguish three types of non-glutinous dry-land rice: blue rice, nplea ntsuah, white rice, nplea dawh, yellow rice, nplea daej. It is believed by the villagers that all the White Meo rice seed first came from Yunnan, Kwangtung, Kwangsei and Honan. Because of this their seed must be cultivated in a moderately cool climate in red soil. The soil should not hold water for more than two days, for if it holds water for a longer period, the stalks will grow very tall but there will be few rice grains on the plant.

After hulling the rice grains maintain a light brown colouring. A flavour similar to wheat is imparted by this rice and is highly prized by the White Meo. Khae villagers, who grow no rice, but must purchase or trade it from the nearby Karen villages, complain of the inferior quality and taste of non-Meo rice. There are three types of glutinous rice grown in Hae Kaei, all distinguished by colour: white, yellow and red. The dark red type is a favourite of children in the form of a small ricemeal cake. It is also used as the base for
White Meo rice wine. Informants in both Khae and Mae Nai indicated that the White Meo have only these three types of glutinous rice, although they have access to other varieties, such as those cultivated by the Karen, Lahu and Yao.

Opium.

Opium poppy (*Papaver somniferum*) is considered the most critical crop by the White Meo. Any non-productive area of land is called lub teb lub chaw nyob tsiai thal yeeb, a field that will not grow opium. Opium requires a cool climate and soils high in the pH factor. The elevation of White Meo villages at altitudes above 1,500 metres is ideal for opium cultivation, but in the case of Khae, it has restricted the cultivation of rice, the main staple of Meo communities. Soil samples from Khae and Mae Nai demonstrate the relatively high pH factor prevalent in most Meo swiddens. The higher the pH factor the better the field, if correlates on Table VII are representative. Opium poppies are classified by colour. White seeds produce white-flowered poppies, yeeb dawb, while the black germinate to produce red-flowered plants, yeeb liab. Poppies with red and white combinations or pinkish petals, yeeb pai, produce grey seeds. The lavender-flowered poppy, whose opium is eaten
for stomach ailments ‘veeb tshuaj’, germinates from a black seed. Often seeds are hastily segregated, giving a swidden a profusion of colours.

Site Selection

Among the criteria used by the White Meo cultivator in selecting a suitable site for a swidden are the following, which are listed in order of significance given by the majority of households in Khae and Mae Nai: type of soil, proximity to village, proximity to cultivated swiddens, water resources, vegetative cover, terrain, exposure, previous land use and supernatural considerations.

Soil

Soil was considered by a majority of household heads to be the most important determinant in the selection and making of a new swidden. As previously noted, the White Meo distinguish four general soil types, which are categorised by colour and stickiness: sticky soil ‘av bloq’, black soil ‘av dub’, red soil ‘av liab’, and white soil ‘av dawb’. Although all soils near the villages of Khae and Mae Nai are placed in one or other of these broad categories, additional criteria are used to distinguish the quality of soils, among which are
taste, firmness, texture, rock and sand content, and friability. For example, both in Khao and Mae Nai villages the reddish laterite soil av liab is regarded as the best type in which to cultivate rice. An explanation of this preference is usually given in terms of taste, texture and stickiness. The soil should have an oily texture, moderate stickiness and when placed on the end of the tongue, the taste should be either salty or sweet. A soil which tastes sour is very poor, and the site will be abandoned, even if other indications appear to be favourable.

Different soils are selected for particular crops. Peach trees grown in av liab have poor foliage and grow more slowly than those grown in av dub, but such trees produce more fruit. Many informants insisted that they preferred av dub for all crops, because it holds water better than av liab.

Table VII seems to indicate a lack of correspondence between the White Keo soil designation based on colour and the relative colouring provided from soil analysis. Sample No. 2 indicates that a soil described as red-sticky by informants is analysed as gravel sandy loam with fine sand and mica flakes. However, the fertility rating based on the pH factor relates to the yield and
cultivation period as described by the informants fairly consistently. Even here various exceptions stand out as in the case of samples No. 6 and No. 8, which are both cropped in maize/opium and have a pH factor of 6.3, but produce good and fair maize crops respectively. Sample No. 11 has a pH factor of 7.2 but is only a two-year fallow. Experience in the swidden sampling soils and the results of the soil analysis appear to corroborate that the White Neo colour categories are based more on the total gamut of soil characteristics as evaluated by an experienced cultivator than on colour or stickiness. The White Neo think of colour as an effective way to categorise different qualities of soil.

Proximity to Village.

Despite the apparent long distances between many swiddens and the village in both Khae and Kae Nai, the White Neo indicated a strong preference for fields near the village. In selecting a new swidden site, a cultivator must choose from the available agricultural land near the village, which may be of poor quality, and more suitable land further from the community. The primary reason given for village resettlement or segmentation is the lack of fertile or otherwise suitable land near the site of the old village. Ideally, the cultivator
prefers a swidden to be as close to the village as possible, but is restricted by practical limitations placed on clearing near villages and the availability of land. Any swidden within 300 metres of the village was subject to the depredation of the pigs and goats which roamed the environs of the village. Therefore, suitable sites 300 metres or more from the village were competitively sought often during the first years of resettlement. Fallowed swiddens near the villages were frequently the first to re-enter cultivation, often before what was considered an adequate period of fallowing.

Except for five sites cleared in 1967, most of the cultivated fields in Mae Nai were more than three hours' distant from the village. The cultivators complained that their new sites must be located at regrettabley distant areas to avoid detection by the Royal Thai Forestry Department, which enforced prohibitions against cutting and burning primary forest.

The situation in Khae was significantly different. Many fields were five yours from the village and some were as much as a full day's walk for the Meo. The reasons for this are complex. Briefly, the villagers had sold or abandoned large tracts of their land when they migrated to Laos in 1960. This land was presently
being used by Thai, Hau and Karen. The largest tracts were being used for potato cultivation by a Thai entrepreneur who imported Thai labour from the Chom Thong plains area. Since there appeared to be no means short of force to retrieve this land from the new cultivators, the Neo had to select new sites further from the village. The second reason given was that the village was surrounded on all sides by Karen villages and hamlets. Although most of the Karen lived at lower elevations, they preferred to use the old Neo swiddens for poppy cultivation. All points north, east and west of Khae were predominantly cultivated swiddens or abandoned grassland. Two Karen villages could be clearly seen from the north approach to Khae village. Nevertheless, the majority of swiddens are situated between 300 metres and 2,000 metres from the village, and it is on these fields that the main burden of cultivation is placed.

**Proximity to Cultivated Swiddens.**

Just as nearness to the village is an essential criterion if a cultivator must work at his swidden frequently and save precious time from commuting to and from the village household, so is proximity to his other swiddens. The White Neo feel that the best swiddens are those that can be expanded year after year on
suitable terrain. Consequently every year the cultivators try to enlarge their existing fields. An effort is made to mark areas adjacent to a cultivated swidden well in advance of anticipated clearing so that such an area will be available when needed. Two areas in Khae of approximately 90 square metres were marked by a downward incision made on the trunk of trees delineating the four corners of the site in 1965, but were not cleared until February 1967. A random sample of ten households in Khae village indicated that an average of four rai per year were added to existing swiddens in this manner. Most nuclear households initially start with four or five rai, and as children are born the swidden expands at approximately four rai per annum.

Exceptions to this ideal pattern of swidden expansion are common, for there are limitations imposed by terrain, neighbouring cultivators and other antecedent variables. Due to the fact that maize/opium is cultivated on old rice swiddens in Kae Nai, the expansion usually involves the rice swidden areas. The pattern of shift is often circular, moving through a given territorial orbit during an interval of time and returning again to repeat the cycle. But more often the new swiddens cleared for cultivation of rice are planted in
the secondary crops during the second year for a period ranging from five years, in the case of maize, to ten or more successive years for opium poppy. As old swiddens are fallowed, fallowed swiddens with five or more years of secondary growth are put back into production. Swiddens are usually adjacent to one another, but the direction of expansion depends on terrain and the other prevailing selection variables.

Since the labour force is the household unit, distribution of the household members into efficient work parties is the primary reason for the emphasis placed on adjacent swiddens. In a neolocal, nucleated household dispersed swiddens cause disruption and hardship by splitting up the husband and wife work unit into separate areas.

Later Resources.

The availability of water, often indicated by lush foliage and heavy vegetation, is an important factor in swidden selection. Cultivators hunted for sites adjacent to streambeds or springs. Fifty-seven of the White Neo

1. See p. 65 above.

2. Household B is an example of this case. In the 10th month Bow goes to maize/opium swidden to weed, Pi goes to cut grass in the rice swidden.
Swiddens in Khao and Mae Nai were near such water sources. This amounts to approximately two-thirds of all the swiddens investigated. Fallowed swiddens which were abandoned for a relatively short period of five years or less were recultivated if the grass, bush and seedling cover was full and green most of the year.

Streambeds usually lay on the lower side of any swidden, either at the base of the field or in a depression parallel to the inclination. Thus they served as drainage areas for many swiddens. Springs were often situated at points below the swiddens or in uncleared areas adjacent to the fields. Cultivators felt that during a long drought such sources of ground water would provide some relief to the crops. They were particularly concerned about extended droughts during the cool months from October through January when the opium crop was under cultivation. In 1966-67 this factor was of immediate concern because of the lack of rain during these months.

Variations in emphasis appeared between informant cultivators in Khao and Mae Nai. The Khao villagers did not mention ground water sources as often as those in Mae Nai when describing the site selection process; however, all major swidden areas were near water sources.
In Khae, most household heads noted the type and quality of vegetation as indicative of the moisture content of the soil in any site.

**Vegetative Cover.**

The White Neo in Khae village are very much aware of the vegetative cover and especially the types of trees which grow best in their particular soil categories. Cultivators rarely clear areas of coniferous growth. They say that such trees grow best in dry sandy soil (aw dawh) of often poor fertility. Many of the cultivators from Hae Nai are hesitant to clear 

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nttoo nloog hla</td>
<td>a hardwood, <em>(C. tribuloides)</em></td>
</tr>
<tr>
<td>Nttoo taww ntxhw</td>
<td>a rough-barked hardwood, <em>(Lithocarpus leucostachya)</em></td>
</tr>
<tr>
<td>Qheb</td>
<td>oak species hardwood, <em>(Lithocarpus oxycarpus)</em></td>
</tr>
<tr>
<td>Nttoo qheb-plaw</td>
<td>a hardwood, <em>(Quercus rox)</em></td>
</tr>
</tbody>
</table>

The most common of these hardwoods is the Qheb which appears to have several sub-species. It is found most often at between 1,000 and 1,500 metres. Most trees when spoken of are preceded by the White Neo word for tree, Nttoo, except for the Qheb species. Many informants
explained this dropping of the prefix by emphasising the importance of this species in determining the selection of swidden sites. Other favourable attributes of forests with qheb trees are: 1. although the wood is hard it burns well; 2. the stands of trees are high, limiting the lower level growth; 3. there is always sufficient moisture in the soil where qheb are found.

In secondary forest areas and regrowth swidden of more than three years' fallow, other vegetative clues are used by the cultivators to determine the advisability of clearing and recultivating. The cultivator distinguishes two types of grassland: 1. tauj, or those recently fallowed swiddens consisting almost exclusively of a variety of coarse grasses which are largely uncontrolled and wild. Three main categories of grasses are distinguished, tauj txhaw, elephant grass; tauj dub, black grass which is frequently used by the White Koe as a spice in cooked dishes; and tauj ab, bitter grass. A selection of grasses from a three year fallow swidden 300 metres from Khae village indicated the following varieties: Elusine indica, Dactylostenium Aegyptium L., Digitaria timorensis, Jacquimontia paniculata, Imperata cylindrica (L.), Fluehea indica (L.). The first three
are in the White Meo category taui ntxhw, the others were placed in the group taui leh. The swidden referred to as teh taui can then be termed grassland area.

2. The second category of what is called grassland vegetation by the White Meo is the piem lia.t. This is an area of grasses, short bush and seedlings. In a sample fallow less than 100 metres from Khae nine bush and small tree varieties were identified by villagers:

a) aual yung, a small bush of reddish hue, the bark of which is boiled and used to wash out the eyes; b) nab neab, a hardwood seedling which is roasted in the fire and eaten. It is thought to cool a fever; c) secq jed tov, a large bush similar to boysenberry, the fruits of which are edible; d) nya svu, a form used as nesting material for hens; e) siv ub nees, a bush with yellow leaves the fruits of which are sour but edible; f) nne nea ntxw, the seedling of tree of the same name; it has yellowish wood used in house fires; g) mw moob, tree seedling; h) sig tischig, a seedling of a fruit tree; i) taui ntxhw, Imperata spp., elephant grass, used as thatch.

These identifiable plants were among fifteen sampled. It is of some significance that out of 15 plants found on the fallow, nine were readily identifiable
by the villagers and all of these had some food or medicinal import for the White Hoo. It would appear that almost all vegetation is utilised by the villagers, even scrub brush types. This type of mixed and developing second growth vegetation was found extensively around Khae village. A rough approximation would indicate an area of perhaps 200 rai. The uncultivated areas near Mae Nai also had a large proportion of this vegetative cover, but most of this land was distant and not considered part of the village cultivation lands. From the point of view of the cultivator there are then three major types of vegetation which influence decisions on land use: 1. gooy, primary and late secondary growth which in most areas is composed of similar species which in the case of the late secondary growth is seeded from surrounding forest plants. This vegetation is relatively stable, uncontrolled, consisting of either an advanced plant association after the seeded trees from the surrounding mature forests are five or six years old and continuing up to 20 or 30 years or made up of a climax vegetation in an area which may never have been under cultivation; 2. tauj, grassland vegetation exhibiting a variety of coarse grass, uncontrolled and
often dominated by the species, *Imperata*. This type of vegetative cover can range from unchanging to rapidly changing depending on the proximity of the surrounding forest cover, drainage and the length of cultivation. In one plot, cultivated in a forest reserve zone in Mae Nai, the vegetative cover returned to predominantly young second growth forest after only two years falling. However, this was not a typical swidden. The plot was fifty square metres, cleared in the midst of primary forest and cultivated for only one year due to restrictions imposed by forestry officials. The majority of swiddens cultivated in circular shift patterns require five or more years to acquire the species predominant in the surrounding mature second growth forest; 3. *piam liaj*, land once cultivated but recently fallowed consisting of incipient growth vegetation with an uncontrolled changing mixture of plant and tree association. Often the cultivators refer to this type of land as *tebohaw quay poi*, which translated means "fields which women defecate on". Until trees have reached a height of six to ten feet the land is considered useless and an area of waste. In Mae Nai village a number of these *piam liaj* fallowed swiddens were cultivated by poorer households in the village who obtained permission from
the original cultivators and who cleared the land to
farm it before a sufficient fallowing period had elapsC. 1

The White Neo preference for clearing sites in
primary forest areas is well ingrained. Both in Mae Nai
and Khao cultivators were outspoken in noting this
preferred vegetation for swiddens. Reasons varied, but
emphasis was placed on the empirical results of dry land
rice cultivation. All cultivators readily admitted the
difficulties in clearing and burning heavily forested
areas, but concluded that the higher yields and better
quality crops more than compensated for the extra work
involved. Two villagers of Mae Nai indicated that there
was a direct relationship between heavy burning and a
successful rice crop.

Terrain.
The White Neo are very explicit about the types
of topography preferred for swiddens: the site must
be in a valley at the foot of a mountain because the
rock keeps in the water to make soil soft all year around.
Such sites should ideally be surrounded by mountains but
open and unobstructed on the downhill side to provide
drainage. Depressed areas lacking drainage are planted

1. Qua Sae Lis and Lee Sae Yaj.
in bananas or left uncultivated (Figure VI). The largest known plot in Khae village is situated in a low undrained bowl in an area of slight gradient. Soil samples indicated a soil of high fertility, but the basin area was flooded during most of the monsoon season. Such depressions in the landscape with higher ground rising all around are called lub ghov zawj and are distinguished from the ideal agricultural valley, lub hav zawj, with sufficient slope for run-off.

Although the White Mee prefer level areas for cultivation, the variable terrain surrounding the villages of Mae Nai and Khae exhibits little land with a slope of less than 15°. Perhaps as a result, the cultivators show minimal concern for slope. The majority of swiddens in Mae Nai were over 35° slope and Khae village swiddens were more precipitous. Nevertheless, certain other characteristics of terrain are considered to be important, such as evenness and regularity of a site, the lack of rock outcroppings. No portion of a swidden, ih ntsui teh, should be of greater pitch than any other section, but this criterion was seldom realised and most cultivators were more concerned with the regularity and continuity of the swidden features.
FIGURE VI

KEY

Khao Village: Swidden Map

Climax Forest

Secondary Forest

Fallow Grasslands

Banana Trees

Potato Swiddens

Maize/Opiyum Swiddens

Opium only Swiddens

Trails

Heavy line indicates downhill slope

Scale: 50 100 meters
Swidden sites ranged from 5° to 65° in slope but each cleared plot, whether or not adjacent to already cleared swiddens, exhibited a significant continuity of features. Irregularities in terrain were used as boundaries between swiddens cultivated by the same or different households.

The ideal swidden, lub hay sawi, consisting of an area of uni-planed slope of not more than 20° pitch and situated at the foot of surrounding mountains but drained at the lower extension of the valley, was seldom found. The cultivator often compromised between slope, irregularity of terrain, and soil content. The quality and rock content of soil was considered more important than the regularity of terrain, and slope was rated as the least important variable. The White Meo cultivator is aware that a certain degree of slope makes the felling of trees easier and that in areas of steep slope (over 30°) the soil washes and leaches more rapidly. He is, however, experienced enough to realise that there are few mountainous areas remaining in Chiangmai Province which meet his ideal requirements (Figure IV).

1. The villagers of Khae returned to the site of Khae village II on returning from Laos, because they did not know of another area with equally suitable terrain.
Exposure.

The steep slope of White Hse swiddens, located in large part on the sides of mountain ridges and the floors of narrow mountain valleys creates a problem of concern for most cultivators, that is the length of exposure of a swidden to direct sunlight. Certain swiddens situated on the eastern exposure of a ridge may receive only the morning sunlight, while those on the western slopes have only afternoon exposure. Such limited exposure to sunlight is thought to cause the stunting of plants and inhibits the growth and size of grain. But of more marked importance is the effect which such shading has on poppy and opium cropping. The cultivators maintained that poppy requires minimal rainfall after the first few weeks but must have bright direct sunlight most of the day, combined with cool weather (60°-75°). Without full exposure to the sun's rays the buds will be few and of small size. At the cropping time (February), the poppy swiddens must have direct sunlight most of the day or the opium sap will not coagulate with the resulting disruption of the cropping schedule, which is either delayed and the better part of the crop lost, or the opium is of inferior quality. A swidden must have what amounts to a full day of direct
sunlight. Most swiddens are referred to as being in one or other of two categories: those that are exposed from 8 a.m. until 6 p.m., and those that receive sunlight from 10 a.m. to 4 p.m. Sites which receive less than six hours of direct sunlight are not cleared or are soon abandoned.

As a consequence of this requirement the majority of White Meo swiddens are situated on the north or south face of mountains and ridges. Thus they receive a maximum period of sunlight. Cultivators indicate a preference for the south face due to the greater intensity of light during the cool season, but this is of lesser importance. Figure VII illustrates the preference for swiddens with northern and southern exposures.

Wind exposure is given minimal attention by White Meo cultivators. During the monsoon season the prevailing winds are southwesterly. The period of greatest wind occurs during the dry season (February through to April) when the winds come in from the north-east. Thus most directions of the compass are exposed to either the wind-driven rains of the monsoon or the dust-laden winds of the dry period. When given a choice most cultivators opted for a south-easterly or north-westerly exposure, if not selecting a swidden facing due north or south.
FIGURE VII
DISTRIBUTION OF SOIL TYPES IN MAE MAI
FIGURE VIII
DISTRIBUTION OF SOIL TYPES IN KHAE
Previous Land Use.

Uncultivated land within two hours (10 kilometres) walk of the village is considered to be "within the village". Although this concept is inexplicit, it means that any non-villager desiring to cultivate such land must seek permission of the village headman before clearing the land. Excepting this communal claim to lands near the village, land fallowed for more than ten years is considered a free commodity, similar in effect to the concept of rights over water and air. Tenure is by usufruct only. A household owns land by usage only, but there are certain residual rights which go along with the clearing of primary and secondary forest. These residual usage rights often effect the selection of new swidden sites. In concept, if a swidden is abandoned for more than ten years, or if prior to this the cultivator who originally cleared the area migrates to another village, the swidden may be claimed and cultivated by another household. However, even if a swidden has lain fallow for fifteen to twenty years, it is the practice to ask permission to cultivate it, if the original cultivator is still living within the village or in a neighbouring village. This custom often determines what sites will be selected for clearing.
Since it is not the practice to charge interest on loans to kinsmen, and interest is never charged to the members of one's lineage, it is often such relatives who will approach a household and ask for permission to cultivate one or another plot which has been fallowed for some time. Other villagers and non-villagers are more hesitant to seek permission for the cultivation rights on such land, fearing that they may be called upon to pay a price or percentage of their crop.

Clearing of already claimed or recently fallowed land without permission from the claimant or original cultivator can be stopped only by watching and catching the household involved. This is a difficult task when one considers the wide range over which swiddens, old and new, are scattered.

**Supernatural considerations.**

Evasively, the White Meo villagers explain the interdispersed groves and forested patches near or situated in swidden areas by referring to the fact that these areas exist because the cultivator did not want to clear them: "Lowv muab ua tab taq lawm, tshuav ib kooq hav soo v xwb" - "They (the cultivators) made all the land into swidden leaving one area of forest".

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1. These include all clanmen, close affinal kin and certain members of mother's family.
Uncultivated forest near swiddens and surrounding villages are often related to certain supernatural elements or to the existence of burial sites. Figure IX illustrates in a limited area of approximately one square kilometre the dispersal of grave sites, spirit-infested groves and swiddens located south-east of Mae Nai village. Seven grave sites are situated in this area covered by the map. Five are at the northern extremity of Neng Sae Lee's fallowed swidden in a place where the six year old fallow meets with a heavily wooded primary and secondary forest. The second grave site consists of the two graves of the mother and father of the Sae Lee lineage. Both sites are on the edge of previously cultivated land near heavily forested area. The primary forest area in the south-west sector is inhabited by numerous termite mounds. Such areas are sacred to the White Mee, for any attempt to remove the mounds or clear the land will anger the termite spirit and bring sickness upon the animals in the village. The shallow area of primary forest in the south-east sector has not been cleared because the land is too precipitous for any type of successful cultivation.

Many suitable cultivation areas are not selected because an accident may have occurred near the area.
<table>
<thead>
<tr>
<th>Phases</th>
<th>White Meo</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Selection</td>
<td>1. Hom teb</td>
<td>Marked swidden</td>
</tr>
<tr>
<td>Cutting</td>
<td>2. Ntoo ntoo</td>
<td>Cut swidden</td>
</tr>
<tr>
<td></td>
<td>3. Luaj nrj</td>
<td>Slashed new swidden</td>
</tr>
<tr>
<td></td>
<td>4. Luaj teb</td>
<td>Slashed old swidden</td>
</tr>
<tr>
<td>Burning</td>
<td>5. Hlawv teb</td>
<td>Burned, slashed swidden</td>
</tr>
<tr>
<td></td>
<td>6. Tehav quav teb</td>
<td>Burned stubble swidden</td>
</tr>
<tr>
<td></td>
<td>7. Thws teb</td>
<td>Poorly burned swidden</td>
</tr>
<tr>
<td>Cropping</td>
<td>8. Teb npleq</td>
<td>Grain crops,</td>
</tr>
<tr>
<td></td>
<td>9. Teb pobkwa</td>
<td>&quot;qoob loo&quot;</td>
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<tr>
<td></td>
<td>10. Teb pobkwa-yinb</td>
<td></td>
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<tr>
<td></td>
<td>11. Teb yinb</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Teb qooyaj ywv</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. Quav npleq</td>
<td>Rice straw swidden</td>
</tr>
<tr>
<td></td>
<td>14. Quav kws</td>
<td>Maize stalk swidden</td>
</tr>
<tr>
<td></td>
<td>15. Quav yeeb</td>
<td>Opium stalk swidden</td>
</tr>
<tr>
<td>Fallowing</td>
<td>16. Teb fab</td>
<td>Overgrown weeds swidden</td>
</tr>
<tr>
<td></td>
<td>17. Tejchaws quav poj</td>
<td>Overgrown brush and trees swidden</td>
</tr>
</tbody>
</table>
Such locations are often marked by a pile of sticks on the ground to show where some accident, illness or murder occurred. The cultivators say that it is very difficult to determine if the Place Spirit, dab sub hamb, is favourable until after clearing and cropping. If a serious accident occurs during the cutting or burning, the site may be abandoned. If villagers and animals who are known to have eaten crops from a particular swidden become ill, a diviner or shaman may conclude that the Place Spirit or some other malevolent spirit inhabited the area and would inflict more injury if the swidden were not abandoned.

In the western end of Heng Sae Lee's fallowed swidden an accident occurred in 1964 which was interpreted as a sign to abandon the swidden. While cutting a large tree at the edge of the swidden, Heng's younger brother broke his leg when the small wooden support set to hold a pole against a large tree (tus tab cho1) collapsed. It was decided that the forest there was inhabited by a malevolent Place Spirit and all clearing was terminated. The swidden contiguous to that forest was immediately fallowed. Prior to the accident the household had intended to cultivate the six year old field.
in opium for another five years.¹

Decisions on sites to be cleared by each household are made by the head of each respective household after discussions with the village headman. There are exceptions to this procedure, as when a household head is so incapacitated by opium or illness that he must delegate this task to his wife or eldest son. The proposed sites are often selected one or two years in advance of clearing, especially in those areas where swiddens already exist, and new swiddens are, in effect, extensions of cultivated land. However, the household head may make a selection only a few weeks before clearing in order to avoid any doubtful claim to the land. The latter method of selection, followed immediately by the clearing of forest, is more common in Khao village where land is scarce and there is competition between the White Yao, Karen and Thais for contiguous land. In Mae Kai competition for land is almost exclusively within the White Yao community; however, there are limitations on land use enforced by the Thai authorities.

¹ Spirits which may affect decisions regarding site selection are: the forest spirit (dab zacv), the termite spirit (dab nauxa), the female jungle spirit (dab poi nauxo), the place spirit (dab sub banb).
**Disputes.**

In the first type of selection, where a site is chosen well in advance of clearing, marking of the claimed site is of great importance. Since the land at higher elevations in the Hong Dong – Mae Rim complex is exclusively cultivated by White Meo, such swidden designation is remarkably effective. Marking of sites contiguous to cultivated swiddens in Khae village also leads to a minimum of disputes because such land has *a priori* been claimed by the White Meo village. Any disputes arising over double claims are brought before the village council composed of all the household heads. In 1964 two households in Khae claimed overlapping parcels of the same site. The question of whose claim took precedence was brought before the council. After two hours of deliberation in which four alternatives were discussed, the site was divided evenly between both parties in the dispute. 1 Disputes over land between Karen villagers in Yang Hoi and the White Meo occur more often and are not as swiftly settled. Such land is usually at the periphery of what is considered village land and any

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1. The other alternatives were that the site should be awarded to: 1. the household whose swiddens were contiguous to the site; 2. the household who first began clearing; 3. to a thirdparty who needed land.
attempt to mark a site well in advance of clearing is often ignored. Land disputes occurring between the Karen and White Meo are referred to the respective headmen of the villagers involved. Settlement is usually reached on an economic basis, with the party losing the claim being given compensation in the form of opium or rice. In three of the four cases recorded the White Meo won the claims and gave compensation to the Karen claimants in the form of opium.

Marking (Nom teh):

Much of the confusion over site claims is the result of ineffective marking of sites and a lack of agreement between hill tribes as to what constitutes a marked claim. After a swidden site has been chosen, the area is marked by making a downward incision on the trunks of the trees delineating the four corners of the site and then driving a horizontal wooden splint into the incision. Although the site is then considered claimed for the household which marked the site, many factors may delay or prevent clearing and cultivation of the land. Many households over-estimate their capacity to clear and cultivate, and this along with illness and cultivation difficulties quite often limits the total number of marked sites which are brought under cultivation within
a household's clearing schedule. In a secondary forest milieu, rapid changes take place in the biotic community over a two and five year period. A swidden site located in an isolated area some distance from cultivated swiddens and the village may not be readily recognisable after three years. The tree slash markings may have been covered with a scar or growth from other plants, such as vines and creepers (hmab). Some cultivators state that it is for this reason that marking of sites is limited to two years and that sites adjoining cultivated swiddens are preferred (Table IX).

The size of swidden sites vary considerably, depending on the number of household members, the work unit of the household and the intentions of the household head. Ideally a marked site should not be larger than the land area necessary for the cultivation of one crop (rice or maize/opium) during one growing season for a household. Since the mean size of households was between seven and eight persons, most households in Mae Nai estimated that a rice swidden of less than six rai, producing less than 1,320 litres of unhusked rice is bordering on shortage. A suitable clearing site for rice is from two to three rai because any larger swidden would probably tax the clearing capacity of a
household during any one year. If three rai were cleared each year and last year's new rice swidden were recultivated for a second season, this would provide an adequate rice crop each year (Table X).

In actual fact, the marked swiddens varied from one to five rai in size. The majority of swidden sites cleared for rice cultivation in Mae Nai were less than three rai in size. Restrictions on the clearing of primary and late secondary forest forced the cultivators to attempt clearing in smaller, less noticeable swiddens. Swidden shapes vary considerably more than size. Some fields are triangular, others square and the majority rectangular. These variations in shape are caused by irregularities in the terrain and the efforts of most cultivators to fit in a new site near cultivated swiddens. There is, however, a preference for rectangular plots, where the vertical dimension is more extended than the horizontal, thus isolated swiddens appear as rectangular slices on a mountain exposure (Plate VII).

Clearing restrictions.

Overriding the actual procedures and techniques employed in site selection are the restrictions imposed on the clearing and cutting of primary and secondary forest by the Thai government. The villagers of both
Mae Nai and Khao find that it is very difficult to obtain permission to clear new land, especially in areas adjacent to or in forest reserve. Villagers in Khao say that they have given up asking the Nai Amphur for permission to clear. In the past such requests were either denied or no reply was given. The following case history of the clearing of a new rice swidden in Mae Nai will give illustration to the dilemma in which some Mae now find themselves:

On the 15th of January, during the full moon, Lao X went into the forest to select a site for a new rice swidden. The Mae begin to search for new swidden sites at the end of the cool season. When Lao X had found an area he liked, he returned to the village and told his sister's husband Lao Y. Lao X and Lao Y returned to the new site, and first Lao X and then Lao Y chose and marked the sites they preferred. On or about the 1st of February, Lao X and Lao Y went to the Army Breeding Station located in Mae Rim, Amphur Mae Rim. They knew that this land belonged to the Royal Thai Army, as is the case with almost all the land in their area. The officer in charge told them that although the land was owned by the Army, the trees were the property of the Royal Thai Forestry Department. He told them
that the Army had no objection to their using the land, but permission must be obtained from the Forestry Department to clear it. Both Lao X and Lao Y made no attempt to contact Forestry officials about permission, since they assumed from past experience that any such request would be turned down. On February 7th another group of villagers from Mae Nai went to this new area selected by Lao X. Lao Z was the leader of the second group. He had heard about the new area from Lay Y. Lao Z, as leader of the second group was allowed to choose his site first from the area that had not been selected by Lao X and Lao Y. The rest of his group chose their sites at random. Five days following the selection of sites the clearing began. First small lean-to type field huts were constructed. Since the area was near the dipterocarpus forests, the huts were roofed with the wide fibrous leaves of these trees. Then the smaller trees were cut. After ten days the lower layer had been cleared, and they began to cut the larger trees. The area was completely cut thirty days after the clearing had commenced.

Burning began during the final weeks of March. After the first burning they collected the debris which had not burned into mounds and burned the mounds. All
of the Kao worked together in clearing and burning the selected area. Lao X and Lao Y worked as one team and Lao Z and his group worked as another. After clearing and burning was completed the area was divided according to previous claim. Lao X's field was 80 metres wide and 200 metres long. Lao Y had a field 60 metres wide and 150 metres long, while Lao Z's field was 250 metres wide and 500 metres long. Although Lao X and Lao Y had chosen the best sites, it was generally agreed that Lao Z had fared better since with a labour force of five men his group had been able to clear more land. However, villagers from the Thai villages of Ban Pa Huang and Ban Tung Fung discovered the newly cleared Kao swiddens. A meeting was held by the household heads of the Thai villages. Many of the Thai villagers were angered because they had been prohibited from clearing the same land. Therefore, the situation was reported to the local Thai authorities.

In circumventing the restrictions on the cutting of forest, the White Kao cultivators have devised a number of schemes to avoid the detection of newly cleared swiddens, among which are the selection of smaller isolated plots situated at great distances from the village; the minimizing of dry-land rice cultivation,
which lessens the amount of new land needed for cultivation; increased production of opium, which is the only crop that economically justifies the cultivation of taxable land; and an increased use of cultivated and fallowed swiddens. Corollary effects of these schemes to avoid confrontation with Government authorities are increased trade with padi rice-growing peoples, such as the Thai and Karen, and increased commerce in the illegal opium crop.

A rough estimation of land on which clearing is prohibited in the area on which Mae Nai villagers claim cultivation rights approaches 70%. In Khao village the defining of such an area is more difficult because of conflicting Karen and White Meo claims, but close to 60% of the remaining forest land is forest reserve. The map showing areas appropriated as forestry reserves in the environs of Mae Nai and Khao villages more dramatically demonstrates the narrow margin of unrestricted primary and secondary forest.

Cutting (Thwa)

Although less labour is required in cutting and clearing secondary growth, the White Meo prefer to clear primary forest for new swiddens. Experience has proven
that a crop grown in a swidden cleared in primary forest more than compensates for the extra work involved. This preference for primary forest is especially strong in Mae Mai, where dry-land rice crops are always cultivated in cleared primary forest.

Cutting, or clearing (thwa), as conceived by the White Meo means the preparation of the land for cropping. Thus it includes a number of temporary and functionally separate stages. In the case of primary forest, clearing begins with luai, the cutting of the undergrowth below the forest canopy. This stage of clearing may range from ten to fifty man-hours of work, depending on the density and type of ground cover under the primary forest canopy. In one cleared swidden situated in a heavily canopied climax forest, the second layer cover was sparse and consisted of widely dispersed saplings, most of which were of the same species as the climax canopy. This site of three rai was cleared of undergrowth in thirteen hours.¹ Sites located near stream beds or in areas of more open climax canopy may have dense undergrowth and take significantly longer periods to cut.

The techniques used in luai clearing involve two

¹ Site A on Figure IX.
significant activities: slashing and chopping. Saplings and small trees, ranging from five to twenty centimetres in diameter are cut down with a txuan, machete, similar to the type used throughout much of South-east Asia (Figure X). Both men and women participate in this type of cutting, and children over twelve often assist their elders. The txuan is swung in a circular motion from right to left with rapidity, cutting off the small trees at about one metre from the ground. Trees of between five and twenty centimetres require a number of angled chops before they fall, depending upon the strength of the worker. Except for the shortened swing, the technique is similar to slashing. This work is predominantly carried on by men, but in households where there are few workers women also participate.

After the clearing of luai is completed, the men begin the cutting of the larger trees, ntoy ntoo. This is the most hazardous swidden activity, but because it is considered the exclusive activity of men, a competitive spirit prevails. Often the felling of the larger trees takes place at the downhill side of the swidden, while the women and children of a household are still clearing, luai, on the uphill side.

There are two techniques of ntoy. The first is
to cut a tree from both sides until it falls, *ntov phee* i tsab. In this case the larger wedge is usually cut from the bole of the tree in the direction of its lean, while the shallower cut is made on the opposite side. If the tree is leaning uphill and the desired fall is downhill then the deeper cut is made on the side opposite the lean. To force the tree to fall away from its lean is considered very dangerous and often results in kick-back, or the butt of the cut timber snapping up and back on falling. *Ntov phee* i tsab is employed most often where the lean of a tree does not correspond to the direction of the desired fall. Thus the more common technique is to fell a leaning tree by cutting one side until it splits off, *ntov tzo ntawg.* In two uncleared swiddens sampled in Khac, most of the larger climax trees were angled slightly downhill. In the five rai area, thirty seven trees were cut by the *ntov tzo ntawg* technique and only nine using *ntov phee* i tsab. In the former technique of cutting slip-back appeared to be the most common mishap. A tree trunk falls into the crotch of another tree causing the nearly free butt to spring loose and slide back rapidly until it hits the ground.

The felling of trees over twenty-five centimetres in diameter is accomplished by the use of the White Heo
axe, หนี, which is an arm's length axe very similar in appearance to the single-bitted axe used throughout the Western world. In both Khao and Mae Hai most axe-heads are purchased in the nearest Thai market towns, but on occasion a White Neo blacksmith will make his own axehead out of lighter weight iron.

The sharpening of cutting implements is done by the household itself, when possible. Every household has its own whetstone, and most of the men appear to be accomplished in the care and maintenance of their tools. If new or extra tools are needed, the village blacksmith will be called upon, and for ฿5.40 a new knife or axe can be forged.

Before cutting at the trunk of a large tree the Neo cultivator erects a platform or leans a notched log against the trunk of the selected tree at a height of approximately five metres. (Figure XI). The notched log is supported by a small wooden stake set to hold it against the tree, หนี ตัด ช่อ. The axe-man then climbs the platform or log, and cuts the tree at this elevation. Two reasons are given for this technique: the Neo believe that if they cut the tree at this height it will not die, which appears to be the case in many instances. They prefer not to kill the trees because then they can
FIGURE XI

\{ 1 - 4 m. tree stump \}
fallow the swiddens for a shorter time. The second reason was that at the height of five metres the trunk was not as thick and the wood was softer. The Kae of Mae Nai and Khae do not girdle trees. Many of the elder men said that it was not the right, or Kae, way of cutting and clearing, although they had seen it done by some Kae who imitated the Karen. The younger men felt that although girdling required less work during the initial stages of clearing, in the long run it was dangerous to both the farmer and his crops. They noted cases in which Karen farmers had been killed by the collapse of a girdled tree. Even without girdling the most common mishap was injury from falling trees and branches. Khae villagers proudly noted that they had not had such an accident in three years. The Kae say that they never use such clearing devices as pollarding or trimming, although the writer has observed these techniques used on the trees in and around the villages. When asked what they were doing, the Kae responded that they wanted more space under the trees and that they would use the branches as firewood. Firewood is almost always collected by the women from an area usually not more than ten minutes from the village. The area surrounding most White Kae villages is heavily wooded, if not by primary, by secondary vegetation.
Depending on the varied practices of individual households, the spreading and levelling of the cut, *luai*, and *ntor ntic*, take place during the cutting. In the first stages of clearing, when slashing and chopping with the *txuaia* are the primary work, some effort is made by the workers to spread the cut debris over the forest floor; but this concern with spreading to hasten the drying process is not practiced by many household work units. The levelling of large trees is also given minimal attention. In *Khae* some attention was given to cutting up felled vegetation into smaller sections to accelerate drying, but in each case specific circumstances, such as late cutting, the portent of early rains or the particular technique of a household head, determined whether the newly felled trees would be levelled.

Most households prefer to fell and clear early in the year so that sufficient time is allowed for the drying of the debris. The same sequence of activities that are applied to fallowed swiddens which are predominantly scrub, can be used in a newly cleared climax or secondary swidden. The debris is allowed time to partially dry out, a period of eight weeks or less. This drying period is followed by firing and burning.
The unburned debris is then cut into smaller sections, collected and piled in a convenient area, and burned a second time.

Fallow areas which are predominantly scrub are first cut and then burned. The roots of the small trees and bushes are left in the ground to decay. Grassland areas are first cleared by fire, followed by the cutting of unburned areas and a second selective burning. Before planting the soil is turned with a hand hoe.

**Auxiliary Activities.**

A number of auxiliary activities are carried out during the cutting and clearing phase of the swidden cycle. Among the most important are the forging and sharpening of cutting tools, the clearing of new trails to newly established swidden sites and the various social activities which take place during the slack period between cutting and burning.

Trails are cleared by the households, or groups of households, that expect to use them. A household, after deciding on a new swidden site, must clear a trail to the site before cutting can begin. If a number of households should select new sites in the same area, a joint clearing of a trail may be undertaken by the households, but more than likely the first household to commence
cutting will be the one to clear the trail. In the case of water courses to the village and main trails leading to and from the village, it is the first households to settle at the new site that clear and construct these necessary facilities.

Forging is considered to be a specialist activity by the White Meo. Although almost every household has individual members skilled in sharpening and caring for tools, only a few villagers know the techniques of forging. Each village has one or two blacksmiths skilled in making jewelry, as well as hoes, knives and axes. In Mae Mai village the households of Sae Lis lineage have professional blacksmiths.¹ Two of these households share a common smithy located near the centre of the village (Figure XII). The smithy is constructed of the same materials and is similar in shape to the White Meo household, but it is only half the size of most households. It has only one door and about one length of the interior area is composed of a raised hearth, seventy centimetres off the ground. The anvil (thatiy) is situated in the centre of the floor area and the blacksmith does the majority of his work in the space between the anvil and the hearth. At one

¹ Sae Lu Sae Lis, Sow Sae Lis, and Lu Sae Lis.
end of the hearth are the bellows (2w1) which are operated by hand.

Soon after the New Year rites, there is much activity in the smithies. A hardwood called nplood blie is first collected. This wood burns slowly and retains high heat for long periods. Once sufficient wood has been collected, the tools to be sharpened are gathered and materials for new tools are collected. Many households bring tools to be reshaped and tempered. Among the most common tools worked on during this period are the axe (tau), the hatchet (hwy tau), the machete (tuan), and the curved hoe (hlau). All of these tools are used in the cutting and burning phases of the agricultural cycle. Throughout the cutting phase tools are brought to the smithy for repair. Often a blacksmith will take a day from his own clearing activities to attend to the backlog of smithy work, but the majority of smithy activity takes place in the evening, after work in the swidden sites and fields has been completed.

Visiting and social activities for the young and courting are accelerated during the slack period when the drying of newly cut swiddens is taking place. Young men and boys, usually in groups of three or less, will visit neighbouring communities, often staying with the
mother’s kin. If time and work schedules permit, these visits may require journeys as far away as Laos. The main and most significant reasons for these journeys is to meet eligible girls and have the opportunity to make contact with kin living in distant villages. The desire to see how other people live and curiosity about the outside world undoubtedly serve as stimuli for such trips. Those youths who remain in the village are usually courting village girls or making daily journeys to close neighbouring villages. Because of the lack of work at this time, the third and fourth months of the white Neo calendar have become the traditional marriage period. Relatives and kin, such as father’s brother, father’s sister, and the groom’s nuclear family, who are expected to attend wedding ceremonies, are able to travel during this phase of agricultural work. After New Years, this is the time when village life is most disrupted. In Khao village during the 1966 phase, five complete households had left the village. Three of them had gone to Khum Klang village only a day and a half’s walk away to stay with kin. The others had made more distant journeys.

1. During 1966 two groups of youths from Khao village visited White Neo villages in the Doi Noi area of Laos.
Many of the remaining households in the village were broken up with sons and household heads visiting in other communities, while still others were hosting guests.

Burning

Burning of new and old swiddens begins early in the fourth month (March 15th onward). The Neo wait until the leaves and grass in the cut site have turned grey-brown. The timing of the burning is considered very critical, for if they wait too long and are caught by a rain they must postpone burning until the sun has dried out the underbrush. This may take a week in dry sunny weather, and even a light persistent rain could create a two-week delay. Rain can be expected in the sixth month (May) and if burning is delayed until the end of the fifth month the farmer may be without a new rice swidden for the coming year.

With minimal rainfall and high winds of the dry season, it usually takes less than five weeks for the debris of a newly cut secondary forest to dry out. The large trunks and limbs of climax forest trees require a considerably longer drying period, but the white Neo cultivator ignores this when timing his first burning.
Any delay beyond that necessary for the good burning of the lighter debris might bring him into a rainy period, which will result in a profusion of weeds and shoots, thus lessening his chances of a thorough burn.

The head of the household or the particular swidden work group decides on the timing for firing his fields, but in swiddens where adjoining fields may be conflagrated by sparks or uncontrolled fire, an informal group arrangement is made on timing. The drying and burning of swidden is possible at any time during the months of February, March and April, if rainfall were the only consideration.\(^1\)

If cutting was completed early in January, an adequate burn could be expected as soon as late February. However, the first swidden fired in Kao Nai in 1966 (that of Nong Sae Lis) was burned on March 20th, or the beginning of the fourth month. In Khao village burning did not begin until April 3rd, near the end of the fourth month. The last swidden to be fired in Kao Nai was on the 22nd of the fifth month. This burning followed a three-day rainy period which began on the sixteenth, consequently the burn was poor. Thus despite the time latitude in drying-firing activities, once the sequence has been

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1. A glance at Table VI on rainfall during these months in 1966 indicates no rainfall for February and March and only a monthly average of 12.5cc. for April.
initiated, there is only a limited period in which a maximally effective burn may be achieved. In the latter case the onslaught of the rainy season was sudden and unexpected. Normally there is a build-up of rain clouds which heralds the coming precipitation. Many villagers, however, emphasised the dangers of waiting until the first rains are imminent.

The procedures for burning include a number of preliminary precautions. A Neo will first clear the border of his swidden of grass and underbrush for a width of usually five metres. If his field borders on another he will tell his neighbour of his plan to burn and perhaps suggest that they burn together so as to make the work easier. If the owner of the neighbouring swidden does not want to burn at that time, they will clear or burn a firebreak between their fields. Burning a firebreak is not as common as clearing by knife and hoe. On one occasion the burning of a firebreak in Mae Nai resulted in the fire getting out of hand, burning a wide area of swidden, fallowed grassland and forest. Fruit trees, such as the common peach (*Ermusa vulgaris*) and the lychees grown by the Neo are protected by clearing an area around the tree and soaking it with water. The villagers do not feel that the smoke and heat from the
fire harms the trees, and therefore do not try to avoid burning near fruit orchards.

It is quite common for the fires set by the Koo to get out of hand. Once the preliminary clearing is completed no further effort is made to control a fire. The writer has observed fires in the Khae area which were set by young White Koo boys who wanted to clear a forested area of underbrush so that they could more easily hunt for wild animals. Many of the older men were opposed to this haphazard method of firing whole forest areas, but they say it happens every year, and there is little that they can do about it. All informants in Khao claimed that the burning of fallowed swiddens had certain unfavourable effects. Twenty of the household heads said that indiscriminate burning caused excessive weed growth. The others felt that it harmed the soil of fallowed swiddens and prolonged the necessary falling period.

However, this attitude toward the firing of cut primary and secondary forest and the controlled burning of fallowed swiddens about to be put back into production, differed significantly. The majority of cultivators stated that without burning "the sickness of the earth", layw pleh tab, would prevent a good crop. In Khao village
reference was made to a reported poor burning in 1965 on an eight-year fallow which resulted in a maize crop of low yield infected with what appeared to be a fungus growth. This incident was considered sufficient proof that burning is essential.

In Nae Nei various reasons were given for burning. New sites in primary and secondary forest were burned, according to informants, so that the land would be clear of logs, brush and grass. Others felt that it would not be possible to plant new swiddens without burning. However, the primary reason given was that it made better crops. Specific reference was made to the ash and the fact that the ash made the soil taste salty and sweet.

It was clear to these informants that the ash added something to the soil. When the writer mentioned that fertiliser would act in the same way on the soil, they replied that they knew this, but that fertiliser cost money and was very difficult to transport. One informant noted, "why should we spread fertiliser when burning does the same thing?"

Firing techniques differed little from household to household. When wind conditions are favourable and the upper margin of the swidden adjoins an area which is to be burned also, or has little flammable material
on it due to recent harvesting, the swidden may be fired at its lower margin. In this case the flames quickly sweep up the slope, and burning can be completed on a dry swidden of three rai in less than one hour. Depending on the wind direction and degree of slope, burning can be started on the lower margin or sides of the swidden. This type of firing usually results in a slower more controllable burn, but is used less due to the longer burning period and the high incidence of incomplete or patch burning. Whatever the direction of the intended burn, the windward margin is always lit slightly ahead of the leeward side.

Fine splints are used to fire a swidden. One man can do this easily by himself, by placing the burning torches at chosen intervals around the field. Women and children help by containing the fire with firebreaks and beating with branches. If the swidden is dry, the fire may be set anywhere; however, if the debris and grass are slightly wet, an area must be well kindled before the fire will spread. If some parts of a field are unburned, the remaining underbrush and small debris will be piled into one area for re-burning. The White Heo rarely use tertiary burnings. If grass overtakes the swidden between the time of burning and planting,
it will be cleared by hoe. Stumps and logs which are only charred by the first burning are not re-burnt. The planting of rice by dibbling, maize by hoeing, and poppy by broadcasting is simply done around these obstacles. The most common explanations for a poorly burned field include: fields in which the grass had grown unevenly or in clumps, fields which had dried out in one area but had remained wet in another, new swidden sites cleared from primary forest where the large trunks and branches had not been given sufficient time to dry.

When secondary burning is necessary because of late burning or insufficiently dried debris, it is always accomplished by spot burning. In the areas which burned poorly is piled vegetation not consumed by the main firing. This work of collecting unburnt branches and underbrush is arduous, and the White Men do their best to avoid a secondary firing for this reason. Often a cultivator will simply ignore such an area and plant around it.

Following the completion of burning, which is the last phase in the removal of material vegetation, there is no slack period. The planting of maize, squashes, beans and leafy vegetables begins immediately following the first rains. Thus commences the cropping phase of
the agricultural cycle which continues until the harvest
of opium and the advent of cutting and clearing in
January and February.

Cropping

Before planting begins in the rice swidden, burnt
logs are sometimes moved about to give a rough indication
of the swidden boundary. This is usually only done when
two or more households have cleared a contiguous area.
In some rice swiddens a small area surrounding the field
shelter is paced off and left unplanted for eventual use
as a vegetable garden. The margin of the fields adjacent
to stream banks are often planted with root crops,
vegetables, sugar cane, millet and sesame. This planting
begins before that of the maize and rice, continuing well
into the growing season of the rice crop. By the seventh
month, swiddens are planted not only in grains but a
large variety of cultigens (Table VIII). Cultivators
often spend more time planting non-grain crops before
and during the grain growing period than in the planting
of grain and opium. This process of almost continuous
supplementary crop planting over an extended period from
the fifth to the tenth month, combined with the planting,
care, and harvesting of the three primary crops, creates
a complex system of cultivation in which many crops are cultivated simultaneously in an overlapping or intercropping system.

**Maize Planting.**

Of the three major crops, maize is the first to be planted. It is also the least important in terms of alternative foods available. Out of the eight recognised varieties five are cultivated for human consumption, but these five comprise less than 20% of the total crop. Maize is the primary fodder for pigs and is a supplementary food for horses and poultry. Most informants agreed that without maize the horses and chickens could find sufficient food by foraging and that the pigs could survive on chopped banana plants for most of the year, yet, as exemplified in Khae village, the White Meo depend on maize more than rice for it is hardier, easier to plant and harvest than rice, and it does not require newly cleared high nutrient swiddens for each crop.

Maize is planted soon after the burning is completed between the fourth and the sixth months, often before the south-west monsoons begin to saturate the area. The selection of maize seeds is accomplished by storing the best ears of corn from the previous year in the loft directly over the cooking fire. It is hoped that the
smoke from the continuously burning fire will discourage insects from eating the stored maize. If maize-borers should damage the seed, it must be given to the animals. Unfortunately maize-borers seem to damage much of the seed in spite of the smoke. If extra seed is needed for planting, the Meo may borrow a small amount of seed from his kin or neighbours; however, if insects have destroyed a large amount of seed he must buy new seed to replenish his stock. The Meo say that they must have three to four tawv, or 80 litres, to sow a field of ten rai. Maize kernels are not soaked before planting because the Meo fear that the seeds might spoil. Maize requires a moderate cool temperature. In Khun Klang there is little corn grown because at 5,800 feet there are few kernels on the ear of corn. For a good corn crop the soil must be black and soft. Particular care must be taken to make a thorough burning so that there is no disease in the soil, and there will be enough ash to make the soil oily and sweet.

Any number of maize kernel varieties are planted in an average swidden. It is difficult to ascertain the relative portions of each variety, but in ten households from Khae village the proportion of nplauum, which falls predominantly into the flint category and has a somewhat
shorter growing season than the more numerous dent types, was approximately one litre to 120 litres. The amount of seed planted is calculated by a white Meo basket containing 25 litres, after the cob has been shelled. The high ratio of dent to nplasm is selected prior to storage so that little effort is made to segregate the types of maize during shelling and planting. Four households in Khao transport the ears to the swidden, shelling the kernels as the planting takes place. This method of planting slows down the planting process and makes it necessary to transport more material. For these reasons it is avoided by most households.

Prior to the actual planting, the soil in the maize swiddens is cleared of any weeds by hoeing, noas nroj. This is followed by the digging of open holes approximately four inches deep and spaced between one and two metres apart. The men usually open the holes with a deep cut made by hoes, while the women and sometimes children place the seeds in the holes by hand. Four or five kernels are dropped in the open holes and then the holes are filled with loose earth, either by employing foot action or with a brush of the hand. Due to the rapidity and ease of dropping kernels in large holes, maize planting takes considerably less time than
rice planting. Large work groups are not needed, and the work unit is almost always the household. Households consisting of less than three workers usually prepare the holes for the whole swidden before commencing the seeding.¹

Effective variations between swidden work units indicate wide discrepancies between time-labour units required to complete the maize planting in the five, approximately 8.5 rai or one hectare, swiddens sampled. Two households with a total of two workers completed planting in four days. (Planting here includes the combined tasks of digging holes, dropping seeds and covering holes.) The three other households employing a numerically equivalent work force completed the same task in less than two days. In the former samples the work units consisted of a woman and her six-year old child and a young man of twenty and his sixty-year old mother, while the latter cases involved in each case a middle aged man and his wife.

Potato planting (goa yaj ywv).

Two major distinctions are evident in the cultivation systems as practiced by Mae Hai and Khae villages. Rice, the major food staple of the White Meo diet is

¹. Pow Sae Lee's household exemplifies this sequence of maize planting. Other households: Pia Sae Vaj, Chung Sae Vaj, Pia Sae Yaj, Pi Sae Yaj.
not cultivated in Khao; however, white potatoes are, and they form the second major cash crop for the Khao farmers. In Mae Kae rice is cultivated, while potatoes are not.

Potatoes are the second major crop planted in Khao. They are planted immediately following the maize planting during the final fortnight of the fifth month and into the first half of the sixth. A second planting is made during the tenth month following the maize harvest and before the seeding of poppy. The telescoping of planting activities connected with maize and potatoes into a relatively confined time period creates a labour shortage dilemma for many households with limited work units. Because of this shortage and the fact that potatoes are not often consumed by the White Meo themselves, the number of households cultivating potatoes in Khao totals only seven. Of this group four are amongst the five wealthiest households in the village, while all seven have over ten household members.

The selection and storing of root crops for replanting is done with care. Only the largest and smoothest potatoes are selected at harvest for replanting.

1. In the Sae Yaj lineage: Teng, Dua, Ying, La.
   In the Sae Vaj lineage: Sopia, Bua Pa, Co.
These are stored in baskets (pur) usually under the platforms in the main living area or in the sleeping quarters.

Planting of potatoes is similar to the techniques employed in maize planting, except that a second burning of the swidden is often necessary because of the time elapsed between first burning and planting, which is over four weeks. If wet conditions or rainfall prohibit a second burning, the swidden soil is turned by hoe, then holes averaging five inches in depth are made with hoes. The holes are spaced at intervals of approximately twenty-seven inches. As in maize planting the women and older children do the actual planting, placing the tubers with small green shoots into the holes, making certain that the largest shoots are directed toward the surface. Loose soil is spread over the holes and packed down with the foot before proceeding to the next holes. The time expended on planting each tuber is from 30 seconds to one minute longer than with maize holes because of the effort made to situate the tubers and pack the soil. The total amount of labour needed in potato cropping is, however, less than with grain crops since underground stems and tubers require less over-all attention and are less subject to damage by pests.
Rice Planting.

Rice planting in Mae Nai begins during the first fortnight of the sixth month, just preceding the heavy rains. White rice cultivators prefer to plant before the soil becomes excessively sticky and difficult to work in. Each household works as a unit in burning and, if necessary, dibbling and seeding.¹

Holes for the rice seed are dibbled by the men and older adolescents. In small households women may also help to dibble, although this task is definitely considered by the cultivators to be men’s work. The average household group of two men and women in Mae Nai is divided into two work parties. The men begin dibbling at the upper margin of the swidden transversing the swidden along horizontal strips, dibbling an area one to two metres in width. The women and older children follow at distances of four to fifteen metres behind. Most of the sticks used for dibbling (teev keem) are one to two inches in circumference and are cut from the qheb tree. The cultivators seem to prefer this wood because it is abundant and it rarely breaks on impact with hidden rocks. Often iron caps (lub teev keem) are

¹ Only one household in Mae Nai made a secondary burning prior to planting in 1966-67.
placed on the tips of the *teaw keem* to make penetration easier and prevent the point of the stick from being crushed. Holes are punched at intervals of eight inches or more to depths of two to four inches, depending on the structure of the soil and rock content. The techniques and speed of dibbling varies significantly between individuals. One dibbler may alternate hands for each hole made, another may use one hand for a long series of holes, switching to his other hand on tiring. Cultivators indicate a preference for moist but not sticky soil, for dry powdery soil does not hold the dibble and often fills up with soil before seeding.

Seeders following the dibblers drop ten or more seeds into each cylindrical hole. The seeds are carried in *pur* to the swidden and then transferred to cloth bags slung over the left arm. Seeds are not counted when dropped, but are estimated by the number of seeds that are held in the palm of the hand. Holes are not filled in with soil because the cultivators want the hole to fill with water so that the rice seeds will germinate more rapidly.

The over-all mood during rice planting is one of anxiety. Since it is important to plant before a heavy rain, speed and skill are necessary in both dibbling and
seeding. There is also the apprehension that both tasks must be completed before Thai officials discover the newly cleared plot. Once the rice is in the ground the swidden is no longer a luaj tob, cleared field, but a tob nploi, a rice field, with full cultivation rights, and there is little that the officials can do.

None of the cultivators in Mae Nai used exchange, feast or paid labourers during the rice planting in 1965–66 or 1967. Many of the older villagers, however, spoke of the time before the Japanese came to Thailand, when all households from the same lineage worked together in the cutting, burning and cropping of rice swiddens. Discussions on this practice indicated that the crop was divided up between participating households on the basis of work units and that disagreements were common.

Khae cultivators grew dry-land rice using the same techniques as in Mae Nai before moving to the present village site. They estimated that they reaped 100 tawy per rai, when weather and soil conditions were favourable. Khae villagers say that the Karen cultivators in nearby villages only harvest 40 tawy per rai under favourable conditions. The reasons given for the low Karen yield included the fact that the Karen did not make deep dibbling holes and that they carelessly
threw seeds into holes, losing most of the seeds on the surface. The villagers also stated that the varieties of wetland or padi rice grown by the Karen and Thai were inferior to White Meo rice both in quality and quantity.

Opium Poppy Planting (Tseb yeeb).

Opium poppy grows best in a cool and relatively dry climate, but in order for the seeds to germinate, the soil must be moist and loose. For these reasons opium is not broadcast until the end of the monsoon season in late September and early October. Opium poppy seeds extracted from the already cropped pods are segregated according to colour. The white seeds produce the white-flowered poppy, while the black seeds germinate into the red-flowered plant. Poppies with red and white petals or petals with a pinkish hue produce grey seeds. Yeeb tahng, the lavender flowered poppy used as a medicinal cure for alimentary ailments germinates from black seeds. The cultivator places the seeds into a tain, small cloth bag, after they have been segregated according to colour. Hastily segregated seeds result in fields with a profusion of colours during the harvest period. Seeds are carried to the swidden for planting in either tain or in pib, kerosene cans roughly equivalent
to twenty litres. A pia of seed will cover most swiddens of two or three rai. Variations in the quantity of seed needed to plant an area depend on: the preference of the cultivators for heavy or light planting, the skill of the broadcasters and the general topography of the swidden.

The White Kao cultivators designate four major phases in the cropping of opium: teab yeab, the broadcast sowing of opium seed; dob yeab, the first weeding of the opium swidden; lea yeab, the second weeding; and blais yeab, the cutting of the poppy pods allowing the milky white sap to secrete onto the exterior of the pod and dry.

Poppy seeds are broadcast as a succession crop in the maize swidden during the fortnight preceding the maize harvest. The preparation of the maize swidden for broadcasting commences with the turning of the soil to a depth of four to six inches with hoes during the end of the eighth month. This work is undertaken by the women and older children in most cases. Hoeing proceeds at a rapid pace between the high stalks of maize, some of which reach a height of four metres. When all the top soil has been turned, broken up and thoroughly weeded, the poppy seeds are broadcast throughout the swidden.
Men participate in the broadcasting which is effected by an overhand, shoulder-high throw. Palms are cupped, while the index finger is outstretched. The force of the throw comes from the wrist, rather than the arm or body. Much importance is attached to the puang, or the amount of seed that can be held in an individual's hands. Those broadcasting the seed usually begin at the upper margins of the swidden, transversing and then doubling back at a lower level. When four or more broadcasters are working together, they line up at the side of the swidden proceeding into the maize stalks as a team, so that repetitive broadcasting will not be made in the same areas. Four broadcasters can complete a swidden of five rai, or approximately one-half hectare, in less than three hours. Because the different varieties of maize ripen over an extended period ranging from ninety to one-hundred and fifteen days in both Mae Nai and Khao, many cultivators harvest maize before broadcasting poppy seed. In twenty-three Khao households harvesting of certain varieties of maize began before poppy sowing. The harvesting was interrupted by two or three days of broadcasting, followed by continued harvesting.

Most cultivators stress the importance of having a lot of activity in the maize/opium swidden just after
the broadcasting so that the seed will become imbedded in the soil. The goal of the broadcasters is to seed every square metre of the swidden surface area.

As in the case of maize and rice planting the work unit coincides with the household group. Occasionally, as illustrated by three households in Khao village during the 1966-67 planting, outside labour was recruited. In the first example members of the household were incapacitated by illness and the household head was forced to call upon his younger brother’s sons to help complete the broadcast. His younger brother considered the work done by his sons to be *pub khuay khuay*, or something given without payment or expectation of any return. The head of the household requesting aid said that it was a *pauy* arrangement, whereby reciprocity is understood. One helps another in manual labour with the understanding of equivalent or near equivalent help in return. In the second case a household offered to give food during the fieldwork and one *taab* of opium at harvest to any individual who assisted during the entire opium cropping cycle. This household was a recent arrival in Khao and was not totally accepted by the community.

The third case was payment by *nag tes*, simple wages for hard labour. Here the household was wealthy
and wanted to sow a larger crop than household labour resources would allow, so two Karen and one indigent white Kao were hired for payment of Ttas.5 per day to hoe and broadcast the opium swidden.¹

Weeding (Dob nrog, Luaí nrog, and Nthue nrog). Weeding is considered by cultivators to be the most strenuous and time-consuming work undertaken during the cropping cycle. It is divided into three distinct techniques, the use of which are dependent in time upon the growth phase of particular crops. The first technique of weeding and thinning in maize, rice and opium cultivation is called dob nrog, which is the extraction of weeds and plants by their roots. At this stage of the cycle the weeds are usually less than four inches high and can easily be pulled out by hand. During the second weeding in maize and rice swiddens, the technique of luaí nrog is employed. This consists of holding a clump of weeds in one hand while cutting it off close to the ground with a knife held in the other. The final technique is nthue nrog which is the hoeing of weeds by using the long-handled hoe to pull out the unwanted weeds and plants. These techniques are usually mutually

¹. For further analysis of labour arrangements refer
exclusive, but can be employed in combination during the second and third weeding.

Maize swiddens are weeded in the seventh, eighth and ninth months of the White Kao calendar. The first weeding occurs not more than five weeks after planting. Although this weeding is referred to as dob nrog by the cultivators, two techniques may be used. If the swidden is heavily intercropped and there is sufficient time, weeding will be done by hand; however, a household pressed for time and anxious to attend to the potato harvest (Khae village) may cut the weeds using the luaj nrog technique. Unless the weeds are more than eleven inches (20 centimetres) high and of heavy growth, the latter technique is not significantly faster than dob nrog. In two measured areas of one-hundred square metres in the same maize swidden, the number of man-hours expended on the first weeding using the luaj nrog technique was only one half an hour less (9 hours compared to 9 hours 30 minutes). The membership of the work unit was identical and weeding was initiated on different days. Pulled weeds are placed in piles along the margin of the swiddens or stacked with the manure from the horses near the swidden shelter.

1. Only a limited number of cultivators make compost piles and often these are not distributed as fertiliser.
The second weeding in the maize swidden begins three or four weeks after the first. It is referred to as *luai nrog xii jaucauq* or the weeding when the maize is as high as the knee. Depending on the extent of intercropped supplementary crops, this weeding may take from two to three weeks. Although long-handled hoes are used for this weeding, the heavy rainfall during the eighth month and the difficulty in distinguishing weeds from sprouting vegetables slows down the pace of work. Fortunately, most weeds missed in the *rob nrog* are high enough not to be confused with the crawling vines of the squashes and melons intercropped with maize.

The third and final weeding during the ninth month is called *four tab* or *nthua nrog* and is, in fact, not a weeding at all, but the turning of the soil around the maize stalks in preparation for opium sowing. This is a time of intense activity. In Mue Nai it includes the harvesting of certain supplementary crops and the planting of others, the maize harvest and the broadcasting of opium poppy, while in Khae villages potatoes and maize must be harvested along with the preparation for the sowing of opium poppy. The soil in the maize swidden is turned by hoe, both the curved hoe (*hlau*) and the Thai *pv trhwi* are used. The children prefer
the Thai hoe because it is smaller and cuts into the sod less deeply. This work takes much longer than prior weeding and all of the household work unit participates, so that opium planting will not be delayed.

Rice swiddens are weeded twice, once during the seventh month and once at the beginning of the ninth month. The first weeding, then, takes place about four weeks after planting when the rice has formed one leaf, "ua duay phuaaj", or is about six inches high. This weeding and thinning is referred to as "doh nrog tab npleaj" and takes from ten days to a fortnight depending on the size of the work unit, the area of rice cultivated and the climatic conditions. The technique employed is hand extraction of unwanted shoots, weeds and seedlings. During this weeding cultivators work facing uphill to make bending over from the waist less strenuous. To accomplish this they move across the swidden at different levels always weeding from the lower to the upper periphery.

The second weeding, "lan npleaj", usually occurs five weeks after the first weeding, when the rice plants are "tun khouvaug", as high as the knee. Like the second maize weeding, wet weather, mud and denser plant growth make this a far more time-consuming task. This is also a limited amount of thinning, which is essential to a
maximum rice yield. Where there is excessive or crowded growth, some of the plants are cut along with weeds to allow the remaining plants a better yield. The technique used in the second weeding is luaŋ nrog, which varies slightly when thinning rice plants in that greater care must be taken in cutting between individual stalks. Very often small weeds under four inches are not cut because of the difficulty in clumping them and the fact that they are not an immediate threat to the crop.

Potato swiddens are weeded by the nthua nrog technique in the seventh and eighth months. In the majority of Khao potato swiddens there is only one weeding, extending over an interrupted four week period during which the maize swiddens must also be weeded. A smaller version of the White Meo blau is preferred so that less damage will be done to the potato shoots.

Opium poppy requires more weeding and attention than any other crop. The cultivators explain that great care is necessary because the poppy grows more slowly than weeds and leafy vegetables and that it is very difficult to distinguish the poppy shoots from weeds and leafy vegetables during the first weeding. In order to achieve maximum yield careful attention must be given to thinning. A space between plants of no less than
one foot is required. The swiddens are weeded and thinned twice during their growing season. The first weeding is done by hand, during the eleventh month or approximately four weeks after planting. Crowded poppy and vegetable plants are also selectively pulled at this time. The second weeding (les yeeh) occurs at the end of the twelfth and the beginning of the first month. Before hoeing, the leafy vegetables left in the swidden are picked. This weeding is considered important for it is during this period that the plants are reaching maturity and the pods which produce the opium sap are filling out.

**Seed Shortage.**

Difficulties such as seed shortage, labour shortage and delayed planting are familiar to the White Meo. If a household has a shortage of rice or corn seed, the head of the household or his wife will go to a neighbour, often but not always someone of the same clan, and either borrow or purchase. Poppy seed is always given freely by relatives and neighbours for there is usually more than is needed, and the White Meo custom has always held that there must be free exchange of poppy seed between Meo. If there is a severe shortage of rice or corn in a village or area encompassing a
number of villages, the Meo will walk to another region where they know there are Meo villages. There, they are confident, there will be enough seeds to supply their needs. The Meo of Khae often told the ethnographer that the white Meo are not like the Lua and Karen who sell their best seeds. The white Meo always keep the best for planting in the next year. Therefore, if one village is short of seed, they can always find good seed in a neighbouring or distant Meo village.

**Pests.**

The three major pests from which the Meo must protect the germinating seed and the crops themselves are insects, birds and foraging animals, in particular bears and gibbons. The most harmful insect is a small flying insect which the White Meo call **conj npeui**. Its shape and size are similar to that of a butterfly or moth. This insect devours the young rice stalks when they are about six inches high. The **conj** also attacks young corn stalks, but does less damage to corn than to rice. Another insect which causes damage to young plants and particularly seeds is the small red ant, known as **nseum liab**. This tiny ant will carry away the rice seed before it has germinated. It is said that one of these ants can carry one hundred rice seeds from a hole...
in a few hours. It also eats potatoes before they sprout, although mould is the major threat to the potato crop. The *kab ccoo* is a type of corn borer. The White Meo like to describe it as "a small black ant with a long nose", and this is an apt description. This small borer is an avid destroyer of maize kernels and is the cause of much sorrow in Meo households. The White Meo have no way to protect their crops against these insects. In Mae Nai the villagers sometimes spray their opium crop with insecticide of Japanese and German manufacture. However, they feel that the expenditure for such insecticides is too high for the benefits received, and if insects strike they will usually turn first to the Place Spirit and promise him a sacrifice if the insects are chased from their crops.

The most effective method of discouraging the birds is a scarecrow or a windshaker shaped like an umbrella. When the wind blows through the shaker it rattles and rustles, thereby frightening the birds. These devices are always placed in the rice field after the grain has matured. Birds rarely bother maize.

Bears and the gibbon are the major enemies of the maize crop. The cultivators have devised a water-operated noise machine for scaring these animals away.
A bamboo segment is placed in the path of a water flow. When the segment fills with water it will drop or tip thereby discharging the water and making a loud noise. The Meo say this noise is similar to that of a man working and that it frightens animals away.

**Domestic pests.**

It is quite usual for white Meo domestic animals to damage crops. The pigs are perhaps the most destructive, and they often forage far from the village. When pigs are kept in the field but they must be closely watched. Pigs will eat and damage corn, potatoes and rice, but they do not harm poppy. The roving bands of the cultivators' cattle sometimes break into a maize swidden and damage wide areas of maize and rice. Horses will also eat maize and rice if it is young. Of all the domestic animals, the White Meo condemn the water buffalo, *tum*, of the Karen. They say that if a water buffalo enters a swidden, it is lost. The buffalo not only eat maize and rice but also opium poppy.

**Fencing.**

Two types of fencing are used by the cultivators. A board fence usually six feet in height is used for garden plots in Khae. The boards are placed side by side and reinforced with horizontal planking. This is
the only type of fence which will prevent pigs and goats from entering an enclosed area. Post and rail fencing is used in areas where horses and cattle are not wanted. The post and rail fence is completely ineffective with pigs, goats, dogs and chickens.

Spoilage.

Spoilage is a major problem. Rice usually spoils in the second year of storage. Many cultivators estimate that one to two out of twenty spoil, but it is estimated that as much as five out of twenty are spoiled by insects. Insects do not harm opium, but if it is exposed to salt or spices it cannot be used. If opium is stored underground and is exposed to water it may spoil. Potatoes must be harvested after three days of continuous sunshine, otherwise about ten out of twenty will spoil. If they are picked during sunny weather perhaps only half out of twenty will be lost.

Damage by animals is another cause of spoilage. Rats are a major destroyer of stored maize. The Mou traps are ineffective. They would like to keep cats but they say that this is impossible with dogs. Domestic animals also break into the storage areas and eat up the grain. Chickens are perhaps the major domestic
culprit. Loss through theft is minimal. Occasionally rice or bananas are stolen from the house but only in small amounts. Opium is always well hidden and there are few thefts.

The White Meo often use traps (rooj) to catch rodents. Three types of rodent traps are used. One (rooj cuam koob) is purchased from the Hau traders or traded in a Thai shop. Another called rooj yej is constructed by the White Meo themselves. It consists of a small circular dead fall trap on the end of a two-foot stick. A string or cord is attached from the door of the trap to the end of the stick. If the rodent enters the trap looking for the bait placed there, it will trip the taut string, thereby shutting the trap door.

The third type of rodent trap is a snare made by village blacksmiths. There are an even greater number of traps used to capture and kill larger animals. A common method of ensnaring large game is to fence an area off and then to set a trap at the entrance of the enclosure by springing a young sapling to fall on the victim, rooj mui tim. A variation on this type of trap which is often used for bear and deer, is the rooj ntxiah
which is constructed by notching a lithe sapling and pinning it down. The thicker end is then pinned up on a trigger set to release easily when an animal passes beneath it. The other end of the sapling is raised and braced up to provide tension. In areas which bear and tiger are known to inhabit, a pit trap, *atub xub* is built. A pit is prepared usually on a game trail. The bottom of the pit is set with sharpened bamboo stakes. Then the pit is covered with a split bamboo covering which is sprinkled with dirt and leaves so that the trap is camouflaged. Another trap using sharpened bamboo stakes is the *nta nmui*. Here the bamboo spear is set horizontally to spring when released by the unsuspecting animal. Two variations on the pit trap are the *rooj gwa* and the *rooi chaub*, where a combination of the above techniques are used. In the former a tree is set to fall and scare the game into a pit set with bamboo spears, while in the latter technique a sapling is used as a spring and a rope as a snare.

Thus the hunters use six principal types of game traps and three variant rodent traps. Nevertheless, hunting is the preferred method of killing game. If large animals are molesting the crops and are not frightened away by the noise devices, the *white neo* will
track them down or lay in wait for them. All men enjoy hunting, and this is a fine excuse for shooting an animal. White Meo usually hunt in groups of three and use their own muskets made by the village gunsmith.

Harvesting (Sau) bringing in.

The White Meo cultivators speak of sau with anticipation. Early in the seventh month preparations are made for the maize and potato harvests. These preparations include the making of new tools, the sharpening and repairing of old ones, the readying of implements for the ritual acts which accompany harvest and the gathering together of household goods which will be taken to the swidden shelter during harvest. Few people remain behind in the village during harvest, for it is a time of intense anticipation and activity centred around the swiddens themselves.

Each crop harvest is referred to by the specific act which harvesting entails, rather than the more general term, sau, which means to gather or bring in crops. The maize harvest is mtias pokwa, the picking or breaking off of the ears of maize. Rather than speak of the gathering of potatoes, it is mt tua cai wai, the digging out of potatoes, which is commonly heard in
the village households. Rice harvest is *muah yule*. The taking of rice in the hand, or the giving and handing over of rice. The cropping of opium is referred to as *blaai yeeb*, the slicing (as one would cut meat) of the opium pod.

**Maize harvest (Ntais pobkwa).**

The first major crop to be harvested in both Mae Haai and Xhae villages is early maize, *pobkwa enui*. This is followed by the picking of late maize, *pobkwa taj*, two to four weeks later. The cultivators frequently discuss the growth stages of the maturing maize crop in relation to the sequence and timing of approaching harvests (Table Vb). Of the fifteen stages recognised by the cultivators, only the last six are considered in estimating the timing of harvest. As soon as the maize pods begin to fill out (*team pom*) the cultivators discuss the probabilities of harvesting dates. The other five sequences indicating the timing of approaching harvest are: 1. *tuaq uxhaw*, the drying off of the silk, 2. *ua nos nyui*, the formation of kernels, 3. *ntum kab*, the kernels are fully outlined, 4. *siax*, shiny husks indicating that the maize is ripe, 5. *dai dai shaub*, drying the maize on the stalk. Most cultivators begin estimating well before harvest what quantities of maize
are to be picked during the last two stages. To do this successfully the needs of the households must be determined for the next twelve months. Discussions are held between household members on the livestock which must be fed. The number of pigs and chickens expected are of special significance since maize is their primary diet. Over three-quarters of the maize crop is left to dry on the stalk. From this a portion of the harvest is stored and used for seeding on the following year.

The hybrid white Maize maize tends to cross with other varieties, until there appears what seems to be an endless proliferation of types. Some cobs have kernels of three or four different colours, ranging from red to brownish yellow. Most of the glutinous varieties (nualaum) are crossed with each other, and the White Maize do not segregate the varied kernels in making seed selection for the next planting. By selecting seeds of differing growing period, staggered harvests are inevitable within a single swidden. As the various varieties of maize are planted at the same time, the approximate date of maturity cannot be estimated until the early maize begins to ripen.

Weather conditions during maize harvest are not a significant aspect of the harvest. Since the ninth
month is in the midst of the monsoon season, heavy rain-
fall is expected. However, dry days during the actual
harvesting are preferred for work proceeds more quickly
when the swidden is not deep in mud.

The division of labour during maize harvest is
minimal. All members of the household participate at
one time or another. Men, women and older children cut
the stalks and carry them to the swidden margins. Often
the younger children pick the ears from the stalks lying
at the edge of the swidden, for this is a task that does
not require considerable skill and strength. The children
place the ears in baskets which are carried by the men
to the waiting horses for transport to the village.
Women usually guide the horses back to the village and
unload the maize in the granary, txhah.

 Implements used in the maize picking include a
small piece of sharp bone called hmuy, which is shaped
like a spear and used by some households to pierce the
ears of the maize while they are still on stalks. This
tool makes husking easier, but since many cultivators
prefer unhusked maize that has hardened on the stalk
for storing purposes, the hmuy is not universally used.
Plaited bamboo baskets, phawy especially designed to fit
the wooden pack-saddles of the White Meo horses are
woven well in advance of the harvest. Another type of basket, *miáo looa*, made of rattan is also taken to the maize swidden for use as a temporary storage receptical.

Maize is harvested in two ways. Early maize ears are often picked row by row from the standing stalks either by ripping off the unhusked ear, *plhaub kwa*, or by inserting the *hnuy* into the cob and extracting the husked ear. Since maize is harvested over a long period of time, from the end of the eighth to the beginning of the tenth month, harvesting techniques vary according to the growth cycle of the intercropped plants. Many cultivators prefer to cut clumps of maize stalks row by row with their *liak*. These piles of stalks containing the ears of maize are placed at the margins of the swidden. The ears can then be picked, when time permits, from these stalks and put in the baskets in which they will be transported to the village. The latter method of maize harvesting is preferred by most cultivators, especially if the swidden is densely intercropped with squashes and other supplementary crops. Late maize, *pobkwe taj*, is always harvested in this manner, so that the broadcasting of opium poppy and leafy vegetables seed will not be impeded. After harvesting the maize, the stalks remaining in the swidden are cut and the
stubble is hoed or pulled out. In the occasional swidden where opium poppy is not sown, the maize stubble is left in the swidden until the next firing.

As the maize is picked and placed in horse-pack baskets, it is transported to the granary, txhal, or in the village. The horse-pack baskets, tawb nees, filled with ears of maize are tied into the horse pack-saddle, nees nra, over which is placed a pack frame, quax tawv nees. Women and older girls lead the horses to the village once or twice a day, usually at noon and evening, depending on the size of the harvesting work unit. Each horse can carry between two and four pur of maize. The distances of the swiddens from the village and whether the fully loaded horse must ascend or descend to the village determines the speed of transport. In both Mae Nai and Khae almost all swiddens are located at lower elevations than the village, thus making the horse pack uphill.

Storage of maize in most households is a problem. Immediately following harvest there is not enough space in the house or in the household or lineage granary (Figure XII). If stored in the house the ears are kept in baskets which are placed in a shed-like porch, gab tsaq, adjoining the front, or downhill, side of the house,
or under the sleeping platforms, chaw pw. Some ears are always hung up on a rope stretched between the rafters of the house. It is often this maize which is used in the next planting. The smoke from the two household fire inhibit the insects from attacking this maize. From time to time the stored baskets of maize may be placed on the tsuay ntxaij loft over the fire so that the smoke will permeate the ears. The preferred location for maize storage is the txhab granary which is a small structure, usually no more than 6 x 3 metres built on stilts two metres off the ground. These granaries are situated less than six metres from the village house and are used solely for the storage of maize and rice. In Mae Nai there are two granaries, one behind Sae Lu's house serves as a storage house for the households of Sae Lu, Qua and Pow Sae Lis. Each household keeps a record of the number of pur stored by them and distribution of the maize is based on this count. At the end of harvest in 1965-66 Sae Lu's granary held over 300 pur of maize. The only other txhab in Mae Nai belongs to Neng Sae Lis and is used exclusively by his household. Khae village has four granaries, three of which were built by the Sae Vaj lineage and one by Sae Yaj. All of the granaries in Khae are jointly used by two or more households.
Maisè is prepared by first shelling, ḏhae nòbkwe, by hand or with a maize sheller, txhuam txwv, which is similar in appearance to a two by four board. The kernels are then ground on a quern (Plate VIII) into maize meal, mov kuan, from which it is made into maize cakes and either fried or steamed. These cakes have the consistency and shape of pancakes. The maize prepared for the pigs is boiled after shelling and fed to the animals as a gruel.

Although the gathering of maize is extended over a long period, the actual time expended in man-hours is deceptively short. Precise figures for the man-hours spent in harvesting an eight rai swidden of maize were difficult to obtain because of the interrupted picking schedule; however, the total number of hours spent in picking, cutting, repicking and transporting of stalks within the swidden was less than ninety.¹

**Potato Harvest (Nthua qos yaj ywv).**

The first potato harvest in ḏhae village occurs at the end of the first and eighth months. Only in seven households is this harvest considered a major event in the agricultural cycle. Those seven households

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1. This swidden was cultivated by Ying Sae Yaj located in ḏhae village.
cultivate more than ninety per cent of the potato crop. The most extensively cultivated and economically rewarding of the root crops, the white potato, *Solanum tuberosum* can be grown at higher altitudes than maize and thus fits ideally into the White Meo ecosystem.

The potato tubers harvested by Khao villagers vary from cream to brownish in colour depending on the quantity of corky tissue. Tubers carrying colour pigments show varying shades of yellow and white. The size of the tubers ranges from two to three inches in diameter with predominantly round and oval shapes. The potato exterior is smooth. White Meo cultivators have not yet developed a syntax for the growth stages of the potato, nor do they designate differences in the potato by other means than colour and size. The lack of nomenclature for potato cultivation is perhaps due to their limited experience in growing this recently introduced crop.

Potatoes are harvested before they are mature. Although these small "spring" potatoes are lower in dry matter content making them heavier to carry and more easily damaged, they are the preferred size for the Thai markets in which they are sold. Harvesting takes place under a range of climatic conditions. The first crop harvest at the end of the eighth month is in a
period of heavy rains while the second crop harvest occurs well after the monsoon season. Most cultivators attest to the fact that harvesting in the first month is less arduous but note that the first crop is larger and of a better quality since potatoes seem to prefer wet soil. Potatoes planted during the cool season often have second growths and hollow hearts.

Little guarding is necessary in the potato swidden since the only real threat to the crop is the domestic pigs. For these reasons potato swiddens are located at greater distances from the village than maize/opium swiddens. The two types of digging implements that are used during harvesting are the curved hoe, \textit{hlaug}, and the paddle-like shovel called \textit{duav}. Both types of tools are used to loosen the earth around the tubers before pulling them out by hand. Open baskets, \textit{ciblaug}, usually used for carrying soil, in addition to the more common storage baskets, \textit{phawv}, are loaded with the harvested potatoes. Old baskets from previous harvests are repaired and used, but new containers are made every year by each swidden unit. The digging out of potatoes always begins at the lower margins of the swidden with the work unit usually spread out along the entire lower border. Working uphill makes bending over less arduous.
As a result of the time, strenuous labour and marketing considerations involved in harvesting potatoes, extra workers are needed. For these reasons a cultivator must seek the assistance of close kinsfolk usually members of his lineage group, which involves the reciprocal helping of a clansman in manual labour, with the understanding of help in return, puw, or less often the giving of help without expectation of any return, pub chuay chuay.¹ More often than not other Khae households are occupied with their own cultivation activities, so that the cultivator must employ Karen workers from nearby villages. The Karen labourers are approached through their headman and paid Tcs.5 per day, plus food.² Men, women and children all participate in the potato harvest.

Harvested potatoes are placed in piles near the swidden shelters until the digging out is complete. Those selected potatoes which are to be kept for replanting are put in phaw, carried to the settlement house and stored under the platforms in the sleeping room.

1. Refer to
2. The Karen and Lua are the only hilltribe groups which will hire themselves out to the white Kao.
dab room, or in the main room, cha tew. Potatoes headed for the Thai market in Chom Thong are packed on horses and sent on the one day journey down the mountain ridges.

Estimated yields from swiddens vary considerably. Discussion with informant cultivators from ten households in Khao revealed the following approximations: In a newly cleared swidden the first crop of potatoes will be between 50 and 60 taww per rai. The second crop yields an equivalent amount. On the third year there is a drop to between 20 and 30 taww per rai. Potatoes are not grown in the same swidden for four years in succession.

Rice Harvest (Muab nplej).

The harvesting of rice is divided by the White Meo cultivators into five separate but successive stages beginning with the giving over, muab, of the rice by the spirits of the place. These stages are: 1. the cutting or reaping of the rice, hlaas nplej, 2. the stacking of the rice sheaves, pawv teq nplej, 3. the

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1. Measurements for grain:
   1 siab equals 2 phaww
   10 siab equal 1 taww
   10 taww equal 1 ras
threshing of the rice sheaves, ntaus nplej, 4. the winnowing or the separation of the rice chaff from the grain, vaj nplej, and 5. the carrying of the rice to the village, thawi nplej. Each one of these stages is considered part of the process called muab nplej, the giving or handing over of the rice, and culminates in the ritual celebration of noi nplej tshiab, the feast of the newly harvested rice. ¹

The harvesting period, beginning with the cutting of the rice late in the tenth month, extends through a period of nearly six weeks. The 1966 harvest extended from the 11th day of the tenth month to the 9th day of the twelfth month. Weather conditions during harvest were dry and sunny. During October there were eleven days of rain with a maximum monthly rainfall of 175.1 cm., and nine of these rainy days occurred in the first half of the month. November had only five days of rain accumulating less than 13.2 cm. Cutting is timed so that it is preceded by at least two dry days. Dry conditions prevent the head of the rice, knah nplej, from germinating between the time of cutting and threshing.

Of the thirteen growth stages of rice distinguished

¹. Mention a note of importance.
by the cultivators, the five final stages beginning with the formation of the kernels, siao paq tshaws, are discussed in relation to the sequence and timing of the approaching harvest. As soon as the rice kernels begin to form the cultivators show increasing interest in the rice swidden. The fortnightly visits to the swidden turn into frequent visits every two or three days, in which the swidden and individual rice plants are given close scrutiny. The five growth stages which are considered critical to the cultivators are: 1. the formation of the kernels, siao paq tshaws, 2. the soft kernels are formed, rau txhuv, 3. the rice is filling out, nplei too, 4. the kernels are ripening at the top of the head, nplei too dai nab hnab, and 5. the rice is ripe at the base of the head, nplei too siv nts naob. Several disparate theories exist in Mae Hai village on the ideal time for cutting and binding of the rice sheaves. Some, notably the younger men in the village, prefer an early cutting at the time of dai nab hnab, because they hold that the rice can ripen at the base of the head after cutting. The older cultivators would rather wait until after siv nts naob, for they insist that to ripen well good quality rice must not be cut too early. Because of these differing techniques, the beginning of
The timing of harvest also depends on the type of rice under cultivation. The three major glutinous types take from between 120 to 145 days to ripen depending on the weather conditions, the determination of the cultivator and other variables. Informants indicate that mplaum liab, red glutinous rice, has a one to two week longer growing season. The sub-variations of ntsuab nplej, the non-glutinous dry-land rice cultivated in the majority of White Hmo rice swiddens are not categorised, but the cultivators say that this variety is made up of many seeds which often have slightly different growing periods. However, harvesting in a given swidden is not staggered.

Harvesting Implements.

The preparation of tools and implements for the rice harvest is undertaken during the month preceding hlaie nplej, cutting. First ley, plaited bamboo mats woven from strips of bamboo and used to catch the grain during threshing and winnowing, are either made or repaired. During the same period, vah, round bamboo
Winnowing trays, and phaw, plaited bamboo baskets used for carrying and storage, are made ready. The large cloth sacks, seev, used in carrying the winnowed padi rice are checked for holes and new ones are woven from the processed bark cloth, dai taw. Finally during the week before harvest the yuv, a small crescent-shaped rice cutting knife which fits into the palm of the hand, is sharpened and forged. The short flat blade of this cutting instrument is set in wood (Figure X). Also sharpened and repaired is the liaq, rice sickle, which is perhaps the principal tool of the harvest, for most cultivators in Mae Sai prefer it over the yuv.1 The goe, treadmill for pounding and milling rice and the ntag, bamboo poles for carrying rice sacks on the shoulder, are checked for defects.

Reaping (Mlais nplej).

Reaping and binding of the rice stalks into sheaves is a combined activity which in most household work units is clearly divided between the men and women. Men cut the bundles of rice stalks with their liaq, using a sudden inward swing coming mainly from the wrist.

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1. Rab is Clf. for implements and tools with a handle or held in the hand, for example rab liaq, rabvuv.
The stalk is cut at approximately six inches from the ground, leaving two feet of stalk with the panicles for bundling. Although individual techniques vary, bundles averaging between five and six separate rice stalks are grasped in the left hand just below the panicle. By using this technique small bundles are left lying on the ground in neat piles. In households where there are few workers, the reaper ties the bundles as he reaps leaving small sheaves of rice behind his swath. Otherwise the women working behind the men collect the small bundles into larger sheaves, using one of the stalks to tie the sheaf. Such sheaves consist of twenty or more stalks which are finally gathered by the women and taken to the threshing area, which is usually situated at the most level point in the swidden. It takes a two-man team two days to cut and sheaf one rai, if neither is suffering from infirmities.

The second technique of reaping with the vuv, is rarely employed in Mae Nai. As explained by informants the technique is similar to liaq cutting; a number of rice stalks are held in the left hand while the small half-moon shaped knife held in the palm of the right hand is rapidly thrust against the stalks. Most cultivators note that cutting with the vuv is slower and
requires the reaper to bend lower than the *liang*. White Meo cultivators never practice secondary reaping or gleaning. Gleaning would be impractical considering their reaping techniques.

The reaping and bundling of the rice stalks in the swidden follows a well-defined pattern. Reapers are not concerned about which side of the swidden they begin cutting, but cutting always commences at the lower margins and moves upward. This practice saves exaggerated bending and losing balance. Each reaper cuts his swath of rice by turning from side to side. Some efforts are made to follow rows of grain, but after the first few hours of cutting each reaper concentrates on clearing the area surrounding him and the configuration of cut grain appears semi-circular rather than linear. Bundling the stalks into sheaves, the women also work toward the upper margin. If there are less than three bundlers, the pattern is usually crescent shaped. A larger group which is capable of covering the entire width of the swidden moves upward from the lower margin in a straight line. The bundlers turn from side to side sheafing all the cut stalks in their path.

Between reaping and threshing the rice stalks are left to dry in the swidden for three days. If it rains
during this drying period, the rice sheaves lie in the swidden until the cultivator determines that it is dry enough for threshing.

Stacking (Pawv nplej) and Threshing (Ntaus nplej).

Men, women and children participate in the stacking, pawv, of the sheaves. In many of the larger swiddens the men continue reaping and the women sheafing, while the children collect the dried sheaves and stack them inside the threshing area (Plate IX). The threshing compound is rectangular in shape, staked on the four corners. Blankets, pam, are stretched on three sides of the stakes to prevent the loss of grain (Plate X). On the floor of the threshing compound are spread lev and in the centre of the enclosure is an angled bench, rov rool. Two or more household women alternate between beating the sheaves of rice and passing the dried sheaves to the thresher. In many of the larger households there are two rov rool and teams of five or more women. Holding on to the stalk, the panicles are beaten against the rov rool in a rhythmic almost effortless fashion. The lub nplej, grains of rice, are separated from the panicles and slide down the rov rool to form an ever-growing pile of threshed rice. When the pile at the foot of the rov rool reaches midway up it, the men of the household clean the lev of quav nvab nplej, rice
straw, and by funnelling the lev, they pour the grain into the plaited bamboo baskets.

A second technique of threshing is reported by informants in Mae Nai. This technique was not observed and is rarely if ever used. The cultivators say they have observed other hill people employing it but think that it requires more labour and time. It requires the thresher to rub rice off the stalk with her hands or feet, moa nplej.

Work proceeds rapidly during threshing. In a ten-hour period thirty-five phaw, or over 700 litres, can be threshed by two women using the ntauw nplej technique.

Winnowing (yai nplej) of the lub nplej begins after the first six baskets of grain are threshed. In the work interval between the end of the cutting and the sheaving and collecting of the sheaves, the men construct the winnowing platform, which consists of two saplings secured horizontally between two stumps of two or more metres in height. This platform is designed so that the grain can be poured from a height, thus allowing the wind and the fanner to blow the chaff, nplaug nplej, away (Plate XI). The area under the platform is levelled by hoe and a lev is placed directly
under the pourer for the winnowed rice to fall on. A basket of grain is winnowed two or three times before it is poured into seav for transport to the village. Winnowing is always done by a team of two men. One pours while the other standing below fans the grain with two winnowing fans, chuh. He will fan the padi as it falls and continue to fan it on the mat. The winnowing is done rapidly and it is punctuated by frequent rest periods, while the winnower waits for the threshers to catch up (Plate XII).

The rice grains are carried to the village in seav which are either tied to pina or placed on the horse's pack-saddles. After reaching the village households, the winnowed grain is spread out on loy for further drying. There mats are usually placed just outside the front entrance to the house, nab tsoaq, and the drying rice must be constantly guarded against chickens and other animals.

The White Keo cultivators are aware that rice stored before it is dry will neither keep nor hull very easily. After drying, the rice seed that is to be used for planting on the following year is segregated and placed in a separate seav.
Dried grain is stored in seey which are often dropped into phawv and placed under the sleeping and storage platforms in the house. When a granary is available the rice grain is stored there with the maize. Most households which possess or have access to granaries prefer to store rice there, since it is better protected from domestic animals and rats.

The dried grain, lub nplej, is milled when needed. The dehusking of lub nplej involves two techniques: the working of the cos treadmill which is located inside the house near the pig fire, and the separation of the grain from the rice bran, xue nplej, by using the vab bamboo winnowing tray and the lub vab tehaux xue, a sieve to sift out the bran. A cos is worked by women, usually after the evening meal or early in the morning before the rest of the household is awake. Perhaps the most ubiquitous sound in the village is the pounding of the cos. The cos consists of six essential parts.

After each bowl of pounded grain is taken from the cos, it is shaken and bounced on the vab to remove the bran.

1. phay cos = the bowl
2. neej cos = the posts
3. nay cos = the beam
4. dauj cos = the pestle
5. traw cos = the foot pedal
6. nacs cos = the cross beam
This process is referred to as *tsaov txhuv*. Each *shov ocg* of grain is pounded two or three times before passing it through the lub *vah tabnuas xua*.

Three stages of the rice processing are sharply distinguished terminologically. Before hulling the rice is referred to as *nplej* with a modifier; after hulling it is called *txhuv*, and boiled rice is *moy*. The cultivators indicate that not only is it necessary for this distinction to be made because of the differences in the bulk, weight and appearance of the rice which change with each process, but also for ritual reasons. As the rice is refined it becomes less ritually important and less subject to the spirits of the first ancestors who introduced it to the Meo.¹ During the harvest phases rice is referred to as: 1. *tes nplej*, sheaved, 2. *ntuaa nplej*, threshed, 3. *vai nplej*, winnowed. After hulling rice is spoken of as *txhuv tuas* for non-glutinous rice and *thhuv npleum*, glutinous rice. At this stage the rice becomes dependent of the vicissitudes of the spirits of the ancestors. There is not a great deal that can happen to the grain between the hulling and the boiling, thus it is considered to have diminished

1. Refer to pp. 373-385.
magical properties. When the rice is cooked it becomes food and the final significant distinction is made.

Rice gruel is kuaa dig, rice water is kuaa ntxhais, and rice cakes, ngyow, but all these derivative food products are referred to as moy, cooked rice, the staple of all White Neo households.

Yields and the yield estimates made by the cultivators are calculated at the stage following winnowing, vail nplaj. At this point the rice is loaded in sessy.

It is the number of sessy or phaww which are counted to determine the crop yield (Freeman, 1955:70). From the 1965-66 harvest Mae Nai village averaged 83.2 phaww per household or a total of 1,249 phaww for the sixteen households comprising Mae Nai and its sister village Jak Kyn (Table X). In the first year of cultivation a swidden yields between twenty to twenty-five taww per rai. The second year's cultivation figures are from eight to twelve taww. Since the White Neo rarely plant rice for three years in succession there are no records or estimates of yields for third year cropping.

Opium Poppy Harvest (Sau yeab).

It is of incidental interest that the verb sau

1. (Freeman, 1955:70) notes that the average total bulk loss from unthreshed rice to dried unhusked rice is over twenty per cent in Iban communities.
<table>
<thead>
<tr>
<th>Household</th>
<th>No. in household</th>
<th>Rice crop 1966 in &quot;rai&quot;</th>
<th>Maize crop (in &quot;phavv&quot;)</th>
<th>Opium crop 1966 in &quot;rai&quot;</th>
<th>Average</th>
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<td><strong>7.1</strong></td>
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</table>

* 1 "phavv" is roughly equivalent to 5 gallons, or 12 kgs of padi (unhusked rice), or approximately 22 liters.

** 1 "joy" is equivalent to 1.6 kgs.
<table>
<thead>
<tr>
<th>Household</th>
<th>No. in household</th>
<th>Maize crop 1965 (in &quot;phawv&quot;)</th>
<th>Maize crop 1966 (in &quot;phawv&quot;)</th>
<th>Opium crop 1965 (in &quot;joy&quot;)</th>
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</table>

* Pong Sae Vaj labours for others at Tc5 per day.
** Pi Sae YaJ's maize crop (1966) was consumed by bears.
which is used by the White Neo cultivators to designate the entire opium harvest process has a variety of meanings, among which are: to write, to gather together, to collect and to gather up. The cropping of opium involves two distinct phases: 1. the cutting of the poppy pods to allow the sap to secrete, hlaia yeab, and 2. the gathering of the raw opium from the exterior of the pod, sau inkh. These phases are separated in time and technique, for the gathering or scraping of the opium must not be attempted until the sap has dried for a minimum of four hours.

Weather conditions during the cutting must be dry. It is not necessary for the opium sap to dry in the sun; but windy and dry weather are required for the coagulation and drying of the milky opium sap. A majority of cultivators feel that the best opium is produced by overnight drying. They indicate that sun-dried opium becomes darker brown and loses much of its glutinous quality.¹

The timing of the opium gathering during the second month and the beginning of the third month is ideal for the type of weather preferred. During the months of January and February 1966 only 5.4 cm. of rain fell at

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¹. The cultivators prefer wind-dried opium because it has greater weight and volume, being less concentrated.
Pai and this rainfall was concentrated on one day early in January. In Khao village there was no rainfall during January and February. At the same time the wind velocity registered between 13.2 and 16.2 which is considerably above the average yearly velocity.

Cultivators vary in the importance they place on classifying and segregating sub-varieties of opium poppy. In Mae Nai the poppy swiddens when in bloom were consistently white, with rare splatters of red and purple. Khao cultivators tend to mix their seed, so that many swiddens are a profusion of colours. Within the colour categories of yeob dewh, yeob liah, yeob pai, and yeob chua inclusive there are various sub-varieties some with deeply serrated petals and others with smooth rounded petals (Plates XIII-XV). All of the categories of poppy plant have similar growing periods and are cropped at the same time. White Mae cultivators disagree on the quality of the opium produced by the different coloured plants. In Mae Nai most cultivators hold that the white-flowered poppy produces a more abundant and finer quality opium.

Khao cultivators tend to be more explicit, indicating a ranking order: 1. yeob liah, red-flowered produces the best opium for smoking, however, it is difficult to grow. Although the weather must be cold,
it requires exposure to at least nine hours of sunlight. The opium from this variety produces little oil and a very heavy opium. 2. yeab dawb, white-flowered plants have a large percentage of oil in the opium. It is good for smoking but burns more rapidly and weighs less. Over eighty per cent of the poppies grown in Chiangmai Province by White Hmo are of this variety. 3. yeab pai, pink and bi-coloured flowered plants produce the lowest quality of opium. It has less weight than the other varieties. The effects of these disparate attitudes is demonstrated in the seed segregation process. The one category of poppy which is ranked apart from the others in both villages is chua yeab, and this is based on its use. This lavender-petalled poppy is the only category which produces opium eaten for stomach ailments.

The three stages of poppy growth recognised by the cultivator are frequently discussed as the time for cropping approaches. The time of the first weeding when the seedling is approximately two inches high is ua teh knab. When the plant is twelve inches high it is called ua roch knah, which indicates that the pod has formed. The poppy in flower is ua cheey, and it is this stage which heralds the beginning of the cropping period. At this stage the plant should be approximately one metre
in height, and each plant should have three to five pods. Productive plants should produce one mub of opium per twenty pods.\(^1\)

The stem length and pod size of poppy plants varies considerably from swidden to swidden in the same area. A selection of measurements from three graded swiddens indicated the following average measurements:

1. A sampling of 100 stems of the more stunted variety indicated an average height of 135 cm. or \(34\) inches.

This sampling was taken from a below-average field. The poppy bulbs from sample No. 1 averaged \(1\frac{1}{2}\) inches in circumference and \(1\) inch from petal to juncture with the stem, and yielded negligible seeds. 2. A sampling of 100 stems from what appeared to be an average field indicated an average height of 210 cm., or 84 inches.

The poppy bulbs from sample No. 2 averaged \(2\frac{1}{2}\) inches in circumference and \(1\frac{1}{2}\) inches from petal to juncture with the stem, and yielded approximately \(\frac{1}{2}\) tablespoon of seeds. 3. A sampling of 100 stems from what appeared to be an above average field for that area indicated an

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1. Opium weights and measurements:
   - \(1\) mub = \(1\) oz.
   - \(3\) mub = \(1\) tab
   - \(4\) tab = \(1\) hong
   - \(4\) hong = \(1\) khen
   - \(10\) khen = \(1\) loy
average height of 270 cm. or 103 inches. The poppy bulbs from sample No. 3 averaged 3 inches in circumference and 1 ½ inches from petal to juncture with the stem, and yielded approximately 1 tablespoon of seeds.

It was not possible to determine the amount of opium snapped or cropped from these samples, since the second tapping had already begun. However, cultivators then cropping the adjacent swidden indicated that sample No. 3 would produce twice as much opium as sample No. 1. Soils in sample No. 1, which were primarily ay dodge, were given as the reason for the low range in size and yield estimates in that swidden. Seed quality and quantity is another important consideration, for the size of the next crop is dependent on seed production. An average of eight litres of seed is needed for sowing one rai of opium.

There are three implements needed for opium cropping, and these are prepared well in advance of harvest. The small trident knife, pica yaeb, measuring ten inches in length is used for making the incisions in the poppy pod. Bound with cord to the seven-inch bamboo handle are three small curved blades which score the ovary of the poppy sufficiently to allow the sap to exude. A four-inch blade, dua yaeb, similar to an artist's palette
knife, is used for scraping the partially dried, but glutinous opium from the incised poppy head. Most of the duaw yeab are 3 to 4 inches wide (Plate IV). Small tin cups, tais, are collected and cleaned by the women so that they are ready to hold the raw cropped opium. These tin cups hold approximately one hong of raw opium. Raw opium is also kept in small wooden boxes, tuxa yeab, but most cultivators prefer tais for underground storage because it protects the opium from moisture.

Other implements not utilised in harvesting but important tools in the measurement and smoking of opium are the hand scales, teey, on which raw opium is weighed. (Figure XIII). Thai coins called satang are placed on the right plate of the scale and the opium to be weighed is put in the left plate, pha teey. There are three sizes of scales, the largest of which can measure one joy or 1.6 kgs. of opium. Smoking utensils include the yeob toh knife used in preparing opium for smoking, the yeob phai plate for holding the articles used during smoking, the yeob thawl opium spatula, the niay dea, a piece of shell on which the opium is rolled before smoking, the yeob tsahb, a long wire or needle-like tool used to hold the wad of opium while preparing for smoking, the tsahb kuhlub opium smoking lamp, and the lub kuhlub the opium pipe.
Incision-making, _blais-yaw_.

The most important aspects of _blais-yaw_ are:
1. the timing,
2. the individual technique, and
3. the cutting pattern.

Timing is more critical in opium cropping than during most other harvests. The white Kao opium cultivators prefer to complete the gathering of opium over a ten-day period, though this rapid a _guru_ is rare. They are never certain when this ideal period for gathering will be. It might occur early in the second month or as late as the third month. Weather conditions during the growing season and particularly at the gathering period are the primary determinants. An unusually dry growing season might inhibit growth, while rain at the time of gathering would halt work. Delays of more than ten days in cutting and gathering can be expected to effect the yield and quality of the crop. About two weeks after flowering the milky white sap, which when dried constitutes raw opium, ceases to flow and changes its chemical consistency. The third critical factor in timing is that the second cropping is made six or seven days after the first. Smaller pods which were passed over during the first cropping and already incised pods which remain green are cut at this time.
Any lengthy delay might prohibit a second cropping, causing a substantial loss. The White Hec in Khee and Hae Ba villages seldom practice tertiary cutting.

The most immediate and routine aspect of timing is the co-ordination of incising and gathering activities. The scraping of the incised pods with the duuy yeob must be completed in the late afternoon of the day of the cutting or in the morning of the following day. Most cultivators agree that overnight drying produces a better quality opium, but any delay in scraping on the following morning caused by illness or some other event, may result in over-drying. Equally, an unexpected light rain during the night will cause the sap to run, resulting in the loss of the entire cutting. Thus an opium cultivator must make a number of critical judgements involving the timing of his opium cropping activities.

The technique employed in making an incision with the xiam yeob on the poppy head can vary with the cultivator. A majority of the incisors hold the xian yeob in their right hand and the poppy pod in their left (Plate XVI). The trilinear incision is made with an upward stroke. Almost immediately the milky opium sap exudes from the edges of the incision, coagulating slightly
on exposure to the sun and air. Variations on this technique are a downward incision on the poppy head (Plate XVII), and a reversal of hand action.

The household cropping units most often use the strip method of harvesting. They begin at the lower right or left margin of the swidden, gradually spreading out along the lower perimeter. Moving upward they zigzag back and forth across their path, each inciser covering an area of from nine to fifteen metres (Plate XVIII). A large swidden is cropped in sections and the leader of the unit determines the size of the section which can be managed in a specified cropping period. The pattern of secondary cropping is far more haphazard. Often it is completed by two or three persons, where the first cutting involved half a dozen or more. The incisers wind their way through the swidden, occasionally doubling back over an area later in the day. This is more selective work as most of the poppy heads have already been tapped. It also requires more time and is less productive.

The Catherine (Sau).

The scraping of the incised poppy heads must be completed not more than eighteen hours after incising. Scraping with the duaw yeab proceeds more rapidly than
the cutting. Often taking the same relative positions assumed in the cutting, the cropping team regroups at the lower margin of the most recently cut section and moves upward. The duay veeb is alternated from the right or left hand and pulled upward along the bowl of the pod. This action is repeated four times on each pod since four rows of incisions are usually made on each poppy head. Most cultivators prefer wide bladed duay veeb as scraping is not interrupted so often by the task of transferring the scraped opium into the taiia.

Storage of the opium during sau veeb is done in the evening after the day’s cropping. This is accomplished in the village household, since usually all, save one, of the cropping teams returns to the village every evening.¹ The raw opium is weighed on the teev after which it is placed in taiia or tawua veeb for storage. In most households women are excluded from this work. As soon as the opium is weighed and packed, suitable hiding places are searched out for storing. The household head often does this task by himself, locating underground niches in his sleeping quarters or in a corner of the main room.

¹ This practice varies. In Mae Nai many household work units prefer to remain at the swidden overnight.
Although there is no strict division of labour adhered to, except to weighing and storing, it is common to see more women and girls cutting and scraping than men. The evident reason for this labour-sex imbalance during cropping is that often the men have begun felling trees at new swidden sites. Also informants feel that cropping opium is a repetitious and undemanding job which the women enjoy. Perhaps because of the lack of bending, lifting and carrying associated with grain harvests, one notices a great deal more levity and talking during opium cropping.

In the village of Mae Nai the average production figures during the 1966-67 harvest was 6.2 kg, or 3.9 joy per household, and with the exception of two households, the average was within 1 kg of the household unit yield. No household exceeded 7 joy and many cropped less than 2 joy. Opium production per household decreased in Khao between the harvest of 1966 and 1967 by a slight margin, even though the number of rai in cultivation was increased (Table XIII). This may have been due to climatic conditions during the growing season of 1966, when the cool months of November and January were drier than usual (Table VI), and there was a light rain during the cropping period. The average size of
swiddens cultivated in maize/opium per household in Mae Nai is 8.7 rai, or approximately one hectare.

Supplementary Crops

Supplementary or minor crops cultivated by the White Meo in Mae Nai and Khae can be conveniently divided into the six categories which the cultivators themselves use: 1. zaub, leafy vegetables; 2. taum, squashes and pumpkins; 3. loci pum, root crops; 4. taun, beans; 5. txiy, fruit crops; and 6. acob loc, grain crops. Included in these categories are four of the five major crops cultivated by the White Meo. Opium poppy is the only crop excluded from this generic type of classification.

Those plants categorised as zaub include leguminous and other vegetables among which are a variety of cabbages. The seeds of these vegetables are stored in cloth bags and left in the loft over the cooking fire, so that they will not be damaged by insects. However, if the stored seed is exposed to smoke and heat for too long a period the seeds will not germinate.

The zaub are planted on two occasions during the yearly agricultural cycle and intercropped with maize and opium poppy. The practice of intercropping applies
only to those cultivates which are planted in swiddens
during the cropping phase of one or more of the major
White Keo crops. The planting of intercropped saub
during maize planting in the fifth month and during
the opium planting in the tenth month differs in both
technique and location. Planting in the fifth month
is done along the margins and inner periphery of the
swidden, the common location being the area immediately
surrounding the field but, laey tab. This planting
follows the maize sowing, and it is not necessary to
turn the soil by hoe because this task is usually
completed prior to the planting of the maize. The
vegetable seeds are dropped into the furrowed soil at
a depth of approximately two inches. Soil is then
placed over the seeds by hoeing loose dirt from adjacent
mounded ridges. The area utilised in minor crop planting
during the fifth month is often not more than one eighth
of the total swidden.

The second planting of saub in the tenth month is
accomplished by mixing the seed with opium poppy seeds.
Into each pur, or twenty litre container, of poppy seed
is mixed a percentage of saub seed. The combined seeds,
which do not include other supplementary crops, are then
broadcast together. This seed mixture does not contain
any of the taub, squash, family or taum, bean, family
which might strangle and prohibit the growth of the
poppy plants, nor looj pur, root crops, which require
other planting techniques. The ratio of zaub to opium
seed is approximately 1:20, as indicated by informants
from ten households in Khae village. The zaub grows
more rapidly than poppy. Two months after planting the
plants are ready to pick. Picking begins in the twelfth
month and extends through the second, as most cultivators
pick according to household demand. If the zaub shoots
appear less than a hand span (8 inches) apart they are
thinned by hand during the first weeding of the opium
swidden. The cultivators are particularly careful to
prevent the zaub from shading or crowding out the young
poppy plants. They are also aware that the zaub have
longer root systems and that they must protect the poppy
plants from strangulation by the zaub roots. Zaub are
sold at Tcs. 5 for two nur. Those plants which cannot
be consumed during the harvest period are preserved by
drying for two days in the sun and storage in jars of
salt and boiled water. Few households in either Kae Nai
or Khae had a sufficient surplus of zaub in 1966-67 for
preserving. Within fifty days the first zaub are picked.
Picking continues for almost a month as most of the
Cabbages are eaten at various stages of maturity. Picking is done by women with children's help.

The second category of supplementary crops, taub, includes more than seven varieties of squashes and melons. Quantitatively, this is the largest category of supplementary crop grown in white Neo swiddens. In Mae Lei and Khae only five swiddens out of the total number of rice and maize/opium swiddens investigated did not have one or more varieties of taub. Planting locations and techniques vary with time of planting and the intercropped swidden. During the fifth month planting, taub seeds are mixed with maize kernels in a ratio of roughly 1:200. Thus squashes, cucumbers and melons are found throughout the maize swiddens. Vines trail along the ground under the faster growing maize stalks.

In the rice swidden a much more selective planting technique is practiced. Taub are planted only near the margins of the swidden or next to stumps and at the base of lobbed or cut tree trunks. Such selective planting prevents the taub vines from strangling or inhibiting the growth of the rice shoots. Dibbling is used in this case. Women usually drop several taub seeds into selected dibbled holes after the rice planting.
is completed. A common sight in the Mae Nai rice swidden is the burnt trunks entwined in lush green vines of the **taub** (Plate XIX). The first **taub** are picked about six weeks after planting. Selective picking continues over a period ranging from three to four weeks. Cucumbers, **dib**, are the first **taub** to be harvested.

Root crops, which range from the white potato to ginger, are categorised as **loot pun**. With the exception of the white potato, which is cultivated in Khao as a commercial cash crop, the occurrence of **loot pun** in White Neo swiddens of Mae Nai and Khao is not widespread. It is planted in less than 20% of the new swiddens. Although the cultivators are aware that this crop can be planted at almost any time during the year and that it requires minimal labour, there is not a strong demand for this crop in the White Neo diet. The planting techniques for root crops are fairly standard. A two to four inch hole is made with the hoe, or a planting stick when a hoe is not available. The tubers are placed in the holes by women and covered with soil.

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1. As noted above, forest food crops afford an additional source of **loot pun** during periods of scarcity.
Locations for planting vary. Some looi pun such as yams, are planted at the base of stumps and trees in the swidden, while others, such as turnips, garlic, ginger and sweet potatoes, are planted along the periphery or in locations outside of the swiddens. Potatoes as a major cash crop occupy the total swidden area. Looi pun are stored in pig and placed over the cooking fire. At the time of planting the seeds of turnips are soaked in water during the night prior to planting. When planting some effort is made to keep the plants spaced at least a metre apart.

Most of the root crops are planted in the sixth and seventh months, when the soil is moist from the first rains. A second planting is made in the ninth month. Looi pun are cultivated in association with bananas and sugar-cane usually on the periphery of the maize/opium swidden. Third plantings are common in Khue village during the eleventh month at the end of the monsoon. Except for potatoes, all root crops are consumed within the village. Harvesting begins two months after planting and is considered women's work.

The third White Kho group of supplementary crops, tana, consists of six varieties of beans, all of which are planted on the margins or near stumps at the maize/
Opium swiddens. Planting is either by dibbling, as in the case of suav, laq and moh or by broadcast sowing. The method of planting is most often determined by the desired size of the yield. If small or limited yields are desired, dibbling is preferred. The locations of taum are always at the margin of the swidden near the field shelter, or at the base of burnt trunks and stumps which provide support for vines. Planting occurs during the fifth month following the first rains. Women and children participate in planting. Taum are harvested over a three-week period commencing at the end of the seventh month. Some varieties such as gaib sua and suav mature in fifty to fifty-five days, others like moh take ten days to two weeks longer.

Txiv is the category used for all white Hno fruit. The two most important txiv crops are bananas, which are consumed by the villagers in Hae Nai and grown as a cash crop in khane, and peaches, which are a subsistence crop in khae and grown commercially in Hae Nai.

The most common variety of banana grown by cultivators is tsawb tvam, (Musa spp.); however, the white Hno distinguish five types of bananas and plantains:
1. tsawb dub, a black plant bearing a large fruit that is green when ripe, 2. tsawt gaab rib, a medium-sized
sweet banana, 3. tsawb gaub, a sour banana, 4. tsawb teen, a small banana commonly found in or near most swiddens. This variety is popular because it can be stored for long periods without spoiling, 5. tsawb pay, a type of very small banana named after the loose fat adhering to a pig's stomach and intestines.

Bananas are planted either in the sixth, seventh or eighth month, because the young plant requires large quantities of water. Many households delay banana planting until the eighth month due to the heavy cultivation schedule in the sixth and seventh months. The local tsawb, or shoot, from an old banana plant is placed in two-foot holes. The hole is then filled with leaves and weeds. Each banana plant is placed at least three metres apart. In the banana swiddens of Khae, of which there are two, spacing is often six or seven metres apart. Except for the commercially cultivated bananas grown at Khae, bananas are planted in clumps at the periphery of swiddens near depressions and springs and along stream beds.

All of the banana plant is utilised by the White Koo. The fruit is eaten. The leaves are used as baskets or containers for food. The stalk is cut up into a mash which is fed to the pigs, and the root is used as a
medicine for stomach ailments. Bananas are preserved by splitting them in half and drying them in the sun for two or three days, or by steaming the split banana and letting it air dry. These dried bananas are called tsawb yeey tsah and are a popular snack among white Neo children.

The banana plant does not produce edible kum, or bunches, until eighteen months after the suckers have been planted. Except for the occasional tree near the swidden shelter from which ripe bananas are picked, all of the varieties are cut green. New suckers develop after the matured stems are cut at harvesting. The tsawb cab gib continues to be productive for twenty years if it is cleared regularly and encroaching vegetation is kept back. Plant maturity, when the maximum fruiting occurs, is usually three years, and many plants are productive for only six years due to lack of care, forest encroachment and high winds.

Peaches, *Prunus* (Prunus vulgaris), like bananas, can be categorised as semi-domesticates (Conklin, 1957:44). Once planted by man they propagate themselves with little or no protection and grow wild. The common peach was introduced to the Neo of the Dong Dong-Kae Rim area in the late 1950's. Since that time peaches had become a
formidable competition to opium as the primary cash crop for White Neo cultivators. In Mae Nai transplanting is the predominant planting technique. Seeds are planted an inch deep in 2' x 4' boxes filled with ay dub. These open boxes are kept near the village houses, usually placed on top of the pig stys or on a wooden stand next to the watering trough. The boxes are watered frequently during the dry and cool seasons. When the seedlings are three to five inches high transplanting takes place. The cultivators prefer to plant peaches in opium swiddens which are nearing the following stage or in marginal areas of maize/opium swidden. A number of cultivators cleared early secondary forest, specifically for peach planting. Holes in which the seedlings are placed are hoed at intervals of four metres. After all the seedlings are transplanted some effort is made to pack the soil around the trees. Negligible attention is given to the trees after transplanting except for periodical weeding during the first year and the clearing of the immediate area prior to burning. Following the first year the seedling reaches a height of about one foot, and three years after the transplanting the first fruit appears. Harvesting of peaches occurs in June, and the small green fruits are then carried in push to the Thai traders.
at Doi Pui. The women and children pick and transport most of the crop, but the trading is transacted by the household head. If the trees are planted in av dub and the weather conditions are favourable, the cultivators can realise as much as fifty to one-hundred kilos from one tree in the seventh year. Three households in Mae Nai cultivated seedlings for the purpose of selling them to other villagers at prices of between Tcs.1 and 2 per seedling. Unlike rice and maize seed, peach seedlings are rarely given, even to lineage members.

The first sizeable peach crop in Mae Nai was harvested in June 1966. The following figures were acquired from a swidden planted solely in peaches by Qua Sae Lie, one of the wealthiest households in Mae Nai. Although this is not a random sample it correlates to most of the peach cultivating households in the area. This household had six rai planted in peaches. Of the total, approximately two rai bore fruit in 1966. There were forty-eight trees of between three and four year's growth on the two rai of land. In the 1966 harvest each tree bore an average of 50 kgs. of fruit. The entire harvest for this swidden was 2,400 kgs. Taking into consideration fluctuations in the trading price, each kilo realised from Tcs.3 to Tcs.4.50. Thus one swidden
of two rai made approximately Tcs.10,800.

Except for an occasional lichee tree, none of the other fruits are actively cared for or cultivated by the White Neo. They can, therefore, be categorised as semi-domesticates of the second order, and non-domesticates. The White Neo rarely utilise mango, pomelo, coconut or guava either as food or for technological, ritual or medical purposes. The main reason for this lack of adaptation may be attributed to the fact that these tree crops do not grow readily at elevations above 800 metres, in which the communities of Mae Nai and Khae are located.

**Fibre Products.**

There are two types of fibre products cultivated by the White Neo. Cotton is often cultivated in small plots near the maize field by women. It is planted in the seventh month and harvested in the tenth. Cotton seeds are placed in dibbled holes by using the same procedure as in rice planting. Each household has its own cotton seeds which are kept in a small cloth bag by the women of the household. To make a White Neo skirt for one girl it is necessary to plant about one-quarter rai of cotton. Any extra cotton grown is usually made into rope. Cotton is called pai. Dai tawy is the white
Kao word for the tree and the bark from which rope is made. The bark of the *dai tow* tree is stripped and soaked in water for one night. On the following day it is dried in the sun and then rolled and twisted into a strong rope. All other fibre materials used by the white Kao of Khao and Mae Nai are purchased from the Thai.

**Organisation of Swidden Labour**

In practice each household sets its own dates for cultivation activities every year. The agricultural calendar consists of a set of terminal dates within which individual household calendars may vary. It is a system of reference based on the accumulated experience of the cultivator and may, like other rules derived from experience fail to meet the specific variations such as changes in the weather or illness within a household.

During the year 1966 a journal was kept of the daily activities of all the households in Nae Nai village. Direct observation of these ten households was attempted but the difficulty of maintaining a day-to-day record of each soon made this unfeasible. Two households in the village were then selected for observation and weekly enquiries were made from the other households about their
daily routines during the previous week. The two houses selected, though not randomly chosen, did not appear atypical in the village. However, they were representative of two economic extremes; one an industrious extended family with an unusual accumulation of wealth, the other a poor labour scarce nuclear family. Selection was made on the basis of the proximity of their swidden to the village and to each other, thus making observation more feasible. The fact that they indicated a willingness to participate was also considered. Due to limited space and the repetitious nature of the daily work schedule, a typical day within the two households is selected for each White Neo month under the heading of the major agricultural activity. Changes in the daily routine are noted, as are shifts and cultivation activities. The composition of the two households vary: household (a) consists of ten members. Ble Ju Sae Yaj, 55 years old and the titular head of the household; his wife Na Gia (Sae Vaj) 47 years; his eldest son Lee Sae Yaj 26 years; Lee's wife Na Che (Sae Vaj) 21 years; Ble Ju's youngest son Pur 11 years; and the other son Natua 9 years; Pur 7 years; Neng 5 years; and Lee's two daughters Na Gia 5 years; Na Ua 2 years. Household (b) includes Pow Sae Lia
### TABLE

#### Annual Work Schedule for Two Households, Mae Nai 1966

<table>
<thead>
<tr>
<th></th>
<th>HOUSEHOLD A</th>
<th>HOUSEHOLD B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Clearing:</strong> Trees are felled; branches and undergrowth trimmed; roots and</td>
<td><strong>Clearing:</strong> No clearing activity this month;</td>
</tr>
<tr>
<td></td>
<td>forest vegetables collected; knives sharpened.</td>
<td>Minor repairs to house; Daily routine around village; Silver jewelry made.</td>
</tr>
<tr>
<td></td>
<td><strong>Cropping Opium:</strong> Sap collected; new poppy buda cut; banana stalks cut for</td>
<td><strong>Cropping Opium:</strong> Sap collected; new poppy buda cut; banana, corn stalks cut for</td>
</tr>
<tr>
<td></td>
<td>pig fodder; tools repaired; opium weighed.</td>
<td>pig fodder; cornmeal ground; tools sharpened.</td>
</tr>
<tr>
<td></td>
<td><strong>Daily Schedule:</strong> Same as Ib Lub 22-28</td>
<td><strong>Daily Schedule:</strong> Same as Ib Lub 20-28</td>
</tr>
<tr>
<td></td>
<td><strong>Cropping Opium:</strong> Daily Schedule, same as Ob Lub 1-5</td>
<td><strong>Cropping Opium:</strong> Daily Schedule, same as Ob Lub 20-28</td>
</tr>
<tr>
<td></td>
<td><strong>Rest Period:</strong> Rice hulled; cornmeal ground; leafy vegetables, fodder</td>
<td><strong>Rest Period:</strong> Rice hulled; cornmeal ground; firewood, pig fodder collected;</td>
</tr>
<tr>
<td></td>
<td>collected; wild pigs, birds hunted; house, stable repaired.</td>
<td>new swidden areas investigated.</td>
</tr>
<tr>
<td></td>
<td><strong>Clearing:</strong> Trees felled at new swidden site.</td>
<td></td>
</tr>
</tbody>
</table>

Table 12
p. 1
Plaub Lab
1-25
Clearing:
Trees felled; branches, bushes piled for burning; fodder, vegetables collected; rice hulled; maize ground.

26-28
Clearing:
Same daily schedule; firebreaks are cleared around new swidden.

Taib Lab
1-10
Burning:
Brush, branches burned; pig fodder collected.

10-28
Maize planting:
Dig holes; Hoe swidden; after 16th plant maize; stay in swidden shelter; return to village to feed pigs.

Rau Lab
1-8
Maize planting:
Schedule same as Taib Lab, 10-28.

8-28
Rice sowing:
Dibble, plant rice seeds in holes; pig fodder collected; tools repaired; rice pounded; maize ground.

Xva Lab
1-28
Wedding:
Stay in swidden shelter; weed; return to village with pig fodder.

Plaub Lab
1-28
Clearing:
Trees felled; brush collected in piles; tools repaired, sharpened.

Taib Lab
1-8
Clearing:
Same daily schedule as Plaub Lab.

11-22
Burning:
Firebreaks cleared.

22-28
Swidden burned.

Rau Lab
1-20
Maize planting:
Hoe swiddens; plant maize; rains have already begun.

Xva Lab
1-15
Rice sowing:
Dibble, plant rice in holes; pig fodder collected; tools repaired; firewood collected; rice seeds collected.
| Yim Lub | Weeding:  
| 1-8 | Same schedule as Xya Lub.  
| 6-22 | Weed rice swidden; rice swidden weeded; children are out of school all month to help.  
| 22-23 | Maize swidden weeded; weeds collected in compost pits.  
| Cuaj Lub | Maize harvest:  
| 1-5 | Same schedule as Yim Lub, 22-26; Maize ears picked.  
| 5-12 | Hoeing of maize/opium swidden; stay in swidden shelter; pig fodder collected.  
| 12-28 | Poppy broadcast: Soil turned; poppy and vegetable seed broadcast in swidden.  
| Kaum Lub | Peach planting:  
| 1-17 | Peach seedlings (120) planted near maize swidden.  
| 17-28 | Imperata grass cut in rice swidden; maize ears, fodder collected; maize ground; rice pounded; wood cut.  
| Kaum Th Lub | Schedule same as Kaum Lub, 17-28  
| 1-7 |  
| 1-10 | Same schedule as Cuaj Lub, 10-28.  
| 1-15 | Weeding:  
| 15-24 | Peach picking: Peaches picked, sold as cash crop.  
| 24-28 | Weed rice swidden.  
| 1-10 | Weeding:  
| 10-28 | Maize harvest: Stay in swidden shelter; maize ears picked; every third day take pig fodder to village.  
| 1-10 | Weeding:  
| 10-28 | Rice swidden weeded; imperata grass cut; stay in swidden shelter; poppy swidden weeded.  
| 1-10 | Schedule same as Kaum Lub, 10-28.  
<p>| 10-28 |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-28</td>
<td>Weeding; Thinning; Maize/opium swidden weeded; vegetables picked; horse packs</td>
</tr>
<tr>
<td></td>
<td>maize to village; dry maize seed stored for next year; return to sleep in swidden.</td>
</tr>
<tr>
<td>15-28</td>
<td>Rice harvest; Cut, bundle rice; repair tools.</td>
</tr>
<tr>
<td>9-12</td>
<td>Rice harvested; Threshing platform built; rice dried; rice threshed, winnowed; maize/opium swidden weeded; grass cut.</td>
</tr>
<tr>
<td>12-17</td>
<td>New Year is celebrated.</td>
</tr>
<tr>
<td>17-28</td>
<td>Maize/opium swidden weeded; prepare for harvesting.</td>
</tr>
<tr>
<td>10-26</td>
<td>Rice Harvest; Cut, bundle rice; collect pig fodder.</td>
</tr>
<tr>
<td></td>
<td>Threshing platform built.</td>
</tr>
<tr>
<td>26-28</td>
<td>Rice threshed</td>
</tr>
<tr>
<td></td>
<td>Threshed rice carried to village</td>
</tr>
<tr>
<td>9-12</td>
<td>New Year is celebrated.</td>
</tr>
<tr>
<td></td>
<td>Maize/opium swidden is weeded and prepared from harvest; pig fodder collected.</td>
</tr>
</tbody>
</table>
35 years, head of the household; his wife Na Pi (Sae Hawj) 21 years; and their two sons Peng 6 years and Pa 4 years. Children under ten years have been excluded from the household work calendar, since they are not a significant part of the labour unit and are always with one or other member of the household or attending school at Pui village.

Maize planting in household (b) during the 1966 cycle commenced some two weeks after household (a). Due to this delay in household (b), rice dibbling was delayed by an almost equivalent period. Even at the time of poppy broadcasting some four months later, household (b) was still significantly behind the rest of the village households. However, the rice harvest was started five days earlier in household (b) because of the anxiety that they would also be late in the harvest of this crop, and that this would interfere with the New Year sacrifices and activities. The rice was, in fact, not completely ripe at the base of the head at the time that Na Pi began cutting and there was considerable debate as to whether the rice harvest should not be postponed for at least a few days. They estimated that a sizeable portion of the crop would be lost because of the early harvest, but the fear of not
completing the task by the time of the New Year sacrifices overrode other factors. Pi mentioned several times during the cutting that their household was always behind the others in the village and if she did not cut the rice at that time they might have to leave half the crop in the field, because they dared not make the spirits angry by working during New Year.

The disparity in the timing of agricultural activities between the two households can be partially explained by the labour shortage in household (b). The head of the household was not only unproductive, but a continuous drain on the resources of the household. Except for the joint work effort in the tenth and eleventh months, when both the rice and the opium crops required extensive weeding, Ha Pi was not given any assistance by her husband. This placed a burden on her throughout the total agricultural cycle, but the period in which she fell farthest behind was during the clearing of new swidden for the rice crop. This work is usually allocated to men, especially the arduous task of cutting the large trees. During the entire clearing period Pow remained in the village and due to his debilitated physical condition he would not have been able to do any heavy work even if he had gone to clear forest.
In household (a) Ble Ju is also an opium smoker and does not venture far from the village; however, the responsibility for providing for the household has been delegated to Ble Ju's eldest son. Ble Ju participated only in a minor way by giving advice and adding to discussions about agricultural matters. The farming activities and the decisions affecting these activities were made by Lee, who with the help of his wife, mother and the part-time assistance of his younger brothers carried on an efficient and productive agricultural programme.

Division of Labour.

The division of labour within household (a) was rigid and systematic. In the house, the two women were responsible for the feeding and supervision of the children, cooking for the household, the winnowing and hulling of rice, the grinding of maize meal, the feeding of the animals, the cleaning of the house which consisted of sweeping and disposing of litter and the weaving and sewing of cloth. Between the two women this household work routine was further broken down. Na Sia would always prepare the meals and feed the livestock when she was at home. When the house was cleaned, it was always Na Sia who made the first move.
Ka Cho ground the maize, and stamped the rice huller when she was in the village sometimes working late into the night, while the rest of the household either slept or discussed the next day's activities. The children were managed by their mothers, but there was no apparent concern, and when one or the other woman was in the field, one of the women kept an eye on them.

In the field the women collected vegetables, grains and fodder for the animals. This activity went on throughout the agricultural cycle. It was usually Na Sia who returned to the village with fodder for the livestock, when there was a choice to be made as to whom should remain in the swidden. Since Ble Ju always remained in the village this seemed a natural decision for in this way the women remained with their spouses. Also Na Cho did not like returning to the village alone in the evening. She expressed concern about wild spirits. Hoeing was primarily the activity of the women, although they were helped by the children. This work included the hoeing and turning of the soil prior to maize planting in the fifth month and the breaking up of the soil in the maize swidden prior to the broadcasting of poppy seed. On many occasions, Lee helped the women and children hoe, but only when he had completed his
other work or if the household was measurably behind schedule. The picking of the cob at maize harvest is done by the women and children; because this does not require hard or skilled labour men rarely participate.

In the household and in the environment of the village, men concentrate on three types of work: the building and repairing of houses and barns, the ordering and execution of sacrificial rites and specialist activities. Household (a) is no exception to this since its head is the shaman for the village. Ble Ju because of his weakened state of health interests himself little in repairs, except those of the most minor nature. Lee built the house with the help of Qua Sae Lis and is continually improving the drainage area around the foundation and laying dried Imperata grass or Diptero-carpus leaves on the roof. Lee interests himself with the material welfare of the household, Ble Ju with the spiritual. Neither Ble Ju nor Lee seem to be interested nor are they considered expert in specialist activities, such as the making of jewelry and tools. Ble Ju twice visited the smithy of Sae Lu Sae Lis during the year 1966, on both times it was to make ritual objects used in the calling of spirits. Lee, though keenly interested in firearms knows nothing about making or repairing them.¹

¹. Qua Sae Lis and Sae Lu Sae Lis are the specialists in jewelry making.
At the swiddens and in the forest the men dominate all activities. Hunting and what little fishing is done are the exclusive interests of the men. Lee is an avid hunter, often leaving the house late at night to return the following morning with deer or other game. He usually hunts near his rice swidden or the maize/opium swidden for predatory animals, such as monkey or bear which might feed on the crops. The men cut and do most of the clearing of new swidden. While Lee cuts the larger trees and heavy undergrowth, the women clear and pile the brush. Swidden selection is made by Lee when he is alone or with Pur hunting in the forest.

Summary

This chapter has been concerned with what can generally be termed economics, for the livelihood of the white Kac cultivator is solely dependent upon his technological use of the resources which are at his disposal. I have described the cultivation cycle which is directly dependent upon the environmental factors obtaining in Chiangmai Province. The order of discussion proceeded from the unique factors, such as the influence of climate, soil and topography on cultivation to the more amenable organic factors. The latter sections
illustrate how the shifting cultivator manages the technique and problems involved in the production of food for local consumption.

White Neo terms and concepts related to the production of food and its treatment are included in the descriptive account which is organised according to the patterned succession of agricultural activities in a full agricultural cycle, through grain crop, root crop, tree crop and fallow periods. It is concerned with: 1. the definition and ordered sequence of all significant divisions of the cycle in terms of varying ecological conditions, types of controlled vegetation, agricultural techniques and timing, 2. the delineation of major agronomic problems faced by the White Neo farmer at each stage of the swidden cycle.

Swidden selecting, cutting, burning, planting, harvesting and fallowing have been described in detail with particular reference to the four major crops: maize, rice, potatoes and opium. This does not imply that the supplementary cultigens cropped during the same period are not of importance. Intercropping is continued on an annual cycle with root and tree crops creating supplementary food after the grains have been harvested. Cropping is the primary agricultural activity from hay
through to December. Harvests overlap to a greater degree than planting (Table IV).

The limitations imposed on the White Hmo agricultural system by the environment have to a large extent directed the cultivators into particular agricultural patterns. Although the White Hmo do not have a highly developed technology, their food supply is adequate and is supplemented by the income received from the opium cash crop, which can be traded for needed items. If technology is considered as the adaption of human behaviour to natural circumstances (Evans-Pritchard, 1947:39), it can be said that the White Hmo are technologically well-adapted to their ecosystem.

In a small subsistence economy, such as that exhibited by the White Hmo, the members of the small local groups are interdependent corporate units. Swidden cultivation is organised around the household unit and each household forms a partially independent corporate entity, which often involves independent decision-making. Therefore, White Hmo economic relations cannot be treated by themselves, for they are dependent upon the general social relationships through which community activities are organised and directed. The division of labour is part of such social relationships, as it is
the organising principle dividing up persons of different sexes and of different ages. It also determines relationships between members of the household unit. Although there is some specialisation within the community, which takes individuals away from their cultivation routine, it is occasional. There is inequality in wealth, but there is no concept of class privilege. Often men exhibit their wealth through material possessions, such as a large herd of horses and cattle, or the construction of a more elaborate house.
CHAPTER III
THE HOUSEHOLD AND THE VILLAGE

Types of Houses ({Taw)}

The White Hoo house must be laid out in a plan physically consistent with the layout of the village. Houses are rarely built closer than three meters to each other. The main entrance, খাঁকুড় টাঁকু, of a house must be situated on the downhill corner of the house facing an open area which often consists of the space beyond the ridge on which the house is built, or a depression or bowl around which the houses are located. The purpose of this design is to prevent flooding and wind around the main entrance. On the upper side of the house, গাউন্স টাঁকু, a drainage ditch is cut. This ditch is often more than one meter wide and serves as a drainage trough during heavy rains. Due to this customary location for the front door, houses are constructed parallel to the ridge line with the front entrance exposed to the rear of the neighbouring house and the open space beyond the ridge.

The distinguishing characteristics of all White Hoo houses are the two entrances, one directly behind the cooking fire, which serves as a secondary entry and exit for the household members tending to daily tasks, and the front door situated on the opposite end of the rectangular...
house. The water trough, lub dub daq, the granary, buddy, and the smithy, lwe taev, if there happens to be one, are usually located near the rear entrance bruny rtxal. If the household has livestock there may be a stable which is abutted to the downhill side of the house and is often sheltered by an extended roof line. Most of the houses have pig sties and nursery boxes near the water trough behind the house. The spill from the trough and the split bamboo water-line, cinj daq, often passes under the sty and over the embankment washing away the pig excrement which many White Meo find offensive. The area between houses is left open and never planted. It is used as a thoroughfare for people and animals, and there is no demarcation as consideration of where one household's property ends and another begins. The area immediately before the chovrool taj which includes the covered entrance passage is used for a variety of agricultural and other activities, including the drying of the threshed rice, temporary storage for rice, corn and banana stalks, weaving mats, sewing clothing and other materials.

There are four types of houses distinguished according to the materials used in roofing.¹ In the villages of

¹ Grass thatch, leaf thatch, wooden shingles, and tin sheets.
Mae Nai and Khae only three of these types are present: grass thatch, nceeb, which is primarily Imperata cylindrica, leaf thatch from the diptocarpus trees of lower elevations, cura nplooj, and wooden shingles, vuaa ntoo. Only four houses in Khae are thatched with leaves. The remainder are grass thatch. All of the houses in Mae Nai are roofed in grass. Houses are constructed around wooden frames, the main supports of which are the ridgepole, ninj ru, and the posts which support the structure, tswq. (Figure III) illustrates the exposed framework as it appears when a house is being built. The wall of the house is constructed of split boards, phua ntoo, which are nailed on to the frame after being fitted. The finished structure is rectangular with a straight sloped saddle or ridge-line roof. There are no windows in the White Meo dwellings, consequently the houses are filled with a dense layer of smoke from the continuously lit cooking hearth.

Special skills are demonstrated during the building of houses. Certain villagers are often called upon by a household to help in phases of construction. Payment is made by nauv, the exchange of manual labour with the understanding of help in return, or by feasting those who

1. Bua Pa's house is roofed in wooden shingles.
have helped. Among members of the localized lineage aid is freely offered and received if such work does not interfere with agricultural activities. For this reason building is usually delayed until after the opium harvest and before the maize planting when many households have a slack period. Variations in the skill and speed of house builders is surprisingly great. Qua Sae Lis, considered by the villagers in Haai to be the most able builder, constructed his house in less than three weeks, from cutting to thatching, with the help of Neng and Tua Sae Lis. Since all three of these men are skilled craftsmen, little supervision was required. They were aided from time to time by other members of their households, but such help was casual and insignificant, except for the weaving of the thatch by Qua's two wives. In another example of house-building, Lee See Tai built a house for his extended family almost single-handed. Occasional advice from his ailing father and assistance from his wife and mother was all the help received. The building consisted of an intra-village move so that there was little need for speed. Lee cleared the foundation, thob fab during February, packing the earth with a wooden tamper. In March he selected suitable trees for posts and beams. Much of this lumber he had already cut during the preceding three months. Before the planting
of maize in April the frame of the house was well under way. Maize and rice planting interrupted his work, but by mid-July the house was completed and the ritual ceremony of bringing the spirits of the ancestors and the household into the new dwelling had been performed.

Thatching is a specialized skill which most of the villagers possess, but only a few excel at. Grass thatching requires less time than leaf. The dried grass, nqeeb is gathered into clumps and placed vertically on the frame. The bundles of grass are tied together and placed side by side and one upon another in horizontal rows. At key locations they are fastened onto the qhab, narrow poles lashed vertically between the ridge pole and the ngaj tsuaq, horizontal side beams of the house. By overlapping the cuam nqeeb, lengths of fixed grass, an impenetrable barrier is created against rain and wind which may last with only minor repairs for three or four years.

The second most common type of roofing is less permanent and takes considerably longer to construct. Large dipteroxarparus leaves, often measuring a half meter in length and only a little less in width are sown together into sections and attached to the ngaj tsuaq and lem ceeb. In many houses these sections are held in place by lengths of split bamboo. Often saplings are laid at two or three
locations on top of the leaves to hold them in place. The roob laj, or pole, laid down horizontally in the crossed ends of the saplings secures the structure. Dipterocarpus leaf roofs have the advantage of being easily patched, since a new leaf can be placed over any hole. But they last only one or two years. The brittle leaves break under severe winds and heavy rains.

Floors of houses are composed of pounded dirt. On the uphill side of the house the foundation is cut a meter or more into the hillside. The soil at this depth is usually moist and easily packable. Soil from this area is spread over the entire foundation to stabilize the loose upper layer soil on the downhill side. Clay is the preferred soil for floors. Packing is done with a wooden tamper.

The interiors of White Meo houses fit into a prescribed pattern based not only upon traditional design, but the requirements of the deities or spirits of the household and the altar platforms of the lineage and clan spirits, dab neeb, the sky spirit, dab ntaw g ntuk, and in some households the medicine spirit, dab tshuaj. Thus the configuration of the interior of households varies only in proportion and minor detail. Houses consist of the main room, cha tsay, which can be entered from either one of two doors, the main door, qhov rooj tag and the side or
FIGURE XIV

GLOSSARY: White Hmo Household

1. Qam tsev  the back of the house (uphill side)
2. Qhov txos  the pig fire
3. Txee  a shelf
4. Rooj zaum  a bench
5. Phaw  plaited bamboo baskets for storage
6. Dab ntaw ng taw  altar of the lineage spirits
7. Dab neeb  altar of the sky spirit
8. Con  the treadmills for pounding rice
9. Qhov rooj tag  the front door (on the downhill side of the house)
10. Cha roog  the bedroom
11. Qab tsih tag  the front of the house (downhill side)
12. Chaw pw  the sleeping platform
13. Qhov rooj  the side door
14. Tsauv ntxaij  the storage shelf over the fire for drying things
15. Qhov cub  the cooking fire
16. Rooj ting taw  footstools
17. Noej dab  the aseatic spirit post
18. Noej ru  the center post of the house, holding up the ridge pole
back door, chov rooj. Directly opposite the chov rooj tag
is the spirit platform (Figure XIV) of dab neeb in which
reside the agnatic ancestors of the household when they are
present within the house. A half meter to the left of the
dab neeb platform is the dab ntaw, ntuq altar. From the
point of view of the builder and the household membership
a house is built around and given spatial conformity in
relation to the ncej dab, the main pillar or post of the
house. Distance and spatial balance are measured from this
pillar which upholds the ridge pole. However, the signifi-
cance of this pillar in the household is not based on its
architectural importance, but on its ritual and symbolic
place in the household. At the base of this pillar are
buried the placenta of all male children born within the
household. All male spirits of the household must return
to this spot before they can proceed to Silv Yis and the
journey of rebirth. The placenta is proof of a spirit's
identity and membership in a lineage and clan. It thus
represents the units of the household group. Any dislocation
or move away from the household by male members for neo-
local residence or some other reason is reflected in the
anger of the ncej dab who has either been ignored or offended
by a break in taboos. Guests in a household, whether clan
members or not, must not sit or sleep at the foot of
ncej dab. Any breach in this rule will bring calamity and separation upon the household. The ncej must be set on the ground, not on a foundation or board floor. Neither must the area immediately surrounding the ncej be covered. A breach of these taboos may prevent the spirits of dead members of the household from entering and departing from the place where their placentas are buried.

One of the rules of house construction is that the distance between the ncej dab and the dab neeb must not be greater than the distance between ncej dab and the qhov txos, pig fire. Around the ncej dab the major household fixtures are laid out: the frontdoor spirit, dab qhov rook, the cooking fire spirit, dab cub, the pig-fire spirit dab qhov txos. Once the arrangement of these household spirits has been determined, the other furnishings can be placed in situ. Stools and a low bench are invariably placed around the cooking fire. A rooj saum, backless bench, is often placed against the partition separating the sleeping quarters from the main room, or in the house of the shaman; tsiv neeb, near the dab ntawg ntug platform, where it is reserved for spirit calling rituals. Over the cooking fire is the nthab, storage loft, and the tsuav atxaaj, a shelf for drying grain and household garments.
Clothing infected with insects is often smoked rather than washed. The cos, treadmill for rehusking rice, has no specific location within the house, but is most often situated at one end or other near the entrances.1

Baskets, phaww and shelves, txee, can be found in all parts of the main room, but are usually in the working areas around the chow txoo, pigfire, and the cos, treadmill, where they are in easy reach of the women doing household chores.

There are two or three separated bedrooms, cha room, in each household which has more than two or three members. They are separated from the main room by a double partitioned passageway which often does not have doors. The chaw pw, sleeping platform, is hidden from the casual viewer by the inner partition. This is the place where sleeping, opium smoking and love making take place, and no one from outside the household can enter without express invitation. On the typical chaw pw are a variety of items, including the txun zoool, mattress, hauv ncoo, small hard pillow placed underneath the neck while smoking and sleeping, and a number of paw, wool blankets.

1. The cos is found in all the houses of Mae Nei, but is only in fourteen of the Ahne houses.
The White Neo house cannot easily be divided into sections of activity, for when occupied it is a beehive of overlapping activities. Rice is stored in any available area of the main and sleeping rooms, as are tools, traps and other paraphernalia. Implements, meat and maize are suspended from beams or placed on tree. Women occupied by preparing pig mash over the ghov txos scurry to the far end of the house to hull rice or search for goods hidden in the bedroom. However, three general areas of the house are distinguished: the sacred ritual area surrounding the spirit platforms and the ncej dab, the cooking section comprising the space between the ghov cub and the ghov txos, and the private sleeping sections. Formal visitors are entertained in the sacred area and informal guests around the ghov cub. The honorary seats in the wedding and other rituals are always located in the sacred area. A table, rooj noj moy, from which the prescribed members of the bride and groom's family eat the wedding feast is placed half way between the dab neeb platform and the ghov rooj tag front door. The bride's representatives sit in a group on the side of the table nearest the front door and the gab tsib tag downhill side of the house.

The cooking area containing the two fire places and the implements used in food preparation, such as the
chopping block, tshob dipper, plak tsaub

gourds for water, pit txwy tea and wine cups, is often
called the rooz hnuj lwa, place of household work.
This is the woman's area to the extent that their
activities dominate this section. Paradoxically, the
only area of some houses prohibited to women is the tsuav
ntxaij.

The sleeping quarters are divided within a nuclear
family according to the age of the children. Infants and
often children sleep with their parents until the approach
of puberty. Generally separate and segregated quarters
are provided for boys and girls over ten years or even
before this if the family is large. In extended family
households consisting of the household head and his
married son, an equal division of sleeping space is
usually provided. The sleeping quarters are separated
by heavy planks and entrances to the quarters are on
opposite ends of the main room. Both elementary families
must expand within the sleeping areas available and there is

1. Justification for this prohibition is attributed to the
following story: Na Sia Sae Hawj, wife of Lao Sua, an older
man, had a lover. Everyday she would take victuals from the
tsuav ntxaij to give to her lover. At the end of 7 years
the household was impoverished and Lao Sua died of hunger
because Na Sia had given away food belonging to the house-
hold spirits. So it is best to keep women away from such
temptation.

2. The eldest male in the household is not always the household
head.
a strict observance of privacy. Personal goods such as the daughter-in-law’s jewelry, which are not considered the property of the total corporate household are kept in the sleeping quarters. The members of a household rarely enter each other’s respective sleeping area unless specifically invited. Thus the sleeping area represents an implicit division within an extended household and a sanctuary for the nuclear family that sleeps therein.

Variations in the dimensions and design of White Meo houses are not significant. House sizes range from 5 x 5½ meters to 10½ x 8 meters in Mae Nai village. (Figure XV). House size usually, but not necessarily, correlates with the number of resident members. The two largest houses in Mae Nai, 10½ x 8 and 9 x 7½, have twelve and nine occupants respectively. However, the smallest house has six resident members. Thus other factors such as agricultural production, health and economic well-being may be additional determinants of house size. In Khao village, for example, the five households considered by the villagers to be the richest and politically most important have houses ranging from 7 x 6½ to 12½ x 10, while the five poorest household have dwellings averaging 6½ x 5.

Temporary houses and field shelters are divided into three categories: tsev tab, tsev pheeb suab and tsev timphooj.
FIGURE XV (1)

1. NENG'S HOUSE

2. NENG'S PIG STY

3. TUA'S HOUSE

4. TUA'S PIG STY

5. TUA'S FIELD HUT

6. NENG'S BARN

7. NENG'S FIELD HUT

8. TUA'S BARN

9. QUAN FIELD HUT

[Diagrams and measurements provided for each structure, including dimensions in meters.]
1. Lu

[Diagram of Lu's porch with dimensions: 5' \times 4\frac{1}{2}']

2. Cheng

[Diagram of Cheng's porch with dimensions: 5' \times 4\frac{1}{2}']

3. Ka Yeng

[Diagram of Ka Yeng's porch with dimensions: 6' \times 5\frac{1}{2}']

4. Ju

[Diagram of Ju's porch with dimensions: 5' \times 5']

5. Qua

[Diagram of Qua's porch with dimensions: 6\frac{1}{2}' \times 7']

6. Sae Lu

[Diagram of Sae Lu’s porch with dimensions: 10\frac{1}{2}' \times 8']

7. Paw

[Diagram of Paw’s porch with dimensions: 5' \times 5\frac{1}{2}']

8. 9.
Although these designations are used loosely for any field structure, there are nuances of meaning. A tsev teb is a more permanent and well-built structure than a tsev pheeb suab, which is simply a lean-to of branches enclosing an area on three sides. The tsev timphoo is midway between these two structures more closely resembling the former, but of temporary (i.e. built for one or two year's use) construction. The latter two structures are more often found in rice swiddens. Field shelters are usually no more than $4\frac{1}{4} \times 4\frac{1}{2}$ meters in size, and consist of a dirt floor and elevated sleeping platforms. (Plate XXII).

The Household and the Family:

From what has been already described, it can be seen that the White Meo household varies in size and composition. This variation is to a great extent dependent upon the type of family unit occupying a common household. The White Meo concept of family as opposed to household is most often expressed by the term cuab, but by extension this term also means household. Twb cuab means to live together under one roof as a single large family. The emphasis here is on twb a pre-verbal particle drawing attention to the state of affairs at that time. The latter phrase is further used to indicate a
household in which two or more conjugal families are living together. An elementary family living alone is referred to as *ib cuab tibnee*, but even this term is open to misinterpretation for *faib cuab* means to divide or separate a household. This term is used to describe the division of a household, when a son upon marriage seeks a new house within the village, but more often expresses the division of a household by brothers upon the death of their father. With the addition of suffixes and modifiers *cuab*, plus *yeal*, *tam*, *tiv*, means all goods of the household including household equipment, utensils and other moveable property. By extension this also means inheritance, although *cuab yeal cuabtam* is the expression most frequently employed to describe the household possessions divided between surviving members upon the death of one of the household members. The White Meo villagers say, *ib lub cuabtiv cuabtam* when describing a family living in one household and all the goods and property pertaining to that household. Thus *cuab* represents to a large extent the economic family common in Chinese ethnography in that it is a unit consisting of members related to each other by blood marriage or adoption and having a common budget and common property.

What are the types of families resident in the
corporate household and how does the White Meo concept of household differ from that of cuab? In sociological terms three main types of families are distinguishable: the nuclear, conjugal or elemental type, the stem type, and two forms of joint family.

The most common type of family unit residing in one household in both Mae Nai and Khae villages is the nuclear family. This category of family includes childless couples, families consisting of uncles or aunts with nephews and/or nieces of unmarried brothers and sisters, single persons and more commonly a conjugal couple and their unmarried children. But primarily this type of cuab is composed of two generations living, eating and working together.

The second most common family grouping is the stem family or the extended family unit consisting of a conjugal couple, their unmarried children and one married son with his wife and children. Broken or variant types of this family grouping are not unusual, i.e. when only one member of the ascendant generation is alive or if the married son has no children. It is this household grouping which the White Meo refer to as ua tub cuab. This family includes three generations in one household.

The final type of family has been described in
writing on the Chinese family as joint, composite, extended, expanded and most recently as the grand family (Freedman, 1966:43). It is in reality a type of large extended family consisting of parents, their married sons and the sons, wives and children and sometimes a fourth generation. Variations in this grouping are numerous. It may describe a household in which the father is residing with his married sons, or it may be represented by an older brother as household head in a household composed of his married and unmarried brothers, with their wives and his and their children and sometimes other relatives. This type of household is extremely rare amongst the White Neo, but does exist as a quasi-temporary arrangement under certain circumstances. Such a composite group is also referred to as a twb cuab and may contain three, or four generations under one roof.

The White Neo use yim and cuab interchangeably to signify a family resident in one household or a household group, but the specific reference is different. Yim is used in reference to the aspects of the household as a local spatial group. It is often used synonymously with the expressions ib tse neeg and ib yig which emphasizes the one family—one household concept within a defined location, that is, under one roof. Thus it is the family
as a domestic group which is referred to or all those people who live in the same house.

Cuab and yim are often confused because both terms refer to more or less the same people. The critical disparity lies in the fact that cuab applies to only those households composed of agnatic kin and their affines. The expression implies family, tied together by kinship ties and possessing common property. Yim is more inclusive, for it refers to the household and anyone living within it, i.e. boarders, guests or members whose tie is not one of close kinship. Thus we may use the White Meo term yim to refer to the basic territorial group most often designated as household.

In Khæ village there were four yim into which individuals were introduced into the economic unit, living, eating and working as members of the household without assuming new kinship relationships or being incorporated into the cuab. These individuals did not belong to the localized lineage, kwvți j, nor in one case were they even kwvți j thaj kub, distant relatives of the same clan. In four cases their permanence within the yim was short-term, the maximum period being three years, and in all cases they did not permanently pool their property into the household unit. Definite terms were arranged in each
individual case. The relationship of such members to the cuab varied from those who had practically no distinction from the other vim members, except over property rights, to those who simply had kum khoj, guest, status within the vim.

The first case involved Mao Sae Vaj who was resident in the vim of Bua Pa Sae Vaj. Mao was Bua Pa's Faibrso and had resided in Laos for many years. His father had died and he travelled in Thailand looking for "work, a wife and a village in which to build a house". Mao had lived in the Bua Pa vim for three years working in their swidden, eating with the household, and because he was kwvir: that kub, participating in most ritual activities. He made no annual or monthly payment for food or board, but was expected to work with the cuab in the performance of the seasonal agricultural activities. Mao’s plans were indefinite. Bua Pa said that he was welcome for as long as he wanted to stay.

In the second example two members of the household head’s affinal group were living with Tua Sae Vaj’s vim. They were both women from another village. The eldest was the FaSiDa of the host’s wife. They had been resident within the household for seven months and during that time had participated in the household and agriculture activities.
No payment was made and the tus tawt tsey indicated that the two women were good workers, but could not stay indefinitely because it put a strain on the household finances and there was not enough space available.

The third example was a child of a kwvtij tha:j kub temporarily living in Ying Sae Yaj's household. No genealogical relationship could be traced, but it was emphasized that the six year old girl was of the same clan. The girl had been left there by her father five months before, and the man had not returned to pick up his daughter. Payment was to be made by the father, although no amount had been determined.

In the final case a boy of nineteen had been sent by his father to Khae to study as a novice shaman under Wu Sae Yaj. The boy was from the Sae Hawj clan and lived in a small White Meo village near the Burma border. He had been selected by Wu when he was travelling in that area. The "spirits" had already entered the boy and his apprenticeship was to continue for only another year. Payment of one tical per day was paid by the boy's father and, in addition, he was expected to participate in the round of agricultural and household duties, while being offered food and shelter.

The village of Mae Nai had two cases of yim residence.
Na Hua Sae Yaj, whose husband had allegedly killed a Thai official, resided in the Ble Ju Sae Yaj household for three months before building a small house for herself and her two children near the center of the village. She and her husband had lived in Kong Hae and her husband was Ble Ju’s MoSiSo. No payment was made, and Na Hua was an unwelcomed guest because she did not help in the activities of the yim.

Na Mee Sae Hawj, the mother of Cheng Sae Lia’s wife, had been living in their household for two years. Her husband had died and she had no sons. Na Mee was not considered part of the cuab for she was of a different clan and because of her age very little support in household activities was given by her. In return for this shelter she promised to give her meagre possessions to Cheng. Cheng expressed irritation and displeasure at having his mother-in-law in the house and insisted that she was not part of the cuab.

All of the above cases were in the villages and related to members who do not belong to the localized lineage, kwvij, but were taken into the household.

The most common type of non-kin based membership in the household economic group was by way of employment in agricultural work at Khae, but this type of accommodation was
not in the village household but the swidden shelter. Many Karen villagers and a number of White Meo indigents were given food and shelter in the tsev teb for periods of five or six weeks, notably during harvest and planting seasons.

These members of the cuab or kinship-based household unit may likewise live and work in distant villages. No matter how long their absence, they are still considered members of the cuab, but conversely not of the yim, if they have no definite economic relations with it.

The distinction between cuab and yim should then be clear. A cuab is the kin-based group which often is, but may not be, a local spatial group. If a cuab is identical to a yim, it is necessary to determine the classification of residence patterns and to discover the values and norms for residence and the proportion of households within the society which conform to it.

Meals in the Yim

Two of the three daily meals are of particular importance and express the unity of the yim as a corporate, as well as spatial, group: the first meal of the day, noi tshais, which occurs between sunrise and the departure for the swidden, and the last meal of the day, noi hmo, taken
after dark. Unlike the noonday meal, noj su, or the morning snack, both of the former meals comprise the entire yim membership, except on those occasions when a member of the household remains in the swidden.

The noj tsheis which can be translated, "to eat in the early morning," presages the daily activities and represents to the White Hmo yim the unity of the group before the day's agricultural activities divide it into small work units. At this meal the daily activities are discussed and problems anticipated. Members of the yim not participating in work activities are often absent, such as elder males occupied with opium smoking, thus giving the workers of the yim an opportunity to analyze and solve problems relating directly to field work and the daily routine. Conversation at noj tsheis usually deals with the specifics of the work schedule. The meal itself is simple, consisting of cold or warmed over rice from the night before and a hot vegetable soup. Everyone present eats from the same rice bowl, ntim, and round-bottomed frying pan, vias, seated around the chov cub, or nearby. The men of the household often gather around the meal, while the women dip out mouthfuls of rice and soup with their long wooden spoons, ouay and move about the area making last preparations for the field. The
preparation of this meal is the joint effort of the household women, although often one or another will take over this duty. In yim, including married sons, it is often the daughter-in-law who assumes these chores.

The evening meal, noj har, is perhaps even more representative of the household unity. After a day of separation in distant swiddens the household members return to describe the events and experiences of their work day. Advice is given and received. The common bond of tiredness and hunger binds the yim into a sense of common endeavours and involvement, which is most often expressed in the levity of this meal.

Preparations for this meal begin when the women return from the swidden at dusk carrying firewood, vegetables from the swiddens, and their infants. Someone blows the smoldering fire into action and feeds it with kindling. First the tea kettle, hwj kais is filled with water and placed on a convenient rock bordering the qnov cub. The water is taken from buckets, thoob, filled from the water-line made of split bamboo lengths set on posts and placed end to end, ciav dej, which runs directly behind each house. Using a riam, small knife, the women of the household remove the skin from root crops or chop up leafy vegetables into fine bits. These vegetables are then dropped into a
ries or pot to wait until the boiling rice has been thoroughly cooked.

Women are the chief contributors to the meal as well as the collectors of the leafy vegetables and any wild plant foods needed for every balanced menu. On their way to and from the swiddens the women continuously look out for wild plants and tubers to supplement the diet. In such matters women are usually experts, knowing where wild plants are to be found and how they should be collected and prepared. The males of the yim do contribute to the noj hwa by cutting firewood and often butchering any meat that requires more than the usual preparation. Most members of the yim help in the cutting of banana shoots, which are one of the main foods of the pigs, while any wild game, such as deer, are killed and prepared only by the men.

Although wild meat is rare, the few times it does appear on the daily menu are considered by everyone to be festive occasions. Pork from the domestic pigs is also a delicacy and the yim only enjoys this when a ritual sacrifice to one of the spirits is performed, or if one of its members brings a section of pig home after a feast or ceremony.

There is a clear division of labour in the supplying and preparation of food, only in those yim which have enough members to make such a division effective. No sanction
restrains men from gathering and preparing certain kinds of food, and women others. Rather in certain smaller *vim* the man of the household may prepare meals and tend to the domestic chores while women pursue agricultural tasks.¹

A reversal of roles is not the exception in slaughtering and butchering of animals either. Although men usually kill and butcher as a matter of course, the women may take over the butchering after a kill.

Before eating the *noj hwm*, the pigs must be fed. While the household’s meal is under preparation, quantities of boiled mash from the *ghov txos* are ladled into the pigs’ feeding trough. This maize mash may or may not be supplemented with banana stalks.

The *noj hwm* is set out in the same manner as the morning meal, but more care is taken to clear the area between the *ghov cub* and the *dab ntawg ntug* altar where the meal is eaten. Men, women, and children will eat together after the day’s work, squatting a few feet apart or sitting on the available stools. The hot steamed rice, *cub mov*, is scooped up with the *duay*, as is the vegetable and meat dish. Evening meals are eaten quickly but the men often

¹. Two such households are those of Ble Ju Sae Yaj and Pow Sae Lis in Mae Nai village.
linger around the food discussing topics of interest while the women get on with domestic chores.

During the meal's preparation visitors from neighboring yim can be found gossiping and smoking with other household. As soon as the meal is laid out on the ground, the family's, Noj Mov is heard, and the neighbours leave. Noj mov is the customary invitation to eat rice, and is an indication that all those not participating in the meal should depart. Visiting is renewed after eating, with children gathering in the centre of the village to play games. Women invariably work well into the night sewing, hulling rice and preparing for the next day's activities. At about eleven most men have retired to their houses to smoke and sleep.

During rice and maize weeding, rice, maize and opium harvest and other stages of the swidden cycle when members of the yim reside in the swidden shelters, there is little opportunity for interacting with members of other households. This is especially significant for the young adolescents who desire each other's company. Therefore, the return to the village is a time of great reunion and togetherness, but the lack of isolation and privacy does not obscure the household group which continues to remain separate at mealtime and during sleeping hours.
Composition of the Household Yim:

The White Meo term yim corresponds, then, to a household for it comprises a wider group than the elementary family of parents and children, or the extended family of paternal grandparents, parents and children. Although the elder White Meo consider it desirable to have an extended household of three generations under one roof, the young couples prefer to have separate and independent households. All seem to agree that two elementary families with immature children creates a strain within the yim and such arrangements are usually of a temporary nature, especially if one or other nuclear family continues to expand. However, economic as well as socio-religious bonds often hold newly married sons or those sons without families to the parental household. White Meo parents like to have at least one son remain with them after marriage and raise his children within their yim for then they have someone to look after them in old age, and the continuity of the yim is assured. The youngest son, ntxawm, has the preferred right, but ultimogeniture is not the predominant pattern. Whichever son remains, inherits the household, cuabyem cuubtam, and all goods therein unless otherwise specified by the household head before his death.

Table XII reflects both household composition and
<table>
<thead>
<tr>
<th>Types of Households</th>
<th>Hac Kha-Jak Kyn</th>
<th>Hac</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>7</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Extended I (E3o &amp; Wi &amp; Ch)</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Extended II (Y3o &amp; Wi &amp; Ch)</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Extended (Collaterals) Eras.</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Extended (Single husband's aged parent)</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Polygynous</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>30</td>
<td>49</td>
</tr>
</tbody>
</table>
residency patterns in Mae Nai and Khao villages. Inclusive of couples without children, complete nuclear families without dependants comprise slightly less than half of the households in Mae Nai and Khao. However, the residence pattern to be discussed will indicate the predominance of patrilineal kin clustered together. Most of these clusters are made up of brothers and their families. Also reflecting patrilineal emphasis are the three households in Mae Nai and two households in Khao which have either the husband’s mother or father living with them in contrast to the one case of a wife’s mother residing in her son-in-law’s household. The majority of joint or extended households consist of a son or sons with or without their wives and children residing in their father’s yim. Only one household, previously mentioned but not located in either Mae Nai or Khao, includes a daughter and her husband residing in or near the household of her nuclear family.

There is only one cuab which does not include a married couple in Khao and this consists of a man of twenty and his aged mother. In Mae Nai the broken cuab of Na Hua Sae Yaj, which includes Na Hua and her two children, is the single example of a cuab without a married couple. There are no examples in either village of cuab with extended relatives which do not include a married couple.
Out of a total of forty-five households in both villages, twenty-nine comprise a single married couple with or without extended relatives. Nineteen of these correspond to the *ib cubab*, nuclear family, while the rest include unmarried, extended relatives.

Yim which have more than one married couple total fifteen with practically an even division between the elder brother and younger brother stem type. Although the majority of households of these household types are composed of parents with one married son and his wife, there are three which include one of the parents with two married sons and their wives and two with parents and two married sons and their wives. The former cases represent one of the richest households in Mae Nai and two of the wealthiest in terms of economic indicators used by the White Meo in Khae village.¹

Evidence corroborates the villagers’ assessment that married sons usually remain with their parents, especially when one of the parents is widowed. In Mae Nai there are three households which include the husband’s widowed mother and one with the wife’s mother in addition to the five stem households which comprise either the younger or older son with his wife, with or without children. Khae exhibits a similar ratio with seven households comprising a widowed

¹ Prosperity is measured in terms of: 1) number of livestock, 2) size of house, 3) number of rai in cultivation, 4) estimated silver hoard, 5) conspicuous consumption.
patrilineal parent and one including the wife's mother. The total number of stem type households is ten. There are two collaterally extended households in Mae Nai and three in Khao, all include married younger brothers living temporarily in the household of his elder brother.

There are few disintegrated nuclear families in either Mae Nai or Khao. As previously noted there is one such example from Mae Nae comprising the wife and children of an imprisoned White Meo. In Khao the household of Pin Sae Ya and his mother should fall into the category of a widowed woman and her child. There are no examples of single individuals living alone within the village community. Widows are either incorporated into the households of their husband's younger brother, usually as a second wife, or if granted permission from their husband's lineage to which they belong after marriage, return to their natal home. Widows of child-bearing age rarely wait long for a second marriage.

The table suggests what other data bears out, that widows and widowers tend to either remarry soon after the death of their first spouse or to move into the households of close relatives.

Polygynous households count as one cuab, and residence is within one yim. White Meo men having more than one wife
often refer to their household as *ua twb cuab* in reference to the fact that they reside together with their respective wives and children as one family *cuab*. Inheritance is divided between male progeny as in the monogamous *cuab*, that is *koom txais ib lub cuabtaa*, the male progeny receive one joint inheritance with the youngest son theoretically acquiring the *yim* because of his paternal support and residence there. Ideally the children of polygynous households should respect and obey both their biological mother and social mother equally. Both wives have spatial jural rights over their own and their co-wives' children, as will be more fully described.

Polygamy exists on a limited scale in both villages. There is one case of polygamy in Mae Nai and three cases in Khae. In two of these cases the co-wives and their children occupied the same dwelling, but separate sleeping quarters, while in the other all the occupants of the household slept on the same *chaw pu*. Although no cases of co-wives residing in separate houses or separate hamlets were noted in Mae Nai or Khae, a number of such separate households were described by informants in other villages, such as Surapon and Kong Hae.

Perhaps the most important preference indicated by the foregoing is the high correspondence between household *cuab*
and the nuclear family, in spite of the fact that one or more sons are expected to remain within the parents' household. Nineteen out of forty-five households surveyed exemplify different stages in the developmental cycle of the nuclear family.

The Basis of the White Neo Cuab:

Since the members of a cuab possess a common property, cooperate in swidden cultivation and, in general, pursue a common living through the division of labour, it can be defined as a corporate group. The cuab is, however, more than this for it is also a kin-based group in which children are born and raised and in which property, goods, knowledge and social links are inherited. As a procreative unit consisting of parents and children, it is often referred to by the idiomatic expression niem tub txiv nyung, for parents and children, but it also includes married sons and their wives and children residing in their father's house, and certain ascendent agnatic kinsmen resident therein. It is the cuab which signifies the temporal and supernatural dependence of parents and children, giving security to parents who are no longer productive and ensuring the continuity and cooperation of the individuals therein. By grounding each member to his cuab the White Neo social system is able to regenerate itself. Each son born to the cuab has the
responsibility of maintaining it and all members of it, and although this responsibility might materially cease with the assumption of duties by a younger brother, the spatial and supernatural bond with the paternal cuab is never broken. Sons must propitiate and give sacrifice to their daq nima tsiv, mother and father spirit until death takes them into the rebirth cycle.

An examination of the important relationships and a breakdown of the conjugal status, size and type of kin included in the yim will provide parameter for better understanding its composition.

The two most important relationships and those upon which a cuab is based are the husband-wife, tse tsiv-poynism and the father-son, tsiv metub dyads. Residence after marriage is unilocal and usually patrilocal and will illustrate these relationships. Wives move to their husband's village and village sector after marriage and, in the great majority of cases, that village sector is the place where the husband's father and agnatic lineage reside. It is common practice for newly married couples to move into the household of the husband's father. Depending upon the size of the household, the domestic configuration and cycle, this type of stem family residence may continue indefinitely or be terminated within a matter of months. An early
dislocation of this type of residence is often predicated on the number of sons within the husband's household, the relationship which develops between the wife and her husband's agnates, especially his mother, the resources available and the desire of the husband to build a new house for his pojinim tub se. All members of stem or expanded family households use the same chov cub and meals are eaten together except in the case of unusual circumstances such as division of the household during certain cropping periods.

In a cuab where the tuo tswv tswv, household head, has more than one son, it is always the youngest son, ntzlawg, who is expected to remain in the paternal house to look after his ageing parents and finally to sacrifice a cow at their burial. In turn the house, all swiddens under cultivation, and any property not allocated by gift before death passes to the youngest son. Elder brothers will only reside there for a temporary period while establishing households of their own, preferably within the village. Significant exceptions of these residence rules do exist. Some may not be able to build within the proximity

1. Se or sev is used to refer to a wife in certain circumstances as koj poj koj sev your wife. Sev also refers to the apron worn over a woman's skirt.
of the paternal house because there is no land available due to overcrowding in the paternal village and the available swidden areas, they may choose to move to a nearby village or settle a new village. In one household (of the E3r stem type) the eldest son manages the household and he and his wife are the main productive workers. The household head Ble Ju can only work for half-hour intervals due to opium addiction, and his mother is too old for heavy swidden work such as felling and hoeing. His eleven year old brother is too young to be of much assistance in household management and agricultural work. In addition the younger brother must attend the government school, which means that he must leave the house at seven in the morning for the two hour walk to Pui village, returning at five or six in the late afternoon. However, it is understood by the household members that when the younger brother marries, the elder brother will set up an independent household.

In yet another household (of the E5o stem type) the youngest son chose to move to the village of his wife’s family because his elder brother had used the entire household savings toward his bridewealth payment. Thus when the youngest brother wanted to marry, there was no silver for bridewealth. As a result the youngest brother moved temporarily to his wife’s father’s village where he
could work off the brideweight by laboring in his father-in-law's swidden and otherwise contributing to his affines' support.

Transactions of the Cuab:

Every White Meo cuab is composed of individuals who exchange kinds and amounts of scarce goods and services among themselves as individuals and as a social unit to those outside the cuab. As Hauss has pointed out, what is exchanged is not exclusively goods, wealth, property or things of economic value, but also courtesies, ritual, dances, feasts, women and often children (Hauss, 1923: 4-10). Principles underlying the exchange relationships are manifold, but two fundamental motivations seem to guide and reinforce the pattern: an individual or a social group, such as a cuab, supplies rewarding services to another and obligates him to discharge this obligation, while the second must furnish benefits to the first in turn.

The White Meo villagers divide transactions into two principal categories: rob pa, those transactions in which a man seeks repayment or payment for goods or services rewarded; and pub qhuv qhuv, transactions from which there is no expectation of any return. Under the former category are the majority of transactions outside the cuab.
Hae tes, or wages for hard labour, is perhaps the most direct type of transaction. It involves the payment of a specified amount in return for the services of another. There may be social implications involved in such a transaction but the chief motivations of the parties are economic and prompt payment for services rendered is usually expected. This type of transaction is rare among members of the same lineage and clan, because it implies an economically ranked relationship which often conflicts with kin relationship and status of the individuals and groups involved. The White Neo have the same word for employee, servant and slave, chev, and the implication is evident.

Any man who works for wages is not only subordinating himself to the man paying him, but is placing his life and welfare in that person's hands. Consequently, few White Neo will hire themselves out in return for wages. As might be expected, wage labour is sought from among other ethnic groups when needed. In Khae the cultivators seek out nearby Karen villagers to work in their swiddens for wages, when the intensity of agricultural activity requires. These kum khej, outsiders or in this case non-Neo, are called chev by the villagers and are paid five baht a day, including food and shelter. When non-Neo are not available for wage labour, an indigent Neo from another clan may be hired.
If not *kum khej*, an outsider, in the sense of being from another community, such a person must be *ob ceh peh txhais*, an outsider in the sense of being from another clan. Thus there are only two possible sources of *nge teq* labor.

The second form of rob *nge* transaction is designated as *teq chawj* which literally means to profit from a business transaction. A transaction of this type must also be made with an outsider, *ob ceh peh txhais*, but the range of those groups and individuals is far more confined and usually includes only those who are not members of one's own *kwetiq* lineage, although it is sometimes extended to closely related affines in theory, but rarely in practice. This category includes barter and sale of goods, including foods of all kinds and moveable manufactured items which are often exchanged for money or for articles of equivalent value. Services are not placed under this category. Loan transactions are included, however, and in this case distinctions are drawn in practice between productive and non-productive property. Money as capital, *peev*, is recognized, as are such concepts as selling at a loss, *poob peev*, and using another person's or group's capital, *rho leuw peev*. Productive property, which may broadly be termed *peev*, includes money and land primarily. Land and money lent to anyone outside the *cuab* and to some extent,
the household, depending on the particular arrangement therein, can be loaned without interest, but it is far more likely that interest will be explicitly demanded or tacitly expected. The villagers consider it a compliment to be called peev xam, clever or skillful, and it is the man who makes a return on his productive property who is so called. There is, nevertheless, general disagreement among villagers on who should make a profit on whom. Some say that lineage members, close affinals and even clannish should not be used for gain, others indicated that with such non-productive items as cooking pots, knives, axes, limited supplies of food and other household goods that no loan or profit is expected among clansmen, affines or even other villagers, txum tim, but that productive property must provide a return, so that a cuab can va neaj, prosper.

In Mae Nai most households with the exception of Sae Lu Sae Lis's lent money, grain and land to other villagers without interest charge, so long as repayment was made within a prescribed period, or in the case of land, use was limited to a temporary period. Borrowing and lending without payment of interest on a term basis, txais was considered the best means of helping a neighbour or relative, and at the same time satisfying one's own needs. The application of interest in Khao was somewhat more prevalent especially
among non-clansmen and affines. Two sizeable money loans
current in the village at the time were accruing twelve
per cent a month. Both of these loans were between non-
clansmen, and Bua Sai Vai was the source. Many of the
villagers criticized him for asking such rates, but said
that he was the only villager with sufficient cash, and
they would have to pay an even higher interest from the
Thai money-lenders.

Four types of gifts, txiaji ntshwa txiaji ntshim were
recognized by the villagers as requiring reciprocity, and
therefore categorized as rob nqo: bridewealth, porthawi;
aid given in agricultural or housebuilding work with the
understanding of help in return, pauv; and all gifts given
to the spirits, such as sacrifices in which aid, expirition
and atonement are expected in return, txuaq nwa txiaji.
The last type is the debt incurred by receiving advice from
a person who speaks with authority, haie ceev nrooi. Such
exchange, whether given in ceremonial form or as informal
advice, involves favours which create future obligations.

Bridewealth payment is thought of as the price one must
pay for taking a woman away from another cuab and kwvi.
This is expressed in the phrase npro lauw txuaas tw tie, which
means to take a woman from the household. That affinal
household must receive compensation for the loss of a girl's
service resulting from marriage. A groom and his kwetij are then making a gift of compensation. Due to this concept an attempt is made to reach fairly equivalent values through bargaining.

Pauv is the most common type of reciprocal gift. It is usually exchanged between the individual sub making up the localized kwetij and more particularly between lineage households with neighbouring swiddens. By extension it could refer to group labour exchange. The most common occurrence of pauv is during maize, potato, opium and rice harvesting periods, when the work load requires additional manpower. Rather than hire non-Noo labour, most cultivators form advantageous arrangements with their neighbours, whereby the labour forces of two or three households are combined to complete a specific job, such as cropping opium before a rainstorm. In return the contributing household can call on equivalent or non-equivalent labour at certain stages of their cropping cycle. In some cases the pauv debt is paid off immediately by working in alternate swiddens on different days, but in the majority of these exchange situations an intricate system of debts is built up, which in a few instances involve third parties. In one specific case Ju Jeel Sae Lis of Mae Nai (Jak Nyn), his wife and their two eldest unmarried children helped in
the rice harvest at Pow See Lis's swidden. The combined
labour force of eight people finished the harvest in three
days. Ju Jee and his household had contributed three days
labour and shortened Pow's harvesting period by about four
days. Nine months later Ju Jee approached Pow and asked
him and three members of his household who could be spared
to aid Kalu See Yaj in hoeing his maize swidden. Pow
sent three members of his household, who worked in Kalu's
swidden for two days, thereby partially paying off the
pauv which Pow owed to Ju Jee's household.

The third distinction of txiaj ntscha txiaj involves
the formal exchange between a cuab and its patrilineage
ancestors, dab neeb, and to a lesser extent all the spirits
of the White Meo supernatural world. Each sacrifice is
thought of as a gift made to pay back a debt owed to the
spirits, txhawm cia then rau lawv, or a gift to induce
the spirits into acting in some beneficial manner. This is
a coercive gift, for there are negative sanctions incurred
if it is ignored. Indifference shown to the spirits will
provoke retributive action in the form of illness or
calamity to the cuab. The most significant element in this
exchange is the annual or periodic sacrifice provided for
all spirits. Such sacrifices obligate the spirits and,
according to some villagers, force even unfriendly spirits,
neem into consideration of an individual's or group's welfare. The spirit, so propitiated, will be coerced into giving aid. For this reason more than any other, the pattern of giving between the cuab and its spirits must be maintained and nurtured. This emphasis on coerced reciprocity is illustrated by the spoken exhortation of the kwutij members at the yearly visit to the parent's grave, which was taken from field notes. On one of the five days following New Years, the parent's spirit, dab niam-tsiv, is given a sacrificial pig. The eldest male descendant leads the ceremony, and only male descendants up to three generations are allowed to participate. After the sacrificial pig has been cooked, the ceremonial leader says, "Father and mother, we will now go and give you food." After which he shoots three times in the air with his rifle. An offering is placed in a bamboo basket, and it includes pork soup, rice, maize cakes, rice wine, tea and opium. The group of agnates then departs for the grave. On arrival at the parental grave the leader says, "We have brought this food for you, please eat it, for you must protect our family." Then everyone kneels and bows while the food is being offered in the ritually prescribed order: tea, wine, rice, soup, cakes, and opium. After which spirit money is burned and the group returns to the village.
The debt, ntxiv nge incurred by seeking advice from a specialist, kwa, or man of authority is also considered as a reciprocal gift. No man should expect advice to be free of obligation, is a thought commonly expressed by the villagers. In many cases exchange relationships develop over a period of time. Individuals who need advice on given matters usually have four alternatives for repayment; they can supply the advice-giver with benefits that he wants badly enough, thus establishing a relationship of reciprocal exchange. Secondly, they could obtain the needed advice from another person, provided that there were alternative sources for the information desired. Thirdly, they could coerce the specialist to furnish the needed advice, provided they were capable of doing so. Finally, they could resign themselves to do without the needed advice, which unless some substitute were found, would increase the risk of failure. Kinship ties are important in the formation of these advice exchange relationships. Authority for a young Mes is represented by his father, father's older brother and younger brother and father's sister. These four categories of kin and to a lesser degree the mother, have disciplinary rights. As a child, the three male categories have control over a boy's inheritance and bridewealth, respectively. That is, if the father dies the child becomes the ward of his
father's elder brother, or younger brother if there is no elder. The lack of bridewealth makes it very difficult for a boy to marry and establish an independent household. Inevitably this relationship of dependency with members of the patriclan lends itself to the further exchange of information and advice. Villagers expressed the development of an exchange relationship with lineage seniors as the easiest way to make exchange contact. "We have close contact with so-and-so already. He does not mind giving us advice because this is part of our relationship." The important point here is that there is a pre-existing exchange relationship into which the exchange of other technical and non-technical information and advice is easily included. The household of Pi Sae Yaj demonstrates this inclination for combining existing kin dependencies with the exchange of technical advice. Pi, who lives alone with his mother, seeks out his father's elder brother, Ying, when he needs advice. When Pi's father died he became dependent upon Ying. Pi's mother always goes to her elder brother Bua Pa for counsel and advice, even though she is considered a member of her dead husband's clan.

Competition sometimes disrupts exchange relationships. This may be aggravated by personality conflicts or simply indicate a reaction to unwanted authority and dependency.
There appears to be a point at which such relationships break up because of unrequited demands and the burden of complying with another's wishes because of the debt owed to him.

Non-reciprocal gifts are the last major category of transactions. They are spoken of as txiaj ntsim, gracious gifts or gifts which do not require a return for a favour given, peuj txiaj ntsim rau. Such gifts do, of course, carry an element of reciprocity, but in contrast to reciprocal gifts this is of secondary concern. This category includes gift-giving among kwtei members and especially within the cumb and is, by nature, an act over and above the normal expectations of sharing. A husband returning from a lowland commercial centre may bring his wife embroidered cloth or some other gift for her personal use. For his children he might perhaps bring pickled fruits or a new knife.

Another type of txiaj ntsig is the transference of a man's rights in property to certain of his survivors who may not ordinarily be included in his cuabyej cuabtam, inheritance. This group might include those not in the line of descent, such as a stepson or daughter. Older sons who have since left the parental household may be given a portion of the household property and land just before their father's death or through instructions given by their
father before he died. It is believed that such gifts are non-reciprocal, in that they are given with no gain in mind, but from a "clear, clean liver", siab ntsiab. Whereas inheritance bestowed on a man's descent group is given to assure his spirit has nab siab, peace, happiness and satisfaction.

A third type of txiaj ntsiag is the training and direction which a specialist gives to an apprentice. In many instances this instruction is given without compensation, except for the satisfaction, kaj siab released in seeing a man trained to carry on an art or technique. Frequently a father or father's brother will instruct his metub in the smithy or in cultivation practices which are not commonly known. The recruitment and training of a shaman are also txiaj ntsiag. When the spirit of the ancestors, neeb, enters a man, then it is known that he has been chosen by the neeb, but the final judgment as to whether the neeb have in fact selected this individual and the instruction of the individual in the practices and techniques of shamanism rest with the elder shaman, tsiv meeb, of the village. Therefore, it is the shaman who, in fact, selects his successor. Most shaman are careful not to choose their

1. The liver is regarded as the seat of the affections, much the same as the "heart" in English.
sons, and in many instances it is a non-clansman who is selected. Such a case is illustrated by the selection of Qua Sae Lis as the successor to the shaman of Mae Nai village. Qua Sae Lis is the son-in-law of the village shaman Ble Ju. Ble Ju's eldest daughter was the first of Qua's two wives. Since their marriage ten years ago Ble Ju's daughter had not borne Qua a son, and had lost three children in childbirth. Qua is one of the young men in the village who follows White Meo customs, shaving his pate, wearing traditional dress and observing ceremonies and sacrifices. His behaviour contrasts sharply with that of Ble Ju's eldest son Lee who wears his hair in the western style adopted by the modern Thai, and quietly shows indifference to his father's ritual and traditional interests. In late 1965 Qua lost his third son by Ble Ju's daughter. Soon afterwards it became known to the village that Qua had been visited by his neeb and that he was training to become a shaman.

Ble Ju confided his reasons for selecting Qua in this manner. "I am too old and weak to serve this village any longer. There must be a new tsiv neeb. Qua has suffered much, he is a hard worker, knows the ways of the White Meo and is respected by the villagers. He will serve them well."

Within the cuab villagers believe that relationships
should be characterized by sharing and by non-reciprocal gift-giving. Observation indicates that actual behaviour does conform fairly closely to these beliefs. In most cuab all members share material resources according to an explicit set of expectations. There is little accounting kept between parents and young children or between young siblings, but this tends to change as children grow older. Between husband and wife the accounting is more strict and serious lapses on the part of a wife may lead to divorce. However, the non-reciprocal giving which characterizes many of the interchanges between parents and children is also present in some of the interchanges between older siblings and between husband and wife.

Relationships within the Cuab:

Although the cuab may be subordinate to the yim as a residential, agro-economical and in some instances ritual group, it is the core group of the yim based on a closely related organization of kinsmen with the elementary family as its focal point. Cuab is often used by the White Meo to express the dependency relationship between parents and their children, Niam tub txiv nyaz, and grandparents and their grandchildren, thooj niam koom txiv, thooj poj koom yawg.

The emphasis in these relationships is on the phaj
which the villagers describe as a gap of age between father and son. Further, phaj is an expression of rules of behaviour between individuals of the same generation and those of ascending or descending generations. A man of an equivalent age to father is phaj txiv, whereas a man of the same approximate age as grandfather is phaj yawk. All the younger generation is, on the other hand, referred to as phaj bluss. The general pattern of behaviour associated with these generational categories is described by the villagers as a knowledge of respect and love.

When describing how a person should behave toward all the women of his mother's age in the village, a neighbour said, "Be like a son and they will treat you like a mother." There is no confusion as to what relation a person has to others, and the intensity of the relationship shades off by degrees to a very distant patrilineal relative, kwvig thaj kub, with whom sexual relations are still prohibited, to distantly related affines, neetsa thaj kub whom a man is free to seduce.

The particular terms expressing the relationship between parents and children are further broken down by the White Heo into distinct terms signifying a specific ranking of relationships based on age. These terms are usually applied only to sons, tub ki. The eldest and
youngest sons are referred to by the parents as 
tub tux hlob, and tub ntaw, respectively; the other 
sons are singularly tub or metub. The emphasis on the 
eldest and youngest son is not coincidental, for it is 
either of these two sons who may one day be responsible 
for their parents' well-being. For it is the only son, 
tub tux tub or the youngest son, tub ntaw, who must remain 
in his father's household sustaining his aged parents.

Often the terms for son metub or tub are used in a 
less definitive manner than one might suspect, for although 
it specifically indicates a man's relationship with his 
son, it is normally used to address the sons of brothers, 
or classificatory brothers. Parents, of course, recognize 
their own children, but the extension of the term does 
illustrate the juridical and economic responsibility which a 
father's brother owes to his brother's son. The terms 
are in fact reciprocal, for a brother's son calls his 
father's older brother txiv hlob, meaning elder father, 
and his father's younger brother txiv nixaum, younger 
father.

There is a more elaborated system of terms which 
although little used in practice, is of significance in 
designating authority amongst the children in a cuab. In explaining correct behaviour within the cuab,
a parent will indicate relationships of authority and respect by saying that a child must behave in such and such a manner because he is the los xwa, fourth-born child of the cuu tw cuab, while his sister is the los lwm, second-born child. By using such terms as: los tua, firstborn, los lwm second-born, los kah third-born, los xwm, fourth-born, etc. a parent is able to avoid the long explanations and confusion which might result from the employing of the more generic younger/older kin terms. In a cuu tw cuab which comprises more than two or three children, this enumeration by birth is effectively used to sort out proper behavioural patterns.

In addition to generation and age as delineators of accepted behaviour, the sex of the interacting parties also plays an important role. This differentiation is particularly emphasized within the cuab. A younger brother will address and refer to his older sisters as miam laus, whereas a younger sister will speak of her elder sister as vivnaus. Conversely, an older brother is mua laus to his younger sister and tij laus to his younger brothers. Thus not only the age but the sex of the speaker and the party spoken to or about are given importance. The extension of this sexual differentiation in terms is carried to patrilateral and matrilateral cross and parallel cousins,
where sex as well as age is fundamental in defining the behaviour expected of individuals.

In short, a younger person should show deference to an older relative of the same sex. A younger male should show some deference to an older female relative if she is more than ten years his senior. Unless a female is much older than a male she should show some deference towards him after he becomes *na nraung*, a man; likewise a man should act with dignity around young women of his *kwvtij* once they have *tiau nkaung*, reached puberty, and with forthrightness around other young women especially his cross-cousins. He must be careful to avoid behaviour suggestive of sexual relations with all *kwvtij* females and other close relatives except unbetrothed or unmarried cross cousins.

In the minority of *vim* which fall into the extended collateral type, where there are two sets of young children in the household, separate cooking arrangements for the children may be the practice. In Figure XVI Neng's household contains both Neng and his younger brother Sua with their respective wives. In this case it is not only a matter of convenience but overt hostility between the two wives who at one time were both competing for Neng's favours. In other such arrangements it is usually a
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matter of convenience as one mother may return late
from the swidden with her children. Household no. 10
Figure XIII is the only polygynous household in Mae Nai.
Qun See Lis, often splits his two wives by sending one
to the maize swidden, while instructing the other to
complete domestic chores. The children in this case
usually remain with their respective biological mothers.
Evening meals in this household are sometimes eaten
separately when one wife returns well after dusk.

The most frequently repeated relationships within
the cunh, if the head of the household is used as ego,
are: mother, wife, sons, daughters, daughters-in-law
and grandchildren. Also included in households illustrated
in Figure XVI are father, younger brother and younger
brother's wife. These relationships cover all those
depicted on the genealogical relationship chart of
Figure XVI from the point of view of tus tawv tsey. A
closer examination of the functional interaction and
behaviour related to these cunh relationships demonstrates
the importance of generation, age and sex within this
closely knit and localized structure which is the basis
of White Kaö social and economic grouping.
Dyadic Relationships of the Descent Group:

The *txiv metub* and the *tus txiv pojnim* relationships are the focal points of the *cunb*, yet at the same time militate against each other. The wife as an outsider enters her husband's father's household and is expected to live and work as a member of that *cunb*. The sons bound by respect and duty which they owe to their father (and mother) are often obligated to live within the confines of their paternal household despite their preference for a new home and the constant pressure of their wives to abandon their natal household. These extended *cunb* of the stem type are usually temporary, except in the case of the only or the youngest son.

However, the former relationship ties a son and his wife to his father's *cunb* even if he is not a co-resident of that household, as sons almost always set up new households near their father's or within their father's village. Thus, when Sae Lu's father died, the four brothers Sae Lu, Fow, Cheng and Sua, were inhabiting neighbouring households and continued to do so after his death. In opposition to this father-son resident pattern, is the strong centripetal pull of a man's wife to set up a household of their own as soon as possible after marriage. As the data in Figure XVI illustrates, the *txiv-metub* relation appears
to be the stronger of the two, for married sons only leave their father's household if a younger brother can replace them, and then they move to locations within the immediate vicinity of their parents. The tviv-pařap residence relationship includes a number of extensions besides one's own father, in fact, its gradations extend to father's brothers and all members of father's kmv and kmvil. It is applied to step-father, if the real father is dead, and the father of anyone ego etc- a brother or sister. Behavioural gradations do occur between each distinctive relationship. A man must demonstrate respect and veneration to his father, both when alive and after death. On a reciprocal level, a son must repay his father for the care and sustenance which has been given to him, for the bridewealth which has gone toward his marriage, for his advice and aid during periods of need. But more important is the supernatural dependency on tviv. The father is the critical link between a man and his ancestors, neeb, and thus his lineage and clan.

Without the support and proximity of his patrilineal kin, a son would have no social relationship to any community. He would forever be an outsider, always searching for a home but never finding one. Without the support of his neeb, man would have no powerful spirits to call on for aid and protection. He would be at the mercy
of his enemies and the host of evil spirits. Thus a son is not only beholden but bound to his father txiv, and his brothers, tij laus and kwv. As might be expected all of these relationships imply authority, proximity and guidance. All of these males with the exception of younger brother, kwv, can teach and punish, but in contrast, they can also be approached for money and material support. In each relationship love is mixed with fear, for a boy is at the mercy of these elder males.

_Xyom ntuj thiaj tau ntuj ntoo, xyom mian xyon txiv thiaj tau zoo._ Reverence the heavens and they will give you good fortune. Reverence your parents and you will be well-off.

In the White Mec communities of Mae Nai and Khae a man interacts more with his father, txiv, than any other individual within the cuabi. It is txiv who guides his son, tub or metub, disciplines him and constantly provokes him to work harder and do more. A txiv will instruct his metub in animal husbandry, the timing and art of cultivation, and any other specialized skill which he is able to impart. Often a young boy can be found in his father's smithy learning the use of the forge and bellows, or in the uncleared forest imitating his father in the use of an axe. When a metub reaches marriageable
...it is txiv who counsels him and provides him with the greatest part of the bridewealth payment. After marriage a son will usually either settle in his father's household or in a house nearby. Throughout a man's existence he is responsible to his txiv. In fact about the only occasion when distant fathers, father's brothers and other patrilineage members exert forceful pressure on a metub is after the death of a son's own father, for tua txiv is almost always within earshot of his son during his lifetime.

The aid, guidance, support and advice which a txiv gives his son are not cloaked by stern authority, nor does there appear to be evidence that a father image represents hostility. Rather there is mutual feeling of dependency and reciprocity, often coupled with the respect so characteristically shown by white Heo sons for their txiv. When a txiv becomes aged it is understood that his sons will care for him. When txiv dies, his sons will sacrifice a cow for his spirit, dab txiv, and every year after his demise they will reinact a sacrifice in his honour. Sons may venerate their father for his goodness and skills, but a weak, greedy, cuab khaum father is also venerated, for it is dab txiv who must intercede for the patrilineage and protect it. A dab txiv who is ignored will bring calamity upon a cuab. It is through txiv that a son is linked with his lineage, kwitij, and
the supernatural world of his ancestor spirits, neeb.

By modification the word txiv is employed to refer to one's genitor's own elder brothers, txiv hlob and younger brothers txiv ntown. By extension it is used to address and often refer to the members of father's kwvij who are of the same generation as father. If a boy's genitor is dead and he has been incorporated into the stepfather's clan, which is a usual circumstance, he will speak of his stepfather as txiv. Finally a man can call the father of anyone he calls brother or sister, txiv.

In Mae Sai and Khae the lives of alternate generations, phaj, often overlap by as much as twenty-five years, and as exemplified by households no. 3, 8 and 4 on Figure XVI, there are frequently situations where adolescents are living in a household with one or more paternal grandparents. Although most households contain only two generations, villages are predominately composed of three phaj. It is the grandparents who live near their grandchildren who are the ones with whom he will interact most and develop the strongest affective ties.

Within the cuab a close relationship exists between a boy and his paternal grandfather, yawg, and to a lesser extent his paternal grandmother, pop. Being patrilineage mates they are bound together closely by joint ownership of
property, mutual obligations and ritual cooperation. The elder man usually exercises control over the disposition of the common property. If a boy's father should die and he is resident within his grandfather's household or if he has no father's brothers, his yawg will manage his property and care for him as a guardian. When a boy marries he usually receives one silver bar from his yawg which augments his bridewealth payment. If a man's yawg is old and alone and has no living sons to support him, his grandson, xeeb txwy, is called in and asked for support. In the majority of cases a yawg will move into the household of his xeeb txwy or if his wife is still alive he may have his grandsons build him a house next door. While a yawg is alive proximity within a common household often engages the pair in disciplinary as well as friendly relations. When a boy's father is away in the swidden or visiting in another village, it is a boy's yawg who must teach and direct him. Relations between yawg and xeeb txwy not resident within the same house are often less authoritative. A yawg living in a neighbouring house tends to be more lenient and playful with his xeeb txwy for as villagers say, "he does not have to face the little tiger." There is usually a great degree of demonstrative affection between a child and his yawg. Household no. 8 on Figure XVI is illustrative of this affective tie, for although BLE Ju
has four young sons of his own, he jokes and plays with his xeab txawv more than his own sons. Ble Ju explains this behaviour in terms of discipline. "If I behaved that way toward my children they would not respect and obey me." The ties between a child and his yawg do not cease with the death of a yawg. On the contrary, they are heightened by the ritual reinforcement of the agnatic kinship bond. This lineage unity is expressed in the gift of a skirt or a pair of pants to a yawg at his burial and the cov ua hauv qhun ceremony which occurs every year on the third day following New Year. At that ceremony a group of agnatic kin, composed of the thoool nai koo txiv kkoos yawg or all those having the same father and grandfather, bring rice nplej, spirit money, and whiskey, cawv, to the grave of their common patrilineal grandfather and grandmother.

In fact, after the death of a yawg his influence over a cuab and kwvtij increases, for his spirit becomes the chief mediator for the kwvtij. It is his spirit which is called upon first to protect the household from sickness and ill

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1. In this case his xeab txawv are female, but there is little difference in the behaviour of a yawg toward his male and female xeab txawv. A girl's relationship with her yawg may often be less close because of her greater contact with her mother and grandmother. When a girl marries, her yawg receives one hang; from her bridewealth and in return he gives her a formal White Meo costume. She does not, however go to the grave of her yawg for the yearly ceremony.
fortune. Without his good will little can be accomplished.

Other relationships within the clan are of lesser social importance, though they may have an equivalent emotional dimension for interaction among family members. A mother's relations with her sons and daughters and a father's relationship with his daughter are highlighted by affective behaviour and a prohibition on sexual relations. Mothers nurture and guide their sons until adolescence when the relationship becomes less significant for both. At that age the son begins to work and participate in the activities of his father and older brothers. Daughters remain close to their mothers until marriage, being guided through domestic tasks and women's agricultural activities. Fathers play a limited role in their daughter's lives, other than arranging their marriages. As far as jural aspects are concerned, classificatory fathers and father's brothers play hardly any role in a daughter's life until her father dies. At that time one of the father's brothers may assert some interest in the girl's welfare by arranging a marriage which includes retaining most of the bridewealth for himself.

The tij laus-kwv older brother-younger brother behaviour, can be symbolized by the terms kwv usag which means friend or companion. In spite of certain deferential
behaviour associated with the age difference, the relationship is essentially one of trust, confidence and mutual activity. Except in cases where a father dies and a ti̍t laus is old enough to assume the duties of household head, the teaching, punishing and property management activities of ti̍t laus are usually latent. If the father is dead, ti̍t laus will provide bridewealth and manage his kwv property. In return, if ti̍t laus dies, kwv will sacrifice a cow for him in addition to those which may be sacrificed by ti̍t laus's own son. Extensions of this relationship are made to half-brothers with the same father, male kwvti̍t and kwvti̍t kub of the same generation, sons of father's own brothers and sons of anyone else whom ego calls father, provided of course that he is not more closely related and addressed by another term.

Older sister-younger sister, vivcuaus, relationship is similar to that between brothers. The tendency towards constant companionship and confidences is tempered by respect given to age. Extensions of the term are applied to half-sisters with the same father, female kwvti̍t and kwvti̍t kub of the same generation, mother's brothers's daughter and father's sister's daughter and co-wife. What differences there are in the ranked behaviour toward vivcuaus take into account the actualities of betrothal, residence and
marriage. Separation of sisters may occur early in life, preventing interaction, due to residence in different villages, whereas co-wives may have a continuous, long-range relationship based more on jealousy than sisterly affection.

Relationships between siblings of the opposite sex, muam-nus are characterized by the different attitudes related to the individual within the domestic cycle of a household. Pre-adolescent behaviour is affective, but tinged with competitiveness on certain levels. However, even with this age group the natural division of labour in the household separates brothers and sisters to a great extent. After puberty the primary consideration is the absence of sexual relations. Considering that muam-nus terms are extended to half-siblings of the opposite sex who have the same father, members of the opposite sex in one's kwvtij and kwvtij kub, and children of the opposite sex of any man one's own father calls brother, it is significant that behaviour is more or less confined to non-sexual attitudes. There was no indication of incest between siblings of the opposite sex in either Mae Nai or Khao, but there were several rumours of sexual relations between kwvtij kub. Whether these were, in fact, undertaken was not ascertained. In any case whether apprehended or not,
such incontinent behavior is said to anger the neeb, ancestors, and activate supernatural sanctions. In the two rumoured cases, public opinion had prevented the alleged parties from seeing each other and all involved parties denied that any such relationship existed.

Outside of the cuab the most active kin relationships are between ego and his father’s siblings and ego and his cross-cousins. White Neo do have a preference for cross-cousin marriage. This preference is reflected in kin terminology. A male addresses his father’s sister’s son and his mother’s brother’s son as npawg, while his wife’s brother and his sister’s husband are called yawa. Ideally all of these terms can be centered in a single individual. In actuality only a very small percentage of marriages conform to this ideal.

The preferred marriage relationship is the mother’s brother’s son—father’s sister’s daughter and to a lesser degree father’s sister’s son and mother’s brother’s daughter. The reason for this preference for patrilineal cross-cousins is not easy for the younger men to describe, and they did not attach much importance to marrying their real muam npawg or father’s sister’s daughter. Rather it meant that real and classificatory muam npawg were their recognized sexual partners. A boy felt he could exhibit a sexual
attitude towards his *muam npawp*, and he felt confidence in doing so, because he knew that his attitude was correct. Both father's sister's daughter and mother's brother's daughter were addressed and referred to as *muam npawp* by their male cross-cousins. As with much of the White Meo kin terminology this is a compound term combining the term for sister *muam* and *npawp*, which is a complex term used generically for anyone from another clan. It is also used as a term of address for someone of the same age whose classificatory relationship is unknown to the speaker. Often White Meo passing on the trail address each other as *npawp*. In addition to its use as a modifier for cross-cousins, *npawp* was used as an elementary term for male cross-cousins when a man is speaking. In this context *muam npawp* then might be freely translated as "sister of another clan", or "sister of father's sister's son or mother's brother's son" depending on the emphasis desired. The relationship between a man and his *npawp* was characterized by comradeship and joking. In many cases where these two relatives were of the same approximate age, a special relationship developed, which can be described as one of constant companionship and mutual trust. They would lend money to each other, exchange confidences and play games, and when asked why they were such close companions,
they would answer, "we are npawz".

Parents, to a great extent, play cupid between muam npawz and vaam daab, encouraging their children to mate with undesirable cross-cousins because they were thoaj sinv thoaj noaj, of one flesh and blood. When questioned on the subject of marriage rules, parents would explain that a man could marry anyone who pleased him as long as she was not in a prohibited category, but that it was better to marry one's real father's sister's daughter or mother's brother's daughter, for then property would be kept within the family, and, in the words of one informant, "you would be taking back your own". The headman tua hus zos and founder of Mae Nai-Jak Kyn village was determined that his only son Tong should marry his father's sister's daughter. He had made a betrothal contract to this effect with his sister's husband who lived in another village. His reasons were economic.

Marriage between father's sister's son and mother's brother's daughter is also favoured but to a slightly lesser degree. (See p. 460). The stronger preference for patrilateral cross-cousin marriage can probably be explained by the passage of property from one generation to the next along the male line. A son who marries his father's
sister's daughter is, in effect, paying back the bridewealth paid to his kweri for his father's sister, thus reinforcing an affinal alliance already in existence. Premarital sexual relationships with mother's brother's daughters are common and gossiped about with great relish. There are no sexual taboos to restrain them and fewer implicit obligations upon them to form a permanent union. An affair between these two is often described as both adventurous and uncomplicated.

A husband is expected to always show respect to his wife's family, and the relationship should be formal and polite. It is significant that the behaviour of respect and formality toward wife's father and wife's mother conforms with the relationship between a man and his phau, father's sister and yawn laus, father's sister's husband. Father's sister has the authority to teach and punish her brother's son, as do father's brothers. However, this relationship extends beyond that to include elements of magical power, fear and prohibitions which demand respectful behaviour from her brother's son. The patterns of behaviour between a man and his wife's mother, niam, closely resemble the latent avoidance relationship between father's sister and brother's son with respect to personal name-calling and respect mingled with fear of authority, both natural.
and supernatural. Actual avoidance taboos are stricter between a man and his wife's mother. The pair do not sit or stand near each other, nor do they directly hand things to one another. When walking along a path, they keep several paces apart, and when possible, a third person walks between them. If an infancy betrothal is arranged with a father's sister's daughter, the taboo of avoidance is much more evident between a father's sister and a brother's son. A boy will avoid all contact with his father's sister from infancy on, for it is known that he will marry the woman's daughter. Extensions of this relationship to wife's mother's sisters, her kwvtil, which is the same as her husband's, and her co-wives, and the mothers-in-law of siblings. In general, avoidance rules are greatly relaxed with respect to a wife's mother's sisters, patrilineage sisters and co-wives, except in connection with sexual relations. There is practically no recognizable avoidance between mothers-in-law of siblings.

Behaviour toward mother's uterine brother, dab laua, is quite different than the relationship which a boy has with his father's sister. Although a dab laua can teach and punish his sister's son, metub, he rarely does so. However, factors of residence and personality are an important influence in the interaction and expressive
behaviour which takes place between a male and his mother's brothers. Since the two are often resident in different villages, there is little opportunity for maternal uncles to assert their authority frequently. The relationship is often characterized by geniality and mutual support. If a young boy feels that his mother has been too harsh on him or beats him without cause, he will often seek out his dab laus and complain. In such a case mother's brother is expected to reprimand his sister if he feels that his metub has reason to be unhappy. A boy will often have a closer and more friendly relationship with his dab laus than with his paternal uncles. Frequent visits to the village of his dab laus with his mother reinforce this interdependency, as the child is usually given food and presents on such occasions. In contrast to his father's siblings, a boy does not receive any bridewealth support from his dab laus, but a marriage to his mother's brother's daughter will often be a little below what is considered a fair price. Should a boy marry someone other than his mother's brother's daughter, there is no compensation which must be paid to dab laus. Nevertheless, a boy who marries his mother's brother's daughter is given approbation by the return gift of two silver bars from the bridewealth payment. If a boy's
father and father's brothers are deceased and he needs money to pay bridewealth or some other debt, he may ask and expect to receive aid from his dab laus. Extensions of the dab laus-matur relationship have no distinctive institutionalized basis for interaction, and the actualities of residence do not encourage such companionship or cooperation. Where residence and relative age do bring individuals in the dab laus category together, the behaviour is usually based on kwv laus rather than the kin relationship. Such categories include males from mother's kwvtij of the same age as mother's uterine brothers and any other males that mother calls brother.

Affinal relationships, especially those involving a wife and her husband's kin, are likely to be quite active and usually consist of sharing in connection with household and activities. A daughter-in-law, nyab, and her husband's mother, poj, often live under the same roof and depending on the duration of extended family residence, may find themselves in constant and long-term companionship. A poj usually receives respect and obedience from her daughter-in-law, while in a few cases the relationship is marred by incompatibility, leading to a change of residence or divorce. More often it develops into a relationship of warm mutual affection and, as the marriage becomes more
stabilized through the birth of children, the poj may become almost a second mother. This second mother relationship is in fact highlighted by the term poj which is used as a technonym for husband's mother, for it is what a woman's children will call their paternal grandmother. In all of the extended family households on Figure XVI the interaction between nyah and poj can be characterized as similar to mother-daughter relationships, with one exception. In household no. 1, Neng's mother would not abide her younger son's wife. This antipathy was to a great extent based on the peculiar circumstances surrounding the marriage, which has already been described. The term poj as employed to husband's mother is, of course an extension. Poj can also be used for husband's mother's own sisters; women of the same generation in her kwitij, that is, women of the wife's new kwitij; and co-wives of a husband's own mother. In circumstances where a woman wants to demonstrate affinal kin ties, she may address and refer to the mother-in-law of her sisters as poj.

The wife's father: daughter's husband relationship will complete the examination of significant typified behaviour between interacting agnates and affines. Perhaps the key to the deferential behaviour between wife's father, txiv,
and daughter's husband, vauv, is that it is the single, most important individual relationship between the wife-givers and wife-takers groups. Such group relationships are frequently criticized as cuam muaa, which refers to the fact that the wife-takers have slighted the wife-givers. This is a metaphoric analogy, for cuam muaa is an expression which is used for the improper chopping of a tree where the slanted cut does not meet properly with the other straight cut. The wife-takers are often compared with the slanted cut. There is an underlying attitude of respect that the wife-takers must demonstrate at all times to the wife-givers. This is an attitude related to formalized behavior rather than affective relations. In Khao village there were frequent complaints from two cuab that they were not receiving the respect and deference due them from their daughter's husband's group. This lack of respect was attributed to foreign cultural influences, notably Thai acculturation.

When the wife-takers and wife-givers are from different villages, it is expected that a member of the wife-taker's group visiting the wife-giver's village will seek out an age-mate from the wife-giver's family, and after addressing him with the appropriate term, will say, "Come drink with me". After this formality, the visitor
will go about his intended business. When meeting on a trail or in the forest, it is the wife-takers who must initiate the formal greeting, coosraw, which is the gesture of respect and prestation used when an honoured guest enters a household. The wife-givers may or may not return this greeting. To demonstrate his position of humility and respect at the wedding feast, the groom must coosraw before his wife's group on three occasions. This formality is repeated by the daughter's husband on every occasional meeting and at the post-marital feast given three years after the wedding.

The relationship between txiv and vauv corresponds to this deferential behaviour between wife-takers and wife-givers. Vauv must exhibit constraint and to some extent servility when in the presence of his wife's father. Constraint between the two is exemplified in their avoidance of discussing sexual matters in one another's presence. Observation of txiv-vauv relations in Mae Nai and Khao leads one to believe that common village residence, when not complicated by conflict over bridewealth and other property, usually leads to the development of closer ties of amity and a significant lessening of formalized behaviour. The coosraw gesture of deference is usually completely eliminated, except on formal occasions, and there
is often a tenor of friendship. This warm behaviour between txiv and vauv is significant, for it indicates that proximity of residence and possibly other kinship ties tend to mitigate the cool relationship of affines which, if from distant villages, begins with any dissatisfaction over betrothal or wedding exchanges. If there is no other basis for the relationship, this coolness may result in enmity. Also, marital strife usually leads to trouble between txiv and vauv, for a father is faced with two choices; to return his unhappy daughter to her husband or accept a permanent separation and return the bridewealth payment. A vauv is in both cases challenged in his almost total authority over his spouse, which is considered a loss of face. Another complicating factor in the relationship is the relative socio-economic rank of the two. A wife's father is usually of higher rank because of his greater age and this often reinforces the complementary nature of their relationships. Situations in which a vauv has a higher quasi-political and socio-economic rank than his wife's father would create an impossible situation, the villagers say, if the two reside in the same village. Thus young men of high status and wealth often seek wives from outside the village. An interesting facet of this practice are the alliances which are formed between powerful
and wealthy cunb in different villages.  

When cross-cousin marriage leads to a man becoming the vauv of his mother's brother or father's sister's husband, two distinguishable differences occur. With matrilineal cross-cousin marriage, a new composite relationship develops which often has conflicting effects. Since a dab laus is the sympathetic sharer and the arbitrator between a boy and his overbearing mother, there is usually an affective tie in existence before the advent of the affinal bond. Thus the two often conflicting relationships must be brought into line. In the cases of matrilineal cross-cousin marriage noted in Khae and Mae Nei, this dab laus-metub pre-marital tie served to mitigate the chances of conflict. A vauv was usually hesitant to assert his demands against his mother's brother, who had given him sympathy and aid. The conflict was most often resolved within the individual rather than between the affinal groups.

Father's sister's daughter, on the other hand, brings into conflict two men, who in most instances, have little pre-marital contact, if resident in separate villages.

1. See Chapter V, pp 466ff.
Probably because of this lack of contact, a man treats his father's sister's husband with the same pattern of deference which he exhibits to his pheuj. Since a man fears the supernatural powers of his father's sister and is forced to come to terms with the powers she has over him, it is not usual that he is excessively argumentative and assertive in his relations with his father's sister's husband. Since no bridewealth is negotiated in patrilineal cross-cousin marriage, there is almost no opportunity for dissatisfaction over price and terms. One may wonder, then, how the marriage is held together, when a daughter can return to her father's household for a permanent period without any compensation payable to her husband. The answer lies in the supernatural hold which a pheuj has over her brother's son. Few veuv mistreat their father's sister's daughters for fear of supernatural punishment. They would rather give in to their wives, than face their pheuj. Thus though there are no mitigating influences to the tensions of the affinal bond in this latter type of cross-cousin marriage, there is a powerful display of counter-acting influences which hold the individual actors in a tight web of social control.
The Household, Yin and the Community, Zej Zej

The community can be described as the local group of neighbouring households that experience almost daily interaction with each other. In addition to proximity, White Hmo communities also reflect ties of kinship and affinity, thus making the community a predominantly discrete and easily recognizable unit. Although community members have contact with individuals from other communities, most of their activities are carried out in the community, thus interaction between them is both more frequent and of a different order than those with outsiders, kum khej.

Members of the household are related to other members of the community as lineage kin and through the institution of marriage. White Hmo communities have institutionalised kinship structures, which represent the localized residence of a particular kin group, for instance, the patrilineage. These agnatically related kin are those individuals with whom a man is genealogically related through his father and may include kin as closely related as his real brother or as distant as the founder of his genealogical descent group. But whereas a brother may be a member of a man's family, suah, such a removed ancestor in his ascendent descent line is not. A brother
is a member of his oua, made familiar and real by daily contact, while a dispersed member of one's  kurti may not exist except in his position in the chain of ancestors which forms one's group attachments. However, many kin relationships are real and are acted out through the intimate contact of daily routine. Thus the kinship ties which exist in their own right may overlap with the intimate household relationships. A White Neo village as we have seen is composed predominantly of agnatically related males of the immediately ascending or descending generations to oneself. These men stand in some sort of kin relationship to each other, for example, they are father's brothers, father's brothers' sons, father's father, sons or brothers. There are a limited number of kinship categories in each community and this limitation can be extended to kin living outside the community. Each kin relationship has a patterned arrangement to each individual relating himself to kin. The White Neo villagers recognize this arrangement by segregating kin into four major groups of relationships: kurti, cov niam, wesitea, and npawg ties. The first group of kin includes all those related as brothers, the entire unilineal descent group, while the second group are all those kin related through mother and thought of as mother's group, cov niam.
There is a recognized division between the kin related as brothers and the kin on mother’s side, which is expressed in the kin terms applied to the kin roles and the individuals who act out these roles. The behaviour patterns which illustrate the effect of kinship terms on relationships stress the precise relationship in which a man stands to someone else in the community. A man involved in a dispute will seek out and expect support of his kverti and they in turn will expect his help, for he is a father’s brother’s son, a father’s brother or some other kverti. As a result anyone who has few close agnostic kin in his community tries to avoid confrontations.

Although most of one’s relatives within the community are close kin, there may be some distant kin and even non-kin. There are also a large number of close kin who are not members of the community. Those agnostic relatives who are not fellow community members are often referred to as kverti that kub, distant relatives, even though they may be genealogically closer than a fellow villager who is called kverti. To explain this apparent contradiction in terms the villagers draw attention to the adage: “Hei yor ngai ib dai, tawv ib nhob, xwoh ib txcod, ptoib ib tsob,” which describes a very close relative as having the one flesh, skin and belonging to the same clump
of bamboo and tree as oneself. They point out that a clump of bamboo grows in a cluster, as all close agnatic kin should.

The agnatic kinship structure of White Hoo communities is a function of the residence rules and the associations between individuals that develop as a result of these rules. Patrilocal residence rules have created communities where there are many daughters-in-law, nyab. Due to the occasional necessity of bridewealth obligations, there are also cases of resident sons-in-law, vamv. The formation of new communities is usually created by groups of close agnates breaking away from the parent community and establishing a new village (see p. 342). Thus in most communities there are three principal generations tied together through agnatic and affinal relationships: an ascendant generation with married children, a younger married generation, and the unmarried children of the latter. The kinship ties in the ascendant generation tend to be the sibling relationship, while in the descendant generation cousin ties are predominant.

All members of a community, including agnatic kin and affines, are spoken of as kwywx ob oag pab tshais whether they are related or not. Thus the White Hoo assume that all members of a community have a kinship relation
either through marriage or consanguineally. The White Neo use the word *kwilti* to indicate this kin tie between individuals. Thus all members of a man’s agnatic group are called *kwilti*. The term *kwilti* does not include a man’s relatives through his mother. Although all agnatic kin of a man are *kwilti* to him, the word most frequently refers to close agnatic relatives, in particular those persons from which he can claim bridewealth rights (see p. 466). Thus it is within the local community where kinship links are reinforced by proximity and mutual participation in activities that the strongest kin ties are evident.

An examination of the kinship structure of Nae, Nai illustrates how this pattern works out in practice. Nae Nai is a small community with a closely knit kinship structure. The community, as many White Neo communities, comprises two surname groups or maximal lineages, (see p. 466). Relationships between a community member and any other member of the community enhances his ties to it and gives him status in it, but within the complex of community activities all relationships are usually given equal importance, for more emphasis is placed on living together in a small corporate community than on kinship categories. The kinship ties between married adults is
demonstrated in Figure XX, which represents the genealogical position of community members in relation to the settlement pattern. The village of Mae Nai and the newly segmented hamlet of Jak Kyn are represented as a single genealogical unit, but the geographical division between the two settlements is indicated by a line separating the relative household positions. Mae Nai was formed by individual no. 5 and Jak Kyn by individual no. 11, who are two of the seven brothers comprising the upper generational level of the community. The kinship core of Mae Nai is the group of siblings, nos. 9, 5, 4, 11, 6, 7 and 8. The village shaman, Hie Ju, no. 10, joined the community after it had moved to Mae Nai. Hie Ju was affinally related to two members of the community through his sister Lu, married to the head of household no. 12 and his brother's daughter Cho, married to the head of household no. 2. He was therefore brother-in-law, yawn dab hlob, to members of the Sae Lis agnatic group before moving to Mae Nai. The real relation between Hie Ju and Lu is yawn dab hlob - yawn yij, and this is often used by Hie Ju to establish his connection in the village, even though his daughter is married to the head of household no. 3, thus creating a higher status, tri-yemuy relationship between himself and the Lis maximal lineage.
To designate the relationship as *triv wmu* would conflict with the generational criterion and only confirms the fact that Me Ju's group as wife-givers prior to this union already had status within the community. It would also conflict with the realities of the social relationships within the community. Such affines of long standing are spoken of as *javthli nesita* and in a general social sense are treated as *javthli* for they are members of the community and are often included in kin clusters (see p. 351).

The larger community of Khao presents a more heterogeneous kinship structure with five cores of close consanguineal kin interrelated as agnatic kin and by marriage ties. One of these cores, no. 3, is made up of descendants of the founding group Sae Vaj. The fifth core consists of the families of three brothers who recently returned to the community (see p. 333); the fourth group of the Sae Vaj surname group includes affines as well and has been exchanging women with the Sae Vaj group since 1950 when these groups were clearing the slopes surrounding the old Khao village site. They then moved to the new site with the Sae Vaj lineage to form a new community (Figure XXV).

The variable kinship composition of these two White Khao communities is a function of lineage exogamy and
residence rules that leave a great deal up to individual choice. The structure of particular communities depends on the marriage and residence choices made in part by particular individuals.

The White Neo community may be called a village in that it comprises a corporate group which is the basis for political action. There is a strong sense of solidarity between its members which often is superimposed on affinal links requiring all community members, whether or not they are agnatic kin to act as if they were. Although villagers have considerable contact with Neo and others from neighbouring communities, most of their activities are village-oriented, thereby reinforcing the strong ties among community members. Villagers have close economic relations and common economic interests. Ownership of swiddens and grazing areas are often spoken of in terms of the lineage with which the village is associated, even though they are household property. In the smaller villages there is considerable labour exchange and cooperation between households. In spite of their daily contact with one another and their community of interests, there are rivalries between members of different clusters of a village. These rivalries seem to be more prevalent in larger villages, where kin clusters are settled in
particular sections of the village and exhibit a feeling of exclusiveness toward each other. The village, as noted, usually has a core of close kin. In addition there may be peripheral members who are not closely related to all of their fellow villagers, and some larger villages have several distinct cores of close kin. From the viewpoint of any individual, the lineage relations and generational differences spread out beyond the local group. The community never corresponds to the entire kin group of any of its members and White Hac community is not often exclusively composed of members of a single surname group and their wives. Furthermore, there seems to be no inclination for an agnatic lineage to become localized within a region. In Khae there are a number of distinct cores of consanguineal close kin, who had no close agnatic or affinal ties with each other before they moved to Khae and their children intermarried. The lack of regional endogamy or exogamy and the mobility of households and communities in and out of the region have maintained the heterogeneity of the kinship structure of the region. Nevertheless, in every village there is a dominant agnatic lineage and into this lineage non-lineage females are incorporated through marriage. Other lines and individuals are occasionally incorporated into the lineages by adoption.
Layout and Residence in the Villages

As previously described, the White Heo prefer village sites situated on the cornice of mountain ridges. The White Heo live in rectangular houses, \textit{tsev}, having board walls and thatched roofs with pounded mud floors. The variations between these houses is not noteworthy, with the exception of size, as houses are constructed in a prescribed manner and position. These houses are situated at distances ranging from eight to two hundred and twenty metres apart. All houses near the village complex are considered as part of the village whether they are in the central area of the village or removed some distance away from it. The households of the village are to a large extent independent socio-economic units. Within these households the senior agnatic member is usually the \textit{tus tsev tsev}, household head, who makes decisions for the household and regulates household affairs.

Houses are usually situated on the slope of a ridge which comprises the village location. In most White Heo villages, settlement patterns are designed so that close agnatic relatives reside near one another. These groups of houses can be described as clusters, \textit{kwiti oob}, and are distinguished from the whole or total community of individuals which includes all the people living in the
village, relatives or otherwise, kmwtd.j ob oog pab txhais.
The kmwtd.j ob may comprise as few as two and as many as
the total number of village households. In Mae La the
division splits the village more or less evenly, with ten
households of the Sae Lis maximal lineage and seven of
the Sae Yaj maximal lineage, divided into four zoen in
some instances and two zoen in others.

Figures XVII (Mae Nai), XVIII (Jak Kyn) and XIX (Khae),
ilustrate the layout of three White Hmo villages in
Chiangmai Province. Included with each diagram is the
name of the household head for each independent house
unit. The inhabitants think of their village as clusters
of mutually dependent households which have chosen to
settle in the same location because of patrilineal and
affinal ties. A village must have an uphill end, squam
zoo, and a downhill end, oog zos, and the houses within
the village are referred to as being situated at some
point between either end. The tus tsay has most often
has his house in the central area of the village, midway
between the two ends, while other households are strung
out along the ridgeline on which most villages are located.
Apart from size, there is not a significant difference in
these villages of Chiangmai Province. Village sites are
selected so that they are near a lub voo hay, broad level
Mae Nai Village

Cluster I
- Neng Sae Lis
- Tua Sae Lis

Cluster II
- Lu Sae Yaj
- Cheng Sae Lis
- Coy Ying Sae Lis

Cluster III
- Qua Sae Lis
- Pow Sae Lis
- Saelu Sae Lis

Residence
Barn
Pig Sty
Water Trough
Smith Sheds

(Distances in Meters)
Jak Kun Village

To Mae Nai - 930 meters.

Cluster I

Ju Jee Sae Lis
15

Ju Sae Lis

Pow Sae Lis

Kalu Sae Yaj

Wa Sae Yaj 30

Cluster II

Mao Sae Yaj

Lu Sae Yaj

Residence □
Barn □
Pig Stv ▢
Water trough
Smithy Shed ▣
valley opening at one end, or a **luy hay zawi**, enclosed valley, so that there is agricultural land nearby. Ideally the site should be located at a point on a ridge between three or four higher mountains so that there will be sufficient water from mountain streams. High mountains surrounding the village also protect it from strong winds. A new village site must not be an abandoned site, because the reasoning goes that if it had been a good, **zoo nkauj**, site the previous community would not have moved away. It is always difficult to find a **zoo nkauj** in a populated area, for any site arouses suspicions as to why some other group did not select it. The final determination is made by the headman, who kills a cock and examines the bird's legs to discover any omens. Smooth legs indicate that the site is **zoo nkauj**.

As Figures XVII, XVIII and XIX demonstrate, the position of village households corresponds to a large extent with the relationship between them. Each village is composed of clusters of closely related agnates and certain affinal relatives. These clusters or segments within the village determine house placement. They are determined by reference to adult males living within the village, who are primarily members of the same **kweli**, lineage descent group. The houses of fathers and elder
brothers are the core of these clusters and are settled around by younger brothers and their families. Although the configuration of houses in Sae Nai is not strictly arranged according to sets of full siblings, it does indicate that there is an emphasis on sibling clusters at varying generational levels, as exemplified by Cluster I. The households in Cluster II all belong to the Sae Lis brothers of the village headman's generation. The only cluster which appears to break this pattern is Cluster III, in which the household of Qua Sae Lis is included. A possible explanation of the location of Qua's household is that the senior wives of both Qua and Sae Lee are sisters from a Sae Hawj lineage in another village. Some villagers felt that it was to accommodate his wife that Qua moved to a location near his father's elder brother's household. Besides being distinguished in accordance with agnatic kin ties, certain affinal clusterings are evident. The eldest daughter of Hie Ju in Cluster III is the second wife of Qua Sae Lis. Thus the shaman and the head man of the village speak of each other as affines and address each other with the appropriate affinal terms, Yang cung and nan cung, even though Qua is Sae Lu's older brother's son. Ju Sae Lis in Cluster II is married to a sister of the village headman in Cluster III.
Other criteria, such as proximity of swiddens, frequency of visiting between neighbours, coupled with ritual interaction, indicate a preference for agnostic sibling residence patterns. Figure XX illustrates two major agricultural areas for Mae Tai village. The swiddens are given numbers corresponding with the village households in Figure XX. Although the villagers voice no preference which would indicate a coincidence of proximity between households and swiddens, an obvious correspondence exists. Fourteen of the twenty-five swiddens in the diagram are situated next to clustered kin from the village. These patrilinearly related households which settle close together, form localized patrilineages, which are common to Jak Kyn hamlet and Khao village as well.

Examination of the residence patterns of Jak Kyn reflects the same tendency toward the clustering of agnatic and to some extent affinal households. Jak Kyn is conveniently divided into two clusters. Cluster I is located on nam zoog, the uphill approach to the hamlet and contains the household of only the Sae Lis nam maximal lineage, Ju Joe the founder and headman of the hamlet and his father’s younger brother, Pow. Separated from these two households, but on the same side of the Jak Kyn stream, which provides water for the village, is the household of
Ju Sae Lis, the son of Ju Jee's older brother. Cluster II, situated on the opposite side of the stream, consists of four households belonging to the Sae Yaj clan. All of the Sae Yaj household heads are siblings. Although Ju Sae Lis is considered a part of Cluster I, he is spatially much closer to Cluster II and in particular to the household of Kalu Sae Yaj, whose elder sister is his wife. The total of seven households has a population of fifty-seven individuals and three infants. Approximately eight percent of the swiddens of these households are located in three specific areas. Three of these are cultivated by the households of the Sae Yaj cluster, while the others are Sae Lee.

Khao village can be divided into five clusters; Cluster I situated on the northwestern entrance to the village, includes six households. In the central area of the village Cluster II and III, comprise three and four households respectively. Cluster IV at the southeastern point of the village is the largest single grouping with nine households. Two hundred and twenty metres southwest of the village centre is Cluster V, which has three households situated in close proximity, but isolated from the rest of the village.

Cut of the total number of clusters designated in
Mae Hoi, only one is exclusively patrilineal and consanguineal. The others are larger and include affinal as well as agnatic kin. In Jak Kyn both clusters are comprised of patrilineally and consanguinely related households. Khae gives a similar clustering with only Clusters V and III composed of agnatic kin. In every case the larger clusters include affinally related households.

Despite the number of exceptions, patrilineal clusters predominate. Except for one household in Cluster IV in Khae, all of the houses belong to the Sae Yaj clan, while Clusters II, III and V are with two exceptions Sae Yaj territory. Near the centre of the village, where Clusters II and III converge, the pattern of agnatic household clusters is less distinct, which may be due to the merging of different clusters. Table XIII gives a breakdown of the residence patterns in the three villages.

<table>
<thead>
<tr>
<th>Villages</th>
<th>Number of Kin Ties</th>
<th>Number of Clusters</th>
<th>Agnatic Clusters</th>
<th>Agnatic and Non-agnatic Clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mae Hoi</td>
<td>10</td>
<td>10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Jak Kyn</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Khae</td>
<td>27</td>
<td>24</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>41</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

Half of the ten kin clusters are exclusively patrilineal,
while the others have at least one affinal or non-
patrilineal household within the cluster. With the
exception of the three non-nuc households in Kha village,
all of the households in the village have kin ties within
the village. In Mae Nai and Jak Kyn as well as Khae
village, the patrilineal clusters appear larger than the
non-patrilineal groupings. Nevertheless, agnatic clusters
predominate, and it can be stated that the patrilineal
residence rule is followed fairly consistently. Most of
the agnatic cluster and segments of the combined clusters
are composed of brothers and their families or families
related through brothers. Even widows, if not incorporated
as secondary wives, usually remain in their husband's
village and remain dependent to a great extent on their
husband's brother. Although there are no cases of
husband’s living separated completely from their agnatic
kin near their wife's natal kin in the villages, there are
two households in Mae Nai/Jak Kyn and two in Khae which
are situated in proximity to certain households either
belonging to the wife's natal lineage group or close to a
married sister of the wife. In the former case, Qua Sue
Lin's household is located apart from his brothers, near
the household of his father's brother, so that his senior
wife could be near her older sister. While in Jak Kyn, Ju
Sae Lao has built his house nearer to his wife's patrilineal kin than to his own, despite the fact that his household's activities are more closely aligned with his own lineage group. In Khae village Lao Tua Saan Vaj lives apart from his patrilineage cluster near the household of his wife's brother Tu Sao Vaj. At the other end of the village Pia Saan Vaj lives in Cluster I, surrounded by his wife's natal patrilineal kin. Activities in both of these households are centred more on their affinal clusters than on their patrilineal ties, except for ritual activities which require ascetic group participation.

It is interesting that the three unaffiliated households are all located in Cluster III of Khae village. A possible explanation of this is that this area is the most central part of the village. Since two of the three unaffiliated households belong to Thais interested primarily in trade, it is natural that they should select a location in the hub of most village activities. Cluster III is also nearest the geographical spot where the clusters of the two village clans merge and is therefore an area of mixed household settlement.

Most of the larger kin clusters in Khae Vai are part of a broader kin network that includes the seven households in Jak Kyn hamlet. Linking households through patriline
matrilineal and affinal ties, this network can be extended to all the villages of the Hong Dong-Mae Rim subregion, and even to Khae village, some fifty miles to the south. Pi, the wife of Pau Sai Lis, is the daughter of Tong Pa Sae Yaj who lives in Cluster IV of Khae village. The entire network of the local lineage of the Sai Lis and Sae Yaj clan in Mae Sai, the villagers claim, can be traced without genealogical reference from Khuang Sai in Laos. One of the sisters of Lee Sai Lis, the leader of the group which moved into Chiangmai Province, was married to a Sae Jaiw, who it is said founded the White Hoo villages in Burma and Mae Hongson Province. Their migration carried them from Dov Maung Pa in Burma across the Mekong River opposite the old "amphur" of Chiangmai. From there they went to Dov Luang in Amphur Pui of Mae Hongson Province.

1. The migration of this group is given as follows: from Khuang Sai in Laos from Hong Tu (Red Soil) mountain; move to Pu E Teng mountain in Laos (Luang Phrabang district); from Pu E Teng move to Dov Yao in Laos; from Dov Yao to Pa Khu (across the Kong River) in Chiang Cong Amphur; they spent two years in Pa Khu, then moved to Dov Kho in Pan Amphur, Chiangmai Province; after one year move to Dov Khy Sai in Phrao Amphur; after two years move to Dov Huai Pa Kho, Mae Rim Amphur; after three years move to Dov Cu Kha, Mae Rim Amphur; after seven years move to Dov Phra Mah Si Phi, Mae Rim Amphur; after one year move to Dov Pui; after ten years move to Mae Khae, where they have been for two years. All of this group includes Sae Yaj and Sae Lis only (White Hoo).
Sae Lu had arranged that the granddaughter of his paternal
great-aunt be married to his son Tong, before Tong was born.
Since there is little communication between these distant
villages no final position will be taken until Tong visits
the village of his father's father's sister. In another
case, the paternal nephew of Lu Sao Lis is reputed to be
living in Laos married to the daughter of Sang Po Sao Lis,
the second in command of revolutionary forces in that area.
The network is extended even further through affinal ties
to villagers in Phitsanulok Province. He Ju's sister
married the son of a Pia Sae Hawj from Huai Sae village,
one of the wealthiest residents in the largest Neo village
in Thailand, consisting of 350 households. Pia has
extensive kin ties which lead back to the wife of Sae Lu,
headman of Sae Nai. Despite this fact, none of the house-
holds in this network of relations can trace their own
patrilineal clan members more than a depth of five
generations. In ascending generations they can recall their
father's father's father, father's father and father's
mother, but not their mother's father's father; their
awareness of broad kin ties within the entire area of Neo
migrations is amazingly effective. Since most of the kin
ties in this network are patrilineal, this ability is most
likely related to the strong taboo against marrying anyone
from one's own clan. There is also indication that powerful families tend to marry important families from other villages, thus reinforcing a network of alliances.

As mentioned, the clusters of households, although essentially a residential group, do tend to have certain common functions such as limited swidden labour exchange, neighbourhood visiting and the selection of contiguous swidden sites. This corporate character does not conflict with the uniquely agnatic function of the patrilineages, which are the primary ritual and property holding segments in a village. Proximity of residence and/or swiddens is secondary to the 

[Note: The text is cut off and not fully legible.]

In ritual activities. At the coy ua hauv chua ceremony in which all members of the village and others from neighbouring areas that have the same father and paternal grandfather, thoci pai koo tixv, koow yaw, gather at the common grave of their ancestors, no non-patrilineal kin are permitted. The majority of sacrifices and rituals undertaken by the lineage and household are exclusive for those thoci non koom of the same parentage (paternal grandparents). Affines, mesite, and those unrelated members of other clans, ob cok pah tihai, are excluded or at most do not actively participate in the ceremony. Since
the transmission of property is, except for minor personal items, exclusively through the male line, there is constant interaction between patrilineally related kin on such matters as inheritance, guardianship, the resolution of lineage disputes and the expiation of lineage ancestors.

Residence, however, is very important in permitting segments of fissional lineages, without consideration of material possessions, to generate closer relationships and re-establish kin ties through interaction. In the village, group relationships are based equally on the residential clusters. These neighbourhood groups have daily contact, and among the households there is a great deal of mutual aid, such as lending money, helping in the construction of a neighbour's house and offering assistance during peak cultivation periods. Often close neighbours are treated as kuriti. Some affinal neighbours are allowed to sleep under the spirit post, although this is expressly forbidden by custom. Nevertheless, the prevalent residence pattern consists of clusters of brothers and their families, which are often segments of patrilineages which have fissioned. Jak lai hamlet is a case in point. These clusters manifest considerable cohesiveness and for them kinship is a reality in the veneration of common ancestors.

1. See p.
The Segmentation of Villages

The main causes for the splitting up of villages can be laid to the search for new land for cultivation and the inadequacy of villages which are too distant from swidden sites. There are also a number of corollary reasons such as the death of a large number of villagers, especially the headman, the lack of eligible females within the village or in nearby villages and the pervasive desire to form smaller more compatible and co-operative residential groups. Besides these reasons which will be examined in greater detail, are the multitude of personal rationalisations given by individual household heads. These rationalisations range from general dissatisfaction with his lot in the village to the outright condemnation of the evil forest spirits, "maey", which have brought continued misfortune upon the village.

Three cases of fissure are of particular interest: the decision of Ju J’ou Soo Lio and his segment to abandon their homes in Khao Nai and set up the nearby hamlet of Jak Ryn; the migration of the majority of the households comprising the old site of Khao village, (Khao Liao) to the present site of the village at 19° N. latitude; and the short-lived move to a new site by three Soo Waj households from Khao village.
villages in the area. As soon as Ju Joe and Pou had begun clearing and building, Ju Sai Lio, his elder brother's son, persuaded his affines and certain of their cluster to move also. During the year of 1967, four additional families from Kao Lai were contemplating settling in Jak Kyn: Qua, Long, Sa and Pua Sai Lio. The reasons for such a move were attributed to hardship and death, the more adequate water supply in Jak Kyn, and the joining of several of the same generation in one village.

The second case of segmentation differs substantially from the events surrounding the Jak Kyn segmentation. When the much respected headman of Khao (Kau) died in the late 50's, it was found impossible to keep the village together. Almost twenty months went by when the village had no headman. Two or three of the elder and wealthier household heads claimed followings of equal size and strength. No one was apparently happy with the situation which was compounded by the pressure on suitable swidden sites by the encroaching Karen village of Yang Ton Phoeng. Since it was impossible to keep the village together, it split into two small and one large segments. One of the smaller segments comprising more or less nine households moved to

1 This reason actually conflates with the genealogical facts, but may refer to the predominance of one generation in Jak Kyn or the move to Jak Kyn by one generation segment.
Khun Klang, another went west toward the Burma border and the third and largest segment settled on the site of the present village of Khao. The reasons for the segmentation seem to indicate that the villagers could not adjust as a group of clusters to any one successor to the venerated old headman. The three competing headmen were not able to satisfy all the demands of the villagers, so certain clusters decided to make their own adjustments by settling elsewhere. Unlike the first example, none of the fissioned segments of Khao (laus) consider themselves as one village or community. None of the segments even have contiguous swiddens.

The third and final case involves what might be described as a protest segmentation. Although it was only a temporary move of less than two years duration, it had a profound effect on Khao village. Jua Sae Vaj, the senior member of Cluster V in Khao village, initiated the fission from Khao which included the two other households in his cluster. Jua’s reasons for settling in a new village with his brothers Wa and Chong appear almost totally political. Ten years before the segmentation, Jua’s father was the headman of Khao (laus). When he died the confusion and final fission of Khao (laus) occurred. Ching Sae Ya was made headman of the segment which settled in the present community of Khao, as an act of compromise.
by the household heads and elders, Ying Sae Yaj had been 
the choice of the majority of villagers, but Bua Pa Sae 
Yaj refused to allow his supporters to back Ying. He 
fought against Ying's adherents and with the help of the 
obligations and compliance others owed him and his 
influence, he gathered enough support to block Ying's 
election. Before he died, the old headman, Paw Sae Wa, 
had asked his son, Jua, to support his wife's father Ying. 
During the weeks preceding the meeting Jua had worked hard 
for Ying. Then just a few days before the meeting Jua 
withdrew his support and showed little interest in the 
selection of a new headman. Soon after Ching was selected 
as the new headman, Jua and his family and the households 
of Chong and Wa moved to a swidden site two days walk 
north of Khae. There they built houses and cleared forest 
for cultivation. No one in Khae will say exactly why they 
moved, and there is a consensus that they did not found a 
new village; though their settlement is referred to as Khun 
Poo. Villagers agree, however, that something occurred 
which caused Jua to be very angry with Bua Pa Sae Vaj.

What is apparent in all of these cases is the dif-
fering degrees of segmentation, which are expressed by the 
White Hmo both spatially in terms of residence and 
functionally in terms of the assumption of cultivation
rights. Whenever a village segments, those clusters which move out to set up a new village nearby are spoken of as *pindan*, men who want to be the first to clear fields. The idiom expressing this important aspect of White Meo social organization is "kub tob poh rub noaws, phuai nyab poh rub amm" which in effect signifies that first settlers have first rights. In latter chapters this concept will be associated more thoroughly with the continuous search for new and better agricultural land. Whether it is the desire to have and be near new land or the difficulties of adjustment following the death of a headman or merely a protest against the authority of an unpopular leader, the villagers do not like to accept the fact that segmentation has occurred. When Ju Jee moved out of his elder brother's village, everyone insisted that he was still part of Mae Nai village. As Ju Jee's hamlet grew and time passed the villagers referred to Jak Kyn as *sib luaj*, the same village. The residents of Jak Kyn, however, spoke of Mae Nai as *lub sub zor*, the old village. Officially, the two communities are spoken of as separate sections, but as many of the cultivators from both settlements have contiguous swidden and the elders, *laus neeg* or *goj tawj laus*,

1. "we were the first to clear fields and the first to claim the prospective daughter-in-law."
and household heads meet in common to discuss most issues and disputes, reference is often made to our village, kus zei yus zos, implying that both are in fact one.

In the second case relating to the segmentation of Khao (laus), there is a complete acceptance of segmentation. Khao (laus) is spoken of as lub sub zon, by everyone. There is pride expressed in the fact that the new village site is superior to the old location. There are two establishments, for no households remain in the old site. The swiddens associated with Khao (laus) have also been abandoned and among the villagers there is no thought of returning to the site of old fallowed swiddens. Due to great distance between the present site of Khao village and the village sites which were chosen by the two other segments from Khao (laus), there is no common and contiguous agricultural area, nor do any of the segments co-operate in swidden tasks. If it is considered that the division has been in effect for seven years, it is not surprising that the villagers speak of themselves as prob pruc deb, separated off in a spatial sense from the other segments of their old village. Add to this, the political circumstances surrounding the splitting up of the community, and the effort of the segments to disassociate themselves with reference to one another is
understandable. The acceptance of disparate villages is in this case a total phenomenon.

The final case demonstrates yet another manifestation of how the villagers' attitudes toward segmentation differ depending on the circumstances of the split. During the two-year period that Jua and his brothers lived in their new settlement, they insisted to all interested parties that theirs was a completely separated village and that they had no ties with Khao. They pointed out that they rarely visited Khao, preferring instead to visit the more distant village of Khun Klang. Also they emphasized that they, as a cluster, had abandoned their swiddens near Khao and had common or contiguous cultivation with no one from the Khao community. Khao villagers, on the contrary, spoke of Jua's settlement as part of their whole village, thoob gos. Some said that Jua and his brothers were simply "visiting their swiddens", meaning that the cluster wanted to be closer to their best farm land. Others implied that Jua was angry with Dua Pa and was showing his pique by staying away from the village for awhile. They stressed the fact that Jua's mother and father's brother's family lived in Khao and that there was no doubt that Jua would return.

It would appear that reference to one village, ib gos,
or separate villages, nyeh nyeh, or other villages, luan zoi zoi are not actual states or conditions, but rather statements about attitudes which determine the performance or non-performance of certain actions. Stress can be placed on the cleavage between two settlements by one party because he desires to emphasize the division of his community from another or that his village is sib lud, equal to and therefore autonomous in respect to another. The members of the "mother village" may choose to stress the dependency of a new segment upon it by noting the interwoven kin ties, the common and contiguous swidden and perhaps other joint property held in common by members of both communities. Thus two villages which include not only the site and houses but the inhabitants of those houses, may exaggerate, and to some extent mislead, in order to stress what they consider the actual or preferential situation. In one case relationships are stressed, in another they are de-emphasized, altering the range of meaning situationally.

The Village, zoi, and the Region, new

A number of White Neo villages are often found in one geographical and/or Thai administrative area. Although the community is the only corporate social group connecting family units, every villager from time to time involves
himself in activities with non-community members. Such activities are usually based on either kinship ties or the proximity of the respective communities. The White Neo refer to groups of separate villages in a defined geographical or administrative area as "prah meu yau", literally "people from the same administrative district." This phrase often, but not always, corresponds to the White Neo chaw, which is a proximity grouping or region consisting of Neo communities that consider each other as neighbours. Most often it includes all Neo communities less than ten hours walk from each other, or more simply any village which can be reached in one day. The difficult terrain and the varying speed of walking make it impossible for the White Neo to be more specific about what geographical area constitutes a chaw. In the Kha which includes Mae Nai and Jak Yen there are five villages, none of which are more than four hours distant from any other. This limitation contrasts with Kha villagers who consider the White Neo village of Khun Klang, more than a six hour walk, within their chaw. Since Khun Klang is the nearest White Neo village to Khae, it means that the limitations on the size of a chaw, or section, are primarily a function of the number of villages and their relative proximity. The large number of villages
In the Kong Long-Kao Ria region appears to have limited
the extension of the White Kao chaw to include a Kao
village less than six hours distant, while Khae includes
the nearest White Kao village of equivalent distance within
their chaw. This may be the result of Khae village's
relative ethnic isolation. Although census data was not
collected from other regions, five villages seems to be a
rough limit of villages that the White Kao include in a
chaw. Informants indicated that they had heard of chaw
in Laos with more than five villages but that such chaw
were politically organized.

The chaw in Thailand, unlike the White Kao village,
is not a discrete social group with members and non-members.
Rather it is an area of proximity, somewhat like a zone
which is defined differently by each village. Any two
villagers, however, usually include their nearest
neighbouring village within their chaw. Kao Kae villagers
often do not think of Kong Kae as being in their chaw,
perhaps for religious reasons rather than geographical.²
Villagers from Naesa, however, always include Kong Kae in
their chaw. Thus the boundaries of a chaw cannot
ordinarily be delimited by a sharp line unless they happen

1. Naai Kong Kae village at 45° north in Figure IV.
2. Kong Kae is a Christian village situated one hour from
Naesa and four hours from Kao Kae. The village consists
of a Sao Yaj minor lineage converted to Christianity
by a missionary of the Overseas Missionary Fellowship.
to coincide with a Thai administrative district. Geographical barriers rarely give a chaw discrete boundaries along its margins in spite of the rugged and mountainous white hoo habitat. Nothing impedes communication and travel between mountain villages. In Thailand there is no natural barrier to the sure-footed hoo and his horse.

The area which we will refer to as the Kae Nai chaw is depicted in Figure XXII. The five villages are within the amphur of Kae Nai and Kong Dong, but only Kae Nai and Jak Kyn are contained in the same tambon or municipal district. The Christian village of Kong Nai lies slightly outside of the map, but within the tambon of Pong Yang. The major trails between the chaw villages are illustrated by heavy lines. The chaw of Khae village can be visualized through Figure IV. The distance between Khae and Khun Klang is approximately thirty air miles. If the study were centred on Khun Klang or Kong Nai, a few other peripheral communities would have been added in a description of their chaw.

In addition to having neighbouring villages which may include kin and non-kin, every white hoo usually has close agnostic and affinal kin residing outside both his community and his region. Ties are maintained with some
of these close kin, though others may live in such distant
villages that there is little contact. Dispersal of
consanguineal kin creates ties with individuals outside
the community and region. Marriages may establish new ties
across regional boundaries, for the natal families of a
married couple are bound to each other through obligations
and the new family of procreation retains ties with each
of them.

Village Leadership and Authority

A number of related villages are often found in one
region which the villagers term ohaw. This region, or
composite of villages, may or may not have a single headman
appointed by the Thai authorities. In the case of Ma Nai
and the other villages of the Hong Dong-Mae Rim ohaw,
there is one headman, tua thawi zoji, who is more commonly
called phuv rvaig, an adaptation of the Thai expression for
headman. As far as the Thai bureaucratic structure is
concerned, the phuv rvaig is directly responsible to the
nearest municipal kamnan, who is in turn responsible to the
district official, nai amphur, and he to the governor,
khevicon of their respective province. Thus the appointed
phuv rvaig is officially part of the apparatus of the
Government of Thailand. As far as the villagers are con-
cerned the phuv rvaig may or may not be their tua tsay hauy.
selected leader and representative. In most cases the Thai government appoints the individual which the villagers select as the man they want to represent them. Mae Nai and the villages associated with it had selected Pa Sae Nanj and, perhaps consequently, respect his official leadership. Khae village, on the other hand, put up a man for appointment who did not fit their criterion as *tsarn khaw hong*. Ching Sao Yaj was a compromise candidate, the real leaders of the village Bua Pa Sae Yaj and Ying Sao Yaj chose to remain in the background. As unrevealed leaders of the village, they would not be responsible and be forced to take orders from Thai government officials. The duties of the *phuv nuan* are extensive, for as representative of his village he wears one hat, and as a Thai government official he has another, often conflicting, functions.

Pa, as *phuv nuan*, understands that he must perform the following duties, which are separate from his functions as head of the maximal lineage; periodically he must visit each village cluster within the Hong Dong-Mae Rim complex and listen to the people’s grievances, make sure that the villagers keep their houses and living areas clean and tidy; act as a police official to apprehend thieves and other criminals; report incidents of serious disease
breaking out in any of these settlements to the Nai Amphur:
go to the Nai Amphur's office every month for indoctrina-
tion programme, foreign news, anti-communist propaganda
and then visit the villages and inform them; keep
villagers from cutting timber, from growing opium and from
disobeying the Thai law; he must entertain Thai officials
who visit his area; and finally in the case of war, the
headman must provide for the Thai Army whatever is demanded,
porters, ponies, food for soldiers, act as guides and
guerrilla fighters. For these duties as headman, the Thai
government pays him Ték. 178 per month. Fa has an
assistant headman, tin xoob, who helps him perform his
duties. The assistant lives in Doi Pui village. His
duties are the same as Fa's, but he receives no salary and
he must pay taxes, from which Fa is exempt. The assistant
is selected by the headman.

In contrast to the paradoxical responsibilities
placed upon the official headman phuv nyais, the tae tsev
hauy has only the interest of his particular village to
concern him. While Ching Sae Yaj maintains the official
liaison between Khae and the local Thai authorities, Dua
Fa Sae Yaj and Ying Sae Yaj in collaboration with the
village elders, cov ntaiw thawi, make the critical decisions
affecting the community. They arbitrate disputes between
villagers, make critical decisions regarding migration patterns and guide the community in its daily affairs. The deference shown for these high ranking men is unmistakable to any observer. Boisterous talk usually becomes quieter when they approach. Men usually wait for a tus tsav havu to open conversations and take their cues from him when to laugh, to command or criticise. However, no supernaturally sanctioned taboos surround a leader’s person, but few villagers would assume enough familiarity with him to place a friendly hand on his shoulder as a common gesture among peers.

Within his own village a tus tsav havu has some degree of command over his adherent’s actions and resources. In the village meetings, usually open to all adult males of the community and during the meetings of the village elders, which often consist of all village household heads, power groups more or less define themselves through interaction. The tus tsav havu of the village guides his followers, giving opinions and assertions not only for himself but his group. The core of this socio-political group is usually made up of the lineage, kwvitj, households clustered around a particular leader. Immediately below the leaders are one or more sub-leaders, men of some wealth and reputation, who receive
orders from the leader and disperse them to all other members of the community. The question is: how far does the tsav hauy authority extend to members of the community other than his localized lineage group and immediate neighbours and to activities not directly concerned with his lineage and neighbourhood?

An example of this extension of authority arose from the recent segmentation of Jak Kyn from Mae Kai. In spite of the fact that Mae Kai and Jak Kyn were spatially separated by over nine hundred metres and had been so for more than six months, some households from Jak Kyn were still returning to Mae Kai for ritual occasions, and the meeting of elders of the two villages were held in common. Few independent decisions were at that time made in one village without conferring with members of the other. When the elders, cov noi xwm, of the village met, they often spoke of themselves as representatives of one village yua noi yua xwm, referring to other villages, including those others under the appointed leadership of a common phuv xwm, as those other villagers, luax za j xwm. At these periodic meetings Sae Lu, the tsav hauy of Mae Kai, was deferred to as leader of both villages. Two other men representing diverse positions were also thought of as sub-leaders; Me Ju Jae Yaj, represented members of his village on
issues dividing the two clans, and Ju Sae Lis was spokesman for Jak Kyn hamlet when issues were raised in which the interests of the two settlements were not identical.

Besides these three key leaders, many of the more dynamic younger men (notably Qua Sae Lis and Lee Sae Yaj) raised and argued problems. These meetings of elders and household heads were called ad hoc, when there was a problem affecting any member of either Sae Naï or Jak Kyn, or either community in general. At these meetings most disputes that could not be settled within the household or localized lineage were mediated. The only inter-community dispute that went beyond the village level during the period from December 1965 to June 1967 was a case of repeated theft carried out by an ostracized member of the Sae Lis lineage, who had spent five of his twenty-three years in Thai prisons. A procedure for handling this village renegade was first attempted by his kruaï, who convened in the house of Qua. They reminded him of his obligations and responsibilities as an agnatic relative and told him that he was bringing shame on his kruaï. After three thefts followed by such meetings, his case was referred to the village meeting and finally by Sae Li to the appointed phuay nuaı.

The influence of the tua tsaiy phuay extends beyond
the confines of his village. In the agya of long venerati- 
am, all the villages under the appointed headman in the 
Taw consider themselves sib luac, equal to each other. 
When problems of importance need to be aired, he may call 
a meeting of all tus tesv hauv in the chaw or even of all 
older persons whose counsel is respected, lamhauv. 
The tus tesv hauv from each of these representative 
villages is expected to attend these meetings. When a 
leader travels to one of these meetings he is usually 
greeted with exceptional politeness and exposed to 
unsparing hospitality. If he should require goods or money 
while visiting in Haesa or elsewhere within the five 
villages of the chaw, he will find little difficulty in 
obtaining credit. He also possesses an advantage in 
purchase transactions, for if he requests a pig, the 
villagers will more than likely produce a willing seller. 
Since the villagers do not ordinarily have pigs for sale, 
this can be taken as a sign of deference. It is not 
unusual for a tus tesv hauv to be asked to arbitrate 
disputes between leaders of neighbouring villages. On the 
other hand, he exercises no control over the services of 
imkauv, people from outside his village, and there are 
always members of his own village who take the opportunity 
to can thavi lam, argue against the leaders, and show
disrespect for his authority.

The positions of tus tsay hauy and phuy nyais carry burdens which discourage many villagers from seeking the higher rank. Many villagers feel that it is difficult to attain the position and once attained it is impossible to escape from the burdens. In competing for the position, it is necessary for a man to possess numbers of agrarian kinsmen capable of giving his support. To gain their support he must conduct his relations with the kurtilob with scrupulous regard for kinship obligations, deference to elders, careful maintenance of kinship taboos and avoidances, readiness to help relatives in times of crisis. Once having become tus tsay hauy, a man’s duty is to maintain his position so as to provide his supporters with reflected renown, which is their compensation for having supported him with their goods and services. In addition he must mediate grievances, arbitrate disputes, provide room and board for visitors to his village, make judgments which offend and create enemies and represent the village at various meetings. In fact, he does everything that is expected of an official phuy nyais, but not as a policeman serving as spokesman for the Thai government. It involves hard work, constant planning and scheming. Allies have to be kept friendly, potential rivals checked.
Achieving and maintaining the position of *the* *towy*
hau also involves dangers and the suspicions of being
harmed by rivals and enemies. There is also the constant
threat of marginal attack. Sorcery embodied in the spirit
cab *nye* is often used against the *towy* hau. The
following episode will illustrate the extent of such
fears and suspicions.

In January 1966 a large sow belonging to Sce Lu Sae
Lie, the *bog* **towy** hau of Sae Hai, was found dead in her
wooden pen. The sow was immediately butchered to determine
the cause of death and the edible portions of the animal
were thrown into a large cauldron and boiled. The lungs
and liver of the animal were examined and it was dis-
covered that there were several knife wounds in one lung
and that three-quarters of the liver had dark red colouring.
The immediate diagnosis was death by sorcery. The only
questions remaining were why had someone employed a sorcerer
to kill Sce Lu's sow, and who was that person. To dis-
cover if a sorcerer has placed a spell on someone or whether
it is the act of a spirit, the White Sea make a human
figure of straw and place it before the front door. An
invocation is then made to the front door spirit: "If a
sorcerer has hurt me, make this figure stand up." The
identity of the sorcerer or the individual employing the
sorcerer is discovered by repeating a list of possible enemies to the straw figure. If the figure stands up, the victim knows who the man is who sought to do him injury. Another practice is to take three sticks and place them in a cup of water. If the sticks stand on end when the correct name is mentioned or the correct illness asked, then the victim can determine who is responsible for his sickness and what type of illness he has. These techniques can also be used by the family of a dead man, trying to determine the cause of death. Once the sorcerer is identified, the victim or a relative can go to him and ask that the magic used against him be stopped. If the sorcerer refuses to withdraw his magic or denies that he is a sorcerer, the victim can either employ another sorcerer or has legitimate cause for killing the sorcerer who has worked magic against him. In the latter case the village or community will not demand punishment for the killing.

Sae Lu placed sticks in a bowl of water and repeated a list of his known enemies several times in succession before it was observed that the sticks responded to the name of a man from another village. Sae Lu seemed pleased at determining who was responsible for his loss. It was decided that two things prevented the sorcerer's magic knife from killing him. Firstly, he was not yet ready to die,
and secondly, his own magic was strong enough to prevent the knife from entering his body. The knife frustrated by its efforts to kill Sae Lu had killed his favourite sow.

Sae Lu had a number of alternatives open to him. He could employ a sorcerer to make magic against his enemy, now that he had determined who was responsible, or he could send a message to that individual requesting that he admit his evil intentions and stop the sorcery against Sae Lu. The alternatives were discussed at some length and it was decided that since there was only one sorcerer in the Hsin Dong-Hae Rim district and that man claimed to no longer practice sorcery, the employment of a sorcerer would be both difficult and expensive. They concluded that he must either obtain a sorcerer from a distant village or ignore the whole incident. It was believed that the man who had caused the evil act would not attempt it again now that his identity was known. Furthermore, Sae Lu professed that he was powerful enough to counter any sorcery against him. While no tus tsay hauv in Hsin Hae or Hae showed evidence of being anxiety-ridden, most of them did take precautions regarded as onerous, such as eating only within their own household.

Trustworthiness is also expected of a tus tsay hauv and any dishonesty on his part is deeply resented by his
victims and widely publicized by his enemies. They are frequently criticized for not taking advantage of their position of power, or seeking another man's wealth. If it can be established that a village head has in fact accepted bribes from specific groups within the village or from interests outside the village, he will quickly be replaced by the council of household heads and elders. The villagers do not expect total impartiality, but they do demand a leader to use his skills of compromise in making relatively safe and expedient decisions affecting their community.

Summary: The Household and the Village

The basic unit of White Hoo social and economic organization is the household, which includes not only those individuals who live under one roof, but also those having relationship ties with other individuals within the community and region. An understanding of the social organization of the household is a primary tool for comprehension and analysis of the White Hoo economic system. Just as the house is the structure which contains the household members, so the household, the fundamental residential grouping, is the corporate unit which often coincides with the fundamental kin-based social group, the family compound. All households are usually independent
swidden units. The household swidden unit is responsible for the provision of its own food and income so that it can meet its consumption needs. It is dependent upon its own resources for all labour except that which can be procured by obligation. All products acquired through the economic activities of the household are jointly owned by the household even though the household is under the authority of the household head, who is usually the senior and/or the founding male of the household.

White Hedo houses are built in a prescribed uniform manner which satisfies not only with the needs of the White Hedo family but the social organization of the family group, which has four basic types. The corporate nature of the household is expressed in the activities of the household group, in particular the eating of common meals from a common hearth and swidden activities. The size and composition of the household and the basis of the family has an important influence on economic obligations, such as the effect it may have on the community of interest among its members. The prevalence of partition, whereby large families break up into autonomous units, usually precludes the existence of large extended families and thus determines the economic work unit. Also every White Hedo family is composed of individuals who exchange kinds and
amounts of scarce goods and services among themselves as individuals and as a social unit to those outside the family. An understanding of the concepts behind, and the categories of, exchange affects the relationships within the family and outside of it. Relationships within the family and between members of the descent group illustrate the unity of the agnatic group, which is expressed by the kin terms which are used between paired kin. Filial respect and reverence for paternal ancestors is perhaps the strongest single factor affecting social control and order in White Neo communities. Since the establishment of marriage ties is prerequisite to the foundation of a family, and the continuity of the family is dependent on the perpetuation of that tie, affinal relationships are an important part of community interaction.

Members of the household are related to other members of the community through the kinship system, as lineage kin, and as affines through the institution of marriage. It is within the focal community that kinship links are reinforced by proximity and mutual participation in activities. Often agnatic ties are assumed for community members even though there is no genealogical justification; however, settlement patterns within a village are usually determined by real agnatic and affinal ties which create
clusters of closely related households. Segmentation of villages usually occurs when suitable cultivation land becomes scarce, but is also affected by social considerations, such as the availability of marriageable females. Although the community is the only corporate social group connecting households, the White Lao distinguish a wider area of activity which can be called the region, chay. Though ambiguous, the region usually includes neighbouring communities, often with kin ties to the local village. Leadership and authority in a White Lao village is vested in the headman, the thum nua, who is often the oldest member of the dominant lineage or the founder of the village; however, he must be supported by the heads of village households. This position often corresponds to the post of phuv nua, chief of the village, a Thai appointment, but duties and responsibilities do not always coincide.

It is evident that the White Lao attach values to their geographical distribution which determines the socio-spatial units in their society. Political values depend on residential relations which are primarily of a kinship type and which will now be examined in terms of the genealogically differentiated groups which make up the social system.
CHAPTER IV
THE RELATIONSHIP SYSTEM

White Nee Social Units

White Nee villages appear to be independent and unrelated units dispersed over a wide area comprising northern Thailand, Laos, North Vietnam, Burma and the adjacent provinces of Hunan, Hunan, Szechuan, Kwangtung, Kiangsi, Kiangsi, Fujian and the regiment of Yenan in China. In northern Thailand, a relatively recent settlement area for the Kruay Nee and other Nee groups, the distance and apparent lack of communication between villages reinforces this impression of autonomous, unrelated communities. Between one village and its closest neighboring Nee community may be three or four days of arduous mountain trekking. The 50,000 or so Nee settlements in Thailand do not consider themselves as an unrelated collection of independent villages stretching over a seeming anonymous political and geographical area. Rather, they think of themselves in terms of genealogical relationships within the social organization which links them together as one people.

The White Nee word for lineage is หน้า, which is most frequently used to refer to the largest segment or division of the genealogical system. Lineages are also
spoken of as kwatji, but this expression refers to the agnatic relationship between groups of persons or individuals by virtue of their membership in groups. All relatives to which a man is related through marriage are neeitas, or the agnatic group of his wife. His sister’s husband’s group is also neeitas. The White Meo often combine the terms kwatji neeitas, to refer to any person with whom a man is able to claim any genealogical relationship or even community members without genealogical ties. Although kwatji neeitas is commonly used only for close relatives and fellow villagers (see p. 320), it includes all of a man’s relationships through males and females and, therefore, can be used to represent the concept of kindred.

Since a xen, used in the sense of the largest group of agnates, is comparable to its lesser segments or divisions, in that it is not an entirely unique group as a segment in a system of groups, it will be referred to as the largest or maximal lineage rather than clan. In this sense the xen can be thought of as a genealogical segment or group of the Meo peoples, who determine their descent from a common ancestor. Marriage between members of the xen is prohibited and sexual relations are discouraged. Within the system of genealogically related groups or
lineages, the relationship of individuals within the groups can be discovered by determining the genealogical relationship of one group to another. The term 

The term **maximal lineage**, is then relative to the individual who is the point of departure in determining descent. For the largest segment, the maximal lineage, the point of departure is the founder of that **maximal lineage**, one of the twelve original maximal lineages.

The smallest genealogical group recognized by the White Kao is the **quah**, which is either traced from the father and includes only his wife and children, or in the extended household, from the grandfather, his sons, son's wives, daughters and the children of his sons. Although the villagers always refer to such a group as a **quah**, they think of it as the smallest genealogical group, which can be called the minimal lineage. This lineage group is never more than three generations of patrilineally related kin and is usually two generations. When a White Kao is faced with an inquiry about his **quah** or **maximal tree**, he usually gives it by referring to his paternal grandfather, the founder of his minimal lineage. He may also refer to his great-grandfather or some other ancestor further removed, but very often he does not recall the names of ancestors beyond his paternal great-great grandfather, **maximal quah**.

The founder of the minimal lineage is always the
paternal great-grandfather, yawk koob, of a man determining
the position of his lineage in the system, while the major
lineage is traced from the paternal great-great-grandfather.
Between the major lineage and the maximal lineage is a
telecopying of innumerable generations of ancestors. This
is evident since no reference is made to any other founders
of lineages, following a definite order. The major lineage
consists of five generations but the expanding lesser
lineages are growing further and further away from the
maximal lineage founder and the gap between major and
maximal lineages is simply spoken of as one's ancestors.
The founder of the major lineage was but an extremity of
another major lineage, who became through the propagation
of the lineages the founder himself of a major lineage.
The founder of the maximal lineage is then removed from
the lesser lineages by an unknown span of generations and
remains the founder only in a mythological sense, but
since the founder is only recognized by the fact that his
name is the surname of all his agnatic descendants, his
position in the actual genealogical sequence can be
telecopied into any level above that of great-great-
great-grandfather. Any ancestor in an ascendant position to
yawk gubab can indiscriminately be the founder of the
maximal lineage. This whole lineage system is highly
dynamic, segmenting and merging over a continuity of time. Actual distances between groups of agnates is, therefore, only relevant up to and including the major lineage. It is not necessary to know the exact genealogical relationships between members of the maximal lineage since anyone beyond the major lineage is distantly related, kwiti thai kub. If a man from the Sae Yaj maximal lineage knows that another man is a Sae Yaj, but cannot trace his e mot descent, he will treat him as a kwiti thai kub and nothing more. However, knowledge of a man's lesser lineage filiation will place the two men in a closer structural relationship. The link through a yawg suab assures those individuals a common bond in a genealogically determined ancestor. Thus the two can participate in certain ritual ceremonies which are defined in terms of common ancestry.

Lineages, kwiti and the Ancestors, neeb

Other than community membership the villagers do not think in terms of political units but of their relationship to other groups through genealogical ties. Except for streams and mountains, the White Neo place names refer to social groups which are derived from the names of ancestors which signify bifurcation in the genealogies which the villagers use to aggregate and separate themselves into
groups. In order to understand how the clusters of agnates and other social units relate and distinguish themselves from others, it is necessary to examine their ideas about descent and genealogy and to determine how these ideas provide a basis for the formation of social units.

As we have seen the White Neo determine who lives where in a village through the kin relationships which tie individuals together (see p. 322). These ties may be patrilineal or affinal, but they are always formed through either descent from a common ancestor or marriage. The influence of ancestors over their descendants may partially explain the reason why the villagers regard their genealogical connections with awe and veneration. A man's genealogy is thought to be continuous for it in theory goes back to the origin of the Neo clans, kwrtii kub by Siv Yis, the founder-creator of the Neo peoples. It was Siv Yis who created the first man and woman, nkaui ntsunb nraug nag, and afterwards told the man to cut a pumpkin into twenty-four pieces and place two pieces of pumpkin in each of the trees surrounding their village. It is from these twelve trees that the twelve Neo clans have sprung. From these original twelve kwrtii kub each Neo has a direct genealogical connection with the first Neo, but more important to the founder of his own maximal lineage,
The divisions are implied and evident in the terminological expressions. The system of calculating relationships through genealogical ties has major sectors: the most distant sector of kin which includes all Neos is referred to as samyang hai neeg or simply hmoob. This sector includes all people, in this case used ethnocentrically for all Neos, from the beginning of man’s generations; tia cuaj txhaaj cuaj tia; the second evident sector includes all those Neos who have descended unilineally from an original clan founder other than one’s own. Anyone in this group is spoken of as hai neeg, or qunu tanj vas ob pan pab txhaaj; the third sector encompasses all those clans to which a man is attached by affinal ties and is called nanjtsa; the fourth sector is composed of all distant relatives belonging to the same clan and therefore having the same surname, kwii thaj kub; the fifth sector is referred to as kwii and often consists of a man’s local descent group, which may include ego’s paternal grandfather, father’s brothers and brothers with their respective families. Kwii, which is a combination of the terms for older and younger brother (male speaking), is frequently described as that group of relatives having the same paternal grandparents, or compared to a clump of bamboo txooj. The final unit in this system of
genealogically related sectors is the quab or family, which occupies a single dwelling and functions as a corporate unit, working, living and eating as a body.

White Neo religious groups, kuvtil, are dependent on segmentation, whereby lesser segments exist within larger ones. The function of these groups divides them into different segmentary levels. For the purposes of analysis it is necessary to describe the functions of each level in the lineage system. A lineage, kuvtil, is a group of patrilineal descendants within a system of such groups. As we shall see it differs from a cluster to which a lineage is attached on account of common residence and other ties of kin through females. The smallest or minimal segment of the patrilineage kuvtil consists of a man’s descendants quab in the first and second generations. As described this minimal lineage segment possesses common property, co-operates in swidden cultivation and in general pursues an interrelated existence through proximity, common endeavour and the veneration of ancestors.¹ The men who live in this minimal segment are a lineage in a lineage or clan system. They can be distinguished as an enduring group consisting of all the patrilineal descendants of a single ancestor (Fortes & Evans-Pritchard, 1940).²

¹ The quab is fully described in Chapter III, p.
² The lineage system on the other hand is "the segmentary system of permanent, unilateral descent groups", Fortes & Evans-Pritchard, 1960, p. 6.
Lineages are means of classifying people; the system is a means of classifying social groups. In Mae Nai and Khao the minimal lineage is reckoned from a male ancestor in the second ascending generation.

Minor lineage segments are equivalent to the minimal segment plus all the sons and agnatic descendants of ego's paternal great-grandfather. The major lineage segment often coincides with the localized corporate group forming a residential cluster, or group of neighbouring clusters. The White Mae speak of such a lineage group as a clump of bamboo, *txool*, which is divided into parts, *faib*. To divide a swidden into sections or to butcher a pig into chunks is to *faib* it. When a cluster splits, the expression used is *faib*. In the same way when all the descendants having the same paternal grandparents, *tdii ni na koo m* *tdii pog koo m yaw*, divided into two groups, the descendants of two brothers, the major segment is said to have made *faib* and the two groups are *ndii pog*, a separate group forming a major segment. The phrase *ndii pog* can be translated as major lineage, for it literally means to divide the cover which protects a group from evil spirits.

The minor lineage forms an important function in the veneration of ancestors. For the villagers, rebirth lies
in the continuity of his lineage, and this can only be attained by propitiation and veneration of his lineage ancestors, *maal*, which are in particular the spirits of his paternal great-grandfather, *yamk koob*, his grandfather *yam*; and grandfather’s brothers. Within the major lineage the division of ritual responsibility is such that all deceased members will be venerated. With three ascending generations there will be a minimum of six ancestors, parents, father’s parents and father’s father’s parents. The head of the major lineage venerates the father’s father’s parents while ritually honouring father’s parents, which are the responsibility of the minor lineage. A man’s *malum moog* is in reality any segment of his maximal lineage *kuntu kub* to which he can claim filiation. A man may claim he is a member of his major segment group rather than his minor segment in order to emphasize his unity with another maximal lineage or clan member, or he may seek to minimize that relationship by noting his attachment to his minor lineage group.

As both segments within the major and minor lineage can be *malum moog*, it is possible to translate *malum moog* as a lineage in a segmentary lineage system. Thus each lineage whether major or minor is made up of persons who believe themselves to be patrilineally descended from one
person. Since the lineages form a segmentary system, a man may in any given situation identify himself with that lineage segment. As an example, Sae Lu and Qua of the Sae Lis maximal lineage, might emphasize their difference in a dispute over land by saying that they were of different minor lineages, i.e. that they had different paternal great-grandfathers. However, if they wanted to identify themselves, as when opposing someone outside their major lineage, they might both refer to their nearest common paternal ancestor. As long as two men belong to the same maximal lineage they are kawtul, no matter how far apart in the genealogies of the lineage system they may be.

In such a system segments cannot always be balanced against other segments of similar size. If the Hle Ju Sae Yaj major lineage is symmetrically segmented into two minor segments, while the Sae Lu Sae Lis major lineage has only one minor segment, it may be due to lack of motivation or ability of another minor lineage in the Sae Lu segment to manifest itself. This latent lineage nevertheless exists within the Sae Lu major lineage, even though it is not a formally constituted unit. A similar one-sided segmentation might occur at a later stage to produce a minimal lineage which is not matched. Within the Sae Lu major lineage, consisting of say three members, one may be
a member of the minimal lineage, the minor lineage and the major lineage; another a member of only the minor and major lineage while one is a member of the major lineage alone. Such a system obviates an orderly arrangement of segments.

The maximal lineages are the basic units of exogamy and are usually named after the ancestral founder. Most villages are inhabited by two or more intermarrying maximal lineages, all members of each have a common surname. In Khae and Kae Nai there are two maximal lineages which intermarry to a preferential degree. According to villagers there are a total of twelve maximal lineages in the geographical area comprising northern Thailand and Laos, which corresponds to the twelve original divisions of maximal lineages: Lis, Hawj, Xyooj, Kua, Yaj, Lauj, Tseb, Wj, Haa, Thoj, Paj, Vaj. Villagers disagree as to whether there are in fact more than twelve White Hoc maximal lineages in the provinces of Kwangtung, Kwangsi, Szzechwan, Hunan, Huan and Hainan, where there are large populations of White Hoc. However the most

1. In non-tonal spelling the twelve maximal lineages might be written: Lee, Daw, Chung, Hua, Ya, Law, Chia, Wu, Ho, Chow, Fa, Wa.

2. As far as this author knows there are no written sources from Chinese etymology indicating the number of Hino clan surnames. Li Chi (1928:127) counts 3,736 surnames recorded up to A.D. 1644. The "Hundred Family Names" included in the Chinese almanac gives almost 500 names. No indication of minority group surnames is given in either source.
knowledgeable informants indicated the existence of only twelve surname groups corresponding to the twelve original divisions. If this were the case a maximal lineage in Thailand might include thousands of patrilineally related individuals while single maximal lineages in the whole area of White Hoo habitation, including southwest China, would number hundreds of thousands. Such a speculation is not entirely unthinkable when it is considered that the list of a "Hundred Family Names" comprises less than five hundred surnames for all of the Chinese people and that it is rare for anyone to bear a surname not recorded in this list (Hu, 1948:47). All villagers bearing one surname are, by that fact, agnates, for they are thought of as descendants of a common ancestor in the male line. Individuals having a common surname cannot marry, and sexual relations between them are discouraged, even when no genealogical connections can be traced between them. However, the possession of a common surname and therefore attachment to the same maximal lineage does lead to special co-operation and preferential or formalized relations between these members of the maximal lineage who have no known or traceable genealogical ties other than a common surname. For example, a White Hoo visiting in a distant locality, such as Laos, would commonly search out
a village having a major segment of his maximal lineage. There he would automatically be welcome in any household of his maximal lineage, in theory, for however long he might want to stay as a guest. He would be allowed to sleep under the spirit post as a member of the kwiti kub and to a large extent would be accepted as a member of the household, xim.

White Neo corporate groups are dependent on the process of segmentation, whereby lesser segments exist within larger ones. A segment is not the same as a lineage, for the lineage associated with (noaim) m提取 is not the smallest lineage. Segmentation within the minor lineage often occurs through the division of a household upon the death of its head. The older sons of the deceased may no longer be held as strongly as before to their corporate agnostic group. After inheritable property has been distributed the constraint on the households of brothers to remain within their father's community is lessened. Thus scarcity of land or disagreement between members of a lineage group may be enough to cause minor or major lineage households to move to a new settlement site that is nearby the original community of their father. Thus members of both communities are able to
attend each others ritual celebrations, burials and lineage members may fulfill their obligations to one another, such as defending the rights of their minimal lineages in disputes over land. After a time the members of the new community may eventually constitute a new local lineage of their own forming a higher order lineage along with those of the originating community. This form of segmentation which is exemplified by Jak Kyn village, contrasts with fission, whereby a minor lineage or some other agnatic grouping move so far away from the original community that interaction between the two communities is negligible. In the case of Jak Kyn, villagers from both communities continued to cultivate contiguous maize/opium swiddens, attend the annual propitiation at father's and grandfather's gravesite and celebrate together those rituals which were not confined to the minimal lineage group.

White Moo lineage segmentation may be made clearer if it is demonstrated briefly within its basic organizational framework. The localized lineages in Mae Nai and Khae are small with a population of less than one hundred persons. All members of the lineage are to a limited extent economically and socially differentiated.
Although there are specialists, such as blacksmiths and shamans, all lineage members practice shifting cultivation, farming swidden plots, over which they have a modified form of usufruct rights. With the exception of the minimal lineage, lineages own no common property, except the gravesite of their deceased agnatic ascendants, and even this claim is, in fact temporary because of the mobility required in shifting cultivation. Scarcity of the major resource, cultivatable land, leads to migration in search of new village sites where such land is available. Domestic ancestor worship before household shrines and annual propitiation performed at the grave of the respective lineage founder are the main rituals of the ancestral cult.

Since the White Hoo are illiterate and thus have no recorded genealogy, individuals are included in the lineage system by virtue of generational criteria and their ascription to those lesser lineages through which origin is traced from the sons of the founder. No genealogical unit stands between the minor lineage and the minimal lineage. Minor lineages do occasionally co-operate in common endeavours, such as the clearing of new swiddens and the celebration of rituals. Leadership of minimal minor and major lineages usually is held by one of the oldest men in the senior generation of the particular lineage, provided that they are not senile or incapable and that there are no other formal lineage heads.
Major lineages form localized residential units, which are often grouped on the basis of certain traditional alliances between maximal lineages. The alliances differ from one place to another respecting the maximal lineages which are linked. In Khae village the intermarried localized lineages (major lineages) are from the Sae Yaj and Sae Yaj maximal lineages, while in Mae Tai it is the Sae Yaj and Sae Lis maximal lineages. Prior to the marriages exemplified by Qua's generation in Mae Tai, the Sae Lis major lineage had traditionally exchanged wives with the Sae Yaj minor lineage in a previous settlement. This alliance was broken off by a dispute which resulted in hostility, followed by co-residence and alliance between the Sae Lis and Sae Yaj minor lineages resident in Mae Tai. This situation could be altered again, for at any given point a minor or major lineage might be grouped in alliance with certain lineages and hostility to others. This sort of hostility often arises between different segments within the lineage system and between maximal lineages which are connected by marriage and matrilineal descent.

Organizing Principles behind Lineage Structure

Villagers think of lineages as groups of patrilineally...
related kin which are continuously forming close relationships with each other, *puab*, and alternately breaking up and scattering *tshob*, and are in a continuity of opposition, catalyzed by the manoeuvring of groups and the individuals within these social units. They realize that over periods of time new lineages are created, the groups from which they originated having differentiated from their parent groups. Large established lineages lose members of segments, often evolving into a mere reflection of their former size and strength. In particular villages one agnatic group may outnumber all others, both in size and political strength. As this maximal lineage grows progressively stronger it does so at the other's expense. On the other hand, an exclusive major lineage occupying a site, on admitting a maximal group from which it can take wives, finds that it is a joint member of a multi-maximal lineage community. The common reason why a non-resident maximal lineage is incorporated into the village structure is so that marriageable women will be available to the young men of the resident maximal lineage and marriageable men for the women of that maximal lineage. The obvious reasons for having two agnatic groups within one village is the rule of exogamy. Thus kinship appears to be the organizing principle.
If one of the organizing principles behind the four primary lineages is kin ties and those levels of genealogical segmentation which determine the size and composition of the units, how do these enduring social groups made up of agnostic descendants relate to other aspects of White Neo-socio-economic, religious and political life? From a functional point of view it might be possible to say that the minimal lineage is the economic unit, since it comprises the only property holding unit and the swidden work unit. The minor lineage is the religious unit since it is the group which gives common veneration and sacrifice to a common agnostic ancestor. The major lineage including all the patrilineally related villagers and neighbouring villagers might then be termed the political unit, while the maximal agnostic group, spoken of as the xem, comprises all of these functions in one degree or another and as the exogamous lineage is the ultimate group to which individuals identify themselves. Although such an explanation is partially true, it is deceptive in its simplicity, for the major function of the lineage system and its segments is to determine those persons who ordinarily come together for ancestor worship, whether or not they are identical with economic or other groups. The cub is at one end of this continuum, as the smallest
fundamental unit of the lineage. This elementary or extended family, as the case may be, controls the household property. Swiddens are cleared, cultivated and held in common, as is the house and most of the implements and other property connected to it. All of the members of the **quah** are agnates with their sisters and wives who share a common fireplace, eating and preparing food together. Only agnatic male members of the minimal lineage can participate in or be present at the **nasi·dab** ceremony. This is a secret ceremony, **shih**, to anyone of another **quah**.

The principles engendering the minimal lineage also include domestic ancestral rites, which are centred on the father-mother spirit, **dab niam-tsiiv**, and the burial ceremony which initiates their sacrificial cycle. The group of agnates which comes together for the **dab niam tsiiv** sacrifices and the burial is larger than the minimal lineage, but it is this segment of the lineage which is responsible for this ceremony and its preparations.

The **dab niam tsiiv** are differentiated by the villagers from the other domestic ancestors and are sacrificed to on two specific occasions during the annual cultivation cycle: once at the feast commemorating the end of the rice harvest, and by the killing of a pig on any one of the five days following the last day of the new year. Both of these
rites are the sole concern of the son or sons residing
within the household of their parents, - the minimal
lineage. Ideally it is the youngest son of the quab. It
is the resident son and his quab that supply and prepare
the pig, although other sons of the deceased and their
quab attend the sacrifice if they are resident within the
village. The resident male descendant leads the ceremony
and only male descendants up to three generations are
allowed to participate. Thus it is a sacrifice given by
the minimal lineage, but participated in by the larger
minor lineage group. The mother-father spirit is of
special concern to the minimal lineage residing within their
household. This spirit protects the residents of that
household from calamity and any disregard for them reflects
immediately upon those residents. The responsibility of
maintaining aged parents does not lapse with their death,
but continues as they take on the three formal representa-
tions of the dead. These representations are: the
gave which contains their corporal body and certain spirits
attached to it; the mother-father spirit altar which in
many households this is combined with the ancestor spirit
altar, dab neeb; and the spirits pig which pass through
judgement transmigration on the way to rebirth thaw! thlab.
Just as the resident son is obligated to insure his parent's
welfare while they live, he must sustain and venerate the spirits of his father and mother in their three manifestations after death. In return the minimal lineage receives the continued protection and major inheritance of the deceased parents.

Burial is perhaps the most economically burdensome responsibility of the minimal lineage. The minimal lineage must ascertain that its dab-nisāt pāy is provided with everything necessary, which include both material needs and spiritual support in the form of prestige gained from veneration and sacrifice. The parental spirits, elāh, must travel to an abode called ṭeob yunā kāsī where the founder of the Neo peoples, Sīv Yis, passes judgement upon them. If they led an unjust or evil life, ignoring the customs of their maximal lineage, they may be turned into ghosts perpetually condemned to an existence without family or lineage ties. These ghosts, ṭeob, often haunt their old minimal and minor lineages causing misfortune and unhappiness. An adverse judgement may condemn the mother—father spirits to a lower form at rebirth, such as that of one of a domestic animal or a person with a mental or physical handicap. 1 If Sīv Yis passes favourable judgement

1. An example: Sā Sae Lia, brother of Sae Lu, is retarded and impotent. The villagers held the belief that he had slept with other men's wives in his previous life, thus providing Sīv Yis with reason to make him impotent in his present life.
the spirit returns to his "grandfather's village". The spirit of the eldest member of the oldest generation of the maximal lineage is the headman of that village where all aquatic lineage members reunite before rebirth. At the burial ritual instructions are given to the spirit, p-url, of the dead parent by a son, the resident son or another son, charged with directing the spirit to grandfather's village, yung zog. The words spoken by the son at the burial of his father are primarily to console the father spirit, dnp txiv, with the fact that it is returning to the familiar village of its ancestors. The reference to the reunion between father and son, given by the grandson is a reminder of the bond which binds the three successive generations of the minimal lineage and the cohesiveness of that group even after death. A man may belong to three minimal lineages during his lifetime, those of his ascendant lineal members, grandfather and father and those of his son and grandson: the first includes ego, his father and grandfather; the second, ego, his father and son; and the third, ego, his son and grandson. Villagers admit that a man may choose any of these as his minimal lineage, according to the relationship which he may want to establish or substantiate.

Within the minimal lineage two other examples of filial respect and veneration are of particular
significance. The maintenance of long hair behind the shaved crown of the head and the sacrifice of one or more cows by a son at burial. It is the obligation of each son to grow his hair in the traditional style, long and tied in the back or braided in a pigtail, for the dab pian triv is believed to reside in the hair of the head. The cutting of the long braids angers the mother-father spirit. Two young men from Nae Mal adopted the western hair style, Lee Sae Ya, the son of the village shaman triv neeb, and Cheng Sae Lis. Lee claims that he does not believe that ancestor spirits have any control over a man's destiny, and he has suffered no ill effects from his revolt against tradition. Cheng, on the other hand, became ill soon after cutting his queue and returned to the traditional style. Lee's father is unconcerned about his son's lack of respect, which may indicate that the purveyor of ancestral beliefs and the ritual medium has some doubt about their validity.

The sacrifice of a cow at burial assures that the dab pian triv will have a good reception at grandfather's village. It is the minimal lineage which must provide the sacrificial animal. This act symbolizes self-denial within the lineage for their venerated father or mother. Cattle and horses above all other domestic animals are a conspicuous indicator of lineage wealth. Cattle are of no
utilitarian value and are killed only at burial rites. By killing a cow the resident son demonstrates his filial respect for he destroys a major asset of the living lineage, but more important he is calling attention to the solidarity between the living and the dead of his minimal lineage. On the ascendant level of the lineage, his father takes the spirit of the sacrificed animal to his father and grandfather, thus reinforcing the ascending links of veneration and solidarity between the sections of the minimal lineage.

The Minor Lineage

The minor lineage is even more concerned with the veneration of ancestors than the minimal lineage. The White Yao speak of ancestors as dab neob. Frequently they substitute the Hunanese expression, t'xwvzei txwvkoob, when discussing obligations and duties which must be performed for these ancestors beyond the generation of grandparents. These t'xwvzei txwvkoob are unknown to living generations and are therefore treated with less sentimentalized respect and veneration. Except for the paternal great-grandfather, yamk koob, or occasionally the great-great-grandfather, yamk suub,¹ the names of these distant agnates are unknown. They are conceived as a group of undifferentiated kinsmen associated with either yamk

¹. Suub means voice or noise.
koob or yamx suab. The minor lineage is responsible for
the veneration and propitiation of the group consisting of
the paternal grandparents as their agnatic descendants,
thool niam koob thool niam pok koob yamx. Such a minor
lineage usually comprises a residential cluster of father,
father's brothers and their sons. It is this lineage group
which is held together by the veneration of yamx. This
unity is demonstrated in the ritual, cow ual yamx quua,
at which the minor lineage takes rice melai, spirit money
dab tixiai, and whisky cauy, to the grave of their common
patrilineal grandfather and grandmother each year on the
third day preceding the New Year. This ceremony is led
by the oldest male descendant of the oldest generation and
only agnatic descendants up to four generations can
participate. After the sacrificial pig has been cooked
the ceremonial leader says, "Grandfather and grandmother,
I now go and give you food." Then the minor lineage
proceeds to the grave site where offerings are presented
(Plate XXIII). If the graves of yamx and pok are not
nearby the village, this ritual is performed inside the
house of the leader of the minimal lineage in front of the
ancestor platform (Figure IX). If the leader of the minor
lineage delegates leadership in the ceremony to another
for any reason, it is understood that he is neglecting his
position to some extent. In Kao Nai this was done by Sae Lu and the other minor lineage members were very critical. All agreed that Sae Lu had neglected his birthright and would arouse the wrath of his grandparents. Qua, the eldest son of Sae Lu's eldest brother, acted as leader of the minor lineage instead of Sae Lu's younger brother. The reasons for selecting someone from the third rather than the second descending generation were not clarified, except that Qua wanted to act in Sae Lu's behalf. In this instance, Qua was the leader of the minor lineage venerating his great grandfather, yaw loob. All members of the minor lineage also gather at the household of a dead minor lineage member. They must mourn for the deceased, remaining in the house for at least three days and nights. The mourning is expressed by the yiab, a wailing cry. As the body of the dead man decomposes, the men smoke opium and the women yiab.

The Major Lineage

The major lineage is that segment of the lineage which venerates and is responsible for sacrifices to jab made to the father's father's parent, yaw loob. This grouping is often spoken of as the palek npos, for it is a division of the minor lineage through fission (see p. 426). It usually consists of a group of two or more neighbouring
agnatic members of clusters or agnatic groups from neighbouring villages to which a man can claim filiation through a common great-grandfather. Major lineage rites are directed toward the paab ancestor spirits commonly associated with that nameless group of agnatic descendants described as soy yawk koob neag, great-grandfather's people. The ritual which specifically aligns the major lineage is the song kaa ceremony, which takes place on the day preceding New Year. At one end of the village a young sapling is set up, with a six foot twined vine rope, km, attached at two points near the top. Strips of red cloth are tied to the rope at one foot intervals. Each household of the major lineage within a village cleans house. The head of each family sweeps the roof, while the women and children brush the floor, walls and ground outside the house. All of the dust from this house cleaning is collected in a large wooden receptable, which is taken to the spot where the song kaa ceremony takes place and deposited into one large basket. All members of the major lineage gather about the sapling, sawm yah. In Nae Nai and Jak yun, all the Sae Lis major lineage gathered at the lower end of Nae Nai village, while the Sae Yaj major lineage gathered at the upper end. Six members of the Sae Lis major lineage from Naesa attended and all inhabitants of
Mae Hai and Jak Kyn were present. The head of the major lineage holds a live chicken in his hands, standing near the dust basket and the ceremony commences. All members of the major lineage grasp hands, while the head of the group implores the nock ancestor spirits of his great-grandfather's generation and above, to take away all bad things from the major lineage and bring them only good fortune. Then the lineage members begin to slowly circle the sapling three times, while the chicken is killed. Blood is placed on the rope and then the head of the major lineage says loudly, "Now all the bad things within this lineage, larbit, have gone and the good things are here for the New Year."

In Mae Hai all residents of the village considered themselves either descendant from Wu Sae Lis, Sae Lu's great-grandfather, or Ju Sae Yaj, Ele Ju's great-grandfather. Outside the village it was estimated there were over one hundred other members of either the major lineage, descendant from these two men. Any of these lineage members could participate in the ceremony by establishing their relationship in the lineage genealogy. As the eldest agnate of the oldest generation, Sae Lu is head of the Sae Lis major lineage and Ele Ju head of the Sae Yaj major lineage. The title given to these two men is ooy ntaun.
which may be translated elder leaders of the community, but this spelling was often dropped in favour of the more concise village head, emphasizing the direct correspondence between the head of the major lineage and village leadership and village shaman. In Khoe village this coincided with the apparent coincidence that Ying Sao Lia, with the exception of aged Wu Sao Yaj, was the eldest male of the eldest generation within the village, and Bua Pa was the head of the Sae Yaj major lineage. Ying and Bua Pa led their respective major lineages in the * Wong Hay ceremony in 1966, which indicated that because of age Wu had relinquished his position as head of the major lineage. Special behaviour is exhibited by the host to major lineage guests. When such a guest arrives he is greeted inside the house. The host and guest touch each other on some part of the body as a sign of common identity. The guest will be invited to eat with the household and sleep under the *ub neab altar. The host as a gesture of solidarity will sleep with the guest. Before the major lineage guest departs a sacrifice will be made to the mother-father spirit to honour the guest.

The primary bond holding the major lineage together is the network of agnatic relationships extending in ritual form to *awg koob, the paternal great-grandfather. This
segment of the lineage must venerate and show reverence,

大使, toward the ascendant generations beyond grandfather,
known as neeb, all those impersonal ancestors of great-
grandfather’s group. Since the descendants of yawg.koob
are noain moc into separate localized groups, a man may
belong to various branches of his major lineage, all of
which recognize the same yawg.koob. Thus individuals from
neighbouring villages or distant villages, once they have
established themselves as being of the same agnostic descent
group, may participate in major lineage ceremonies. The
most important and frequent of these rituals is the us neeb
us yain, calling of the spirits of the major lineage
ancestors. This ceremony takes place within the households
of major lineage families, but a man far from his village
may have this ceremony performed for him by a shaman,
txiv neeb, in the house of a distant member of his major
lineage. The calling of the spirits requires the services
of a medium, the txiv neeb, spirit father. The txiv neeb
need not be a member of the major lineage or for that
matter the maximal lineage. He is a specialist, kwa.
Such a man has been visited by his own ancestor’s spirits.
The spirits have entered his body and caused him to go into
a somatic state. After this he is trained as a novitiate
txiv neeb for five years under the guidance of an accepted
shaman. Since the principle of the relationship between a man and his dab neeb is one of reciprocation, the calling of the spirits is thought of as both a ritual honouring of the ancestors and a means of eliciting their support, protection and advice. Dab neeb are a constant threat and aid to each individual within the major lineage. Treated with respect they can bless the lineage with bountiful harvests, good health and fortune; ignored they may create poverty, sickness and confusion. The ua neeb ua wi ceremony begins with the sounding of the cong, followed by the calling of the neeb by the hooded tril neeb. Rhythm is as important as the magical formula of words and sounds. Communication with maw koob and his group is not a simple process. They must be cajoled, tempted and persuaded to communicate with the tril neeb. The ceremony usually takes over an hour and the chanting is interrupted by rhythmic jumping on a bench facing the ancestor spirit shelf. When communication is finally made, the activities slowly come to an end with the ringing of the oui neeb oui yali, the bell used to call the spirits. The constant reoccurrence of this ceremony attests to its importance. In Mae Sai it was performed on every occasion of sickness or ill fortune as well as when an individual within the major lineage needed guidance. Over a one year period Hie Ju, the only
triv neoh in the village, performed one hundred and seventy-eight triv neoh na vaiz, while the frequency in Khae was much higher due to the presence of four triv neoh in a village of twenty-five households.

The maximal lineage

The largest segment of agnatic descendants in the lineage system is the maximal lineage, neoh, whose members are often referred to as kwetj thai kub (Friedman, 1958:33). This is a non-discrete group of agnatic kin founded by a particular man from the original twelve Hco elementary families. Unlike the minimal, minor and to some extent, the major lineages, the maximal lineage is dispersed and is in no sense corporate in character. In both Khae and Mae Nai villages there are two maximal lineage groups. Khae has twenty-five households; thirteen of the Sae Vaj maximal lineage and twelve of the Sae Vaj maximal lineage, in addition to the two Thai merchant households and one Hau (Chinese) married to a White Hco girl from a neighbouring village. In Mae Nai eleven households had the Sae Lis surname and six the Sae Vaj. Other White Hco villages surveyed had variations on maximal lineage distribution within the villages (Table XIV), but the prevailing norm was the village with two or perhaps three maximal lineages. In both of the villages under consideration, there were two
<table>
<thead>
<tr>
<th>Area</th>
<th>Households</th>
<th>Maximal Lineages</th>
<th>Numbers of Members</th>
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<tr>
<td>Khae (Chiangmai Province)</td>
<td>25</td>
<td>Sae Yaj</td>
<td>12</td>
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<td></td>
<td></td>
<td>Sae Vaj</td>
<td>13</td>
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<tr>
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<td>17</td>
<td>Sae Lis</td>
<td>11</td>
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<td>Sae Yaj</td>
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<tr>
<td>Kong Hae</td>
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<td>Khun Klang</td>
<td>26</td>
<td>Sae Vaj</td>
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<td>Leo Sang</td>
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<tr>
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<td>Sae Xyooj</td>
<td>4</td>
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<td></td>
<td></td>
<td>Sae Hawj</td>
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<td>Chao Suraon (Pitsanuloke Province)</td>
<td>24</td>
<td>Sae Hawj</td>
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<td>Sae Vaj</td>
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<td>Sae Vaj</td>
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maximal lineages, in the former case an almost equal division of maximal lineage households, in the latter an imbalance of two to one. When queried about the division of maximal lineages within a village the kaeo would usually answer that it was necessary to have two xee so that a man could find a wife. An example of this occurred in the recent segmentation of four Sae Vaj households from Khao. The four households moved from the village to a new location about ten hours walk from Khao. The reasons for this move were: that they wanted to be near their swiddens, that the soil around Khao was deteriorating because of over-use, and that there was no new land nearby with good soil. After eight months in the new village, they returned to Khao. The reason given was that there were no eligible females nearby of another xee. Marriage within the maximal lineage is strictly forbidden. This prohibition is enforced by a fine of four tab (rupees in Burmese coinage) placed on each of the known offenders by the village headman or the elders. No cases of marriage between the various lineage branches of a maximal lineage was found in any of the surveyed villages.

The maximal lineage cannot, as the minor and major lineages tend to do, be defined as a quasi-territorial or political area, in the sense that the majority of its
members are resident within an area that is geographically delimited. Neither does the maximal lineage or any other lesser lineage identify itself with an animal or plant in a totemic association of one degree or another.

Unlike the lesser lineages the maximal lineage, members do not necessarily determine membership by genealogical demonstration. A man can simply identify himself as a maximal lineage member by saying that his surname is such-and-such, and mention that he is from a particular (chac) region. He is then accepted as a guest and may sleep under the dab nech altar in recognition of his membership in the maximal lineage. In theory he can remain in the household of his maximal lineage mate for an indefinite period. Some attempt is usually made at tracing genealogies to determine if the guest may in fact be more closely related. However, because of the lack of specific information there is a tendency to telescope generations in maximal lineage genealogies. Villagers usually ask a stranger, "Kol mon dabtsi?" What maximal lineage do you belong to? Recognition that both are from the same mon brings out the exclamation, "Tab yox kurtii hub!" We are distant relatives of the same maximal lineage! or "Tab kurtii pues tuy pues ting!" We are brothers from the beginning of man's generations! Although
it is possible for a boy to change his maximal lineage under certain circumstances, it is rarely done.\footnote{On divorce an infant's mother might remarry and desire to bring her son into her new husband's household. If the boy's genitor and/or pater is poor he may sell the child, thus making a change of maximal lineage possible. Such a\textit{kiay rroom} adoption of maximal lineage is thought of as disgraceful. However, a woman changes her maximal lineage on marriage. (See p.}

The solidarity of the maximal lineage as with the other lesser lineages is expressed in terms of a ritual participation in ancestor rites. A member of one's maximal lineage may be invited to participate in most of the ceremonies and sacrifices of any of the lesser lineage segments. Unlike an outsider, \textit{ob eeg pob txhaig}, he need not stand aside during rituals or sleep in segregated areas of his maximal lineage mate's house. He can be invited to rest within the sleeping quarters or any other section of the house because his ancestors are ultimately the same as the other members of the household. As a member of the maximal lineage he also will be given preferential hospitality. On noting the arrival of a member of the maximal lineage, the household head will go outside his front door to greet his guest. He is expected to touch his lineage mate on some part of the body as is customary between brothers. He should invite his guest to sleep in his bedroom, although the invitation is almost
always turned down. Even when a maximal lineage mate has not been specially invited, the host will offer to pay his transportation to and from the village. This offer of hospitality is usually only accepted by those who have travelled from a very distant village on invitation. When the guest decides to continue his journey, he will be given a portion of pork from the jeb niem tiv sacrifice. A guest from one's maximal lineage is always honoured with participation in a sacrifice to the mother-father minimal lineage spirits.

The behaviour toward a guest of one’s maximal lineage differs from the attitude toward a Neo from another maximal lineage, who is a stranger. Such a person will also be greeted outside the house and if liked will be invited in, but he can only spend the night if the specific invitation given by the household head is approved by the village headman. In most cases no sacrifice is expected or made.

Non-Neo are given yet different treatment. They are not expected to enter a White Neo house. If the household head does not invite the guest in, he will be given food, if he asks for it, outside the house. A non-Neo is not invited to sleep within a household, but taken to the village headman who is expected to provide quarters if
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asked or delegate someone to host the guest. No ceremony is performed and such a stranger is unwelcome if he remains beyond three days. The non-Meo is a guest of the village, not of a lineage. His reluctant host is always the leader of the village. The treatment of guests, then, represents a scale of behaviour differentiating degrees of relationship within the lineage system and also for those outside of it. Whereas members of a maximal lineage are always given free haven, non-members are approached with hesitation and non-Meo with a certain suspicion.

White Meo ritual differs from one maximal lineage to another. The awareness of these variations in ritual is an acknowledged bond between maximal lineage members. The Sae Lis maximal lineage, for example, throws away the sacrificial rooster offered to the spirit of the dead before their departure to "grandfather's village" and offers food to the spirit plug in reverse of the customary pattern. Justification for this behaviour is upheld in a myth known by all maximal lineage members:

"Many years ago the most senior member of a Sae Lis household died. He had only two sons and no other agnates living in his village. When the sons tried to carry the burial platform, meag, and the sacrificial rooster to the grave, they found it too much to manage, so they carried
the sacrifice to the grave, left it and returned for the platform. On reaching the grave with the platform, they found the sacrifice gone. On further investigation they discovered the footprints of a hawk." Due to this experience all members of the Sae Lis maximal lineage throw the sacrifice to the hawk before leaving the village. The Sae Lis lineage also feeds the spirit on the way to the grave rather than in the customary manner.

The Sae Vaj maximal lineage has the practice of asking everyone who goes to the grave to carry three stones. As the mourners leave the grave they throw the stones at the burial mound because once long ago when the sons of a dead man of the Sae Vaj maximal lineage were leaving the grave after the burial, one son saw the ghost, XV, of his father beside the grave with fire in his eyes. The son became frightened and threw a rock at the ghost. Its eyes closed and the ghost returned to the grave.

The Sae Vaj maximal lineage say that many years ago one of the Sae Vaj men was preparing a chicken for sacrifice. After the chicken had been cooked, he looked in the pot for the heart. He could not find it and asked his five-year old son to search for it. The boy could not find it either. The father thought the son had eaten the heart and he became angry and killed his son, taking the
son's heart for the sacrifice. Later when he was eating, he found the heart of the chicken in the pot. He was very sad and since that time the Sae Yaj clan has not eaten the hearts of animals.

A fourth example is found in the Sae Hauj clan. Once the head of a Sae Hauj household had prepared and killed two chickens and a baby pig for sacrifice. The meat was hung in the loft for the evening ceremony. The family then left the house to work in the fields, only a daughter stayed at home. The daughter's lover came to call. He was very poor and very hungry. He asked the girl for some food. She gave him the pig and the two chickens to eat. When the father returned for the sacrifice there was nothing to use. He was very angry and told his daughter to stay away from the house until the sacrifice was over. Thus no unmarried women are allowed to stay in a Sae Hauj house during a sacrifice.

Lineages and the Village

Outside of the White Meo ritual context, which is largely structured on lineage relationships, the lineages have only a latent influence on community relations. A villager rarely thinks about his lesser lineage relationships as distinct from his community. Since lesser lineages
may form corporate, localized clusters and communities, the individuals therein see themselves as residential groups. All villages are composed of at least one or more lineages. Even though the lineage members may only be a small proportion of the total community, they are identified with it as an aggregate of individuals living in an agnatic cluster. Villagers think in terms of local divisions within the community and of relations between these divisions. References to lineages are only made when considering who may and may not participate in rituals and whom one may approach as a partner in sexual relations and marriage. In almost all other circumstances a man relates and speaks of himself as a member of the particular village in which he lives. Unless specifically asked, "Koi xeem dabtsi?", when queried who he is, he will reply, I am from such-and-such a village, "Xus zoj yus gos". His village, in most situations, is the relevant factor in his life, for it is the place where most of the events in his life cycle occur, and in relation to all of the non-Meo outside world, nej kum, he is a member of such-and-such a village in such-and-such a territory and nothing more. When pressed on the subject, the villager will note that his village, gos, is in fact made up of such-and-such maximal lineages, xeem. To the White Meo this means that
the village belongs to and is identified with certain maximal lineage groups. Many villages are spoken of and known by the name of the man who founded them. This is usually the headman of the group that first settled at a village site. Jak Kyn hamlet, for example, is most often referred to as zos Ju Jee among the White Neo of the chak, instead of its official name taken from the stream passing through the site. Similarly, Mae Nai is spoken of as zos Sae Lu, after the headman of the village. When Ju Jee or Sae Lu die the villagers will continue to be known as Jak Kyn, the village of Ju Jee, or Mae Nai, the village of Sae Lu. Thus the villages are incorporated into the genealogical levels and the date of the first settlement of a village can be reckoned. All people resident in the village become members of zos Ju Jee or zos Sae Lu whether they belong to the same maximal lineage or not. Even strangers who have resided there for a period are assimilated into the lineage structure of the community. In Khas village the two Thai residents and the Raw married to the White Neo girl, speak of themselves as members of Dua Pa's village. As the lineage of the founder grows and his descendants multiply, the village will continue to be spoken of as such-and-such's village. Since the White Neo rarely remain at one village site for periods longer
than fifteen successive years, the site where the remnants
of the houses once stood may be recalled as the place
where a certain founder's village once was. The site of
old Khæ village exemplifies this pattern. A lesser
lineage then becomes identified with the community it
founded.

A villager can talk about the community and the
founding lineage interchangeably. Often confusion arises
in the use of these terms. In the late 50's the village
of Khæ moved to Laos, under the persuasion of Pia Sæ
Yaj and certain members of his maximal lineage living in
Laos. The villagers were told that if they did not
emigrate they would be devoured by small tigers, tæov
cuan, a common threat used by the White Neo, for if a
man is eaten by tæov cuan his spirit will not be reborn.
Although the households that did go only remained in Laos
for one to three years, they refer to the village in which
they settled as ros Pia. Pia is not happy about this
reference and insists that the village had nothing to do
with him and that it was already a village when the Khæ
households arrived there. On one occasion two White Neo
visitors to Khun Klang overheard a conversation about
ros Pia and decided to visit the mysterious village. When
they asked directions from another group they were sent to
Khae instead of Laos because that was the village in which Pia Sae Yaj was then residing.

Lineage names are also used to describe certain regions, chaw, as extensions of community references. Three villages in Kae Hongson Province are under the authority of a single headman whose father founded the communities. The region in which the villages are located is called chaw Chung, after the founder. Probably because of the rapid expansion of Chung's lineage and the frequent travelling of its inhabitants, villagers from other areas also refer to this village by referring to its founder.

In the White Neo lineage system one man has the potential to start a lineage by marriage. The minimal, minor and major lineages have a status expressed primarily in ritual exclusiveness, in contrast to the mutuality of interests and total interaction of the community. Villagers intermarry with other villagers, until the bonds of kinship are so interwoven that marriage with cross-cousins seem almost inevitable. When two lineages marry to such an extent that suitable women are not numerous, they can marry into collateral lineages of the other maximal lineages and the children of their daughters. The lineages of the village become interrelated through affinal ties until no lineages in the community are unrelated.
However, the rules of exogamy which create the lineage ties, also keep them apart, for one must marry out of one's agnatic group. Although a lineage may be dispersed over a wide area and the individual is separated from the main branches of the lineage, it always maintains its ritual tradition based on descent from distant ancestors which separates it from other lineages. These ritual values which regulate the ceremonial relations between groups of agnates are kept in force by the relationship between members of the agnatic group and the dead of ascending generations. A lineage segment is tied to its past through the authority of and veneration toward its predecessors. The after-life perpetuates the union between the living lineages and those that have gone before. Rebirth depends upon the attitudes of one's ancestors and the lineage to which they remain members.

The villages with their community of mutual interest and interaction determine the political relations between groups of people residing in separate villages, zoa, and regions, chay.

Land liaj ia, and the Lineage korytij

The White Neo speak of land surrounding the village as liaj ia, which refers to land and territory belonging to minimal lineages syab, of a particular community. All
rights to the land within the minimal lineage are usually held by the head of the household, *tau toui tay*, when the minimal lineage is residing together under one roof. In certain instances elders' sons living within the parental household will clear and cultivate swiddens which are considered to belong to them, but even in these rare cases the crops from such swiddens become part of the household larder. Usufruct rights to climax forest areas come with the clearing of the land. Those rights over cleared land continue during the period of cultivation and for a fallow period of twenty years if the original minimal lineage which cleared the land remains within the *liaj in*. If the original cultivator moves to another region, *ahw*, the abandoned land is usually considered an unoccupied area and can be claimed by anyone in the community.

Land within the environs of a village is also referred to as *liaj in tebahwa*, or the lands and fields of the village. Although a community considers certain land within a radius of several miles from it to be an area in which its minimal lineages have priority cultivation rights, the village as a unit has no claim on any land itself. Rather the minimal lineages of the community have equal rights of access to the land. These rights are held in common by members of the village, *txum tin*, against any
outsiders, kmun khe'. Actual ownership is established by the clearing of forest, which is usually undertaken by a minimal lineage. The clearing of forests, which is either primary or climax, from a tract of land, ntsui, insures a minimal lineage rights over that tract. Land once cleared and cultivated is considered part of the inheritance, lub ouabtam, of the minimal lineage. Since it is usually the youngest son of the head of the minimal lineage who acquires the household and all the goods pertaining to it, lub lub ouabtam, it is not surprising that elder brothers often prefer to hold claim to land outside the parental minimal lineage group. The transfer of minimal lineage land by gift before death can alter the traditional inheritance transaction so that the agnates within a minimal lineage obtain equal or divided parcenary rights in the land of the minimal lineage.

Women have no rights in land or the crops produced from it, even though they may be the chief cultivators. A woman has the right to cultivate a swidden for her husband, father or brother so long as she is resident within his village. She also has the right to clear and cultivate sufficient land in her husband's swiddens to feed herself and her children so long as she is married to him. Women have no land rights in their natal community, but since
very few White Kao women ever continue to cultivate their natal minimal lineage swiddens after marriage there is rarely any concern. If a divorcee or a widow returns to her parental household, she cultivates the land of her natal lineage. If her brothers clear land for her she has the right to cultivate, but rights of usufruct are held by her brothers.

As a member of a lineage group in a village, a man has either an agnatic and/or a residential right to clear and cultivate land in his village. However, if a man tried to cultivate land in an area considered to be the tabohaws of another minor lineage, certain subtle limitations are imposed upon him. In any dispute over his rights or boundaries he will find himself in opposition not just with the minimal lineage of a contiguous swidden, but with the entire minor lineage cultivating that tract of land, ntsanj. A minimal lineage cultivating land adjacent to ntsanj of its own minor lineage may simply expand its holdings at the expense of the most distant genealogical holder of land which adjoins it, with the realization that it will receive the support of its lineage group, usually brothers. But a minimal lineage cultivating in a ntsanj distant from agnatic relatives cannot expect support in any dispute or conflict. It is, in fact, at the mercy
of the cultivators from other lineages, ab ear-pab txiajic, to which it cannot claim lineage solidarity and from which it will probably receive unified opposition in any dispute. Strangers in a community must be even more careful in getting the consent of all village residents before cultivating a swidden or clearing forest.

Since lineage members tend to coalesce and support each other in land disputes, it is not surprising that the majority of contiguous swiddens are cultivated by members of one minor lineage. An example of the partition of newly cleared land illustrates this pattern of land use. Lee Sae Yaj selected a new site for rice swiddens. Since the site was large, he invited Ju Sae Yaj to join clearing the forest covering the site. After ten days of work the two members of the Ile Ju minor lineage decided to approach Qua Sae Lis and let him join them. The two reasons for letting a member of another lineage join them was that Qua is married to Lee's sister, that be expressed interest in acquiring new rice swidden and he was a strong worker. However, Qua was hesitant about clearing in the new tract until Lee agreed to allow Pow Sae Lis to clear and cultivate in the site also. It was agreed among these two minor lineages that no other minimal lineage could cultivate the site. Thus any dispute would not result in an
unfavourable balance of power.

In Khao village the sole Hmaw resident complained of having a field which was distant and isolated from the other community swiddens. He said that although he would prefer to be near other village swiddens for proximity and common protection, he did not want to come into conflict with other households over land rights. Thus, admitting that he would be at a complete disadvantage with no lineage support whatsoever in the village. Since the Karen were raiding his swidden, he thought he might give up swidden cultivation entirely for his village garden.

Boundaries are seldom marked between contiguous swidden cultivated by members of a minor lineage. Thus in the Sae Lai valley where the swidden are predominantly of the Sae Lai minor lineage, no distinguishable markers divide the minor lineage swiddens. At the east end of the valley, however, where the swidden of the Sae Yaj lineage of Fui village abut the swiddens, a crude stone buffer has been constructed. Such a ntsui held by a minor or major lineage is often spoken of as the ntsui of that lineage.

Conflicts over land within a lineage ntsui are resolved by the members of the lineage involved. A man's birthright gives him an equal position in relation to his brothers, which they share in relation to other men in the
village, and which all men of the village share vis-a-vis other villagers. The agnostic relationship carries land rights with it, in as far as a contiguous swidden and support are concerned. A man has land adjacent to, but distinct from, that of his brothers, all of whose land may be contiguous to, but distinct from, more distant agnostic kin, whose land though bordering that of another exdagal lineage affiliated through affinal ties, is also distinct. In the ntsuj a spatial concept is given to lineage association.

Disputes over Land plaub

Any disputes arising between cultivators of contiguous swidden are usually settled quickly through the mediation of other lineage members. Such a mediator in a lineage dispute is called, pha: bneb, and it is his obligation to see that an amiable settlement, tu plaub, is made within the confines of the lineage. If this cannot be achieved, the headman must fix a settlement, tiax plaub. All male members of a village have the right to land on which to cultivate crops, but these members of particular lineages resident within the village have their rights through residence and lineage membership. Men isolated from their lineage segments often lose their rights to fallowed swidden over a period of time, if they give up their
residence, whereas members of resident lineages can leave
the community for up to twenty years and find their
fallow held aside for their return. Disputes often occur
over the use of fallowed swiddens, in such instances. In
Khao village Yee Sae Vaj returned from Khun Klang village
after ten years residence there in a cluster with members
of his major lineage. Soon after his arrival in Khao he
began clearing regenerated secondary forest tracts which
he said were sites of some of his old swiddens when he
was resident in old Khao(luas). His felling of trees at
these sites was interrupted by a claim made by La Sae Vaj
that the tract had been marked by him for clearing and
Yee had no right to the land. In the dispute which
followed Yee was supported by his entire major lineage
resulting in the withdrawal of La’s claim. Yee confided
afterward that if he had been in a village where his
lineage was less powerful, La Sae Vaj would have been able
to take the tract. The dispute itself was mediated by
the members of the two maximal lineage groups within the
village.

Rights over fallowed land are not held in per-
petuity, but usually for up to twenty years, as long as
the minimal lineage is resident within the village in
whose tebkhaws its holdings lie. When a minimal lineage
family moves to a new chaw to take up permanent residence; its land rights lapse and are assumed by members of its minor or major lineage. Unclaimed fallows exhibiting the characteristics of mature secondary growth are treated as if they were primary forest. Thus the minimal lineage which falls the tract, establishes presumptive rights over it. What constitutes abandoned land is almost always a major point of dispute amongst lineages and outsiders.

When an entire community, such as Khae, abandons an area to move into a new chaw, the whole of the former area is considered free of previous usufruct rights. Thus when the Khae villagers returned from Laos, they found many of their abandoned swiddens cultivated by Karen and Thai. A whole rash of disputes over land arose out of that situation. Disputes between White Hmo villagers and outsiders, kum khej are not mediated between lineage segments, but by the headman of the two villages concerned. The headman is, however, subjected to the pressures of the more or less cohesive units within his village. One such dispute over cultivated swidden involved La Sae Yaj. After six months in Laos, he returned to Khao to find his maize-opium swidden planted in poppies by a Karen family from Yang Noi village (Figure XXV). Efforts to resolve the conflicting claims through individual discussion failed. Finally
La Sae Yaj went to the headman of Yang Noi, who informed him that the dispute must be resolved between the two villages through their headmen. La was forced to wait six months until the headman of Khao, Ching Sae Yaj returned from Laos, at which time the Karen agreed to give up the disputed swidden in exchange for certain trading concession, including a ten per cent commission on all opium sold to Karen villagers for the headman of Yang Noi.

Disputes over the use of land by and large are resolved within the lowest level within the lineage or community which contained the parties involved. In some cases it may be deliberately planned that a dispute be handled at a higher level in the lineage organization, but this type of case is unusual, although it seems to occur with situations involving non-Karen.

In 1963 Sae X, a Mae Nai villager, planted two hundred peach seedlings in a field which he cleared not far from a road constructed by the Thai government. Two years later a government official told Sae X that he wanted to temporarily plant some pine seedlings in Sae X’s peach field. He apparently assured Sae X that he would be transplanting the seedlings in one year’s time. According to Sae X when he visited his peach field in the spring of 1966 he found that some pine branches were damaging his
peach trees, so he clipped back some of the branches. When the official learned what he had done, he told Sae X he was destroying government property and trespassing on government land. Sae X argued that the land was in fact his since he had cleared and cultivated the field long before the government's interest in it.

This problem, though easily interpreted as a simple misunderstanding, demonstrates the conflict between two different concepts of land ownership. Sae X is, in fact, in the right if we are to evaluate the problem in the context of Kao tradition covering land use. He was the first to clear and cultivate the land and, therefore, it belongs to him and his heirs until the field is abandoned for more than twenty years. The government official, on the other hand, is representing government interest, and under Thai law, the government is legal owner of the land.

In such a dispute it might be assumed that either the community of the cultivator or the headman of the Kao Dong-Kao Rim shaw would support his claims. However, this was not the case. In fact Sae X's own minor lineage did not come to his aid when asked to form a delegation to argue the dispute before the Thai officials concerned. It was never allowed to become a dispute between Kao Nai and the government, even though every Kao in the shaw felt
resentment over the unilateral confiscation of their land use rights exemplified by this case.

The White Kao conceive of land rights as attributes of individuals, focused in the headman of the household cultivating the land. It is to uphold these rights held by the minimal lineage unit that cause related individual households to band together for protection and mutual aid. Although the cultivation of contiguous land may strengthen other relationships and be a basis for their continued maintenance, the right to cultivate contiguous land does not in itself give rise to the relationships. Right of cultivation is, in a sense, individualistic, for no matter how many people or groups may have ownership rights in a tract of land, the head of the minimal lineage which felled and cleared the climax tree cover has the right of cultivation over the land for as long as he remains in the region and is not prepared to relinquish these land use rights. No one else has that particular right, unless the land use right is transferred to him by inheritance, gift or lease. On the other hand, a man’s lineage, in this case members of his minor and major lineage, has the right to support and defend the rights of its group against outside interests. If a man’s minor lineage, as residents of a single community, support and defend those rights,
it might be possible to assert that such tracts of land are the communal property of the village, for use of such land should first receive the approbation of that section of the community which upholds individual rights over land.

Inheritance of Land, *cuabyes1 cuhabtam*

The White Néo expression referring to inheritance, *cuabyes1 cuhabtam*, does not mean rights to land except by extension, rather it means family (household) utensils and silver. The rights of cultivation over a father's or grandfather's swidden are, nevertheless, the most valuable possessions, which are transferred upon death. In general, it is the practice that on death, land remains within the minimal lineage. The son who remains within his father's household, caring for and sustaining his father and mother, is the sole heir to all land cultivated by his minimal lineage group. The White Néo insist that this is the fairest method of dispersal, since it is that son which, in fact, has probably cleared and cultivated most of the land held by the minimal lineage. But this sequence of inheritance is only possible if death occurs at a given time in the domestic cycle. If death happens when all the sons are pre-adolescent, or if for some reason all sons have moved to separate or neighbouring households, another method of land distribution is necessary. In the former
instance, the father's brother or some other minor lineage
guardian of the children, assumes the rights of cultivation
over the deceased's land for the children. Thus the land
remains de jure, within the minimal lineage while being
cultivated by members of the major lineage. In a sense,
then, rights to land might be said to be vested in the
minor lineage in such cases. For when a member of the
minor lineage administers the land, it subsumes the rights
held by one of its minimal branches. Such an inheritance
can be compared to fusion for the land is, de facto,
brought back under the control of the minor lineage
represented by the guardian of the bereaved minimal lineage
group. In this context, what we would call inheritance of
land is analogous to the merging of two minimal lineages.

If the death of a minimal lineage head occurs after
all his sons have married and moved into separate house-
holds, the distribution of rights over the deceased's
lands follows a different pattern. Unless prior dispersal
is decided upon, the principle of distribution is faib
sib ngaupung, the equal division of land among the sons and
brothers of the deceased. But even in this case there
are conditions attached to the equal dispersal of
cultivation rights, for it is usually applied only to those
who have contributed to the burial and in particular to the
acquisition of a sacrificial cow. In this context, inheritance is comparable to the fission of a minimal lineage, with portions of its property rights dispersed among its higher segments. When Lee Sae Liu died, all his sons were living under separate roofs. It was rumoured that Lee had asked his youngest son, Pow, to leave his house because of the boy's bad habits and opium addiction. He was more of a burden on his father's household than help. They maintained, however, that Lee and his wife would move into his son, Sae Lu's household, when he was no longer able to carry on by himself. The land rights to Lee's swidden were split between the members of his minor lineage, but not equally, for Sae Lu provided the sacrificial cow. Sae Lu claimed one half of the total of his father's swiddens. The other sons, however, did not want to give up their equal *mân* claim to their father's land despite the fact that they did not contribute to the acquisition of a cow. The matter was finally settled by the elders of the major lineage who determined that the land should not be split at all, but rather that the sons of the deceased should cultivate the lands together. What actually happened was the splitting of the inherited land on an equal basis despite the judgement of a joint inheritance, *koom txais ib lub cuabtam*. It is noteworthy
that all of Lee's sons were full brothers, and it was perhaps for this reason that the elders decided upon a joint inheritance, for the villagers feel that a minor lineage of this type should be able to cultivate a common swidden. The five brothers in this case divided the seven swiddens by taking one each and splitting up the others proportionately. These were allowed to fallow after a number of disagreements made cultivation impossible.

Any cases involving half-brothers are usually settled by the youngest son of the first wife receiving the cultivation rights to all land, unless some other distribution is executed by the head of the minimal lineage prior to his death. In all cases of joint inheritance some consideration is given to the size of the minimal lineages included in the inheritance. In the above case an alternative division was proposed, whereby Lee's oldest son Wu would take over the two swiddens left in balance after the equal division, since he had a large minimal lineage, six sons at the time of Lee's death. All the brothers had agreed to this allocation except Sae Lu, who maintained that he should receive one of the two. Due to the fact that both swiddens were old, Wu and Sae Lu agreed to put them into fallow rather than argue about who would receive which field.
Three main principles are evident in the White Meo concept of land inheritance: 1. The use of a deceased man's swiddens usually is passed to the son which looks after his father and sacrifices a cow to his spirit. 2. Land use rights stay within the minimal lineage and, if not, within the minor lineage. 3. Villagers prefer to hold land rights in units no larger than the minimal lineage. These precepts do not allow for equal sharing of land among sons or the guardianship of pre-adolescent children, but they do assure that every man has a right to land. In actuality, each individual case of inheritance is handled according to the particular circumstances surrounding it.

Joint inheritance is an expression used to imply an inheritance or gift to a minor lineage group without the division between the minimal lineage units specified. It is a symbol of a relationship between people rather than the assumption of common cultivation rights, for minimal lineages will spatially divide such an inheritance between them.

Land Rights by Gift and Lease

Land rights are frequently transferred by gift. This most often occurs when an aged father or paternal grandfather desires that certain tracts of his land be given to sons and brothers living under a separate roof. In such
cases he will specify to the elders of his major lineage, and the village headman, if he so desires, which land is to revert to his minor lineage heirs at the time of his death. Alternatively he may turn certain swidden over to minor lineage relatives before his death, but this is rare, because he may be forced to ask for his gift to be returned if he recovers from his illness. Such behaviour is called, _sub txess cub txes_, and has, as the American idiom "Indian giving", derogatory implications.

Another form of land gift is to _ahua_, those of another maximal lineage, but more specifically to a man associated with uxorilocal residence. In such circumstances a man's father-in-law may turn over certain swiddens to his daughter's husband as an inducement to maintain uxorilocal residence, or simply as an act of goodwill. Rights over such land are subject to residence, because such a minimal lineage has no resident minor lineage to quarrel against encroachment on its land rights. It is usually understood that when a son-in-law departs from the community his rights lapse or revert to his wife's father. If he returns to his wife's father's village, he will have to be accepted as a resident again before his claims to such land will be considered.

1. _ahua_, _hauv nese_, and _ob ces nub txhai_ all refer to those of another maximal lineage, but _ahua_ is used most often for a man living with his wife's minor lineage group.
Rights to cultivation are also given to members of one's major lineage. In villages like Kae Kai and Khao where land is becoming scarce because of external pressures, fallowed and secondary forest land cultivation rights are frequently given to poorer minimal lineages by wealthier ones. These rights are usually for provisional periods or for one cultivation cycle. Tuso Sae Vaj of Khae village was provided with three rai by his father's brother, Su Sae Vaj, on the condition that he fell the large trees, clear the land and use it for only two years. Since the land was situated near the village the conditions were accepted. In another case Chong Sae Vaj was given total and perpetual cultivation rights over a one rai swidden by his brother Jua. There was no apparent exchange in this transaction. In both villages there was a total of thirty-two rai which were under cultivation by minimal lineages other than the ones which possessed the cultivation rights. Nineteen of these were gift transactions between members of equivalent minor lineages. Ten rai were cultivated by members of the possessors' major lineage, while only three were cultivated by haiy nea. One of the three was leased to a non-Heo living within the village.
Leases, **txaus**, Borrowing, **sey**, and Land Sales

Leases are those land transactions in which rights of cultivation are temporarily transferred in exchange for another good. Although the White Kao have no word meaning lease in the sense of the English word, **txaus** is used by cultivators to express the exchanged basis of such rights over cultivation land. The collection of rent in any form for the use of another villager's swidden is a rare occurrence. The villagers explain it in these words, "When a man clears a field, he believes in his heart that the land is his to use, but he knows that his *kuyi* and the whole village have an interest in it." In two of the cases where non-agnates leased land, payment of any kind was refused the first year. On the second year when the lessee asked to renew his cultivation rights, one of the **txaus** swiddens was renewed without payment, while at the other, the lessor was promised four buckets of maize from the harvest. In the final case a small swidden near Khao village was leased to a Thai trader temporarily resident in the village. Payment of three and one half kilos of opium was made on a yearly basis, following the poppy harvest. This arrangement was only renewable through negotiation held at the time of rental payment.

The White Kao do not believe that rent should be
charged among trum tim, villagers, and maximal lineage members, *xenm*. Only under extraordinary circumstances should a man have to pay his trum tim or kurudj money rental. Not even a token payment is normally accepted for it is more advantageous for the minimal lineage which holds cultivation rights to have a goy, borrower-lender, relationship with other members of its lineage and community. By developing a goy relationship with other residents, a minimal lineage builds on the system of reciprocity, which binds the villagers and lineages to one another. On the negative side any acceptance of rental for land validates the right of ownership over land.

Cultivation rights as conceived by the White Khoo cultivators are expressed in actual cultivation and are rights in space relative to other persons, not rights over the land. Thus, the cultivators are reluctant to temporarily transfer cultivation rights over their fallow land because they are aware of the lack of productive land and the necessity of an uninterrupted fallow.

To understand the goy relationship it is necessary to realize that it is not a purely economic concept. Rather, as Hauss has noted, it is one in which "the circulation of wealth is but one part of a wide and enduring contact." (Hauss 1923: 10-25) The goy are
voluntary exchanges between individuals and groups of individuals that are partly motivated by the returns such actions are expected to bring. A minimal lineage which allows another group to cultivate its swidden is initiating a series of exchanges. Each exchange whether it is ceremonial in form or not, involves favours that create future obligations. The nature of the return is usually unknown and is left to the discretion of the one who makes it. However, there is frequently an understanding of the type of return expected. Thus when Su Sao Wa lent his fallow field to his brother's son, he did so with an expectation of a future repayment, xob. Perhaps this xob would not be completed within his lifetime, but he knew that the obligation would be imparted to his minimal lineage. Such debts are not thought of as being between individuals, ib teay nas, but between minimal lineages. Obligations are passed on from generation to generation, tian, within the minimal lineage. Many villagers speak of gey as a kind of insurance in justifying such land transactions. "If I allow him to borrow such-and-such a swidden, when I am in need he will come to my aid." By practising gey, a system of reciprocity is developed which has an enduring continuity. It is perhaps because of their lack of permanence either as individuals or enduring social
groups that outsiders, *khum khai* are occasionally exempted from this exchange system. The White Hmo are also aware that the northern Thai people, *cor phay ywaeb* and the Thai government, *thaib vaj*, do place monetary value on land and conceive of all land as being owned. The villagers are constantly reminded that they must pay taxes, *tae*, on the land which they cultivated. In Mae Nai various types of taxes are collected from villagers. The land on which the village and surrounding swiddens are situated is owned by the Royal Thai Army. Thirty to seventy baht a year are paid per household to army officials for the right to cultivate the land. In addition an assessment is being made on all land which is or has been under cultivation, including fallowed secondary forest. The cultivators resent the fact that they must pay an equivalent tax on land in and out of production. Fallow land which may remain unproductive for up to twenty years is not considered as asset by shifting cultivators, who consider their rights not in the land but in the space relative to other persons. Such a land tax places additional pressure on the land hungry cultivator to put marginal fallow land back into cultivation before adequate regeneration has been possible. It also encourages the reluctant possessor of cultivation rights to lease out his fallowed land, so that
he will have sufficient income to pay the land tax. Thus the fragile cycle of regeneration which permits the environmental balance to be maintained is no longer in effect.

Despite the knowledge that other peoples consider ownership of land the basis for their right to cultivate it, the White Nee have maintained their belief that uncleared land is for those who use it. The sale of land remains a difficult concept for the villagers to comprehend. Since cultivation rights to land follow residence rights and every villager has the right to sufficient cultivation land, the permanent transfer of land is not relevant to their situation. As long as a villager remains in a shan he has the right to cultivate any available uncleared land and since no one can cultivate land where he is not living, such land is passed onto his lineage or cultivation rights in it are abandoned. Residence and the right to land become an inseparable part of the social groups which cultivate it. When the land is exhausted these groups move on to another area where there is a greater abundance of land. In both Khae and Mae Sai the density of population may soon require such a movement. The exact reckoning of the population densities which would, over a given period, require such movement has not been calculated,
however the segmentation of Jak Kyn hamlet from Mae Nai and the encroachment of Khao swiddens by neighbours is indicative of the pressures already at work.

Villages of over twenty households are considered by many White Khe cultivators to be cumbersome. Land around the village is too rapidly exhausted and the search for new swidden sites forces the cultivators further and further from their village. A village like Khao with twenty-seven households and a population of two-hundred and sixty souls has already reached the size when fission is near at hand. Perhaps the desire to band together for protection will prevail in the short-term, but the need for sufficient land cultivation seems to eventually overwhelm other motivations. The important point is that all residents have the right to adequate land and when such land is unavailable, segmentation occurs and the villagers move on.

The Lineage and the Swidden

A number of factors have influenced the dispersal of maximal lineages. Since the White Khe depend on the cultivation of highland swidden for sustenance, a villager must have sufficient land to meet the needs of himself and his dependants. If every villager who needed more land expanded by pressing his neighbours fallow into production, the rewards of production would not balance against the
marginal return from insufficiently fallowed land or the disputes which would arise in the community. As land surrounding a village comes into short supply because of lineage expansion, segmentation results.

Villagers in both Khae and Mae Nai are aware of this increasing demand for land as a result of the increase in population, not only of the Kao, but other hill groups. They often speak in terms of genealogies and the expansion of lineages to demonstrate this expansion. The increasing demand for land has had an effect on the fission of the lesser lineages in their efforts to find new land. Many of the lesser lineages are increasing spatially in their effort to comply with the demand for land. The expansion means the breaking up of segments within a village, but before this occurs the villager tends to attempt to cultivate any suitable land within a reasonable distance from his village. Since reasonableness is highly relative, some cultivators may journey five hours to their swiddens while others consider two hour's walk too far. The consequence of this search for land is a movement away from the village to the swiddens. Thus a minimal lineage may be the first to segment, but its fission from its minor lineage and its parent village is a gradual process involving a sequence of longer periods at distant swiddens.
sites. Leo Sae Yaj of the He Ju Sae Yaj minimal lineage at Mae Nai, spent extended periods in his new rice swidden. The time consumed by walking three hours from the village to his fields was too long to warrant his returning every night to the village. Lee is contemplating moving permanently to his rice swidden, but is delaying the move for two reasons: he must wait until his younger brothers are old enough to help manage his aged father's household, and he is anxious to find other households in the village which will move to the new site with him. The minimal lineage of Qua Sae Lis is his first choice. He wants a cuab or many cuab from the same generation and approximate age as his own, but he does not want, initially at least, any cuab from his lesser lineages or his maximal lineage. The first thought is to have an opposing maximal lineage into which his children can marry. Ideally this is Qua's minimal lineage, for any marriages between these two cuab would result in a cross-cousin association. Lee, with some pride, says, "This was the way in which my father moved away from his father's group." The result of this intention is that the minimal lineage of He Ju as well as the minor Sae Yaj lineage of Mae Nai will be split into a new set of lineages, in terms of the expansion of more inclusive lineages.
Every lineage segment on the periphery of its parent community is considered as an expanding unit. The movement of expansion is toward uncleared primary or secondary forest and is correlated with the pressure of population. Other pressures hold the lineages together. One of these is the commonality of ancestors which bind agnostic descendants together. A second is the search for marriageable women of another maximal lineage. One solution to the lack of suitable women results in a flux of fission and fusion. A case of this type has been examined, where a minor lineage or cluster of households, moves to a location distant from the parent village but near uncultivated lands, only to return after a few years so that the sons might find wives (see p. 344). This sort of temporary segmentation was possible in Khao village where the returning minor lineage was able to find space, but even there the returnees were forced to find a household site two hundred metres from the nearest village households. In other areas such as the Hong Dong-Kaam complex, any attempt of a lineage to return to its earlier site may be impossible, since as one segment leaves an area another may move in. Thus temporary segmentation is less feasible in heavily populated areas where the demand for land is at a premium. It is then possible to state
that population pressure is the most probable cause of the permanent segmentation of lineages. In the Hong Dong-Kaa Hiu region, land shortage and limits placed on migration will possibly have the same effect on the segmentation of lineages as is evident in the southernmost areas of Ngao migration. Such mega-villages as Huai Sae in Amphur Lomsak, Phitsanuloke Province, have over three hundred households, which are divided into sections ten to fifteen minutes distant from each other. Consequently, the major lineages in such regions have expanded to a much larger size than those in the north. Many major lineages in these southern regions, where the mountains meet the lowland plains, have over sixty members, which contrasts sharply with the size of major lineages in Chiangmai Province. This is due at least in part to the barriers against continued southward migration. When confronted with the temperatures, topography and Thai populations of the plains, the Ngao prefer to halt their movements, which creates high density populations as other groups from the north move into the region. If this population could migrate freely, it would probably disperse itself over a larger area, thus continuing the process of segmentation.

A population in such a cul-de-sac would prefer to expand into adjacent but separated areas, such as
demonstrated in the splitting off of the Ju Jee minimal lineage leading to the eventual settlement in Zoga Ju Jee. Thus they would be close to suitable agriculture, but at the same time be near other members of their major lineage group. As they expanded their cultivated swiddens they would eventually meet, forming an area of contiguous swidden and major lineages. At that point, as the White Neo themselves point out, the entire shan group of adjacent villages would migrate to a new area where primary and late growth secondary forest was abundant.

Cultivation rights are of fundamental importance and the values which surround the rights to cultivate are the foundation of the White Neo socio-economic system. A cultivator's primary concern is to maintain cultivation rights over sufficient land to support the needs of his minimal lineage, while at the same time maintaining his position in the group which forms his agnostic lineage. For by remaining within a large group of his agnates he is assured the support of his lineage members in any dispute he may have over his cultivation rights. So long as it remains near its parent village, the minimal lineage can call upon the support of its wider lineage attachments when confronted with opposing claims to land and other resources. Thus in Khao village when a dispute arose over
the boundaries of adjacent swiddens, Pia Sae Vaj was able to muster enough support from his father's brother and other members of his major lineage to force his opponent to back down and relinquish his claim. Conversely, the small hamlet founded by Jua Sae Vaj near the Karen village of Yang Sa Ne found itself in a minority position unable to defend its cultivation rights. Cultivation rights are only one element in a larger, all encompassing series of reciprocal rights and obligations which form the basis for the lineage network of relationships. It is the protection afforded by clustered residence of minor lineage members within the region, ohaw, of their major lineage which restrains the segmentation process. Within such an ohaw a minimal lineage can enjoy the co-operation and mutual benefit brought about by his membership in an exclusive agnatic group. However, when a village becomes large and cultivation rights are jeopardized by competition within the lineages themselves over the scarce land resources, the pressure to find new land becomes the predominant motivation. Thus the villager is faced with contradictory influences in his decision-making process.

Many villages in Mae Nai point out another factor influencing their decisions on segmentation. In a ohaw such as Hong Dong-Mae Him, there is less competition over
land above one thousand metres, since no other hill groups are in the region. There is also the protection afforded by proximity to Thai government authorities. Due to the lack of disputing tribes and the pax-Thai prevailing in the region, the Neo are able to split up into smaller communities than would otherwise be possible. There is no longer the need to band together in order to defend one's interests against outsiders. Mae Nai villagers, while admitting this basic premise regarding the protection of their rights, point out that they are presently confronted with a new rival for cultivation rights in the form of the rights over land claimed by the Thai government itself. These contravening rights are manifested not only in decisions affecting land use, but also in the right to clear uncultivated land without remuneration to the government itself. If the desire to maintain safety should override other considerations a reversal in the trend toward smaller villages may occur, as it has in Khae. The pressures upon Khae cultivators are such that the villagers are very open about their desire to expand the lineages within the village. Daily complaints are varied regarding Karen encroachment on village land. One solution to the problem was the migration of the entire village to Laos. By these means lineage solidarity and
support were maintained, while a solution was sought. Unfortunately, disadvantages overrode the advantages. The desire for an easier and more pleasant life, which White Keo associate with smaller communities, led the majority of villagers back to Khae.

There is a constant search for an equilibrium between maintaining cultivation rights and at the same time living in a community where there are sufficient supporters to maintain those rights. Perhaps this is why minor lineages, with or without affinal households, prefer segmentation within a chaw, which insures that close contact with the major lineage of the parent village can be sustained. When the need for solidarity arises it is then readily available. Villagers can close their ranks, lineages merge and fusion replaces fission. The fission of related chaw villages rarely leads to a total cleavage between the lineage leaders and their dependants. As in the case of Jak Kyn and Kae Bai, there are common councils and meetings of elders on most issues affecting the communities, and separateness is only maintained on those matters which may have led to fission in the first place, such as cultivation rights over certain land. Even in instances of fission over cultivation rights, major lineage members from nearby villages often help each other
in stress periods of the cultivation cycle, as well as assisting their closest genealogical agnates in disputes within the larger lineage or community.

Individuals or minimal lineages, *qua* na, which leave clusters and villages associated with their patrilineal group, to live with other members of another maximal lineage take a large risk, for they no longer have the support of their agnatic lineage members when needed. Nor do they have the support of those lineage ancestors which are bound to the lineages that support and venerate them. Probably it is for this reason that few men maintain residence in their wives' natal village for extended periods.

Finally it is the *poixem*, people of the lineages, governed by outsiders which is the cohesive element in White Kao political concepts. Thus total unity is latent within the lineage system.

Summary

The two principles, place of residence and relationship, are the primary means by which an individual can affiliate with other White Kao. These principles are expressed in the questions usually asked of a new acquaintance: What is your name? "Kol lub mue bu li oes?" Where is your village? "Kol nyob yus oes?"
The social system which is based on the lineage system and the organization of kinship relations supersedes the lack of political unification, moulding the White Haeo into a complex network of interdependencies. Members of each household are related to other members of their community in two primary ways: as lineage kin and as affines through the institution of marriage. While the term *kin* is used to refer to the household spatial group, *cunb*, which often corresponds to the household, is the smallest lineage segment, being composed of all agnatic kin and their affines living within one household under the authority of one household head, and possessing common property. A lineage, *kuyil*, is a group of patrilineal descendants within a system of such groups. The men who live in the smallest or minimal segment are a lineage within a lineage system. They are distinguished as an enduring group consisting of all the patrilineal descendants of a single ancestor. Since *men* is used to refer to the largest group of agnates, it is comparable to its lesser segments, in that it is not an entirely unique group as a segment in a system of groups. Lineages are not always corporate, localized groups, although they are frequently associated with territorial units. Members of a lineage who live in an area associated with it often
conceive of themselves as a residential group. It is often these patrilineally related clusters which determine the residence patterns within a community. Lands surrounding the community are referred to as liia li, lands and territory belonging to the minimal lineages of that community. Cultivation rights over land are of fundamental importance to the White Neo, and the values which support the right to cultivate appear to be the foundation of their socio-economic system. A cultivator's primary concern is to maintain cultivation rights over sufficient land to support the needs of his minimal lineage, while at the same time maintaining his position in the agnatic groups through which he is assured the support of his lineage members in any dispute he may have over his cultivation rights. This results in an effort to maintain the equilibrium between having adequate land for cultivation and at the same time living in a community where there are sufficient supporters to maintain these rights.

We now turn to marriage which is the means by which ties are created between lineages.
CHAPTER V

MARRIAGE

Incentives for Marriage

The selection of a spouse is a primary goal of all males, and the sole motivation of most females in a White Meo community. Along with marriage come the goals of having many children, especially sons, and eventually a household of one's own. To be the owner of one's own house means more than ownership of a physical structure; it indicates a position of authority within one's clan and represents the center of one's world. To have one's own yin is the driving desire of most young couples.

Marriage, then, is one of the most important events in the life of an individual villager and his clan. An oft repeated adage illustrates this importance, "Qab teb peb xub noaws nkaaj nyab peb xub awa," 'We were the first to clear fields and the first to claim the prospective daughter-in-law'. This idiom, besides implying the competitive nature of marriage as a family selection, expresses the attitude of first rights over swidden and daughter-in-law. The villagers list three important benefits of marriage: the ability to have sons, the acquisition of a worker, and the assumption of those alliances and contracts which are derived from one's official relatives.
Other reasons for marriage are less mentioned but quite evident to the observer. Since the household is the productive unit of the village, it is desirable to have and direct one's own work unit. The traditional division of agricultural and domestic chores between men and women make marriage attractive. It is also impossible to compete materially with one's peers as a single householder. Women supply most of the subsistence needs and provide a routine and manageable labour source. However, substitutes are available for these facets of marriage, for parents, siblings and other relatives can and do frequently complement these roles. Unmarried men usually remain in their parent's household and widows can always depend on their husband's kin for assistance in heavy work, such as the clearing of a new swidden. Any man who desires power, respect and wealth in the community must marry, however, for it is his wives and children who provide him with the labour force necessary to attain wealth and thus respect and power.

The concept of marriage is also reinforced by the usage of ntsuag to designate orphans, widows, widowers or any individual without parents or husband and wife. The meaning is explicit for ntsuag is a short and isolated sprout of a tree or bamboo. The word itself evokes pity, for when used to describe individuals such as menyam ntsuag, or orphan,
or ณธณ, the implication is of poverty and loneliness. Thus by definition White Meo society tries to prevent such a lack of non-attachment from its members.

Finally, marriage as one of the three most critical rites de passage in the life of an individual marks the transition from adolescence to manhood and the assumption of adult responsibilities.

The selection of a wife is an important matter, especially in the first or primary marriage. Most marriages are monogamous in Mae Nai and Khae, but in the case of polygynous marriage, second marriages for widows and widowers, incentives and purposes may differ from those of the first marriage. Due to the unfettered sexual freedom prevailing in most villages, the selection process, which is often regulated by parental selection of a suitable girl, is quite often ignored. In the evening the villages come alive with the visiting boys from other villages and the interchange between village girls and boys. The chawg, a form of mouth harp, used for courting and giving off a low muffled pitch, can be detected at different locations throughout the village. Although there is a differentiation of copulation in and out of marriage, there is no discouragement of ณธณนกุ้า except with certain prohibited categories of relatives. One girl of fourteen years had four concurrent sexual partners, and
there were often arguments over which boy was in favour.
In Neo villages there is no vagueness about sexual dictatorship and no evidence of any homosexuality, for as soon as puberty occurs the girls begin to have liaisons in the swidden during the day and in the forest nearby the village at night.

Selection of a Mate and Age Consideration

Choice of a bride is usually based on her industriousness and known agricultural abilities. A girl renowned for her hard work will consequently demand a higher brideprice, for not only will she be an economic asset to her future husband and his *cunb*, but the loss of her abilities in her father's household make him hesitant to part with her. Health and energy are an evident part of this economic factor being behind wife selection.

Political factors are also considered, for an ambitious and influential *cunb* tries to obtain a daughter-in-law from a large and wealthy lineage so that their status in the village is enhanced. Often these political alliances take place between two *tug hau zog* village headmen as a consolidation of power.¹ Such political alliances usually result in a friendship alliance or the fusion of two villages.

Infancy betrothals are common in such cases.

¹ A case of this kind occurred in 1965 where the villagers of Lao Sung and Hual Khuman were joined by a marriage of their headmen's children.
Coincidence may determine the choice of a mate, as when a boy visiting relatives in another village meets a girl and love ensues. Finally, location exercises an important influence, for the ideal practice is to choose a spouse from nearby. This practice acts like the cross-cousin marriage in reinforcing existing kinship ties and consolidating property. Also parents like their children to reside nearby, and unless political decisions dictate otherwise, they try to arrange that their sons and daughters marry locally.

To obtain a wife, may be carried out by a variety of methods. Ideally a man should court a girl whom his parents designate as suitable, then to approach the willing girl's father through a tug nothawj intermediary. Another common technique is to take a girl from another village unwillingly, phag chawy cho lanoy cab, with or without the approval of one's parents. The captive girl's father or lineage cluster must then be contacted within three days of the abduction by a representative of the suitor's household. Any property which the girl might have possessed at the time of the abduction must be returned with the representative. If the girl's father is not notified within three days, he has recourse to a fine that the headman of the abductor's village is obliged to enforce. Such fines vary from community to community, but consist more or less
of thirty rupees, one bottle of millet whisky, and two
chickens, if the girl is returned to her parents. On
the other hand, if marriage negotiations commence, in
spite of the abduction and breach of etiquette, the bride's
family may demand an additional sum of forty rupees be added
to the bridewealth payment. "The abduction of a girl and
her presence in her suitor's household are considered to be
favourable negotiating points for the wife-taker's household.
The younger the girl is and the older the suitor the greater
is the incidence of abduction. The usual marriage age for
a male is between 20 and 25, while females frequently marry
as young as thirteen, but commonly wait until they are nine-
teen or twenty (Table XV). In Mae Nai a total of six husbands
married before they were twenty, in comparison with eighteen
who waited until their twenties. In contrast only five wives
waited until their twenties before marrying, while twenty-
two married before reaching their twenty-first birthday.
A White Meo adage expresses the desire of a father to marry
off his daughter at an early age, 'Daughters are like passing
water pigs; therefore it is best to marry them off before they
become of importance in the household'. The symbolism of
passing water refers to the fact that daughters marry and
leave their natal household and village, thus they are at
best temporary members of their paternal households. Also
### Table XV

**Age of Marriage in Mae Nai**

<table>
<thead>
<tr>
<th>Households</th>
<th>Men under 20</th>
<th>Men under 30</th>
<th>Women under 20</th>
<th>Women under 30</th>
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<td>1</td>
<td>2</td>
<td>2</td>
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<tr>
<td>2</td>
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<td>17</td>
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<tr>
<td>Total</td>
<td>6</td>
<td>18</td>
<td>22</td>
<td>5</td>
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</table>
to be noted is that boys from wealthier households tend to marry at a younger age since they are better able to obtain funds for the bridewealth payment. All of the six males who married under twenty came from the more prosperous households in the village. Members of poor households often pass the ideal age before marrying for their labour resources are needed at their father's household, and they cannot accumulate sufficient bridewealth to afford a bride.

The third method of bride selection is the most commonly arranged, but least practised. The household often establishes a marriage bond with the father of a marriage partner with whom it is considered advantageous to form an alliance, whereby their child or unborn children are actually promised to the son or daughter of the other party in marriage. This is symbolised by the giving of a heavily embroidered cloth or a payment of four rungers to the wife-giver, when a child of the correct sex is born. A girl promised in such a ceremony is usually compelled to marry her selected partner. However, if a boy wants to break this arranged engagement he can do so by paying a small fine to the girl's father. If such a girl has another suitor who wants to marry her, the suitor must pay a double bridewealth, a portion of which goes to her betrothed groom. Such arranged infant betrothals are often made between those households which
consider their progeny to be preferred marriage partners.

As will be illustrated, ideal or preferred marriages are a minority of the marriages in both Nao Hai and Khao. Adolescents and adults of marriageable age have their own ideas concerning an appropriate partner and these often conflict with those of their parents. This is highlighted by the fact that the range of permitted marriage partners may not coincide with those with whom sexual relations are permitted.

Prohibited Marriage Partners

Over-riding all other factors influencing the choice of a mate are those based on kinship. Marriage is not permitted between members of the same maximal lineage, xeech, close cognates, close natural kinsfolk, close kinsfolk by adoption, close affines and individuals from different generations. Although the White Nao prohibit marriage between members of the same xeech, sexual relations with distant members of the same maximal lineage are tolerated, especially when the parties involved reside in widely separated villages. A man may not marry or have sexual relations with a woman of his own major lineage and a fortiori with those of his minor and minimal lineage groups. Villagers can conceive of the possibility that maximal lineages may segment with one lineage adopting a new surname, but insist that they have
no knowledge of this happening. However, if such a segmentation of a maximal lineage did occur, there would no longer be prohibition on marriage between the members of the segmented maximal lineages.

Marriage is prohibited between a man and woman of his mother's natal minimal lineage; however, certain members of a mother's natal minor lineage are preferred marriage partners. Two sets of prohibited categories exist for the White Neo and are terminologically distinguished. Those prohibited females related to a man through his mother are designated as cov nima, mother's group. This category includes mother, nima, mother's sister, nima tais and mother's brother's wife, nima dag laag. These terms prefaced by nima contrast with the non-prohibited mother's brother's daughter, maua npawg, roughly translated, sister of another maximal lineage. The second category of prohibited women includes all of his maximal lineage members or clanswomen and are referred to as xeem poj, clan females. Included in this group are father's sister, whuai and sister's daughter, mentxhaig, and contrasting to the prohibited category is father's sister's daughter, maua npawg. It is considered a more serious offence for a man to marry or have sexual relations with the prohibited categories of his xeem poj than with his cov nima.
Once a girl has been adopted into her foster father’s household, she becomes a member of his maximal lineage and therefore cannot marry anyone from her adopted father’s maximal lineage. Bridewealth is claimed by her father’s minor lineage, whether he is genitor or not. She may, however, marry members of her natal maximal lineage, and, in fact, may marry natal minor lineage kin.

Affinal and generational prohibitions against sexual relations and marriage are also operative. Wives’ sisters or any minor lineage member of a wife cannot be taken as second wives, and a man may only marry his wife’s sister if his wife has died childless. Most White Hec men felt that this was a peripheral prohibition and did not recognize it as prohibiting sexual relations with their wife’s sisters; however, the women indicated that the prohibition was as rigid as those against sexual relations within the maximal lineage. This prohibition is sometimes extended to brothers who desire to marry a pair of sisters, for such an arrangement prevents the younger brother from taking his older brother’s wife should he die. Similarly it is held that two sisters should not have sexual relations with the same man.

Generational prohibitions often overlap with other categories thus making prescriptions against such relations somewhat ambiguous. The prohibition against a man having
sexual relations with any of his father's wives or marrying any of his widows is often extended to those women's own sisters. A man may have sexual relations with members of his father's generation without being punished, but he may not have relations with wives of lineage members, who are in loco facto considered members of his maximal lineage. Since almost all women of an older generation, tiam, are married, it is the prohibitions against adultery which are usually prohibitive. Father's sister, mother's sister, sister's daughter, mother's brother's wife and wife's brother's daughter were all included with wife's brother's wife as protected because of adultery. More distant kinsmen are likely to demand compensation for adultery than members of the minor lineage. Although prohibitions outside the extended family do not appear to coincide with the nearness of biological kin, a man is often compelled to marry a woman from another village due to the extension of prohibited categories to all of his agnatic kin. In effect these restrictions based on kinship reduce by approximately one-half the number of otherwise available women whom a man may select as his spouse in Mae Sai and by one-fourth those otherwise available in Khao. This may be one reason why boys like to visit villages of maternal relatives where there is a wider range of eligible partners.
Sexual relations between members of the same sex are punished by public censure, fines and supernatural sanctions; however, the greater the genealogical distance between a man and woman the less serious is the punishment. In Khae a young couple having an affair of this type were twice threatened with fines if they did not stop seeing each other. On the third occasion fines were imposed on their cuab by the village headman. Their respective cuab met and decided that the boy should be sent on a visit to agnatic relatives living in another village.

More important than fines imposed if prohibitions are broken is the ostracizing of a person from his community. Such individuals are often driven from their father’s household and village, condemned to no longer enjoy the benefits of life within the confines of his minor and minimal lineage.

The majority of sexual relations with prohibited individuals are considered so because they are a breach of marriage rules. A person is discouraged from having relations with persons who may not become his spouse, thus relations with daughters of his father’s sisters and mother’s brother’s and sister’s are encouraged. These prohibitions can only be understood as part of the kinship system. A man is often forced by the rules of exogamy to look outside his community for a wife, thus creating affinal kinship links between

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1. Fines seldom exceed 33 rupees, one bottle of whisky and one chicken.
communities. Neighbouring communities become connected by a network of affinal ties which regulate the relations between communities.

Preferred Marriage Partners

In contrast to these restrictions which certain kinship ties exercise on the choice of a wife, other ties predispose relatives to marry.

The preferred marriage partner is the patrilineal cross-cousin, and to a lesser degree mother's brother's daughter. (Table XVII). The reason for this preference for patrilineal cross-cousins is not easy for the younger men to describe, and they did not attach much importance to marrying their real muem npawg or father's sister's daughter. Rather it meant that real and classificatory muem npawg were their recognised sexual and marital partners. A boy felt that he could exhibit a sexual attitude toward his muem npawg and he felt confidence in doing so, because he knew that his attitude was correct.

Both father's sister's daughter and mother's brother's daughter were addressed and referred to as muem npawg by their male cross-cousins. As with much of the White Meo kin terminology this is a compound term combining the term for sister, muem and npawg which is a complex term which can be used generically for anyone from another clan. It is also used as a term of address for someone of the same age whose classificatory
## TABLE XVII

### SIBLING & COUSIN TERMINOLOGY

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### APPRINES

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<td>RuEBr</td>
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<tr>
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<td>yaw: dab</td>
<td>RuYBr</td>
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<td></td>
<td>tis nyab</td>
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<td></td>
<td></td>
<td>nias noaus</td>
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<td>tie nyab</td>
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relationship is unknown to the speaker. Often White Neo
passing on the trail would address each other as npawg.
In addition to its use as a modifier for cross-cousins,
npawg was used as an elementary term for male cross-cousins
when a man is speaking. In this context muum npawg then
might be freely translated as 'sister of another clan' or
'sister of Pasimo, Morroso and Mobida', depending on the
emphasis desired. The relationship between a man and his
npawg was characterized by comradeship and joking, and in
many cases where these two relatives were of the same approx-
imate age, a special relationship developed, which can be
described as one of constant companionship and mutual trust.
They would lend money to each other, exchange confidences, go
hunting and play games, and when asked why they were such close
companions, they would answer, 'we are npawg'.

There is an ambiguity in the use of this term. 'Npawg'
is employed loosely to describe a comrade or very good friend
from another clan, in contrast to kwuluag, which is used for
a good friend from one's own clan. Kwuluag can be freely
translated as 'little brother'.

When speaking about muum npawg, White Neo boys would
often say, 'Why should we marry our muum npawg, when we can
marry anyone from our mother's clan, our mother's mother's
clan and our father's mother's clan?' Thus the freedom of
choice was expressed in terms of marrying specific non-
prohibited groups of females, which in fact were sisters of
classificatory mothers because there is a general prohibition
against marrying women of another generation. Any woman in
this range of relatives who was of a different clan but the
same generation was a preferred marriage partner.

In addition to the main features of kinship nomenclature
which reflect the expectation that cross-cousins should
interact sexually and intermarry, are the customs of property
inheritance. Real cross-cousin marriage prevents the dis-
semination of resources and property which is thereby kept
intact and continuously associated with one or two groups.
Due to the more stable relations developing from such a
marriage, and the fact that property is maintained within
a narrow framework of relationships, the wealthier cuab of
Khao and Mae Nai exhibit a higher incidence of cross-cousin
marriage than other cuab. Marriage between classificatory
cross-cousins does not consolidate property holdings to the
same extent but in other respects it is looked upon as pre-
ferred by young and old. Instances of classificatory cross-
cousin marriage occur frequently in villages, such as Mae Nai
and Khao, which are dominated by two numerically strong
patrilineages whose members tend to maintain the tradition
of intermarriage.
The genealogical data from Mae Nai indicates only one case of real patrilineal cross-cousin marriage, and this was between Sae Gale Lis and Na Chi Sae Vaj. (Figure XVI). There is an interesting background to this marriage which may demonstrate the relationships and obligations as they develop on the ground. Meng Gale Lis, the EBr of Sae, had taken his PaSiDa as his lover. About a year later Na Chi became pregnant. Her father Ju went to Meng and told him that he must either pay the fine of 33 rupees or marry his daughter. Meng told his PaSiHu that his daughter had been with many men and that he was sure that he was not the father of the child, besides only two months before he had married Na Ya Sae Vaj. Ju told his WiBrSo that if he did not marry his PaSiDa he would take him to the Thai authorities who would force him to do so under Thai law. To make the matter more complicated, Meng was at that time having sexual relations with Na Chung, the YSi of Na Chi. Meng then spoke to his YBr, Sae and asked him to marry Na Chi. Sae at the time was in love with a girl from Ju Jee hamlet. Meng then spoke to his PaYBr, Tua. These men persuaded Sae to marry Na Chi, but everyone felt that they should wait until the baby was born, and in addition Sae was only 14 years old. Ju was given 1 'joy' of opium to improve his wounded pride. Na Ya Sae Vaj, wife of Meng, then threatened to leave him because of his relations with Na Chung.
### Table XVI

**Marriage Prohibitions**

<table>
<thead>
<tr>
<th>Patrilinual Prohibitions, Xeen poi</th>
<th>Matrilinual Prohibitions, Cov niam</th>
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<tbody>
<tr>
<td>Father's Wife . . . . Niam . . . .</td>
<td>Mother . . . . . . . . Niam</td>
</tr>
<tr>
<td>Father's Sister . . . Phauj</td>
<td>Mother's Sister . . . Niam tais(yau)</td>
</tr>
<tr>
<td>Father's Brother's Wife Niam hlob</td>
<td>Mother's Brother's Wife Niam dab laug</td>
</tr>
<tr>
<td>Father's Brother's Daughter</td>
<td>Mother's Mother . . . Niam tais</td>
</tr>
<tr>
<td>Daughter Niam</td>
<td></td>
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<tr>
<td>Brother's Daughter . . . Mentxhais</td>
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<tr>
<td>Father's Mother . . . Fog</td>
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**Affinal Prohibitions, Cov naitna**

<table>
<thead>
<tr>
<th>Wife's Sister . . . . . . Mian laus (hluas)</th>
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<tr>
<td>Wife's Sister's Daughter . . . Mentxhais</td>
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<tr>
<td>Wife's Brother's Daughter . . . Mentxhais</td>
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<tr>
<td>Wife's Mother . . . . . . Niam tais</td>
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A month after this a Neo from another village visited Mae Nai and asked Ju for Na Chung. He paid a hang and they were immediately married. Soon after Sae and Na Chi were married. Neng and Sae now live in their mother’s house with their respective wives.

In Mae Nai there are two cases of real patrilateral cross-cousin marriage. Both of these marriages involve women from the village who have married and settled in another village.

It is notable that the brothers and sisters of the headman, with only one exception, took spouses from the Sae Hawj xeej, which all their father’s brothers children were married to Sae Yaj clansmen. Sae Lu’s explanation of this was that all of his siblings had married classificatory cross-cousins. In the village where his father’s household was, there were only two xeej - the Hawj and Sae Lis. Sae Lu liked to emphasize the tradition of cross-cousin marriage in his lineage and the importance of that type of marriage. This contrasted sharply with the attitudes of the younger generation.

The incidence of cross-cousin marriage in Khae is less than in Mae Nai. There were only three cases of real patrilateral cross-cousin marriages. Here again the cases were confined to three of the wealthiest households in the village: Bua Fa Sae Vaj, Wu Sae Yaj and Tua Sae Vaj. Only one example of matrilateral cross-cousin marriage was discovered, and that
was in the household of Seng Sae Vaj, who had married his mother’s brother’s daughter. However, numerous cases of classificatory cross-cousin marriage existed in Khao, nine of which were recorded.

Marriage Arrangements

As has already been noted, the ideal marriage arrangement involves the act of formal betrothal, *tki̯ tkau̯*, at the time of birth. In this way two sets of parents, whether they are simply unrelated neighbours, father’s sisters, or mother’s brothers, can determine what they consider the ideal marriage partner for their son or daughter. Such a *tki̯ tkau̯* is formalized by a symbolic cloth being given by the wife-takers group to the wife-givers. The act represents a serious undertaking on the part of both parties, with sincere expectation that it will lead to marriage. Betrothal can also be arranged before a girl begins to menstruate, *tki̯ tkau̯*, and in this case the symbolic ceremony of giving and receiving is identical. His later betrothal often takes place and simultaneously with the first menstruation, the request from a girl that she have a separate room in the house for herself. This also signals the beginning of sexual relations with boys of her own age and older. Since White Meo women do not control the menstrual discharge, privacy from parents and siblings is often a matter of great importance to any young
Bridewealth

The easy contacts and sexual alliances among adolescents lead to many marriages which bypass betrothal entirely. If a pair please each other, they may agree to marry and the youth requests his father to negotiate with the girl's minor lineage. Nevertheless, negotiating the betrothal or the impending marriage is not always a simple matter, even if both parents approve of the match, for there is usually some bargaining over payments. It is necessary to agree on the bridewealth payment before the marriage itself is formalized. The negotiations usually commence when the man's couab delegates a go-between the tschob zeeb or mei koob-meng koog, to approach the wife-giver's group.

The lengthy negotiation which precedes a marriage is always handled by the mei koob-meng koog, or representative of the two groups: wife-takers and wife-givers. There are a number of ways in which the marriage negotiations may be influenced. Initially, a man's father sends his representative to the girl's father after or possibly before any understanding has been reached by the couple. In both cases the girl's father will demand an exaggerated bridewealth. However, if he thinks this is a good marriage or is particularly interested in marrying off his daughter, this price is quickly brought
down through negotiation. If the price is too high, the
girl may go and live in her lover's household or she may be
kidnapped willingly or unwillingly by her suitor, if he comes
from another village. All these acts place pressure on the
girl's father to negotiate. The abduction of a girl and her
presence in her suitor's household are considered to be
favourably negotiating points for the wife-taker's group. If
the girl becomes pregnant, this also adds to the wife-taker's
bargaining position.

The negotiation between the nei kooh of the wife-takers
and the wife-givers continues until they reach a reasonable
compromise position. At that point the bridewealth nego-
tiation stops and wedding plans are discussed. At the wedding
ceremony itself the final compromise is made by the wife-takers.

Bridewealth commonly consists of a payment of 5 hang, or
crude bars of silver. If a woman has been married before and
she has no children, 100 rupees is deducted from the price.
If she has more than three children, the bridewealth is
halved to four hang. Also given to the wife-givers by the
wife-takers are one large pig, two chickens and ten bottles
of Nai whisky, which is the basis for the wedding feast.

Non-payment or partial payment of the bridewealth may result
in matrilocality residence, although the White Nai insist that
until the bridewealth is fully paid the marriage is not
formally constituted and that such a couple are living together out of marriage, which means that any offspring do not belong to the husband's clan. In some instances the bride's father and mother are taken into the groom's new household and supported by the groom and their daughter. Such support usually is reckoned as partial payment of bridewealth. However, this must be negotiated at the wedding and the bridewealth adjusted accordingly, otherwise a man's wife and children could not become members of his maximal lineage.

In two instances where this type of household group was observed, the bride's parents had no sons resident in their village and in one instance the bride's parents were very old and unable to sustain themselves. When inquiry was made into who was to sacrifice a cow on their death, it was indicated that their respective sons would return from Nam district to do this.

Although the bride's dowry is usually small, consisting of her clothes, personal effects and some jewelry, it may play an important part in the negotiation, especially if the wife-takers become reluctant at the last moment. The bride may receive extra silver necklopes and jewelry in order to make her more attractive to the wife-takers.

The presentation of the bridewealth is made by the majkoob of the wife-takers, who should not be from the groom's
lineage, to the representative of the wife-givers. The txiv hlob, father’s elder brother, and the txiv ntxawm, father’s younger brother, of the groom are called upon to assist the groom and his father in the payment of bridewealth. However, repayment of such a debt to father’s elder brother and father’s younger brother must be cleared and such accounts are reckoned from generation to generation. Elder brother and younger brothers are first and second respectively in the line of inheritance if a man has no sons. They also have authority over their brother’s children and are expected to exert discipline when the father is not present. If a boy’s father dies when the boy is still under twenty and he has no elder brother, his father’s elder brother becomes guardian over his father’s property, and the boy must move into his father’s elder brother’s household. If a boy has no txiv hlob his father’s younger brother will assume this position.

Payment of the bridewealth to the bride’s father and the wedding feast are only a part of the complex of relationships between wife-takers and wife-givers. The groom’s family must give 4 rupees tab to the wife’s elder brother and the wife’s elder sister, 3 rupees to the wife’s younger brother, 12 rupees to the wife’s father’s father and wife’s father’s mother, 5 rupees to all of the wife’s father’s sisters and
wife's father's brothers. In addition to these payments to these particular members of the wife-giver's group, the wife-takers are expected to give a second or post-marital feast for the wife-givers three years after the wedding. The minimal requirements for this feast are also prescribed: one large pig, 4 bottles of Nao whisky, or rice wine, and 2 chickens. It is the obligation of the wife-takers to present at least the above quantity of food for the wife-givers. If the wife-takers group for some reason cannot afford such a feast, they must make this known well in advance, and make up for this slight by frequent invitations for the wife-givers to come and have rice whiskey (cawv nplau) at their house or the house of a maximal lineage member. The wife-givers do not reciprocate such invitations no matter how many times they are hosted during the first three years of marriage. However, after waiting an appropriate period of three years, they may and usually do invite the wife-takers to their house. When the wife-takers and wife-givers are from different villages, it is expected that a member of the wife-takers group visiting the wife-givers village will first seek out an age-mate from the wife-givers family and grasp his upper arm while addressing him with the appropriate term. Then he must say, 'come drink with me'. After this formality, the visitor may carry out the purpose of his visit. When
passing on the trail or in the forest, the wife-takers must initiate the *coos gaws*, which is the traditional Neo formal greeting. It consists of the opening and closing of the cupped hands accompanied by a slight bow. It is a gesture of respect and pretension and is also used when an honoured guest enters a household. The wife-givers may or may not return the *coos gaws* of the wife-takers.

The wife-giver/wife-taker relationship is best described by the White Neo term *cuam cuae*, which means to not meet properly. There is an underlying attitude of respect that the wife-takers must exhibit to the wife-givers. This is formalized behaviour. Two wife-givers in Khae often complained that they were not receiving enough respect from their daughter's husband's group. They said the younger Neo had forgotten good behaviour and were becoming more like Thais every day. In both of these cases the wife-takers were not real or classificatory cross-cousins.

To demonstrate his position of humility and respect at the wedding feast, the groom must *coos gaws* and kneel before his wife's group on three separate occasions. This requires the separation of the two groups, which is maintained through most of the ceremony. This *coos gaws* formality is repeated by the wife-takers group three years later at the post-marital feast given by the wife-takers.
Most villagers look upon the payment of bridewealth as a type of exchange. The bride's father tries to maximize the price to test the groom's intentions and the groom tries to obtain a lower price which is a near equivalent to the value he places on his bride. Factors which determine bride-price, some of which have already been mentioned, are working ability, good family, beauty and of course love. Age is not a factor in determining the bride-price. The price does, however, depend on whether the girl is the first daughter (price, 200 tal), second daughter (225 tal) or third daughter (250 tal). The youngest daughter brings the highest bride-price. All these factors must be considered by the taw tshoob and the two cuab during the lengthy negotiations.

The exchange concept of bridewealth is highlighted by the incidence of sibling marriages. Although not a common occurrence, brothers from one cuab occasionally marry sisters from another cuab in a joint ceremony. Such an exchange is prohibited in some villages. In another arrangement men without younger sisters under their authority may agree to a mutual exchange and, hence, marry each other's sisters for the purpose of cementing a politically useful brother-in-law relationship.

The Marriage Ceremony: Xaus tshoob

The White Meo marriage ceremony is a festive affair, and
is performed as a socially desirable way to formalize a marriage. This ceremony itself consists of last minute haggling, prestation and union, followed by a feast, and finally the departure of the bride and groom and the groom’s party cov shua vauf. It usually takes place in the household of the bride’s family even if she has already been dwelling in her finance’s residence in another village or hamlet. It is usually scheduled for late morning, but ordinarily does not begin until midday because of delays. Both families attend in force, along with lineage masters and mates and neighbours. Besides the groom, there are seven principal participants in his party: the best man, tug phi lai, usually the groom’s father or one of his brothers; the toastmaster, tug cov canv, often a paternal uncle; the man in charge of the food, tug tehwi kab; the master of ceremonies, tug kov xov who is a member of the groom’s agnatic group; the groom’s negotiator, tug mei koob of which there are two and perhaps a third go-between; often the headman of the groom’s village, tug tehab xov.

The bride’s formal representatives cov shua tehoob correspond to the groom’s except for the absence of the phi lai.

On November 14, 1966, there was a fairly typical wedding ceremony at Pui to formalize the marriage of Na Tong Sae Lia,
the daughter of the assistant headman, to Jua Sae Havj.
It took place in the household of Tong's father. The
negotiations on the bridewealth had reached a settlement on
the 12th of November between the representatives of the two
groups. During these negotiations the meil koob sat on small
benches in front of the neeb spirit altar. The parents of
both the bride and groom remained outside the house, chatting
and visiting neighbours, but never discussing the matter at
hand. Meanwhile the meil koob haggled over the price and terms.
The bride's meil koob asked for ten bars of silver. This had
been determined beforehand, for the groom's representatives
agreed and said they could pay 8 bars and the remainder in
rupees.1 After weighing the silver the bride's representatives
placed them on the table and went outside to see if the pig
was big enough. Since the size was acceptable they did not
ask for further compensation. On the 15th at about 4:00 pm
the wedding party was asked to go to Lu's house to prepare the
food. Lu and his family arranged the seats into three
groupings: one for the respective kwiti, one for the repre-
sentatives of both groups, and one for the guests. At each
table the men eat first. The husband eats at the guest table
and the wife eats with the women guests. The children eat
while walking about. The groom's group brings 15 bottles

1. One bar is equivalent to one hang weight which is
thirty-two and one half rupees.
of rice wine (gaw rplw), the bride's group 10. All of the rice wine must be consumed at this occasion. The drinking begins about two hours before eating. At the first table Lu begins the drinking and everyone follows in sequence clockwise. After drinking the cup is turned upside down to show it is empty, then it is refilled from the bottles on the table. At the guest's table the groom initiates the drinking.

After eating, the wife's father, Lu, presented his daughter with gifts: 8 silver neckbands, each weighing more than 25 rupees; 10 skirts; 6 blouses; 6 aprons; 6 rear aprons; 10 head clothes; 6 pairs of wristbands, each 10 rupees in weight; 2 silver belts, each 20 rupees in weight. These gifts were shown to everyone and then placed in a bamboo basket. After this the husband gave a cup of rice wine to his wife's father and then to his father, to the wife's representatives and his representatives. Then the bride gave a cup of rice wine to her husband's mother, then to her mother, and the representatives. Then Lu, the bride's father, took a cup of rice wine to the Su Ka, ancestor spirit platform and proclaimed that he had sold his daughter to Jua and that she no longer belonged to him. After this Na Tong called her brothers and sisters by their first names, not kinship names. She uses their first names until she has her first child, then she must use the
classificatory term that her child will use. The wedding meal was eaten about 10.00 a.m. and finished about 3.00 p.m. At about 4.00 p.m. the bride and groom said goodbye and departed for the groom’s village in Kee Chee. One of the husband’s representatives, phi lai, presented an umbrella to the bride and the other kay xwm, carried the basket full of her belongings. Both groups (the husband’s and the wife’s) accompanied the couple a short way from the village. About 20 metres from the village the groom stopped and presented the two representatives with rupees. The representatives offered to carry their things to Kee Chee, but the groom said no, knowing it would cost him 10 rupees per person. Friends of his from Kee Chee carried their things for them. The representatives of the groom were from Mae Sa. The bride’s group returned to their house with some of the groom’s group that wanted to stay on. Lu brought out 20 more bottles of rice wine and the drinking continued for the rest of the night.

The wife’s representatives received 4 rupees each and the husband’s 2 rupees each. All those who helped cook received one piece of pork. Three persons from Mae Mai were invited to the wedding: Hle Ju Sae Yaj was invited because he is considered the most important witch-doctor in the Mae Rim-Hong Dong area. Also one of Hle Ju’s
daughters is Lu's daughter-in-law. Tua Sae Lee went to
represent his mother who is Lu's sister. Qua Sae Lee was
invited because he was a friend of Lu's.¹

All told there were thirty-nine persons at the
wedding feast. This number includes only those who partook
of the meal, while others watched and wandered to and
fro. Of these guests, twenty-two were members of the
bride's koriti, while the groom had 13 lineage members
as guests. The relationship of the respective groups
to the bride and groom are demonstrated on Figure XXIII.
In addition to these relatives, there were four other
guests, one of which was the village headman.

Figure XXIII shows a large representation from the bride
and groom's agnostic groups but no members of the bride or
groom's mother's natal koriti. However, father's
sisters, phuaj, and their spouses and children were a
significant proportion of both groups. Why, then, were
mother's brothers not represented, especially
amongst the members of the bride's group in whose

¹ Lu Sae Ya from Khae visits Han Kon Ya in Amphur Samuang
for the wedding of his montxhaig.

On March 27 he arrived at the village. On the 26th
the ceremony began at 3 p.m. Ha Ua Sae Ya's family
(the bride) prepared for the ceremony by killing a
large pig. They waited for the husband's group to
arrive (the husband and two representatives). About
six o'clock Tong Sae Yooj, her husband, Lu Sae

(continued over)
Xvooj and Chee Sae Yaj his two representatives arrived at the village, he brought seven other friends with him. His mother and father did not come. Tong brought a large pig with him weighing about 100 kilo and also two chickens. The representatives of each group sat down on benches inside the house opposite each other and began to discuss terms. The husband's representatives told them that they had a large pig and the bride-price; the wife's people checked the pig. The husband's people then said that the most diligent and beautiful girl from their village cost only 8 hang; therefore, they reasoned that the wife's people were asking too much at 92 hang. The wife's group became angry and said that they would now charge an extra fine of 50 rupees because I, the husband's group did not contact the wife's parents after he abducted her four months before (it is the usual practice for the husband to send an older person to inform the girl's parents about the abduction and tell them not to worry, but that the man's intentions are good). They said they were going to charge Tap 40 for this breach of neo custom. 2. Tong's mother had said that she hated Na Ua and that if her son brought her to the house she would leave by the front door if they came in the back or by the back door if they came in by the front. They said that they would charge Tap 20 for this humiliation to their clan. 3. When Tong took Na Ua to live with him he also took her silver neckbands and jewelry. This jewelry belonged to Na Ua's clan. They said that for this breach of custom they were going to fine or charge Tap, 20 extra.

After the representatives had talked and argued until 8 p.m. they went to ask the headman and the oldest man in the village to mediate or arbitrate. Both of these men said that Na Ua's clan was right and that the husband's group must pay Tap, 80 extra. The husband's group gave in and they talked and smoked for the remainder of the evening.

On the next day before the feast the husband's group paid 92 hang for Na Ua and the extra fines amounting to Tap, 80. (morning) Then Na Ua's father Ju Sae Yaj placed all of her jewelry in a bamboo basket: six white neo skirts, ten shirts, eight women's hats, four neckbands of silver weighing 20 rupees each. They returned four hang to Tong as a symbol of good feeling. Ju then ate (M'ai Lan Lab Txiv.), He told the moem spirit that he had sold his daughter to Tong and that she would now belong
to another room and be only neglects.

Then the tables were set up for the guests, five tables in all. The first table consisted of Ju, his wife, and his older brother and sister, The second table had the two representatives from the two groups. At the third table long and his male guests were seated, at the fourth table was Ka La and her female guests. At the fifth table sat the children, boys and girls. The men drank 20 bottles of whisky. After drinking they began to eat and finished about two o'clock. Then the two representatives of Tong said that they must return to their village. long and La La then knelt in front of her parents and the father told her how to be a good wife and asked long not to beat her harshly if she did not follow too custom, but to let him know and he would punish her. Then long bowed to his wife's parents and promised to do everything they had asked. Then Ju went to the representatives table and paid each man 4 rupees, a total of 16 rupees. Then Ka Jia Sue Yaj divided the remaining uncooked pork into three parts, giving one part to long Tong. The two representatives of Iao Tong carried the two umbrellas which shielded the newlyweds from the sun, Ka La's representatives carried one basket of pork and another of her clothing and jewelry. After the group had walked 10 or 15 metres long turned to the representatives of both sides and said, "We can carry the umbrellas and the baskets, Thank you." He then gave each representative 2 rupees each. Since they were all from the same village everyone went home. (If Tong had allowed the representatives to carry the goods to his house it would have cost him a minimum of 10 rupees or if the village was distant approximately 10 rupees.)

Since the idea about the extra fine on Tong was from La Jia Yaj (nr of Ju), Ju gave him an extra 20 rupees. La said that Ju was very happy because he received the highest price ever paid for a girl in that area. Actually (according to La) since he returned all her jewelry and clothes the price paid by Tong was not any higher with the fine of Tap. 80.
Bride's Party (Tus naheis)  

\[ \Delta = 0 \]

Groom's Party (Tus naug)

\[ \Delta = 0 \]
village the ceremony took place? Explanations given by the bride's father following the ceremony attributed the fact to the absence of any of his wife's family in the village. He explained that his wife's family is from the Phrae region and this was too distant to be able to attend the wedding. It was pointed out that none of the groom's matrilineal kin were present either. Perhaps the explanation for the lack of matrilineal representation at weddings lies in the total lack of involvement which this group has in the ceremony. Unless the mother's brother's daughter is the bride, or if certain matrilineal kin happen to be related affinally to the marrying minor lineage, there is no need for their presence. If certain close matrilineal relatives happen to be present they will be included, if not, they are not called upon to attend the ceremonies. A father's brother has almost complete authority over his brother's son in the absence of his father and is the first to assume guardian rights if the father should die. Father's sister must be invited to her brother's son's wedding, and if the trip is long and difficult, a brother's son must see that it is paid for. Father's sister has the authority to teach and punish her nun cur, or brother's son, as do father's brothers. But the relationship extends far beyond that. Prohibitions, fear and magical powers are associated with father's sister. A brother's son cannot
live with his father's sister even though his father dies. Although he can borrow from his father's sister, she is in no way obliged to give him aid. He cannot ask her for aid in the payment of bridewealth. Father's sister has magical powers over her brother's son, and he fears her anger and curse for this reason. She has the power to kill him, to make him ill or childless with a simple curse. If father's sister asks her brother's son to work in her fields, it is likely that he will obey her more quickly than if his father or father's brother were to ask him. If marriage takes place between father's sister's daughter, *muam npawg*, the newly married pair are prohibited from living even temporarily in his father's sister's house. In this case part of the bridewealth may be borrowed from father's sister. Repayment can be made at any time, and two cases were recorded where it was never paid. However, if brother's son marries a girl other than father's sister's daughter, he must pay father's sister 12 rupees, and there is no reciprocal act or return of this payment. If father's sister dies before marrying, her brother's son inherits all her personal effects and whatever property she may have. Though such property may be limited to clothing and jewelry, it nevertheless symbolizes the special relationship between father's sister and brother's son. When brother's son's father dies, he must notify his father's sister before anyone
else and if she lives in another village, he must pay for her trip and maintain her while she is in his village. Father's sister can demand that an extra cow be sacrificed at her brother's funeral and brother's son must comply with her wishes.

It is not surprising then that father's sisters are almost always members of the participating groups at weddings, at least among the groom's party. In the bride's case, they are more often than not resident within their brother's village. At many weddings patrilineal kin members and non-members may be invited simply because they happen to be there at the time, not because of their kin ties or the lack of them. Thus the division between a narrow range of agnatic kin and others is not always as distinct as might be expected. Those kin who are expected to give and receive payments at the ceremony, such as the bride's brothers and sisters, paternal grandfather and grandmother, and paternal uncles and aunts are always invited and usually come, for they are not only morally obligated to do so, but it is in their interest to be present to receive payment for their interest in the loss of a kwiti member.

The villagers, then, expect that the members of the two agnatic groups will be well represented, because the broadest significance of the marriage is for them. New relationships are formed, at least on the terminological and sanctional
levels, between their members. From the bride and groom down to all members of both households, relationship terms would be altered or newly applied. Affinal kin terms must be learned by the younger brothers and sisters of both the bride and groom, who may not have ever had the occasion to use them before. The bride's father must be called yuen and the groom's mother poi. Failure to remember or use these terms might cause misunderstanding, or a feeling of disrespect. Even more significant was the entirely new relationship developed between the parents of the couple, which may or may not have had previous kin ties.

The terms yuen cuan and poi cuan must be constantly on the lips of the wife-takers so that proper deference could be demonstrated. (Figure X:III.) With the terms nian lu and nian hu which a husband must use to address his wife's older and younger sisters goes the literal meaning of older mother and younger mother. These terms themselves direct a man toward the motherly or non-sexual relationship which he must maintain with his wife's sisters. Thus for the two minor lineages marriage has an intense significance, for not only has it meant a loss and a gain of one member respectively, but opened up an entirely new range of relationships which are of practical importance. Probably because these official ties are fragile, at least until the first child is born, greater effort is made to consolidate the relations with one's
affines neeitea. Neeitea, which means a man’s relatives by marriage or a woman’s consanguinal relatives after she marries, is a composite of neej and tea, which literally means to establish a fortune or estate. As soon as the bridewealth payment is completed, a wife will begin to address and refer to her natal lineage group as neeitea when speaking to them or of them as a group. Neeitea must be used to signify all affines or in the above context a man’s relatives by marriage and/or a woman’s consanguinal relatives after she has married. Her husband’s maximal lineage then becomes kvvitj, and she uses this term in describing and referring to members of her husband’s lineages.

The Feast

The arrangement of the individuals at the feast appears informal, but it is deceptively structured. Not only are the bride’s and groom’s parties separated during most of the negotiation period, but the configuration of the seating arrangements is formalized. Men eat first. At one small table situated near the front door the mej koob of both parties are seated. At another table situated near the main house post, the fathers and paternal uncles of both parties gather around, seated on benches. (At small weddings, the mej koob and lineage table is sometimes combined). The third table located nearer to the cooking area is for the women. Invited
Guests are placed at a fourth table. The groom eats at the
guest table and the bride at the women's. The seating arrange-
ment at the marrying lineage table is important, for the bride's
affinal group must sit across from the groom's. In many
wedding feasts each representative is seated facing his
counterpart. (Figure XXIV). In the centre of the table is
a profusion of bottles containing rice wine, and at appropriate
intervals cups of it are handed around the table. The drinking
speeds up as the prepared food is brought to the table by the
women. After initial formalities, the tone of the conver-
sation is varied. Discussion is held on marriage, its duties
and responsibilities. Compliments are exchanged between the
newly defined affinal groups. During and after the meal the
groom may cooe gaws, bow and kneel, before his bride's group
as many as three times. On the final occasion both the bride
and groom may cooe gaws. Words may or may not be spoken but
the intent is evident. The groom expresses his appreciation
for the woman which has been given to him. He promises
obedience and respect to his wife's group and indicates that
he will be a good husband and father. In return he received
the good wishes and blessing of his wife's group. At the
last cooe gaws, just preceding the departure of the newly
married couple, a final word of caution and good will is
exchanged. This demonstration of respect and gratitude must
FIGURE XXIV

"Cov qhua tshoob"
Bride's Party

"Cov qhua vaav"
Grooms Party
be repeated by the newly married husband three years later at a post-marital feast given by the wife-takers. Before departing from the feast, bride and groom extend affinal kin terms and the appropriate behaviour patterns to each other's consanguineous relatives beyond the limits of the nuclear family. The groom will not only call his brothers-in-law yama dab, as he may have been addressing them for some time, but many of his wife's male parallel cousins as well. A realignment of relationships has been completed and new alliances formed.

Just before departing the pigs provided for the feast, which have already been butchered, are handed to the appropriate guests and representatives, who take their portions home. The pork is divided in accordance with the status and contribution of the participants at the ceremony. The largest portion remains with the bride's household, while the remainder is divided between the paternal aunts and uncles of the bride and groom and the formal representatives of both groups.

Finally, as the couple leave the village, they are presented with the symbolic umbrella and the basket containing the bride's personal possessions, to speed the bride to her new shelter and home.

With the exception of the ritual offering to the neek
preceding the feast, no religious rites accompany a marriage. In some households a separate table is set aside for the need spirits, but this is not a common occurrence.

Dissolution of Marriage: Nraug

A marriage so formalized is difficult to dissolve due to the property transactions involved. The White Meo distinguish sharply between the value of bars of silver, nyiaj daim and other forms of payment, such as Thai currency. Silver is not only an item of exchange, but a medium for saving. It may be kept over long periods with no depreciation and if an engagement or marriage is dissolved, it can be returned to the aggrieved fiancé or husband. If a fiancé dies the betrothal gift is usually returned, but after the marriage no such return is made by the wife-givers. Since the payment is made to compensate the woman’s natal minor lineage for the loss of her services and for the services, procreative and otherwise, which she bestows on her new household, no return is deemed necessary. This concept of payment for the loss brought upon the affinal household is expressed in the White Meo phrase ‘Nrog laqv txuaq tw tie’, which means to take away a wife from among her family. Quite often this phrase is used to denote an affinal relationship. On the other hand, if a woman leaves her husband and returns to her parent’s house after bridewealth is paid, two courses of action lie
open; the husband can demand for her return which must be executed, unless her father returns the bridewealth. The husband may demand the return payment he made in the form it was given, i.e. silver. Similarly, if a husband demands a divorce because his wife is lazy or he is displeased with her, a repayment of the bridewealth may also be demanded in kind.

The word used to describe divorce, nraag, signifies to separate off from. It is most often used in the phrase, "new nusab po njiam nrauj lawu!" to indicate that a man has put his wife away, or turned her out. Whereas if a woman seeks to terminate a marriage, she runs away from her husband or separates from his group, ncaim luag. The common usage of these phrases does emphasize a distinct difference, for whereas a man can and does expel a woman from his household, a woman simply flees from the household of her husband. Neither of these phrases fits the situation which occasionally occurs, wherein a man residing in his wife's natal village, 'puts his wife away' by declaring the marriage dissolved and by returning to his agnatic settlement. However, in both terms, the point is clear, the separation and division between the two affinal groups has been effected. They have chosen to take the key ncaim roads which separate their minor lineages. It is held that if they wanted the respective kymti could arrange a reconciliation between the separated couple.
The disposing of property associated with the marriage sometimes leads to litigation. If the divorce has come about through the man's putting his wife away, the man usually demands total repayment of the bridewealth; however, if a woman leaves her husband for reasons such as cruelty, or she has what her minor lineage feels are valid claims against him, there may be arguments and litigations over repayment, which often leads to a compromise. In any case a woman remains the property of and is considered part of her husband's maximal lineage until the bridewealth is returned or some mutually acceptable compromise is made. Thus the divorce is not de facto, until a disposition of the bridewealth has been mutually agreed upon by the two affinal groups concerned. Since marriage not only involves the couple concerned, but also the respective minor lineage members, divorce is not taken lightly and normally a man will not put away his wife, or a woman run away from her husband, unless there are flagrant reasons for doing so, such as overt laziness, promiscuity or ill-temper on the part of the wife, and cruelty on the part of the husband.

Disposal of property other than bridewealth usually does not create controversy. A man has no claim on land identified with his wife's minor lineage, and she has no claim on his. In addition, a wife has no ownership claim on her husband's house or any of the moveable goods therein, ip lub cuabtiv.
custom, except for her personal possessions, which may include her clothing, jewelry and other personal articles. However, if the couple happen to have an uncrilocal residence, with their house built on land identified with the wife's consanguineal lineage, the husband on leaving the village would assert no claim.

In connection with the retention of a couple's children, a man's rights are also favored. The villagers say 'sons always remain with their father'. If a man because of travel or other reasons, is not able to care for his children, he may turn them over to their paternal grandparents or his brother's household for a designated period. A sentimental compromise is often reached by leaving the female children with their mother, if she so desires. Very young nursing infants are also left with their mothers for a temporary period of time. Sons must by the time of puberty have developed a close identification with the residence and interests of their father's kin.

Sampling in both Mae Tai and Khao indicate that separation occurs with decreasing frequency after children are born into a minimal lineage. Among the small sample of three marriages which broke up during an eighteen month period, two were due to a poinia tab seeb, a childless woman. Women who do not become pregnant after the first two years of marriage, poinia tab seeb lug, usually face one of two fates:
their husband will put them away or seek a second wife.

Adultery: $\text{ñkauj fa}$

Infidelity with an unmarried woman by a husband is not considered by the White Meo to constitute adultery. In fact, the term expressing the concept of adultery, $\text{ñkauj fa}$, means a woman who runs away from her husband to be with another. A complementary phrase implicating a man in adultery, $\text{dheev lung rui lung riy}$, refers to a man who copulates with another man's wife. Adultery then, requires the act of intercourse between a man and a married woman. Any other combination of sexual activity, such as intercourse with an unmarried female of the same descent group is not considered by the White Meo to be adultery, but a prohibited relationship. (Goody, 1956: 286-305). What the villagers mean when they say such and such a woman is $\text{ñkauj fa}$, is that she has fornicated with a man other than her husband. Whether or not her extramarital partner was a member of her descent group or not is unclear and for that matter irrelevant, for what the villager is referring to is the taboo brought about by her married status. There are different degrees of adultery and $\text{ñkauj fa}$ with a member of one's own descent group would intensify the sanctions brought against the adulterers. But, whereas incest with a non-cousin member of one's maximal lineage may on the first offence call for no more than a reprimand, adultery with a
married woman, regardless of her descent ties, is sanctioned by a customary fine placed against the guilty man and an undertermined punishment meted out to the guilty wife by her husband.

The punishment imposed for adultery is prescribed by White Meo custom as a fine of 33 rupees for the first offence, which must be paid by the guilty party to the husband of the woman involved. In addition two rupees, one chicken and one bottle of whiskey must be paid to the headman of the village; while 4 rupees, one chicken and one bottle of whiskey must be paid to the informer. The guilty wife is often beaten by her husband. Continued adultery by a woman results in more severe fines and the public exhibit of the offenders. Adultery with a member of one's descent group may lead to banishment from the community.

No cases of adultery were punished during the period of village observation, although two women in Mae Hai and one in Khae were commonly known to have extramarital relations. In the first case, Na Mee, the wife of the retarded brother of Sae Lu Sae Lie, was known to be having intercourse with Qua and Neng Sae Lie. Everyone in the village was aware of this state of affairs, except her husband. However, no one in the village condemned the relationships because it was alleged that her husband was impotent. Since both Neng and Qua were
parallel cousin and members of her husband's major lineage, it was conceded that their behaviour was not reprehensible, but proper. It was suggested that all wives of the kwiti were obligated to have children so that the lineage would grow. This case demonstrates that adultery within the descent group can, under certain circumstances, be accepted by the community. This is of particular interest since adultery with a descent group member is regarded as a compound offence with a more severe punishment than adultery with a wife of a non-clan member. The apparent paradox may be attributable to the fact that procreative rights are to a large extent the concern of the xoon, as a societal unit.

A second case of adultery in Mae Nai involved sexual relations between Meng Sae Lie and his younger brother's wife, Na Chi. An understanding of the relationships may illustrate the reasons for accommodation between the individuals. Inconclusive material on this point,

All members of Meng's household and most villagers were aware that Meng and Na Chi had not terminated their sexual liaison after her marriage. The general sentiment within the village is that their behaviour is very definitely nkaui fa, but it is because of the situation that it is more often spoken of as dheev luag noj luaj sev. By using this phrase the finger

1. For ethnographic description of this cuab refer above, pp.463-465.
of guilt is directed toward Neng rather than Na Chi. A majority of villagers feel that Neng is to blame, not only for the infraction against adultery rules, but for burdening his younger brother with an unwanted wife. However, no sanctions have been brought against Neng or Na Chi, yet the villagers say that if Cao desired he could demand an adultery fine from Neng. The full rate of compensation will probably never be demanded because of their relationship structure, their common residence, the socially prescribed relationship between older and younger brother and the peculiar circumstances leading up to the adultery. If Cao was to make an issue of the matter it would require a division of the collaterally extended household in which they all reside. Since Neng has control over the household treasury, such action would be an economic hardship on Cao unless an acceptable agreement was reached. But, more important, to bring such a litigation before the village would humiliate the entire major lineage. Brothers should not publicly quarrel or behave in such a manner, and for a younger brother to publicly condemn his tiq lung can be compared to condemning one's father. Therefore, solutions must be found within the household itself.

The one case of adultery in Khao village was between two married, but non-related, individuals. Pia Sae Ya was under condemnation by the village and had been forced to pay the
adultery fine for having sexual relations with the wife of
Wa Sae Vaj, Na Yia. Na Yia's natal clan was Sae Hawj, and
she was from another village. Relationships between the two
households concerned were limited to passing encounters and
village meeting. Wa Sae Vaj, one of the richest and most
powerful men in the village, won his case quickly. From the
very outset, the affair was made public and there appeared to
be none of the complexities which surrounded the previously
described cases. The range of sanctions against adultery does,
in fact, depend on the interaction of the involved parties as
much as the structural relationships between them.

Polygyny

Villagers say that there are two reasons why a man takes
a second wife: either the first wife cannot bear him a son, or
the first wife needs someone to help her to do the household
and swidden work. This type of reasoning corresponds to the
overall purposes of marriage, which are in this order, so that
a man may have sons and increase the strength of his minor
lineage, so that he can have daughters to increase his wealth
and finally to gain a sexual partner and a good worker.

Polygyny exists on a limited scale. There was one case
of polygyny in Mae Sai and three cases in Xhae. In all but
one case, the husband was of moderate wealth, in terms of
number of fields, horses, cows, goats and supposed hidden wealth.
(silver). Whereas in Khae all the polygamous husbands were over forty, in Mae Nai the husbands were under thirty. Most of the villagers in both communities considered a second wife something extra and unneeded. In each case the second wife was considered a prestige symbol by the polygamous husband. A common phrase was, 'A man with two wives and ten horses is very rich'. Horses and cattle are the conspicuous indicators of wealth for the White Meo. In the Mae Nai case, the nephew of the headman took a second wife because his first wife had given him four girls in ten years of marriage, and he saw little hope of getting a son. His second wife, the daughter of the village shaman, had so far failed him also. He had six daughters. It was often remarked that he was potentially a very rich man with six daughters to bring bridewealth and two wives to work his swidden.

In Khae, out of the six wealthiest household heads, only the richest man in the village had two wives. His was the largest household recorded, with sixteen children and a total of twenty members living in the household. Another man in Khae had taken his elder brother's wife when his elder brother was killed.

There is much substance behind the explanation that men take more than one wife for economic reasons. For a survey of livestock and property indicates that the three polygynous
cunab in Khae have significantly more animals than most other households and are well above the average. Bua Pa Sae Yaj's household at the time of the survey owned seven horses and three cows, whereas the averages in the village were, respectively, two and .04 per household. La Sae Yaj had fifteen pigs and three horses, contrasting to the average of 7.1 and 2 respectively, per household. Finally, Wu Sae Yaj had 16 pigs, ten horses and four cows, well above the count for any other households. It is also significant that these three men were amongst the six higher-ranking households in the village.

All of the polygymous cunab living in Khae and Mae Nai are united in the sense that co-wives reside in the same household, when not separated by swidden work. This includes their respective offspring, who usually eat meals together, play together, and address each other with sibling kin terms. In three cases the membership pattern of the four polygynous cunab are similar. There is one husband with two wives and the offspring of the respective wives which are his own children. In one case, that of La Sae Yaj, the second wife brought two children from her previous marriage in a household which already had children. Depending upon the membership pattern the internal organisation of polygynous cunab may differ substantially.
The distinctiveness of the sub-units comprising a polygynous **cuab** are not easy to detect, except in the display of emotive behaviour in the household and swidden. Within such a household all members address and refer to each other by kin terms, with the co-wives calling each other **vivmeaua**, older sister or younger sister, according to relative **xen**. The sexual prohibition between siblings and step-siblings is, of course, also in effect because they belong, by virtue of their common father, to the same **xen**. However, as might be expected the relationship and interaction within a polygynous **cuab** are somewhat complex. There is an atmosphere of continuous rivalry between the co-wives. This is often demonstrated by sulking, refusal to co-operate with household and swidden tasks. Often this rivalry is based on sexual competition.¹ In two of the aforementioned polygynous households, the two wives sleep in the same bed with their husband. Custom and a sense of fairness require that if a husband copulates with one, he must service the other also. Here, as elsewhere, such as when the second wife is forbidden to eat alone with her husband if the first wife is in the house, the first takes precedence by the mere fact of seniority within the **cuab**.²

1. Cua Sae Lis and Bua Pa Sae Vaj, from Mae Nai and Khae respectively, have polygynous households.

2. The first wife always sits on her husband’s right when eating and the second wife on his left.
The time span in which he must show favour to his second wife, if she is not to feel neglected, usually takes in the entire night. During their episodes, the non-active wife is expected to turn her face to the wall and pretend to sleep. It is impressed upon the observer that this order of selection and pattern of etiquette are taken very seriously, for the villagers say many neglected and distressed wives commit suicide by eating large amounts of raw opium. In order to avoid these types of confrontation, a man will commonly devise ruses to get one or the other wife to the swidden, or time his relations with one wife to coincide with the menstrual period or pregnancy of the second, thereby escaping his dual obligation.

The major distinction between a man's co-wife sub-units is best illustrated by the inheritance pattern. This is in turn dependent upon the domestic cycle within the cuab. If a man dies while his first wife is still alive and her sons dominated the household, it is they who will decide on the distribution of the inheritance. However, the second wife and her children have recourse to the dead father's brother who is expected to arbitrate. In a minimal lineage group comprising only the youngest son of either wife resident within the household, there will be no controversy because it is he who must pay for the burial and support his father's
wives. It should be pointed out that the potential conflict over inheritance is lessened by the fact that the eldest resident son at the time of a father's death must co-operate with his father's brothers in arranging the burial and the distribution of inheritance. As already noted, this kind of controversy can arise only among the deceased's own children; any step-children he may have acquired have little or no voice in the matter.

Re-marriage

Although the tendency is to think of new households being formed with the first marriage of a man and a woman, many minimal lineages in Khae and Mae Hai were founded on marriages between spouses who had been married more than once, due usually to the death of their first spouses, divorce or similar circumstances. If there was no issue from the earlier marriage, then the second marriage differs in no major respect from the model described previously, except that the negotiation and ceremony are usually simplified. Because of the rules determining the allocation of offspring in the event of a husband's death, re-marriages often involve a preferential choice of mate.

Levirate is quite common in White Meo villages, and it was considered correct for a widow to marry her dead husband's younger brother. In such cases, no marriage ceremony is
performed and no bridewealth is paid. However, there is a prohibition against an elder brother marrying the wife of his younger brother, because it is considered to be disrespectful to marry someone older than the first husband. A widow is expected to abstain from intercourse and therefore not to re-marry until after the spirit plig of her dead husband has begun the cycle of re-birth. This re-birth ceremony can take place from thirteen days to one year after the burial.

Three reasons are given for encouraging this form of widow re-marriage. On the death of her husband, a woman continues to remain a member of her husband's maximal lineage, as to her children. Many of her husband's minor lineage agnates contributed to the fund used for the payment of her bridewealth, therefore, she is not only a member of her husband's lineage until a marriage outside that xem is agreed to, but her procreative and sexual functions remain property of the minor lineage, hvtij.

Secondly, the normal bridewealth payment is considerably less in the case of a widow. Whereas in the first marriage she may have brought the equivalent of 300 baht Thai currency, if she is without children 100 baht may be deducted in the second bridewealth payment. If a widow brings more than three children into her second marriage, only half of the original price can be expected. Thus widows are somewhat
of a bargain to a man who desires a proven and productive addition to his household.

Finally, it is not only desirable but the moral obligation of a dead man's younger brother to insure the welfare of his brother's wife and children, and if possible, to take her for his wife. The positive sanction for this type of remarriage is the absence of any bridewealth payment. It is to the younger brother's advantage to marry his brother's wife, in that it is both socially and economically encouraged. If a woman is well-liked and industrious other members of the minor lineage may openly encourage and press this marriage. The younger brother may be said to inherit his older brother's wife by the simple fact that no bride payment is required. Here, more than in other marriage arrangements, the woman herself may have final say in the matter and much depends on her relations with her marital lineage groups.

In Mae Nai there are no actual cases of what may be called levirate marriage, but in the nearby village of Kong Hae and Khoe there are two each. A description of two of these will demonstrate some of the complexities involved.

La Sae Vaj from Khoe village has two wives, Na Mao Sae Vaj and Na Ju "ae Vaj (Plate XX). He had been married to Na Mao for nine years before he married his deceased elder brother's wife. La had five children by Na Mao, prior to
his second marriage to Na Ju, three of whom were sons. In
taking Na Ju into his household as second wife he had acquired
the two unmarried sons of his deceased brother. While they
are in his household, they will continue to address him as

In fact, Na Ju and her sons spent most of their time not
in the village household, but in the potato swidden shelter
which La had expanded and rebuilt into a model village house.
This swidden house, trev teb, was the only example of a quasi-
permanent swidden-type residence in Khao. It appears that
this secondary marriage was prompted by economic reasoning
and sentimental ties to a brother's wife.
In a second instance of levirate, Wa Chi (Sae Lia) married her husband's unmarried younger brother, Wa Sae Hawj, when her first husband died. Two years later Wa died leaving Na Chi with two girls by her first husband and a son by her second. Her third husband, a widower, yawg ntsuag, Sa Sae Yaj, agreed to take her two daughters provided that their names be changed to his clan name. A nominal price was paid to the Sae Hawj minor lineage and permission for this name change was agreed between the two groups as part of the marriage arrangement. The son of Wa Sae Hawj, however, was given to his paternal grandmother and raised by his father's minimal lineage. In these transactions Wa Sae Hawj paid nothing, while Sa Sae Yaj paid one hundred baht for Na Chi and her two daughters. The two girls will be raised as members of the Sae Yaj xeeম and may well marry men from the Sae Hawj xeeম, although it is unlikely that it would be a close relative from the localized Sae Hawj lineage.

Summary

Marriage is the means by which the White Meo create ties between lineages; good marital relations are conducive to good lineage relations, which in turn stimulate further marriages between lineages. Marriage is not permitted between members of the same maximal lineage, close kinsfolk by adoption, close affines or persons who stand to one another as fathers and
daughters in generation. In contrast to these restrictions, which certain relational ties exercise on the choice of a wife, other ties, such as the cross-cousin relationship, predispose relatives to marry. By virtue of marriage a woman is transferred from her father's maximal lineage to that of her husband. While her husband alone has sex rights in her, all of his minor lineage have residual rights since they shared in her bride-wealth.

Bride-wealth, involving contributions from the minor lineage as a whole, creates new social ties between persons and regulates inter-relationships between those persons until the relationships become assimilated into the kinship system. At that point the social group identifies itself with common ancestors, common interest in property, wives and children, and corporate rights in territory. Rights in land resources are equated with the prosperity of the household, that socio-economic unit upon which the White Neo economy depends.

Marriage partners setting up a new household become economically independent, therefore, they must have the knowledge and skills necessary to support themselves as swidden units.
Swidden cultivation involves procedures devised by man through time. These procedures are the result of men working together in groups and living together in a delimited area. In ecological terms the most salient characteristic of swidden cultivation is its adaption into the existing natural ecosystem. Unlike various forms of sedentary agriculture it does not alter and disrupt the environment to such an extent that reconstitution of the natural ecosystem may be impossible. The extraordinary diversity of the tropical forest is to a large extent imitated by the White Keo shifting cultivator. His crops are often mixed, intercropped and planted in succession. His use of the natural environment as a source of goods is varied and quite sophisticated. But most important the clearing of dispersed forest does not change the habitat from a generalised community to a specialised situation in which the land produces in concentration only crops for which it has been artificially altered.

The limitations placed on the shifting cultivator by scarcity of land, terrain, climate, soil and his
marginal adaption to variations in these factors is evident in both Mae Nai and Khae villages. The requirement of swidden rotation and a sufficient falling period necessitates considerably more land per cultivator than sedentary or permanent field cultivation. Swidden cultivation is an agricultural system in which natural forest is transferred into a food resource by the cultivator. Nevertheless domesticated land is far less diverse than the forest and its effects on the environment can be catastrophic. A change from the ideal conditions of shifting cultivation could and often does herald an irreversible process of environmental deterioration. Swidden cultivation usually becomes a badly adapted system: 1. when the scarcity of land forces the cultivator to farm inadequately fallowed land; 2. when cultivators interested only in the immediate harvest sacrifice future prospects to expediency; 3. when migratory shifting cultivators move into more tropical areas where deciduous forests regenerate more slowly; and 4. when the gradient of swiddens causes an accelerated erosion of soils (Geertz, 1963:26).

In the remaining sections comparisons will be made between certain aspects of shifting cultivation in Mae Nai and Khae villages with particular emphasis on the
effects of land scarcity on the economic organisation of the communities. The manner in which the White Meo shifting cultivators find varying solutions to agricultural problems through the organisation of labour, settlement patterns, rights over land and the splitting up of communities are also discussed. The possible effects of economic change on White Meo social organisation are briefly noted in the conclusion.

The Two Communities

The population of shifting cultivation communities such as Mae Nai and Khae must be sparse enough not to exceed the supply of suitable cultivation land. If demand for land exceeds supply, the White Meo cultivator will either recultivate fallowed swiddens before they are adequately regenerated or move to another site where land is available. In the former case the cultivator might have to give up dryland rice cultivation because of the maximum cultivation period of two successive years. Khae is an example of this type of solution. As Geertz (Geertz, 1963:120) has pointed out, rice is both more destructive to the environment and harder to cultivate than any other crop. It demands light, encourages weeds and exhausts minerals. In the
latter case, the translocation of a community to more suitable agricultural land may include only a few households or the entire village. The villagers feel that segmentation of a minor lineage group is by far the commonest type of movement toward uncultivated land. The settlement of Jak Kyn and Chong Sae Vaj's temporary hamlet near Khae provides two differing paradigm of this search for new swiddens.

The maximum population which shifting cultivation can support is a subject of considerable speculation. Pelzer (Pelzer, 1945:24) estimated that swidden cultivation could support in perpetuity a population as dense as fifty per square kilometre. This calculation was based on the ten year swidden cycle, where all cleared land would revert to forest every ten years. Other calculations from anthropological sources indicate population densities much lower than this figure.¹ The roughly estimated population density of Mae Nai village is five per kilometre, which is considerably below the figure of eight per square kilometre estimated

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1. Hanunoo - 10/sq.km. (Couklin, 1954:35)
Kachin - 2-3/sq.km. (Leach, 1954:234)
Lamet - 2.9/sq.km. (Lzikewitz, 1951:38)
Murut - 1.2/sq.km. (Leach, 1950:90)
Siang - 2/sq.km. (Province, 1937:80)
Freeman - 7.3/sq.km. (Freeman, 1955:136)
at Khae village. The average density of the two villages is somewhat higher than the figures given by other ethnographers in Southeast Asia, but way below the calculations made by Pelzer. Cultivated and recently fallowed swiddens surrounding Khae comprise about one-half the land area within a radius of five miles, but would be considerably more than one-half if uncultivable slopes and ravines were excluded. As already described, the northern and western periphery of Khae village is bounded by Karen communities, so it is only to the south and east that forested land is found to any extent.

The White Meo indicate that this precipitous landscape could not be farmed. During one period in Khae a visit was made to the site of the old village (Khae Luas). Most of the area immediately surrounding the old site was in early secondary forest (less than ten years old), but a mile or two from the village site Karen villagers had already begun to clear opium swiddens. I stress this point because the Khae villagers frequently complained of Karen encroachment on their lands. Older villagers spoke of having to find a new village site if the demand for available land was not eased.

In Mae Nai the pressure on land was less, but the number of small segmented villages or hamlets made
estimation difficult. Since no other hill tribes inhabited the area, the Mae Nai villagers noticed the pressure on land less but were concerned about government restrictions on forested land. Such restrictions and regulations possibly designed to guide the villagers into sedentary agriculture patterns was, in fact, forcing them into cultivation of inadequately fallowed swiddens, as can be seen from the discrepancy between ideal fallowing periods and the actual fallows. The following are the ideal fallowing times as noted by White Hmo informants: rice swiddens should be fallowed for seven years after one year of cultivation. After two years the fallow should be eleven or twelve years. There should not be three successive years of rice cultivation. Maize swiddens should have six years fallow after one year of cultivation. Two years cultivation should have ten years fallow, and three years cultivation, fifteen years of fallow. Potato swiddens after one year of cultivation should have four years fallow; two years cultivation, seven years fallow; three years cultivation, ten years fallow; and four years cultivation, fifteen years fallow. Five years of successive cultivation should not be practiced. Opium swiddens after one year of cultivation should be fallowed three years; after
two years cultivation, fallowed seven years; after three years cultivation, fallowed ten years; after four years cultivation, fallowed fifteen years; after five years cultivation, fallowed eighteen years; and after six years cultivation, fallowed twenty years. Seven years of successive cultivation is not ideal.

Whereas the ideal fallowing time for swiddens planted in rice exclusively is seven years after one year cultivation, the Mae Nai cultivators often planted rice for two successive years. Instead of fallowing the swiddens following the first year of cultivation as is common in some Neo villages, the fields were immediately planted in maize and opium poppies. The pattern in maize cropping was no closer to the ideal fallowing cycle. Most maize/opium swiddens in Mae Nai were planted for four years or more in maize followed by often more than six successive years of opium poppy cultivation. Of the four major crops, only potato cultivation was within the ideal cropping-fallowing pattern and this can be attributed to the fact that potato cropping was recently introduced and no criterion applying specifically to the region had been set up by the Khae cultivators. It should be emphasised that these ideal cropping-fallowing cycles are abstracted from what the White Neo
cultivators think of as the best possible timing of their successive cropping system. Other variables such as the rapidity of regrowth, the type of vegetational regeneration, the quality and type of soil and the past experience, in particular cultivation areas, are taken into consideration by individual cultivators when making decisions.

That the present stress on land is reaching critical proportions in these White Neo villages is supported by Leach's report (Leach, 1950;90) which indicates that the Land Dayaks of Sarawak were suffering from a serious shortage of land under population densities of twelve to twenty per square kilometre. Although there is general validity to estimates on the ratio of population to land, the density which a given area can support is dependent upon the conditions of terrain, rainfall, soil, cultivation timing and techniques and social factors such as settlement patterns, the division of labour, the size of local groups, the manner in which these groups partition the land, and marriage.

Shifting cultivation, as practiced by the White Neo, is a cropping system which provides a wide choice of physical sites, in that the cultivator can walk or climb to almost any location where he feels crops would
grow. Measurements of swidden slopes in Mae Nai and Khao indicate a wide range of gradient from a maximum of 80% to a minimum of 5% (see Chapter II, Edaphic Factors). Since the majority of swiddens in both villages were over 30% gradient, the observer might assume that either the cultivators were forced to cultivate steep, undesirable slopes due to the scarcity of land or perhaps they preferred such slopes as their cultivation techniques were adapted to vertical terrain. Neither conclusion is totally valid. The villagers themselves say that given the opportunity they could grow better crops in flat areas. They explain that flat land is always scarce so they have learned to live in the mountains. However, the experience of the Khao villagers in a low altitude settlement in Laos proved disastrous. Many villagers contracted malaria, others dysentery, and there was general displeasure with the climate and the soil. Although other motivations were evident, there is little doubt that they returned to Khao because of the apparent benefits of living at a higher elevation in an ecosystem to which they are physically and technologically adapted. I would speculate that given the free choice of any topography the villagers of Mae Nai and Khao would select the same relative
position in the vertical layering of people that they presently retain in the mountainous region of Thailand.

The configuration of swiddens is more important to the White Meo cultivator than the angle of slope. Cultivators prefer swiddens shaped like rectangles with the longer section on the vertical slope (Plate VII). Some informants point out that in such a swidden soil washed from the uppermost portions of the field drains into the lower half, thus slowing down the loss of the nutrient-rich top layer of soil. Drainage in such vertically shaped swiddens is not considered a problem since run-off is carried down the borders of the field. In addition to these factors, irregularity of the terrain, rockiness and soil type all contribute to the selection of swidden sites. The relative sophistication of White Meo soil classification is evidenced in their matching crops to soils. They clearly appreciate variations in soil quality and demonstrate a marked preference for azonal soils which are most often found in mountainous regions.

Burning of vegetation during the dry season leads to an accumulation of potash and valuable phosphates. This burning is an integral part of the shifting cultivator's technique. However, the detrimental effects
of burning, such as the destruction of humus leading to the consequent decrease in nitrification and other changes in the structure and composition of soil, do not appear to outweigh the immediate and long-term advantages to the cultivator or at least his estimation of advantages. Shifting cultivation as practiced by the White Meo does result in serious soil erosion, especially in communities such as Khao village, where in a number of cases rotational cycles of land use have been shortened to the point where vegetative regrowth is disrupted. Similar conditions of scarcity are developing in the Mae Hai region, where land is being set aside for forest reserves and declared unoccupied lands of public domain. Such restrictions on the freedom of the cultivators without providing alternative lands or alternative economic opportunities increases the likelihood of intensified swidden use and results in increased erosion. The effects of restrictions on the density, settlement patterns and land rights of the White Meo communities may be even more far-reaching.

The White Meo cultivates value wild vegetation as an expendable resource which when cleared permits productive use of land, but they also consider the forest as a resource in itself from which they can
extract food and other utilitarian items. This concept contrasts with the view of the surrounding macroculture which considers the vegetational cover as a watershed control, a protective agent against soil erosion, a source of longterm economic value and perhaps a scenic and recreational area. Both groups place a high value on vegetational cover and the differences in emphasis are mainly subjective interpretations of the best use for highland areas. Given unrestricted movement and a lack of pressure on land, the White Neo cultivator will select primary and climax forest for new cropping endeavours. The reasons for such a preference is economic to a large extent, since the volumes of vegetative material will provide nutrients for the soil and consequently higher yields. The White Neo cultivator knows more about the plants in his regions and the uses to which they can be put than most plains people. He is keenly sensitive of the many different aspects of plants which make up the vegetation of his region. Further he is quite successful in deciding when regeneration of vegetation of a swidden has reached a stage where clearing can take place and new crops may be cultivated.

Shifting cultivation is not found only in the
tropical zones, but at this point in time the distribution of shifting cultivation as an agricultural system falls chiefly in the tropics and sub-tropics. Shifting cultivation is still practiced in Korea and Japan and the last crop of grain rye grown in Sweden by shifting cultivation was harvested in 1918 (Darby, 1956:210); however, it is most frequently found in subtropical areas, where the gross seasonal shift of the solar cycle, with its variations in temperature produces a distinct seasonality. In the White Neo regions of Burma, Thailand, Indocina and southern China, primary cropping practices are distinctly seasonal, with a spring planting season and an autumn harvest season. In northern Thailand these variations in season include distribution of precipitation primarily during the summer months, with dry periods occurring before and after the monsoon rains. In the early spring before the first rains, the extreme dry season occurs in which clearing and burning may be scheduled over a relatively long period. Variations in temperature also have an impact on the White Neo agriculture system, such as the early burning that occurs during particularly hot and dry seasons. Viewed as manifestations of seasonality the important factors affecting crops are the length and timing of the dry
season, the timing of the onset of the rainy season and the length of the rainy season. The rice crop is particularly affected by micro-climatic changes, but it is apparent that other crops are also subject to minor climatic variations. Rice is distinctly a seasonal plant in its maturity patterns and thus the planting calendar is more critical for rice than most other crops. The White Kao in Mae Sai pay close attention to the solar-cycle calendar for this reason.

It is evident that the biotic environment of the sub-tropical monsoon regions which the White Kao inhabit have a direct effect on their particular system of shifting cultivation. Many different aspects of the biotic environment have been considered in relation to the White Kao communities. The White Kao are primarily cultivators of upland rice, but as we have seen, not all communities grow rice. They also cultivate maize, opium and potatoes as major crops. They do not traditionally have gardens around or in their villages, yet in Khao the Kao and Thai residents have influenced the construction of fenced garden plots. The cultivators also raise cattle, horses, goats, pigs, dogs and chickens. Cotton cloth, iron tools, salt, pottery, blankets, bottles and Thai medicines are purchased while opium,
wild animals, peaches, potatoes are sold. Deer, bear, wild pig, jungle fowl and many other birds are hunted. Bamboo, rattan, fibre, dipterocarpus leaves and imperata grass are gathered for roofing. Shoots, varied roots, green leafy vegetables and fruits are gathered primarily for local consumption.

The annual calendar of White Neo cultivators follows from their subsistence activities. In early December the last of the rice is harvested, processed and transported to the village. This precludes the new year celebrations, which may occasion hunting. In January the opium pods are cropped and the first felling of trees in new swiddens may occur. In February opium crop harvest terminates and clearing commences in earnest. The gathering of wild root crops is also evident. In March clearing continues and burning takes place. In April maize, potatoes and certain vegetables are planted. In May rice is sown, along with bananas and other supplementary crops. The summer months of June, July and August are passed in weeding, minor harvests and preparation for maize harvest and poppy broadcasting in September. In October and November weeding of opium swiddens and the harvesting of rice are the predominant activities. It can be concluded from
this brief review of Table IV that the cultivation of cereals and opium are the major cropping activities and that the timing of these activities is almost totally dependent on the prevailing environmental conditions. There is also a difference in the cropping patterns of Mae Nai and Khae due to the planting of rice and peaches in the former and the absence of potato cultivation, while in the latter the situation is reversed. Hunting and gathering are occasional activities in both villages and add little to the food source.

Labour Units

Shifting cultivation techniques, such as intercropping and succession cropping, make constant demands on the expenditure of and organisation of labour. When they are not cropping, shifting cultivators are felling, burning, weeding, gathering or constructing. One type of agricultural work or another is required throughout the year. In Mae Nai where rice may be considered, if not the major, the most important crop, it is the only grain not extensively intercropped. The margins of the rice swiddens and areas around the field shelters are planted with squashes and other vegetables. Rice cultivation in Mae Nai seems to determine the principal
seasonal variations in the expenditure of labour. Most of the felling and clearing occurring in the hot season is concerned with the preparation of new rice swiddens. The critical timing of rice sowing in May is a period of hard work and maximum swidden labour participation. During the intermediate growing season other cultivation activities, such as the weeding of rice swiddens and harvesting of maize are demanding but require less expenditure of energy than the planting and harvesting of rice.

Rice cultivation absorbs more of the time and energy of the Mae Hai cultivators than any other crop. It is noteworthy that the ritual slack season comes after the rice harvest has been completed and before the clearing of new swiddens commences. However even in this short period of less than a fortnight, preparations are being made for the opium harvest.

In Khao village the timing of labour expenditure is somewhat altered by the absence of rice cultivation. Potato cropping with a much shorter growing period fills what would otherwise be the slack periods in May and November, in addition to intensifying labour output in July and September. For both of these crops it is the labour effort which a swidden unit can muster at clearing,
planting and harvesting that determines the size of the swidden it can cultivate (Leach, 1949:27). Agricultural work at these times requires the full-time participation of all able-bodied members of each household. Khae cultivators, not dependent on their own efforts for the main staple of their diet, hire labour from outside their village and engage in hired labour or labour exchange within their community. The potato crop is sold to Thai merchants. Thus Khae villagers produce two cash crops, potatoes and opium. Only maize is cultivated primarily for local consumption. In economic terms, Khae may be said to be a more advanced production unit, for the main staple of their diet is acquired through trade. The agricultural specialisation in Khae has made the villagers dependent on their non-Neo neighbours for survival. Khae villagers have not given up rice cultivation without controversy within the community. Older members of the community argue that the techniques of White Neo rice cultivation are being forgotten and that the village must rely on the capricious Karen farmers. The majority, however, point out that although Karen rice is inferior, more prosperity can be had by selling potatoes to the Thais and opium to the Karen. Khae informants admit that neither of these arguments is complete. Scarcity of land and labour
are the primary factors which have led the Khao villagers to abandon rice. Dryland rice requires newly cleared land after the first or second cropping and such land is simply not available in Khao. Rice cultivation also necessitates periods of intensive labour, with no monetary return, only local consumption. Dryland rice production cannot support hired labour. The Khao villagers living in close proximity to the Karen rice terraces see that wet rice can be grown year after year in terraced fields. Karen cultivators desire opium and will trade rice for opium in an exchange system which the Khao villagers consider favourable. Thai merchants in Chom Thong and Chiangmai have a growing market for potatoes. The Khao villagers obtain Thai currency for potatoes and purchase Thai hard goods with the return from the sale of the potato crop. The advantages of potato cropping over rice are four-fold: two crops of potatoes can be cultivated during one agricultural cycle; potato swiddens can be cultivated for a longer period than rice swiddens, thus requiring less clearing of forest; potatoes are a cash crop bringing a favourable economic return; and finally, potatoes require less intensive labour than dryland rice.
It would be valuable to make some comparisons between labour expended in rice production with that in potato cultivation. However, figures obtained in Khao and Mae Nai during the 1966 agriculture cycle are not reliable due to the large number of variables involved.

The time expended on potato planting on a rai of land in Khao was found to be approximately two days longer than an equivalent size plot sown in rice at Mae Nai village. The total time expended in dibbling and sowing the experimental rice plot was four and a half days. Weeding, on the other hand, was a major part of rice cultivation, whereas potato swiddens were often

1. There are 2.2 rai per acre. The following estimates of time expended in man days per rai provides only a rough approximation for the major crops cultivated. No consideration is taken of the division of labour or varying clearing, planting and harvesting conditions:

   Felling, slashing and burning - 15 days in primary forest, six days in secondary forest.

<table>
<thead>
<tr>
<th>Planting</th>
<th>Time (in days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (dibbling and sowing)</td>
<td>4½</td>
</tr>
<tr>
<td>Maize (turning soil and covering)</td>
<td>9</td>
</tr>
<tr>
<td>Potato (turning soil and covering)</td>
<td>6½</td>
</tr>
<tr>
<td>Opium poppy (broadcasting)</td>
<td>1 (estimated)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Harvesting</th>
<th>Time (in days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (reaping, threshing and winnowing)</td>
<td>11</td>
</tr>
<tr>
<td>Maize (picking)</td>
<td>4</td>
</tr>
<tr>
<td>Potato (dicing)</td>
<td>7</td>
</tr>
<tr>
<td>Opium poppy (incising and collecting)</td>
<td>15</td>
</tr>
</tbody>
</table>
not weeded at all during the growing period. It was
the lengthy harvesting of rice which indicated the
greatest advantage in the time saved in potato cultivation.
The digging up of potatoes, though laborious, took
four days less than an equivalent one-hundred square
metre area of rice. The total time expended in rice
harvest was eleven days. Threshing sorting and
winnowing are included in the time required for the
harvesting of rice. But again it should be pointed out
that this is not a valid measure of the labours involved,
for it only considers the time involved and not such
variables as the sex and age of harvesters, their
physical fitness or the amount of energy consumed in
their performance of the task. For example, in rice
harvest there is considerably more division of labour
than during the extracting of potatoes. Cutting and
carrying and winnowing are predominantly male activities,
while women stack, thresh and sort, although this
division of labour is only observed in households with
sufficient numbers of both sexes to make it feasible.
In the potato harvest men, women and children dig out
the crop, and it is usually the horses which carry the
baskets of potatoes to the village and market. For
meaningful comparison, however, it would be necessary
to have some estimate of the total labour expended in agricultural endeavours over an annual cycle by all members of a representative sample of household units together with a measure of the productivity of that labour.

One of the most important aspects of swidden labour organisation in White Heo communities is the division of labour within the household, for the household is the basic economic unit. The household may be equivalent to an elementary, polygamous or extended family. However, group labour is not essential at any one phase of the agricultural cycle. Small families such as that of Pia Sae Yaj in Khoe and even single individuals may constitute self-sufficient swidden units, although dryland rice cultivation, combined with maize/opium cultivation demands the participation of both sexes or at least two individuals at certain stages, as was illustrated by the Pow Sae Lis household schedule (Table XII). While in most swidden units felling was largely limited to males, in many households both sexes participated in all phases of swidden work. In the larger household units roles were differentiated mainly in felling, rice planting, harvesting and in the gathering of food and village chores. In the swiddens the division
of labour is less evident than in the village, where women pursued household chores and sewing.

The household can be equated with the swidden unit and a group of swidden units sometimes jointly clear a single area when it is advantageous. After clearing is completed, however, the area is divided up between the participating swidden units according to manpower supplied. This type of joint labour effort is more common in Mae Nai where there is a form of communal labour exchange during felling. When additional labour is needed in Khae village to ensure that swiddens are ready for burning and planting before the seasonal changes, workers are frequently hired from either poorer households within the village or the neighbouring Karen communities. In both communities supplemental labour is recruited on a local basis in proportion to the needs of the particular swidden activity. There are not any organised working groups other than the swidden units based on individual households.

Settlement Patterns

Settlement patterns in the two communities are influenced by three major conditions: the proximity of
the swiddens to the village, the availability of climax forest or adequately fallowed secondary growth, and residence in a community of sufficient size to provide an adequate number of acceptable marriage partners.

As swidden sites near to a village settlement become scarce due to fallowing, the cultivator must shift his swiddens further from his place of residence. However, he must not clear sites so distant from the village that the time taken to reach his swidden does not warrant the work effort he must expend on the cultivation of his swidden. During planting, harvesting and specific growth phases crops must receive adequate daily care. Although many villagers indicate that they would prefer to remain settled at village sites for longer periods than the usual ten to fifteen years, the lack of available land for cultivation after such a residency period forces them to look for new sites. Thus the White Hmo settlement pattern follows the demands of their economy. Cultivators, whose swiddens are considered too removed from their place of residence, move from their original villages to a new site where adequate agricultural land can be found nearby or re-locate in a site nearer to their present swiddens. The resettlement of both Jak Kyn and Khao can be attributed
to proximity factors. Another factor affecting the settlement pattern is the need to protect the swiddens from predators, although the contiguous expansion of White Neo shifting patterns discourages faunal predation. This problem is solved by periodical residency in the field shelter, during the phases when crops are most susceptible to depredation. It is ironical that the shift pattern which is most effective in preventing faunal depredation retards reforestation by creating wide stretches of grassland where forest species are excluded. It may be that White Neo field shift patterns more than any other single factor are responsible for the large grassland or savanna areas associated with their settlements. Izikowitz (Izikowitz, 1951:82, 142) for example, compares the Koa with the Lamet settlements where there appears to be no reforestation problem. Since both the Lamet and the White Neo inhabit climatic zones with long dry seasons and other similar environmental characteristics the distinct variation between them may be attributed to the fact that Lamet communities remain stationary for several generations, while the White Neo villages move their settlements more frequently in an effort to be near their swiddens and suitable forested areas for clearing. Thus the White Koa live in more
dispersed and mobile communities. Both the Lamet and the White Keo cultivators move back and forth between their swidden shelters and villages. However the Lamet spend longer periods in their rice swiddens than do the Mae Nai cultivators. Often an entire White Keo household will move to the rice swidden for up to two weeks during weeding and just prior to harvest, when the ripening heads of grain, *

*nplei too ciay nte noob*, attract flocks of birds. Although the Mae Nai cultivators, when compared to the Lamet, spend relatively short periods in their field shelters, it is clear that shifting cultivation has some influence on the dispersal of settlements, for it requires that village houses be partially vacated during certain phases of the swidden cycle. In contrast to periodical rice swidden residence, Mae Nai cultivators spent very little time in their maize/opium swiddens. *Hae* cultivators, who do not practise rice cultivation, with certain exceptions, rarely spent extended periods in their potato or maize/opium fields. It may be conjectured then that upland rice cultivation has an indirect effect on the dispersal of White Keo settlements.

Another notable similarity between rice cultivating in Mae Nai and the Lamet villages as described by
Izikowitz (Izikowitz, 1951:31-34), is the fact that when villages segment and move to new sites, it is usually only for short distances. As already described, the segmentation of Mae Nai households, which resulted in the settlement of Jak Kyn, was prompted primarily by a desire to be closer to swiddens and, in particular, rice swiddens which have to be phased out of rice cultivation within two years after clearing. Since most of the ritual and community activities of Mae Nai and Jak Kyn continue to be carried out together, it is clear that economic reasons were the most important consideration in the segmentation.

Clear advantages arise in moving to a site which is easily accessible to the original settlement. Maximal lineage exogamy prohibits marriages within the surname group, thus limiting the choice of eligible females. In a village of five or six households, and a single maximal lineage such as Kong Hae there are no marriageable females, while in Mae Nai, a village of two maximal lineages and seven households, the domestic cycle and other unfavourable circumstances may seriously limit the choice of females. The villagers are aware of this problem, as exemplified in the case of the segmentation of the Chong Sae Vaj minor lineage in Khao. Thus they
prefer new sites which are either relatively accessible to the original community or at least within range of other white HcO villages. The development of the complex of villages in the Mae Mai region can more clearly be understood in this context, as well as the events at Khao, which in contrast has developed different settlement patterns, possibly due in part to the lack of rice cultivation.

In point of fact the shifting cultivator faces a choice between living in permanent and clustered settlements and periodically spending time in his field shelter, when crops and in particular rice need the most attention, or living permanently in his swiddens. As Izkowitz (Izikowitz, 1951:142) has suggested it may be the presence of large domesticated animals that encourages the former settlement patterns. All white HcO livestock with the exception of horses are kept within the village and its surrounding areas. Pigs and chickens never move far from the village itself, while the cattle and goats graze and browse nearby forest and grassy areas. However, the many apparent exceptions to this type of animal husbandry make this argument difficult to accept.
Rights Over Land

Some variation exists in the conceptual attitudes of villagers in Mae Mai and Khao on rights over land. The villagers consider land surrounding their community as land and territory which, in theory at least, is in control of the household units of the village. Although each community considers that its minimal lineages have priority cultivation rights over land within a radius of several miles, the village as a political unit does not hold claim to land itself. Nevertheless Khao villagers have delimited tracts of forested land for clearing purposes and a relatively well-defined boundary between themselves and Karen cultivators. While in practice this imaginary boundary is often ignored, it appears to form the basis for arguments in disputes with the Karen over land.

In contrast, Mae Mai cultivators de-emphasize the importance of village lands and fields. They point out that as villages split up and move to new sites nearby, it is impossible to define geographical cultivation areas. Many households of Mae Mai cultivate rice swiddens which are nearer to Jak Kyn, and in one case, Pui village than to Mae Mai. To define boundaries under such circumstances would place hardship on all cultivators.
The White Meo are similar to many other shifting cultivators with unilinear descent groups, such as the Tanala of Madagascar (Linton, 1933:46), the Kachin of Burma (Leach, 1954:155) and the Tiv of Nigeria (Bohannon, 1954:31), in that there are distinctive differences in the actual rights which the lineages have in land.

Larger social groups, such as minor and major lineages, have control over tracts of land only in so far as contiguous swidden units are usually equivalent to agnatically related households. This kin relationship is perceived in terms of related social groups rather than individuals. Since lineage members tend to coalesce and support each other with reference to lineage affiliation, it is not surprising that localised lineages tend to cultivate adjacent fields. Disputes over land are usually settled within the smallest lineage segment involved in the litigation, plaub, and an effort is made to find a relative outside the disputing lineage segments who can make an amicable settlement, tu plaub. If the dispute is with another maximal lineage or non-Meo, a settlement is usually fixed, txiau plaub, by either the village headman or by a joint agreement between the headmen of the communities concerned. In most cases of dispute there is a conscious effort to maintain harmonious interpersonal relations even during the heat of the controversy.
Clearing of forest establishes the right to cultivate a swidden beyond the time when the field has been left fallow for reforestation. Once fallowed the field can be used as common grazing land for the village livestock, but the original cultivator's rights to the land are not abandoned unless he specifically relinquishes these rights to another swidden unit or moves from the village to another region. Usufruct rights to land are held only as long as the cultivator is prepared to assert these rights by permanent residence. This system of relatively permanent rights to delimited areas of secondary forest is not linguistically distinguished from primary forest in relation to rights over it, but rather in reference to the extent of forest regeneration. Primary and late secondary forest are both referred to as zov. If a right over secondary forest is not known in the community, an interested cultivator may begin clearing and by this act ascertain whether any other swidden unit claims usufruct rights. However, the mobility of White Meo villages in the past appears to have mitigated the chance of this type of land dispute, for by the time the forest has regenerated, the villagers have often moved away from the region. During the period from January 1966 to June 1967, more disputes over rights
to land were recorded in Khae village than Mae Nai and most of the disputes were concerned with rights to secondary forest plots which were reaching the stage of regrowth when recultivation was feasible. Since Khae village is undergoing a more immediate shortage of land than Mae Nai, it is quite possible that the demand for what scarce land was available caused more conflicts. Other factors, such as the temporary migration of Khae villagers to Laos, might also have aggravated the situation, for, in theory, by moving to another region the cultivators abandoned their rights in Khae swiddens. Nevertheless, it seems logical to assume that as land grows scarce, only two options are open to cultivators: they must either move to a new area, or more vigorously protect what land is available from the increased demand. It is conceivable that the former response to land scarcity results in the continuance of shifting cultivation, while the latter may lead to greater claims on available land and eventually some form of permanent rights over land. However, the facts in Mae Nai and Khae do not conform to such an evolutionary process. Mae Nai village, with its growing peach crop and externally restricted movement, may be more directed toward a sedentary agricultural system than Khae. The villagers
themselves often debate the fact that fruit tree farming restricts their short term movements. By continuing to plant peach trees they have accepted, to a large extent, a quasi-permanent agricultural system. Only observation of these two communities over a twenty-year span could provide a definite indication of the trend toward sedentary agriculture, but given the pattern of White Meo response to changing economic conditions, it seems unlikely that all households within a community would opt for permanent settlement. A sedentary way of life still remains incompatible with the type of shifting rice cultivation practiced by most White Meo communities.

Size of Communities

The size of Mae Nai and Khao may to a large extent be influenced by the type of shifting cultivation which they practice. Shifting rice cultivation in combination with intercropped maize and opium poppy necessitates small dispersed communities if cultivators are not living permanently in their swiddens. The need for adequate land, especially in a situation of scarcity, forces the White Meo to settle at greater distances from each other than would be necessary under conditions of sedentary
agriculture. The distance between communities affects the interaction and relationships between individuals, households and lineage groups which might otherwise have more interpersonal contact. The mountainous terrain in which the White Meo villages are situated also curtails contact between small dispersed communities. In Mae Nai, except for frequent interaction with Jak Kyn villagers and the daily sojourn of school children to Pui, visits between communities are reserved for ritual occasions and specific purposes. Many of the older members of Mae Nai rarely leave the village except for their swiddens. Khae village, which comprises 260 individuals to the 123 in the combined villages of Mae Nai and Jak Kyn, does not practice rice cultivation (Tables X and XI). The larger community has even less interpersonal contact between villages than Mae Nai. Infrequent visits to Khun Klang for marriages, feasts and New Year ceremonies are the major occasions for inter-village contact. Nevertheless, within the region where social relations are on a more formal level than within the community, most individuals are interrelated through kin and affinal ties and are personally known to each other. The villagers in Khae express a definite doubt that the village would maintain its present size
if they resumed rice cultivation. They note the scarcity of land and the great distance between the village and areas where dryland rice could be cultivated. There is not sufficient land for a community the size of Khae to cultivate rice, given the terrain and lack of primary forest in the area. The villagers are aware of social change brought about by dividing up large villages into smaller communities. They indicate that immediately after splitting up, visiting between smaller, segmented villages is frequent, especially among the youth and unmarried individuals. Gradually visiting tapers off until it becomes an occasional event. Thus, in spite of variations in the size of White Meo communities, the number of individuals included in one’s sphere of ordinary social contact does not routinely exceed the members of the village.

As a limiting factor on the size of the communities, land has a bearing on lineage structure, since large communities can only develop when the furthest swidden are near enough to justify the time taken to reach them. This factor has a tendency to create small communities, especially in agriculturally marginal terrain. Once all the good swidden sites are occupied, it is not possible for new lineages to settle in the village or old lineages
to expand to any great size before segmentation takes place. However, when the original settlers move from the village, the land is once again opened up to new lineages which must consider the suitability of the site and the feasibility of the surrounding land. Lineages occupying communities with good soils and topography can, therefore, remain in a village site longer, expanding up to the limits imposed on them by the availability of agricultural land. Thus in certain areas, such as the White Hào Community of Huai Sae in Petchaboon Province, where large, continuous areas of land exist, villages and their local lineages are able to grow to considerable size.

In other areas, such as those in Chiangmai Province, where the terrain is rough and broken, lineages move away when land becomes scarce. More often than not this move was to a nearby location, thereby permitting the segmented households to remain members of the lineages in their original villages. With the passage of time the lineages in the two communities become less interdependent, forming a balanced or, as the case may be, major lineage equivalent in size and position with that of their original settlement. Jak Kyn is an example of this type of segmentary process.
If, on the other hand, a lineage group moves to a new site so distant from their original village that there is no social communication or economic exchange between the new community and the old, fission has taken place. Rather than creating new segments, the original community has lost lineage members. Although there is no definite social or economic break between Khae and Khun Klang villages, they are far more dispersed than Mae Nai and Jak Phyn, and interchange is minimal by comparison.

Conclusion

In the white Neo communities of Mae Nai and Khae, shifting cultivation permits a system in which the fundamental socio-economic unit, the household, occupies an interdependent position. Households are equivalent to the economic unit of production, the swidden unit, and as the minimal lineage, they are the unit through which property is transferred. This interdependence is manifest in the agnatic residential clusters which make up village communities and in the web of kinship ties which radiate throughout the lineage system to the founder of each maximal lineage. Nevertheless, there is a high degree of self-sufficiency maintained
by households in the economic sphere, for it is large enough to meet the demands of swidden labour and small enough to be able to organize successfully its swidden activities and to control its production and consumption according to its own requirements. The techniques of shifting cultivation do not appear to interfere with the social organization, nor could it be concluded that the social organization limits the capabilities of shifting cultivation. Both systems appear to complement each other and these two major parameters of White Kao society have adapted themselves to the environment.

It is impossible to state confidently that the White Kao social organization produced a particular settlement pattern, for there is too much variation exhibited among the shifting cultivators of Southeast Asia alone. Likewise it does not appear conclusive that the social organization of the White Kao has influenced the type of settlement patterns in Mae Ha and Khao. However their highly integrated social organization may influence the closely integrated cropping practices, which in turn favour village settlement. White Kao households are not freely mobile, for they are held together by ties of kinship and affinity. Although a household may move to another village independently,
this is a rare occurrence and only happens if it has
kinship or affinal ties in a second community. Never-
theless, the mobility of White Hoo households which
segment as clusters or groups of agnatically related
households is sufficient to inhibit the rise of wider
social groups with political functions. Ties between
families result from affiliation in wider lineage groups
which require an understanding of the classification of
social roles between relatives and neighbours. Although
social groups larger than the household family, oomb,
have no legal status, they do give and expect support
from related lineages. The functioning and dissolution
of the household family does affect the entire localised
lineage.

As an economic system, shifting cultivation
stimulates a greater degree of mobility by household
units than sedentary agriculture. However, there is
a considerable degree of permanency in Mae Na and Khao
which may in part be influenced by lineage affiliations
and the desire to remain in communities of sufficient
size to provide a range of eligible marriage partners.
In contrast to the social pressures toward permanency
of settlement is the scarcity of cultivable land and the
lack of climax forest resources. These conditions have
undoubtedly been the cause of the splitting up of
communities for there is no longer any assurance that
the expanding community will have sufficient land available
for all its members in perpetuity. Jak Hyn village was
founded primarily because of the pressure on land within
the immediate area surrounding Kae Nai. In Khao where
forest is disappearing rapidly, the villagers must
eventually come to a decision on whether to move to a
new forested region or take up a more permanent form of
agriculture. The abandonment of rice cultivation has
postponed the time when such a decision will have to be
made. Whereas the scarcity of land in Kae Nai is
producing fission, the more severe pressure on land at
Khao village has not so far had a similar effect because
maize, opium poppy and potatoes may be cultivated for
longer continuous periods than rice and do not require
the highly concentrated nutrients of a newly felled
climax forest.

If a peasant society is defined as a rural,
aricultural community which practices subsistence
farming, but also produces crops that it exchanges with
a wider market (Lehman, 1963:222) then both Khao and Kae
Nai villagers can be called emerging peasant communities.
Khao far more than Kae Nai is dependent on external
markets. For the main staple of the White Neo diet, rice, Khao villagers are dependent on the localised exchange of opium for rice with neighbouring Karen villages. Potatoes are sold in the lowland markets for hard goods and what are, in effect, luxury items for White Neo cultivators. This leaves maize as the only major subsistence crop.

As their dependence on markets increases and the White Neo assume a greater role both in the wider national economic structure and in social communications with the larger lowland society, ties between local and agnostic groups may become less meaningful. More emphasis will be placed on the economic ability to adapt the communities to the best agricultural opportunities whenever and wherever they are available. In Mae Nai which has greater social communication with the Thai macroculture, there is a more regularised and direct contact with the lowland administrative apparatus.

The general attendance of Mae Nai children at the Border Police school in Pui is having a direct and immediate influence on behaviour within the households and kinship structure. Children often know more than their parents on specific subjects or have a wider range of knowledge. They have become less dependent on their
parents and their agnostic kin groups for advice and direction, and this is manifested in what the eldier villagers consider as a lack of respect and veneration for their ancestors and the traditions of White Neo society. Even among the children, there is circulation of small amounts of money. This process of adapting to macroculture markets and institutions may be paving the way for an ultimate adoption of sedentary agriculture.

If White Neo lineages are to maintain their solidarity, it would seem that two qualities inherent in most peasant agnostic lineage structures must be elaborated: the holding of common property and the sense of lineage cohesiveness through ancestors. As Freedman (Freedman, 1953:139) has pointed out, the purest form of unilinear descent group is a society which is totally sedentary and in which there is no specialised institution of government. In such societies the whole of political life is expressed in terms of the relations between segments. "As soon as political centralism appears, lineages are engaged in relations which are supported by values and sanctions from outside."

To explain why some lineages rather than others manage to hold their members together, he adduced the factor of common property. It was probably due to the support
given to the lineage system in the collection of taxes and other localized operations of government which allowed lineages in China to survive. Other than the minimal lineage group which corresponds to the household family and the swidden unit, lineages in Mae Nai and Khao do not hold property in common. They do, however, afford socio-economic security by assuring each member of assistance in case of need both from the lineage group itself and from individual members of the lineage.

With the exception of the White Neo burial mound (Plate XXIII) and household altars the lineages have no enduring ancestral monuments, such as the Chinese lineages possess. Shifting cultivation does not permit permanence and there is a tendency for lineages to fission when land becomes scarce. Economic necessity forces households to leave the community and contacts between separated communities may not be maintained. In such fissured lineages, cohesiveness is primarily within the lineage segment, so that only proximity and veneration of common ancestors produce solidarity among agnatic kin. Whether the Thai-educated children of Mae Nai will continue to believe that they are dependent on their ancestors for their own prosperity and welfare must remain for the future to determine.
Although it cannot be stated that the particular social organization found in Ane Kai and Ilae is determined by the White Keo technology of shifting cultivation, the social system is largely dependent on the continuation of the White Keo economic system. The values of each affect the other.
GLOSSARY OF WHITE NEO TERMS

All relevant White Neo terms appearing in this thesis are included below with the exception of those listed in Tables. White Neo words and phrases are fully translated whenever they occur in the text. The alphabetizing is based on English equivalents.

- **av blop** = sticky soil
- **av dawb** = white soil
- **av chib** = black soil
- **av lilab** = red soil
- **cam thawj lawn** = argument against a leader
- **cawv** = rice wine
- **cha roog** = bedroom
- **cha tucoy** = main living room of Neo house
- **chaw** = geographical region
- **chaw pw** = cleaning platform
- **chib** = ceremony secret to all but minimal lineage members
- **chuj dayj** = common maize grown as animal fodder
- **chub** = winnowing fan to blow rice chaff
- **ciav dawj** = split bamboo water line
- **clab lamb** = open baskets used for carrying soil, potatoes, etc.
- **conj npauj** = small flying insect which eats young rice stalks
- **cong gaws** = formal greeting of respect
- **cos** = treadmill for pounding and milling rice
- **cov noj man** = village elders
- **cov nthus thawj** = village elders, another term
- **cov pusaw myeph** = northern Thai people
- **cov qhua tabboob** = the bride's party at the marriage feast
- **cov chua vauv** = the groom's party at the marriage feast
- **cov tawj lams** = village elders
- **cuab** = family unit residing under one roof
- **cuyheeq cuabtam** = inheritance of household property, including cultivation rights
- **cuaq lub** = the ninth month of the lunar calendar
dihthecarpous leaf thatch for roofing
lengths of bundled grass for roofing
pack frame to fit on a pony's
packsaddle
steamed rice
ball used to call spirits to the
feiy neeb
cooking fire spirit
mother's uterine brother
lineage and clan spirit
father—mother spirit
sky spirit
the terror spirit
female jungle spirit
front door spirit
pig fire spirit
dog sleeping room
place spirit
torture embodied in the spirit
medicine spirit
processed buck cloth used to make
cloth sacks
drying the maize on the stalk
shelling the maize by hand
large, yellow—green squash; also
a type of cucumber
striped, yellow—white squash
extraction of weeds by the roots
first opium soothing
an indigenous tuber
peach, (Musa vulgaris)
paddle—like shovel; wood spoon for
eating fish, center put
wide palette knife used to scrape
partially dried opium off the pod
to divide, split, cut into sections
turning soil with hoe; third seeding
of maize swidden
debt incurred by receiving advice
from respected person
refers to all heo descended from
an original clan founder other
than one's own clan
bar of crude silver
small hard pillow for sleeping
to harvest opium
curved hoe for working in swiddens
the time when the moon comes up after the chickens have gone to roost
vines and creepers
refers to all Kao peoples
spear-like piece of bone used to pierce maize ears
the head of the rice
marking of a swidden site to indicate ownership
the spirit caller
ten bottle
hatchet
the nuclear family
the first month of the lunar calendar
a swidden
a single village
a turnip
unit of measurement for opium; 1.6 jugs.
a corn boror which destroys maize kernels
instruction given without compensation, free advice
twelfth month of the lunar calendar
gruel made of rice
rice water
a bunch of bananas
a man or outsider
a man of authority
younger brother
localised lineage group
agricultural residence cluster
clan or maximal lineage
distant patrilineal relatives
good friend from one's own clan
variety of bean
the edge of the jungle
second weeding of rice swidden
second weeding of opium poppy swidden
respected elder person
sickness of the earth which occurs when swidden is not burned
plaited bamboo mats for catching rice during threshing and winnowing
liaj ia
tebchaws
log cam

looj pum
looj tawb
loj kab
loj lim
loj tua
loj xam
luaj zeaj teog
luaj
luaj nrog
luaj nrog txij hawoaug
luaj teb
lub hav sawj
lub cuabtam
lub jab dob
lub kublub
lub upleg
lub qhov sawj
lub teb lub chaw nyob
tais thaj yeab
lub teev keem
lub qub zoe
lub yah tohua xua
lub vos hav
lub hav sawj
lwj
lwj tsev
mav moob
mav koob meko koog
metub
mav loos
moe upleg
mov
mov kuam
moq
muab

a sickle
the lands surrounding the village
the cultivated land
chopping block used in food preparation
root crops
banana shoot
third-born child
second-born child
first-born child
fourth-born child
other villages than one's own
initial cutting of interbrush and saplings in a new swidden
cutting off a clump of woods close to the ground
weeding when maize is as high as the knee
a cleared field
ideal agricultural valley with a slope on one side for run-off
inheritance
water trough
opium smoking pipe
grains of rice
depression with high ground rising all around it
a field which will not grow opium; any non-productive land area
iron caps put on to dibbling sticks to strengthen tips
the old village
a newbie used to sift out rice bran
broad level valley opened at one end
an enclosed valley
bellows used by village blacksmiths
blacksmith's used
tree seedling
a marriage go-between
term for son, or brother's son
rattan basket for temporary maize storage
threshing rice by rubbing grains off the stalk with hands and feet
term used for any form of cooked rice maize meal
variety of bean
giving over of rice by the place spirits
muab npleg to harvest rice, literally to take the rice in one's hand
muam laus elder sister, when referred to by a younger male
muam upawg female cross cousin, when referred to by a male
nab naeb hardwood seedling which is roasted and eaten
noca urod hoeing of weeds prior to planting
noca laug to run away from one's family group
noca npog a separate lineare group which has split forming a major segment
noca men who want to be first to clear forest for new fields
noca wun main post unholding house; also called post spirit
noca pias rice cakes
noca npis affinal relatives
noca tahn thaj kub distantly related affines
noca forest spirits
noca horses
noca nru pack saddle for horse
noca ru ridgepole of the house
noca tsauq horizontal side beams of a house
noca wife's mother
noca fa adultery
noca mo last meal of the day, eaten after dark
noca npis the feast of the newly harvested rice
noca su noonday meal, or morning snack
noca tanais first meal of the day
noca thaj thawj to make a profit through one's position of power
noca npis rice chaff
noca sticky
noca xiav variety of maize for human consumption
noca dpaj dryland rice, yellow in colour
noca daw dryland rice, white in colour
noca ntsuab dryland rice, bluish in colour
noca too stage at which rice begins to fill out
noca too daj qab hnab kernels of rice are ripening at top of the head
noca too xiav nto nqob kernels at the base of the head are ripened
noca liab red glutinous rice eaten mainly as a sweet
nlooj hlis  hardwood used for burning in blacksmith's fire
npua  pigs
nwe te  wages earned for hard labour
næeb  grass thatch for roofing
nr æug  dissolution of marriage
nteb pohhw  to pick or break off ears of maize
ntæs  bamboo poles used for carrying rice sacks
ntau npleg  threshing of the rice sheaves
ntntab  storage left over the cooling fire
ntlua nroeg  hoeing of weeds and unwanted plants
tntim  rice bowl
tntem kub  stage at which maize kernels are fully outlined
ntoo  tree
ntoo daj tawv  tree with yellowish wood used for house fires
ntoo nplooc hlis  hardwood tree, (C. tribuloides)
n too quæv playv  hardwood tree, (C. situatianum)
n too tawv ntæhw  hardwood tree, (Ithocarpus lanierianus)
n too ntoo  cutting of larger trees in new swidden
ntoo pheej tsaab  to cut a tree from both sides until it falls, usually cutting a larger wedge on side opposite desired direction of fall
ntoo txw ntægw  to cut a tree on one side until it splits off
ntntæab npleg  non-glutinous dryland rice cultivated by root hithe boo
ntnæug  orphan, widows, anyone left alone without close family ties
ntnæam liæb  a tiny ant which eats rice seeds after they are planted
ntnæam npleg  threshed rice
ntntæj  a tract of land cleared from primary forest
ntælawg  term for youngest son
ntæxw nqe  debt incurred by seeking advice from a specialist
nus laus  elder brother, when referred to by younger female
nyab  daughter-in-law
nytæ auv  fern used as nesting material for hens
nyiaj daim  bars of silver
nyob nrug deb  separate villages
nyuj  cows
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>os</td>
<td>Ducks</td>
</tr>
<tr>
<td>pai</td>
<td>raw cotton</td>
</tr>
<tr>
<td>pam</td>
<td>blankets stretched on 3 sides of threshing area to prevent loss of grain</td>
</tr>
<tr>
<td>pauv</td>
<td>reciprocal labour arrangement</td>
</tr>
<tr>
<td>paw uv tchwj</td>
<td>Thai-style hoe, small, shallow-cutting</td>
</tr>
<tr>
<td>pawn yab</td>
<td>sapling around which Song ka ceremony takes place</td>
</tr>
<tr>
<td>pawv tøb npleg</td>
<td>stacking of rice sheaves</td>
</tr>
<tr>
<td>peev</td>
<td>to be clever, skilful</td>
</tr>
<tr>
<td>peev xwm</td>
<td>people of Meo lineages</td>
</tr>
<tr>
<td>pej xeem</td>
<td>age gap between father and son, implies rules of behaviour for generational attitudes</td>
</tr>
<tr>
<td>phaj</td>
<td>refers to anyone of the younger generation</td>
</tr>
<tr>
<td>phaj hlaus</td>
<td>refers to a man of father's age or generation</td>
</tr>
<tr>
<td>phaj txiv</td>
<td>refers to a man of grandfather's generation</td>
</tr>
<tr>
<td>phaj yawg</td>
<td>father's sister</td>
</tr>
<tr>
<td>phauj</td>
<td>plaited baskets to carry and store rice, designed to fit the wooden pack-saddles of Meo ponies</td>
</tr>
<tr>
<td>phawv</td>
<td>exterior walls of house made of split boards</td>
</tr>
<tr>
<td>phauj</td>
<td>official village headman chosen by Thai government as a liaison</td>
</tr>
<tr>
<td>phauj ntoo</td>
<td>grass, underbrush found in fallow fields</td>
</tr>
<tr>
<td>phuv nyais</td>
<td>rice and wine cups</td>
</tr>
<tr>
<td>pib txwv</td>
<td>kerosene cans used for storing seeds, roughly 20 litres in size</td>
</tr>
<tr>
<td>piv</td>
<td>water gourds</td>
</tr>
<tr>
<td>plhauj taub</td>
<td>piece of shell on which opium is rolled before smoking</td>
</tr>
<tr>
<td>pling deg</td>
<td>the spirit which exists in each person</td>
</tr>
<tr>
<td>plig</td>
<td>ripping of unhusked maize ear from stalk during harvest</td>
</tr>
<tr>
<td>plhaub kws</td>
<td>early maize</td>
</tr>
<tr>
<td>pokkwa cauj</td>
<td>late maize</td>
</tr>
<tr>
<td>pokkwa taj</td>
<td>paternal grandmother</td>
</tr>
<tr>
<td>pog</td>
<td>a childless woman</td>
</tr>
</tbody>
</table>
| pojniam tab seeb | }
to get lost in the jungle
to sell at a loss
brideweath
groups of patrilineally related kin
which are continuously forming close relationships
amount of seed that can be held in the palm before broadcasting
something given with no expectation of payment or reciprocity
basket containing approximately 25 litres
dryland tare
peace; satisfaction
front entrance to the house
downhill side of the house
downhill end of the village
chickens
variety of bean
uphill side of the house
uphill end of the village
garlic
to borrow, create a borrower-lender relationship of obligations
narrow poles lashed vertically between ridgepole and side beam to attach bundles of grass thatch to roof
species of oak, (Jithocarpus oxyecarpus)
slave, servant, or employee
side or back door of the house
main or front entrance to the house, usually on downhill side
pig fire
grain crops
white spring potato
small bush whose bark is boiled and used as eye wash
wild, uncultivated land, thought to be hostile
classificatory term for all tools with handles or that are held in the hand
field measurement roughly equivalent to 2 acres
sixth month of the lunar calendar
formation of the soft kernels on the rice stalk
riam small knife for skinning vegetables and preparing food
riam yeed small trident knife for incising opium pods at harvest
rob nge transaction in which a man seeks payment for goods or services rendered
roob laj pole laid across top of roof to secure crossed saplings which fasten the thatch
rooj noj mov table
rooj zaum backless bench for sitting around cooking fire
satang Thai coins used as weight balances in weighing opium
tauj to gather, harvest, bring in taxes which the Thai government forces into to pay on the land they use bush similar to boysenberry, with edible fruits
eaev large cloth sacks used to carry winnowed padi rice
seeng kasa ceremony to major lineage founder on day before New Years
sia vsa shiny husks indicating maize is ripe
sib luaj equals, when referring to people or villages
sig sychig fruit tree seedling
siv ub nees yellow-leafed bush with sour berries
Siv Yis Creator of the Leo peoples and founder of 12 original Leo clans
suav variety of bean
tab measurement of opium equivalent to 2½ satang in weight
taib small cloth bag for storing seeds before planting
taize small tin cups used for collecting opium sap after scraping
taub generic term for all squashes and pumpkins
tauj generic term for grassland, recently fallowed growth
tauj dub black grass
tauj lab bitter grass
tauj ntxhw elephant grass
taum beans
taue single-bitted axe
tawb nees horse pack-baskets
tawv

unit of measure roughly equivalent to 20 litres

teb
cleared, cultivated fields
tebl npleg
rice fields
tebl plig
field spirit
tebl tauj
a swidden which has reverted to grass after falling

tebohaws quav poj
idiom meaning literally "fields on which women defecate, used to describe recently farmed fields considered useless until trees are 6-10 feet in height"

teeb kublub
opium smoking lamp
teev
scales for weighing opium
teev keem
dibbling stick made of qheb wood
teev npleg
sheaved rice
thaiib vaj
the Thai government
thaiiv
anvil used by village blacksmiths
thawj npleg
to carry the rice to the village after harvest
thawj thiab
rebirth of a person after death
thoob
buckets
thoob roz
the whole village, in the sense of including small nearby hamlets
thooj pog koom
those having the same paternal grandparents
thoij txhiaj
to covet another man's wealth
thws
cutting, clearing of a site to prepare for cropping

tieb nkauj
menstruation, to reach puberty
tical
Thai currency
tid laus
elder brother, when referred to by a younger male

tim xyoob
assistant to official headman chosen by the phuv nyais

tiv
common Keo squash
tow
small dark-green pumpkin-type squash

tsam pom
starve at which maize kernels begin to fill out

tsawb dub
large banana which is green when ripe

tsawb paw
small banana

tsawb qab zib
medium-sized, sweet banana

tsawb qa"ub
a sour banana

tsawb team
common banana, (Musa spp.)
tsawb yeev tuab
dried bananas eaten as a snack by Neo children and adults

teeb yeeb
to plant opium by broadcasting

teev
a house

teev pheeb suab
a three-sided lean-to made of branches
560

tsev teb

tsev tim phooj
tkaia

tshaj thawj
tshob

tsiaj txhuu ncauj
tsoj neeb
tsoob

tsoov txhuv
tsuav ntshaij
tsaug
tuag txhuav
tus cev cawv
tus haav hauv

tus kav xwm
tus mej koob
tus ntawg

tus phiøj laj
tus pov thawj
tus tab choj

tus thawj zeej
tus tsahb xov
tus tooob neeb
tus tsawj kab

tus tsev tsev
tus tub hlob

txaia
txaus

tx dab
txee
txhab
txhuang nws txiaj
txhuam txwv
txhuv
txhuv nplam
txhuv txua
txiaj ntsig

a field hut
temporary field shelter
goats
to profit from a business transaction
breaking up and scattering of
patrilineally related kin groups
an animal pen
a shaman
all vegetation, including trees, which
are not planted or tended by man
bouncing the rice on a tray to remove
the bran
a storage loft over the fire
supporting posts of the house
to dry off the corn silk
toastmaster at wedding, usually
groom's paternal uncle
village headman, chosen by the
villagers
master of ceremonies at wedding
go-between for groom's family
younger son, when referred to by his
parents
best man at a wedding ceremony
a marriage intermediary
wooden support set to hold cutting
pole or platform against a tree
village headman chosen by Thai gov-
ernment, also called nhuy nvaia
headman of groom's village
a marriage go-between
man in charge of the food at a
wedding feast
head of the household
elder son, when referred to by his
parents
to borrow or lend without interest
to lease cultivation rights, usually
in exchange for goods, produce or
obligations of other kinds
a sacrifice made to yawg koob
a shelf
granary for storing maize and rice
gifts to the spirits, i.e. sacrifices
maize shelling board
term used for rice once it is hulled
glutinous rice, once it is hulled
non-glutinous rice, when it is hulled
gracious gifts, i.e. gifts not
requiring a favour in return
rice plant is as high as the knee, when second weeding occurs
formal betrothal
fruit crops
elder father, i.e. father's elder brother
younger father, i.e. father's younger brother
a clump of bamboo
a mattress for sleeping
wooden boxes for storing opium sap after harvest
water buffalo
stage at which rice plant has formed one leaf, indicates time of first weeding
stage at which maize kernels form to prosper to become a man
round bamboo winnowing trays
daughter's husband
elder sister, when referred to by a younger female
opium apatula
wooden shingles for a roof
crescent-shaped rice cutting knife which fits in the palm
the marriage ceremony grandson, when referred to by his paternal grandfather
Neq word for lineage, i.e. largest group of agnates
rice bran
ghosts of condemned souls which return to haunt their lineages reverence shown toward descendant generations of ancestors
winnowing of rice chaff from the grain paternal grandfather
paternal great-grandfather
paternal great-great-grandfather
a widower
father's sister
father's sister's husband
white-flowered opium poppies
red-flowered poppies
red and white, or pink-flowered poppies
yeeb phaj — plate for holding opium-smoking articles
yeeb tob — knife used to prepare opium for smoking
yeeb tseeb — needle-like tool for holding opium
yeeb teehuaj — lavender-flowered poppy, used for medicinal purposes
yeeb yaj kaib — abode to which the plig travels after death of the body
yias — round-bottomed frying pan
yim — household as a local spatial group, may include non-kin members
zaub — leafy vegetables
ziag pag tshaws — formation of kernels on the rice stalk
zoo nkauj — a site considered good for settling a new village
soov plig — forest spirit
so3 — village
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Plate V  Carved Figure

Plate VI  Maize Samples

Plate VII  Swidden-Khae

Plate VIII  Quern

Not Reproducible
PLATE IX  RICE SHEAVES

PLATE X  THRESHING AREA

PLATE XI  WINNOWERS

PLATE XII  WINNOWING
PLATE XVII  DOWNWARD INCISION

PLATE XVIII  TEAM CROPPING

PLATE XIX  BURNED TRUNK

PLATE XX  POLYGYNOUS HOUSEHOLD