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T'IN: A HISTORICAL STUDY

by

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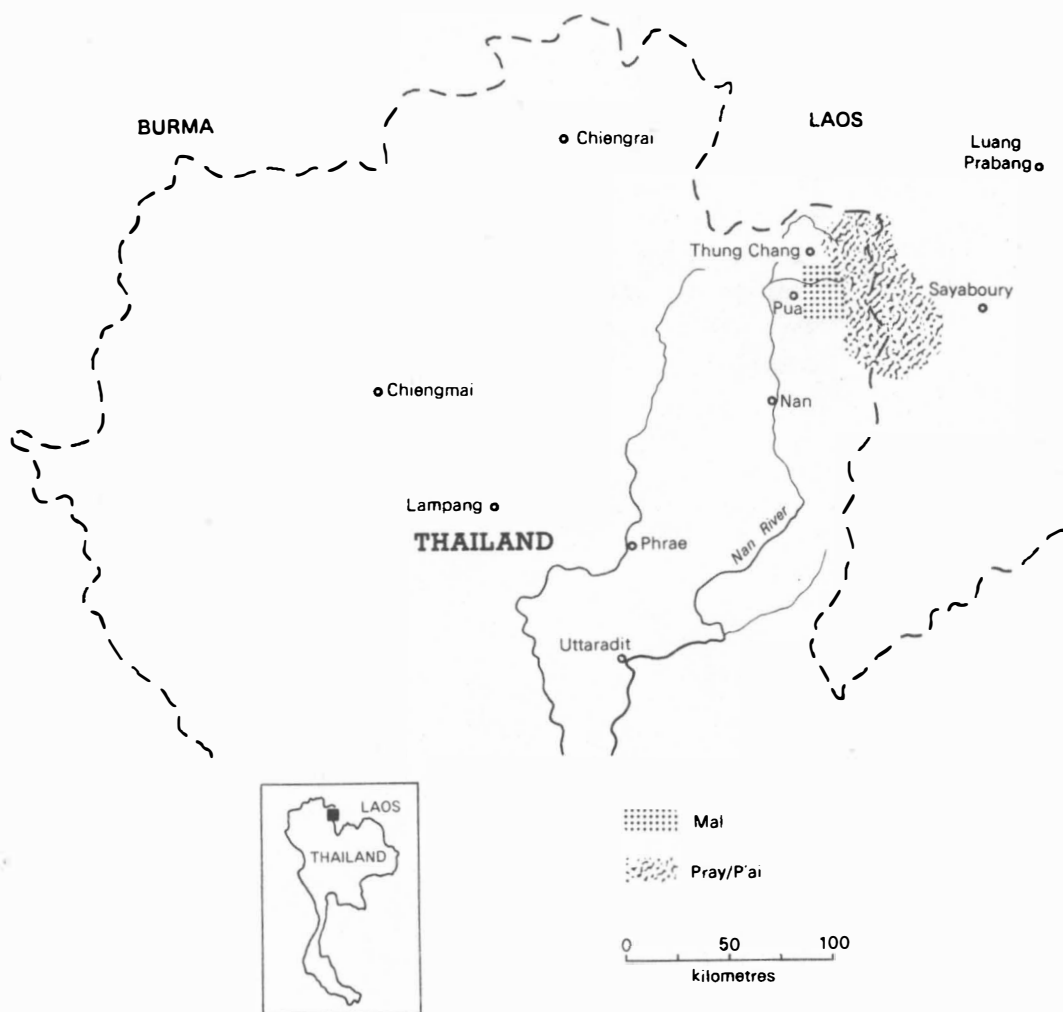
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This monograph is the dissertation I wrote for the Ph.D. degree at Indiana University in 1971. For this publication I have included in the opening chapter more ethnographic material about the T'in tribe than what was in the original. The rest of the material, however, remains unchanged.

David Filbeck,
Lincoln Christian Seminary
Lincoln, Illinois 1975.

THE T'IN IN THAILAND AND LAOS



CHAPTER ONE

THE T'IN: AN ETHNOLINGUISTIC INTRODUCTION

1.1. LOCATION AND POPULATION

The T'in are mountain dwellers, located mainly in Amphurs Pua, Chiang Klang and Thung Chang, the three northernmost districts of Nan Province, Thailand. Also, four T'in villages are reportedly located in Mae Charim sub-district of Amphur Muang Nan, and one village in Amphur Sa which is located south of Amphur Muang. Statistics from the Tribal Research Centre of Chiang Mai University report 96 T'in villages in Nan Province with a total population of 23,397 tribal people. However, these two figures appear too low. I personally know of several T'in villages that have not been listed by the Tribal Research Centre. LeBar et al. (1964) state that there are over 120 T'in villages with a total population estimated anywhere from 12,000 to 35,000; another 5,000 to 6,000 T'in are reportedly located in Sayaboury Province in Laos.

The figure 23,397, the population given for the T'in in Thailand, appears inflated on one account. Several T'in villages have been uprooted and resettled into three tribal refugee centres. Statistics compiled for September 1973 from each of these centres reveal the following count of T'in refugees: the Pa Klang Centre outside of Pua contains twelve former T'in villages and a T'in population of 2,307 people; Don Keo in Chiang Klang contains five former T'in villages with a population of 537 people; and Phae Klang in Thung Chang consists of six former T'in villages with a population of 1,202 people. Many of the former villages in these three centres, and their populations, are listed by the Tribal Research Centre as still being located in the mountains. In other words the population of some T'in villages are listed twice and the duplications added on to make the grand total of 23,379 people of the T'in tribe in Thailand. How much duplication

has occurred in compiling the statistics on the T'in found at the Tribal Research Centre is difficult to assess. This makes a final estimation of the population of the T'in tribe in Thailand even more difficult to arrive at. Yet a round figure of 25,000, which would take into account the omission of villages noted above and the duplication pointed out next, is perhaps not too wide of the mark.

1.2. ETHNONYMS

The ethnonym T'in is a Thai term applied by the Thai to the people who are the subject of this monograph. Srisavasdi (1963) writes this word in Thai with a rising tone (t'in); however, this writer has never heard it pronounced this way. I have always heard it with a low tone (t'in). The romanized spelling in the literature has varied also. In LeBar et al. (1964), as in this monograph, the apostrophe indicates that the phoneme /t/ is aspirated. In Filbeck (1964) the convention Th'in was used to indicate aspiration. Young (1961) uses Htin. This unusual device for symbolizing the aspirated /t/ is probably to be traced back to Mr. Young's background in the Lahu language. The romanized script devised for Lahu in Burma symbolizes all aspirated stops by writing the /h/ first: /hp ht hk hk'/ which in turn formed the basis for the spelling of Htin.

Haas (1964) defines /t'in/ as meaning a place, an area, or a location. The Thai compound /chaw t'in/ refers to the native inhabitants of an area. It is this complete designation that is sometimes heard applied to the T'in. It is also sometimes understood that these people are therefore the original inhabitants of this part of Thailand, with the Thai making a later appearance. Moreover, the term /chaw t'in/ seems to have a derogatory flavour and it has been reported to me that some of the T'in are offended by its use.

While T'in has entered the literature as a quasi-official name for this group, we must realize that in reality there is no such group. The (T'in) tribal people do not call themselves by this ethnonym nor do they recognize its validity because of its derogatory connotations. Moreover, as we shall see below, the term T'in is incorrect as concerning the present linguistic and cultural facts. Yet, there is no other ethnonym suitable to portray the obviously close relatedness these subgroups have in language and culture. For this reason we retain the ethnonym T'in for the unity of discussion it gives us.

In other words, T'in is an ethnographic construct, having no present reality but offering us a great deal of explanatory power in the description of these people. It is -- as Twaddell (1935) might have put it -- a terminological fiction abstracted from the data for the purposes

of describing conveniently the ethnolinguistic relations among the various subgroups. While the term T'in may have no synchronic reality it still contains a measure of truth as a historical construct. In historical times, when the Thai and T'in first came into contact there probably was a more homogeneous ethnic group that could rightly be called /chaw t'in/ by the Thai. Since then, however, the dividing effects of Time have taken their toll on the T'in leaving the original ethnonym intact but making it obsolete.

There are other ethnonyms in current use. The Northern Thai (Thai Yuan on Khon Muang) in Nan Province usually employ the term *lua?* (sometimes pronounced *lwa?*) to refer to the T'in. This too is an ethnographic construct of even wider application. Throughout the whole of northern Thailand, *lua?* is used rather loosely to refer to those minority groups that are non-Sinitic in background and/or who are not recent immigrants from outside of Thailand. The languages of groups so termed are not, however, related except perhaps remotely. For example, the Lawa of Maehongsorn Province show greater linguistic with Western Palaung-Wa languages (cf. Voegelin and Voegelin 1966b, 1966c, 1966c) than with T'in. Both Lawa and T'in are called *lua?* by the Thai.

An additional ethnonym is sometimes found in the literature on the T'in. This is the combination of the term Kha with T'in and P'ai. Spencer and Johnson (1960) make mention of an ethnic group called Kha in the northern areas of Thailand and Laos, but they make no attempt to break down this group into linguistic subgroups. Srisavasdi (1962) arranges the T'in under the Kha section of his book and gives the combination Kha T'in as the name of the tribe.

The origin of the term Kha in ethnographic descriptions goes back at least to the 19th century. Lefevre-Pontalis (1896), a French ethnographer wrote:

...le mot Kha est employe par les Thai, non pas comme une indication d'origine, mais comme le sign d'inferiorite sociale des populations appartenant a une autre race queux, et placees sous leur dependance.

The writer has never heard the term Kha T'in (or Kha P'ai) uttered by either the Thai or Nan Province or by the T'in themselves. The standard meaning of Kha in Laotian is that of slave or at best a person of lower status, which is the meaning of the Thai word /khâa/. I am acquainted with a few Northern Thai people who know of the term but it is my impression that this knowledge has been gained from Thai books and histories written on the subject.

Whatever the origin of the term Kha as applied to the T'in and other related groups, it appears that the current definition of slave or person of low status has become a self-perpetuating myth, perhaps based

on a certain amount of ethnocentrism. This is evident in the term Khmu. Smalley in LeBar et al. (1964) points out that, in Laos, the word Khmu is heard as Khamu which has led to a false etymology Kha Mu, an analogy based on such tribal designations as Kha Lamet, Kha Hok, etc. In this case of the Khmu, the correct compound would have to be Khma Khmu. A former Thai headman of the T'in village where I lived once used this false etymology to explain why the Khmu (sic Kha Mu) were considered of lower status by the Northern Thai. However, he went on to remark that the T'in were never considered but are counted as equals.

P'ai is another ethnonym used to designate the T'in. However, this term is almost exclusively confined to Laos although the term is not unknown in Thailand. Don Durling (personal communication) reports that P'ai lua? is also used in Laos, and for one group P'ai Nyua? is used, for it is claimed that they have forgotten their T'in language and now speak only Nuan (= a northern dialect of Thai).

In Thailand the T'in ethnographically divide themselves into two groups (see map, page vi). The people of one group, the group which the writer is most familiar with, call themselves /maa!/. This is the same as the Thai word /khwān/ meaning 'spirit' or 'soul'. In fact both T'in groups use /maa!/ in this sense. To all ethnic groups of this area each person has a number of souls, or /maa!/ according to the T'in. Like the Thai and Laotians, some compute the number at thirty two. A well person has the full number while a sick person has a lesser number, or at least a qualitative decrease in soul or /maa!/. The flight of /maa!/ from a person must then be invited back into the sick person by a sacrifice and incantation.

According to the T'in, every living thing has /maa!/ and death is attributed to its complete absence. This probably indicates that the T'in look upon /maa!/ qualitatively than quantitatively. Only two things in this world, however, merit ceremonies in order to keep the quality of /maa!/ high, to keep it happy, or to bring it back when some part of it has disappeared. These two things are humans and upland rice. Any other thing, whether animal or vegetable, is outside the concern of these ceremonies.

For that group of T'in (largely in Pua District) who say they are maa! people, the term carries a deep, religious meaning. One might guess that this usage is the result of being able to verbalize a self-discovered insight of the very core of T'in existence. Something of this was expressed by a young woman who said: "*We hold to maa!*" (as opposed to the writer who holds to the Christian religion). She went

on to explain that this was the meaning of *phyam maal*, Mal People. This term sets these people off, in their own eyes, as separate from the ethnic groups that surround them: the *khon muang* (Northern Thai), Meo, Yao and Khmu. These Mal, of Pua and Chiang Klang Districts, refer to their own language as /*ŋeɛŋ maal*/ (/ŋeɛŋ/ meaning 'word', 'language', 'message').

The second group of T'in call themselves /*pray*/ [prai] and/or /*luaʔ*/ and are generally located to the north and east of the Mal (see map). *Pray* is an old Tai word now replaced in the Northern Thai language by /*luaʔ*/. However, in Laos the synchronic reflex P'ai (the /p/ is aspirated in Laotian while it is unaspirated in T'in) is used. Ancient Thai has a unit phoneme */br/ (Brown 1965). This has become, respectively, /p'r/ in Standard Thai and /p'/ in the Northern Thai dialect and Laotian. T'in emerged from its parent stock (Khmuic; see Thomas & Headly 1970) having all voiced stops changed into voiceless stops (/b d j g/ > /p t c k/). From this it seems likely that T'in had assimilated a number of loanwords from Thai (including the ethnonym */bray/) beginning with the phoneme */br/ before Thai underwent the above sound change. Later, */br/ went through a different change in T'in: */br/ > /pr/.

Currently the term *Pray* as an ethnonym probably has no meaning (but historically see below). It may be evidence of a marked tendency among all T'in groups to acculturate to lowland Thai. Acculturation is especially evident within the *Pray* group where a number of basic words have been borrowed from Thai. These same basic words are kept intact, however, by Mal speakers. In addition, *Pray* speakers show a number of reassimilations of Thai words; that is, while some loanwords have kept their original pronunciation since first borrowed from Ancient Thai, other loanwords are now pronounced as they are in the Northern Thai dialect today. These same words have not gone through a reassimilation among the Mal.

From a historical viewpoint a possible etymology of the ethnonym *Pray* (and the Laotian term *Phai*) is to be found in the Northern Thai word /*phay*/, as in /*phay khaa*/ 'to thatch, make thatch for roofing'. In this case the T'in word /*pray*/ of the same meaning would be a loanword from Ancient Thai (which in any event is probably true). However, just what the semantic rule would be which would extend the meaning of the verb 'to thatch' to that of a designation for a tribe is difficult to formulate. Another possible derivation is found in the Cambodian loanword /*phray*/ 'forest', 'jungle' (Dr. Karnchana Nacaskul, personal communication). It is not difficult to see where 'jungle' could be extended to refer to a tribe living in the jungle, which the tribe would eventually adopt for itself. The most plausible derivation,

however, is to be found in the Thai word /phrây/ 'common, low-class people' (Haas 1964). According to Dr. Kachorn Sukphanick (in personal communication) /phrây/ goes back in the Thai language at least 600 years and has always referred to people of low-class or common status as against the nobles in Thai history. As such it is a synonym of /khâa/, which was discussed above in relation to the T'in. Seeing that the T'in have been referred to as Kha, it is not at all unreasonable to assume that they were also referred to as Pray and that this latter ethnonym 'stuck' and was eventually adopted by a section of the T'in tribe. In like manner, the term Lua, which is a Thai word with a low-class connotation, is being adopted by the Pray in some villages as an ethnonym in place of the term Pray.

The above discussion leads to a re-evaluation of the ethnonym Mal. However, we can only surmise as to what this re-evaluation might be and therefore can present it only in the form of questions. For example, is the ethnonym Mal what all the T'in called themselves at one time? If so, how and when did Pray come to replace Mal in one section of the tribe but not in the other? On the other hand, maybe Mal arose as a cultural reaction to being called Pray, and/or Kha, by people of another culture and therefore is a more recent development. The relationship of the ethnonym Mal vis-à-vis Pray, Lua and Kha is certainly a curious one. Unfortunately, in absence of tribal history or even legends on tribal origins there can be no solution to the question of how they came into existence and have persevered unto the present day.

The term T'in is apparently regaining some currency and validity as a tribal ethnonym among those T'in who have been resettled in the tribal refugee centres mentioned at the beginning of this chapter. This is so because they (i.e. the Mal and Pray) are told by Thai Government officials that they are properly the T'in Tribe and should call themselves by this name. However, T'in is still an ethnonym that is being advocated and imposed upon them by outsiders. Whether this 'acceptance' by some T'in will spread to those still living in the surrounding mountains, providing some sort of unity and tribal consciousness to these people, or will even survive after the Indo-China conflict is ultimately settled, is highly debatable.

In this context we should also discuss names and surnames used among the T'in. As tribal ethnonyms (with the exception of the term Mal) have been imposed upon the T'in by the Thai, so have their personal names and surnames been given to them by the Thai. Personal names, i.e. first names, among the T'in are the same as those currently popular among the Thai peasant population of Nan Province. These names are

spoken as T'in words, sometimes pronounced with their original Northern Thai tones, sometimes not. Surnames among the T'in, as with the Thai, date back to the reign of Rama VI, during which time (circa 1910) surnames were established for the Thai population. In many cases one surname was given to the inhabitants of a single village. This was the method used among the T'in: nearly all T'in villages have different surnames, only a few having the same surnames as some other village(s). Moreover there has been little migration among the T'in during the past sixty years. Consequently one may still find whole villages with single surnames. Pha Nam Yoy, where the author lived for three years, was an exception: people from three other villages had come to live there and they had retained the surnames of their formal villages. However, in villages having had less contact with the Thai and Thai Government a person, on moving into such a village, will take on the surname of his adopted village. A woman, on marriage, is not expected to take on the surname of her husband should he have a different surname. Should he be a newcomer to the village it is expected that he give up his last name and be called by the last name of his wife, which of course is that of the whole village. However, as such isolated villages come into closer contact with the Thai Government -- especially Thai education -- this custom will undoubtedly change as it already has with many T'in villages.

1.3. PLACE OF ORIGIN

Migration brings up the question of place of origin for the T'in. Young (1961) places the origin of the T'in as vaguely from the South, i.e. as a migration possibly northward from the Malay Peninsula. However, this is only a hypothesis and seems unlikely because of the linguistic evidence available. First, there are no languages closely related to T'in south of Nan Province. If the T'in, and Khmu, did migrate from the South, one might expect to find other tribal languages showing greater or lesser linguistic affinities located at various points in between.

While such a situation is lacking to the south, we find just such a situation lying to the northeast of where the T'in are now located. For example, a large number of Khmu live in the Luang Prabang area of Laos. Thomas and Headley (1970) in their linguistic comparisons report that Khao (Kang Ai) and Puôc (Phuoc) in Northern Vietnam are clearly Khmuic, i.e. more closely related to T'in than to other Mon-Khmer languages. Luce's list of eight languages (1965) is so ordered as to show the spread of Mon-Khmer languages westward from Tonkin to India. Tonkin would then be the ancestral home of the T'in. Benedict (1942) is in substantial agreement:

The archaic cleavage between the Thai-Kadai-Indonesian on the one hand, and Mon-Khmer on the other, must have come about in the South China-Indochina area, with subsequent localization of these two divisions in the north and south, respectively.

LeBar (1968) gives the same area ('... the general region of Tonkin-Kwangsi-Yunnan') as an ancestral home of modern Mon-Khmer hill tribes in Tonkin, Laos and Vietnam.

Concerning the T'in in Thailand, LeBar et al. (1964) state that they appear to have migrated from Laos in the past forty to eighty years (circa 1884-1924). This late date for entry into Thailand may be true of a few Pray villages located on the Thai-Laotian border, but it can hardly be true of villages further to the west (including Mal villages). The writer has been unable to elicit any tribal history or legends of migrations or of former locations in Laos. Personal histories of several aged people revealed only a knowledge of their grandparents who are said to have been born in Thailand.

There are several other indications that the majority of T'in villages have been in Thailand even longer than the personal recollections noted above. The term T'in, or /chaw t'in/, itself is one such indication. Its meaning is that of inhabitant, or native, pointing to a possible recognition that the T'in were the original inhabitants of this area.

This leaves an important question unanswered, however. Did the Mal move into present day Thailand first, with the Pray following in a later westward migration? Or did a proto-group of these two branches first migrate into this area with subsequent divisions into two main groups?

1.4. SOME SOCIOLINGUISTIC CONSIDERATIONS

All T'in in Thailand are multilingual, speaking in addition to their native dialect of T'in one or more other languages. All T'in speak Northern Thai (more precisely the Nan variety of this Thai dialect), as this is the medium of communication used with other ethnic groups (Meo, Yao, the Northern Thai, etc.) who live close by. Men, because of their greater contacts with the outside world, often become very fluent in Northern Thai, sometimes to the point of preferring Northern Thai in conversation with one another. T'in women, because of fewer contacts outside their own ethnic group, are on the whole not as fluent in Northern Thai. Their Thai vocabulary is limited and tends to revolve around only a basic core of everyday words used for conversations concerning the necessities of life.

Children start learning Northern Thai as soon as they start learning T'in. I have observed toddlers imitate the Thai spoken by their fathers

and Thai visitors in informal visits in T'in villages. It is at this point where the difference in relative fluency in Northern Thai between the men and women has its beginning. Boys, whose future roles will include contact and trading with outsiders, are encouraged to stay around and listen to 'men talk'. Girls, on the other hand, because of their future roles as wives and mothers and not as traders of livestock and produce, are expected to withdraw to another part of the house and engage in 'girl talk', which of course is in T'in dialect. As boys and girls become older this cleavage in bilingualism widens, to where at the time of young adulthood there is a recognizable difference between the capabilities of the sexes in speaking Northern Thai. For example, by their twenties, young men will have good mastery over the intonational patterns of Northern Thai while the women of the same age will speak haltingly and with definite traces of T'in intonational patterns superimposed on their Northern Thai. This style of bilingualism seldom improves for T'in women since they do not usually assert themselves to have more contact and experience with the Northern Thai population.

Some T'in tribal people are trilingual. Two examples of trilinguism exist among the T'in. One is found among the inhabitants of Ban Chuun, a village located in the mountains east of Pua but whose inhabitants (at this writing) now live in the Pa Klang Tribal Refugee Centre outside of Pua. Their own village dialect is clearly a Pray dialect but it is different from any other T'in dialect I have investigated, showing a number of interesting and unique sound changes vis-à-vis other dialects. That is, the variety of T'in spoken at this village must be considered a separate and equal dialect. Since Ban Chuun is surrounded by Mal speaking villages, there is much contact and even intermarriage with the Mal. Consequently, Ban Chuun villagers can fluently speak Mal in addition to their own Pray dialect. Northern Thai completes the lingual triangle for these villagers.

The second case of trilingualism I have found among the T'in exists among those speakers who have had close contact with the Meo. I have found several inhabitants of Baw Wen village who speak, besides their own T'in dialect and Northern Thai, a fair amount of Meo. Admittedly this last statement is impressionistic but it is necessary since the writer does not know Meo and so must rely upon subjective judgments when observing T'in speaking Meo to a Meo tribal person. There appears one basic reason for this knowledge of Meo that some T'in have, namely opium. Several T'in of Baw Wen village are opium addicts and their source is the nearby Meo who grow it. This dependence upon the Meo leads often to close and prolonged contact, the very conditions needed for learning another language. Even non-opium smoking children of

addicted parent have learned Meo in this situation. However, the number of T'in who can speak some Meo is probably quite small.

Diglossia, a term used in sociolinguistics, among T'in speakers is still in a developing stage. Diglossia differs from bilingualism in this respect. Bilingualism refers only to the ability to speak two languages (or more as the case may be) and not to the choice of when to speak one language and not the other. Such a choice depends upon many social variables: status, age, position, social prestige, prestige of the language to be spoken, etc. An example of diglossia can be seen in the northern part of Thailand where a person will use northern dialect with family and friends but he would know that this form of Thai is inappropriate to use when speaking to a high official from Bangkok. Only Standard Thai is appropriate in this case.

Among the T'in, however, it is usually the communicative aspects and not the social consequences, of the situation that dictates which language to use, e.g. Northern Thai is spoken because there are Northern Thai present in the conversation who of course do not know T'in. On the other hand, I have observed times when a conscious choice of one language over another has been made by T'in speakers. On having first moved to the T'in village of Pha Nam Yoy I noticed that the men of the village, when walking as a group along a trail, would speak to each other only in Northern Thai and not in their tribal tongue. But these same men, back in the village, would speak T'in. The question, therefore, is why would these men choose to speak Northern Thai and not T'in on the trail. From my experience with them three reasons emerge: 1) their village was very close to Thai villages which resulted in more contact with the Northern Thai and a greater fluency in their language than their wives and even other T'in who lived further back in the mountains; 2) they themselves spoke various dialects of T'in and probably found it easier to speak Northern Thai than trying to understand each other's particular dialect; 3) and a low valuation of T'in because of its many dialects versus the high valuation of Northern Thai because of its homogeneous nature and because it is the language of their cultural superiors.

I have not observed these diglossic variables among all T'in villages. Those villages deep in the mountains appear to rely mainly on T'in, with Northern Thai serving only as a second and imperfectly known language. The villages having more contact with Northern Thai will show a greater range in choosing which language to speak in a given situation. For these latter villages Northern Thai, especially for the men, is not merely a second language but an alternate code, the choice of which can be made to fit the social situation.

1.5. COLLECTION OF DATA

Data from the T'in of Thailand were collected between 1962 and 1964, and again between 1965 and 1969 while the writer served as a missionary among the T'in. For three years the writer lived with his family in Ban Pha Nam Yoy, a T'in village of the Mal group located in Thung Chang District. My M.A. thesis (Filbeck 1965) was written on this one Mal dialect. The language data and information on the T'in in Laos were kindly supplied by Don Durling through personal communication.

CHAPTER TWO

LINGUISTIC CLASSIFICATION

2.1. MON-KHMER

As far as the writer knows, T'in has not been included in any listing of the languages of the world. Voegelin and Voegelin (1966a, 1966b) do not list T'in in their survey of the languages of the world. Meillet and Cohen (1952) do not list T'in either. Maspero, who wrote the section on Mon-Khmer in *Les Langues du Monde* makes no mention of T'in.

A survey of the older French journals on South East Asia also reveals no listing of T'in. Lefèvre-Pontalis (1892) mentions a number of Mon-Khmer languages in Indo-China of the last century; but though he does list several Kha languages he does not list T'in. In another article (Lefèvre-Pontalis 1896) he lists a few other Kha languages without listing T'in. However, word lists in both articles reveal a large number of cognates with dialects of T'in.

Cabaton (1905) lists a large number of languages from Indo-China, classifying them into three language groups, one of which was Mon-Khmer. T'in did not appear in any list. A survey of the Bibliography contained on Shorto (1963) likewise reveals no mention of T'in.

Shafer (1952) compares a few 'Austronesian' languages with some Sino-Tibetan languages. He does not mention T'in; however, several cognates with T'in were found in the Austronesian word list.

However, the above does not mean that the T'in people have not been known or that the T'in language has not been classified. Thai literature and popular accounts of tribal minority groups in Thailand refer to the T'in (Srisavasidi 1962, 1963). The *Journal of the Siam Society* (e.g. Nimmanahaeminda 1963) has mentioned the T'in on several occasions. Seidenfaded (1958:118) and Young (1961:61-4) give short ethnographic

descriptions of the T'in in Thailand. LeBar et al. (1964:128) gives a short ethnographic note on the T'in prepared by my colleague Dr. Garland Bare. I have published several articles, both religious and ethnographical, on the T'in (see bibliography). A more recent publication that makes mention of the T'in is Thomas and Headley (1970).

Wherever T'in has been mentioned in the above reference it has been classified a Mon-Khmer language. But Mon-Khmer is a large language family containing a great number of languages, some of which are more closely related than others. The lack of any previous listing of T'in in Mon-Khmer makes it difficult to see where T'in would fit in in relation to other Mon-Khmer languages. In Shorto (1963) T'in would be placed in the Northern Mon-Khmer subgroup along with languages such as Palaung, Riang, Khmu, Lamet, Wa and various other Kha dialects. However, this sub-classification is still much too broad to be of real help, for T'in shows closer relationships to some of these languages (e.g. Khmu) than to others (e.g. Palaung).

In Sebeok (1942), even though the author is summing up the results of Wilhelm Schmidt's classification of South East Asian languages, T'in would be a Kha language sub-classified under Mon-Khmer. In this respect, to say that Kha is a language is misleading. In the first chapter we saw there the term Kha crept into ethnographic accounts from the Thai (more properly the Laotian) language for the simple reason that no other term existed and from the lack of hard linguistic data on the languages so included. Kha is nothing more than a waste-basket into which to dump otherwise little known Southeast Asian languages. On closer examination we see the Kha language(s) comprising a heterogeneous group of closely related and more distantly related dialects and languages. The term's original function was sociological, not linguistic. However, both linguists (e.g. Sebeok) and anthropologists (e.g. Spencer and Johnson, 1960) have taken over this term and converted it into a classificatory term for both linguistics and anthropology. On the basis of linguistic data from these languages the term Kha, unlike the ethnonym T'in, cannot enjoy the status of a true ethnographic or historical construct. Many of these languages, or their proto-forms, were in existence at the time when the Thai people gained enough political power over these various groups to assign the sociologically inferior term Kha to them. As linguists, we should give this term back to the sociologists!

2.2. ALTERNATIVE CLASSIFICATIONS

By a realignment of related languages in South East Asia T'in can be classified other than as a Mon-Khmer language. This, in effect, is what

Voegelin and Voegelin (1966b, 1966c, 1966d) have done. Their different classification of related languages indicate that T'in would be classified as Palaung-Wa and not Mon-Khmer. Any relation of Palaung-Wa with Mon-Khmer would be excluded on the family level 'though relationships of a phylum or macrophylum remoteness have been suggested'.

Palaung-Wa in turn is divided into two groups, a western and an eastern; only the eastern group need concern us here. Voegelin lists seven languages in this latter group: Khmu, Lamet, Kha Kwang-tin, Kha Kon-tu, Kha doy-luang, Pheng and Tong-Luang. Of these seven, the writer has had access to a vocabulary list only from Khmu (Smalley 1961) for comparison with T'in. T'in yields 53% cognates with Khmu, and on this basis it appears that however Khmu is classified so must T'in be classified. Therefore, if we follow Voegelin's classification of Khmu, we will in turn classify T'in as Palaung-Wa, eastern group.

However, classifying Khmu as Palaung-Wa is not unanimously accepted. Smalley, writing in LeBar et al. (1964) feels that Khmu is more like the Mon-Khmer languages than those of Palaung-Wa. He reports that Joseph Greenberg shares the same impression. And he elsewhere classifies Khmu in the Mon-Khmer group (Smalley 1961).

A different approach to classifying the languages of South East Asia, including T'in, is to use Voegelin's term above, Phylum linguistics, where language families are grouped together into broader classifications. Schmidt was one of the first to do this, combining Mon-Khmer, Munda and Annam-Muong into one group which he termed Austroasiatic. This has not met with universal acceptance among scholars. Sebeok (1942) takes Fr. Schmidt to task for basing his classifications on morphological and lexical patterns and not on sound-meaning correspondences considered basic in determining whether languages are genetically related. Similarities of structural patterns can be documented from totally unrelated languages in diverse locations around the world and therefore should not be used as basic criteria for classifying languages on a genetic basis.

At the same time that Sebeok was refuting Schmidt's Austric hypothesis, Benedict (1942) came out in favour of it and attempted to provide some sound-meaning correspondences in proof of the relationships. Benedict postulated a Proto-Austric stock comprising Thai-Kadai-Indonesian as one subgroup, Mon-Khmer (hence T'in) and Annamite as another subgroup; Meo-Yao was a possible third subgroup. Under this alignment T'in could be termed an Austroasiatic language in addition to its Mon-Khmer classification.

Luce (1965) employs the term Austro-Asiatic for the same group of languages. (T'in is not listed). However, in his article in the Siam

Journal he seems to use the terms Mon-Khmer and Austro-Asiatic interchangeably.

Young (1962:51) states that T'in is an Austronesian language. Moreover, he states (page 52) that T'in, along with the Lawa and Khmu languages, are not Mon-Khmer, 'nor is there anything more than remote Mon-Khmer influences'. However, it should be noted that Young is alone in this opinion, stemming in large measure from his lack of any real linguistic research and comparison of these languages. He offers no data to support this view, but has only superficially borrowed a few terms from other scholars.

Phylum linguistics is at present too imprecise to furnish reliable guidelines for a broader classification of T'in. Terms such as Austro-Asiatic, Austronesian, and Proto-Austriac should be avoided at this stage since they have a tendency to blur groupings that can be established on proven linguistic criteria. Their chief virtue lies beyond the genetic reconstruction of languages in providing 'a sense of research direction, a programmatic map pointing out relatively more rewarding directions of investigation' (Voegelin and Voegelin 1966:2)

Perhaps the term Mon-Khmer is too imprecise as a classification for these languages since it is not agreed whether Mon-Khmer is a subgroup within a broader group, or is a true linguistic family whose languages are all genetically related but whose intralanguage relationships are not yet delimited. The general feeling leans toward the latter, and pending a final, definitive delimitation, we classify T'in as Mon-Khmer.

2.3. EVIDENCE FOR MON-KHMER CLASSIFICATION

In the previous section we stated our belief in Mon-Khmer as a family of genetically related languages. We rejected for the purpose of this monograph any broader classification as being premature if not misleading. In this section we give evidence for classifying T'in as a Mon-Khmer language.

The main characteristic of a language family is the repeated occurrence of forms showing correspondences in both sound and meaning. Either one alone is insufficient. In fact, correspondences in sound systems and patterns alone have been the stock-in-trade of those making broader classifications. But this method can prove either too much or nothing at all. For example, both Thai and T'in dialects share similar inventories of phonemes and distribution of phonemes within the syllable; both are isolating languages having few affixes; both contain bisyllabic word patterns of minor (stressless) syllable plus major (stressed) syllable. Other similarities can be given from such typological comparisons. Moreover, both languages contain words in common. Yet the two

languages are not genetically related. There are phonological differences, both of an inventory and phonotactic nature, that cannot be explained within the methods of comparison and reconstruction generally accepted. The words held in common have no systematic import and are not of the basic vocabulary of each language, an illusive subject to which we return below.

Correspondences in form alone, on the other hand, may prove nothing. T'in has prenasalized obstruents, but Khmu does not. Khmu has a symmetrical system of phonemes: /p t c k/, /b d j g/ and /m n ñ ŋ/. T'in has only /p t c k/, /b d/ and /m n ñ ŋ/. Khmu has infixation of an instrumental morpheme, T'in has only a possible remnant of a causative prefix. Yet, on comparing wordlists of Khmu and T'in one finds a large number of cognates.

Correspondence in meaning alone is likewise counterproductive. Languages in contact will express what their neighbours are talking about in their own words. New and useful semantic combinations will be created using the stock of morphemes already on hand. A number of such correspondences can be observed for Thai and T'in. However, these are loan translations, mostly from Thai to T'in, and cannot show genetic relationship between the two languages.

Repeated occurrences of sound-meaning correspondences must amount to more than just a few isolated forms. Sound-meaning correspondences can be found for any two languages one wishes to compare. But this may be due to chance (as between Thai /taà/ 'to die' and the corresponding English gloss), or sound symbolism (e.g. nursery words as in Thai /mê:/, T'in /møy/ and English /mɔ/ 'mother'); or it may be due to similarity in onomatopoeic words. But when correspondences number beyond these types of examples, one must consider the possibility of genetic relationship. The greater the number, the more likely that the hypothesis is true.

Another characteristic of a language family is sound-meaning correspondences in basic vocabulary. Just what constitutes a basic vocabulary for a language or even a group of languages is difficult to define. Some investigators have attempted to postulate a universal set of sound-meaning forms valid for all languages. This has been the basic assumption of glottochronology. But there are problems to such a set: how many words are basic, one hundred, two hundred or is a five hundred word set more representative? For example, when Khmu and T'in were compared (Thomas and Headley 1970) on the basis of 207 words drawn largely from the Swadesh word list, they yielded 39% in cognates. But comparing a list of 300 miscellaneous words compiled from Smalley (1961) I found that Khmu yielded 53% cognates with T'in.

Some of the meanings on the Swadesh word list are signalled by grammatical patterns, as at and in are in T'in.¹ The English sememes of many of the words on this list often do not fit other cultures. In T'in there is no one word for child. The T'in speak of a /khwan/ that is a biological or adopted offspring, or a /khuan/ which is someone else's child. Both are basic to T'in and to many other cultures of this same area. In comparing languages of this area to determine relationships and degree of relationships such words must be considered basic even though they are not, and indeed cannot be, included in any universal set.

The concept of a basic vocabulary has an intuitive validity about it. However, it is more heuristic in value than true in an epistemological sense. A feeling of basic vocabulary gives the investigator an instrument by which he may immediately test hypotheses concerning the relationships of two or more languages. But as he goes deeper in his comparisons -- and if his initial hypothesis is validated by a goodly number of sound-meaning correspondences drawn from a basic vocabulary list -- he may see that some words are not basic while others are due to their respective low or high frequency of occurrence throughout the languages investigated. By becoming immersed in these words that often occur in a particular group of languages (but which may not necessarily occur in any universal basic word list), a new language may be brought in and tested as to its relationship to the group as a whole. Moreover, whenever a language contains correspondences to these words, they give the investigator an immediate, albeit tentative, classification of the language in question.

This latter method has been the procedure for furnishing the linguistic classification of T'in. T'in contains a number of words corresponding to words associated with Mon-Khmer languages. There is a stock of words found in a number of languages previously classified in the Mon-Khmer group. Some of these words do not occur in any universal set of basic words, yet they may be considered basic to these languages if not to the area in general. These correspondences can be due to chance or borrowing for they occur in contiguous languages. On the other hand, these words also occur in widely distributed languages which in all probability have not come in contact with each other.

The lists of comparisons on the following pages give fifty words from two dialects of T'in compared with nine Mon-Khmer languages. As can be seen most of these words correspond to cognates found in

¹The locatives at and in in T'in can be expressed by the form ta-. In addition the Thai word nay 'in' is used as well as a native word khuan which has the special constraint of occurring in the phrase khuan sa? 'in the forest'. For the most part location of in is expressed by ta- or by a syntactical pattern.

Mon-Khmer languages.

Two observations should be made on the comparative data presented in II.1. The data are not arranged to show how the ten languages should be subgrouped in relation to each other. The data have one main purpose, to show that T'in is a Mon-Khmer language.

The second observation concerns the transcription of the words included in the lists. My transcription for T'in (1) and T'in (2) is based on principles laid down in Filbeck (1965:9-11). The data on Khmu is taken from Smalley (1961) with the exception of a few additions from Luce (1965). The rest of the data (Mon, Khmer, Palaung, Wa, Riang and Lamet) is taken in the main from Luce (1965) with a few additions for Modern Khmer from Jacob (1968), for Palaung from Shorto (1960), and for Riang from Cabaton (1905). As the reader will see, words taken from Luce's list of Mon-Khmer languages are impressionistic. Having no other authority I have made few corrections or attempts to standardize his transcription; neither do I attempt to interpret his many diacritic marks. However, his impressions show enough similarities with the phonemic script used for T'in for the words used to serve their purpose.

When a word is not included under a language this means that the word was either unavailable for inclusion or the word available was not a cognate. Some words that are not cognates were included, however, mainly to illustrate replacement.

The nine Mon-Khmer languages showing correspondences with T'in were chosen with three purposes in mind. First it seemed propitious to show sound-meaning correspondences with Mon and Khmer, both diachronically and synchronically. Since this language family is named after these two languages it is to be expected that T'in should show a number of similarities.

Second, it seemed good to select languages to compare with T'in that were located some distance away. Palaung, Wa and Riang are located to the west of Thailand in Burma, the last language being the farthest west. In all probability there has never been any contact of these three languages with T'in: topographical and political animosities of long standing between Burma and Thailand exclude any such contact. This also rules out borrowing for the similarities among these languages.

Two languages located to the north and east of T'in are included (Lamet and Khmu), but there is here the chance of borrowing or other influences making their way from Tonkin through Laos and these two languages to Thailand. To include languages located to the east of Thailand enhances the possibility that shared words are the result of borrowing. Politically and culturally this area has enjoyed a great deal of inter-communication. But when these words chosen from T'in agree with the

II.1.

COMPARISON OF SOME MON-KHMER LANGUAGES AND T'IN

	Mon		Khmer		Palaung	Wa	Riang	Lamet	Khmu	T'in(1)	T'in(2)
	Old	Modern	Old	Modern							
Numerals											
one	moy	mwai	moy	muey				mos	mooy	mooy	ma-
two	bar	ba	ver	pi·(r)	a	ra	ar	ar	baar	piar	piə
three	pi	pi	pi	byy ¹		loi	k'wé	lohe	pe	phé?	phé?
four	pan	pan	pon	buən ¹	p'on	pən	pon	pun	pən	phgon	
one hundred	kiam									kɨ ²	
Body Parts											
ear	ktor	katow			hyu?	yar	tsor	yok		mɔy	nthoɩ
eye	mat	mat	mat						mat	mat	mat
hand/arm	tey	tai	tai	day	ti	tai?	ti?	tī	ti?	thli	thli
leg .. lower									blu?	patak	nɔŋ
leg .. upper					blu					pluu	ntak
nose	moh	muh	muh	muh		myh		mus	muh	moh	moh
breast	toh	tah	toh	toh						po?	po?
tongue		latak		antak	kərtə?	ndak	tak		həntak	nthaak	nthaak
tooth					hraŋ					siaŋ	siaŋ
mouth					klor				gaak	ŋkaap	noot
blood	chim	chim			knam	nam	nam		senəm	miam	miam
hair	sok	sok	suk	sak	hu	hark	huk	hog		nsook	nsook
bone		jut		cha-i	kaʔaŋ	iʔaŋ	tsən aŋ	siaŋ an	ʔaŋ	ʔiaŋ	ʔiaŋ
Foods											
rice (un- hulled)	sro?	sro?				ngo		ngo kang		ɲua?	ɲwa?
(husked)	sŋo?	sŋu	raŋko	aŋkah	hŋau	ŋo?	ŋo	ngo sin	hŋo?	ŋkɬo?	ŋkɬo?
(steamed or cooked)					pəm ¹					saa	saa

II.1. continued

	Mon		Khmer		Palaung	Wa	Riang	Lamet	Khmu	T'in(1)	T'in(2)
	Old	Modern	Old	Modern							
Foods Ctd.											
ripe					sɪn	ʃɪn	sin		sin	sin	
fruit					ple					phle?	phla?
banana					kluəy					khluay	nthlɪ
salt		bulw	ampel	ampil				pelu		suak	suak
bran		kəm	aŋkam	ɔŋka'm	k'am	kam	k'am			kham	
Social Terms											
father					ma				yoŋ	ʔaw	ʔaw
mother					kən	kən	ku n	kon	ma	məəy	mee
child	kon	kon	kon	koon	sɪam	sɪam	s'əm	kon	clam	khwan	khwan
Thai		sem	syəm	sləm	slam					slam	slam
Objects											
sun/day	tŋey	tŋal	tŋal	tŋal	səŋi	siŋal	s'əŋl	sŋɿ	ŋl?	ŋe?	ŋe?
earth	tɪ?		ti	tɪ	kəte	de?	k'vte	ketté	katé	nthé?	
paddy					hɔ					ha?	ŋa?/paŋa?
dry rice field				srae						εε	εε
pain/disease	ajey	yal		jhuh	s'u'	sa	s'u	so	cu	so	
house	sŋl	sŋl		os	ga	nyen			gaŋ	klaŋ	claŋ
firewood									he?e?	pa?oyh	ʔoot
Pronouns											
I	ey	al	añ	añ				ō	ʔo?	ʔəñ	ʔəñ
you (sg)	beh	beh			meɪ	be	ml	mɿ	mee	mah	mah
Misc											
dream	appo	lpa			rənpɔ	ti mau	rəmu			mphɔ?	

	Mon		Khmer		Palaung	Wa	Riang	Lamet	Khmu	T'in(1)	T'in(2)
	Old	Modern	Old	Modern							
Animals											
fish	ka?				ka?	ka?	ka?	ka	ka?	khaa	khaa
dog	ciw	kiaw	chke	co'	s'o	so?	s'o?	so	so?	sua?	swa?
horse	kseh	khyeh	seh	saih						maa	pyaŋ
buffalo				krəbyy	kra?				thraak	khraak	khyaaŋ
pig	clik	lik	jwok	jrūk	le?	lik	lek			siŋ	siŋ
barking deer	pah	pah pares			βos	poh	pōs	pōs	puôï	phoyh	phoət
goat	babe?	babe?	vave	babaih	bε	be?	pe?		be?	pe?	
bird	kiŋcem	gacem			sim	šim	s'im	shim	slim	seem	seem
elephant	ciŋ	ciŋ			saŋ	saŋ	sitsaŋ	kesaŋ	chaŋ	caŋ	mee coŋ
ant		samot		sramoc		moit			muic	hmooc	simooc

1) Compare /phio·n/ 'forty' with T'in(1) /phoon/ 'four'.

2) Only in a slightly different dialect than T'in(1) (Dialect C of Chapter III)

¹Or 'cooked rice'.

more distantly located languages of Mon, Palaung, Wa and Riang to the west and with Khmer to the south we have reasonable assurance that any correspondences with languages to the east are not due to borrowing but belong to an original Mon-Khmer stock.

Third, Khmu was chosen because of its close proximity to T'in, both geographically and linguistically. Khmu villages literally surround the T'in area shown in map on page vi. There are no Khmu villages in the T'in area on the Thailand side of the border, but to the east in Laos Khmu villages are found all the way to and beyond Luang Prabang, interspersed with T'in villages. There is a chance of borrowing, as mentioned above, between these two languages. Moreover, the situation is not obviated by the high percentage of correspondences between the two languages. However, when the similarities between Khmu and T'in agree with languages more distantly located, we have further assurances that these correspondences are not due to borrowing between two contiguous languages.

A perusal of the comparative data on pages 20-22 will convince the reader that T'in shares a number of words that are Mon-Khmer in characteristics. On this basis the reader can see that T'in should be classified as a Mon-Khmer language.

Thomas and Headley (1970) are in agreement. Using data I supplied on one dialect of T'in in comparisons with sixty other Mon-Khmer languages, they made the following statements concerning correspondences among all these languages.

The words for 'water' neatly cut across the Mon-Khmer area, with almost 100% regularity giving dak forms in Khmer, Pearic, Bahnaric, Katuic, and Viet-Muong, and om forms in Monic, Palaungic, Khmuic, and Khasi. (Bahnaric frequently has um forms for 'bathe'.)

[Note: All dialects of T'in have ?əəm 'to bathe'; T'in (1) has ?oom 'to urinate'.]

High persistence throughout the family was noted especially on words (with sample forms)

bird	<u>sim</u>	=	<u>seem</u>	in T'in(1)
blood	<u>mham</u>	=	<u>miam</u>	in T'in(1)
bone	<u>sking</u>	=	<u>?ian</u>	in T'in(1)
child	<u>kon</u>	=	<u>khwan</u>	in T'in(1)
day	<u>səai</u>	=	<u>ne?</u>	in T'in(1)
dog	<u>chə</u>	=	<u>sua?</u>	in T'in(1)
eye	<u>mat</u>	=	<u>mat</u>	in T'in(1)
far	<u>əai</u>	=	-	
fish	<u>ka</u>	=	<u>khaa</u>	in T'in(1)
fly	<u>rui</u>	=	-	
and the numerals 1-4				
one	<u>muy</u>	=	<u>mooy</u>	in T'in(1)
two	<u>bar</u>	=	<u>piar</u>	in T'in(1)
three	<u>pe</u>	=	<u>phe?</u>	in T'in(1)
four	<u>pon</u>	=	<u>phoon</u>	in T'in(1)

2.4. SUBGROUPINGS WITHIN MON-KHMER

Very little work has been done on the problem of subgrouping the many languages of the Mon-Khmer group. Shorto (1963) divides Mon-Khmer into several groups one of which -- his Northern Mon-Khmer -- includes Palaung, Riang, Khmu and Wa. T'in would also be included in this subgroup. However, the criterion for this Northern Mon-Khmer subclassification is geographical. All these languages are located above 180°N. and 94° and 106°E. There is probably nothing false with this subclassification, but the truth of it is due more to coincidence than to principles of language comparison. Moreover, it does nothing to show how these Northern Mon-Khmer languages relate to each other in subgroups. No geographical criteria are relevant here; only comparison of sound-meaning correspondences will suffice.

Thomas and Headley have done research on Mon-Khmer subgroupings. They compared over sixty Mon-Khmer languages, using the procedures of lexicostatistics, for the purpose of classifying these languages into subgroups. Lexicostatistics, they noted, yielded excellent results in the

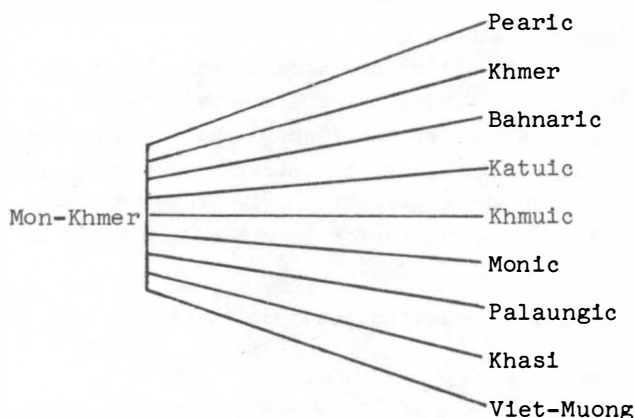
fairly neat clusterings of percentages showing the distinction between intrabranh comparison and interbranch comparison; intrabranh figures run from about 40% up, interbranch figures from 20-30%, interfamilly figures about 10-15% cognates percentage thus gives a fairly consistent picture of degree of relationships.

Lexicostatistics, they also noted, had a number of weaknesses. Thomas, in his comparisons, obtained one set of percentages while Headley frequently obtained a 5% difference in his comparisons. Lexicostatistics does not allow for greater phonetic deviation than commonly assumed, so these procedures must have a built-in variance factor which allows for greater deviation from, or even closer adherence to, the phonetic changes and similarities expected. The word lists used by these two linguists were prepared by people having various degrees of linguistic ability. The variations obtained by people untrained in linguistics give an uncertainty in their results. Also, the basic word list used for all the languages compared was taken from the Swadesh 200 word list with a few substitutions for more compatibility with this part of the world. However, it appears that all parts of a basic vocabulary are not equally stable and so the results from any list must still be suspect. Moreover, not all the languages compared had complete word lists filled out for them which gives another element of uncertainty about these lexicostatistical results.

To sum up, lexicostatistics is not a precision tool careful phonological reconstruction is necessary if one desires detailed information about relationships. Lexicostatistics is useful, however, for giving a quick general picture of language groupings. Individual cognate percentages mean little, but clusterings of percentages can be meaningful and reliable, especially if separated by 5-10 percentage points from other clusterings, so the results are presented with the confidence that the general outlines will still be standing after detailed phonological reconstruction has been made.

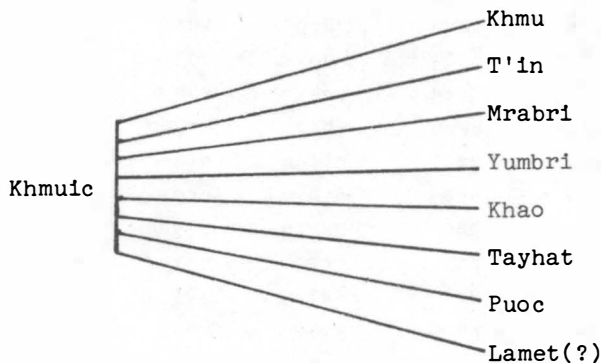
Thomas and Headley give nine major subgroups for the Mon-Khmer language family. They are summarized in the following diagram:

II.2 Diagram showing subgroups in Mon-Khmer



For this monograph we are interested only in the Khmuic subgroup, for this is the subgroup where T'in is placed within the total Mon-Khmer picture. The term Khmuic was first suggested by William Smalley and is based on the ethnonym Khmu. Khmuic consists of eight languages.

II.3



Further subdivisions are undoubtedly possible. David Thomas, in personal correspondence, states that Khao may be considered a dialect of Khmu. I have already mentioned the close relationship existing between Khmu and T'in. Very little is known of Mrabri and Yumbri, but it is conceivable that they also form a distinct subgroup within Khmuic. No data from all these languages are available to determine sub-subgroupings within Mon-Khmer and subgroupings with Khmuic. Nor would it be the purpose of this monograph to present more than just an outline of these sub-subgroupings if data were available.

As noted in Chapter One T'in is not a language; it is an ethnographic construct, a cover term for a number of closely related dialects. There are several dialects of T'in and they quite naturally fall into two main branches. These two branches conveniently correspond to the two ethnic subdivisions of Chapter One: the Mal and the Pray. The Mal speak three dialects, and all speakers call their language(s) /neen maal/ 'the Mal language'. These three dialects agree in vocabulary and sound changes vis-a-vis the Pray dialects. There are at least two Pray dialects in Thailand, all sharing in similar vocabulary and sound changes. Table II.4 shows cognates from five known dialects of T'in, arranged to show their classification in either the M(al) or P(ray) subgroup.

II.4. Cognates demonstrating subgrouping within T'in

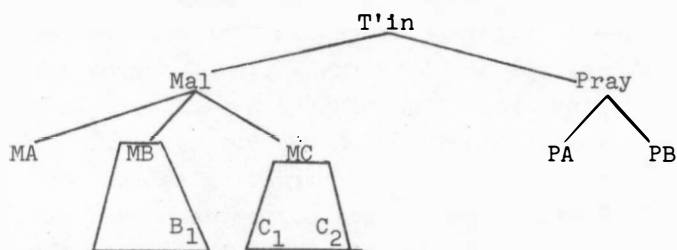
Mal			Pray		
MA	MB	MC	PA	PB	
phram	phyam	pham	khram	khyam	person
cəŋ	cəŋ	cəŋ	plw	plw	foot
plar	plaĩ	plal	piə	piə	two
səy	səy	səy	prəŋ	pyəŋ	spirit
məy	məy	məy	mee	mee	mother
klal	kial	klal	mañ	məñ	dark
ŋe?	ŋe?	ŋe?	ŋl?	ŋl?	sun
ha?	paŋa?	paŋa?	paŋa?	ŋa?	paddy
rəŋ	yəŋ	ləŋ	ruaŋ	luaŋ	path
sa?	sa?	sa?	yoo	yoo	forest
?lak	?lak	?lak	yak	yak	defecate
khləŋ	khləŋ	khəŋ	khərəŋ	khyəŋ	male
pra? ¹	pyaa	paa	nteeŋ	nteeñ	machete
ñaa	ñaa	ñaa	ñcey	ñcey	older sibling
ŋkraŋ	ŋkyəŋ	gaŋ	ŋkraŋ	ŋkyəŋ	pole
prəŋ	pyəŋ	pəŋ	ŋkrə	ŋkyə	morning
?ət	?ət	?ət	?ət	?ət	to take
khooy	khooy	khooy	weey	?ooy	to lie down

1) A Thai loanword in all three Mal dialects.

Two of the Mal dialects have subsets which will be discussed more fully in the next chapter. The data for the Pray dialects may also be arranged to show subsets of dialects, and this may be the correct interpretation of the data. However, the discussion of this problem will be reserved until Chapter Four.

The information in the preceding paragraphs may be summarized in the following 'tree'.

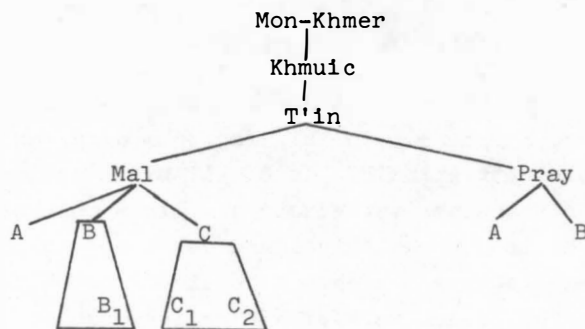
II.5. Tree of Mal and Pray dialects



The terms Mal and Pray show the two branches of T'in, or how the dialects of T'in arrange themselves. The capital letters show the synchronic dialects spoken in Thailand. The letters with subscripts show the subsets, or minor but discernable variations, of dialects.

The location of T'in and her dialects within the total picture of Mon-Khmer may be seen in the following tree.

II.6. Tree showing subgrouping of T'in in Mon-Khmer



2.5. GOAL OF STUDY

The overview presented in II.6. is not meant to support the thesis that broad classification of languages should come first, nor is the discussion on the T'in dialects to follow meant to support the other side of the issue. Broad classifications and detailed comparisons of languages can travel together on the same road, for one complements the other. A broad classification tells us where we are within the

total picture; detailed comparisons show us the composition of part of the total picture. Moreover, such a preliminary overview of relationships will be useful in our reconstructions of Proto-Mal, Proto-Pray and Proto-T'in; more distantly related languages will provide evidence for a number of reconstructions.

The goal of this study, therefore, is to provide some detail for one part of the total Mon-Khmer picture. The procedure used to show this is comparison of T'in dialects and reconstruction first to proto-dialect stages (Proto-Mal and Proto-Pray) and finally to Proto-T'in. Reconstruction of these different stages in T'in can proceed only along the lines of phonology. There is very little of morphology -- the composition of words into root/stem plus bound affix -- in any of the T'in dialects. The great majority of words are monosyllabic, and disyllabic words contain no hint of previous morphological construction. There is some compounding of otherwise free morphemes.

The following list from Mal dialect A lists the only evidence there is for any type of morphology in T'in. A few of these examples can be duplicated for other T'in dialects as well.

II.7. Evidence for morphology in Mal Dialect A

/mpləp/	<i>to immerse</i>
/pləp/	<i>to sink</i>
/mpəl/	<i>to kill</i>
/pəl/	<i>to die</i>
/nthəh/	<i>to put to sleep</i>
/thəh/	<i>to sleep</i>

The initial nasal on the examples above appears to be a causative, perhaps a transitive, morpheme. In Mal, /mpləp ~ pləp/ and /mpəl ~ pəl/ are found only in dialects A and B. In C, all pre-nasalized unaspirated stops of Proto-Mal have become voiced stops. Since this affects both nouns and verbs, i.e. is a phonological and not a morphological change, this (nasal) morpheme is irrecoverable in dialect C. Only dialect A has /nthəh ~ thəh/, the causative */nthəh/ having been replaced by /sɛɛl/ in dialects B and C. From Pray I have found only the alternation /mpəl ~ pəl/

Maspero, writing in Meillet and Cohen (1952:609-21), gives a short characterization of affixation in some languages of Mon-Khmer. Of interest here are his comments on prefixes, both from a diachronic and synchronic aspect. Historically, a number of prefixes can be reconstructed for Mon-Khmer, one of which is a transitive or causative prefix.

Le préfixe labial était essentiellement verbal: p-transformait des noms ou des verbes intransitifs en transitifs, ou en

causatifs: Mon yo 'être malade' / pa-yo 'rendre malade'.....
 m- formait des sortes de participes: Mon tit 'sortir' /
ma-tit 'sorti'.

Synchronically, affixes

n'ont plus guère que des debris du système primitif: chacune d'elles a perdu quelques-uns des préfixes....p- a disparu aussi, et a été remplacé par ha qui doit avoir d'abord été lui aussi un verbe independant, car il se place tantôt avant tantôt apres le verbe avec la même value causative: k-et om- (< *m- ?) sont devenus les prefixes formateurs de verbes.

We can only surmise concerning the relation between the causative of the T'in dialects and what Maspero has said about Mon-Khmer in general. Historically we may say that Mon-Khmer */p-/ 'causative prefix' became the nasal */m-/ in T'in. This */m-/ then assimilated to the point of articulation of the following consonant in prefixation.

The causative in the T'in dialects is normally a syntactical construction using the verb 'to give' in the sense of 'to cause', as in this sentence from Mal dialect B.

II.8. ?əŋ nam to?
 give he come Cause him to come.

Transitive, intransitive and causative verbs in the T'in dialects are inherently so; no overt morphology is used to signal these functions.

The Prefix /pa-/ 'stick' occurs in all three Mal dialects but not in the Pray dialects. It is not an extremely productive affix, being limited to pieces of wood of some definite length (e.g. firewood) which have a definite use in the culture.

2.6. RESULTS OF RECONSTRUCTIONS

Note should be taken of what we are hoping to reconstruct. Are we purporting to reconstruct a uniform proto-language, or just a dialect of a non-uniform proto-language? Both positions are held in current historical studies in linguistics. Hockett (1955:486) even manages to adhere to both sides of the issue at the same time.

When we wish to employ the comparative method we are found to make a potentially false working assumption: that the distinct languages which we are comparing trace back not to a single parent language but to a single language free from dialect variation.

In reality, Hockett realizes that since there is no uniform language today, one free of any dialectal variation, there probably were no uniform languages in the past. Yet reconstruction has proceeded on the assumption that there were.

King (1969:176) has a variation on this issue.

To formulize comparative reconstruction in a way that emphasizes the points of similarity between the comparative method and generative phonology....., we must first assume a uniform 'lexicon' in the proto-language.

Presumably, King does not propose a uniform parent language free of all dialectal variations, but only uniform lexical items in the parent language which lie behind the changes observed in the daughter languages. No particular claim is made about whether these uniform lexical items constitute a uniform proto-language, or merely form a part of a proto-language which may be composed of other parts (dialects) and which may be irrecoverable. These uniform lexical items yield 'a minimal set of proto-phonemes which spell items in the lexicon of the proto-language'.

Dyen (1969), on the other hand, dislikes the practice that assumes language uniformity on the one hand while on the other hand it denies the validity of the assumption on empirical grounds.

The assumption is needed for the functioning of the comparative method. But one can reasonably object to this view: if a method is dependent on an assumption that is contrary to a reasonable likelihood, this does not engender confidence in its conclusions.

To escape this paradox, Dyen questions the need of the assumption of proto-language uniformity to the comparative method. All that is needed, he claims, is an assumption of a uniform proto-idiolect. All reconstructions, therefore, are considered as having been obtained from a single speaker. Irreconcilable differences are attributed to different idiolects in the proto-language.

However, the uniformity assumption may not need to be given up so easily. Wang (1969), while not addressing himself to this problem, has proposed that time must also be taken into account in describing phonological change. Change, he asserts, is abrupt when it occurs; but it does not occur in all relevant morphemes at the same (abrupt) time. 'What actually takes place is a kind of diffusion from morpheme to morpheme in his vocabulary.' This is the same mechanism of diffusion that occurs across larger boundaries such as dialects and languages. A change occurs in one individual, perhaps in one small segment of the society. Over a period of time it diffuses gradually both over the relevant stock of morphemes involved and from one speaker to another or from one area to another.

An example of this can be seen in Mal. There is currently a gradual change of final /-c -ñ/ to /-t -n/, i.e. all final palatal consonants are being replaced by the more favoured alveolar consonant. I do not mean these are gradual degrees of change in articulation from the palatal position to the alveolar position in the mouth. I mean that there

is a drift, or diffusion, throughout Mal speakers of /-c -ñ/ > /-t -n/. This has not affected dialect A as yet, but it has completed its course in dialect C. In dialect B this change appears to be sporadically drifting through villages and speakers. In the village where I lived about half the villagers that spoke this dialect had /-t -n/ in place of /-c -ñ/, and even recent immigrants whose siblings in other villages still speak /-c -ñ/ have become inconsistent, sometime speaking /-c -ñ/, sometime /-t -n/. I have noticed a few other villages similarly divided.

Now this has a few intriguing implications in connection with the uniformity assumption. Assuming that all changes happen this way, we must recognize that there was an earlier uniform state, a time before which changes took place or had time to become so diffused that speakers were conscious of real variations in their language. And in reconstructing a proto-state from these variations we go back to this earlier time.

/-c -ñ/ can be reconstructed back to a uniform Proto-Mal state where all speakers of that earlier time spoke /-c -ñ/. It is not necessary to postulate variations between /-c -t/ and /-n -ñ/ among idiolects at this initial stage in order to account for the synchronic variations. This, and other changes, emerged from a uniform proto-dialect in one individual or area and diffused, as it still is doing today.

There are a few problems to this extension of Wang's ideas. One is the problem of irreconcilable differences which Dyen would attribute to different idiolects in the proto-language. However, this is not the place in this dissertation to discuss this problem; we will return to this in a later chapter. Another problem concerns the period of time a reconstruction purports to characterize. Does a reconstruction describe the earlier uniform state or one of the later stages? Does a reconstruction show the proto-language at a time when a change has diffused throughout 20% of the speakers, 40% or maybe even 60%? Perhaps the question can be resolved by considering the amount of irreconcilable differences we have left over in a reconstruction. But at this point the views of Dyen and Wang converge, one complementing the other.

It is at this point that I drop the issue of whether our reconstructions of Proto-Mal, Proto-Pray and later on Proto-T'in take us back to a uniform state or to just proto-idiolects of these proto-languages. Given the factor of time and diffusion as Wang proposes, the two views need not be considered contradictory. It may be that our reconstructions, especially of the proto-dialects, reflect a more uniform state; even our reconstruction of the more remote Proto-T'in may reflect such an early stage. On the other hand, it may be that we are reconstructing only a genealogy of idiolects. If the latter proves to be the case it

will not mean that there were no previous uniform states; rather, it will mean that our reconstructions go back in time only to a period when a given change (or changes) had not diffused throughout the language or dialect to the point at which it may be said that a dialect has emerged.

In other words, our reconstructions are valid as far as they go. They are characterizations based on the data we have in the synchronic dialects. These characterizations may be incomplete due to loss of lexical items or even phonological elements, for merging into zero is also a fact of language change and once it has diffused throughout all speakers it is no longer recoverable. Whether our characterizations or reconstructions of these dialects reflect uniform or non-uniform stages is left to the conjecture of the reader. Where I have intimate knowledge of the linguistic situation, as with the Mal dialects, I have certain feelings on this question. Perhaps I can present the data in a way that can explicate these feelings.

CHAPTER THREE

PROTO-MAL

3.1. THE MAL DIALECTS

In the previous chapter we saw that Mal is divided into three dialects. Two of the dialects contain subsets, that is, minor variations which do not merit separate classification as dialects either from a native speaker's point of view or from linguistic considerations. Culturally, each of the subsets is found in only one village, the speakers being integrated into the main stream of interpersonal communication. Each subset contains no different inventory or set of phonemes from all the rest of the dialect. On the other hand, one of the important factors in distinguishing Mal dialects A, B and C is the different inventories of phonemes that each dialect has.

All three Mal dialects are located in one geographical location (map, page vi). There is only one known village that speaks dialect A, located in Thung Chang District of Nan Province. The number of speakers is probably no more than a few hundred. There is also only one village that speaks dialect C, which is a large village of two sections containing over 2,000 people. It is located in Pua District of Nan Province. For dialect B I have counted eighteen villages that speak this dialect. These are small villages, ranging from four households to more than thirty, and the number of speakers will not exceed 3,000 people. Most of these villages are located in Pua District.

All three dialects are mutually intelligible; I myself am able to understand and be understood by speakers of dialects A and C. The village of Ban Pha Nam Yoy, in Thung Chang District, where I lived for three years, was originally a village of speakers of dialect B but over the past twenty five years speakers of dialects A and C have immigrated and intermarried. Interpersonal communication is carried on in the three dialects. Some adjustments or allowances are made in con-

versing with speakers of other dialects but these soon become automatic. A few lexical items are peculiar to each of the three dialects but this does not mean that such words are not known by speakers of the other dialects; rather, they mark the user's linguistic background.

The phoneme inventories of the three Mal dialects are arranged side by side on page 35. The phonemization of each dialect is based on Pike (1947). One interesting result from applying Pike's procedures has arisen in dialect C as compared to dialects A and B. For dialects A and B aspirated and/or labialized stops are treated as clusters and not as unit phonemes because of the pattern pressures upon these stops exerted by nonsuspicious consonant clusters. For dialect C, however, these nonsuspicious consonant clusters are missing, having been lost in development from Proto-Mal. The aspirated/labialized stops, therefore, are treated as unit phonemes. By doing so we quickly gain an idea of the types of sound changes and restructuring that dialect C has undergone vis-à-vis the other two dialects.

The phonetic values of the phonemes in all three dialects correspond to the values traditionally assigned to the graphemes representing the phonemes. In dialect B there is one unusual grapheme, /ʔ/ which is a high, back, unrounded vocoid occurring only in syllable final position. It is nonsyllabic and is thus classified as a consonant. There is little allophonic variation in the phonemes of these dialects. In all dialects final /-l/ is the affricate [-dʌ] while in initial position the allophone is [l]. In dialect A and B the prenasalized unaspirated stops have allophonic variants [mb nd ŋg].¹

In all these dialects all consonants occur both initially and in final syllable position except /s/,² which occurs only in initial position. Consonant clusters occur only in initial position with the exception of /-yh/ and /-wh/. In dialect A /-y/ occurs only in final position with the exception of a few Thai words that speakers of this dialect use. In dialect C /y/ occurs initially in only a few words

¹Since these two dialects have phonemes /b d/ already, the principles of phonemic analysis would require us to state that the variations of /mp nt ~ mb nd/ are allomorphic instead of allophonic. [ŋk ~ ŋg] would be allophonic because there is no /g/ phoneme. However, in the past (Filbeck 1965:4-11, 56-7) I have not felt constrained to hold to a strict biunique principle for these dialects. Such a principle is at best only a heuristic device within procedures of discovery. To paraphrase a quotation from the Scriptures, linguists are not made for biuniqueness, but biuniqueness is made for linguists. Whether we state that /mp nt ~ mb nd/ is allophonic (with overlap) is left to the discretion of the analyst and his goal in analysis.

²There are several Mon-Khmer languages where a final /-s/ occurs. Historically, in many of these languages, /-s/ has become final /-yh/, as can be seen in Modern Cambodian /os/ 'fire' and Mal /ʔoyh/ 'fire'. Pray dialects have /ʔoot/ 'fire'.

III.1. PHONEME INVENTORIES OF THE THREE MAL DIALECTS

Mal A					Mal B					Mal C				
Consonants:														
p	t	c	k	ʔ	p	t	c	k	ʔ	p	t	c-	k	ʔ
												cw-	kw-	
b-	d-				b-	d-				ph-	th-		kh-	
m	n	ñ	ŋ		m	n	ñ	ŋ			thw-		khw-	
	r					l				b-	d-		g-	
	l					s-			h	m	n	ñ-	ŋ	
	s-		h		w	y	ɿ				l			
w		-y									s-			h
										w		y		-yh
Vowels:														
i	ɨ	u			i	ɨ	u			i	ɨ	u		
e	ə	o			e	ə	o			e	ə	o		
ɛ	a	ɔ			ɛ	a	ɔ			ɛ	a	ɔ		
length					length					length				
la		ɬa			ia		ɬa			ia		ɬa		
ie		ua			ie		ua					ua		
rising tone														
Consonant Clusters:														
		pr					py		pi					
ph		phr	phi		ph		phy	phi						
mp		mpr	mpl		mp		mpy	mpl						
mph					mph									
th		thw			th		thw	tw						
nt		nth			nt		nth							
		kr	kl				ky	kl						
kh		chr	chl		kh		chy	chl						
kw		khw			kw		khw							
ŋk		ŋkr	ŋkl		ŋk		ŋky	ŋkl						
ŋkh					ŋkh									
ñc		cw			ñc		cw							
ns		sw			ns		sw							
ʔm														
hm		hn	hñ h	mh			nh	ñh						
hr		hl	hw	hy			lh	hw						
rw		-yh	-wh				-yh	-wh						

which may be due to dialect borrowing from dialect B. All voiced stops occur only in initial position.

Vowels in all three dialects may be either long or short. Long vowels are analyzed as sequences of two short vowels. Only dialect B has developed a rising tone. It stands in contrast to register-type pitch phenomena but it is not necessary in communication to distinguish meaning. For example if /ʔəñ ʔay caaŋ/ is substituted for /ʔəñ ʔay cǎaŋ/ 'I'm unable (to do it)', it would still be understood with the same meaning. But the substitution would be tagged as being 'the way they say it over at Ban Sakat (= dialect C)'.

3.2. PHONEMICS OF PROTO-MAL

We assume here a deductive approach in our treatment of the three Mal dialects as a more succinct statement of our reconstruction of Proto-Mal. That is, instead of proceeding inductively step by step in comparing and reconstructing the various changes of the three dialects, we start with Proto-Mal and state the changes that have occurred from the proto-dialect in the individual dialects or those changes that have occurred as converging phenomena in more than one dialect. Certain types of phonological changes have occurred in more than one dialect and our method of description will allow us to succinctly see these phonological drifts that have occurred. Also, this procedure will allow us to state why they are considered drift and not dialectal borrowings or due to some common origin below the proto-dialect level. In addition, stating changes that have occurred from a proto-stage provides motivation or evidence for certain reconstructions not well attested numerically from the data.

The phonemes and phoneme clusters of Proto-Mal are given on pages 37 - 43. These pages give the comparative data from the three Mal dialects necessary for the reconstructions postulated for Proto-Mal. For some of our reconstructions there are problems, but these will be discussed more fully below. One interesting problem that comes from comparing the phonemes of dialect A (page 35) with the reconstructed phonemes of Proto-Mal is that we come to the conclusion that dialect A has apparently become more uniform in its development from Proto-Mal. The change in A has not been 'away from' the proto-dialect, but an enhancing of the tendency to uniformity that is present in any language but which usually loses out to the stronger tendencies of change. The changes in dialect A appears to be losses and not changes in phonological features such as we find in dialect C and to a limited degree in dialect B.

A quick look at the data for dialect C on the following pages reveals that this dialect is more different from Proto-Mal than the

III.2. Phonemes of Proto-Mal

Consonants

p t c k ?
 (b) (d)
 m n ñ ŋ
 r
 l
 s- h
 w -y

Vowels

i ɨ u
 e ə o
 ɛ a ɔ

Vowel Clusters

la ua ɬa ie

Consonant Clusters

pr pi ph phr pʰi mp mpr mpl mph
 tw th thw nt nth ns cw ñc sw
 kr kl kw kh khɾ khɿ khw ŋk ŋkr ŋkl ŋkh
 ?m (?n) (?ñ) (?ŋ) hm hn hñ hŋ hr hi hw rw -yh -wh

III.3. Evidence for reconstruction of Proto-Mal Consonants¹

Proto-Mal	Dialect A	Dialect B	Dialect C	English Gloss
/p/	pal	pal	pal	<i>to lead</i>
	pəh	pʰh	pih	<i>to carry</i>
	pop	pop	pop	<i>to meet</i>
/t/	tlah	tiah	tiah	<i>all</i>
	tah	tah	tah	<i>forehead</i>
	to?	to?	to?	<i>to come</i>
/c/	cɬl	cɬl	cɬl	<i>heavy</i>
	cak	cak	cak	<i>to go</i>
	cuu	cuu	cuu	<i>to go down</i>
/k/	kək	kək	kək	<i>to boil</i>
	kuut	kuut	kuut	<i>to enter</i>
	kayh	kayh	kayh	<i>to be</i>
/?/	?et	?et	?et	<i>to take</i>
	?ia?	?ia?	?ia?	<i>far</i>
	pha?ll	pha?ll	pha?ll	<i>owner</i>
/m/	miam	miam	miam	<i>blood</i>
	məc	məc	mət	<i>to see</i>
	mia?	mia?	mia?	<i>rain</i>
/n/	naayh	naayh	naayh	<i>comb</i>
	nəp	nəp	nəp	<i>package</i>
	nəc	nəc	nət	<i>knife</i>
/ñ/	ñan	ñan	ñan	<i>grass</i>
	ñuah	ñuah	ñuah	<i>finger</i>
	looñ	looñ	looñ	<i>lost</i>

Proto-Mal	Dialect A	Dialect B	Dialect C	English Gloss
/ŋ/	ŋeɛŋ	ŋeɛŋ	ŋeɛŋ	<i>to hear</i>
	ŋaaw	ŋaaw	ŋaaw	<i>fool</i>
	ŋeet	ŋeet	ŋeet	<i>to pour</i>
/r/	rur	yur	lul/luy	<i>to hang loose</i>
	ri?	yi?	li?	<i>energetic</i>
	plar	plai	plal/play	<i>two</i>
/l/	lul	lul	lul	<i>water gourd</i>
	llak	llak	liak	<i>afraid</i>
	leh	leh	leh	<i>out</i>
/s/	sin	sin	sin	<i>cooked</i>
	sɛc	sɛc	sət	<i>meat</i>
	sɔɔl	sɔɔl	sɔɔl	<i>vomit</i>
/h/	hɛp	hɛp	hɛp	<i>to insert</i>
	hiɰy	hiɰy	hiɰy	<i>to dissolve</i>
	ho?	ho?	ho?	<i>better health</i>
/w/	wɛɛl	wɛɛl	wɛɛl	<i>cripple</i>
	wɔɔŋ	wɔɔŋ	wɔɔŋ	<i>chin</i>
	wak	wak	wak	<i>to hang up</i>
/-y/	mooy	mooy	mooy	<i>one</i>
	laayh	laayh	laayh	<i>comb</i>
	phɛy	phɛy	phɛy	<i>to spit</i>
/pr/	pran	pyan	pan	<i>sore</i>
	prɔɔt	pyɔɔt	pɔɔt	<i>to shell corn</i>
	prɔŋ	pyɔŋ	pɔŋ	<i>early</i>
/pi/	pluut	pluut	puut	<i>to insert</i>
	plitt	plitt	pitt	<i>to swallow</i>
	plee	plee	pee	<i>cramp</i>
/ph/	phɰan	phɰan	phɰan	<i>tray</i>
	phəñ	phəñ	phəñ	<i>to shoot</i>
	phoh	phoh	phoh	<i>to split</i>
/phr/	phram	phyam	pham	<i>person</i>
	phran	phyan	phan	<i>reed</i>
	phrut	phyut	phut	<i>miscarriage</i>
/phl/	phllan	phllan	plan	<i>floor</i>
	phlln	phlln	phlln	<i>upside down</i>
	playh	phlayh	phayh	<i>play banjo</i>
/mp/	mpuu	mpuu	buu	<i>to crawl</i>
	mpah	mpah	bah	<i>some</i>
	mpal	mpal	bal	<i>thick</i>

Proto-Mal	Dialect A	Dialect B	Dialect C	English Gloss
/mpr/	mprua?	mpyua?	bua?	<i>pretty</i>
	mprlaŋ	mplaŋ	biaŋ	<i>split bamboo</i>
	mpro?	mpyo?	bo?	<i>man</i>
/mpl/	mplih	mplih	blh	<i>to fall</i>
	mplɔh	mplɔh	bɔh	<i>mountain</i>
	mplat	mplat	bat	<i>tie knot</i>
/mph/	mphaa	mphaa	phaa	<i>to feed</i>
	mphɨ?	mphɨ?	phɨ?	<i>name</i>
	mphuul	mphuul	phuul	<i>powder</i>
/tw/		tway		<i>meaning unknown</i>
/th/	the?	the?	the?	<i>true</i>
	thua?	thua?	thua?	<i>moon</i>
	thla?	thla?	thla?	<i>south</i>
/thw/	thwaar	thwaaĩ		<i>bird net</i>
	thwaay	thwaay	thwaay	<i>to offer</i> (Thai loanword)
				<i>time</i>
/nt/	nto?	nto?	do?	<i>time</i>
	ntuah	ntuah	duah	<i>to tell</i>
	ntən	ntən	dən	<i>don't know</i>
/nth/	nthuu	nthuu	thuu	<i>leaf</i>
	nthaak	nthaak	thaak	<i>tongue</i>
	nthɔ?	nthɔ?	nthɔ?	<i>smoke</i>
/ns/	nsiaŋ	nsiaŋ	siaŋ	<i>sound</i>
	nsook	nsook	sook	<i>hair</i>
	nslik	nslik	siik	<i>to inhale</i>
/sw/	swak	swak	swak	<i>weaving spool</i>
	swaar	swaaĩ	swaal/swaay	<i>bandage</i>
	swaa	swaa	swaa	<i>baboon</i>
	(Only three examples)			
/cw/	kriaŋ	cwaaŋ	cwaaŋ	<i>frog</i>
	cwɛɛŋ	cwɛɛŋ	cwɛɛŋ	<i>corner</i>
/ñc/	ñcɨh	ñcɨh	cɨh	<i>be pregnant</i>
	ñcur	ñcuĩ	cul/cuy	<i>to warm oneself</i>
	ñcan	ñcan	can	<i>to stand (tr.)</i>
/kr/	krəŋ	kyəŋ	kəŋ	<i>horn</i>
	kraam	kyaam	kaam	<i>bean</i>
	kru?	kyu?	ku?	<i>deep</i>
/kl/	kluak	kluak	kuak	<i>white</i>
	kliw	kliw	klw	<i>water leach</i>
	kliɨ	kliɨ	kɨɨ	<i>to lick</i>

Proto-Mal	Dialect A	Dialect B	Dialect C	English Gloss
/kw/	kwaal	kwaal	kwaal	<i>to prepare</i>
	kwaat	kwaat	kwaat	<i>wave hand</i>
	kweh	kweh	kweh	<i>name of village</i>
/kh/	khep	khep	khep	<i>hoof</i>
	khuak	khuak	khuak	<i>worm</i>
	kheet	kheet	kheet	<i>drunk</i>
/khr/	khrɨɨt	khyɨɨt	khɨɨt	<i>glue</i>
	khruŋ	khyuŋ	khuŋ	<i>be fat</i>
	khroot	khyoot	khoot	<i>came apart</i>
/khl/	khlih	khlih	khlih	<i>to fall</i>
	khlan	khlan	khan	<i>sad</i>
	khloh	khloh	khoh	<i>ant hill</i>
/khw/	khwaay	khwaay	khwaay	<i>potato</i>
	khwar	khwaɨ	khwaɨ/khway	<i>axe</i>
	khwan	khwan	khwan	<i>child</i>
/ŋk/	ŋkɨɨ	ŋkɨɨ	gɨɨ	<i>friend, with</i>
	ŋkaap	ŋkaap	gaap	<i>mouth</i>
	ŋkɨŋ	ŋkɨŋ	gɨŋ	<i>attic</i>
/ŋkr/	ŋkri?	ŋkɨ?	gɨ?	<i>ceremony</i>
	ŋkrəyɨh	ŋkyəyɨh	gəyɨh	<i>water hole</i>
	ŋkraa	ŋkyaa	gaa	<i>shelf, rack</i>
/ŋkl/	ŋkɨlŋ	ŋkɨlŋ	gan	<i>body</i>
	ŋklɔh	ŋklɔh	gɔh	<i>from</i>
	ŋklɔk	ŋklɔk	gɔk	<i>come out of</i>
	(Only three examples)			
/ŋkh/	ŋkhe?	ŋkhe?	khɨ?	<i>tick (insect)</i>
	ŋkhaa	ŋkhaa	khaa	<i>torch</i>
	ŋkhal	ŋkhal	khal	<i>flood</i>
/hm/	Series One			
	hmaay	mhooy	hooy	<i>shoot at target</i>
	hmaat	mhaat	haat	<i>hardship</i>
	hmaay	mhaay	haay	<i>widow</i> (Thai loanword)
	hmɨay	mɨay	ɨay	<i>tired</i> (Thai loanword?)
	hmɔɔ	mɔɔ	ɔɔ	<i>doctor</i> (Thai loanword)
	hmlaŋ	mɨlaŋ	ɨlaŋ	<i>tea</i> (Thai loanword)
	Series Two			
	hmaal	maal	maal	<i>soul</i>
	hmaŋ	maŋ	maŋ	<i>root</i>
	hmu?	mu?	mu?	<i>betel nut</i>

Proto-Mal	Dialect A	Dialect B	Dialect C	English Gloss
/hm/ ctd.	hmual	mual	mual	<i>to plant by punching holes</i>
	hmuul	muul	muul	<i>wild pig</i>
	hmoc	moc	moot	<i>ant</i>
	hmɔɔy	mɔɔy	mɔɔy	<i>ear</i>
	hmɔɔl	mɔɔl	mɔɔl	<i>ladder</i>
	hmɔɔn	mɔɔn	mɔɔn	<i>girl</i>
/hn/	Series One			
	hnɬay	mhɬay	hɬay	<i>tired</i> (Thai loanword)
	hnɔŋ	nhɔŋ	hɔŋ	<i>swamp</i>
	hnum	nhum	hum	<i>young</i> (Thai loanword)
	hnuam	nhuam	huam	<i>bamboo strips</i>
	hnam	nham	ham	<i>medicine</i>
	hnəm	nhəm	həm	<i>hatch</i>
	hlaa	nhiiim	hiim	<i>wedge</i>
hnii	nhil	(nil) ²	<i>debt</i> (Thai loanword)	
/hn/	Series Two			
	hnɔŋ	nɔŋ	nɔŋ	<i>to begin</i>
	hnuan	nuan	nuan	<i>bridge</i>
	hnuyh	nuyh	nuyh	<i>stool</i>
	(Only three examples)			
/hñ/	Series One			
	hñoot	ñhoot	hoot	<i>withered hand</i>
	hñam	ñham	ham	<i>handful</i>
	Series Two			
hñɬim	ñɬim	ñɬim	<i>heart</i>	
hñaa	ñaa	ñaa	<i>shoulder bag</i>	
/hŋ/	Series One			
	hal	ŋal	ŋal	<i>stump</i>
	hat	ŋat	ŋat	<i>dried up</i>
	hah	ŋah	ŋah	<i>to clear burnt rice field</i>
	Series Two			
	hŋua	ŋua	ŋua	<i>rice</i>
	Series Three			
	həʔ	paŋaʔ	paŋaʔ	<i>paddy</i>
	/hr/	hraam	hyaam	(haam)
hraŋ		hyaŋ	(haŋ)	<i>divorce</i> (Thai loanword)
hray		hyay	(hay)	<i>rice steamer</i> (Thai loanword)
kək		hyuŋ	(huŋ)	<i>to boil rice</i> (Thai loanword)

<u>Proto-Mal</u>	<u>Dialect A</u>	<u>Dialect B</u>	<u>Dialect C</u>	<u>English Gloss</u>
/hI/	Series One (Twenty examples)			
	hləm	lhom	hom	<i>able</i>
	hlop	lhop	hop	<i>to return</i>
	hlat	lhat	hat	<i>door</i>
	hloŋ	lhǒŋ	hoŋ	<i>lost</i> (Thai loanword)
	hlak	lhak	hak	<i>post</i> (Thai loanword)
	hlɪa	lhɪa	hɪa	<i>left over</i> (Thai loanword)
	hlɪaŋ	lhɪǎŋ	hɪaŋ	<i>yellow</i> (Thai loanword)
	hlaŋ	lhǎŋ	(laŋ)	<i>place</i> (Thai loanword)
	hlok	lhok		<i>trainee</i> (Thai loanword)
	Series Two			
	hləŋ	palɪŋ	palɪŋ	<i>morning</i>
	hlah	palah	palah	<i>to divide</i>
/hw/	Series One			
	kaŋhɪɔ?	hwaŋ (Thai loanword)	(waŋ)	<i>middle</i>
		hway		<i>to stack up</i>
	hway	hwǎy	(way)	<i>homage</i> (Thai loanword)
	khieek	hweek	week	<i>break (bread)</i>
	ɔɔ?	hwɪt (Thai loanword)	ɔɔ?	<i>be short</i>
	Series Two			
	hwar	waī		<i>a vegetable</i>
/rw/	rwaay	waay	waay	<i>leopard</i>
	rwayh	wayh	wayh	<i>to stack up</i>
/ʔm/	ʔmləh	bləh	bləh	<i>mushroom</i>
	ʔmut	but	but	<i>shirt</i>
	ʔmɪal	bɪal	bɪal	<i>bored</i>
	ʔmiac	biac	blat	<i>to crush</i>
/-yh/	ʔayh	ʔayh	ʔayh	<i>swollen</i>
	ʔoyh	ʔoyh	ʔoyh	<i>fire</i>
	khuyh	khuyh	khuyh	<i>to sit</i>
/-wh/	clawh	clawh	phɔ?	<i>to split bamboo</i>

1. The phonemes of Proto-Mal which are well attested have only three cognate examples given from each of the dialects. Any phoneme having fewer or more than three attesting cognates as examples means that no more examples are available in addition to those given. In general, any reconstruction having five or fewer examples in the Mal dialects will have all examples given.

2. A word enclosed in parentheses in dialect C means that the word is a reassimilation or replacement from Modern Thai.

III.4. Evidence for reconstruction of Proto-Mal Vowels

Proto-Mal	Dialect A	Dialect B	Dialect C	English Gloss
/i/	tih	tih	tih	<i>mushroom</i>
	ʔii	ʔii	ʔii	<i>we (exclusive)</i>
	liŋ	siʔ	siʔ	<i>long time</i>
/e/	leh	leh	leh	<i>out</i>
	ʔeen	ʔeen	ʔeen	<i>there</i>
	seem	seem	seem	<i>bird</i>
/ɛ/	leh	leh	leh	<i>stone</i>
	ʔɛɛ	ʔɛɛ	ʔɛɛ	<i>we (inclusive)</i>
	lɛʔ	lɛʔ	lɛʔ	<i>to seek for</i>
/ɨ/	mɨr	mɨ	mɨl	<i>to walk</i>
	kiɨʔ	kiɨʔ	kɨʔ	<i>head</i>
	phɨl	phɨl	phɨl	<i>crossbow</i>
/ə/	kət	kət	kət	<i>famine</i>
	ʔəñ	ʔəñ	ʔən	<i>I</i>
	kəñ	kəñ	kən	<i>to observe</i>
/a/	taa	taa	taa	<i>place, at</i>
	ca:k	ca:k	ca:k	<i>to go</i>
	raʔ	yaʔ	laʔ	<i>to place</i>
/u/	ʔuuy	ʔuuy	ʔuuy	<i>to have</i>
	luh	luh	luh	<i>to offend</i>
	nthuut	nthuut	thuut	<i>to blow</i>
/o/	soo	soo	soo	<i>red</i>
	loʔ	loʔ	loʔ	<i>to rest</i>
	thoon	thoon	thoon	<i>to buy</i>
/ɔ/	sɔ	sɔ	sɔ	<i>another</i>
	lɔyh	lɔyh	lɔyh	<i>to steal</i>
	lɔʔ	lɔʔ	lɔʔ	<i>good</i>
/ia/	ʔlah	ʔlah	yah	<i>wife</i>
	ʔlaʔ	ʔlaʔ	ʔlaʔ	<i>far</i>
	miaʔ	miaʔ	miaʔ	<i>rain</i>
/le/	ʔleh	ʔleh	ʔlah	<i>to untie</i>
	khleh	khleh	khlah	<i>to laugh</i>
	ntlec	ntiec	dlat	<i>to thresh</i>
/ɬa/	phɬan	phɬan	phɬan	<i>tray</i>
	khɬaʔ	phɬaʔ	phɬaʔ	<i>spit up</i>
	mpɬaʔ	mpɬaʔ	bɬaʔ	<i>rapids</i>
/ua/	ʔua	ʔua	waa	<i>before</i>
	kuar	kual	kual/kuay	<i>river</i>
	mpuaʔ	mpuaʔ	buaʔ	<i>cow</i>

other two. Since there are a few troublesome points in describing some of the changes that have taken place in C, let us begin by reviewing the noncontroversial changes of this dialect.

3.2.1. Some Phonological Changes in Dialect C

One of the more noticeable observations of dialect C is the reduction of consonant clusters or complex consonants from Proto-Mal. There are three general parts to this reduction:

- III.5. a. All prenasalized unaspirated stops became the corresponding single, voiced stops; */mp nt ŋk/ > /b d g/.
- b. The nasals in all other prenasalized consonant clusters were lost; */mph nth ns ŋkh ñc/ > /ph th s kh c/.
- c. All liquids in consonant clusters were lost;

$$*C(h) \left\{ \begin{array}{l} l \\ r \end{array} \right\} > C(h)$$

In addition, the preaspiration in */hw/ was lost in dialect C. Final */-c -ñ/ have become final /-t -n/.¹

There are a number of other changes that have occurred in dialect C, but these should be discussed separately since there are some problems connected with these changes that have a more crucial bearing on some of the reconstructions we have posited for Proto-Mal. Moreover, these latter changes should be discussed in closer relation to the changes that have occurred in dialect B. In this way we can show the motivation behind certain reconstructions in spite of inconclusive or even contradictory evidence observable in the data. For most of our reconstructions we have good evidence from two out of three dialects, many times three out of the three. For a few posited reconstructions, however, we find no simple, statistical majority in the three Mal dialects for the postulation. In one case, a reconstruction (*/?m/) goes against the numerical evidence of the dialects.

3.2.2. Parenthetical Elements

In the chart on Proto-Mal consonants (page 37), the segments /b d/ are enclosed in parentheses. Two reasons exist for this notation. First, reconstruction of native words in Proto-Mal leads back to an

¹In dialects A and B, final /-c/ is not an affricate, as the initial occurrence (allophone) is, but a palatal [tʲ]. In other words, /c/ has two allophones in complementary distribution.

/c/ [c] palatal affricate, occurring in syllable initial position only.

[tʲ] palatal stop occurring in syllable final position only.

inventory of phonemes containing no voiced stops. In the data on the dialects only dialect C has voiced stops, but these are reflexes of Proto-Mal */mp nt ŋk/. In dialect B, there are no such voiced stops or reflexes of Proto-Mal origin. On the other hand, some speakers of this dialect regularly say /dʰi/ 'over there' instead of /nʰi/, but this is only a sporadic, perhaps irregular, sound variation which finds no other parallel in B. Dialect A has /ni/ 'over there', which means in B 'way over there'.

The second reason why /b d/ are enclosed in parentheses stems from the evidence that Proto-Mal was in contact with and heavily influenced by the surrounding Thai people and language. Currently all three Mal dialects contain a number of Thai loanwords beginning with the consonants /b d/, especially personal names; all Mal people have Thai names prefixed by one of the two Thai words /ba-/ 'male' or /ʔi-/ 'female': e.g. /ʔibun/ 'Miss Boon', /baduan/ 'Mr. Duang'. Earlier contact with Thai is also evidenced by Thai loanwords in these three Mal dialects that preserve a pronunciation of Thai which has since been lost due to independent sound changes in the Thai dialects. In this situation it is possible that /b d/ were spoken in Thai loanwords in Proto-Mal, therefore in the phonemic inventory.

There is one major problem contained with the above notation, however. There is a real possibility that /b d/ were not spoken in Thai at this earlier period of contact. The Thai segments /b d/ are synchronic reflexes of */ʔm ʔn/ respectively. Whether the change */ʔm ʔn/ > /b d/ had already taken place by the time Proto-Mal was influenced by Thai is a difficult matter to assess. One piece of evidence to show that this change had already taken place stems from those Thai loanwords in Mal that preserve a more ancient pronunciation of Thai. For example, the ancient Thai word */hmɔɔ/ 'doctor' is still preserved in Mal dialect A as /hmɔɔ/ [Mmɔɔ/, in B as /mhɔɔ/ and in C as /hɔɔ/, while in Thai the word has become /mɔɔ/. On the other hand, no Mal dialect has any Thai loanword preserving the ancient Thai */ʔm ʔn/ pronunciation. Therefore, it is possible to reason that at the time of borrowing such words as Thai */hmɔɔ/, there were no words beginning with */ʔm ʔn/ in Thai; otherwise there would surely be loanwords of this latter type preserved in the Mal dialects in the same manner as the former type. This leads to the conclusion that Thai */ʔm ʔn/ had already changed to /b d/ which then could have very well entered the Proto-Mal phonemic inventory via loanwords.¹

¹For a sociolinguistic approach to this problem, see 5.2.3. below.

*/?m/ has been reconstructed for Proto-Mal (independent of any prior Thai influence) on the basis of dialect A. I have recorded four words in this dialect beginning with /?m/ (page 42). These four words are also found in dialects B and C, each word beginning with /b/ in both dialects. Numerically speaking, /b/ is better attested than /?m/, but there are other, more cogent reasons for reconstructing */?m/ and saying /b/ is the reflex.

One reason is inverted analysis, when more distantly related dialects, e.g. the Pray dialects and Khmu, are brought to bear on this problem. In this case, there is no evidence in my data on any Pray dialect that would substantiate the reconstruction of /?m/, but when we look at Khmu we find such evidence. Smalley, in his *Outline of Khmu Structure*, as set up a consonant cluster /?m/ for one dialect of Khmu. Since this dialect of Khmu and the Mal dialects share a high degree of cognates, it appears that */?m/, and not /b/, is needed in Proto-Mal (and eventually Proto-T'in) in reconstructing a Proto-state to the Khmu and Mal (T'in) dialects.

Another reason for reconstructing */?m/ and not */b/ in Proto-Mal stems from areal considerations. Both Thai and Mal have been in contact in the same area for a long time. There is no evidence that /?m/ in Mal dialect A or Proto-Mal was ever borrowed from Thai */?m/. However, there is the possibility that the Thai sound change */?m/ > /b/ has had the same effect in Mal dialects B and C. That is, this change is an areal phenomenon, the results of which were felt in unrelated languages which have nevertheless been in close contact. Since there is such areal evidence, and none to the contrary, i.e. */b/ > /?m/, we reconstruct */?m/ for Proto-Mal.

This discussion leads to the other preglottalized nasals postulated for Proto-Mal but which are enclosed in parentheses. They are so enclosed because there is no synchronic evidence in the Mal dialects for their inclusion in Proto-Mal. On the other hand, not to include */?n ?ñ/ in Proto-Mal contravenes our intuition about what a phonemic inventory should contain. It would appear highly unusual if Proto-Mal contained only */?m/ and not */?n ?ñ/. Statistically, it appears that the nasal consonant most likely to be found in a language is /n/, and if a language has other nasals they will be in addition to /n/. It is unlikely that one will find a language with only /m/ or /ñ/ without a corresponding /n/. For this reason it would appear strange if Proto-Mal did not have other preglottalized nasals in addition to */?m/, especially since the full comparable series */hm hn hñ hŋ/ is well attested. Yet, such a condition is not impossible. One reason for the few examples of /?m/ and /b/ < */?m/ in these dialects could be that

Proto-Mal had only */ʔm/, and due to its oddity all words containing this combination were being replaced, as indeed has apparently happened in the Pray dialects.

On the other hand, Khmu has /ʔn ʔñ/ as well as ancient Thai. Khmu, of course, is genetically related to the Mal dialects, and provides a rationale for including */ʔn ʔñ/ in Proto-Mal. This is not a Mon-Khmer Thai language, but due to close areal contact and influence, it would be difficult to rule out */ʔn ʔñ/ from Proto-Mal.

*/ʔŋ/ is a more difficult matter to assess. No evidence in Khmu or Thai exists for such a cluster. On the other hand, given the series */hm hn hñ hŋ/ it would not be unreasonable to expect the full glottalized series */ʔm ʔn ʔñ ʔŋ/ also.

3.2.3. On the Reconstruction of Proto-Mal */r/

The reconstructed phoneme */r/ for Proto-Mal shares much the same situation as */ʔm/: only one Mal dialect contains a phoneme /r/, dialect A. Dialects B and C have no such sound, nor has there been any simple change in these two dialects such as is the case for */ʔm/ > /b/. However, the inverted evidence for reconstructing */r/ is much better than for */ʔm/. One Pray dialect has a /r/ phoneme. Smalley sets up a /r/ phoneme for Khmu also. For reconstruction beyond Proto-Mal, the inventory of Proto-Mal must contain a */r/.

The changes that */r/ have undergone in dialects B and C are both varied and interesting. In each dialect */r/ has undergone a split, dividing into different sounds, sometimes merging with other phonemes, at other times creating a new phoneme.

One interesting point to remember in discussing the changes that */r/ has undergone in dialects B and C is the fact that in Proto-Mal */-y/ evidently occurred only in final or postvocalic position. No prevocalic position can be reconstructed for */-y/.

In dialect B */r/ split, becoming /y-/ in prevocalic position, and /-ʔ/, a high, back, unrounded semi-vowel which occurs only in postvocalic position.

III.6.	*/raʔ/ > /yaʔ/	<i>to place</i>
	*/kruʔ/ > /kyuʔ/	<i>deep</i>
	*/mar/ > /maʔ/	<i>snake</i>

One consequence of this split has been the loss of prevocalic /y-/ < */r/ in consonant clusters occurring contiguous to a high front vowel.

III.7.	*/ŋkriʔ/ > /ŋkiʔ/	<i>ceremony</i>
	*/mpriaŋ/ > /mpiaŋ/	<i>split bamboo</i>

In dialect C */r/ split into /l/ and /y/, merging with these same phonemes in C. However, as noted in II.5. there are two subsets of C, each subset being defined by means of the manner */r/ split and merged with /l/ and /y/. In both subsets, initial */r/ became /l/.¹

III.8.	*/ra?/ > /la?/	<i>to place</i>
	*/rɪ?/ > /li?/	<i>energetic</i>

Pray dialects show the same type of drift where */r/ > /y/. The /r/ sound has been quite unstable throughout the whole area. Besides T'in languages, /r/ has had just as interesting a history in the Thai dialects.

Our reconstruction of Proto-Mal contains the cluster */rw/, posited on the basis of two examples in A. In B and C, these same words begin with /w/.

III.9.	Dialect A	Dialect B	Dialect C	
	rwaay	waay	waay	<i>leopard</i>
	rwayh	wayh	wayh	<i>to stack up</i>

Given the tendency of */r/ in Proto-Mal, as well as in one dialect of Pray, to change and merge with other sounds, it would be counterintuitive to postulate that dialect A gained an extra consonant cluster by adding /r/ to the above two words.² Since the loss of /r/ in B and C constitutes a simpler sound change, the more complex situation is taken as reconstruction.

3.2.4. Preaspiration in Proto-Mal

Data from the comparison of the three Mal dialects show that preaspiration is well attested for Proto-Mal. Indeed, for the nasal and the lateral there are two, sometimes three, series which attest preaspiration for this proto-dialect stage. The preaspirated nasals and the lateral seem to form a class by themselves vis-à-vis the preaspirated */hr/ and */hw/. As we proceed further into our description of sound changes from Proto-Mal we will see that this distinction was operative and must be taken into account in our description.

The series for preaspirated nasals and laterals, however, poses a somewhat different problem. Why are there more than one? Was there really just one proto series which changed in two and three ways in the

¹Notice that we have already discussed the loss of */r/ from consonant clusters in C (III.5.). The sound change now being discussed must have occurred after this loss.

²Compare Thomas and Headley (1970): 'Palaung final -r on many words is a recent accretion, not inherited from early Mon-Khmer. This is the opposite of the usual Mon-Khmer trend toward losing -r.'

surviving dialects? or were there several proto sources which have tended to drift and merge together phonetically? We will discuss these possibilities later on in this section. In the meantime we will keep the several series apart. We will mark the first series of each pre-aspirated nasal and lateral with a single asterisk *, e.g. */hm/, */hn/, */hñ/, */hŋ/, */hl/. The second series will be noted by a double asterisk **: */hm/, */hn/ etc. The single asterisk refers to the first set of examples or cognates found on pages 57-9; the double asterisk refers to the second set (the third series for */hŋ/ will be discussed in connection with */hl/ below).

3.2.4.1. *Metathesis in Dialects B and C*

The first or single asterisk set, */hm hn hñ hl/, forms a subclass vis-à-vis */hŋ/ in Proto-Mal. This can be seen in the respective -- albeit similar in some respects -- histories of change from Proto-Mal in all three dialects.

In Mal dialect A */hm hn hñ hl/ have undergone no change in the morphemes so designated. Only */hŋ/ has changed in this dialect, but this can be better discussed later in connection with what has occurred in dialects B and C.

Proto-Mal */hm hn hñ hl/ metathesized in dialect B: /mh nh ñh lh/. */hr hw/ did not metathesize; */r-/ has changed to /y-/, */hr/ likewise becoming /hy/. There has been no change from */hw/ in dialect B. Metathesis in this dialect, however, raises some interesting problems in the phonetics of the change. In B, the /h/ in /mh nh ñh lh/ is not the voiceless counterpart of the preceding voiced consonant as is supposed for Proto-Mal, but [h], a sound free of any obstruction or closure in the oral cavity and homorganic to the following vowel. The change from Proto-Mal to B, therefore, involved more than just a simple switch of sets of features. It involves a metathesis of some type of underlying competence of the phonemic patterning. This metathesis was not merely a transformational rule as formulated for metathesis by Chomsky and Halle (1968:351), where (whole) sets of features are switched in position.

In assuming that sets of features are transformed in metathesis, two rules would be needed for metathesis in dialect B.

III.10. a. Metathesis Rule

$$\begin{array}{l}
 \text{SD:} \quad \left[\begin{array}{c} +\text{con} \\ \text{asyl} \\ \beta\text{nas} \\ -\text{voice} \end{array} \right]_1 \quad + \quad \left[\begin{array}{c} +\text{con} \\ \text{asyl} \\ \beta\text{nas} \\ +\text{voice} \end{array} \right]_2 \\
 \text{SC:} \quad 1 + 2 \rightarrow 2 + 1
 \end{array}$$

b. Feature Changing Rule

$$\begin{bmatrix} +\text{con} \\ \alpha\text{syl} \\ \beta\text{nas} \\ -\text{voice} \end{bmatrix} + \begin{bmatrix} -\text{con} \\ -\text{syl} \\ -\text{nas} \\ -\text{voice} \\ +\text{low} \end{bmatrix} / \begin{bmatrix} +\text{con} \\ \alpha\text{syl} \\ \beta\text{nas} \\ +\text{voice} \end{bmatrix} \text{---}$$

According to Chomsky and Halle, the odd thing about a metathesis rule as the above is that it turns out to be less 'costly' than other, more common phonological processes in their phonological theory. To counteract this counterintuitive result, an arbitrary 'complexity' notation is added to such a rule. On the other hand, I fail to see why metathesis should arbitrarily be made more complex since it is a mechanism available to everyone acquiring a language and since it is an extremely simple operation, which is actually reflected by the transformation rule that Chomsky and Halle have proposed.

Rule III.10b., however, is extremely costly, for it involves the change of nearly every feature in the input set of features. In fact, the only time when a feature is not changed is when the rule vacuously states that for */h|/ > /|h/ [-syl] (> [αsyl]
[-nas] βnas) where α and β = + or -) becomes [-syl]
[-nas]. The α -notation is needed because of the environment the rule occurs in.

To prevent vacuity in our rules formulating metathesis in dialect B, two feature-changing rules are needed: one to specify the metathesis involving nasals, and another for the lateral. However, this misses the generalization that we wish to state, namely */hm hn hñ h|/ > /mh nh ñh |h/. A simple and straightforward way to capture this generalization is to assume a phoneme classification index where classes of sounds are grouped together, and it is the class that is metathesized on a rather abstract phonemic level. The realization of the class after the switch is by allophone. Phonemically, */h/ in Proto-Mal had the following voiceless allophones: *[H M N Ñ Ń L W], all occurring in mutually exclusive environments. Eliminating [Ń] and [W] we are left with a class of phones that, in an abstract sense, metathesized. Before the metathesis, */h/ was (in part) realized as *[M N Ñ L]; after, it was realized as [h] in B, homorganic to the following vowel.

In more traditional terms, we have in metathesis in dialect B a combination of metathesis, dissimilation and primary split. On an abstract, phonemic level, there was a metathesis. But the metathesis created an unusual phonetic situation so it also went through dissimilation, and the dissimilation was realized by means of secondary split when, for a set of allophones of */h/, the environmental conditioning was lost. No

longer did a voiced consonant follow; only a vowel followed. As the allophones of */h/ split, one set was lost, being replaced by *[h].¹

A discussion of metathesis in B is first necessary in order to understand the change that Proto-Mal preaspiration underwent in dialect C. For example, the data from the three dialects on */hm/ are:

III.11.	Dialect A	Dialect B	Dialect C	
	hmɿay	mhɿay	hɿay	tired

On the surface, the change from Proto-Mal to C appears to have been */hm/ > /h/, or in a more general rule */hC/ > /h/ excepting */hŋ hr hw/ which became /ŋ Ø w/ (words beginning with */hr/ have been replaced by Thai loanwords in dialect C; this is the significance of the words enclosed in parentheses under dialect C in III.3.). However, there is enough similarity with what has happened in B to postulate an intermediate stage between Proto-Mal and dialect C. That is, the true course of events was first a metathesis (as in B) and then a loss of the initial nasal and lateral: */hm hn hñ hɿ/ > */mh nh ñh ɿh/ > /h h h h/. This process captures a generalization that was first noted for dialect C in III.5b.: all nasals in prenasalized aspirated stops were lost. This can now be broadened to include prenasalized */h/ and */ɿh/.

Besides the generalization that the above intermediate, metathesized stage captures for dialect C, we find other evidence for this stage in the drift that is observable in dialect B. In II.5. we noted for dialect B a subset B₁. Actually B₁ is spoken by about one third of the members of one village with a few scattered speakers in other villages. This subset is characterized by a number of sound changes that parallel what has happened in dialect C, namely:

- III.12. a. All nasals in prenasalized clusters have been lost:
/mh nh ñh mp nt ñc ŋk mph nth ŋkh etc./ >
/h h h p t c k ph th kh etc./.
- b. /ɿh/ > /h/, phonetically [ɿ], a voiceless lateral.
- c. All liquids in clusters have been lost:
C(h) l > C(h)
- d. /-c -ñ/ > /-t -n/

In III.12a. there is one difference between dialects C and B₁. In C */mp nt ŋk/ became /b d g/ but in B₁ /mp nt ŋk/ have been subjected to

¹This can be carried further one more step by saying that *[h] then went through a process of assimilation, becoming assimilated homorganically in articulation with the following vowel.

a more general rule of 'deprenasalization' than what occurred in C. It is this observation that motivates the terming of this change in B₁ drift and not dialectal borrowing from C. If it were borrowing then we would expect /b d g/ in place of /mp nt ŋk/ and not /p t k/ as is the case.

3.2.4.2. On */hŋ/

*/hŋ/ (Series One in the comparative data) is posited for Proto-Mal because of the alternation /hʋŋ/ observed in the three Mal dialects. For example, dialect A has /haɪ/ 'stump' while B and C have /ŋaɪ/. In positing */hŋ/, moreover, we assume that dialect A has likewise undergone first a metathesis and then a loss of the initial segment (but only in this cluster): */h/ > */ŋh/ > /h/, while B and C have undergone the loss of only the initial */h/.

Other reconstructions of Mal /hʋŋ/ are possible; however, when we consider the Pray cognates we see that */hŋ/ is indeed the correct postulation. I return to this below in 5.2.3.

The change */h/ > /ø/___ŋ which occurred in dialects B and C is similar, if indeed it cannot be considered the same, to the type of changes that have taken place for the second series of preaspirated nasals to be discussed below. I have kept the two separated, however, even though the end results are the same phonetically.

3.2.4.3. The Second or Double Asterisk Series of Preaspirates

The double asterisk ** series of preaspirates in Proto-Mal refers to the second set of cognates under the proto forms /hm hn hñ hŋ/ found on pages 40-2. In this second series **/hm hn hñ hŋ/ form a distinct subset from **/hɪ/. This can be seen from the different types of changes that each subset respectively went through.

Of **/hm hn hñ hŋ/, there has been no change from Proto-Mal to dialect A. In dialect B and C, however, the changes can be summed up in one rule:

III.13. h → ø/___N (where N = any nasal)

It is this more general rule that motivated the separation of */hŋ/ from **/hŋ/ of 3.2.4.2. above.

Proto-Mal **/hɪ/ presents an entirely different problem. For this reconstruction we have the alternation /hʋpa-/ in the Mal dialects.

III.14.	Dialect A	Dialect B	Dialect C	
	hlah	palah	palah	<i>to distribute</i>
	hləŋ	palɪŋ	palɪŋ	<i>morning</i>

The reconstruction ***/h/** may be wrong, for it implies the change $h \rightarrow pa$ -- a process we may call syllabification. The Proto-Mal form may have been ***/pa-** which became /h/ in dialect A but which remained unchanged in B and C. This may also be explained to include preaspiration in general in Mal, i.e. preaspiration may be the reflex of pretonic syllables of a former time. Since change is a gradual diffusion, it may be that the syllables /pa-/ in III.14. are residues, i.e. morphemes that have not been affected by this diffusion.

Since ***/h/** is capable of a wider interpretation than ***/hm hn hñ hŋ/**, perhaps we should also have a separate symbol, e.g. ***/H/**, meaning that ***/H/** may have been a proto ***/h/** which became the syllable /pa-/ or it may have been a proto syllable which was reduced to /h/. However, such a decision should not be made without first considering ***/hŋ/**, for the two are related.

3.2.4.4. On ***/hŋ/**

The evidence for ***/hŋ/** is the following:

III.15.	Dialect A	Dialect B	Dialect C	
	ha?	paŋa?	paŋa?	<i>paddy</i>

The alternation here is $/h \sim paŋ/$. Internally there appears to be two processes. First, analogous to ***/hŋ/** (> $/h\sim hŋ/$ of 3.2.4.2.), there is a correspondence to what has happened in dialect A, namely ***/hŋ/** metathesized to $/ŋh/$ and then the initial /ŋ/ was lost. Second, analogues to ***/h/**, ***/h/** was replaced by the syllable /pa-/ before a velar nasal in dialects B and C.

In other words, ***/h/** and ***/hŋ/** are related in that ***/h/** and ***/hŋ/** became /h/ in dialect A (by slightly different processes), and ***/h/** and ***/hŋ/** were replaced by the syllable /pa-/ in dialects B and C. Moreover, these two patterns are related in that the pretonic syllable may be the proto-form and the /h/ of dialect A the reflex. In this case these two patterns should be reconstructed as ***/H/** and ***/Hŋ/**, the phonetic values of which are uncertain at this stage of our knowledge.

While I will admit to the phonetic uncertainty of ***/h/** and ***/hŋ/** -- even using at times ***/H/** and ***/Hŋ/** to display this uncertainty -- I tend to consider the preaspirated patterns as the proto-forms. The evidence -- meagre as it is -- for this feeling is two-fold.

First, if the alternation $/h\sim hŋ/$ is reconstructed as ***/hŋ/**, then the alternation $/h\sim paŋ/$ is reconstructed as ***/hŋ/**. However, the relationship between these two alternations would not be apparent were it not for the second piece of evidence.

In II.1. we noted that Palaung has /hŋɔ/ 'paddy'. This suggests that in reconstructing beyond the time depth of Proto-Mal, even beyond Proto-T'in, for this etymology, we must have a preaspirated form for Proto-Mal. In other words, inverted analysis points to preaspiration and not to the pretonic syllable /pa-/. And that this pretonic syllable has replaced preaspiration on a limited basis in Mal.¹ It is this piece of evidence that leads me to reconstruct ***/hŋ/ for the alternation /hʋpaŋ/ and that ***/h/ underwent a process of syllabification in dialects B and C.

But what of **/hɪ/? We have no internally related alternation as we had for ***/hŋ/, nor do we have any evidence from more distantly related languages that preaspiration was the proto-pattern and not the pretonic syllable /pa-/. Perhaps, more data will reveal such a preaspirated cognate in another language. Or it may be that **/hɪ/ is not related to ***/hŋ/. On the other hand, syllabification of ***/hŋ/ may have diffused to **/hɪ/, perhaps in Pre-T'in times, thus creating a residue of /pa-/ syllables in Mal.

How plausible is syllabification? The change /p/ > /h/ is more commonly observed in language, but this is no reason to reject a priori syllabification of /h/. Indeed, in the final chapter we shall see that syllabification of /h/, i.e. preaspiration, is a process also found in Pray.

3.2.4.5. Why Multiple Series?

Why have we posited two series of proto */hm hn hñ hŋ hɪ/, one of which metathesized² and the other which did not? The data from the three Mal dialects can support this hypothesis, but must the data be interpreted this way? That is, can we get by with a single set of proto-forms which split in two and three ways or should we posit as many sets of proto-forms which have to a large degree merged phonetically in the process of change? The comparative data in III.3-4. are arranged to implicitly support the former. The discussion up to this point has been more descriptive in nature than an attempt to answer

¹It should be pointed out that Palaung /hŋɔ/ may not be cognate to /haʋpaŋaʋ/ of Mal after all. Khmu has /hŋɔʋ/ 'steamed rice' which is cognate to */hŋuaʋ/ of Mal. The problem here, of course, is that of semantic plausibility (Greenberg 1957:38), of attesting a shift in meaning (in this case) from 'steamed rice' to paddy or vice versa. There is no evidence that such a shift has taken place. However, more data, especially from Khmu, may clear up this difficulty.

²Excepting */hŋ/, of course, which had an independent course of action but which stands in the same relation to */hm hn hñ/ vis-à-vis **/hm hn hñ hŋ/.

this problem: my discussion of two or three series can be interpreted either way.

We interpret the multiple series¹ as stemming from a single set of proto-forms. To posit two or more proto sets in reality gains us nothing. One set, of course, would have the phonetic values traditionally assigned to the preaspirates /hm hn hñ hŋ hɪ/. The phonetic values of any other set would be unknown, and could just as well be symbolized by any variety of symbols, e.g.

III.16.	*/#/	>	hm
	*/%/	>	hn
	*/3/	>	hñ
	*/@/	>	hŋ
	*/1/4/	>	hɪ

According to this hypothesis we know nothing more about Proto-Mal than we did at the beginning of the analysis.

But we have not yet answered the question, which is now, why did a single set of proto-preaspirates split in the way we have indicated? This is not the same as asking why there were phonological changes in Mal, but why the changes (in this case) took the form they did. Perhaps this also is beyond our capability to answer; however, I believe there are other data from Mal and other related dialects that can give evidence to the answer we propose.

Crucial to my answer is Wang's (1969) proposal that we must take time into consideration when discussing phonological change

Surely, if we give more consideration to the dimension of time, much of the 'unstructuredness' observed by dialect geographers and in sociolinguistic studies of language usage can be better reconciled with the necessary faith that our linguistic behavior is lawful.

A change is phonetically abrupt but it takes a period of time to diffuse through all the relevant morphemes of a speaker or language. The period of time may be short, e.g. a generation, or it may take several generations to diffuse completely. Wang's main reason for including time in a description of phonological change is to account for residue, for 'even the best phonetic laws are frequently ridden with irregularities'.

It may be possible that such irregularities, or residue, from sound change which did not undergo these changes, can be explained within the

¹I exclude the rather special case of ***/hŋ/ of III.16. until the latter part of this section.

context of time. Given the assumption that change is phonetically abrupt, it still takes time to diffuse even within a speaker's competence. Given also this span of time, Wang proposes that residue 'may be caused by two competing sound changes that intersect in time'. That is, before one change has had a chance to diffuse throughout all the relevant morphemes and speakers of a language, another sound change enters in to interfere with the diffusion process of the first change. This interference may indeed impede the rate of diffusion of the original change, or it may stop it altogether thus 'recognizing incomplete sound changes as a cause of splits'.

I believe that Mal exemplifies this process. There was one set of proto preaspirated forms in Proto-Mal. A change began, perhaps in an individual or, as in the case of final /-c -ñ/, a segment of Proto-Mal speakers: */hm hn hñ hŋ hl/ began the course of losing the initial */h/. The initial phonetic change was abrupt wherever it occurred, but it did not affect all relevant morphemes at once nor did it spread throughout all speakers at once. Just what the rate of diffusion was we of course have no way of knowing. But sometimes before all relevant morphemes in all speakers were affected by this loss of initial */h/ contiguous to a following nasal or lateral, a competing sound change entered and halted the process. This in turn has resulted in the split or multiple series of preaspirates one of which eventually metathesized in dialects B and C and the other did not. The series that did not metathesize represents those morphemes that had gone through the loss of */h/ before nasals and laterals: the environment for metathesis no longer existed. Since the diffusion of this initial change was incomplete when this competing change entered, it was subsequently stopped and we have in Mal the residue of an incomplete sound change in the dialects of Mal.

I include dialect A in this process also. There are far fewer preaspirated consonants than their non-preaspirated counterparts. This would suggest that there has been a loss of preaspiration thus creating this synchronic imbalance. Such loss, however, is irrecoverable in A. The fact that there are more such residues in A than in B or C is not evidence against this hypothesis. It may have been that the competing sound change acted faster in halting this loss in A than it did in B or C. Or, the rate of diffusion was erratic in all three dialects diffusing at a slower rate in a segment of T'in speakers that eventually became dialect A. Perhaps the segment was the last affected, i.e. the change began and thus had proceeded further in other segments of T'in before this segment was affected.

In fact, the preaspirated consonants in both dialects A and B are fewer in number than their simpler counterparts, and of course they have been completely lost in C. III.17. below shows how great the imbalance is.

III.17.	Dialect A	Dialect B	Dialect C
/m/	24	33	33
/hm/	14	5 > /mh/	-
/n/	20	34	34
/hn/	14	10 > /nh/	-
/ñ/	37	39	39
/hñ/	4	2 > /ñh/	-
/ŋ/	20	24	24
*/hŋ/	3	-	-
**/hŋ/	1	-	-
/l/	42	42	42
/hl/	22	22 > /lh/	-

The above table, reflecting morpheme counts from my word lists of the Mal dialects, shows that the simple consonant occurs in more morphemes (in initial position) than the opposing preaspirated variety. Since the ratio in some patterns is quite disproportionate we may assume that it was closer together in former times. Perhaps the ratio of l/hl above is more 'plausible' than the more disproportionate ratios of the others, suggesting that the nasals were affected most and that there were a greater number in times past. We may also assume that the disproportionate ratios are due to a loss of */h/ in a number of preaspirated consonants before it was stopped by a competing change which entered the Mal picture, thus creating the small residue of preaspiration, or metathesis in B of the Mal dialects.

What was the competing sound change that halted the loss of */h/ before nasals and laterals in Mal? We have already mentioned that the Mal dialects contain a number of Thai loanwords in the comparative data on the preaspirates (pages 40-2). While these same loanwords are in dialects B and C we see that they have undergone sound changes unique to these two dialects, independent of what has happened to these same words in Thai. The following table summarizes what I mean.

III.18.	MA	MB	MC	Thai	Thai Spelling
<i>doctor</i>	hmɔɔ	mhɔɔ	hɔɔ	mɔɔ	hmɔɔ
<i>debt</i>	hnli	nhʔli	hli	nʔli	hnli
<i>yellow</i>	hiʔaŋ	ihʔaŋ	hiʔaŋ	liʔaŋ	hiʔaŋ

Thai spelling still reflects the earlier Thai pronunciation of pre-aspiration, but the latter is used now as a device for symbolizing tone. Also notice that no loanwords of Proto-Thai */hñ hŋ/ were included. There are several reasons for this which we need not for our purposes spell out here; the main reason is that to my knowledge Mal dialects contain no such loans.

The important thing to notice in the above table is that the pre-aspirates have remained unchanged in MA, have metathesized in MB, and -- if our theory is correct -- have metathesized in C and have gone through a further change or loss of nasal and lateral before /h/.

For the three Mal dialects, therefore, I claim that Thai preaspirated loanwords stopped the loss of initial */h/ in the environment of a following contiguous consonant, thus creating a residue of preaspirated words which have been reconstructed for Proto-Mal from the multiple preaspirated series that were posited in the comparative data.¹ Mal, probably at a time when the three synchronic dialects were not completely differentiated, assimilated these loans from Thai.² That they contained preaspirated clusters was no problem, for there were still a few native words with identical clusters in the vocabulary of the speakers; the initial change was not completely diffused throughout all the speakers. III.18. shows how few the preaspirates are in comparison to the opposing simple nasals and lateral. The following table (III.19.) breaks down the preaspirate residues into native words and Thai loans.

III.19.		Dialect A	Dialect B	Dialect C
	*/hm/	2	2 > /mh/	2 > /h/
Thai	*/hm/	3	3 > /mh/	3 > /h/
	**/hm/	9	9 > /m/	9 > /m/
	*/hn/	7	7 > /nh/	7 > /h/
Thai	*/hn/	3	3 > /nh/	3 > /h/
	**/hn/	4	4 > /n/	4 > /n/
	*/hl/	17	17 > /lh/	17 > /h/
Thai	*/hl/	5	5 > /lh/	5 > /h/

¹This, of course, is not the same phenomenon that Wang (1969) was discussing, but it is a logical extension of his proposal. He was talking of an actual competing sound change that alters diffusion, thus causing residues. Here, however, I have extended this notion to include Thai loanwords of the same phonological structure as the competing force (not change in this case) that stopped an ongoing change, thus creating residue in Mal.

²These loans were probably borrowed in Proto-T'in times, but this point of chronology is irrelevant here.

Why these loans would freeze this diffusion at this place we are unable to say, but linguists have long recognized that foreign words sometimes behave differently than native words.¹ It seems also that borrowed words are sometimes resistant to the processes of phonological change that are taking place at the time of borrowing. Once assimilated, however, they become subject to new (and different) sound changes that affect the relevant morphemes.

This is what has happened in dialects B and C. These Thai loans stopped the loss of initial preaspiration in all relevant morphemes, or before all were affected. Some time later, however, a new sound change -- metathesis -- began in some individual or segment of these two dialects. This change diffused again until all relevant morphemes this time were affected, both native and Thai loanwords.

Proto-Mal */hŋ/ was also frozen as a cluster for a few words in dialects due to the pressure exerted by Thai */hm hn hɪ/. Later however, the change h + Ø/___ŋ resumed its process in B and C perhaps due to no actual loans containing Thai */hŋ/. This change has all but completed its course in dialect A also; I have only one recorded example of /hŋ/ from A.

Proto-Mal */hɪ/ and */hŋ/ (all series), on the other hand, did not follow this pattern. Both patterns metathesized in at least one Mal dialect, but beyond this there is the alternation /hʷpa-/ that occurs in a few cognates. We posited preaspiration as the proto-patterns for this alternation but such a postulation should be proposed with caution at this stage.

Why this split between metathesis and this alternation occurred is hard to assess. Perhaps metathesis occurred on words of T'in origin and the alternation on words of a more ancient stock that goes back even before Proto-T'in. I have no evidence that this is true for the alternation of III.14. (i.e. **/hɪ/) but there is such Pre-T'in evidence of */hŋ/ (> /hʷpaŋ/) from Palaung /hŋɔ/ which I noted above. There is no evidence of borrowing here between Palaung and T'in, so we conclude that a common origin is involved here. The alternation /hʷpaŋ/, as developed in T'in (Pray dialects have /ŋaʷpaŋa?/) from Pre-T'in words, may have diffused to words of the */hɪ/ pattern thus causing the same alternation.

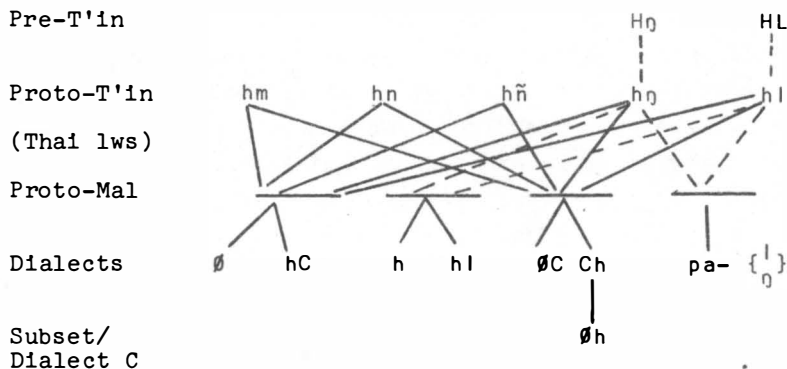
Indeed, the change of preaspiration in T'in may have begun in the environment of the velar nasal back before the time of Proto-T'in on

¹ Compare Pike's (1947) extra-systematic borrowing and Chomsky's and Halle's (1968:373) use of diacritic features to indicate non-native words.

words of a more ancient origin. This could explain why Proto-Mal */hŋ/ has had a somewhat different history than the other preaspirates in the T'in dialects. Other preaspirates of ancient origin were not affected by this diffusion until later in the Proto-T'in stage and by that time other phenomena had entered to compete with this change. New words beginning with preaspiration were formed which resisted this change. This in turn caused a residue of /hʷpa/ alternates in the T'in dialects.

The above may be summarised in the following chart.

III.20.



C = m n ñ ŋ l

The above chart begins with Pre-T'in /Hŋ HL/ which eventually developed into the alternation /hʷpaŋ/ and /hʷpa/ in the dialects. I have termed the latter alternate in each case syllabification, i.e. h → pa-; however as has been noted, this should be considered a hypothesis at this stage of our knowledge. Pre-T'in /Hŋ HL/ should be considered as historical constructs, posited to account for certain phenomena, and whose phonetic values are uncertain. In other words /Hŋ HL/ may be considered as preaspirates which subsequently underwent syllabification, or they may be interpreted as ancient pretonic syllables which have remained unchanged from Pre-T'in times (with the exception of Mal dialect A where the syllables reduced to /h/). The dotted lines show how Pre-T'in /Hŋ HL/ have developed down to the extant dialects of Mal. While we have posited one source for the two-way split of */hm hn hñ/, it appears that we must posit two sources for */hŋ hl/, one that is older in time than Proto-T'in.

The solid lines show how the remaining preaspirates developed. Words of Proto-T'in containing /hm hn hñ hŋ hl/ came into Proto-Mal having been influenced by Thai loanwords in the manner discussed above. That is, Proto-Mal had preaspirates in the manner we have reconstructed.

From the Proto-Mal level, however, the preaspirates have had in general a two-way development or split. There has been some loss of initial /h/, as in dialects B and C (and by inference in A also), and metathesis.

It is understood, of course, that the above is a reconstruction and therefore subject to correction on the basis of further evidence. At our present state of knowledge, however the outline of events in the above chart is as reasonable a hypothesis as any other.

3.2.5. Miscellanea

Throughout the three dialects of Mal there are a number of words that are cognates, or appear to be cognates in some traditional sense. No list of these words is given here since no new phoneme or phoneme clusters for the reconstruction of Proto-Mal would emerge from the data. More seriously, though, would be the difficulty of assigning the correct proto-form for the words involved. This is not to say that no proto-form, or even a plausible proto-form as based on what has already been posited for Proto-Mal, could be postulated; the problem is that several such etymologies could be established for each example and we would have no criteria for showing which etymology would be correct.

Another problem in comparing miscellaneous variations among related dialects is that such variations may be sporadic changes, perhaps in some cases non-cognates. For example, the words for 'earthquake' /hieh - kləyhŋkleəh - kəyhgeh/ in Mal A, B and C respectively, may all be derived from Pre-T'in /hi/ (cf. III.20. above), but there are no other examples of this type to provide us a pattern on how such changes have come about. On the other hand, the resemblance may be entirely fortuitous: /hieh/ may be a replacement in A of the proto-form preserved in dialects B and C.

One pattern that does emerge from the miscellaneous variations in the three Mal dialects is that, as in the example in the above paragraph, dialects B and C often agree together in opposition to dialect A. One exception is the word for 'house' where Mal A and C have /ciaŋ/ but Mal B has /kiaŋ/ (Pray dialects have /ciaŋ/. I have posited */kiaŋ/ as the Proto-Mal (and even Proto-T'in) forms on the basis of Khmu /gaŋ/ 'house'. The rationale for this is that there is plenty of evidence otherwise for the changes */g/ > */k/ and */aa/ > */ia/ from Proto-Khmu-T'in to Proto-T'in. The change */ki/ > /ci/ in all but one T'in dialect is a sporadic, howbeit a conditional change, i.e. a change that has affected not only this one word and no other word or morpheme in the T'in dialects. In the comparative data of III.4., there are two examples of sporadic changes where Mal A and B agree against C: the word 'before' is /ʔua/ in Mal A and B, but /waa/ in C, and the word for 'wife' is /ʔiah/ in the former two dialects, but /ʔyah/ in the latter. In Mal C, /ʔy/ occurs only on

this morpheme and has not diffused to other morphemes (cf. /ʔiaʔ/ 'far') of similar phonological structure.

In this section on miscellaneous words in Mal we should also mention a few other items reconstructed for Proto-Mal which, because of their odds-and-ends nature, are perhaps not as certain as we have posited. */tw/ is tentatively reconstructed for Proto-Mal; however, the evidence for it is weak. I have one recorded incident of /tway/ (meaning unknown) in texts of dialect B. The word is apparently unknown in dialects A and C. But because of the well attested */thw/ and the pattern */kw khw/, */tw/ has also been included in the phoneme chart of Proto-Mal.

Another example is */hr/ (page 41), which has been lost in dialect C and the words in dialects A and B on which this proto-cluster is posited are in reality Thai loanwords. The fact that no native words beginning with /hr/ have been found in Mal or Pray is no reason for rejecting this cluster for Proto-Mal, or for Proto-T'in as shall be done in Chapter V below. The fact that /hr/ was so readily and widely adopted in early T'in could argue for the prior existence of native /hr/ which disappeared being replaced as a cluster through Thai loanwords. Whatever the cause, the introduction of */hr/ into Proto-Mal by means of Thai loanwords is sufficient for this reconstruction.

The cluster /-wh/ has been reconstructed for Proto-Mal on the basis of one word, /ciawh/ 'to split bamboo', which occurs in Mal A and B. The cluster disappeared from Mal C when /ciawh/ was discontinued in use being replaced by /phɔʔ/, a word also known in the other two Mal dialects. In dialects A and B /phɔʔ/ means to split firewood and can be spoken to describe the action of splitting bamboo; however, /ciawh/ is the usual word for this. With the loss of /ciawh/ in C, /phɔʔ/ was extended to carry the meaning 'to split bamboo' in addition to splitting firewood.

There are several other alternations among cognates, as well as replacements among unrelated words, sprinkled throughout the Mal dialects. Many of these, especially among cognates, may represent patterns of change which we are unable to recover at this time, or they, along with the replacements, may exhibit nothing more than sporadic changes. Since we see no further interesting results emanating from a discussion of these possibilities we will not take the time and space discussing them. Rather, we hold them in limbo until more evidence is available.

3.3. ON SUBGROUPING IN PROTO-MAL

In this chapter we have assumed that the Mal dialects form no lower subgroups below the proto-stage. Our discussion of the changes that have taken place in dialects B and C has proceeded on this assumption. B and C, however, share a number of similar changes, and for this reason

it could be argued that B and C form a distinct subgroup within Proto-Mal. Yet there are enough dissimilarities in change from Proto-Mal between B and C to exclude the possibility of combining these two dialects into a subgroup. The similar sound changes that the two dialects share we attribute to drift, or convergence. In addition, the changes common to both B and C occurred at different time in each dialect.

In other words I assume here in this section a position not unlike that of the generative phonologists in determining different dialects. It is not only a comparison of inventories of phonemes that determines different dialects but also the rules -- i.e. the grammar -- that underlie these inventories. The three Mal dialects contain nearly the same inventory of phonemes, and they are mutually intelligible; but they are still different dialects on the basis of the different rules that it takes to realize the similar phonemic inventories from the proto-dialect.

However, a dialect becomes differentiated because of an accumulative effect. It is neither inventory nor rules alone that differentiates dialects, it is both as well as other factors such as vocabulary that distinguishes a dialect -- an accumulation not unlike a set of distinctive features in phonology. The three Mal dialects are differentiated by means of an accumulation of features -- phonemes, rules, order of rules, vocabulary -- which enables one dialect to be distinguished from the other dialects.

We have seen how the phoneme inventories of the three Mal dialects differ (III.1.), and some of the differences in vocabulary is illustrated from the comparative data in this chapter. We now turn to a statement of rules that derive the three dialects from Proto-Mal.

Based on our reconstructions we say that Proto-Mal interited -- or assimilated -- from Proto-T'in in a vocabulary redundancy rule.

$$\text{III.21.} \quad hC \rightarrow \left. \begin{array}{l} hC_1 \\ hC_2 \\ HC_3 \end{array} \right\} \text{c Thai loanwords}$$

That is, preaspirates were divided into three idiosyncratic classes. The first class included Thai loan preaspirates and native preaspirates influenced by these loans. The second class consisted of preaspirates not influenced by Thai loanwords. The third class contained the Pre-T'in preaspirates /H_η HI/.¹

Each dialect operated on this redundancy rule. Just how dialect A made use of this rule is a matter of conjecture but due to the dis-

¹I assume here that */H/ was phonetically an /h/ which eventually became the syllable /pa-/ in dialects B and C.

proportionate ratio between the simple consonants and their preaspirated counterparts (III.16.) there must have been some loss of preaspiration in A. That is, a diachronic rule we can reconstruct for dialect A is

III.22. $h \rightarrow \emptyset / ___ C_2$

We are unable to say which synchronic morphemes in A went through this change.

Other rules which can be reconstructed for dialect A stem from /HC₃/ -- i.e. /H_ŋ Hl/ -- of III.21. Proto-T'in */H/ became /h/ in A, resulting into */h_ŋ hl/. */h_ŋ/ metathesized and the resulting initial /ŋ/ was subsequently lost. This was not restricted to words derived from */H_ŋ/, but other words beginning with /h_ŋ/ -- Series One of III.3. -- were also affected. Thus hC₁ and HC₃ of III.21. interacted in dialect A.

III.23. a. H → h / $___ C_3$
 b. h_ŋ → ŋh
 h_ŋ ≠ hC₂
 c. ŋ → \emptyset / $___ h$

This demonstrates the fluidity of the vocabulary redundancy rule for Proto-Mal. The three classes were not stable; rather, native words were probably always subject to reclassification, especially hC₁ and hC₂. The fact that some hC₂ words were influenced by Thai loanwords shows how unstable the classes were.

Dialects B and C share a number of similar sound changes. This is due in part to operative on the same Proto vocabulary redundancy rule III.23. But dialect C has gone further in its operation and only a small segment of B is now catching up. Following is a list of changes for dialects B and C stated in the form of ordered rules. They are listed in parallel columns to enable the reader to readily compare the changes, both their similarities and differences. The segment(s) on the left of the arrow represent Proto-Mal, those on the right resultant change.

The two sets of rules in III.24. show the difference between dialects B and C. */r/ changed quite early in B and in ways different from C; */r/ in C appears to be a late change, differentiating the subsets of C (rules C9-10). */mp nt ŋk/ in C became voiced stops which is another rule setting C off from B. Metathesis occurred in both dialects on the morphemes of Thai origin and on morphemes influenced by Thai pre-aspirates. In B /hy/ and /hw/ were exempted from metathesis. In C */hw rw/ were both reduced to /w/ thus avoiding a later metathesis rule (Rule C3.).

In III.3. I noted two series for */hw/. */hw/ was also influenced by Thai preaspiration in the same manner as the native preaspirates: the loss of */h/ before */w/ was stopped by Thai loans containing /hw/. The residue of Proto-Mal */hw/ words yet found in B has remained unchanged in this dialect. Nevertheless */hw/ Series One is still hC₁ and */hw/ Series Two is hC₂.

Rules B4-5 and C5-6 are the same for both dialects. But at this point dialect C diverges from B. Rule C7 is a 'mirror image rule' and summarizes the information on reduction of consonant clusters in III.5b -c, i.e. the loss of prenasalization in pre-consonantal position (= ___C) and the loss of liquids in post-consonantal position (=C___).

III.24.

Proto-Mal Vocabulary
Redundancy Rule

$$hC \rightarrow \left\{ \begin{array}{l} hC_1 \subset \text{Thai lws} \\ hC_2 \\ HC_3 \end{array} \right\}$$

Dialect B

1. $r \rightarrow \left\{ \begin{array}{l} \tau / v _ \\ y / _ v \\ \emptyset / _ w \end{array} \right\}$
2. $y \rightarrow \emptyset / C _ i$
3. $hC_1 \rightarrow C_1 h$
 $hC_1 \neq hw, hy$
4. $h \rightarrow \emptyset / _ C_2$
5. $H \rightarrow pa- / _ 3$

Subset B₁

6. $C^1 \rightarrow \emptyset / \# _ C^2 _ \dots$
 $C^1 \neq C^2$
 $C^1 = \text{nasal or liquid}$
7. $[_ _ C] \rightarrow [_ _ t]$

Dialect C

1. $\left[\begin{array}{c} \overline{mp} \\ nt \\ gk \end{array} \right] \rightarrow \left[\begin{array}{c} b \\ d \\ g \end{array} \right]$
2. $hr \rightarrow$ Replaced by Thai lws
3. $\{ _ r \} \rightarrow \emptyset / _ w$
4. $hC_1 \rightarrow C_1 h$
5. $h \rightarrow \emptyset / _ C_2$
6. $H \rightarrow pa- / _ C_3$
7. $C^1 \rightarrow \emptyset / \# _ C^2 _ \dots$
 $C^1 \neq C^2$
 $C^1 = \text{nasal or liquid}$
8. $[_ _ C] \rightarrow [_ _ t]$

Subset C₁

9. $r \rightarrow l$

Subset C₂

10. $r \rightarrow \left\{ \begin{array}{l} l / _ v \\ y / v _ \end{array} \right\}$

Rule C7 contains an additional piece of information, namely that C^2 has now been restructured in dialect C along the lines shown in the Phoneme Chart of III.1. C^2 now refers to aspirated and/or labialized consonants as complex phoneme units.

Subset B_1 contains the same mirror image rule but it covers more ground than in dialect C. Rule B6 states that $*/mp nt \eta k/$ became $/p t k/$ respectively whereas these same clusters were exempted in Rule C7 because of the previous Rule C1. However, because $*/r/$ became $/y/$ in dialect B, $/y/$ is exempted from Rule B6: Subset B_1 still contains palatized stops.

Both Subset B_1 and dialect C have replaced the final palatals $*/-c -\tilde{n}/$ with the more favourable $/-t -n/$.

CHAPTER FOUR

PROTO-PRAY

4.1. THE PRAY

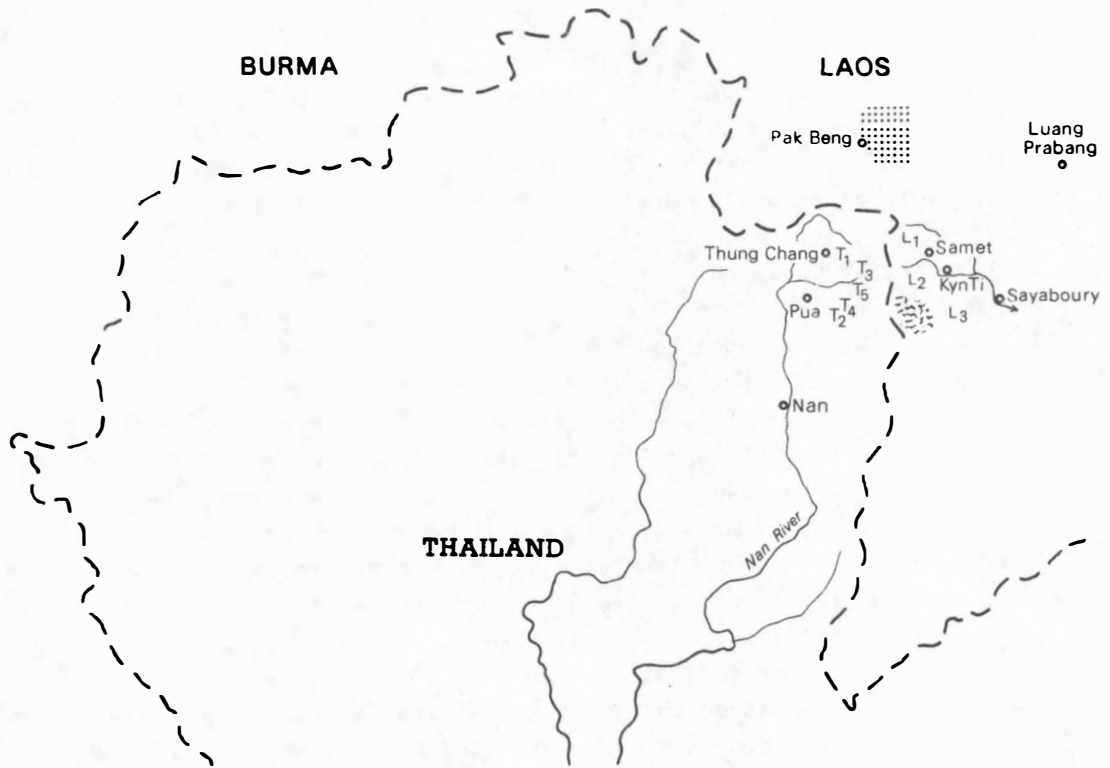
The Pray are located to the east and north of the Mal (see map, page vi). There are two, perhaps three Pray villages within the Mal area. I do not know the total number of Pray villages, nor the number of speakers of this T'in dialect. They greatly outnumber Mal villages and speakers, however.

The area in Thailand where the Pray are located is now unsettled because of the Indo-China War. Several Pray villages -- by no means all -- have been removed to resettlement areas. The resettlement outside the Government centre of Thung Chang is comprised of all Pray-speaking T'in. The villages of this group were subject to terrorist attacks -- several village leaders were assassinated -- and the Government was unable to give complete protection. These villages were formerly located in the mountains in Thung Chang District.

The tribal resettlement outside of Pua contains both Pray and Mal groups. Pray from close to the Laotian border were moved to Pua first, with a few Mal villages removed afterwards. These villages were formerly located in the mountains of Pua District. It was suspected that these villages contained Communist sympathizers, at least villagers who gave food to terrorists. However, informants have told me they had little choice in the matter.

Don Durling reports from Laos that areas in Sayaboury Province, to the east of Thung Chang and Pua in Thailand, are likewise unsettled. He also reports that there are T'in around Pak Beng (see map, page 68), but due to the unsettled conditions in that area he has been unable to make survey trips there to collect data for linguistic comparison.

There is an area, southeast of Sayaboury (map page 68), where the T'in (presumably formerly Pray speaking) have dropped their T'in lan-



..... Unclassified T'in Group

~~~~~ Yuan (Laos) speaking T'in

0 50 100  
kilometres

guage and now speak only Yuan (a northern dialect of Thai).

The Indo-China war, which was in progress during the time this monograph was first being written, unfortunately hindered survey work and gathering data among the Pray in both Thailand and Laos. It appears that this condition will remain for some time to come.

#### 4.2. THE DATA

The writer is regretfully not as knowledgeable about the Pray as he is with the Mal. I have done no missionary work among them, nor have I visited any of their villages. I do not speak any Pray dialect, conversing with Pray speakers in the northern dialect of Thai. I have gathered data from Pray speakers in the market town of Pua and from the resettlement camps of Pua and Thaung Chang.

I have collected data from five villages (or former villages in the case of those that have been moved to a resettlement camp) in Thailand, and Don Durling has furnished data from three villages in Laos. These are designated T1 and T5 and L1 and L3 respectively; their approximate locations are shown on the map on the previous page. The number of words from each village is as follows.

##### IV.1. Number of words from Pray villages.

|    |   |           |
|----|---|-----------|
| T1 | = | 215 words |
| T2 | = | 107 words |
| T3 | = | 300 words |
| T4 | = | 171 words |
| T5 | = | 122 words |
| L1 | = | 258 words |
| L2 | = | 249 words |
| L3 | = | 270 words |

In the list of cognates that follows only 74 words are given. This appears sufficient for our purpose of reconstructing Proto-Pray. While only a small number of cognates are listed, all 8 villages where data have been collected have been included. This was necessary due to paucity of data showing certain phonotactic patterns from every village; in other words, certain of our reconstructions are based on data from one or two villages. However, where data for a phoneme or phoneme cluster is lacking in one set of cognates from a certain number of villages, I have tried to cite other examples from the missing villages showing the same phoneme or phoneme cluster in question (cf. /ñ/ nos. 8 and 9, page 71). In a few cases this procedure was impossible to follow (cf. /kɪ/ no. 57).

The cognates have not been listed according to the alphabetical order of their English glosses. Rather, they follow the traditional reading of a phoneme chart, which for Proto-Pray is given in IV.3. However, the English glosses have been numbered for easy reference.

The villages (T1...T5 and L1...L3) are not arranged in strict sequence as IV.1. suggests. These villages have been arranged to show how their respective data seem to align them into dialects, rather distinct linguistic subgroups within Pray. The data appear to show 3 'etic' subgroups: {T1 T2 L1 L2}, {T3 T4} and {T5 L3}. There are problems with this division but this will be discussed below in 4.4.

Words enclosed in parentheses are Thai loanwords or reassimilations from Northern Thai and/or Lao dialects of Tai. For example, /phreew/ (no.24) under T1 is an ancient loanword from Thai while /pheew/ under T5 is a more recent reassimilation from Northern Thai.

#### 4.3. PHONEMICS OF PROTO-PRAY

I have not given the phoneme inventory of each Pray dialect, as I did for the Mal dialect (3.1.). Two reasons dictate this. First, I am not at all certain about dialect differentiation in Pray; and second, the inventories for the dialects which are at this stage apparent from the data are too similar to be of interest. The data suggest that, if there is dialect differentiation based on differences in inventories, such differentiation must hinge on the behaviour of /r/. In other words, phoneme inventories at this stage of our knowledge would differ on whether or not there was a /r/ phoneme inventory for Proto-Pray (IV.3. below). This is different from the deductive approach I used in discussing Proto-Mal. Because of lack of intimate knowledge of Pray I use here an inductive approach, i.e. stating the data first (as I have done in IV.2.) and then infer the phonemic inventory from that.

The data I have from the various Pray villages are sufficient for this reconstruction without any intermediate steps. That is, the data I have, including inverted analysis from Mal, require this type of inventory.

## IV.2.

## Pray Data From Eight Villages

| English          | T1       | T2       | L1    | L2    | T3      | T4    | T5      | L3    |
|------------------|----------|----------|-------|-------|---------|-------|---------|-------|
| 1. eat           | poŋ      | poŋ      | poŋ   | poŋ   | poŋ     | poŋ   | poŋ     | poŋ   |
| 2. come          | toʔ      | toʔ      | toʔ   | toʔ   | toʔ     | toʔ   | toʔ     | toʔ   |
| 3. house         | ciəŋ     |          | ciəŋ  | ciəŋ  | cəŋ     | cəŋ   | ciəŋ    | ciəŋ  |
| 4. dark          | ceɛl     | ceɛl     | ceɛl  | ceɛl  | ceɛl    |       | ceɛl    | ceɛl  |
| 5. shirt         | koop     | koop     | koop  | koop  | koop    | koop  | koop    | koop  |
| 6. eye           | mat      | mat      | mat   | mat   | mat     | mat   | mat     | mat   |
| 7. water         | noʔk     | noʔk     | noʔk  | noʔk  | noʔk    | noʔk  | noʔk    | noʔk  |
| 8. grass         | ñɛn      |          | ñɛn   | ñɛn   |         |       | ñɛɛn    | ñɛn   |
| 9. black         |          |          |       |       |         | ñam   | ñam     |       |
| 10. village      | ŋual     | ŋual     | ŋual  | ŋual  | ŋual    | ŋual  | ŋual    | ŋual  |
| 11. path         | ruəŋ     | ruəŋ     | ruəŋ  | ruəŋ  | ruəŋ    | ruəŋ  | luəŋ    | luəŋ  |
| 12. to walk      | rər      | rər      | rə    | rɪr   | rər/mɪr | mər   | mɪr     | ləl   |
| 13. stalk        | lam      | lam      | lam   | lam   | lam     | lam   | lam     | lam   |
| 14. pig          | siŋ      | siŋ      | siŋ   | siŋ   | siŋ     | siŋ   | siŋ     | siŋ   |
| 15. sky          | waəŋ     | waəŋ     | waəŋ  | waəŋ  | waəŋ    |       |         | waəŋ  |
| 16. chin         |          | waŋ      | waŋ   |       |         | waŋ   | wəŋ     | wəŋ   |
| 17. forest       | yoo      | yoo/ñcoo | ñoo   | saʔ   |         |       | yoo     |       |
| 18. defecate     | yak      |          |       |       | yak     |       |         |       |
| 19. horse        | praŋ     |          | praŋ  | praŋ  | (maa)   |       | pyəŋ    | plaaŋ |
| 20. spirit       | prəŋ     |          | prəŋ  | prəŋ  | pyəŋ    | pyəŋ  | pyəŋ    | pləŋ  |
| 21. foot         |          |          | ciəŋ  | pluu  | cəŋ     | cəŋ   | piw     | pluu  |
| 22. barking deer | phəʔt    |          | phəʔt | phəʔt |         | phəʔt | phəʔt   | phəʔt |
| 23. forsake      |          | phlah    | phraʔ | phraʔ |         |       |         |       |
| 24. arrive at    | (phreew) |          |       |       |         |       | (pheew) |       |

| English           | <u>T1</u> | <u>T2</u> | <u>L1</u> | <u>L2</u> | <u>T3</u> | <u>T4</u> | <u>T5</u> | <u>L3</u>    |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| 25. vegetable     |           | phlɛ?     |           |           |           |           | phia      |              |
| 26. fruit         | pɦɛ?      |           | phlɛ?     | phlɛ?     | pɦɛ?      | pɦɛ?      | pɦɛ?      | pɦɛ?         |
| 27. pepper        | piʔiat    | phiyet    | phrɛʔiat  | (pik)     | piʔiat    | (pik)     | (pik)     | phrɛʔpik (?) |
| 28. kill          | mpəl      | mpəl      | mpəl      | mpəl      | mpəl      |           | mpəl      | mpəl         |
| 29. split bamboo  | klɛɛl     |           | mpɾɛŋ     | mpɾɛŋ     |           |           | mpyeeñ    | mpɾɛŋ        |
| 30. elder         | mpɾɛh     |           |           |           | mpyeh     |           | mpyeh     |              |
| 31. go down       |           |           | mlɪh      | mplɪh     | blɪh      |           |           | mplɪh        |
| 32. stomach       | mpɦuul    |           | mpɦuul    | mpɦuul    |           |           |           | mpɦuul       |
| 33. eyebrow       | mpɦuay    |           |           |           | mpɦuay    | mpɦuay    |           |              |
| 34. hand          | thii      | thii      | thii      | thii      | thii      | thii      | thii      | thii         |
| 35. machete       | ntɛɛŋ     | ntɛɛŋ     | ntɛŋ      | ntɛŋ      | ntɛŋ      | ntɛŋ      | nteeñ     | ntɛŋ         |
| 36. tongue        | nthaak    |           | nthaak    | nthaak    | nthaak    |           | nthaak    | nthaak       |
| 37. roofing grass |           |           | nthur     | nthur     | nthur     |           | nthuul    | nthuul       |
| 38. ear           | nthər     | thur      | nthɔər    | nthɔər    | nthər     | nthər     | nthəl     | ntur         |
| 39. older sibling | ñcey      |           |           |           |           | ñcey      |           | ñcay         |
| 40. afraid        |           | ñcək      | ñcak      | liak      |           |           |           |              |
| 41. head of rice  | ñcək      |           |           |           |           |           | ñcok      |              |
| 42. son-in-law    | ñcoʔ      | ñcoʔ      |           |           |           |           |           | ñcoʔ         |
| 43. hair          | nsook     | nsook     | nsook     | nsook     | nsook     | nsook     | nsook     | nsook        |
| 44. tomorrow      | krak      | krak      | krak      |           |           |           | lak       | lak          |
| 45. rise up       | klɔh      | klɔh      |           |           |           |           |           |              |
| 46. banana leaf   | klaaŋ     | klɔɔ      |           |           |           |           |           | khɪɔɔ        |
| 47. white         |           |           |           |           |           |           |           | kluak        |
| 48. stone         | kwah      |           |           |           |           |           |           |              |
| 49. fish          | khaa      | khaa      | khaa      | khaa      | khaa      | khaa      | khaa      | khaa         |

| <u>English</u>    | <u>T1</u> | <u>T2</u> | <u>L1</u> | <u>L2</u> | <u>T3</u> | <u>T4</u> | <u>T5</u> | <u>L3</u> |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 50. person        | khram     | khram     | khram     | khram     | khyam     | khyam     | khyam     | khram     |
| 51. male          | khroŋ     |           | khloŋŋ    | khloŋŋ    | khyoŋŋ    | khyoŋŋ    | khyoŋŋ    | khloŋŋ    |
| 52. fall down     | khlih     | khlih     | khlih     | khih      |           |           |           |           |
| 53. rice husk     | khlak     |           |           |           |           |           |           |           |
| 54. mouth         | ŋkaap     | ŋkaap     | ŋkaap     | ŋkaap     | ŋkaap     | ŋkaap     | ŋkaap     | ŋkaap     |
| 55. child         | khwan     | khwan     | khwan     | khwan     | khwan     | khwan     | khwan     | khwan     |
| 56. early         | ŋkrɔh     |           | ŋkrɔh     | ŋkrɔh     | ŋkyɔh     |           | ŋkyɔh     | ŋkrɔh     |
| 57. comb          |           |           |           |           |           |           |           | ŋklap     |
| 58. fingernail    |           |           | ŋkher     | ŋkher     |           | ŋkheɛi    | ŋkheɛi    | ŋkhei     |
| 59. tick (insect) | ŋkhe?     |           | ŋkhe?     | ŋkhe?     |           |           |           |           |
| 60. I             | ?əñ       | ?əñ       | ?əñ       | ?əñ       | ?əñ       | ?əñ       | ?əñ       | ?əñ       |
| 61. you (sg)      | mah       | mah       | mah       | mah       | mah       | mah       | mah       | mah       |
| 62. he            |           |           | ?am       | ?am       |           |           |           |           |
| 63. located       | ?u?       | ?u?       | ?u?       | ?u?       | ?u?       |           | ?u?       | ?u?       |
| 64. we (ex.)      | ?li       |           | ?ih       | ?ih       |           |           | ?ih       | ?ih       |
| 65. chicken       | si?iar    |           | (kay)     | (kay)     | ?iar      | ?iar      | ?iai      |           |
| 66. bone          | si?iaŋ    | si?iaŋ    | si?iaŋ    | si?iaŋ    |           |           | ?iaŋ      | si?iaŋ    |
| 67. skirt         |           |           | si?uu     | (sin)     |           |           |           | (sin)     |
| 68. to steam      | si?oh     | yoh       | si?oh     | si?oh     |           |           | ?oh       | si?oh     |
| 69. hot           |           |           | si?ɔh     | si?ɔh     |           |           | ?ɔh       |           |
| 70. bowl          | si?ɔɔi    |           |           |           |           |           |           | si?ɔɔi    |
| 71. tray          |           |           | sito?     | sito?     |           |           |           | sito?     |
| 72. moon          | sua?      |           | sua?      | thua?     |           |           |           | thua?     |
| 73. skin          |           |           | suah      | thuah     |           |           |           | sithuah   |
| 74. be short      |           |           | sep       | thiap     |           |           |           |           |

## IV.3. Phoneme Inventory for Proto-Pray

| Consonants         |     |     |     | Vowels  |        |     |     |
|--------------------|-----|-----|-----|---------|--------|-----|-----|
| p                  | t   | c   | k   | i       | ɨ      | u   |     |
| (b)                | (d) |     |     | e       | ə      | o   |     |
| m                  | n   | ɲ   | ŋ   | ɛ       | a      | ɔ   |     |
|                    | r   |     |     |         |        |     |     |
|                    | l   |     |     |         | length |     |     |
|                    | s-  |     | h   |         |        |     |     |
| w                  |     | y   |     | ia      | (ɨa)   | ua  |     |
| Consonant Clusters |     |     |     |         |        |     |     |
| pr                 | pl  | ph  | phr | phl     | mp     | mpl | mph |
| th                 | nt  | nth | ns  | (cw) ɲc |        |     |     |
| kr                 | kl  | kw  | kh  | khɨ     | khɨ    | khw |     |
| ŋk                 | ŋkr | ŋkl | ŋkh |         |        |     |     |

## 4.3.1. Parenthetical Elements

The chart of phonemes of IV.3. contains postulated proto-phonemes enclosed in parentheses, the first of which are /b d/. What was said concerning /b d/ in Proto-Mal (3.2.2.) can be repeated here. That is, Thai loanwords, including personal names, containing /b d/ are used by Pray speakers and are therefore presumed to have been used in Proto-Pray.

However, there is some evidence that a /b/ is emerging in some Pray locations. T3 has /bɨh/ 'go down' (no. 31) while /mplɨh/ is found in T4 and T5, and /mplɨh/ in L2 and L3. Don Durling transcribes /mɨh/ for L1. However, while this is phonetically possible, it probably represents only an idiosyncratic variation, perhaps a hearing mistake on the part of the elicitor. Also, L1 has /bah/ 'vegetation' while /mpah/ is found in T1, T2, T4 and T5, cognates which were not included in IV.2. These are the only two examples of a type of change that has taken place in another T'in dialect, Mal dialect C which has \*/mp/ > /b/. However, it is nowhere as extensive in Pray as it has become in Mal C. Indeed, it may be a rather recent change, one that has just begun its course through the relevant morphemes and speakers of Pray. Due to the paucity of data, however, this change may be even more widespread than here indicated.<sup>1</sup>

<sup>1</sup>For /bɨh/ in T3, there is a chance for dialect borrowing from Mal dialect C which has /bɨh/ > \*/mplɨh/, for the two locations are not far apart and the village that speaks Mal C is on a major trade route between T3 and the market centre of Pua, thus increasing the chances of borrowing. However, for /bah/ in L1, it must be considered a converging phenomenon, as it is nowhere close to Mal C, being in Laos, and /bah/ has no cognate in Mal, which has /nthuu/ 'vegetation'.



There is no evidence of a similar change for /d/, or for a /g/ for that matter, as there is in Mal dialect C. Morphemes in Pray beginning with /d/ are Thai loanwords, probably recent in acquisition.

In the section on consonant clusters in IV.3., /cw/ is enclosed in parentheses. I have only one possible example for this reconstruction, which is based on a retranscription of a word from L3 provided by Don Durling. Mr. Durling transcribed /cuaat/ 'drive away' (not included in IV.2.). L1 and L2 have /cuap/. Assuming that the aa of /cuaat/ is a long vowel (but analyzed as a sequence of two short vowels), it would appear that, structurally, the u is not the crest of the syllable as in /cuap/. It may be voiced, which would give it a vowel-like quality following the voiceless consonant /c/, but not being the crest it should be classified as the semi-vowel /w/ and the word transcribed /cwaat/. This reanalysis, and the subsequent retranscription, is tenuous at best. However, it is a possibility, and should be held as such for future confirmation.

/ʔa/ is also enclosed in parentheses for Proto-Pray. I have no example from any Pray village containing this vowel cluster, but because it is so prevalent throughout the whole area in both Tai and Mon-Khmer languages it seems unlikely that no Pray dialect has it. The possibility is thus left open for its discovery in Pray.

On the other hand, while there is no positive evidence for /ʔa/, there is some negative evidence. T5 has a Thai loanword /mian/ 'similar to', which is /mʔan/ in Standard Thai. However, this may not be a loanword from Standard Thai, but from the Nan variety of the Northern Thai dialect which has undergone the change \*/ʔa/ > /ia/.<sup>1</sup> That is, /mian/ in T5 may be Northern Thai (Nan variety) of /mʔan/.

While this is plausible, we must still leave open the possibility that /mian/ in T5 is in reality due to a basic grammatical difference between Pray and Thai; since Pray emerged from Proto-T'in having lost the cluster /ʔa/, the only recourse in borrowing Thai words containing /ʔa/ was (and is) to substitute the Pray /ia/ for /ʔa/. By contrast Mal did not lose /ʔa/ and so there was no need for substitution (cf. /hʔa/ 'left over' in dialect A; L3 has /ʔa/ for this loanword). More data are needed to resolve this problem.

<sup>1</sup>This change, though, is not as complete around the Pua and Thung Chang area as the above statement of it might indicate. That is, a great number of speakers still have /ʔa/ in their idiolects. From my experience there appears to be 'pockets' of isoglosses where the majority of speakers will speak one or the other. Realizing this makes the source of /mian/ in T5 uncertain.

#### 4.3.2. Distributional Problems

All consonants in IV.3. occur in both syllable initial and final position with the exception of /b- d- s-/, and possibly /h y/. All consonant clusters occur in syllable initial position only.

Data from Pray show that /h/ occurs in consonant clusters and in final position of a syllable (i.e. following a vowel). But it is questionable whether /h/ occurred initially in Pray, especially in native words. From Thailand Pray sources I have only Northern Thai loanwords that begin with the /h/ sound. Don Durling also provides only Yuan (Lao) loanwords for initial /h/ in Laotian Pray.

However, it would appear strange if /h/ is not found initially in Pray. Initial /h/ is certainly abundant in Mal as well as in Khmu and Thai. It may be that our elicitation came up with a gap in our data. There may be native words in Pray beginning with /h/, and we need to elicit more data in order to find them. Yet, the loss of initial /h/ in Pray as it emerged from Proto-T'in is not impossible. As we will see in the next chapter, the /h/ in preaspiration (in the sense we have reconstructed for Proto-Mal) was lost either through merger with zero or by replacement by some other sound. Perhaps initial /h/ (i.e. contiguous to a following vowel) was drawn into this loss also.

/y/ occurs in syllable final position in Pray, but, as with Proto-Mal, an initial occurrence of this phoneme is just as questionable for Proto-Pray. Data from Thailand Pray show initial /y/ (no.17), but the data also show the probably source: /y-/ > /ñ/ > \*/ñc/. /yak/ (no.18) is from, i.e. a variant of, /ʔlak/ (cf. Mal /ʔlak/ 'to defecate'). No data from Laos show initial /y/. Indeed, Mr. Durling writes that he has found initial /y/ only in loanwords.

Since initial /y/ is also lacking for Proto-Mal, we should not find a similar situation for Proto-Pray unduly suspect. On the contrary, an initial /y/ found in the data of Pray should alert us to look for its source in some phonological change.

Our total data on Pray contain no example of /-əy/, a distribution which is in Mal and Thai. Mal /məey/ 'mother' is /mee/ in Pray, which may suggest a historical basis for the absence of /-əy/ in Pray.

#### 4.3.3. Some Etymological Difficulties

The data in IV.2. present a few problems in reconstructing the proto forms of certain words. The first examples are the cognates for 'horse' and 'spirit' (nos. 19 and 20). The data show alternation between /r ~ y ~ l/ in initial consonant clusters. /y/ can be eliminated from consideration being a common (T'in) replacement of /r/ in these dialects.

But there could be a question of whether /r/ or /l/ should be in the proto forms of these words. Either reconstruction is plausible. Therefore, we must look for external evidence.

For the Proto-Pray form for 'horse' (no.19), there is sufficient evidence for selecting \*/praŋ/. Lefèvre-Pontales (1892) cites /pr-/ in examples for 'horse' from several "Kha" languages. In a later article (1896) he has prong from two Kha languages, kamprong from another and brang from Khmu. He also has mrang 'horse' from Lamet.

The proto form for 'spirit' (no.20), unfortunately, is not as apparent. Lefèvre-Pontales nor Cabaten (1905) list cognates for 'spirit' from other Mon-Khmer languages. Smalley (1954), however, has bryan from Srê, a Mon-Khmer language spoken in South Vietnam. Whether this is a true cognate or a chance convergence is a matter of speculation. Geographically and linguistically T'in and Srê are far apart, and for this reason the evidence is suspect.

A similar problem from IV.2. is the alternation /r ~ y ~ l/ in the word for 'male' (no. 51). Mal A and B have /khlɔŋ/ with no evidence of /l/ > \*/r/ for this word. But because of the well attested change /y/ > \*/r/ in Pray (as well as in Mal), it appears that the Proto-Pray form was \*/khrɔŋ/.<sup>1</sup>

The preceding paragraphs demonstrate that Proto-Pray \*/r/ has had a history similar to that of Proto-Mal \*/r/, i.e. \*/r/ has split into either /y/ or /l/ in the synchronic dialects. In Mal, however, the split has resulted in well-defined dialects and/or subsets while in Pray the split has resulted in a mixed bag of ill-defined dialects (see 4.4.).

Perhaps here is the place to consider the alternations /krak - lak/ 'tomorrow' (no. 44). Mal A has /krak/ and so it would appear that the longer and more complex form is also the Proto-Pray form. However, there are no other data which would suggest why the initial /k/ in this word was lost in some varieties of Pray. Perhaps since \*/krak/ is always spoken following /ŋl?/ 'day' which has a final glottal stop, the subsequently occurring /k/, being an obstruent like /?/, became a redundant obstruent in this environment and therefore merged with zero. If this was the true course of the history of /lak/ in T5 and L3 then we may assume that the initial /k/ was lost before /r/ became /l/ in this variety of Pray. Then later the initial /r/ (in \*/rak/) was subject to the general rule \*/r/ > /l/ in initial position. In other

<sup>1</sup>/phlah/ (no.23) in IV.2. from village T2 is probably a borrowing from Mal which has /phlah/ and not /phra?/.

words, the isolated or sporadic change that \*/krak/ underwent in T5 and L3 was later subject to an '*across the board*' or general sound change.

The last ten words (nos. 65-74) in IV.2 present another difficulty in etymology. For example, in the cognates for '*chicken*', there is an alternation /si?iar - ?iar/ in Pray. Mal dialects have the simpler forms for all ten words. Internal evidence within Mal or Pray does not suggest that the initial /si-/ is an accretion or whether the simpler, monosyllabic forms represent a loss of an initial syllable. Linguistically, however, we feel that the shorter forms represent a simplification of proto-language bisyllabic forms. In these examples, therefore, we posit the syllable \*/si-/ for these forms. Moreover, in reconstructing Proto-T'in we will see that this was indeed the case. But we are anticipating.

However, this does not exactly explain the final three words of IV.2. Here we have an alternation of /svthvsith-/, apparently valid for all three examples. The longest alternation -- the bisyllabic forms -- is taken to be the reconstruction for Proto-Pray. \*/sith-/, therefore, has become /s/ in some varieties of Pray while in other varieties the initial syllable was lost.<sup>1</sup>

/sito?/ '*tray*' (no. 71), on the other hand, remains recalcitrant. It is obviously related to \*/sith-/, perhaps being derived from the Proto unaspirated opposition cluster \*/sɪt-/.

#### 4.3.4. Miscellanea

There are a number of miscellaneous items in the cognate list of IV.2. which defy reconstruction. Some of these are problems due to transcriptional difficulties in elicitation, e.g. /rə/ '*to walk*' (no. 12) from L1. There is no way to correct this type of difficulty for this monograph. Only a second opportunity at elicitation can provide the answer.

A problem closely related to transcription is that of vowel length, as in /cɛi - cɛɛi/ '*dark*' (no. 4). When eliciting isolated words it is nearly impossible to discern vowel length, especially in T'in dialects. Only after a word is compared with other words occurring in an identical stress position of a sentence can one be sure of its vowel length. In a weak stress position (cf. Filbeck 1965:46) a long vowel is likely to be measurably shorter than a short vowel in a stronger stress position. In isolation vowel length depends on extra-linguistic factors such as emotions or competing outside noise.

<sup>1</sup>Mal dialects have only /thua? thuah thlap/ '*moon, skin, below*'.

/ciaŋ - cəŋ/ 'house' (no. 3) presents a similar problem. The ultimate reconstruction of this word belongs under Proto-T'in. However, this alteration may be due to lack of precision in elicitation (cia- often sounds like cə- in languages of this area), or it may be a natural development of ia → ə/c<sub>1</sub>.

A true alternation appears to occur in /nthɔr - nthur/ 'ear' (no. 38). I have elicited both forms in Thailand and Don Durling has provided both forms from Laos. /nthɔr - nthur/ is probably the original T'in word and not the Mal /mɔɔy/. In II.1., Old Khmer has ktor and Riang has tsor. If the o in these cognates is truly a mid back rounded vowel then the eventual reconstruction for T'in would be \*/nthor/ with the vowel \*/o/ making a subsequent split into the /u/ and /ɔ/ of present-day Pray.

Other alternations includes /əva/ and /əva/, both probably due to problems in elicitation and transcription. The former alternation, in 'older sibling' (no. 39), is probably /a/, for /a/ when contiguous to a following /y/ is often raised and fronted by many Pray speakers to where an e sound is effected. In the latter alternation, in 'afraid' (no. 40), /əva/ follows a palatal /c/. Since /c/ has a tendency to raise the low central vowel /a/ which, from an English standpoint, would be classified as a variant of /ə/, the latter example should also be transcribed with the /a/ vowel.

/?iiv?ih/ 'we (exclusive)' (no. 64) is probably due to encroachment from Mal. That is, /?iiv/ in T1 is a borrowing from Mal; indeed, since I elicited the form using Mal /?iiv/ for the example of the exclusive pronoun (Thai has no inclusive-exclusive distinction in pronouns), the informant may have only given the Mal pronoun as the form used in T1 village. \*/?ih/ is the probably reconstruction for Pray: Khmu has /?i?/ 'we', which, assuming this to represent the Proto-Khmu-T'in form, corresponds to Mal /?iiv/ and Pray /?ih/.

#### 4.4. ON DIALECT DIFFERENTIATION IN PRAY

We posited two dialects for Pray in Chapter II (II.4., II.5.) while arranging the data in this chapter to show three groups (IV.2.). However, I qualified my statement in Chapter Two about the number of Pray

<sup>1</sup>Actually, this would not be a simple replacement of a diphthong by a monophthong. Phonetically, /ia/ is [iʌ], i.e. /a/ is raised in articulation by the preceding /i/ to an articulation resembling [ʌ]. On the other side, since /c/ and /i/ are both articulated in the palatal region of the mouth, the /i/ has a tendency to merge (or become lost) with the preceding /c/. This in turn leaves only [ʌ] as the syllabic of the syllable. Consequently it must be classified with either /ə/ or /a/. It is interesting to note that native speakers of these languages (e.g. Thai speakers who are literate) will classify it with /a/; native English speakers doing elicitation are prone to classify it with /ə/.

dialects by limiting the statement to Thailand. When data from Laos are included, three subgroups emerge in Pray. Since Pray is a larger branch than Mal we should expect the number of subgroups within Pray to increase as data from other villages and areas become available.

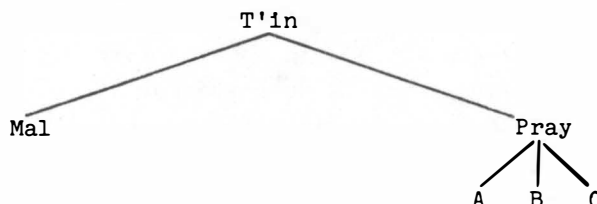
The arrangement of the data in IV.2. to show three subgroups is, however, not without difficulties. Indeed, classifying T5 and L3 together appears arbitrary. These two villages share many common features but there are other features that they do not share. Moreover, T5 shares a few features with the second group of T3 and T4. This can be seen in the cognates for 'male' (no. 50), where even L3 shares a feature with L1 and L2 vis-à-vis the villages in Thailand. Such difficulties stem from two sources: mistakes in elicitation and the models hitherto used to display dialect differentiation.

The fact that L1, L2 and L3 have /kh'ɔŋ/ while T1...T5 have /khrɔŋkhyɔŋ/ is probably not due to an elicitation mistake. Mal, as already noted, has /kh'ɔŋ/. It is quite plausible to see how this differentiation emerged from a Proto-T'in \*/r/ or \*/l/ (more likely \*/r/). However, /khrəm/ 'person' (no. 50), /ŋkrɔh/ 'early' (no. 56), /phrɛʔ/ 'pepper' (no. 27), /ntur/ 'ear' (no. 28) and /mprɛŋ/ 'split bamboo' (no. 29) under L3 are probably mistakes in elicitation. Don Durling, who provided these examples for L3, warned me of this possibility. Since Proto-Pray \*/r/ has become /l/ in initial and final positions in L3, as well as in consonant clusters for 'horse' and 'spirit' (nos. 19-20), one would expect /l/ in those examples still having /r/ in consonant clusters. For example, L3 agrees with T5 in /luəŋ/ 'path' (no. 11) and /nthuul/ 'roofing grass' (no. 37) as well as other words containing initial and final /l/ < \*/r/ not listed in IV.2. It is this type of regularity that makes the above inconsistencies suspect. For this reason I have classified L3 with T5, expecting that these inconsistencies will be resolved along such lines of regularity with more data. Therefore, we set these examples in L3 aside from consideration.<sup>1</sup>

The other type of difficulty in our arrangement of the data into three subgroups stems from the model implicit in such an arrangement. IV.2. assumes a 'tree' model as was used in Chapter Two. That is, with the introduction of data from Laos, the trees of II.5. and II.6. can be modified (for the Pray branch only):

<sup>1</sup>Of course, these examples may not be mistakes. They may illustrate residue from a competing sound change that has drifted down from Proto-T'in, changing some relevant morphemes while leaving other morphemes unchanged. But to hold to this hypothesis at this stage is premature.

## IV.4.



A tree diagram, showing relationships among dialects, can be stated in the form of rules. Since the main criterion of subgroupings used in IV.2. was the behaviour of Proto-Pray \*/r/, we can distinguish subgroups {T3 T4} and {T5 L3} by the following rule (\*/r/ in {T1 T2 L1 L2} has remained unchanged).<sup>1</sup>

## IV.5.

$$*/r/ \rightarrow \begin{cases} l/ & \{ \begin{array}{l} \# \text{---} v \\ v \text{---} \# \end{array} \\ l \text{ or } y /C(h) \text{---} v \end{cases}$$

Both the tree diagram and rule schemata were used to characterize Mal dialects. These two equivalent models were adequate for Mal because of sharp dialect boundaries. In 3.3. I stated that dialect differentiation is the result of an accumulation of several factors or features: difference in phonemic inventory, (historical) rules to realize the (synchronic) phonemes and vocabulary. However, it is not only a matter of storable differences. Slight differences in one or even all three factors may not create sufficient feelings of differences. Such differences must attain a certain degree before another variety is recognizable. In Mal, these differences have accumulated to such a degree that different dialects are recognized even by the native speakers.

However, it appears that Pray is not like Mal in this respect. Indeed, (dialect) boundaries in Pray are not sharp as in Mal; rather, the factors determining dialect differentiation intersect and overlap throughout the three subgroups we have set up. There was overlap in Mal dialects, but the data (and the models used) showed that such overlappings were converging phenomena, independently motivated for each dialect concerned. For Pray, however, the data show no evidence for convergence of independent sound changes; there is only a potpourri of individual changes meandering through all Pray varieties resulting in no accumulative, dialectal effect.

<sup>1</sup> Except for 'male' (no. 51) for L1 and L3, which we will ignore at this point.

Obviously, Pray is still a language with a great deal of 'local differentiation' (Swadesh 1952). In this case, the tree diagram and rule schema are inadequate models to characterize Pray. A tree shows 'splitting processes but not overlapping processes' (Southworth 1964). This is the basic flaw of a tree diagram. Rule schemata also suffer from the same defect. Such models are valid only if there are sharp dialectal boundaries (as in Mal). Where sharp boundaries are lacking -- as in Pray -- these models are not valid models of description.<sup>1</sup>

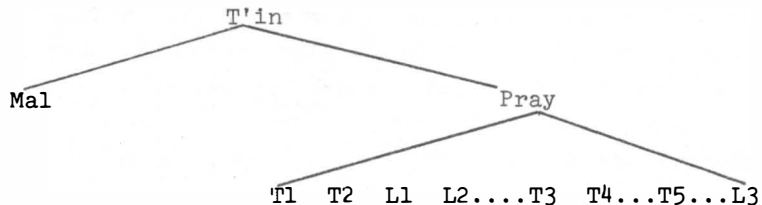
For such languages Swadesh (1952) proposed the Mesh Principle. That is, there are step-wise relationships that hold between sub-varieties of a language or a classification of languages.

In an extensive area of local differentiation, there may be marked differences between non-neighbouring types of speech, even to the point of non-intelligibility among very distant ones, but the area up to some point maintains a unity through intermediate, mutual intelligible dialects.

This principle is useful in classifying isolated varieties of languages which appear to fit in no one linguistic grouping. An isolated language may be a 'missing link', i.e. some place in the middle, between two linguistic groups.

Applied to Pray, the Mesh Principle shows us a step-wise relation from {T1 T2 L1 L2} to {T4 T3} to {T5 L3}. Indeed, this principle allows us to separate T5 from L3, moving the former to the 'left' (schematically) showing that this village is an intermediate step between {T3 T4} and {L3}. This may be schematized in a modified tree diagram.

IV.6.



IV.6. shows that there are two extremes for Pray: T1...L2 and L3. T3, T4 and T5 represent two intermediate steps between the two extremes. Furthermore, the intermediate villages may be interpreted as partaking of features contained in the preceding and following groups. For example, T5 shares the rule  $*/r/ \rightarrow y/C(h)\_\_\_$  with T3 and T4 while also sharing the rule  $*/r/ \rightarrow l/\{\# \underline{\quad} \# \}_V$  with L3. T3 and T4, on the other

<sup>1</sup>The position that a tree diagram is adequate for Mal but not for Pray should cause no alarm or cry of inconsistency. On the contrary, this need for different models characterizes how these two T'in branches differ.



hand, share with T1...L2 the feature of initial and final /r/.

The Mesh Principle, as Swadesh explained it, may provide an explanation for the intersecting or overlapping sound changes observed in such alternations as /rʷyʷl/ in consonant clusters.

...common features...need not go back to a period of maximum homogeneity which may have preceded the dialectal differentiation...they may have had their origin later in an already differentiated situation.

That is, some changes of \*/r/ > /l/ in clusters may have occurred (e.g. /khrɔŋ ~ khɪɔŋ/ in T1 L1 L2) after the subgroup became differentiated along other lines (e.g. from T3 and T4 which has the change \*/r/ > /y/ in clusters). However, this is more a matter of conjecture at this stage and should not be pressed.

Swadesh also noted that the Mesh Principle is not contradictory to reconstruction, which is the purpose of this monograph. On the contrary, it provides outside evidence for reconstruction. Indeed, 'the Mesh Principle may show that a reconstructed language was a mesh or chain of closely related dialects'. However, in this case, the mesh or chain of Pray subgroups provides internal evidence for the reconstruction of Pray.

Swadesh had in mind the classification of isolated languages in presenting the Mesh Principle. For example, he proposed that Thai-Sino-Tibetan-Nadene form a chain of diverging (dialectal) differences. But Pray is not exactly a mesh of dialects as IV.6. represents. Rather, Pray subgroupings represent a mesh or chain of isoglosses. For this reason the tree (IV.6.) is still inadequate to characterize Pray. What is needed is a diagram or schema that can show how isoglosses intersect across dialectal boundaries on a historical basis.

Southworth (1964) calls such a diagram a diachronic isogloss map. Such a map is a tree showing splitting processes and overlapping processes of isogloss diffusion simultaneously. This double process characterizes the present state of Pray. As Southworth noted

The picture of overlapping innovations and nondefinitive splits seems to be fairly typical of the early stages of differentiation of a speech community where there is no geographical separation.

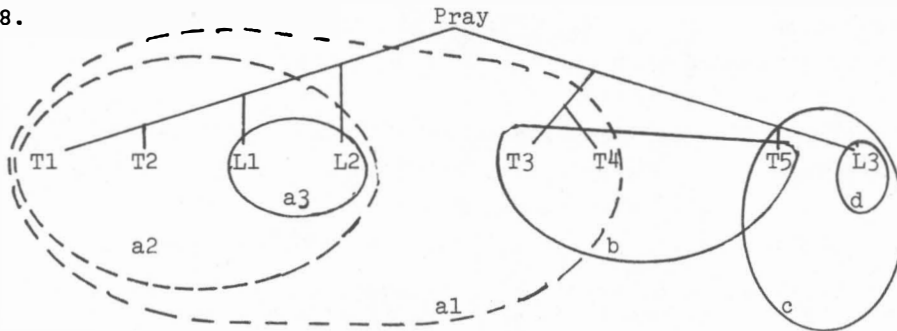
Since Proto-Pray \*/r/ has been the basis of differentiation -- as well as confusion -- of subgroups in Pray, let us first see how a diachronic isogloss map would characterize the many changes of this proto-phoneme. First a rule schema summarizes all the changes observable from the data in IV.2.

- IV.7.            \*/r/ →
- |    |                                          |                                                         |
|----|------------------------------------------|---------------------------------------------------------|
| a. | {                                        | 1. r/{# <u>      </u> <sup>v</sup> }_ T1 T2 L1 L2 T3 T4 |
|    | 2. r/ C(h) <u>      </u> T1 T2 L1 L2     |                                                         |
|    | 3. l/ *khrɔɔŋ L1 L2                      |                                                         |
| b. | y/ C(h) <u>      </u> T3 T4 T5           |                                                         |
| c. | l/{# <u>      </u> <sup>v</sup> }_ T5 L3 |                                                         |
| d. | l/ C(h) <u>      </u> L3                 |                                                         |

IV.7.(a1-a2) are redundantly stated so the reader may gain an overall, contrastive view of the overlapping innovations with the retentions in Pray dialects. (a3) contains the same environment as (d); the difference is that (a3) is restricted to one word (no. 51 in IV.2.) while (d) is a general rule affecting all occurrences of \*/r/ in clusters. For this reason (a3) is restricted to L1 and L2 and (d) is reserved for L3. (b-c) show the overlapping relationships that {T3 T4} and {T5 L3} share as well as the features that separate the two subgroups. (c-d) further shows how T5 and L3 are similar and how they differ with respect to Proto-Pray \*/r/.

Next, the rule schemata of IV.7. are imposed on a branching tree diagram in the form of circles. Each subpart of IV.7. is a circle; each circle is lettered for accurate reference to the corresponding sub-rule of IV.7. Also each circle encircles only those locations or villages of IV.1. where the innovation has occurred.

## IV.8.



The circles of broken lines represent the retentions of Proto-Pray \*/r/ IV.7.(a1-a2) in the Pray dialects. L1 and L2 have undergone the isolated change \*/khrɔɔŋ/ > /khlɔɔŋ/. T3, T4 and T5 have undergone the change \*/r/ → y/C(h)\_\_\_\_, and T5 and L3 have gone through the change \*/r/ → /l/ in all other environments with the exception of a few words in L3 where a proto \*/r/ became /l/ in consonant clusters.

Diachronic isogloss maps can be constructed for a number of other intersections variations observable in IV.2. For example, the alter-

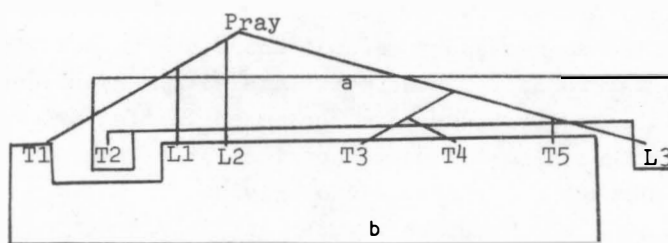
nation /ɔ̃u/, which was noted in 4.34., and the reconstruction of \*/o/ for the alternation. We also stated that this \*/o/ is probably of Pre-T'in origin. In order to show that this Pre-T'in /o/ underwent changes that /o/ of T'in or Pray origin did not, we may designate it with a double asterisk. The rule for this change would then be stated thus:

IV.9.

$$**/o/ \rightarrow \begin{cases} a. & u & T2 & L3 \\ b. & ɔ & T1 & L1 & L2 & T3 & T4 & T5 \end{cases}$$

The diachronic isogloss map would have the following configuration.

IV.10.



There are other isoglosses that intersect throughout the various Pray villages; a few of them we have made no mention of. One is 'machete' (no. 35) which has a double alternation of /e ~ ε/ and /ŋ ~ ñ/. However, there are problems of vowel length, even possible mistakes in elicitation, that make the diagramming of these isoglosses too complex for this monograph. Following this lead we will not attempt to construct diachronic isogloss maps for the other variations we have observed in the data.

We conclude this section by reasserting the uncertain -- even arbitrary -- nature of this discussion on Pray dialects. Subgroup boundaries within Pray do not appear as sharp as in Mal. Perhaps these groups should not be termed dialects. Certainly they are still in that labyrinth of unresolved structural change, where there is neither a homogeneous language nor clearly defined dialects. Perhaps it ought to be said that our reconstruction of Proto-Pray is methodologically incorrect, for Pray is still very much with us!

## CHAPTER FIVE

### PROTO-T'IN

#### 5.1. RECONSTRUCTING PROTO-T'IN

In order to reach this stage in our historical study of T'in, we first reconstructed two proto-dialects of T'in, Proto-Mal and Proto-Pray. This was necessary because there are phonological changes that are peculiar to each of these two dialects. By reconstructing the proto-dialects first, we have succeeded in 'factoring out' these peculiar changes allowing us to consider only those divergencies that are related through their Proto-T'in origin.

However, the procedures we used in reconstructing Proto-Mal and Proto-Pray will not change as we proceed now with Proto-T'in. In chapters three and four these procedures consisted of three steps. First, there were the comparative data drawn from several sources. The data were arranged in lists for each comparison and reference. Second, reconstruction of the proto-dialects was made on the basis of the comparative data. Inventories of phonemes and phoneme clusters for the proto-dialects were posited, and unresolved problems were discussed. Lastly, inverted analysis -- using data from more distantly related dialects and language -- was used to help in deciding the course of reconstructing the proto-dialects.

The same three steps will be used in reconstructing Proto-T'in. The data, however, will be that we have reconstructed for Proto-Mal and Proto-Pray. No forms from the synchronic dialects of T'in will be used. Reconstructed data from the two proto-dialects will be compared in order to arrive at a reconstruction of Proto-T'in. While no synchronic form will be used to reconstruct Proto-T'in, this will not mean that alternative reconstruction of the proto-dialects -- hence a reevaluation of the synchronic data -- will not be discussed in the light of Proto-T'in.

Since we are dealing with a proto or 'parent' language, we will rely more heavily on inverted analysis for the reconstruction of Proto-T'in than we did for the proto-dialects. Analogous to the Mal/Pray dichotomy and the role each played in the reconstruction of the other, we will look to other Mon-Khmer languages for aid in deciding the course of reconstructing Proto-T'in. This will be seen in our numerous references to Khmu which shares a great many cognates with T'in and stands in relation to Proto-T'in as Mal did to Pray and Pray to Mal. In the absence of any closely related dialect as in Mal/Pray, we must rely on languages that are related to T'in. However, data from other Mon-Khmer languages are not as abundant as we had for Mal/Pray, and for this reason problems will remain after we are finished with Proto-T'in. At best, with the data I have been able to gather from other languages such as Khmu, we will be able to outline possible, perhaps even the probable solution of many of these problems. More data from Mon-Khmer languages would indeed help, but this must remain for the future.

By relying on inverted analysis wherever possible in reconstructing Proto-T'in we delimit the course of our reconstructions. This is comparable to 'hugging the phonetic ground' in phonemic analysis. From all the comparative data presented in this monograph a large number of different (but often conflicting) reconstructions are possible. Moreover, such reconstructions are entirely 'plausible', i.e. they do not contradict the requirements of natural language. However, the reconstructions of the various proto-stages of T'in have been posited according to the requirements of language change within T'in, and, in the case of Proto-T'in, of language change from Pre-T'in. This eliminates a number of plausible but otherwise arbitrary reconstructions.

For example, later on in this chapter, we will maintain that /hN/, or preaspirated nasals, is the correct reconstruction for Proto-T'in, as I have maintained for Proto-Mal already. The motivation stems not from Pray but from the more distantly related language of Khmu which also has preaspirated nasals. Furthermore, in reconstructing Proto-Khmuic (II.3.) it becomes far simpler to assume preaspirated nasals in both T'in and Khmu; otherwise we are forced to posit unnecessary and arbitrary (though plausible) changes.

## 5.2. PHONEMICS OF PROTO-T'IN

I assume here, as I did with Proto-Mal, a deductive approach in our reconstruction of the phonemics of Proto-T'in. That is, I begin with the reconstructed inventory of proto-phonemes and phoneme clusters and then present the evidence for these reconstructions in the comparative data of Proto-Mal and Proto-Pray. This will allow us to more succinctly

state the divergencies that have occurred in the two T'in dialects and the problems that remain unsolved.

I will not repeat here the phoneme inventories of Proto-Mal and Proto-Pray. Should the reader care to consult these he may find the inventory for Proto-Mal in (III.2.), and for Proto-Pray in (IV.3.)

By a close look at the inventory of proto-phonemes and phoneme clusters of Proto-T'in in (V.1.), the reader will see that the reconstructed phoneme chart is the same as that reconstructed for Proto-Mal. A closer investigation will reveal that Proto-T'in, in this respect, is nearly the same as Mal dialect A (III.1.) which is the most complex, phonologically speaking, of the T'in dialects. In other words, Proto-T'in (with the exception of a few posited elements) is Mal dialect A. There are a number of interesting implications that follow from this observation, but these will be discussed below.

One reason why our reconstruction of Proto-T'in phonemes favours what is found for Mal dialect A is the feeling or intuition that loss of phonemes in the overall system is more likely than accretion or addition of phonemes. Especially is this true when the ratio between the two alternatives is rather wide. That is, in this case, if accretion is assumed then we would have to say that a large number of phonemes and complex phoneme clusters were added to several T'in dialects, complexities which Proto-T'in did not have. There is a tendency in language toward simplification. However, this is more a matter of empirical investigation than a 'law'. Yet knowing of such a tendency gives us a basis for deciding between loss and accretion. The evidence in T'in points toward loss, or simplification of a more complex source. Much more of linguistic interest can be stated about T'in on this assumption.<sup>1</sup>

For noncontroversial reconstructions in Proto-T'in only one example from each of the two proto-dialects is given. In cases where cognates for a reconstruction are lacking (e.g. Proto-T'in \*/pʰr/), two non-related examples (one from each proto-dialect) are given to attest the reconstruction. For controversial reconstructions (e.g. the pre-aspirates) all relevant data are given.

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<sup>1</sup>One example of accretion in a T'in dialect is the addition of a distinctive rising tone in Mal dialect B, which functions in part as a way loanwords are assimilated.

## V.1.

## Phonemes of Proto-T'in

| Consonants         |      |      |      | Vowels         |      |                    |
|--------------------|------|------|------|----------------|------|--------------------|
| p                  | t    | c    | k    | i              | ɨ    | u                  |
| m                  | n    | ñ    | ŋ    | e              | e    | o                  |
|                    | r    |      |      | ɛ              | a    | ɔ                  |
|                    | l    |      |      | Length         |      |                    |
|                    | s    |      | h    | Vowel Clusters |      |                    |
| w                  |      | -y   |      | ia             | ua   | ɨa ie              |
| Consonant Clusters |      |      |      |                |      |                    |
| pr                 | pl   | ph   | phr  | phl            | mp   | mpr mpi mph        |
| tw                 | th   | thw  | nt   | nth            | ns   | sw cw ñc           |
| kr                 | kl   | kw   | kh   | kh r           | kh l | khw ŋk ŋkr ŋkl ŋkh |
| ?m                 | (?n) | (?ñ) | (?ŋ) | hm             | hn   | hñ hŋ              |
| hr                 | hl   | hw   | rw   | -wh            |      |                    |

## V.2.

## Comparative Data from Proto-Mal and Proto-Pray

| Proto-T'in | Proto-Mal | Proto-Pray | English                                |
|------------|-----------|------------|----------------------------------------|
| p          | pəl       | pəl        | <i>to die</i>                          |
| t          | təl       | təl        | <i>carry</i>                           |
| c          | cɨh       | cɨh        | <i>heavy</i>                           |
| k          | kar       | kar        | <i>straight</i>                        |
| ?          | ?ət       | ?ət        | <i>to take</i>                         |
| m          | moh       | moh        | <i>nose</i>                            |
| n          | nɔɔk      | nɔɔk       | <i>water</i>                           |
| ñ          | ñan       | ñɛn        | <i>grass</i>                           |
| ŋ          | ŋe?       | ŋi?        | <i>sun/day</i>                         |
| r-         | ra?       | ra?        | <i>to place</i>                        |
| -r         | phər      | phar       | <i>to fly</i>                          |
| l          | lam       | lam        | <i>stalk</i>                           |
| s-         | seem      | seem       | <i>bird</i>                            |
| -s         | phoyh     | phɔɔt      | <i>barking deer</i>                    |
|            | ?oyh      | ?oot       | <i>fire</i>                            |
|            | payh      | pat        | <i>to flee</i>                         |
| h-         | ho?       | -          | <i>better health</i>                   |
| -h         | mplɔh     | lɔh        | <i>mountain</i>                        |
| w          | waan      | waan       | <i>sky</i>                             |
| -y         | ñaay      | ñcay       | <i>older sibling</i>                   |
| pr         | pron      | pro?       | <i>sore</i>                            |
| pl         | pluu      | pluu       | <i>lower leg (Mal)<br/>foot (Pray)</i> |

| Proto-T'in | Proto-Mal           | Proto-Pray | English                |
|------------|---------------------|------------|------------------------|
| ph         | phɨɨɨ               | phuul      | <i>crossbow</i>        |
| phr        | phram               | khram      | <i>person</i>          |
|            | phlah               | phraʔ      | <i>to foresake</i>     |
| phl        | phleʔ               | phleʔ      | <i>fruit</i>           |
| mp         | mpəl                | mpəl       | <i>to kill</i>         |
| mpr        | mpɾaŋ               | mpɾeŋ      | <i>to split bamboo</i> |
| mpl        | mplih               | mplih      | <i>fall down (Mal)</i> |
| mph        | mphɔʔ               | mphɔʔ      | <i>go down (Pray)</i>  |
|            |                     |            | <i>dream</i>           |
| tw         | tway                | -          | <i>meaning unknown</i> |
| th         | thar                | thar       | <i>rope</i>            |
| thw        | thwaar              | wat        | <i>birdnet</i>         |
|            | thwaay <sup>1</sup> | ʔoon       | <i>to offer</i>        |
| nt         | ntuah               | ntuah      | <i>to tell</i>         |
| nth        | nthɨr               | mthɨr      | <i>bat</i>             |
| ns         | nsook               | nsook      | <i>hair</i>            |
| sw         | swaar               | pək        | <i>to bandage</i>      |
| cw         | cwɛɛŋ               | ŋkaŋ       | <i>corner</i>          |
| ñc         | ñcɨh                | mphu       | <i>pregnant</i>        |
|            | liak                | ncak       | <i>afraid</i>          |
| kr         | krak                | krak       | <i>tomorrow</i>        |
| kl         | klɔʔ                | kluaʔ      | <i>deceive</i>         |
| kw         | kwaal               | -          | <i>prepare</i>         |
| kh         | khuan               | khuan      | <i>younger sibling</i> |
| khr        | khɾeh               | khɾeh      | <i>ripe</i>            |
| khw        | khwaay              | khwaay     | <i>potato</i>          |
| ŋk         | ŋkaap               | ŋkaap      | <i>mouth</i>           |
| ŋkr        | ŋkrəm               | ŋkrəm      | <i>disappear</i>       |
| ŋkl        | ŋklaŋ               | naŋ        | <i>body</i>            |
|            | naayh               | ŋklap      | <i>comb</i>            |
| ŋkh        | ŋkheʔ               | ŋkheʔ      | <i>tick</i>            |
| hm         | Native Words        | hmaal      | <i>soul</i>            |
|            |                     | hmɔɔc      | <i>ant</i>             |
|            |                     | ʔuut       | <i>star</i>            |
|            |                     | hmɨʔ       | <i>root</i>            |
|            |                     | hmuʔ       | <i>betel nut</i>       |
|            | Thai loanwords      | maay       | <i>widow</i>           |
|            |                     | hmɔɔ       | <i>doctor</i>          |
|            |                     | hmiaŋ      | <i>tea</i>             |
|            | Native Words        | hnam       | <i>medicine</i>        |
|            |                     | mpɾɛɛ      | <i>nouse</i>           |
|            |                     | hnuam      | <i>bamboo strips</i>   |



| Proto-T'in    | Proto-Mal            | Proto-Pray            | English                     |
|---------------|----------------------|-----------------------|-----------------------------|
|               | Thai loanwords hnum  | num                   | <i>young</i>                |
|               | hnll                 | nll                   | <i>be in debt</i>           |
| hñ            | hñam                 | slnam                 | <i>handful</i>              |
|               | hñf̄m                | cay <sup>2</sup>      | <i>heart</i>                |
|               | thoor                | slñaa                 | <i>have a cold</i>          |
|               | hñaa                 | thoŋ <sup>2</sup>     | <i>shoulder bag</i>         |
| hŋ            | hŋal                 | slŋal                 | <i>stump</i>                |
|               | hŋat                 | slŋat                 | <i>dry</i>                  |
|               | hŋua?                | (sl)ŋua?              | <i>unhulled rice</i>        |
|               | hŋa?                 | paŋa?/ŋa?             | <i>paddy</i>                |
| hr            | Native Words hraam   | raam                  | <i>carry (two persons)</i>  |
|               | hruum                | -                     | <i>clod of rice</i>         |
|               | Thai loanwords hray  | (slʔɔɔl) <sup>3</sup> | <i>rice steamer</i>         |
|               | hruŋ                 | (kæək)                | <i>to boil</i>              |
|               | hraŋ                 | (phra?)               | <i>divorce</i>              |
| hl            | Native Words hlop    | (waal)                | <i>return</i>               |
|               | hlat                 | (mphlal)              | <i>door</i>                 |
|               | hlɔɔy                | (ruak)                | <i>tadpole</i>              |
|               | hləŋ                 | (ŋkrəh)               | <i>morning</i>              |
|               | Thai loanwords hlfaŋ | llaŋ                  | <i>yellow</i>               |
|               | hlfa                 | lla                   | <i>left over</i>            |
|               | hlaŋ                 | tll                   | <i>classifier for place</i> |
|               | hlonŋ                | (læə)                 | <i>lost</i>                 |
| hw            | Native Words hwar    | -                     | <i>a vegetable</i>          |
|               | Thai loanwords hwlt  | (thlap)               | <i>short</i>                |
| rw            | rwaay                | waay                  | <i>leopard</i>              |
| ?m            | ?mut                 | koop                  | <i>shirt</i>                |
|               | ?mʔal                | ŋkac                  | <i>bored</i>                |
| -wh           | clawh                | pək                   | <i>to split bamboo</i>      |
| <b>Vowels</b> |                      |                       |                             |
| i             | siŋ                  | siŋ                   | <i>pig</i>                  |
|               | thll                 | thll                  | <i>hand</i>                 |
| e             | leh                  | leh                   | <i>out</i>                  |
|               | seem                 | seem                  | <i>bird</i>                 |
| ɛ             | phlɛ?                | phlɛ?                 | <i>fruit</i>                |
|               | ?ɛɛ                  | ?ɛɛ                   | <i>we (inclusive)</i>       |
| f̄            | klf̄?                | kf̄?                  | <i>head</i>                 |
|               | mʔf̄r                | mʔf̄r                 | <i>to walk</i>              |
| ə             | ?f̄ñ                 | ?əñ                   | <i>I</i>                    |
|               | -                    | læə                   | <i>be lost</i>              |

| Proto-T'in | Proto-Mal | Proto-Pray | English                             |
|------------|-----------|------------|-------------------------------------|
| a          | paŋ       | paŋ        | <i>listen</i>                       |
|            | raaŋ      | raaŋ       | <i>flower</i>                       |
| u          | puc       | puc        | <i>whisky</i>                       |
|            | nthuu     | nthuu      | <i>leaf</i>                         |
| o          | to?       | to?        | <i>come</i>                         |
|            | thoon     | thoon      | <i>to buy</i>                       |
| ɔ          | lɔ?       | lɔ?        | <i>good</i>                         |
|            | lɔc       | lɔc        | <i>end</i>                          |
| la         | siaŋ      | siaŋ       | <i>tooth</i>                        |
| le         | ?ieh      | -          | <i>untie</i>                        |
| fa         | phʌn      | sito?      | <i>tray</i>                         |
|            | hlʌ       | lia        | <i>left over</i><br>(Thai loanword) |
| ua         | ŋual      | ŋual       | <i>village</i>                      |

- 1) A Thai loanword, from /thawaay/ 'to offer' but assimilated to fit the Mal consonant cluster pattern.
- 2) Thai loanword
- 3) All the words enclosed in parentheses are native replacements of Thai loanwords.

### 5.2.1. Parenthetical Elements

A notable feature of the phoneme inventory chart of Proto-T'in in V.1. is the lack of voiced stops /b d/. Both of these stops were posited on a tentative basis for both Proto-Mal and Proto-Pray on the strength of probable loanwords from Thai containing voiced /b d/. By way of note, /j g/ were not posited because these voiced stops have been lost to Thai since ancient times, and no new occurrences of these voiced stops have arisen through any phonological change.

Now as we leave the proto-dialects we enter a stage where even the status of /b d/ is confused in Thai. This of course affects the T'in picture considerably and for this reason I have chosen not to posit any voiced stops for Proto-T'in.

Brown (1965) reconstructs the voiced series \*/b d j g/ for Ancient Thai, and Modern Thai dialects (in Thailand and Laos) still have /b d/. But Modern Thai /b d/ are not related to Ancient Thai \*/b d/ and herein lies the confused state for Proto T'in. Ancient Thai \*/b d j g/ became /ph th ch kh/ (aspirated stops) in Standard Thai and /p t c k/ (unaspirated stops) in Northern Thai and Laotian. According to Brown this change took place quite early in the history of Thai, beginning as early as 1200 A.D. and certainly completed by 1650 A.D.

At the same time, however, Ancient Thai \*/ʔmʔnʔñ/ were changing into Modern Thai /b d y/ respectively, in a type of 'drag-chain' process. On one side Thai was losing voiced stops, and from other changes Thai was (partially) gaining back her voiced stops. Clearly Thai was in a state of unresolved change at this time.

Khmu, a closely related language to T'in, and by implication Proto-Khmuic, still have a number of Thai loanwords preserving the (voiced) pronunciation of Ancient Thai \*/b d j g/. Many of these same loanwords are also in T'in dialects but having passed through a general devoicing rule /b d j g/ > /p t c k/ (unaspirated stops) which was operative in the transition from Khmuic to Proto-T'in.

| V.3. | Ancient Thai | Standard Thai | Khmu   | Mal A  | English         |
|------|--------------|---------------|--------|--------|-----------------|
|      | brɔ̌ɔm       | phrɔ̌ɔm       | brɔ̌ɔm | prɔ̌ɔm | <i>together</i> |
|      | bop          | phɔ̌p         | bɔ̌p   | pop    | <i>to meet</i>  |
|      | -l           | -             | da     | taa    | <i>place</i>    |
|      | jlɪm         | -             | jlɪm   | ciim   | <i>to taste</i> |
|      | gon          | khon          | gon    | kon    | <i>person</i>   |

<sup>1</sup>I have no examples from Khmu or T'in of a Thai loanword from Ancient Thai \*/d/. It is feasible -- i.e. it fits the pattern -- that /da ~ taa/ came from /thii/ 'place' in Thai (< \*/dii/), but the alternation /a ~ i/ would have to be explained as a change /a/ < /i/ within Ancient Thai. There is no justification for this. So /da ~ taa/ is probably a chance correspondence.

V.3. precludes the possibility of Ancient Thai \*/b d j g/ having been in Proto-T'in. Thai words containing these voiced stops were borrowed, but they were borrowed before T'in became differentiated from Khmuic (and Khmu) and were thereafter affected by a sound change that played a major role in the differentiating process. Since there are no loanwords in the T'in dialects beginning with the voiced stops /b d/ and deriving from Ancient Thai \*/b d/, we may assume that Proto-T'in became differentiated from Khmu after \*/b d/ (and \*/j g/) were devoiced in Thai. Otherwise, we should expect such loans in the T'in dialects corresponding to what is observed in Khmu.

But this leaves open the question of Ancient Thai \*/ʔmʔn/ which became /b d/ during this same general period. If a true drag-chain process occurred here, we can assume a somewhat later completion date for the change \*/ʔmʔn/ > /b d/. However, this still does not solve the problem of voiced stops for Proto-T'in. Sometime after T'in became separated from Khmuic, Thai regained the two voiced stops. Was Proto-T'in thus influenced by Thai to the point that words beginning with

voiced stops were borrowed? We simply do not know. The vast majority of current loans (/b d/ < \*/?m?n/) in the T'in dialects are personal names and isolated cultural items. This means that the issue is essentially a cultural one. When did the (ancient) T'in become so dominated by the Thai that they felt compelled to adopt Thai names? Perhaps the domination occurred in Khmuic time (the Khmu, at least in Thailand, use Thai names also). Why haven't the T'in preserved the ancient pronunciation (\*/?m?n/' of /b d/ in accordance with other loans e.g. /hm hn/) instead of changing in accordance with the Thai? The answers to these questions are not strictly linguistic in nature; they rather belong to sociolinguistics, perhaps historical sociolinguistics.

However, upon a historical sociolinguistic basis, we can eliminate /b d/ from Proto-T'in. We assume that the T'in (or the Khmuic, whichever the case may be) quickly became dominated by the Thai and the civilization the Thai were creating. The T'in adopted Thai names, perhaps as a means of trying to better their lowly 'Kha' status. In this type of situation it makes no difference linguistically if these Thai names began with the preglottalized nasals (\*/?m?n?ñ/) or their modern day reflexes (/b d y/). The T'in were sure to have followed suit. The linguistic question that now arises is this. Did this Thai change occur while Proto-T'in was still a homogeneous language (hence /b d/ for Proto-T'in), or did it occur after T'in broke up into Mal and Pray (hence no /b d/ for Proto-T'in)? Again we have no answer. Therefore, because of this uncertainty and because of its essentially sociological nature, I do not posit /b d/ for Proto-T'in.

The above discussion is not totally vacuous or without benefit for reconstructing Proto-T'in. Knowing that Ancient Thai \*/?m?n?ñ/ became /b d y/ in modern Standard Thai, we now have some basis for including /?n?ñ/ in the Proto-T'in inventory of consonant clusters. When discussing this problem in Proto-Mal (3.2.2.) we included /?n?ñ/ mostly on the basis of /?m/ and the pressure of pattern congruity that /hm hn hñ hŋ/ exerted on the total system. But we failed to find any reflexes or examples of /?n?ñ/ in the Mal dialects. Evidence from Khmu was cited, but it had no direct historical bearing on this problem.

In not positing /b d/ for Proto-T'in we probably should remove the parentheses around /?n?ñ/ thus showing the (probable) sociolinguistic situation of that time.<sup>1</sup> But I have not removed the parentheses, and the significance I wish to attach to this is the following: The status of voiced stops in Proto-T'in is dependent on the sociolinguistic vari-

<sup>1</sup>The situation for \*/?ñ/ is somewhat more complex, but only along the same sociolinguistic lines. In Standard Thai \*/?ñ/ has become /y/. In Northern Thai it has become /ñ/. T'in speakers have followed suit, as can be seen in the borrowed Thai name bañaa 'Mr. *Naa*'.

able of a dominating culture having made the linguistic change first and the dominated culture following suit. In other words, from a historical linguistic standpoint, by not positing /b d/ for Proto-T'in we have perhaps reconstructed Proto-T'in back to an earlier period.

I have not included \*/ʔŋ/ in the above discussion. Brown (1965) does not posit /ʔŋ/ for Ancient Thai although /hŋ/ is well attested. I posit \*/ʔŋ/ for Proto-T'in on the basis of pattern pressure from \*/hŋ/. However, it is a tenuous postulation at best. Indeed, for both Proto-Mal and Proto-T'in in this case, I can be accused of letting my feeling of what is linguistically esthetic have the upper hand and of extrapolating beyond the data.

#### 5.2.2. Distributional Problems

\*/-y/ is posited only for final or post-vocalic position in Proto-T'in. Indeed, the initial position or occurrence of /y-/ was factored out on the proto-dialect level. Data from Khmu does not contradict this restriction on the distribution of \*/y/. Initial /y/ occurs in Khmu and I have three examples of Khmu initial /y/ with cognates in T'in.

| V.4. | <u>Khmu</u> | <u>Mal A</u> | <u>English</u>                      |
|------|-------------|--------------|-------------------------------------|
| a.   | yaam        | ñəm          | <i>to cry</i>                       |
| b.   | yaak        | ñaak         | <i>difficult</i><br>(Thai loanword) |
| c.   | yok         | ñok          | <i>to lift</i><br>(Thai loanword)   |

V.4a cognates are native words while V.4a-b are Thai loanwords. The pattern of V.4., however, is clear. Initial /y/ from a Pre-T'in time became /ñ/ in Proto-T'in, and an initial /y/ has only recently re-emerged in Mal dialect B.

A syllable-final \*/-s/ is posited for Proto-T'in. This is a departure from what has been reconstructed for either Proto-Mal or Proto-Pray where /s/ occurs only in syllable-initial position. However, such a reconstruction is necessary because of the alternation between the two T'in dialects of /-yh/ and /-t/: e.g. /ʔoyh/ (Mal) and /ʔoot/ (Pray) '*fire*'. In this case the Proto-T'in form, as reconstructed, is \*/ʔos/.

The motivation for this reconstruction of final \*/-s/ is not found in Khmu. Khmu also has a final cluster /-yh/, although I do not have at this writing any T'in cognates of the few Khmu /-yh/ words I have on file.<sup>1</sup> The real motivation stems from more distantly related Mon-

<sup>1</sup>With the exception of the cognates for 'barking deer' (see II.1.). However, the Khmu example is from Luce (1965) and I cannot trust his transcription on this crucial word.

Khmer languages, e.g. Modern Khmer which has *os* 'firewood' (/ʔoot/ in Pray also means firewood while /paʔoyh/ is firewood in Mal). Ernest Lee (personal communication) reports that /-s/ and /-yh/ are common Mon-Khmer alternates, even in closely related dialects. A Proto-T'in /-s/, therefore, became /-yh/ in Mal and /-t/ (i.e. merged with /t/) in Pray.

Final /-s/ in Proto-T'in, however, must be considered at this stage of our knowledge as a historical construct whose actual phonetic value is not quite certain. As a construct it provides an explanation for /-yh ~ -t/ in T'in dialects; moreover there is justification for it as a historical construct from other Mon-Khmer languages. The problem is its relation with other Khmuic languages. That is, since we are not certain that \*/-s/ is necessary in reconstructing Khmuic, it may be that /-yh ~ -t/ in T'in is not from a Mon-Khmer /-s/ but from an intermediate (Proto-Khmuic) stage which is from Mon-Khmer /-s/.

On the other hand, \*/-s/ may have been a sibilant in Proto-T'in. In this interpretation, according to the meagre information we have on Khmu, we must discard a Proto-Khmu-T'in stage or subgroup within Khmuic (cf. II.3. and following discussion). T'in and Khmu are branches of a deeper historical alignment, and /-s/ would then be reconstructed for Khmuic. The change from Khmuic to Khmu would involve the loss of \*/-s/ (rather the replacement of \*/-s/ by /-yh/ while \*/-s/ would remain unchanged in T'in until the division in Mal and Pray: Mal following the common Mon-Khmer drift of /-s/ > /-yh/ and Pray following a common areal phenomenon of /-s/ > /-t/).<sup>1</sup>

Neither of the above two interpretations of Proto-T'in in \*/-s/ is crucial to the essential correctness of the postulation. Distributionally, there was a syllable final sound or segment which was the basis of the synchronic alternation /-yh ~ -t/. What this segment actually was can only be determined by comparing Proto-T'in with data from other Mon-Khmer languages. Adequate data to identify this segment is lacking, but from the little information presently available to me from other Mon-Khmer languages, it would not be surprising that the sibilant /s/ occurred in syllable-final position in Proto-T'in and was the source of the alternating finals under discussion.

### 5.2.3. On /siʔV/ in Pray

Pray contains a number of bisyllabic words the first syllable of which is /si-/. These words were not discussed in the previous chapter

<sup>1</sup>This phenomenon is still seen in English loanwords with final /-s/ in Thai. Such loans are pronounced with a final /-t/, e.g. kaat 'gas'.

as they were not necessary for the reconstruction of Proto-Pray; they are included here, however, because they play an important role in the reconstruction of Proto-T'in.

There are two environments in which the stressless syllable /si-/ occurs in Pray. One is before vowels (technically before glottal stops), which is the focus of this section, and the other is before nasals but which will be discussed in 5.2.4. below. The order of discussing these two environments is crucial here, for the first appears to have had an affect on the other in the development of both Mal and Pray from Proto-T'in.

The data in V.5. below were not included in the general comparative data of V.2. because they add nothing new by way of reconstructed phonemes. Moreover, postponing the presentation of the data until this point in the discussion enables us to focus on a problem of etymological reconstruction important for Proto-T'in and ultimately for Khmuic. The data in V.5. also include cognates from Khmu (Smalley 1961 and Maspero 1955) to show the direction that the solution of /si?V/ in Pray must take.

## V.5.

| Mal  | Pray   | Khmu   | English         |
|------|--------|--------|-----------------|
| ?iaŋ | si?iaŋ | cə?aaŋ | <i>bone</i>     |
| ?uu  | si?uu  | -      | <i>skirt</i>    |
| ?iah | si?iah | -      | <i>wife</i>     |
| ?oh  | si?oh  | -      | <i>to steam</i> |
| ?ɔh  | si?ɔh  | -      | <i>hot</i>      |
| ?ɔɔl | si?ɔɔl | -      | <i>bowl</i>     |
| ?iar | si?iar | hɨ?iar | <i>chicken</i>  |
| ?uaŋ | (lam)  | sɨ?ɔɔŋ | <i>wood</i>     |

(lam) under Pray is a replacement, or rather a semantic extension of Proto-T'in \*/lam/ 'stalk, tree trunk' (which is also in Mal) because of the loss of /?uaŋ/. The dashes under Khmu signify that I do not have examples, whether cognates or replacement, from this language.

The comparative data in V.5. show immediately that the pre-syllable /si-/ before vowels in Pray is not an accretion from zero, but is a retention from a Pre-T'in (via Proto-T'in) stage, and the absence of /si-/ before vowels in Mal is a loss of this feature. The problem, therefore, is to specify this retention phonetically for Proto-T'in.

In considering additional data from Khmu, we see two possible solutions to this problem: /s/ or /h/ may be posited for pre-syllables in Proto-T'in. I posit /h/ for the Pre-T'in period, under pressure, moreover, to become /s/.

## V.6.

| Mal  | Pray | Khmu  | English                                  |
|------|------|-------|------------------------------------------|
| see  | see  | hree  | <i>hill rice field</i>                   |
| sɔɔy | prɔɔ | hrooy | <i>spirit</i>                            |
| swaa |      | hwa?  | <i>monkey</i>                            |
| sɔɔm | sɔɔm | hrɔam | <i>to clear, cut<br/>hill rice field</i> |

We are unable to state at this stage the extent of this pressure on /h/ in Pre-T'in. Whatever it is, it was strong by the beginning of Proto-T'in, diffusing in short order until all morphemes beginning with /h/, of the Pre-T'in period, were affected.

This, of course, can be clearly seen in Pray. It was somewhat different in Mal. /h?V ~ s?V/ was eventually lost, a loss that was probably associated with the gradual loss of preaspiration (3.2.4.4.) in Mal. However, the loss of aspiration before consonants was stopped by Thai loanwords. In Mal, /si-/ before vowels was unaffected by this freeze or was lost before it took place.

From V.5. we see that the alternation /h?V ~ s?V/ was probably not a Proto-Pray phenomenon, perhaps not even an alternation that occurred in Proto-T'in. Indeed, the merging of some h's with /s/ was probably a factor that helped to distinguish T'in from the other Khmuic languages, which resulted also in Pre-T'in /h?V/ merging with /s?V/ in Proto-T'in.

I posit, therefore \*/s?V/ as the Proto-T'in in pattern for the Mal and Pray cognates of V.5. This proto-presyllable \*/si?V/ quickly became lost as Mal emerged from T'in and did not affect preaspirated consonants. But for Pray, \*/si?V/ was retained,<sup>1</sup> with Proto-T'in \*/hm hn hñ hɲ/ falling in with this pattern thus completing a drift from Pre-T'in times of /h/ merging with /s/.

## 5.2.4. Preaspiration in Proto-T'in

The preaspirates \*/hm hn hñ hɲ hw hr/ are all posited for Proto-T'in. However, these preaspirates, concerning Mal and Pray, divide themselves into two classes: \*/hm hn hñ hɲ/ and \*/hl hw hr/. The latter class remained unchanged from Proto-T'in to Proto-Mal. But in Proto-Pray the preaspiration in this class was lost, or words beginning with these complex clusters were replaced either by native words lacking preaspiration or by Thai loanwords.

<sup>1</sup>The loss of the presyllable /si-/ before /?V/ is diffusing throughout Pray (see nos. 65-69 (IV.2.)), probably due to pressures from Mal and the low functional load of the presyllable.



\*/hm hn hñ hŋ/, on the other hand, while remaining unchanged from Proto-T'in to Proto-Mal, have undergone a change in the transition to Proto-Pray. Proto-T'in \*/hN/ (N = nasal) has undergone in Pray a process, first noticed in Mal dialects, of syllabification: h → si/\_\_\_N. That is, stressless syllable /si-/ replaced Proto-T'in /h/ in the environment of a succeeding contiguous nasal.

From Khmu in V.5. we see that there are two possible sources for /si?V/ in Pray. One is /h?V/ and the other is /s?V/.<sup>1</sup> Presumably both /h?V/ and /s?V/ being of Pre-T'in origin, fell together into the single pattern of /s?V/ in Proto-T'in. This explains why both /h?V/ and /s?V/ in Khmu have /s?V/ cognates in Pray: This pattern was retained in Pray but for Mal the initial syllable was lost. Indeed, as was noted in 5.3.2., the apparent lack of an initial /h/ in Pray dialects, coupled with this loss of /h/ (i.e. replacement of /hV-/ with /sV-/), may show a more general change for Pray. Namely, all initial occurrences of /h/ may have been subject to an across-the-board loss or replacement in Pray. This can be shown in the following rule.

V.7.

$$h- \rightarrow \begin{cases} sV-/\# \_\_\_\_\_\_ V \\ \emptyset \text{ in all other environments} \end{cases}$$

As stated, V.7. is too powerful; it must be amended in the next paragraph to account for the presence of /si-/ before nasals. On the other hand, the rule is a good approximation of what has happened to /h-/ in development of Proto-T'in to Pray.

Preaspirated nasals and not the syllable /si-/ before nasals are posited as the proto pattern for T'in because of the pattern pressure that \*/h| hw hr/ exerts. That is, there is no question of the correctness of \*/h| hw hr/ and that preaspiration in these clusters was lost in Pray but was retained in Mal. Moreover, the loss of initial /h/ in these clusters is consonant with the general loss or replacement of initial /h/ in Pray which was noted by rule V.7. In other words, V.7. can now be revised to account for the replacement of /h/ before nasals.

<sup>1</sup>The vowel following the /h/ or /s/ is nondistinctive and, according to the dialect/language being discussed varies over a predictable range of vowel qualities. In Pray the vowel in /si-/ will range from /i/ to /e/ to /a/. The selection of /i/ for all examples in this monograph is based on the statistical preponderance of /i/ in this presyllable. For Khmu, Smalley (personal communication) states that the vowel in both /h?V/ and /s?V/ is usually /ɨ/ but will range over other vowel qualities including /ô/ which is the vowel that Maspero writes. In general, I have written /i/ for this vowel or left it out altogether in the following discussion. I ignore Khmu /c?V/ in V.5. Both Khmu /c/ and /s/ have /s/ cognates in T'in.

V.8.

$$h- \rightarrow \begin{cases} sV-/\# \text{ \_\_\_\_\_ } \left\{ \begin{matrix} ?V \\ N \end{matrix} \right\} \\ \emptyset \text{ in all other environments} \end{cases}$$

V.8. is a more general rule and provides another justification for positing preaspiration in Proto-T'in. Indeed, this loss or replacement of /h/ appears to be the ultimate outcome of Pre-T'in /h?V/ merging with /s?V/ in Proto-T'in. This loss or replacement was stopped for Mal but it kept on diffusing in Pray until every initial /h/ was lost or merged with Proto-T'in pattern \*/s?V/. That is, /h/ before nasals was replaced by /sɪ-/, a process we may also call syllabification.

Syllabification in Pray provides evidence for a change posited for Mal dialect A in 3.2.4.2. There I postulated that Proto-Mal \*hŋ (Series One) metathesized in Mal A and then the initial nasal was lost: \*/hŋ/ > \*/ŋh/ > /h/, e.g. /həl/ 'stump' in A but /ŋəl/ in B and C. The Pray cognate is /sɪŋəl/. Now, all cognates of Mal /hŋ/, as well as all other preaspirated nasal cognates, have undergone syllabification in Pray. This pattern, rather process, from Pray provides the justification for metathesis in Mal A.

Syllabification is not an uncommon process in Mon-Khmer languages. David Thomas (personal communication) reports that 'presyllables' seem to change rather freely, and often unpredictably, in the Bahnaric languages (see II.2.); i.e. stressless, minor syllables come and go in relation to morphemic 'roots' from language to language and from one historical time to another. An example of loss of presyllables can be seen in the following cognates from T'in and Khmu (from Maspero 1955).

| V.9. | <u>Khmu</u> | <u>T'in (Mal A)</u> | <u>English</u> |
|------|-------------|---------------------|----------------|
|      | həmpo       | mphɔ?               | to dream       |
|      | həntak      | nthaak              | tongue         |

From comparative data in II.1., the bisyllabic forms of these cognates are taken as the proto-forms. For T'in, then, the presyllable was lost by means of the /h/ shifting to the medial unaspirated stop, the (predictable) vowel merging with zero and the nasal, already subject to assimilation, assuming the new function of prenasalization in the syllable structure of T'in.<sup>1</sup>

<sup>1</sup>Note may be taken of the ultimate outcome of this loss of presyllables as exemplified in Mal dialect C (see III.5b., 3.2.1.) and B1, a subset of Mal dialect B (see III.27., 3.3.). In these two Mal varieties prenasalization of aspirated consonants has been lost.



tern. As a consequence, Proto-T'in preaspirates remained unaffected until the emergence of the Mal dialects where the preaspirates \*/hm hn hñ hq hl/ metathesized.

### 5.2.5. Miscellanea

As in any work of reconstructing a proto-language, several examples remain recalcitrant. A parallel situation was found for Proto-Mal (3.2.5.) and Proto-Pray (4.3.4.). The situation for Proto-T'in, however, is more extreme, for we are reconstructing at a greater time depth than for the proto-dialects thus allowing for more divergencies and more time for the causes of these divergencies to be lost or at best blurred. Therefore, I list only a few of these examples and note a few things about them. The examples are numbered for easy reference in the following discussion.

| V.11. | <u>Proto-Mal</u> | <u>Proto-Pray</u> | <u>English</u>       |
|-------|------------------|-------------------|----------------------|
| 1.    | tiah             | clah              | <i>finished</i>      |
| 2.    | klaŋ             | ciaŋ              | <i>house</i>         |
| 3.    | kial             | ceel              | <i>dark</i>          |
| 4.    | saa              | ca?               | <i>steamed rice</i>  |
| 5.    | cəm              | ciam              | <i>weak</i>          |
| 6.    | phram            | khram             | <i>person</i>        |
| 7.    | nso?             | ñco?              | <i>son-in-law</i>    |
| 8.    | klo?             | klua?             | <i>deceive</i>       |
| 9.    | hnuam            | siñuam            | <i>bamboo strips</i> |
| 10.   | mploh            | loh               | <i>mountain</i>      |

The first three examples in V.11. represent a 'centralizing' process contiguous to a following front vowel: /t + c + k/. This is not a productive process in the T'in dialects, occurring only sporadically. According to our procedure of sometimes postulating Pre-T'in sources to explain certain changes, we may speculate about possible Pre-T'in sources for these three examples: Pre-T'in /t/ and /k/ have centralized in some of the T'in dialects.

The cognates of #9 are similar to the first three examples, i.e. there has been an assimilation of the alveolar nasal to a contiguous front vowel. However, we are certain that the preaspirate cognate is the proto-form, and the change  $n \rightarrow \tilde{n}/\_\_$  is due first to the emergence of the front vowel in the presyllable from a Proto-T'in \*/h/ before nasals. It appears to be a sporadic change as no other word beginning with /sin-/ has been affected. Perhaps it is a recent change in Pray and will diffuse to other morphemes.

Nothing of real interest can be said at this time of the remaining cognates in V.10.. Some similar phenomena have been discussed elsewhere (e.g.  $ia + \text{ə}/c$  (4.3.4.)) while others may be residue from a Pre-T'in stage (cf. for #8 Khmu /sɔʔ/ 'dog' and T'in \*/suaʔ/). At this point we leave these miscellaneous items until such time as the availability of more data may reveal their lines of reconstruction.

### 5.3. ON DIALECT DIFFERENTIATION IN PROTO-T'IN

Proto-T'in divided into the two proto-dialects, Proto-Mal and Proto-Pray, at an early date. Later, the two proto-dialects divided into several more dialects. While the consequence of these divisions has resulted into a number of T'in dialects, the rate of change has not been constant for every dialect. There are some dialects more conservative than others, meaning that such dialects have not changed as much as some others but have retained more of the 'parent' language. Some T'in dialects, on the other hand, have changed extensively and evidently rather rapidly. There is evidence, of course, that all T'in dialects have undergone changes, some more extensively and more quickly than others.

In 5.2. of this chapter I mentioned that Proto-T'in, as reconstructed from the T'in dialects, resembles Mal dialect A more than any of the other T'in dialects, and we might add that Proto-T'in resembles Mal dialect C least of all. In other words, the Mal branch contains both the dialect that has changed the least and the one that changed the most. The Pray dialects appear to be in the middle of these two extremes along with Mal B but with the subset B<sub>1</sub> moving quickly forward to the extreme of Mal C. All T'in dialects are changing, and have changed, at different rates.<sup>10</sup>

Mal A is the most conservative dialect of all the T'in dialects, remaining relatively unchanged from Proto-T'in time. For this reason we may designate Mal A the linguistic centre of T'in. I do not mean that this dialect is the geographical centre of T'in, for there is only one village that speaks this dialect and it is located in Thung Chang District of Nan Province in Thailand. This is at the extreme western edge of T'in territory, the great bulk of speakers of T'in dialects lying to the east. Indeed, there is only one T'in village (of Mal B) to the west of this village before T'in territory is left and one finds only Thai villages.

A linguistic centre, therefore, is a dialect of least change and from which all other dialects can schematically be viewed as diverging

<sup>10</sup>The basis for these statements is the comparison of inventories of phonemes and phoneme clusters of the dialects including the Proto-dialects.

in greater and greater detail of linguistic change. This can be seen in the diagram in V.12..

The relationships shown in V.12. are different from what are shown in the trees of II.5-6 and IV.6.. V.12. shows how the various dialects are related in rate or degree of change from the least changed dialect. This is not contradictory to the tree relationships we posited earlier. On closer examination it can be seen that V.12. complements the tree relationships by showing what a branching tree cannot, namely degrees of change from a common source and not merely that the various dialects are related genetically. A branching tree diagram can give a false impression of some dialects by implying that these dialects have changed as fast and as extensively over the same period of time as other dialects. Of course, this is not true as can be seen among the T'in dialects.

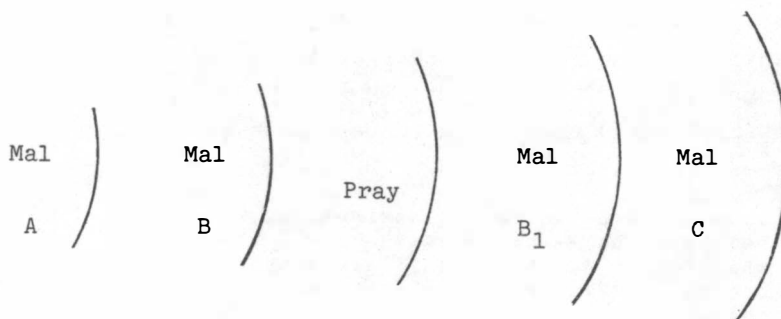
Dialects or languages subgrouped together within a larger grouping may still show different rates of change from some common source. This is possibly due to the different rates that similar processes progress through the varieties of the subgroup. For example, in Mal we can see that there is a tendency in all three dialects to lose prenasalization and preaspiration. Since all three dialects have been in existence for the same length of time, and since Mal C has undergone these losses the most extensively, we may assume that Mal A has changed quite slowly, Mal B somewhat faster and Mal C fastest of all.

Rate of language change is closely connected to processes of simplification, in the technical sense that this word is currently used in linguistics. Simplification is bringing a wider variety of linguistic phenomena under fewer rules or patterns. Mal C, in this sense, has simplified Proto-Mal and Proto-T'in phonemic structure more than any other T'in dialect. Moreover, this greater simplification or generalization of linguistic structure has been accomplished in the same length of time that other dialects have taken in accomplishing fewer simplifications.

Similarity of types of change may provide evidence for grouping dialects within subgroups, but this does not mean that each dialect must undergo these similar changes at the same rate. Nor does this preclude the possibility of related dialects within another subgroup proceeding at the same or different rates of change vis-à-vis the other subgroup.

In this section we may consider also the date of separation of the two T'in proto-dialects. It must be noted that rate of change can have no bearing on this question as some dialects change at a faster rate than others. Dialect differentiation over time is uneven, and

## V.12. Diagram Showing Degree of Change from Linguistic Centre



separation is not a sudden process but takes place gradually over time resulting into an accumulation of distinctive features.

Because of the unevenness of differentiation over time some scholars have sought to determine date of separation by means of rate of loss or basic vocabulary. However, for Mal and Pray, this method is unproductive. Basic vocabulary shared by both Mal and Pray runs over 90%.<sup>1</sup>

This question, I believe, is beyond solution. On the other hand we may gain some idea of the period of separation by considering Thai loanwords in T'in which preserve an ancient Thai pronunciation. If we can ascertain the period these changes occurred in Thai then we can have an approximate date of the separation of Mal and Pray.

Both proto-dialects share many Thai loanwords beginning with /r/. Standard Thai maintains this phoneme but the Northern Thai dialect which surrounds the T'in has gone through the change \*/r/ > /h/. If we can ascertain the date of this change we may assume that Mal and Pray had not yet divided as they presently are. In addition both T'in branches share reflexes of Proto-T'in preaspirated nasals. Only Mal preserves Ancient Thai preaspirates, but since preaspiration on native words became presyllables in Pray we can readily see why preaspiration on Thai loans was not retained but reassimilated. If we can ascertain the date of loss of preaspiration in Thai, then we have an approximate date of when Mal and Pray were still T'in.

There are several things wrong with this method. For one, we have assumed that a change gradually diffuses throughout all the relevant morphemes. Since the Thai change \*/r/ > /h/ and \*/hN/ > /N/ may have

<sup>1</sup>This count is based on the Swadesh 200 word list. This comparative list is not given here as nothing of interest is to be gained.

occurred over a long duration of time we have no approximate date but only a span of time when Mal and Pray were one language. Moreover, the date these changes took place in Thai is just as uncertain. To date the time when Mal and Pray were one or divided from T'in, on the uncertainties of when dialects emerged in the history of Thai, is to beg the question.

Brown (1965:70-1) uses dates to determine when stages in Thai emerged from former stages, but they

should not be taken too seriously....they should be used as best guesses -- not facts. [e.g.] when stages earlier than the present 'ancient Thai' are considered the latter will become '700 Yunan' -- or whatever the best guess may be at that time.

He also warns that many of the changes he posits in the history of Thai 'have undoubtedly been placed too early'. However, even at the risk of being accused of begging the question I will attempt to date the existence of T'in -- the time before which Mal and Pray separated -- by using the dates that Brown has established in Thai. In this way we can gain an idea when the two dialects emerged from T'in.

Brown dates the change \*/hN/ > /N/ from before 1000 A.D. to no later than 1250 A.D. This is quite early for this change, and if it is true, then we must recognize that it occurred at a time when T'in had not become differentiated within Khmuic. This is not unreasonable to assume, for Khmu also contains ancient Thai preaspirates. But Khmu and T'in do not contain the same preaspirated loanwords which would suggest that these Thai words were borrowed after the two separated.

On the other hand, the Thai writing system, which still maintains the ancient way of writing preaspiration (/h/ plus nasal, liquid or semi-vowel), was devised 700 years ago. It was created at a time when preaspiration was still spoken, but of course there is no evidence in the orthography when preaspiration was finally replaced with the current Thai tonal system, but it seems certain that the change took place at a later date than 1250 A.D., perhaps as late as the 17th Century.

The Northern Thai change \*/r/ > /h/ is placed at this later date by Brown, as having been completed by 1650 A.D. If this date is true then we may assume that Mal and Pray were still a homogenous language some 300 years ago. Of course, the two dialects may have begun their division even before this time not becoming completely separated until some time afterwards.

#### 5.4. CONCLUSION

To end this monograph we may return to the question of what we have reconstructed. Have we succeeded in reconstructing a uniform language,



or a language which had variations? Given the charts of III.20 and V.9. it appears that we cannot say we have reconstructed a uniform language. There were cross-currents of competing changes even from pre-T'in times that were running to and through the proto-dialects. For the most part these currents have resolved themselves in the extant dialects, but not entirely as can be seen in Mal dialect B with its one subset. These currents in this subset may diffuse until all of B is engulfed several generations hence.

We have not reconstructed everything in Proto-T'in. There undoubtedly were morphemes that had undergone changes before the changes were stopped by competing forces. These losses cannot be recovered. Our reconstructions, therefore, go back only so far along the continuum of time, back to a time when certain pre-T'in changes had been stopped, when other changes were in that labyrinthian state of being unresolved, and when certain other changes had not begun their course.

Language is a phenomenon of ongoing change. Reconstruction takes us back only to another time when the configuration of this process of continual change was different.

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