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A COMPARATIVE STUDY OF PRAY AND MAL PHONOLOGY

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บทคัดย่อ

วิทยานิพนธ์ฉบับนี้เสนอการศึกษาเปรียบเทียบระบบเสียงภาษาปรัยกับภาษามัล ซึ่งพูดที่จังหวัดน่าน โดยได้ศึกษาระบบเสียงภาษาปรัยในระดับทำนองเสียง คำ พยางค์ และหน่วยเสียง และเปรียบเทียบระบบเสียงของภาษาปรัยกับภาษามัล ซึ่งเป็นภาษาย่อยอีกภาษาหนึ่ง ซึ่ง เควิก ทิลเบค ได้ศึกษาไว้แล้ว

จากการศึกษาพบว่า โครงสร้างทางเสียงของภาษาปรัยและมัลคล้ายคลึงกัน ส่วนใหญ่ความแตกต่างจะอยู่ที่รายละเอียดของเสียงย่อย (ของพยัญชนะและสระ) ยกเว้นระดับเสียงสูงต่ำในภาษามัลที่มีนัยสำคัญ ซึ่งภาษาปรัยไม่มี นอกจากนี้ ภาษาปรัยยังมีวิวัฒนาการของพยางค์หน้าคือ /ɲi-/ ในขณะที่ภาษามัลไม่มี

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ABSTRACT

This thesis presents a comparative study of Pray and Mal phonology. The Pray phonological System is described in terms of intonation group, stress group, syllable and phoneme. The Pray phonology is then compared with the Mal phonology (as presented by David Filbeck).

From the study, it is found that the phonological structure of Pray and Mal are similar. The differences are mainly in the phonetic details (consonant and vowel) except that the pitch in Mal is phoneme but the pitch in Pray is not. Moreover, Pray has developed the minor syllable /ɛi-/ while Mal does not.

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ABBREVIATIONS AND SYMBOLS

asp.	aspirated
C	consonant
Clas.	classifier
Diph.	diphthong
etc.	et cetera
F.P.	final particle
HF	high-falling pitch
L	level pitch
LR	low-rising pitch
Lw	Loanword
Maj	major
Min	minor
S	stress
Sec.	section
U	unstress
unasp.	unaspirated
V	vowel
~	variant form
≠	contrast form
:	long
.	half-long
'...	stress
/	high level pitch
\	low level pitch
-	mid level pitch

^	high-falling pitch
∨	low-rising pitch
√	occurring
-	non-occurring
+	combine
' '	meaning
()	optional
[]	phonetic brackets
/ /	phonemic brackets

Chapter I

INTRODUCTION

1. Background and Objective of the Study

The T'in people are the Mon-Khmer speakers located in Chaiyaboury of Laos and Nan province of Thailand (see sec. 5.3 p.7) In Nan province, they are the largest hilltribe. The majority of them live in the areas of communist infiltration along the border of Thailand and Laos. Only few phonological studies of the T'in language have been found. David Filbeek has published the work mainly on Mal which is one of the two main dialects of T'in, Pray, which is another main dialect, has been studied mainly by missionaries and anthropologists who work with this ethnic group. Premsrirat (1988) has given a brief discription of Pray phonology at Ban Wang Saw, Chieng Klang district, Nan province in her Pray Medical Conversations. However, the detailed study of Pray phonological system is still needed.

There are two important objectives in my study of Pray phonological system. The first is to present the phonological system of the Pray dialect. The second is to compare the phonological system of the Pray dialect with the Mal dialect. It is interesting to see how these two varieties of T'in are similar or different from each other.

2. Scope of the Study

This study presents a full phonological description of Pray spoken in Ban Wang Saw, Chon Dean sub-district of Chieng Klang district in Nan Province. The data collected have also been checked with the Pray varieties spoken in Ban Nam Lad in Ngob sub-district and Ban Phae Klang, Thung Chang district of Nan Province.

For comparison, the phonological study of Mal by David Filbeck is used. Examples are drawn from his Mal-English dictionary. The comparison focuses on consonant, vowel, pitch, syllable and stress-group.

3. Benefit of the Study

The study of the Pray phonological system in details including the comparison between Pray and Mal would help us to have an understanding of the T'in language. This knowledge can have beneficial contribution on the promotion of Literacy campaign among the T'in people as well as historical linguistic study.

4. Method of the Study and Source of the Data

I started working on Pray with Mr. Praphan Phutheng, 26 years old, a Pray speaker of Ban Wang Saw, who was in Bangkok during November to February 1987. In February 1987, I went to Ban Wang Saw to check my data and worked mainly with two informants,

Mr. Mok Phutheng, 65 years old, and Mr. Dee Phuthong, 50 years old. The data were also checked with other speakers in the village.

In collecting data, the informants were asked to pronounce each of the word on my prepared wordlist (some were adapted from Swadesh Southeast Asian wordlist). Some grammatical patterns and text materials were also elicited. They are also recorded on a tape-recorder for later check. The data were transcribed with the International Phonetic Alphabet (I.P.A.).

5. General Information

5.1 The Name of the Group

There are many names used to refer to the T'in. They are Chaw Doy, Kha T'in, Kha Phay, Lua Phay, T'in, Phray, Pray, Mal or Maal (Veerothay, 1985)*. The names that are generally known are 'Lua' and 'T'in'. The name 'T'in' is used by the Thai government officers whereas the name 'Lua' is used by the local Thai people in Nan province. The word 'Lua' is accepted by the T'in people to be referred to themselves whereas the word 'T'in' is not accepted. In their own words, some groups of the T'in call themselves 'Pray' and some call themselves 'Mal'. They do not want anybody to call them 'T'in' in the same way that the Hmong do not like the word 'Meao' (Rattanakul, 1984).

In Thailand, this ethnic group can be found only in Nan province. If we come across the Lua in Mae Hong Son and Chiang Mai

* กุเบต วิโรหัย, 2528

province, it refer to the Lawa or Lawue which is different Mon-khmer tribe.

5.2 Language Classification

Although the name T'in has been missing in some of the surveys of language of the world, it does not mean that the T'in language has not been classified. According to Diffloth (1985), T'in has been classified in the Khmuic branch of the Austroasiatic language family as shown in the following diagram.

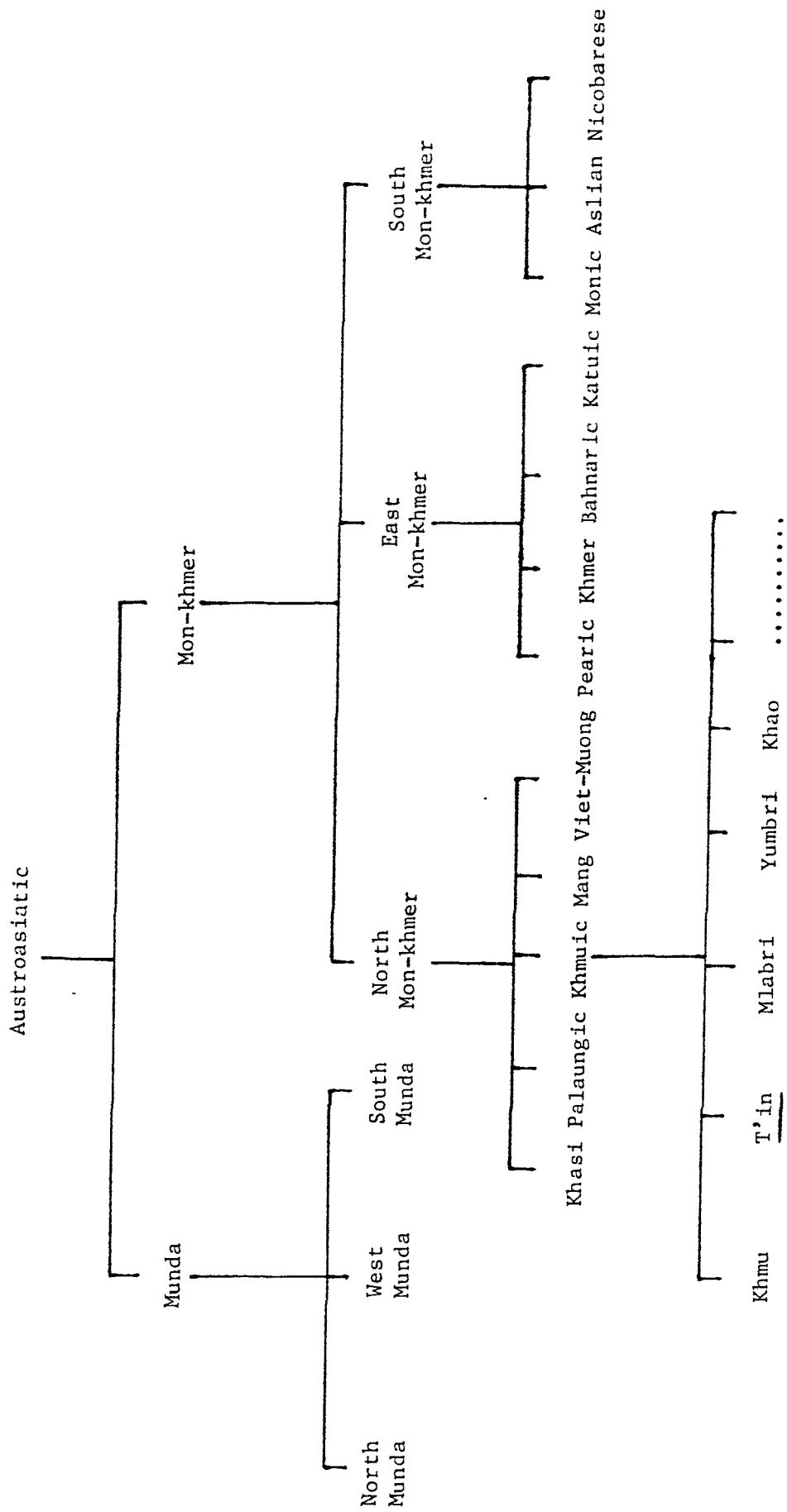
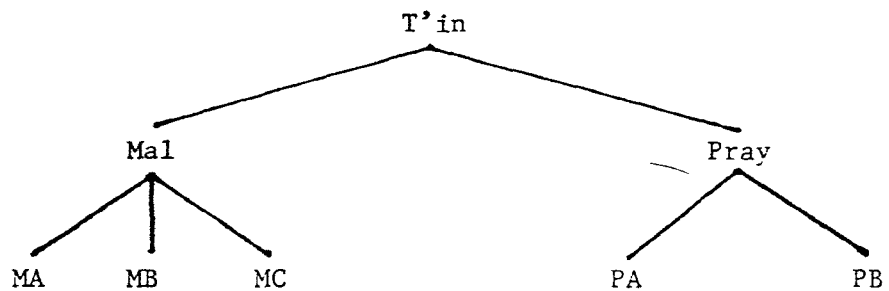


Figure 1: The place of T'in in Austroasiatic Family (Modified from Diffloth, 1985).

From this diagram, we can see that T'in belongs to the Khmuic sub-branch of the Northern Mon-Khmer sub-family which is a large language group containing a great number of languages, some of which are more closely related than others. There are two languages, Khmu and Mlabri, in the Khmuic sub-branch that are more closely related to T'in than others.

According to Filbeck, the T'in language can be furtherly divided into two main dialects as shown in the following diagram.



MA, MB and MC = Mal dialect A, B and C
 PA and PB = Pray dialect A and B

From the diagram, we can see that the T'in language is divided into two dialects, Mal and Pray. There are three varieties of Mal that agree in vocabulary and sound change. The A variety is spoken only in one village in Thung Chang district. The other two varieties, B and C, are spoken in several villages in Pua district. For Pray, there are at least two varieties in Thailand. They share similar vocabulary and sound changes vis-a-vis the Mal dialect (Filbeck, 1978). The examples of

cognate demonstrating subgrouping within T'in by Filbeck can be shown as follows:•

	<u>Mal</u>			<u>Pray</u>		
<u>MA</u>	<u>MB</u>	<u>MC</u>	<u>PA</u>	<u>PB</u>		
phram	phjam	pham	khram	khjam		person
sɔ:j	sɔ:j	sɔ:j	prɔ:ŋ	prɔ:ŋ		spirit
prɔŋ	pjɔŋ	pɔŋ	ŋkrɔ:	ŋkjɔ:		morning
piar	piaw	pial	pia	pia		two

From Filbeck (1978)

5.3 Geographical Location and Population

The T'in is a hilltribe located mainly in Pua, Chieng Klang and Thung Chang districts, Nan province, Thailand and in Chaiyaboury province of Laos. (Filbeck, 1978). Veerothay (1985) states that most of the T'in people in Nan province settled along Nam Lae, Nam Pua, Nam Khom, Nam Wang, Nam Khum, Nam Wa, Nam Mang, ... etc. which are branches of Nan river. These areas belong to the three districts mentioned above. Most of them are located near the border between Thailand and Laos. (see the map on page 8).

However, because of the Indo-China conflict and communist infiltration from the East in 1969-1970, several thousands of the T'in moved down to resettlement camps in the low lands and had to adjust themselves to different ways of farmings and modes of living.

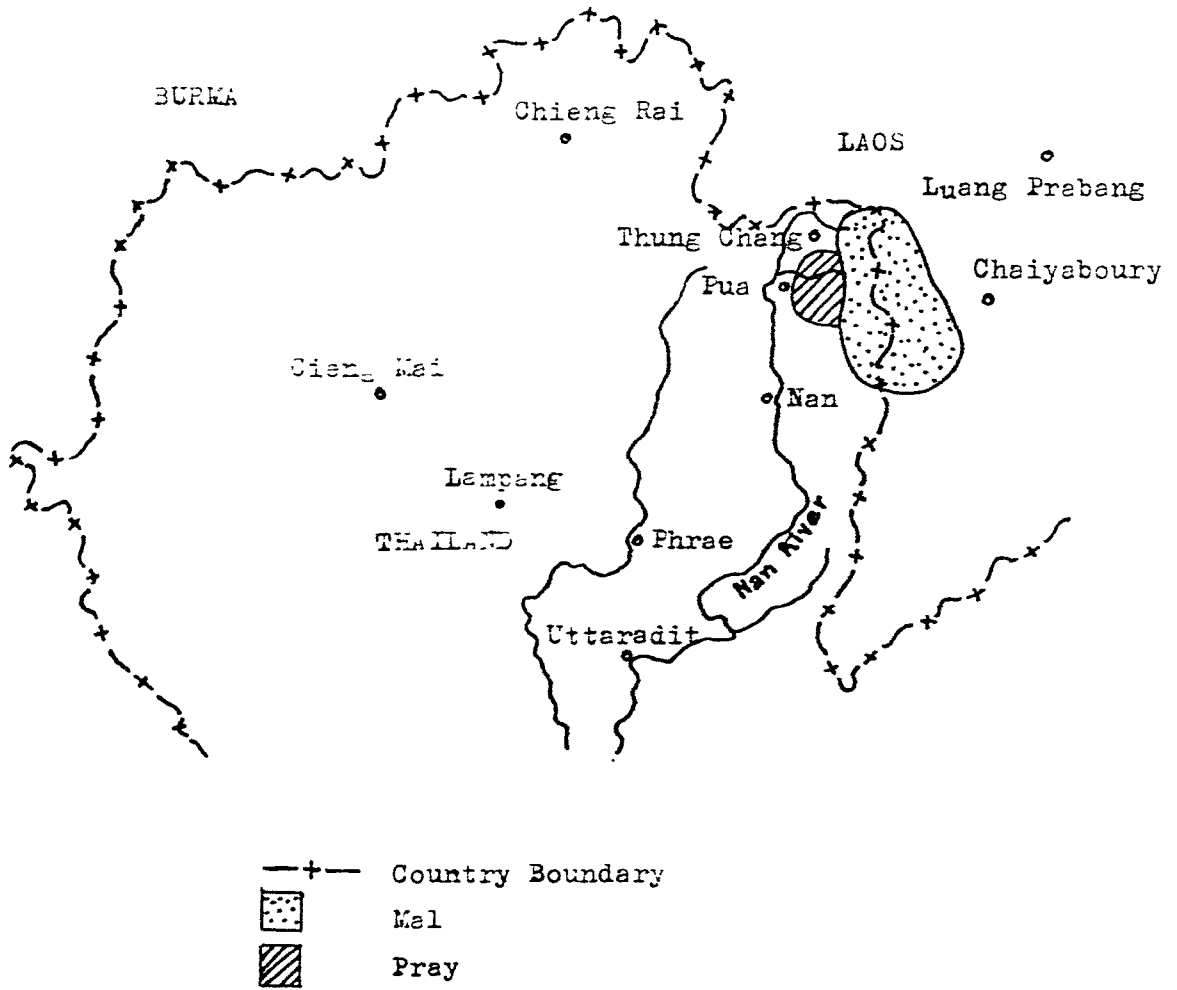


Figure 2 Map of The T'in People in Thailand and Laos.

(Adapted from: Filbeck, 1978)

Figure 3 A T'in(Mal) village(in Phu Kha subdistrict,
Pue district of Nan.)

According to the statistics reported by the Hilltribe Development and Welfare Center of Nan Province in 1987 there are 146 T'in villages in Nan province and the total population is 28,516. That is the T'in forms 51.67% of all the hilltribe population located in Nan province. About 69.93% of the T'in people are located in Pua district, 12.22% in Chieng Klang district and 8.4% in Thung Chang district. The rest of them, which is about 9.45%, are located in Moung, Weang Sa, Mae Charim and Santisuk district (see the map on page 11).

The location and number of the speakers of Pray found in Nan province are still not known. However, for the speakers of Mal, Filbeck stated that there are eighty-two known villages.

The Pray variety under study here is spoken at Ban Wang Saw, Chon Dean sub-district, Chieng Klang district. which is in the north of Nan province.

The boundaries of Chieng Klang are as follows:

North - Laos and Thung Chang district, Nan province.

South - Pua and Tha Wang Pha district, Nan province.

East - Pua district, Nan province.

West - Chieng Kham district, Phayao province.

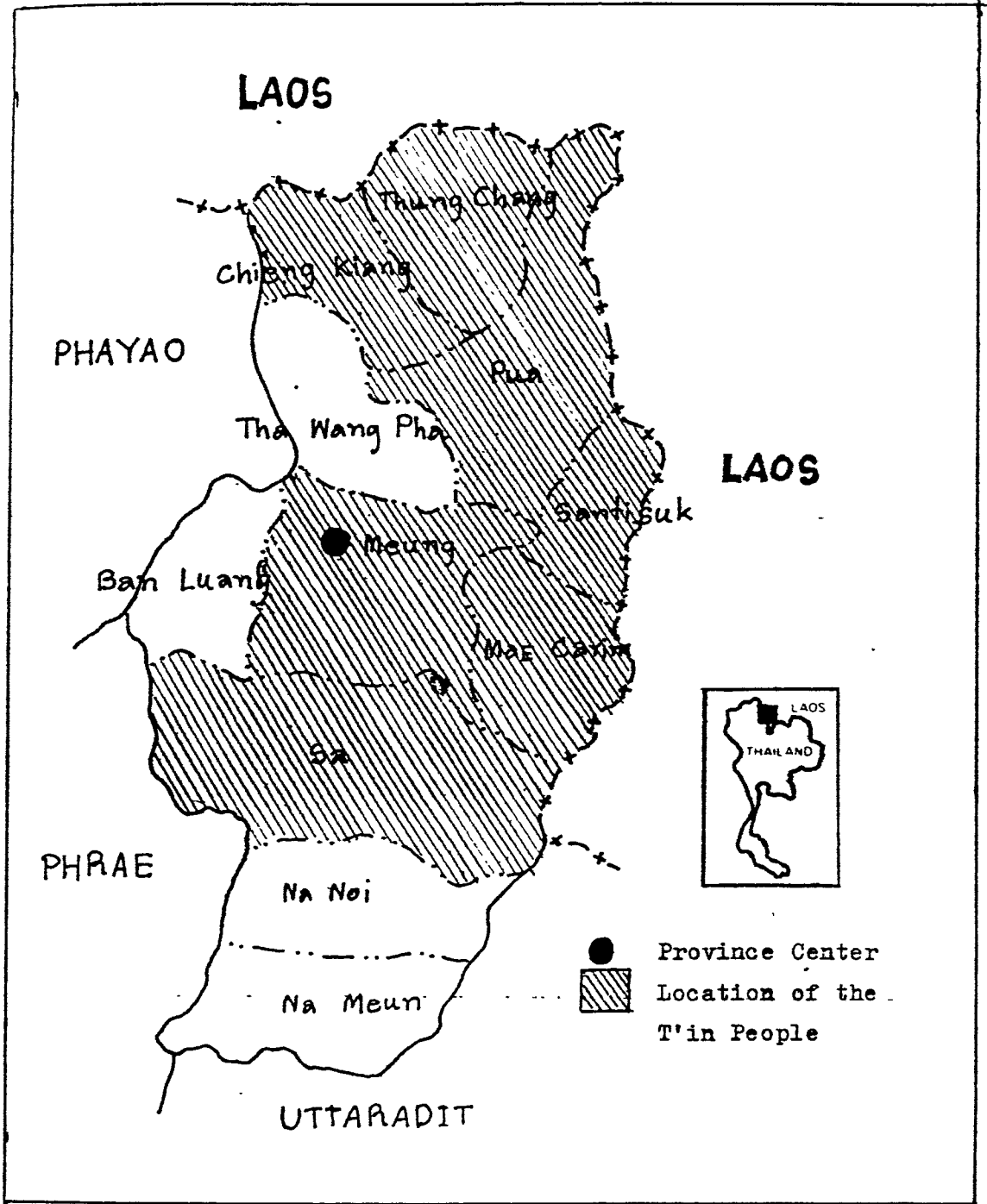


Figure 4 Map of Nan Province Showing Location of the T'in People.

(Adapted From : Official document produced by Chieng Klang district, Nan province)

LAOS

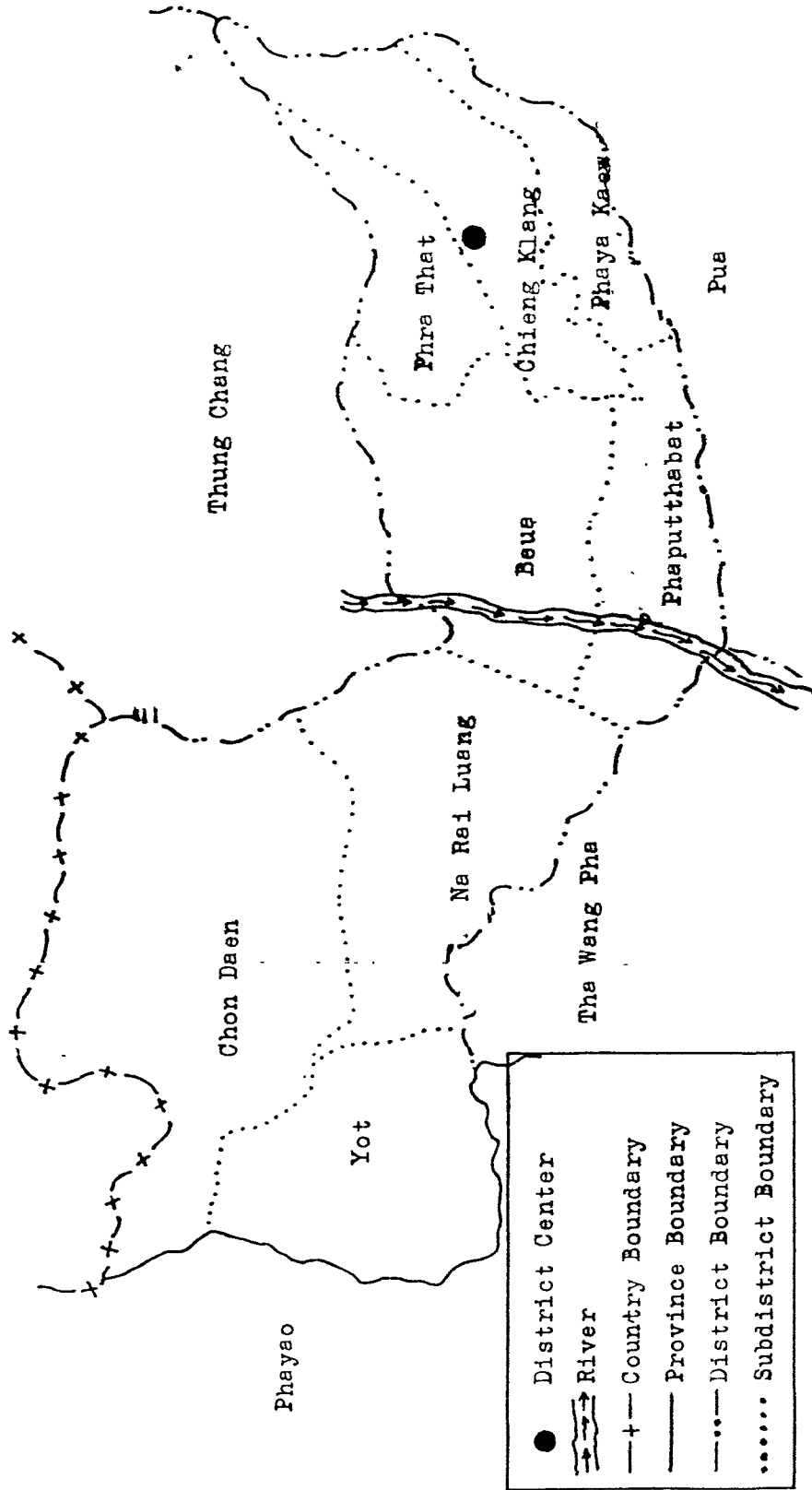


Figure 5 Map of Chieng Klong District, Nan Province

(Adapted From: Official document produced by Chieng Klong district, Nan province)

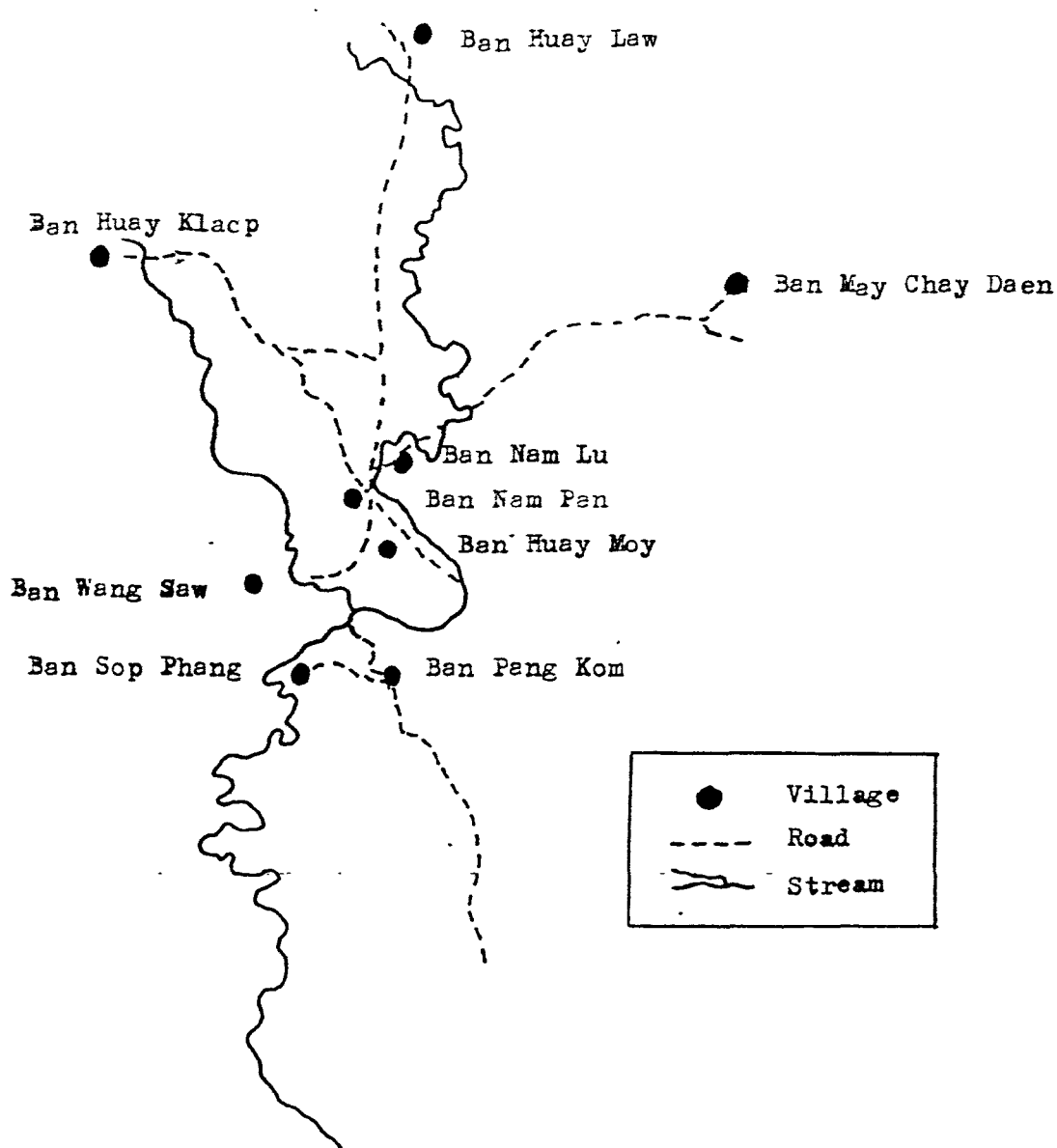


Figure 6 Map of Chon Daen Subdistrict, Chieng Klang District, Nan Province.

(Adapted From : Official document produced by Chieng Klang district, Nan province)

-1-

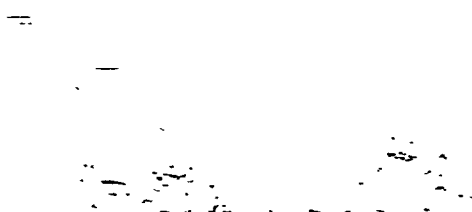


Figure 7 Wang Saw village, Chon Daen subdistrict,
Chieng Klang district of Lan.

There are nine sub-districts in Chieng Klang district, Yod, Chon Daen, Na Ray Luang, Bua, Chieng Klang, Pha Phuttabat, Pha Thad, Pha ya Kaew, and Chieng Khan sub-districts. For the Chon Daen sub-district, it contains eight villages, Huay Law, Nam Pan, Huay Klaep, Sop Phang, Nam Lu, Huay Moy, Pang Kom, and Wang Saw villages (see the map on page 14).

Wang Saw is the only village where the people speak Pray while Pang Kom speaks Thai Lue and the rest speak Khmu.

5.4 Historical Background

Young (1961) has a belief that the T'in migrated from the South, namely, from the Malay Peninsula. Filbeck (1978) argued against this hypothesis. He says,

'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.'

However, Filbeck did not indicated from where the T'in migrated. He just asked the questions that if the T'in came from Laos (as stated by LeBar et al., 1964 or other writers), "did the Mal or the Pray move into Thailand first? or did a proto-group of these two branches firstly migrated into this area with subsequent divisions into two main groups?"

Srisawat (1963) states that the first group of T'in moved into Thailand in 1928. He also has a hypothesis that the T'in might have moved into Thailand before the Thai people migrated from China down to Indo-Chinese peninsula.

Dersaint (1973) states that the T'in moved into Thailand in 1876. In this period, the Kha group in Laos have problem with the Lao government, so this group were subdued in Muang Ngoi.

Also, Premsrirat (1987) and Satayawatthana (1987) agree with the idea that the T'in never moved from other places, their original location is where they live at the present time. Premsrirat also says that it was possible that they moved from one place to another in this area (Thailand and Laos) because of disease, fighting or other reasons.

In my opinion, I agree with this idea. There is another reason that supports it. It is a tale* told among the T'in people, about the fighting in which they helped Thai people fight with the Ngiau. That was in the period of King Rama V.

For Ban Wang Saw, it was settled not more than twenty-five years ago. There is a historical information given by Mr. Dee Phutheng, a Pray speaker at Wang Saw, that the Pray people there migrated firstly from Chaiyaboury province of Laos from the villages like Nam Lod, Huay Poy, ... etc. They firstly

*It was told by Mr. Noi Pau Pa and other Pray speakers in Ban Nam Sod, Thung Chang district.

settled at Ban Pa Ray in Phu Kha sub-district of Pua district, Nan province. Later, some of them went on moving westward to Chon Daen sub-district of Chieng Klang district. There, they settled at a place which is only one kilometre from the border (between Thailand and Laos). This village was called 'Wang Saw' (the old village). Because of the fighting at the border area, they had to move downward into the Thai boulder and finally settled at the present Wang Saw village. However, there are some families that migrated directly from Laos more recently. Nowadays there are sixty-seven households*, eighty-two families and three hundreds and sixty people living in Wang Saw village. (The Hill-tribe Development and Welfare Center of Nan Province, 1987).

5.5 Characteristics

Generally the Pray people are somewhat dark, short and stout. Some people mentioned that they are rather quiet and do not like to speak with strangers from the plain land. But the Pray people I know and familiar with are polite and endurable. However, the Pray people in some village look unhealthy and inactive. It may be because of chronic diseases such as Malaria, Tuberculosis, and under nourishment. The Pray in some villages do not welcome strangers from the plain land, since they believe that the strangers will bring bad things to them. This is due to their bad experience with some people from the plain land who come to take advantage of them. (Veerothay, 1985)**

*Fifty-five households are Pray and twelve households are Khmu.

5.6 Occupation

As other hilltribes, agriculture is the main occupation and source of food of the Pray people. They grow rice on dry field on the mountains as the main crop. They also grow corn, bean, cotton and vegetables. Besides, they do basketry, hunting and seeking jungle products. Furthermore, the Pray earn their living by growing and collecting tea leaves to make "Miang" (Srisawat, ၂၀၁၂)*

This "miang" is a sort of pickle to be chewed after meals or at free times like betel. Most of the Pray raise pigs. It is women's duty to bring a kind of leaf called "b၁:n" in their language from their field to feed pigs when they came home after finishing their work in the field. Men's duty is mainly hunting and seeking jungle products.

5.7 Religion and Belief

Most of the T'in people are animists. They believe in spirits which is called "pl၁:n" in their language. They believe that the spirits cause a lot of events in their lives. They can make them ill or die if the people do something wrong. So in order to appease the spirits, they are to offer things such as chicken or pig and liquor to the spirits during the time of sickness. The important spirits are village spirit, household spirit and field spirit. The village spirit must be made sacrifices and offered thing every year in order to have a happy life. The household spirit is the ancestors spirit that can cause good or bad events only to the family. And the field spirit must be made sacrifices nine times a year.

* ပျဉ်းမာဏ ကိရိယာ, ၂၀၀၆



Figure 8 A woman (Prey) working with her
paddy (pounding paddy).

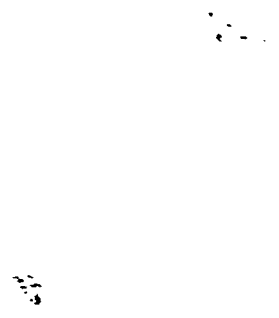


Figure 9 A large mortar for pounding
paddy to separate the grains
from the chaffs.

Buddhism and Christianity (Protestant) have been introduced to some T'in villages. However, the T'in people who become Buddhist still practice the spirit sacrificing ceremony whereas those who become Christians do not.

5.8 Housing

Most of the T'in house, especially traditional houses, are built on piles with bamboo raised floors and walls. The roof is made from lemon grass. Mostly, one side of the roof slopes down nearly adjoining to the ground. Under this side of the roof, there usually is a mortar used for rice paddy pounding. Firewood and things are also kept here. In the house, there are one or two sleeping-rooms and a cooking-room (which is also a living-room) where there is a fire place. On the raised floor outside the house proper, there is a shelf with a roof for placing earthen jars containing water for drinking and bottle gourds.




Figure 10 A Pray house in wang Saw Village, Chon Daen
subdistrict, Chieng Klang district of Nan.

Chapter II

PRAY PHONOLOGICAL SYSTEM

1. Intonation Group


An intonation group is defined as the units of the highest rank of the phonological hierarchy as here presented and, therefore, has no storable function. Its structure is stated in terms of the stress group.

In the Pray dialect, there is a contrast between the rising intonation contour and the falling intonation contour (only between the polar question and the statement ending with /?an/) Each type is characterized by the pitch on the last syllable of the intonation group.

1.1 Rising Contour

The rising contour has two sub-groups as follow.

1.1.1 Low - Rising Contour

This type of contour is used for the polar question with the final particles /?an/ and /na:/, the request with the final particles /dæ:/ and the one-word negative answer. It begins with a fall and ends with a rise [].

Examples:

Polar Question

[sʰó? pɔ̃ŋ ʔã̃n]

want eat F.P.

'Are you hungry?'

[rê: ɸijá.? ɸá.? ʔã̃n]

go far F.P.

'Is it far?'

[Léh ʔiŋ nã:]

come long time F.P.

'Have you been here long?'

Request

[rê: pát ʔɔ̃:k ʔã̃n dæ:]

go get water I F.P.

'Go to get water for me, please.'

[ɸɔ̃h cá.? ʔõn ʔã̃n dæ:]

get rice give I F.P.

'Get the cooked-rice for me, please.'

One-word Negative Answer

ʔaj

no

'No.'

1.1.2 Rising Contour

This type of contour is used for exclamation. It is marked by a rise [↗].

Examples

[ʃéh patthəh]
 hate very much
 'How much I hate it !'
 ↗
 [ʃáh]
 'Showing bad-temper.'

In chasing an animal such as a dog or a bird, the rising contour point that is higher than usual is also found.

Examples

↗
 [ʃé.ʔ]
 'Go away.'

1.2 Falling Contour

This type of contour is used for normal statement, content question, command and only polar question with the final particle / ʔoʔ /. It is marked by a fall [↘].



Examples:

Normal Statements.

[mǎc nɔ̃:j krák nã:n]

meet together time next

'We will meet each other next time.'

[pɔ̃ŋ kúp pɔ̃ŋ nthũ:]

eat can eat F.P.

'If you can eat it, you can go on eating it.'

[ʃabã:j d̃æ: . ?ãj ʃabã:j d̃æ:]

fine some not fine some

'Sometime I feel well but sometime I don't.'

[?áh - mē: lɔ̃ŋ ní: cú.? kô:p ʃô:]

women Clas. This put on shirt red.

'This women puts on a red shirt.'

Content Questions

[rǎ: phandǎj]

go where

'Where are you going ?'

[ʃijǎ.? - ʃá.? pandǎj]

far how much

'How far is it ?'

[khô:ŋ ciãŋ mí: ɲé.ʔ lɔŋ]
 in house have how many clas.

'How many people are there in the house ?'

[?ɛ:ŋ kã:n ɲiwa.ʔ]
 do work what

'What is your job ?'

[ɲu: cannak]
 name how

'What is your name ?'

Commands

[?ət ɲá? ɲih ták thũŋ]
 get thing get in at bag

'Put something in the bag'

[pɔŋ cá? ?ôn ɲút]
 eat rice give all

'Eat it up'

[má.ʔ kɔh kók-lãm ɲáj]
 don't climb tree F.P.

'Don't climb up the tree'

Polar Questions with /?o?/ as a final particle.

[léh ?iŋ ?ó.? ↘]

come long time F.P.

'Have you been here long?'

[rə: nāŋ -lɔ.? ?ó.? ↘]

go · real F.P.

'Will you really be going?'

As I mentioned above, there is a contrast between the rising contour and the falling contour. Examples are shown below.

'Q' is a polar question and 'A' is an answer (statement).

Q : [lɔ.? pɔŋ ?ân ↗]
good eat F.P.

'Is it delicious?'

A : [lɔ.? pɔŋ ?ân ↘]
good eat F.P.

'Yes, it is delicious.'

Q : [ŋɔ:m-lɔ.? (?əŋ) ?ân ↗]
think of I F.P.

'Do you miss me?'

A : [ŋɔ:m-lɔ.? ?ân ↘]
think of F.P.

'Yes, I miss you.'

So in phonemic writing of the intonation, the rising contour will be marked by / ↗ / and the falling one will be marked by / ↘ / as shown in the examples below.

Q : / lɔ́? pɔ́ŋ ?an /
 good eat F.P.

'Is it delicious?'

A : / lɔ́? pɔ́ŋ ?an ↘ /
 good eat F.P.

'Yes, it is delicious.'

2. Stress Group

A stress group functions in the intonation group, and is defined as the rank whose units have a structure stated in terms of syllables.

The stress group in Pray may have from one to three syllables, but the majority is monosyllabic. If it has two or more syllables, it has as its nucleus one stressed syllable, which is always the last syllable in the group.

2.1 Structure

The stress group in Pray can be divided into two groups according to their structure.

2.1.1 Monosyllabic Stress Group. It consists of a major syllable which contains a stress. Its structure is 'S'.

Examples :

['mê:]	'mother'
['râ:]	'to go'
['?âw]	'father'
['pɛ.ʔ]	'how many'
['piak]	'a bear'
['khráp]	'to follow'
['mbâl]	'to kill'
['ŋkɔh]	'the chest'

2.1.2 Polysyllabic Stress Group. It consists of one major syllable with one preceding minor syllable which contains no stress. Its structure is 'US'.

Examples :

[ta'pót]	'a bun of hair'
[ka'câŋ]	'horns'
[si'nɛ:]	'a rat'
[par'lâr]	'the lightning'

There are two words in Pray that are found with trisyllabic structure.

[ɕi læp'phláp]	'a butterfly'
[ɕi rak'thák]	'a kind of lizard'

It is noted that a pitch on a minor syllable is neutral.

2.2 Function

The stress group functions in the intonation group. In this language, there is no distinction between stress groups, because any type of stress group can function in the precontour or the contour position in the intonation group.

3. Syllable

A syllable is defined as the rank whose units function in the stress group and whose structure is stated in terms of phonemes.

3.1 Structure

The structure of a syllable is described in terms of nucleus and periphery. The nucleus is formed by a vowel (V) or a diphthong (VV), and a periphery is formed by one to five consonants (including a final consonant). There are two major types of syllables: "open syllable" and "closed syllable."

3.1.1 Open Syllable

An open syllable is defined as a syllable which ends with any single vowel or a diphthong. The full structure is C(C)(C)V(V)

It can be further divided into three sup-types as below.

3.1.1.1 Sup-type one : CV (V)

Examples :	[mê:]	'a mother'
	[pâ:]	'to win'
	[dúa]	'long'
	[ɛi-]	'a minor syllable'
	[ta-]	'a minor syllable'

3.1.1.2 Sup-type two : CCV

Examples :	[thî:]	'the hands, arms'
	[klê:]	'crosseyed'
	[mbɔ̃:]	'to cry (of a cow)'

3.1.1.3 Sup-typ three : CCCV

Examples :	[phlæ:]	'to stick out (the tongue)'
	[khrɔ̃:]	'to beg for'
	[ŋgrɔ̃:]	'to shout'

It should be noted that long vowels or diphthongs can occur in major syllables whereas only short vowels occur in minor syllables.

3.1.2 Closed Syllable

A closed syllable is defined as a syllable ending with a consonant. The full structure is C(C)(C)(C) V(V) C. It can be further divided into four sub-types as follows:

3.1.2.1 Sub-type One : C V(V) C

Examples :

[m ^h ɔ̃ŋ]	'to be dark'
[nák]	'a fish net'
[p ^h æ:ŋ]	'a word, a language'
[pí:t]	'to wipe, to scrub'
[t ^h əl]	'to close'
[ci:k]	'to burn'
[cuah]	'to spit'
[mia?]	'the rain'
[k ^h uak]	'a pair of shoes'

3.1.2.2 Sub-type Two : CCV (V) C

Examples :

[kr ^h ú c]	'to fall'
[mlíh]	'to drop'
[plúk]	'to turn silver gray'
[cw ^h á:t]	'to drive away'
[ph ^h úl]	'a crossbow'
[th ^h ón]	'to buy'
[p ^h sa:ŋ]	'a kind of bamboo'
[p ^h sián]	'slope, noise'

3.1.2.3 Sub-type Three : CCC V(V) C

Examples :

[kwrá?]	'to retch'
[khw ^h āŋ]	'in'

[nɔ̃wáh]	'a tale'
[nɔ̃gráŋ]	'a post'
[nɔ̃gruam]	'to stemp grass to be plain'

3.1.2.4 Sub-type Four : CCCCVC

Examples :

[khwraʔ]	'a snail'
[mphiɔ:k]	'to peel'
[ŋkhra:t]	'rough'

3.2 Function

A syllable functions in a stress group. There are two classes of syllable in terms of their function in the stress group, a major syllable and a minor syllable.

3.2.1 Major Syllable

A major syllable functions as a nucleus of the stress group. It always occupies the final position in the stress group. Its occurrence is obligatory. A syllable of this class can be any sub-type of either the open syllable or the closed syllable and contains a stress.

Examples :

[ɛi'ʔx:]	'who'
[ɛi'ru:a]	'a cock's comb'
['klê:]	'crosseyed'

[ʔkrô:]	'to shout'
[kon'kôj]	'the knuckle of the hand'
[ʔthâ:r]	'a rope'
[ʔkhrâm]	'a person'

3.2.2 Minor Syllable

A minor syllable functions as a periphery in the stress group. Its occurrence is optional. It bears no stress, and normally occupies the initial position of the stress group, preceding the major syllable. In rare cases, it can also occur in the medial position. The structure of the minor syllable can be C(C) V(C) but no full expansion occurs.

Examples :

[ɕi'ʔx:]	'who'
[phi'jét]	'chili'
[ɕin'ɕâ:]	'a kind of snake'
[ɕirak'thák]	'a house lizard'

It should be noted that the structure CV- is normally found while the structure CCV- and CVC- are very rare.

Therefore, the structures of syllable class functioning in each stress group type can be summarized in the following chart.

Types of Stress Group	Structures of Syllables Functioning in Stress Group types
S	'C(C)(C)(C)V(V)(C)
U S	C(C)V(C)' C(C)V(C)*
U U S	CV C V C ' C(C)(C)VC

Chart 1 Structures of Syllables Functioning in Stress Group Types

3.3 Syllable boundaries and Marking Syllable breaks.

Syllable boundaries are clearly marked in the data by:

a. the following syllable patterns, that is, if there are two or more than two consonants occurring together between two vowels, the second consonant is the initial consonant of the next syllable because the final consonant of a syllable can only be a single consonant and a vowel cannot occur at the beginning of a syllable.

b. the occurrence of one of the final consonants /m, n, ɲ, ŋ, p, t, c, k, ʔ, h, l, r, w, j/.

c. the syllable breaks as indicated by the informant (Syllable - breaks need not be marked overtly in the data).

*No full expansion occurs

It would be worth mentioning the consonant clusters which occur word medially across syllable boundaries in this dialect because they occur systematically although they are rare.

a. Homorganic-consonant clusters

-pp-	e.g.	[pɔp'pɔh]	/pɔppɔh/	'a millirade'
-pph-	e.g.	[ɛilɔp'phlɔp]	/ɛilɔpphlɔp/	'a butterfly'
-tt-	e.g.	[tɔt'tɛ:]	/tɔttɛ:/	'a wall gecko'
-tth-	e.g.	[pat'tháh]	/patthəh/	'very much'
-kk-	e.g.	[ɔk'kɔ:k]	/ɔkkɔ:k/	'strange'
-nt-	e.g.	[kan'tín]	/kantín/	'the lead tree'
-rl-	e.g.	[par'lár]	/parlar/	'the lightning'

b. Velar - alveolar consonant clusters

-ŋn-	e.g.	[caŋ'nák]	/caŋnak/	'how'
-kth-	e.g.	[ɛirak'thák]	/ɛirakthak/	'a lizard'

c. Cluster consisting of the consonants from the nearby place of articulation.

-kj-	e.g.	[kɔk'jɔk]	/kɔkjɔk/	'to hobble'
-ŋc-	e.g.	[ciŋ'cɔk]	/ciŋcɔk/	'a house corner'

d. Other consonant clusters.

-mɕ-	e.g.	[ɕum'ɕu:]	/ɕumɕu:/	'to feel asleep'
-mk-	e.g.	[kam'kɔ:]	/kamkɔ:/	'the sweet basil'

4. Phoneme

The phoneme is defined as the rank whose units function in the syllable. It is the lowest rank of the hierarchy and has no stable structure, but the phonetic form of the phoneme can be described.

The major functional classes of phoneme in the syllable in Pray are the consonant and the vowel.

4.1 Consonants

The consonants function as syllable periphery in all syllable types in Pray. There are a total of 17^{*} consonant phonemes: /m, n, ɲ, ŋ, p, t, c, k, ʔ, ɓ, ɗ, ɟ, h, l, r, w, j/ as shown in the following chart.

*18 phonemes if /f/, which found in Thai loanword, is added.

4.1.1 Consonant Chart

Manners \ Points	Labial	Alveolar	Palatal	Velar	Glottal
Nasal	m	n	ɲ	ŋ	
Plosive	p	t	c	k	ʔ
Implosive	ɓ	ɗ			
Fricative			ç		h
Lateral		l			
Trill	w		j		

Chart 2 Pray Consonant Phonemes.

Problems of Interpretation

1. Although the symbols \hat{b} and \hat{d} are not as common as b and d , I prefer to use them here because they represent the closer quality of the real sound.

2. The same as the problem 1, I prefer to use the symbol \hat{s} instead of s because it represents the closer quality of the real sound.

3. A plosive that is followed by $/h/$ is interpreted as two-consonant cluster such as $/ph, th, kh/$ instead of one aspirated plosive because, phonemically, it is pronounced as two consonants more than one. Moreover, the word meaning 'to leave' can be pronounced as either $[pháh]$ or $[páh]$.

4. A plosive preceded by a homorganic nasal is interpreted as consonants in cluster such as $/mp, nt, nc, nk/$ instead of one prenasalized $/m^nt, n^tc, n^nk/$ because the plosive and the nasal can occur freely from each other in a syllable.

4.1.2 Formational Statement of Consonants

Nasals

/m/ [m] a voiced bilabial nasal, occurs initially and finally in a syllable.

/miam/	[mi ^h :am]	'blood'
/manæw/	[ma'næw]	'a squirrel'
/mlu?/	[mlu.ʔ]	'to rest'
/mbə1/	[mbə ^h 1]	'to kill'

/n/ [n] a voiced alveolar nasal, occurs initially and finally in a syllable.

/nɔ:k/	[nɔ:k]	'water'
/ntɬ:ŋ/	[ntɬ:ŋ]	'a knife'
/pli:n/	[pli:n]	'to turn over'
/khwan/	[khwân]	'son/daughter'

/ɲ/ [ɲ] a voiced palatal nasal, occurs initially and finally in a syllable.

/ɲim/	[ɲim]	'to cry'
/ɲwan/	[ɲwân]	'mountain'
/ɲɬə1/	[ɲtɬ ^h ə1]	'to ripple'
/phəɲ/	[phə ^h ɲ]	'to shot'

/ŋ/ [ŋ] a voiced velar nasal, occurs initially and finally in a syllable.

/ŋual/	[ŋuâl]	'a village'
--------	--------	-------------

/ŋwa:l/	[ŋwâ:l]	'to crawl'
/ŋkhæ:r/	[ŋkhê:r]	'the finger nail'
/cɔŋ/	[côŋ]	'big'

Plosives

/p/ There are two allophones: [b] and [p], in this phoneme.

[b] a voiced bilabial plosive, occurs after /m/ but never in cluster with /h/

/mpə1/	[mbê1]	'to kill'
/mpah/	[mbáh]	'vegetable'

[p] a voiceless bilabial plosive, occurs elsewhere.

/pi?/	[pí.ʔ]	'full'
/pru:t/	[prû:t]	'to pull'
/mphul/	[mphûl]	'the stomach'
/kap/	[káp]	'a box'

/t/ There are two allophones: [d] and [t], of this phoneme.

[d] a voiced alveolar plosive, occurs after /n/ but never in cluster with /h/

/ntɔ:k/	[ndô:k]	'a spoon'
/ntak/	[ndák]	'the lege'

[t] a voiceless alveolar plosive, occurs elsewhere.

/tal/	[tâl]	'to close (a lid)'
/nthɔ?/	[nthô.ʔ]	'smoke'
/kut/	[kút]	'to enter'

/c/ There are two allophones: [ɟ] and [c], of this phoneme.

[ɟ] a voiced palatal plosive, occurs after /n/.

/pco:/ [pɟo:] 'forest'

/pcwah/ [pɟwáh] 'a story'

[c] a voiceless palatal plosive, occurs elsewhere.

/cem/ [cém] 'to feel sleepy'

/cɔŋ/ [cɔ́ŋ] 'big'

/ku:c/ [kú:c] 'to make fire'

/k/ There are two allophones: [g] and [k], of this phoneme.

[g] a voiced velar plosive, occurs after /ŋ/
but never in cluster with /h/

/ŋkuc/ [ŋgú:c] 'to be lazy'

/ŋkræ?/ [ŋgrá?] 'a pestle'

[k] a voiceless velar plosive, occurs elsewhere.

/kih/ [kíh] 'old'

/kraw/ [kráw] 'to scatch'

/khok/ [khók] 'a monkey'

/ʔ/ [ʔ] a glottal plosive, occurs initially and finally in a syllable.

/ʔiŋ/ [ʔíŋ] 'to be long time'

/ʔaw/ [ʔáw] 'father'

/ʔa?/ [ʔá.ʔ] 'a thing'

Implosives

/ɓ/ [ɓ] a voiced bilabial implosive, occurs only initially in a syllable.

/ɓut/ [ɓúʔ] 'a moment'

/ɓot/ [ɓót] 'cloud'

/ɓræh/ [ɓræʔh] 'to be old'

/ɗ/ [ɗ] a voiced alveolar implosive, occurs only initially in a syllable.

/ɗæ:k/ [ɗæ:k] 'to shove'

/ɗua/ [ɗú:a] 'to be long'

/ɗok/ [ɗók] 'many'

Fricatives

/ɸ/ [ɸ] a voiceless palatal fricative, occurs initially in a syllable, fluctuates with a voiceless alveolar fricative [s] and a voiceless aspirated palatal plosive [tɸ^h]

/ɸo:/ [ɸó:]~[sô:]~[tɸ^ho:] 'red'

/ɸo?/ [ɸó.?]~[só.?]~[tɸ^ho.?] 'to want'

/ɸinæ:/ [ɸinæ:]~[sinæ:]~[tɸ^hinæ:] 'a mouse'

Since [ɸ] is used by most people and [s] is found used by only few people, I prefer to write this phoneme as /ɸ/.

However, only [tɸ^h] can also occur after /ɸ/ in the consonant cluster [ntɸ^h-] /ɸc-/.

/pɛə m/	[p̄tɛ ^h ə̄m]	'a somewhat dark or dark colour'
/pɛo:k/	[p̄tɛ ^h o:k]	'hair'

The phoneme /ɛ/ in the minor syllable /ɛi-/ corresponds to /h/ in Pray Ban Nam lad, so the minor syllable is /hi-/ in this Pray variety.

Wang Saw	Nam Lad	
/ɛi ?u:/	/hi ?u:/	'Thai long skirt'
/ɛi na:t/	/hina:t/	'a gun'

/h/ [h] a voiceless glottal fricative, occurs initially and finally in a syllable and as the second member of consonant clusters.

/haŋ/	[hāŋ]	'rich'
/hə?/	[hə́.ʔ]	'garbage'
/ɛeh/	[ɛéh]	'to hate'
/khlih/	[khlíh]	'to fall'

Liquid

/l/ [l] a voiced alveolar lateral, occurs initially and finally in a syllable and in initial consonant clusters.

/lɔ:ŋ/	[lɔ́:ŋ]	'a wild pig'
/khla:l/	[khlâ:l]	'quickly'
/cæ:l/	[câ:l]	'evening'

Trill

/r/ [r] a voiced alveolar trill, occurs initially and finally in a syllable. It fluctuates with a voiceless alveolar trill [r̥] only in syllable initial.

/rɛ:ŋ/	[r̥ɛ:ŋ]~[r̥ɛ:ŋ]	'land'
/ra:ŋ/	[r̥a:ŋ]~[r̥a:ŋ]	'a flower'
/ŋkhæ:r/	[ŋkh̥æ:r]	'a nail'
/parlar/	[par'lâr]	'lightning'

It also occurs in fluctuation with a voiced alveolar flap in consonant clusters.

/khrəp/	[khr̥əp]~[khr̥əp]	'to follow'
/khwra?/	[khw̥rá.?]~[khw̥rá.?]	'a snail'
/mpro:/	[mbr̥ô:]~[mbr̥ô:]	'to howl'

In some other Pray villages, for example, Ban Nam Lad, the phoneme /r/ corresponds to /j/ in initial position and in initial consonant clusters, and corresponds to /l/ in final position.

Wang Saw	Nam Lad	
/ra:ŋ/	/ja:ŋ/	'a flower'
/khram/	/khjam/	'a person'
/tha:r/	/tha:l/	'a rope'

Semi-vowels

/w/	[w]	a voiced labial-velar semi-vowel, occurs
		1. initially in a syllable, and fluctuates with [ʔw], a voiced pre-glottalized labial-velar semi-vowel.
/wɛ:n/	[wɛ:n]~[ʔwɛ:n]	'a mirror'
/wɑ:ŋ/	[wɑ:ŋ]~[ʔwɑ:ŋ]	'a year'
/wɑŋ/	[wɑŋ]~[ʔwɑŋ]	'the chin'
		2. finally in a syllable
/hɛ:w/	[hɛ:w]	'a graveyard'
/phaw/	[phɔw]	'to wait'
and		3. in initial consonant clusters.
/kwah/	[kwɔh]	'a place for cooking food'
/pɕwɑŋ/	[pɕwɑŋ]	'a log lumber'
/j/	[j]	a voiced palatal semi-vowel, occurs initially and finally in a syllable, fluctuates with a voiced pre-glottalized palatal semi-vowel [ʔj] in the syllable initial.
/jim/	[jim]~[ʔjim]	'a prize'
/jat/	[jat]~[ʔjat]	'to be small'
/jɔk/	[jɔk]~[ʔjɔk]	'to be frightening'
/nɔj/	[nɔj]	'together'

4.1.3 Consonant Contrast

/p-m/	/pəc/	'to prick'
	/məc/	'to know'
/t-n/	/tam/	'to insert'
	/nam/	'3rd person singular'
/t-l/	/ta:t (?a:k)/	'to shine'
	/la:t/	'to chip'
/t-r/	/tɔ:/	'not to know'
	/rɔ:/	'a corn on the foot'
/c-ɲ/	/cuah/	'to spit'
	/ɲuah/	'to be near'
/k-ŋ/	/kut/	'to enter'
	/ŋut/	'a shadow'
/l-r/	/ɸili:/	'a corn'
	/ɸiri:/	'a cockroach'
/t-c/	/to:k/	'to stamp on'
	/co:k/	'to absorb'
/c-k/	/cen/	'from'
	/ken/	'a palm civet'
/n-ɲ/	/nam/	'3rd person singular'
	/ɲam/	'black'

/n-n/	/ɲua?/	'to kid'
	/ŋua?/	'a hut'
/k-ʔ/	/kə:r/	'a handle'
	/ʔə:r/	'wet'
/c-ʔ/	/ca:r/	'a crab'
	/ʔa:r/	'to shove'
/p-b/	/poŋ/	'mud'
	/boŋ/	'a kind of bamboo'
/t-d/	/to:k/	'to stamp on'
	/dɔk/	'many'
/p-w/	/pi?/	'full'
	/wi?/	'left'
/m-w/	/ma:ŋ/	'ruin'
	/wa:ŋ/	'a year'
/t-ʔ/	/taw/	'a turtle'
	/ʔaw/	'father'
/m-h/	/phum/	'to break wind'
	/phuh/	'to launder'
/n-ŋ/	/ʔina:t/	'a gun'
	/ʔiŋa:t/	'to feel a sudden pang'

/c-j/	/ce:n/	'fruit meat'
	/je:n/	'an eel'
/n-j/	/nim/	'to cry'
	/jim/	'to smile'

4.1.4 Consonant Distribution

There are complex syllable onsets (C(C)(C)(C)-) in this Pray dialect. Therefore, the distribution of the consonants will be described on the basis of their occurrence in the syllable.

The consonants can be divided into three main Sub-classes according to their distribution: initial single consonants, final consonants and consonants in cluster.

4.1.4.1 Initial Single Consonants

(Consonant Sub-class C₁)

These are the consonants which function in the initial position of the major and the minor syllables. They are all consonants. These consonants occurring in each syllable type are presented in the following chart.

	Min.	Maj.
m-		✓
n-		✓
ɲ-		✓
ŋ-	-	✓
p-	✓	✓
t-	✓	✓
c-	✓	✓
k-	✓	✓
ʔ-	-	✓
β-	-	✓
ɖ-	✓	✓
ɸ-	✓	✓
h-	-	✓
l-	-	✓
r-	-	✓
w-		✓
j-		✓

Chart 3 : Single Initial Consonants (C₁) Functioning in each Type of Syllable.

From the chart, we can see that:

1. All consonants can function in the initial position of the major syllable.

Examples:

/miaʔ/	'blood'
/nam/	'he, she'
/nim/	'to cry'
/niʔ/	'a day'
/piak/	'a beer'
/tak/	'at'
/ceŋ/	'feet'
/kuʔ/	'head'
/ʔiŋ/	'long (time)'
/ʂot/	'cloud'
/dua/	'long'
/ʂiŋ/	'a pig'
/haŋ/	'rich'
/leh/	'to come'
/rə:/	'to go'
/wiʔ/	'the left'
/jat/	'small'

2. The consonants that can also function in the initial position of the minor syllable are /r, ʔ, c, k, ʂ, p/.

Examples:

/parlar/	'the lightning'
/tapot /	'a hair bun'
/ciŋcək/	'a house corner'

/kacən/	'horn'
/dʌkda:k/	'rugged, unsmooth'
/ɕijəh/	'a wife'

4.1.4.2 Final Consonants (Consonant sub-class C₂)

In Pray, all of the consonants except the implosives /ɓ/ and /ɗ/ and the fricative /ɕ/ can occur as final consonants. The distribution of these consonants functioning in each syllable type is shown in the following chart.

Final Consonants	Min.	Maj.
m	✓	✓
n	✓	✓
ɸ	-	✓
ŋ	✓	✓
p	✓	✓
t	✓	✓
c	-	✓
k	✓	✓
ʔ	-	✓
h	-	✓
l	-	✓
r	✓	✓
w	-	✓
j	✓	✓

Chart 6: Final Consonants (C₂) Functioning in Each Syllable Type.

From the chart, we get that:

1. The following consonants can function in the final position of the major syllable.

/m, n, ɸ, ŋ, p, t, c, k, ʔ, h, l, r, w, j/

Examples:

/ɲim/	'to cry, prize'
/n̪than/	'to be alarmed'
/m̪ɔ̃ɲ/	'dark'
/ɲwan̪/	'mountain'
/kap/	'a box'
/kæ:t/	'some'
/tho:c/	'to light the fire'
/kæ:k/	'to curry'
/cəʔ/	'dirty'
/ɕih/	'to put on/in'
/pəl/	'to die'
/cæ:r/	'to leak'
/ɕiw/	'sweet'
/khaj/	'to say'

2. The final consonants which can also function in the final position of the minor syllable are /m, n, ŋ, p, t, k, r, j/

Examples:

/kamkɔ:/	'the sweet basil'
/kanti̪n/	'the lead tree'
/cannak/	'how'
/ɕɔ̃ppɔ̃h/	'a millipede'
/tɔ̃ttæ:/	'a wall gecko'
/ɕirak̪thak/	'a lizard'
/pãrlar/	'the lightning'
/majwəj/	'the fly'

4.1.4.3 Consonants in Clusters (Consonant Sub-classes C₃, C₄ and C₅)

4.1.4.3.1 Consonant Sub-class C₃

These are the second members of consonant cluster and found in both the major and minor syllble (but somewhat rare). They are /p, t, c, k, s, h, l, r, w/.

The chart showing the correlation of the consonants in the two-consonant clusters is provided below.

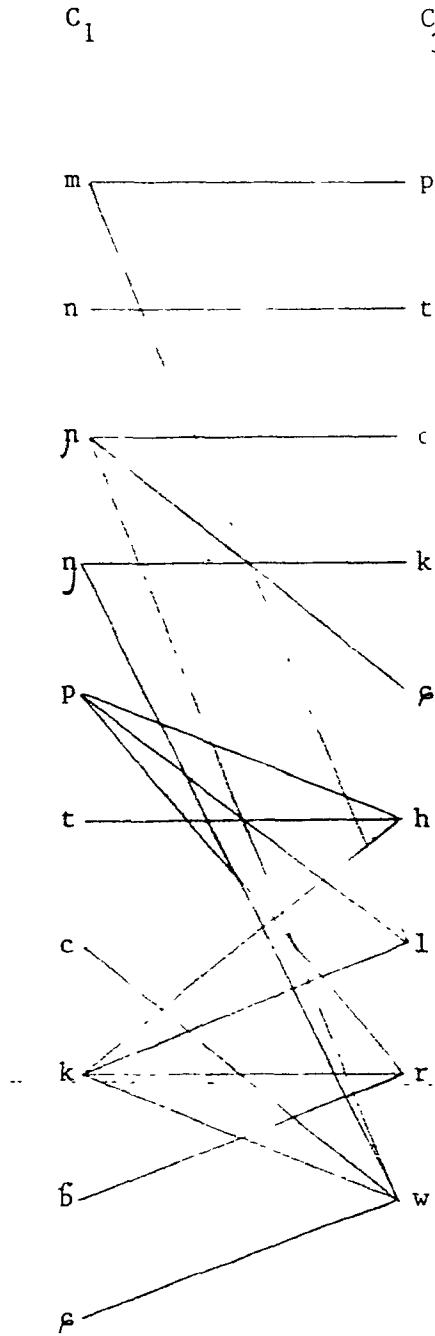


Chart 4: Co-occurrence of Consonants in Two-consonant Cluster. (C_1 C_3)

C_1 - the first member of two-consonant clusters.

C_3 - the second member of two-consonant clusters.

The first consonant of the two-consonant clusters can be:

- a. the nasals /m, n, ɲ, ŋ/
 - b. the plosives /p, t, c, k/
 - c. the implosive /ɓ/
- and
- d. the fricative /ɣ/

The second consonant can be:

- a. the plosives /p, t, c, k/
 - b. the fricatives /ɣ, h/
 - c. the liquids /l, r/
- and
- d. the semi-vowel /w/

There are altogether 19 two-consonant clusters in Pray:

mp ml

nt

ɲc ɲɕ ɲw

ŋk ŋw

...ph .pl .pr .

th

cw

kh kl kr kw

ɓr

ɣw

Examples:

/mpəl/	'to kill'
/mlæw/	'an Adam's apple'
/ntak/	'a lege'
/ɲcəj/	'an older sibling'
/ɲɕianɲ/	'a sound'
/ɲwanɲ/	'mountain range'
/ɲkəm/	'an insect'
/ɲwa:l/	'to crawl'
/pha:/	'animal food'
/pluk/	'to turn silver gray'
/pra:ɲ/	'clear, limpid'
/thi:/	'the hand, arm'
/cwa:t/	'to chase'
/kha:/	'a fish'
/klak/	'to lick'
/krɔ:j/	'to flow'
/kwah/	'a fire place'
/bræh/	'old (age)'
/ɲwa?/	'a dag'

4.1.4.3.2 Consonant Sub-class C₄

These are the third members of three consonant clusters and found in only the major syllable. They are /h, l, r, w/

The correlation of the consonants in the three-consonant clusters is shown in the following chart.

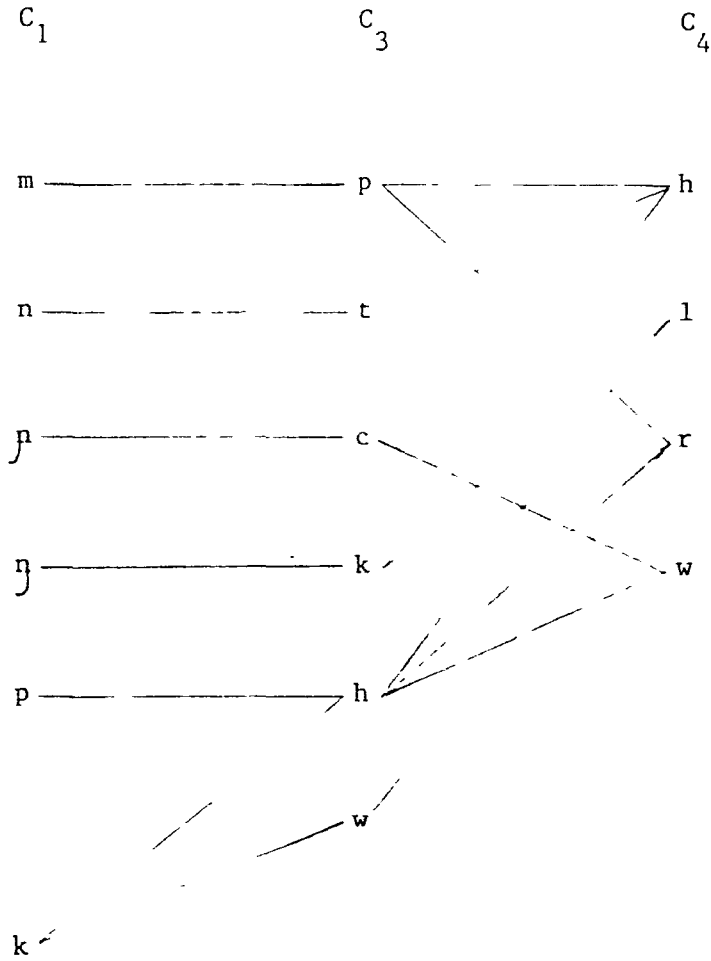


Chart 5: Co-occurrence of Consonants in Initial Three-consonant Clusters. ($C_1 C_3 \cdot C_4$)

C_1 - the first member of three-consonant clusters.

C_3 - the second member of three-consonant clusters.

C_4 - the third member of three-consonant clusters.

The first consonant of the three-consonant clusters can be:

- a. the nasals /m, n, ŋ, ŋ/
and b. the plosives /p, k/

The second consonant can be:

- a. the plosives /p, t, c, k/
b. the fricative /h/
and c. the semi-vowel /w/

The third consonant can be:

- a. the fricative /h/
b. the liquids /l, r/
and c. the semi-vowel /w/

There are all together 14 initial three-consonant clusters:

mph mpr
nth
pcw
ŋkh ŋkl ŋkr
phl phr phw
khl khr khw kwr

Examples:

/mpha:c/	'to swipe'
/mprə?/	'straw'
/nthu:t/	'to blow'
/pcwəŋ/	'a log lumber'
/ŋkhal/	'turbid'

/ŋklaŋ/	'a rung (of ladder)'
/ŋkrɔː/	'to shout'
/phlæ?/	'a fruit'
/phrɔh/	'to set pole up'
/phwah/	'to open a liquar jar'
/khlæ:p/	'to pinch'
/khram/	'human being, a person'
/khwa:r/	'an axe'

4.1.4.3.3 Consonant sub-class C₅

These are the fourth members of four-consonant clusters and found in only the major syllable. They are /l, r/. In Pray, there are four four-consonant clusters, /mphl, mphr, ŋkhr, khwr/.

Examples:

/mphlɔŋ/	'to hang up'
/mphri:t/	'to be scratched'
/ŋkhra:t/	'rough'
/khwra?/	'a snail'

4.2 Vowels

The vowels function as the syllable-nucleus. There are contrasts between short and long vowels and three diphthongs in this language, showing a total of 18 vowel phonemes: /i, i:, e, e:, æ, æ:, u, u:, ə, ə:, a, a:, o, o:, ɔ, ɔ:, ia, ua, ua/ as shown in the chart below.

4.2.1 Vowel Chart

Tongue Position \ Tongue Height		Front		Central		Back	
		short	long	short	long	short	long
Monophthongs	High	i	i:	ɤ	ɤ:	u	u:
	Mid	e	e:	ə	ə:	o	o:
	Low	æ	æ:	a	a:	ɔ	ɔ:

Diphthongs

ia

ua

ua

Chart 7: Pray Vowel Phonemes

4.2.2 Formational Statements of Vowels

Monophthongs

/i/ [i] a short high front vowel, occurs before all the final consonants except /p, ʔ, r, j/.

/ʔiŋ/	[ʔîŋ]	'long time'
/ɕih/	[ɕîh]	'to put on'
/cip/	[cîp]	'negative marker'
/ɕira:/	[ɕirâ:]	'thin'
[i.]	a half-long high front vowel, occurs only before /ʔ/.	
/ŋiʔ/	[ŋî.ʔ]	'a day'
/wiʔ/	[wî.ʔ]	'a left side'
/phiʔ/	[phî.ʔ]	'to plead'
/i:/	[i:]	a long high front vowel, occurs before /n, ŋ, p, t, k/ and in open syllables.
/pli:n/	[plî:n]	'to turn in another side'
/pi:ŋ/	[pî:ŋ]	'a water leech'
/ti:p/	[tî:p]	'to fold'
/ŋkri:/	[ŋgr̂i:]	'wind'
/e/	[e]	a short mid front vowel, occurs before /m, n, ŋ, p, t, c, k, h/
/ɕem/	[ɕêm]	'a bird'
/ken/	[kên]	'a palm civet'
/ceŋ/	[cêŋ]	'feet'
/ɕep/	[ɕêp]	'short (≠ tall)'

	[e.]	a half-long mid front vowel, occurs only before /?/	
	/ɤe?/	[ɤé.ʔ]	'to drive, lice'
	/nte?/	[ndé.ʔ]	'nearby'
	/phe?/	[phé.ʔ]	'to be spicy'
/e:/	[e:]	a long mid front vowel, occurs before /n, t, k, l, r, w/ and in open syllables.	
	/je:n/	[jê:n]	'an eel'
	/ɤe:t/	[ɤê:t]	'to rough'
	/nthe:k/	[nthê:k]	'to shake'
	/me:/	[mê:]	'mother'
/æ/	[æ]	a short low front vowel, occurs before /m, n, ŋ, p, t, k, h, l, w/	
	/khræm/	[khrê:m]	'to be crisp'
	/kæh/	[kê:h]	'to be tight'
	/pæŋ/	[pê:ŋ]	'to chew'
	[æ.]	a half-long low front vowel, occurs only before /?/	
	/læ?/	[lé.ʔ]	'to find, a fruit unit'
	/ɤæ?/	[ɤé.ʔ]	'how much/many'
	/thæ?/	[thé.ʔ]	'next'

/æ:/	[æ:]	a long low front vowel, occurs before /m, n, ŋ, p, t, k, r, w/ and in open syllables.
/kæ:m/	[k ^h æ:m]	'to be sharp'
/phæ:n/	[ph ^h æ:n]	'a mirror'
/pæ:ŋ/	[p ^h æ:ŋ]	'a word, a language'
/tɔtæ:/	[tɔt ^h æ:]	'a wall gecko'
/ʊ/	[ʊ]	a short high central vowel, occurs before /m, n, ŋ, t, c, k, h/.
/thʊm/	[t ^h ʊm]	'to crowd around'
/khʊn/	[k ^h ʊn]	'to overlie'
/bʊt/	[bʊt]	'a moment'
[ʊ.]		a half-long high central vowel, occurs only before /?/.
/kʊ?/	[k ^h ʊ.?	'a head'
/mlʊ?/	[ml ^h ʊ.?	'the matter'
/khrʊ?/	[khr ^h ʊ.?	'to be productive'
/u:/	[u:]	a long high central vowel, occurs before /n, p, t, k, r/ and in open syllables.
/lʊ:n/	[l ^h ʊ:n]	'to put off'
/nthʊ:r ?ʊ:t/	[nth ^h ʊ:r ?ʊ:t]	'a rainbow'
/khʊ:k/	[k ^h ʊ:k]	'to swallow'
/lʊ:/	[l ^h ʊ:]	'to be still'

/ə/	[ə]	a short mid central vowel, occurs before all of the final consonants except /ʔ, r/
/ ?ə m/	[?ə̂ m]	'to take a bath'
/lə p/	[lə̂ p]	'a valley'
/mə j/	[mə̂ j]	'female'
[ə.]		a half-long mid central vowel, occurs only before /ʔ/
/hə ʔ/	[hə̂.ʔ]	'to hate'
/ɕi jə ʔ/	[ɕi'jə̂.ʔ]	'to be far'
/ə:/	[ə:]	a long mid central vowel, occurs before /n, ŋ, t, k, r, j/ and in open syllables.
/mpə:n/	[mbə̂:n]	'a mate'
/thə:ŋ/	[thə̂:ŋ]	'to lean'
/ŋkhə:t/	[ŋkhə̂:t]	'to stagger'
/lə:/	[lə̂:]	'to forget'
/a/	[a]	a short low central vowel, occurs before all the final consonants except /ʔ/ and as a nucleus in presyllables.
/cap/	[cáp]	'to be suitable'
/jak/	[ják]	'dung'
/khaw/	[khāw]	'back'
/phapɔ:ŋ/	[pha'pɔ̂:ŋ]	'a window'

	[a.]	a half-long low central vowel, occurs only before /?/
	/da?/	[dá.?.] 'to be thin'
	/ca?/	[cá.?.] 'cooked-rice'
/a:/	[a:]	a long low central vowel, occurs before all the final consonants except /?, h/ and in open syllables.
	/pa:k/	[pâ:k] 'a big spoon'
	/ra:j/	[râ:j] 'to be cruel'
	/na:r/	[nâ:r] 'to disappear'
	/kha:/	[khâ:] 'a fish'
/u/	[u]	a short high back vowel, occurs before all the final consonants except /?, r/
	/situn/	[sitûn] 'a pock'
	/nthut/	[nthút] 'to stumble over'
	/puc/	[púc] 'liquor'
	[u.]	a half-long high back vowel, occurs only before /?/
	/cu?/	[cú.?.] 'to be deep'
	/mphu?/	[mphú.?.] 'to be pregnant'
/u:/	[u:]	a long high back vowel, occurs before /h, p, t, c, k, r/ and in open syllables.

	/pu:n/	[p ^h u:n]	'to rob'
	/pru:t/	[pr ^h u:t]	'to pull'
	/lu:/	[l ^h u:]	'to scramble for'
/o/	[o]	a short mid back vowel, occurs before all the final consonants except /c, ʔ, r, w/	
	/ʃimoŋ/	[ʃi'm ^h oŋ]	'a star'
	/khot/	[k ^h oʔ]	'to sit with the knees'
	[o.]	a half-long mid back vowel, occurs only before /ʔ/	
	/loʔ/	[l ^h o.ʔ]	'to find'
	/toʔ/	[t ^h o.ʔ]	'to return'
/o:/	[o:]	a long mid back vowel, occurs before /m, n, ŋ, p, t, c, k, l, r, j/ and in open syllables.	
	.. /ʔo:m/	[ʔ ^h o:m]	'to piss'
	/nto:n/	[nd ^h o:n]	'there'
	/ʒo:/	[ʒ ^h o:]	'red'
/ɔ/	[ɔ]	a short low back vowel, occurs before all the final consonants except /p, ʔ, w/.	
	/tɔm/	[t ^h ɔm]	'to sit'
	/ʔɔŋ /	[ʔ ^h ɔŋ]	'to look at'
	/ŋɔŋ/	[ŋ ^h ɔŋ]	'to stand, to stop'

	[ɔ.]	a half-long low back vowel, occurs only before /ʔ/.	
	/ŋkhɔʔ/	[ŋkhɔ́.ʔ]	'an animal shell'
	/mphɔʔ/	[mphɔ́.ʔ]	'to dream'
/ɔ:/	[ɔ:]	a long low back vowel, occurs before /m, n, ŋ, p, t, c, k, l, r, j/ and in open syllables.	
	/khɔ:m/	[khɔ̂:m]	'to grope'
	/prɔ:ŋ/	[prɔ̂:ŋ]	'spirit'
	/tɔ:/	[tɔ̂:]	'do not know'

Diphthongs

There are three diphthongs in Pray.

/ia/	[ia]	begin with a short high front vowel followed by a short low central vowel, occur only before /h/	
	/phiah/	[phiáh]	'a direction, one of a pair'
	[i;a]	begin with a long high front vowel followed by a short low central vowel, occur elsewhere.	
	/pia/	[pî:a]	'two'
	/miaʔ/	[mî:aʔ]	'rain'
	/cianŋ/	[cî:aŋ]	'a house'

/ua/ [u:a] begin with a long high central vowel followed by a short low central vowel, occur in open syllables and before /t, k/ in Thai loan-word.

/lua/ [lɯ̃:a] 'a saw'

/cua/ [cɯ̃:a] 'a heart'

/luat/ [(khô:j mân) lɯ̃:at] 'a kind of tuber plant like potatoes'

/kuak/ [kɯ̃:ak] 'a pair of shoes'

/ua/ [ua] begin with a short high back vowel followed by a short low central vowel, occur only before /h/

/ɕinuah/ [ɕi'nuah] 'to point'

/ŋkhuah/ [ŋkhuah] 'to come off'

[u:a] begin with a long high back vowel followed by a short low central vowel, occur elsewhere.

/ɕuan/ [ɕũ:an] 'to ask'

/ɕuak/ [ɕũ:ak] 'saliva'

/ɕua?/ [ɕũ:a?] 'the moon'

4.2.3 Vowel Contrast

/i/ - /e/ /ndi?/ 'to wriggle to loss about'

/nde?/ 'beside'

/i:/ - /e:/ /mi:/ 'a negative marker'

/me:/ 'mother'

/e/ - /æ/	/ken/	'a palm civet'
	/kæn/	'to be tight'
/e:/ - /æ:/	/nthe:k/	'to move'
	/nthæ:k/	'to bend'
/u/ - /ə/	/mʌn/	'will'
	/mən/	'dark'
/u:/ - /ə:/	/lʉ:/	'to be still'
	/lə:/	'to forget'
/ə/ - /a /	/rəh/	'to loosen'
	/rah/	'to blossom'
/ə:/ - /a:/	/thə:ŋ/	'to lean'
	/tha:ŋ/	'to glow'
/u/ - /o/	/ʔuʔ/	'to stay'
	/ʔoʔ/	'a final particle'
/u:/ - /o:/	/(khaw) nthu:r/	'a roof'
	/ntho:r/	'the gill of a fish'
/o/ - /ɔ/	/ŋkoh/	'to hammer'
	/ŋkɔh/	'the chest'
/o:/ - /ɔ:/	/ŋkho:/	'to be exhausted'
	/ŋkɔ:/	'the neck'

/i/ - /ɯ/	/kih/	'to be old'
	/kwh/	'to catch fire'
/i:/ - /ɯ:/	/ʔi:t/	'to repair, to untie'
	/(nthɯ:r) ʔɯ:t/	'rainbow'
/ɯ/ - /u/	/phɯŋ/	'a group'
	/phuŋ/	'to jumble, to be disorderly'
/ɯ:/ - /u:/	/lɯ:/	'to be still'
	/lu:/	'to scramble for'
/e/ - /ə/	/khat khat/	'to be filled with awe'
	/khet/	'to be quite'
/e:/ - /ə:/	/re:/	'a porcupine'
	/rə:/	'to go'
/ə/ - /o/	/ləm/	'together'
	/lom (ciaŋ)/	'the ridge of a roof'
/ə:/ - /o:/	/ʃə:r/	'to roast over an open fire'
	/ʃo:r/	'to shove'
/æ/ - /a/	/ɕaŋ/	'the entrails'
	/ɕaŋ/	'a bitter taste'
/æ:/ - /a:/	/kæ:n/	'a seed'
	/ka:n/	'to be defeat'

/a/ - /ɔ/	/lanŋ/	'to fall'
	/lɔŋ/	'Clas. for person'
/a:/ - /ɔ:/	/pa:k/	'difficult'
	/pɔ:k/	'a hand net'
/i/ - /i:/	/pit/	'a measure of capacity for rice'
	/pi:t/	'to wipe, to scrub'
/e/ - /e:/	/cen/	'from'
	/ce:n/	'fruit meat'
/ɛ/ - /ɛ:/	/pɛt/	'a salt taste'
	/pɛ:t/	'a worm'
/ɯ/ - /ɯ:/	/nthɯh/	'above'
	/nthɯ:r/	'a bat'
/ə/ - /ə:/	/khət/	'to pound'
	/ŋkhə:t/	'to stagger'
/a/ - /a:/	/wanŋ/	'the chin'
	/wa:nŋ/	'a year'
/u/ - /u:/	/pɯt/	'a mosquito net'
	/pɯ:t/	'to poke'
/o/ - /o:/	/mot/	'disbelieve'
	/mo:t/	'to bend down'

/ɔ/ - /ɔ:/	/lɔŋ/	'a clas. for a person'
	/lɔ:ŋ/	'a wild boar'
/ɛ/ - /ə/	/rɛh/	'to tear'
	/rəh/	'to loosen'
/ɛ:/ - /ə:/	/ɛɛ:r/	'a langur'
	/ɛə:r/	'to thoast over fire'
/a/ - /ɔ/	/tam/	'to insert'
	/ɔm/	'to sit'
/a:/ - /ɔ:/	/ca:m/	'to expose'
	/cɔ:m/	'to walk on tiptoe'
/ia/-/ua/	/kiaŋ/	'stone'
	/kuak/	'shoes'
/ua/-/ua/	/dua/	'the cockspur'
	/dua/	'long'
/ia/-/ua/	/kiaŋ/	'stone'
	/kuar/	'to stir'

4.2.4 Vowel Distribution

There are two sub-classes of vowel according to their distribution: vowel sub-class V_1 and vowel sub-class V_2 .

4.2.4.1 Vowel Sub-class V_1

These are vowels that occur both in major and minor syllables. They are short vowels, /i, u, e, a, o/.

Examples:

/ɛiw/	'sweet'
/cincɔk/	'a house corner'
/kruc/	'to fall'
/dʌkda:k/	'to be rugged'
/mak/	'to love, to like'
/parlɔr/	'the lightning'
/mpɦul/	'stomuch'
/pʌmɔu:/	'to be sleepy'
/lɔh/	'to be slope'
/kɔkɔk/	'to hobble'

4.2.4.2 Vowel Sub-class V_2

These are vowels that occur in major syllable. They are all vowels,

Examples:

/ɛiw/	'sweet'
/ci:k/	'to be burnt'
/ɲep/	'to touch'
/ɛe:t/	'to laugh'

/pæn/	'grass'
/ʔæ:ŋ/	'to do, make'
/krʊc/	'to fall'
/lʊ:n/	'to take off'
/lʒn/	'to be sharp'
/kə:k/	'curry'
/mak/	'to love, to like'
/dɑ:ŋ/	'to road'
/mpɦul/	'stomuch'
/cu:r/	'to go down'
/pron/	'a pimple'
/ko:p/	'a shirt'
/lɔh/	'to be slope'
/mpɦɔ:t/	'a blanket'
/mia?/	'rain'
/kʊak/	'a pair of shoes'
/mpuat/	'a bee'

The co-occurrences of vowels and consonants are shown in the following charts.

	i	i:	e	e:	æ	æ:	ʊ	u:	ə	ɜ:	a	a:	u	u:	o	o:	ɔ	ɔ:	ia	ʊa	ua		
m	✓	✓	✓	✓	✓	✓	✓	-	✓	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	-	✓	
n	✓	✓	✓	-	✓	-	-	-	✓	-	✓	✓	✓	-	✓	✓	-	✓	-	-	-	-	
ɸ	✓	✓	✓	-	✓	-	-	-	-	-	✓	✓	-	✓	-	✓	✓	✓	-	-	✓		
ŋ	✓	-	-	-	-	-	✓	-	-	-	-	✓	✓	-	✓	-	✓	✓	-	-	✓		
p	✓	✓	-	✓	-	✓	✓	-	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	
t	✓	✓	✓	-	-	-	-	-	✓	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	-	-	
c	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
k	✓	-	✓	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ʔ	✓	✓	-	-	✓	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	
β	-	-	✓	-	-	-	✓	-	-	✓	✓	✓	✓	✓	✓	✓	-	-	✓	-	-	✓	
ɸ	✓	-	✓	✓	✓	✓	-	-	-	-	✓	✓	✓	✓	✓	✓	-	-	✓	-	✓	✓	
ɛ	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
h	-	✓	-	✓	-	✓	-	-	✓	✓	✓	✓	-	-	-	-	✓	✓	-	-	-	-	
l	✓	-	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓
r	-	✓	-	✓	✓	-	-	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	-	-	✓	
w	✓	✓	✓	-	✓	✓	-	-	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	
j	-	-	✓	✓	-	-	-	-	✓	-	✓	✓	✓	-	-	-	-	-	✓	-	-	-	

Chart 8 : Co-occurrence of Vowels and Initial Consonants in Major Syllables (Vowels after Consonants).

The co-occurrence of vowels and initial consonants in major syllables as shown in the chart shows that:

/i/	occurs after all consonant except	/b, h, r, j/
/i:/	does not occur after	/ŋ, k, b, d, ʒ, l, j/
/e/	does not occur after	/ŋ, p, ʔ, h, r/
/e:/	occurs only following	/m, p, c, d, ʒ, h, r, j/
/æ/	does not occur after	/ŋ, p, t, b, h, j/
/æ:/	does not occur after	/n, ɲ, ŋ, t, b, r, j/
/ʊ/	occurs after	/m, ŋ, p, c, k, b, ʒ/
/u:/	occurs after	/c, ʔ, ʒ, l/
/ə/	does not occur after	/p, ŋ, b, d/
/ə:/	occurs after	/k, b, ʒ, h, l, r/
/a/	occurs after all consonants except	/ŋ/
/a:/	occurs after all consonants	
/u/	does not occur after	/ɲ, t, h, w/
/u:/	does not occur after	/m, n, ŋ, t, h, r, w, j/
/o/	does not occur after	/ɲ, h, w, j/
/o:/	does not occur after	/ŋ, b, d, h, w, j/
/ɔ/	does not occur after	/n, b, d, w, j/
/ɔ:/	occurs after all consonants except	/w/
/ia/	occur after	/m, p, t, c, k, ʒ/
/ua/	occur after	/c, k, d, l/
/ua/	do not occur after	/n, t, h, w, j/

	i	i:	e	e:	ɛ	ɛ:	u	u:	ə	ə:	a	a:	u	u:	o	o:	ɔ	ɔ:	ia	ua	ua	
m	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-
n	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ɸ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ŋ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-
t	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	✓	-	-	-	-	-
c	✓	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-
k	-	-	-	-	-	-	-	-	-	-	✓	-	-	✓	-	✓	-	-	-	-	-	-
ʔ	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
β	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
f	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ɸ	✓	-	-	-	-	-	-	-	-	-	✓	-	✓	-	-	✓	-	-	-	-	-	-
h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
l	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-
r	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-
w	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
j	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chart 9 : Co-occurrence of Vowels and Initial Consonants in Minor Syllables. (Vowels after consonants).

The co-occurrence of vowels and initial consonants in minor syllable as shown in chart 9 shows that only short vowels /i, u, ə, a, ʊ, ɔ/ can occur after initial consonants as in the following examples.

/i/	occurs after	/c, ʃ/	
	/cip/		'a negative particle'
	/ʃirec/		'a mole rat'
/u/	occurs after	/d/	
	/dʷkda:k/		'rugged, unsmooth'
/ə/	occurs after	/l/	
	/ʃiləpphlap/		'a butterfly'
/a/	occurs after	/m, p, c, k, ʃ, r/	
	/manɔw/		'a squirrel'
	/parlar/		'the lightning'
	/caŋnak/		'how'
	/kacaŋ/		'horn'
	/ʃaʃa:/		'a basket'
	/ʃirakthak/		'a house lizard'
/u/	occurs after	/ʃ/	
	/ʃumʃu:/		'drowsy'
/ɔ/	occurs after	/t, k, ʃ/	
	/tɔttɔ:/		'a wall gecko'
	/kɔkjɔk/		'to hobble'
	/ʃppɔh/		'a millipede'

	m	n	ɲ	ŋ	p	t	c	k	ʔ	h	l	r	w	j
i	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-
i:	-	✓	-	✓	✓	✓	-	✓	-	-	-	-	-	-
e	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
e:	-	✓	-	-	-	✓	-	✓	-	-	✓	✓	✓	-
ɛ	✓	✓	-	✓	✓	✓	-	✓	✓	✓	✓	-	✓	-
ɛ:	✓	✓	-	✓	✓	✓	-	✓	-	-	-	✓	✓	-
ɯ	✓	✓	-	✓	-	✓	✓	✓	✓	✓	-	-	-	-
ɯ:	-	✓	-	-	✓	✓	-	✓	-	-	-	✓	-	-
ə	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
ə:	-	✓	-	✓	-	✓	-	✓	-	-	-	✓	-	✓
a	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
a:	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓	✓
u	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
u:	-	✓	-	-	✓	✓	✓	✓	-	-	-	✓	-	-
o	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	-	✓
o:	✓	✓	-	✓	✓	✓	✓	✓	-	-	-	✓	-	✓
ɔ	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	✓
ɔ:	✓	✓	-	✓	✓	✓	✓	✓	-	-	✓	✓	-	✓
ia	✓	-	-	✓	✓	✓	-	✓	✓	✓	✓	-	-	-
ɯa	-	-	-	-	-	✓	-	✓	-	-	-	-	-	-
ua	✓	✓	-	✓	-	✓	-	✓	✓	✓	-	✓	-	-

Chart 10 : Co-occurrence of Vowels and Final Conscnants
in Major Syllbles.

The correlation between vowels and final consonants will be discussed in 5 groups as follow:

1. Labial group /m, p, w/

/m/ does not occur after long vowels /i:, e:, u:, ə:, u:, ʊa/

/p/ does not occur after /e:, u, ə:, ɔ, ʊa, ua/

/w/ does not occur after /i:, e, u, u:, ə, ə:, u, u:, o, o:, ɔ, ɔ:, ʊa, ua/

2. Alveolar group /n, t, l, r/

/n/ does not occur after /ia, ʊa/

/t/ can occur after all vowels

/l/ does not occur after /i:, e, æ:, u, u:, ə:, u:, o:, ʊa, ua/

/r/ does not occur after /i, i:, e, æ, u, o, ia, ʊa/

3. Palatal group /n, c, j/

/ɲ/ occurs after /ə, a, a:, u, o, ɔ /

o:, ɔ:, ia, ʊa, ua/

/c/ does not occur after /i:, e:, æ, æ:, u:, ə:, o, ia, ʊa, ua/

/j/ only occurs after /ə, ə:, ə, a:, u, o:, ɔ, ɔ:/
ʊa, ua/

4. Velar group /ŋ, k/

/ŋ/ occurs after all vowels except /e:, u:, u:, ʊa/.

/k/ does occur after all vowels

5. Glottal group /ʔ, h/

They occur after all short vowels and diphthongs /ia, ua/

	m	n	ɲ	ŋ	p	t	c	k	ʔ	h	l	r	w	j
i	-	-	-	✓	-	-	-	-	-	-	-	-	-	-
i:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
e	-	-	-	-	-	-	-	-	-	-	-	-	-	-
e:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
æ	-	-	-	-	-	-	-	✓	-	-	-	-	-	-
æ:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ɪ	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ɪ:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ə	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ə:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
a	✓	✓	-	✓	-	✓	-	-	-	-	-	✓	-	-
a:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
u	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
u:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o	-	-	-	✓	-	-	-	-	-	-	-	-	-	-
o:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ɔ	-	-	-	-	✓	✓	-	✓	-	-	-	-	-	-
ɔ:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ɯa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ua	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Chart 11: Co-occurrence of Vowels and Final Consonants
in Minor Syllables.

The co-occurrence of vowels and final consonants in minor syllables as shown in the chart shows that:

/i/	occurs before	/ŋ/
/æ/	occurs before	/k/
/a/	occurs before	/m, n, ŋ, t, r/
/u/	occurs before	/m, n/
/o/	occurs before	/ŋ/
/ɔ/	occurs before	/p, t, k/

/i:, e, e:, ɛ:, ɯ, ɯ:, ə, ə:, a:, u:, o:, ɔ:, ia, ɯa, ua/

do not occur before any final consonants in minor syllables.

	i	i:	e	e:	æ	æ:	ʊ	ʊ:	ə	ə:	a	a:	u	u:	o	o:	ɔ	ɔ:	ia	ma	ua
mp	✓	-	-	-	-	-	-	✓	✓	✓	-	✓	-	✓	-	✓	-	✓	✓	-	✓
ml	✓	-	-	✓	✓	-	✓	-	-	✓	-	✓	-	✓	-	-	✓	✓	-	-	-
nt	✓	-	✓	-	✓	✓	-	-	✓	✓	-	-	-	-	-	✓	✓	✓	✓	-	-
nc	✓	-	✓	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
ɲə	✓	-	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	-
ɲw	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-
ŋk	-	-	✓	-	✓	-	✓	-	✓	-	✓	✓	✓	-	✓	-	✓	✓	✓	✓	✓
ŋw	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-
ph	✓	✓	✓	✓	✓	✓	✓	-	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
pl	-	✓	-	-	✓	-	-	-	-	✓	✓	✓	-	-	-	-	-	-	-	-	-
pr	-	-	-	-	-	-	✓	-	-	-	✓	✓	-	✓	✓	-	-	✓	-	-	-
th	✓	✓	✓	-	✓	-	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
cw	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-
kh	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-	✓	✓	✓	✓	-
kl	-	-	✓	✓	-	-	-	-	-	-	✓	✓	-	-	-	-	✓	-	-	-	-
kr	-	-	-	-	-	-	✓	-	-	-	✓	✓	-	-	✓	-	-	✓	-	-	-
kʷ	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-
ʃr	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ʂw	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-

Chart 12: Co-occurrence of Vowels and Two-consonant Clusters

Note : Only the two-consonant clusters /ph-/ is found occurring with the vowel /a/ in minor syllables.

The co-occurrence of vowels and two-consonant clusters as shown in the chart shows that:

/i/	occurs after	/mp, m̄, nt, ɲc, ɲɕ, ph, th /
/i:/	occurs after	/ph, p̄l, th, kh/
/e/	occurs after	/nt, ɲc, ɲɕ, ŋk, ph, th, kh, kl/
/e:/	occurs after	/ml, p̄h, kh, kl/
/æ/	occurs after	/ml, nt, ɲɕ, ŋk, ph, pl, th, kh/
/æ:/	occurs after	/nt, ɲc, ph, kh/
/u/	occurs after	/ml, ŋk, ph, pr, th, kh, kr/
/u:/	occurs after	/kh/
/ə/	occurs after	/mp, ɲc, ɲɕ, ŋk, ph, th, kh/
/ə:/	occurs after	/mp, nt, ɲc, ɲɕ, pl, th, kh/
/a/	does not occur after	/cw/
/a:/	does not occur after	/m̄p, ml, nt, ɲw/
/u/	occurs after	/mp, ml, ɲc, ɲɕ, ŋk, ph, th, kh/
/u:/	occurs after	/ɲc, ph, pl, th/
/o/	does not occur after	/ml, nt, ɲw, ŋw, pl, cw, kl, kw, ɕr, ɕw/
/o:/	occurs after	/nt, ɲc, ɲɕ, ph, th/
/ɔ/	does not occur after	/ɲw, ŋw, pl, pr, cw, kr, kw, ɕr, ɕw/
/ɔ:/	does not occur after	/ɲw, ŋw, pl, cw, kl, kw, ɕr, ɕw/
/ia/	occurs after	/mp, ɲc, ŋk, ph, kh/
/wa/	do not occur after any two-consonant clusters	
/ua/	occurs after	/mp, ŋk, th, kh/

	i	i:	e	e:	ɛ	ɛ:	ɨ	ɨ:	ə	ə:	a	a:	u	u:	o	o:	ɔ	ɔ:	ia	ua	ua	
mph	-	-	-	-	✓	-	-	-	✓	-	✓	✓	✓	-	✓	-	✓	✓	✓	✓	-	✓
mpr	✓	-	-	✓	-	✓	-	-	-	-	✓	-	-	-	-	✓	-	-	-	-	-	-
nth	✓	-	-	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
ncw	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-
ŋkh	-	-	-	✓	✓	-	-	-	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	-	-	✓
ŋkl	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-
ŋkr	✓	✓	-	-	✓	-	-	-	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	-	-	✓
phl	✓	-	-	✓	✓	✓	-	✓	✓	-	✓	✓	-	-	-	-	✓	✓	-	-	-	-
phr	-	-	-	-	-	✓	-	-	-	-	✓	✓	-	-	-	-	✓	-	-	-	-	-
phw	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-
khl	✓	-	-	-	-	✓	-	✓	✓	-	✓	✓	-	✓	✓	-	✓	-	-	-	-	-
khr	-	-	✓	✓	✓	✓	✓	-	✓	-	✓	✓	-	✓	-	-	-	✓	-	-	-	-
khw	-	-	-	-	✓	✓	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-
kwr	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-

Chart 13: Co-occurrence of Vowels and Three-consonant Clusters

The co-occurrence of vowels and three-consonant clusters as shown in the chart shows that:

/i/	occurs after	/mpr, nth, ŋkr, phl, kh1/
/i:/	occurs after	/nkr/
/e/	occurs after	/khr/
/e:/	occurs after	/mpr, nth, ŋkɛ, phl, khr/
/æ/	occurs after	/mph, nth, nkɛ, nkr, phl, khr, khw/
/æ:/	does not occur after	/mph, pɛw, ŋkɛ, ŋkl, ŋkr, phw, kwr/
/u/	occurs after	/nth, khr/
/u:/	occurs after	/nth, phl, kh1/
/ɔ/	occurs after	/mph, nth, ŋkɛ, ŋkr, phl, kh1, khr/
/ɔ:/	occurs after	/ŋkɛ/
/a/	occurs after	all three-consonant clusters
/a:/	does not occur after	/mpr, ŋkɛ, ŋkl, phw, kwr/
/u/	occurs after	/mph, nth/
/u:/	occurs after	/nth, ŋkr, kh1, khr/
/o/	occurs after	/mph, nth, ŋkɛ, ŋkr, kh1/
/o:/	occurs after	/mpr, nth, ŋkɛ, ŋkr/
/ɔ/	occurs after	/mph, nth, ŋkɛ, ŋkr, phl, phr, kh1/
/ɔ:/	occurs after	/mph, ŋkɛ, ŋkr, phl, khr/
/ia/	occurs after	/mph/
/ua/	do not occur after	any three-consonant clusters
/ua/	occurs after	/mph, ŋkɛ, ŋkr/

There are five vowels occurring after four-consonant clusters as following:

i:	occurs after	mphr
a	occurs after	khwr
a:	occurs after	ŋkhr
ɔ, ɔ:	occurs after	mphi

4.3 Suprasegmental Features

Suprasegmental features are phonetic features that are associated with segmental sounds. The syllable nucleus (vowel) always carries the suprasegmental features, though there may be some influence on the consonants.

4.3.1 Pitch

In this Pray dialect, the occurrence of pitch is predictable. There are two pitch patterns conditioned by segmental environment (consonants and vowels): level pitch and high-falling pitch.

4.3.1.1 Level Pitch

The level pitch which is usually high is marked phonetically by [ˈ] and occurs in a closed syllable type ending with the obstruents /p, t, c, k, ʔ/ and /h/ and having a short single vowel as the nucleus of the syllable.

Examples:-

[pt ^h ɛ́p]	'to go down'
[ɛ́nít]	'a lip'
[méc]	'to know'
[pʃɔ́k]	'to fear'
[kú.ʔ]	'a head'
[páh]	'write, to be bright'

Also, in the closed syllable type ending with a glottal /ʔ/ or /h/ and having a diphthong /ia or ua/ as the nucleus of the syllable, the high level pitch occurs.

Examples:

[mi:áʔ]	'rain'
[puáh]	'to be near'

The high level pitch sometimes occurs in fluctuation with a mid or low level pitch which are marked phonetically by [-] and [ˋ]

Examples:

[mát]	[māt]	[màt]	'a face, an eye'
[lḥ]	[lḥ]	[lḥ]	'a hill'
[bák]	[bāk]	[bàk]	'nearly'
[ʔḥt]	[ʔḥt]	[ʔḥt]	'to angry'

4.3.1.2 · High-- Falling Pitch

The high-falling pitch is written phonetically as [ˆ] and occurs:

1. in an open syllable type.

Examples:

[mê:]	'a mother'
[pḥ:]	'they'
[đu:â]	'long'

2. in a closed syllable type ending with a consonant, /m, n, ɲ, ŋ, w, j, l or r/.

Examples:

[mi:am]	'blood'
[lɯ:n]	'to put off (clothes)'
[ʔəɲ]	'I'
[ɕiŋ]	'a pig'
[ʔaw]	'a father'
[nɑ:j]	'an aunt'
[mphul]	'stomuch'
[su:ar]	'to lead by the hand'

and 3. in a closed syllable type ending with an obstruent /p, t, c, k/ and having a long vowel or a diphthong as the nucleus of the syllable.

Examples:

[ti:p]	'to count'
[mɛ:t]	'to be mild'
[ɕi'mo:c]	'an ant'
[pi:ak]	'a bear'

4.3.2 Stress

A syllable is said to be stressed if it is more prominent than the surrounding syllables. In Pray, stress is predictable. It is conditioned by the position of the syllable in the stress group, that is, stress always falls on the last syllable of a stress group.

Examples:

['nâ:r]	'≅ wing'
[çi'næ:]	'≅ moust'
[çiləp'phlɔp]	'≅ butterfly'

Chapter III

A COMPARISON OF PRAY AND MAL PHONOLOGY

Pray and Mal which are the two main dialects of the T'in language have certain differences and similarities in their phonological systems that are worthwhile comparing. In this chapter, the phonological system of Pray discussed in chapter two is compared with the Mal phonological system discussed by David Filbeck in 'Mal (T'in)' (1976) and 'Mal-English Dictionary' (1987). Filbeck's data were collected from Mal speakers living in three villages: Huay Pud and Toey in Pua district and Pha Nam Yoy in Chieng Klang district, Nan province.

In this chapter the Mal phonological system will be firstly presented, then the similarities and differences between these two dialects will be discussed.

1. Mal Phonological System

1.1 Intonation

Intonation pattern in Mal is comprised of three degrees of stress: strong stress /1/, medium stress /2/ and weak stress /3/. Each stress contains an accompanying pitch*: high pitch with

*Various patterns of pitch had been discribed in sec. 1.4.3

strong stress, mid pitch with medium stress, and low pitch with weak stress. The strong stress forms the center of the intonation contour. The medium and weak stresses form the pendant. A contour may consist of only a center or a center with preceding pendant. Also, the medium stress or weak stress may occur following the center on a question marker or emphatic marker respectively. The three sentence stresses can be illustrated in the following sentences:

/²?əŋ ³?aj mə: poŋ ¹sa:/

'I have not yet eaten'

/²pa:m cu: ³sæ? ²məŋ ¹?əc/

'They (dual) have gone down to the Thai villages'

/²mah ³poŋ sa: ¹?əc ²jo:/

'Have you eaten already'

/²kajh pu? ¹?æ: ³pə?/

'That's the way it is'

1.2 Stress Group

Without including a compound word, the stress group in Mal is divided into two types according to their structure.

1.2.1 Monosyllabic(Stress Group)

It consists of one major syllable and is found commonly in Mal.

Examples:	[cák]	'to go'
	[khaː]	'fish'
	[kluák]	'white'

1.2.2 Disyllabic(Stress Group)

It consists of one major syllable preceded by a minor syllable.

Examples:	[pa'thiá?]	'evening'
	[sa'nâ:t]	'a gun'
	[ma'ʔæ:]	'what'

1.3 Syllable

The syllable in Mal can be divided into two types according to their structure: open syllable and closed syllable.

1.3.1 Open Syllable

It has sub-types as shown along with examples below.

CV(V)	/no:/	'a final particle'
	/pua/	'for, for the purpose of'
CCV(V)	/thi:/	'the hand, arm'
	/plua/	'name of river'
CCCV	/ŋkja:/	'a bamboo grate hanging above a fireplace'

All of them can function as both major syllables and minor syllables.

Examples:	[pa'ŋá?]	'rice field'
	[tha'lê:w]	'see the meaning on page
	[mpha'lô:ŋ]	'the skull'

It should be noted that the minor syllable CCCV- is very rare.

1.3.2 Closed Syllable

It also has sub-types as shown along with examples below.

CV(V)C	/mat/	'the face, eyes'
	/piar/	'two, also'
CCV(V)C	/ŋkoh/	'to nail'
	/plian/	'to be clear of legs'
CCCV(V)C	/phli:ŋ/	'to grill'
	/kʰluak/	'earthwome'
CCCCVVC	/mphluan/	'to agree'
CV(V)CC*	/ʔajh/	'swollen'
	/noojh/	'lower lip'
CCV(V)CC	/nsɔjh/	'a hornet'
	/nsuajh/	'to whittle'
CCCVCC	/ŋkhajh/	'to sneeze'

All of them can function as major syllables. Only CVC and CCVC can also function as minor syllables.

Examples:

[tɔk'tô:]	'a wall gecko'
[ŋcoŋ'lóʔ]	'to shake'

1.4 Phoneme

1.4.1 Consonants

1.4.1.1 Single Consonants

There are seventeen single consonant phonemes of Mal as follows:

*See sec. 4 p. 110

Manner \ Point					
	Labial	Alveolar	Palatal	Velar	Glottal
Nasal	m	n	ɲ	ŋ	
Plosive vl	p	t	c	k	ʔ
vd	b-	d-			
Fricative		s-			h
Lateral		l			
Semi-vowel	w		j	ɥ*	

Chart 14: Mal Consonant Phonemes.

Note : Dashes show the limit of positions in which the phonemes can occur.

Examples:	/m/	/mo:t/	'an ant'
		/ʔx:m/	'to do'
	/n/	/nam/	'he, she'
		/cə:n/	'to be bright (of light)'
	/p/	/pa:w/	'to squash'
		/lɔ:p/	'to tell'
	/ŋ/	/ŋe:ŋ/	'to hear'
		/laŋ/	'a male'
	/p/	/puc/	'liquor'
		/kap/	'a box'

*Filbeck uses the symbol /ɥ/ for this phoneme.

/t/	/tɔk/	'to step on'
	/ku:t/	'to enter'
/c/	/cak/	'to go'
	/məc/	'to see'
/k/	/ki:k/	'to set fire to'
	/ʔa:k/	'sunshine'
/ʔ/	/ʔi:/	'we (inclusive)'
	/ʔiaʔ/	'far'
/b-/	/bot/	'cloud'
/d-/	/dɔw/	'over there'
/s-/	/sɔ:/	'field'
/h/	/hoʔ/	'better'
	/ʔiah/	'a wife'
/l/	/lɔ:c/	'the tip, the end'
	/lɔ:l/	'the buttocks'
/w/	/wa:ŋ/	'a year'
	/ʔaw/	'a father'
/j/	/jɔ:k/	'a toad'
	/mo:j/	'one'
/-ɰ/	/ɰaw/	'cold'

The phoneme /ɰ/ is evidently a unique development in Ban Pha Nam Yoi-Ban Toei dialect of Mal. It corresponds to /r/ in final position in another dialect. For example, the word /suɰ/ 'be rotten' in this dialect corresponds to /sur/ in Huay Pud dialect (Filbeck, 1976).

1.4.1.2 Consonants in Clusters

1.4.1.2.1 Two-Consonant Clusters

There are twenty-five two-consonant clusters in Mal as presented along with examples below.

/mp-/	/mpəl/	'to kill'
/mh-/	/mha:w/	'to claw'
/nt-/	/nteh/	'a cup'
/ns-/	/nsianj/	'slope, noise'
/nh-/	/nha:ŋ/	'palm of hand'
/ŋc-/	/ŋcuh/	'pregnant'
/ŋh-/	/ŋhah/	'to pull sharply'
/ŋk-/	/ŋka:p/	'the mouth'
/ŋw-/	/ŋwa:j/	'to return'
/ph-/	/phæ?/	'three'
/pl-/	/plin/	'to turn (over)'
/pj-/	/pjan/	'a pimple'
/th-/	/thi:/	'the hand'
/cw-/	/cwæ:ŋ/	'corner'
/kh-/	/khæh/	'a mountain goat'
/kl-/	/klwɪl/	'to lick'
/kj-/	/kjwɪc/	'to fall out'
/kw-/	/kwa:t/	'to beck on'
/ʔw-/	/ʔwanj/	'sad'
/ʔj-/	/ʔjah/	'wife'
/bj-/	/bjæh/	'a kind of bean'
/sw-/	/swa?/	'a baboon'

/lh-/	/lhɔ:j/	'tad pole'
/wh/	/whæt/	'often'
	/ciawh/	'to split'
/jh/	/jhun/	'to boil'
	/bjiajh/	'a kind of mushroom'

1.4.1.2.2 Three - Consonant Clusters

There are fourteen three-consonant clusters in Mal as presented along with examples below.

/mph-/	/mphul/	'stomach'
/mpl-/	/mplɔh/	'mountain'
/mpj-/	/mpja?/	'rice straw'
/nth-/	/nthuɔ/	'a bat'
/ŋkh-/	/ŋkhiaɔ/	'finger nail'
/ŋkl-/	/ŋklaŋ/	'a body'
/ŋkj-/	/ŋkjæ?/	'a pestle'
/phl-/	/phlæ?/	'a fruit'
/phw-/	/phwa:j/	'cotton'
/phj-/	/phjam/	'a person'
/thw-/	/thwa:ɔ/	'a bird trap'
/khl-/	/khlɪh/	'to fall (off something)'
/khw-/	/khwan/	'a son/danghter'
/khj-/	/khju:t/	'a sore, pox'

A four-consonant cluster in Mal is found only in one word: /mphluɔŋ/ 'to agree'

1.4.2 Vowels

1.4.2.1 Single Vowels

There are eighteen single vowel phonemes in Mal as shown below.

Position \ Height	Front		Central		Back	
	Short	Long	Short	Long	Short	Long
High	i	i:	ɨ	ɨ:	u	u:
Mid	e	e:	ə	ə:	o	o:
Low	æ	æ:	a	a:	ɔ	ɔ:

Chart 15: Mal Single Vowel Phonemes.

Examples:

/i/	/kiŋ/	'to sew'
/i:/	/ʔi:m/	'full'
/e/	/leh/	'out'
/e:/	/ʔe:n/	'that'
/æ/	/phæʔ/	'three'
/æ:/	/wæ:/	'trousers, pants'
/ɨ/	/kluʔ/	'the head'
/ɨ:/	/ŋɨ:m/	'the heart'
/ə/	/kəp/	'to boil'
/ə:/	/də:/	'at all'
/a/	/maŋ/	'a snake'

/a:/	/kha:/	'a fish'
/u/	/but/	'a shirt'
/u:/	/ʔu:t/	'a star'
/o/	/ʔoh/	'to steam'
/o:/	/no:/	'a particle'
/ɔ/	/ʔɔh/	'hot'
/ɔ:/	/mɔ:l/	'stair'

1.4.2.2 Diphthongs

There are four diphthongs in Mal as shown along with examples below.

/ie/	/ʔieh/	'to untie'
/ia/	/ʔiah/	'a wife'
/ua/	/ʔua/	'before'
/wa/	/lhwa/	'more than'

No long vowels occur before /ʔ/. No long vowels except /ɛ:/ occur before /h/. Only two examples of /-ɛ:h/ have been found.

/nɛ:h/	'clean'
/ŋkjɛ:h/	'landslide'

1.4.3 Tones

There are two tone phonemes, low-rising and non-low-rising, in Mal. The low-rising tone is an innovation used to assimilate loanwords from other languages. The non-low-rising tone is the various intonation pitches that are in contrast with the low-rising tone as shown below.

/po:/	'a kerosene con'	≠	/pǒ:/	'to converse'
/sɔ:t/	'worn out land'	≠	/sǒ:t/	'to hunt'
/ka:n/	'defeated'	≠	/kǎ:n/	'work'
/ca:n/	'to hire'	≠	/cǎ:n/	'be able'

There are also a number of words that differ in meaning due to one or two other elements.

/kho:/	'to be tired'	/khǒ:/	'a hinge'
/kjan/	'solid'	/kǎ:ŋ/	'middle' (lw)
/ŋan/	'grass'	/ŋǎ:m/	'an insect'
/ŋɔ:k/	'neck'	/ŋǒ:m/	'lonely' (lw)

Other words that carry the low-rising tone include:

/thiǎ?/	'below'
/cǒ:j/	'to help'
/cǎ:ŋ/	'a corner'
/khǒ:m/	'above'
/kwǎ:t/	'to make a backfire'
/bǎ:k/	'to smear on'
/bǎ:k/	'rice field'
/sanǎ:t/	'a rifle'
/jǎ:p/	'to drive away'
/ʔǎ:n/	'that'
/ʔǎ:/	'that one'
/mpjǒŋ/	'a type of basket'

Statistically the number of words in Mal containing the low-rising tone comprises more than 5% of the vocabulary.

The non-low-rising tone have allotones according to the structure of the syllable. If the syllable is open (having no final consonant but ending in a long vowel or diphthong), or if the syllable ends in a voiced continuant, the pitch is high-falling.

Examples:

[pæ̂:]	'you (plural)'
[nâm]	'he'
[kiãŋ̂]	'home'

However, if the syllable ends in a consonant, that is, an obstruent or /h/, the pitch is level.

Examples:

/cak/	[cák]	[cāk]	[càk]	'to go'
/luh/	[lúh]	[lūh]	[lùh]	'?'
/sɔ:t/	[sɔ́:t]	[sɔ̄:t]	[sɔ̀:t]	'worn out land'

.. For the non-low-rising tone, the height of each allotone depends on stresses which operate in the intonation (see sec. 1.1 in this chapter), high pitch for strong stress, mid pitch for medium stress and low pitch for weak stress.

2. Comparison of Pray and Mal Phonological System

2.1 Phoneme

2.1.1 Consonants

The comparison of the consonant phonemes in Pray and Mal will be discussed in terms of single consonants and consonants in clusters.

2.1.1.1 Single Consonants

There are 17 single consonants in Pray, but there are 18* in Mal. The detailed description of the phonemes is not exactly the same.

Point Manner		Pray					Mal				
		Labial	Alveolar	Palatal	Velar	Glottal	Labial	Alveolar	Palatal	Velar	Glottal
Nasal		m	n	ɲ	ŋ		ɱ	ɳ	ɲ	ŋ	
Plosive	vl.	p	t	c	k	ʔ	p	t	c	k	ʔ
	vd.						b-	d-			
Implosive		ɓ-	ɗ-								
Fricative				ɸ-		h	ɸ	s			h
Lateral			l					l			
Trill			r								
Semi-vowel		w		j			w		j		-ɥ

Chart 16: Comparison of Pray and Mal Single Consonants.

Note: Dashes show the limit of positions in which the phonemes can occur.

*The phoneme /ɸ/ is added. (see sec. 4, p.110)

The single consonant phonemes in these two dialects can be divided into single initial consonants and final consonants.

2.1.1.1 Single Initial Consonants

The single initial consonants in Pray are all of the consonant phonemes while all of the consonant phonemes except /-ɥ/ are single initial consonant phonemes in Mal. The chart showing of initial consonants functioning in each type of syllable is shown below.

Pray		Mal	
Minor	Major	Minor	Major
m	m	m	m
	n		n
	ɲ		ɲ
p	p	p	p
t	t	t	t
c	c	c	c
k	k	k	k
?	?	?	?
	β		b
	dʰ		d
ɸ	ɸ	s	s
	h		h
	l		l
	r		
	w		w
	j	j	j

Chart 17: Comparison of Pray and Mal Single Initial Consonants in each Type of Syllable.

From the chart :

1. There is a problem of different interpretation of some phonemes between Filbeck's system in describing Mal and my system in describing Pray of some phonemes that should be made clear. The discussion of the detailed differences of these phonemes which mainly concern the phonetic quality of consonants is provided as the following.

1.1 The implosives /ɓ, ɗ/ presented in Pray and the plosives /b, d/ presented in Mal are actually similar in the phonetic quality. Even though, in Pray, there is no contrast between the implosives [ɓ, ɗ] and plosives [b, d] (also, [b, d] are allophones of the homorganic voiceless plosive /p, t/ (see sec. 4.2.1.2)), I prefer using the implosives /ɓ, ɗ/ to be closed to its phonetic quality whereas Filbeck prefers the plosives /b, d/.

1.2 The palatal fricative /ç/ presented in Pray and the alveolar fricative /s/ in Mal are also similar in the phonetic quality. The phoneme /ç/ presented in Pray has [s] and [ç] as its allophones, but [ç] is more common*; I, therefore, prefer to write it phonemically as /ç/ while Filbeck prefers /s/ for Mal.

2. All the single initial consonants in both dialects can function in the major syllable.

3. In Mal, the consonants /m, p, t, c, k, ʔ, s, j/ can function in the minor syllable while all, except the consonant /j/, can function in the Pray minor syllable.

*[ç] is found in most of the T'in people

2.1.1.1.2 Final Consonants

The comparison of final consonants functioning in each type of syllable is shown below.

Pray		Mal	
Minor	Major	Minor	Major
	-m		-m
-n*	-n		-n
	-ŋ		-ŋ
-ŋ	-ŋ	-ŋ	-ŋ
-p	-p	-p*	-p
-t	-t		-t
	-c		-c
-k	-k	-k	-k
	-ʔ		-ʔ
			-ɸ**
			-s**
	-h		-h
	-l		-l
-r*	-r		
	-w		-w
-j	-j	-j*	-j
			-ɥ

Chart 18: Comparison of Pray and Mal Final Consonant in each Type of Syllable.

* = Found in only one word.

** = See sec. 4, p. 110

From the chart:

1. There are 14 final consonants in Pray, but there are 16 in Mal: there are no /-ϕ, -s/ in Pray.

2. The phoneme /r/ occurs in Pray while the consonant /ɥ/ occurs in Mal

3. All final consonants in both dialects occur in the major syllable.

4. The final consonants /n, ŋ, p, t, k, r, j/ occur in minor syllable in Pray while, only /ŋ, p, k, j/ occur in minor syllable in Mal.

2.1.1.2 Consonants in Clusters

Consonants in Clusters in these two dialects may be divided into three groups, two-consonant clusters, three-consonant clusters and four-consonant clusters.

2.1.1.2.1 Two-Consonant Clusters

There are 19 two-consonant clusters in Pray, but there are 25 in Mal as presented in the following chart.

CC	Pray	Mal
mp	✓	✓
mh	-	✓
ml	✓	-
nt	✓	✓
ns	-	✓
nh	-	✓
ɲc	✓	✓
ɲɕ	✓	-
ɲh	-	✓
ɲw	✓	-
ŋk	✓	✓
ŋw	✓	✓
ph	✓	✓
pl	✓	✓
pr	✓	-
pj	-	✓
th	✓	✓
cw	✓	✓
kh	✓	✓
kl	✓	✓
kr	✓	-
kj	-	✓
kw	✓	✓
?w	-	✓
?j	-	✓
bj	-	/
ɓr	✓	-
sw	-	✓
ɕw	✓	-
lh	-	✓
wh	-	✓
jh	-	✓

Chart 19: Comparison of Pray and Mal Two-Consonant Clusters.

Form the chart:

1. In Pray, the phoneme /h/ is in cluster only with oral plosives except /c/ and /ʔ/ whereas in Mal it also occurs with /m, n, ɲ, l, w, j/. So there are consonant clusters like /mh, nh, ɲh, lh, wh, jh/ in Mal which are not found in Pray.

2. The consonant clusters /ml, ɲw/ occur only in Pray.

3. The clusters /pɕ, pr, kr, ʃr/ in Pray do not occur in Mal whereas the clusters /ns, pj, kj, bj/ in Mal do not occur in Pray. These Pray clusters occur in correspondence with these Mal clusters respectively as presented in sec.3* in this chapter.

4. All the two-consonant clusters in both dialects occur only in initial position. (The final clusters /wh, jh/ presented in Mal are interpreted as single final consonant in Pray bilabial fricative /ɸ/ and alveolar fricative /s/ respectively, because these clusters make the syllable pattern in Mal to be very different from the syllable pattern in Pray and, from my opinion, it is the matter of the different interpretation.

2.1.1.2.2 Three-consonant Clusters

There are 14 three-consonant in both Pray and Mal.

*Sound Correspondence

CCC-	Pray	Mal
mph-	✓	✓
mpl-	-	✓
mpr-	✓	-
mpj-	-	✓
nth-	✓	✓
pcw-	✓	-
ŋkh-	✓	✓
ŋkl-	✓	✓
ŋkr-	✓	-
ŋkj-	-	✓
phl-	✓	✓
phr-	✓	-
phj-	-	✓
phw-	✓	✓
thw-	-	✓
khl-	✓	✓
chr	✓	-
khj	-	✓
khw	✓	✓
kwr	✓	-

Chart 28: Comparison of Pray and Mal Three-consonant Clusters.

From the chart:

1. Pray does not have the consonant clusters /mpl, thw/ as in Mal whereas Mal does not have the consonant clusters /pcw, kwr/ as in Pray.

2. Although Mal does not have the consonant clusters /mpr, ŋkr, phr, khr/ as in Pray, these consonant clusters in Pray correspond to the consonant clusters /mpj, ŋkj, phj, khj/ in Mal respectively.

3. Both Pray and Mal three-consonant clusters occur only in initial position.

3.1.1.2.3 Four-consonant Clusters

In Pray, the four-consonant clusters /mphl, mphr, ŋkhr, khwr/ have been found whereas in Mal only /mphl/ has been found.

	<u>Pray</u>		<u>Mal</u>
/mphlɔ:k/	'to peel'	/mphluan/	'to agree'
/mphri:t/	'to be scratched'		
/ŋkhra:t/	'rough'		
/khwra?/	'a shellfish'		

2.1.2 Vowels

The comparison of the vowel phonemes in Pray and Mal will be discussed in terms of single vowels and diphthongs.

2.1.2.1 Single Vowels

Both Pray and Mal have 18 single vowel phonemes. They are of the same quality.

i, i:	ɯ, ɯ:	u, u:
e, e:	ə, ə:	o, o:
æ, æ:	a, a:	ɔ, ɔ:

However, there are some differences between the vowels in these two dialects.

1. The vowel length in Mal carries a lighter functional load than it does in Pray; that is, not many words depend on vowel length to distinguish meanings. No contrast in a vowel length in identical environment can be found. Only the contrast in analogous environment have been found.

2. No long single vowel in Pray can occur before /h/ whereas only the vowel /æ:/ in Mal occurs before /h/. However, only two words, /næ:h/ 'clean' and /ŋkjæ:h/ 'landslide' have been found.

3. In minor syllable, all the Pray short single vowels except /e/ and /o/ can occur whereas in Mal all the short single vowels except /æ, ə, o/ occur.

2.1.2.2 Diphthongs

Pray has three diphthongs whereas Mal has four diphthongs.

<u>Pray</u>	<u>Mal</u>
-	/ie/
/ia/	/ia/
/ua/	/ua/
/ua/	/ua/

For detailed comparison:

1. The diphthong /ie/ does not occur in Pray whereas in Mal it is found in contrast with /ia/.

2. All diphthongs in both dialects occur only in major syllables.

2.1.3 Pitches

In Pray, there are two types of pitches, level and high-falling pitch which are not phonemic. But, in Mal, there are two phonemic pitches (or tones); low-rising pitch contrasting with non-low-rising. The following figure shows the comparison between pitches in these dialects according to different environments.

Environments		Pitch	
		Pray	Mal
Open syllable or syllable ending with a voiced continuant		HF	HF ≠ LR
Syllable ending with an obstruent and containing	long V.	HF	L ≠ LR
	short V.	L	L
	Diph.	HF	L ≠ LR
Syllable ended with /h/		L	L

Chart 21: Comparison of Pray and Mal Pitches.

- LR : Low-rising pitch
- HF : high-falling pitch
- L : level pitch
- V : single vowel
- Diph. : diphthong
- ≠ : occur in contrast with

From the chart:

1. In the open syllable or the syllable ending with a continuant, the high-falling pitch occurs in Pray whereas in Mal this pitch contour is found occurring in contrast with the low-rising pitch. In the examples below, the meaning of Pray words are the same as Mal words in the left column (if there are two columns of examples in Mal).

Example:

Pray	Mal	
[kâ:n]	[kâ:n] 'to be defeated'	≠ [kǎ:n] 'work'
[krân]	[kjân] 'hard'	≠ [kǎ:n] 'middle'
[phûn]	-	[pǔn] 'dust'
[thûn]	-	[thǔn] 'a swamp'
[kîn]	-	[cǐn] 'smell'
[hân]	-	[hǎn] 'rich'
[po:r]	[pô:] 'to speak'	≠ [pǒ:] 'kerosene can'
[ŋkhô:]	[khô:] 'to be tired'	≠ [khǒ:] 'a bamboo hinge'

2. In the syllable ending with an obstruent and containing a long vowel or a diphthong in Pray, the pitch is always high-falling whereas, in Mal, the level pitch* occurs in contrast with the low-rising pitch.

*see sec. 1.4.3

Example:

Pray	Mal		
[mphâ:c]	[mphá:c]	'to swipe'	
[pî:t]	[kí:t]	'to wipe, to scrub'	
[d̥k]			[d̥k] 'to crowd in'
[ɕuak]	-		[suak] 'to scold, salt'
[ɕô:t]	[sɔ́:t]	'sticky'	≠ [sɔ̌:t] 'to hunt'

There is an exception that it is only in Pray that the level pitch occurs in the syllable with final /ʔ/ and a diphthong.

Pray	Mal		
[míáʔ]	[míáʔ]	'rain'	-
			[thíáʔ] 'below, south'

3. In the syllable ending with an obstruent and containing a short vowel, the level pitch occurs in both dialects. In this environment, no contrast of pitch occurs in Mal.

<u>Pray</u>	<u>Mal</u>	
[mɛʔ]	[mɛʔ]	'new'
[mphút]	[phót]	'to become undone'
[púc]	[púc]	'liquor'
[thók]	[thók]	'to tie'
[khlóp]	[khlót]	'a lid, to close'

4. In the syllable ending with final /h/, the level pitch occurs in both dialects. Also, in this environment, no contrast of pitch occurs in Mal.

<u>Pray</u>	<u>Mal</u>	
[máh]	[máh]	'you'
[múh]	[móh]	'the nose'
[núh]	[nóh]	'a chopping block'
[phiáh]	[phiáh]	'a direction, side'
[khráh]	[klás]	'to break (e.g. tooth)'
[kwáh]	[púah]	'the fire place'

2.2 Syllables

Both Pray and Mal contain syllables of similar structure.

	<u>Pray</u>	<u>Mal</u>	
CV(V)	/na:/	/no:/	'a final particle'
	/pia/	/piɛ:/	'two'
CSV(V)	/thi:/	/thi:/	'the hand, arm'
	/khua/ 'clothes'	/thie/	'a sag'
CCCV	/ŋkra:/	/ŋkje:/	'a bamboo grate'
CV(V)C	/mat/	/mat/	'the face, eyes'
	/miam/	/miam/	'blood'
CCV(V)C	/ŋkoh/	/ŋkoh/	'to nail'
	/khianŋ/	/khianŋ/	'a lamp'
CCCV(V)C	/phliŋ/	/phli:ŋ/	'to grill'
	/ŋkhuah/ 'to come off'	/mphuanŋ/	'coterie group'
CCCCV(V)C	/mphlonŋ/ 'to hang up'	-	
	-	/mphluanŋ/	'to agree'

For detailed comparison description:

1. All syllable patterns in both dialects can function as major syllable.

2. In Pray, only the patterns CV, CCV and CVC can function as minor syllables whereas in Mal CCCV and CCVC and CCCVC- can also function as minor syllables.

	<u>Pray</u>		<u>Mal</u>	
CV-	/p <u>ana</u> ?/		/p <u>ana</u> ?/	'rice field'
CCV-	/p <u>hap</u> ɔ:ŋ/	'a window'	/p <u>hasua</u> ?/	'a bee'
CCCV-	-		/m <u>phalo</u> :ŋ/	'the skull'
CVC-	/t <u>ɔ</u> t <u>t</u> æ:/		/t <u>okto</u> :/	'a wall gecko'
CCVC-	-		/p <u>conlo</u> ?/	'to shake'
CCVC-	-		/m <u>phunwa</u> :n/	'sky'

However, the patterns CCCV- and CCVC- in Mal are found only in a few words.

2.3 Stress Group

The stress group structure in these two dialects is very similar, that is, if there is more than one syllable, the stress is on the last syllable. There are trisyllabic stress group only in Pray dialect.

	<u>Pray</u>		<u>Mal</u>	
Monosyllabic.	[prɔ:ŋ]		[sɔ:j]	'spirit'
Disyllabic.	[par'lar]		[pa'ja:ɸ]	'the lightning'
Trisyllabic.	[ɕi rak'thak]		-	'a kind of lizard'
	[ɕi ləp'phləp]		-	'a butterfly'

3. Sound Correspondence

The similarity of Pray and Mal is markedly high. The difference is most obvious on sound change of consonants and vowels. The following examples will illustrate phonological variations in correspondences between these two dialects.

3.1 Consonant Correspondences

3.1.1 Single Consonant Correspondences

3.1.1.1 Single Initial Consonant Correspondences

Pray	Mal	
m-	m-	
/mia?/	/mia?/	'rain'
/mi:/	/mi?/	'a negative marker, one'
n-	n-	
/nam/	/nam/	'he, she'
/na:c/	/nac/	'a sword'
p-	p-	
/pæŋ/	/pæŋ/	'a word, a language'
/pim/	/pəm/	'to cry'
ŋ-	ŋ-	
/ŋi?/	/ŋe?/	'a day'
/ŋɔ:j/	/ŋaj/	'to raise (one's head)'

Pray	Mal	
p-	p-	
/pi?/	/pi?/	'full'
/pa:/	/pa?/	'you (dual)'
p-	k-	
/pi:t/	/ki:t/	'to wipe, to scrub'
t-	t-	
/to?/	/to?/	'to come'
/to:k/	/tɔk/	'to step on'
c-	c-	
/ceŋ/	/caŋ/	'the foot'
/cu ^h /	/cu ^h /	'to put on (a hat), heavy'
c-	k-	
/ciŋ/	/kiŋ/	'to sew'
/cu:/	/ku:/	'every'
c-	j-	
/cə?/	/jə?/	'dirty'
k-	k-	
/kih/	/kih/	'to scratch'
/kæ:n/	/kian/	'a pip'
k-	p-	
/katɔ:t/	/patɔ:t/	'the sound of chickens'
/katna:r/	/pana:ɰ/	'the wings'

Pray	Mal	
k-	c-	
/kin/	/c ^h in/	'smell'
k-	j-	
/kiw/	/jiw/	'the eyebrows'
?-	?-	
/ʔæŋ/	/ʔaŋ/	'at'
/ʔaŋ/	/ʔaŋ/	'I, me, mine'
?-	h-	
/ʔoʔ/	/hoʔ/	'or'
ɓ-	b-	
/ɓot/	/bot/	'the cloud'
/ɓok/	/bok/	'to chop'
d-	d-	
/dæ:k/	/dæ:k/	'to shove, to crowd in'
d-	b-	
/dɛŋ/	/beŋ/	'to pull'
ɸ-	s-	
/ɸih/	/sih/	'to put on/in'
/ɸiaŋ/	/siaŋ/	'the tooth'

Pray	Mal	
h-	h-	
/haŋ/	/haŋ/	'rich'
/ha:n/	/haw/	'to dare'
h-	j-	
/ha:ŋ/	/ja:ŋ/	'to divorce'
/hə?/	/ja?/	'rubbish'
l-	l-	
/leh/	/leh/	'to come'
/læ?/	/læ?/	'to search for'
r-	j-	
/ra:ŋ/	/ja:ŋ/	'a flower'
/ruk/	/juk/	'to water'
r-	l-	
/ro:c/	/luac/	'to finish'
w-	w-	
/wi?/	/wi?/	'the left'
/waŋ/	/wɔ:ŋ/	'the chin'
w-	h-	
/wah/	/pah/	'to open (e.g. the month)'

3.1.1.2 Final Consonant Correspondences

Pray	Mal	
-m	-m	
/lam/	/lam/	'wood'
/cem/	/cam/	'weak (from working)'
-m	-p	
/ŋwam/	/ŋwap/	'to grope'
-n	-n	
/pæn/	/pæn/	'grass'
/mɔ:n/	/mɔ:n/	'young girl'
-n	-m	
/man/	/mæm/	'female-in-law'
-n	-l	
/ŋken/	/ŋkæ:l/	'to roll up (e.g. sleeves)'
-n	-ɥ	
/ha:n/	/haɥ/	'to dare'
-ɲ	-ɲ	
/ʔəɲ/	/ʔəɲ/	'I'
/phəɲ/	/phəɲ/	'to shot'
-ŋ	-ŋ	
/pɔŋ/	/pɔŋ/	'to eat'
/ʔaŋ/	/ʔæŋ/	'at'

Pray	Mal	
-p	-p	
/ɲap/	/ɲəp/	'to grasp'
/ŋka:p/	/ŋka:p/	'the mouth'
-p	-t	
/khləp/	/khlət/	'a lid, to close (door)'
-t	-t	
/ʔət/	/ʔot/	'to angry'
/phat/	/phat/	'to squeeze (with fist)'
-t	-s(-jh)	
/ŋkat/	/ŋkhas/	'to sneeze'
/phɔ:t/	/phɔs/	'a barking deer'
-t	-ɰ	
/ŋkra:t/	/ŋkhaɰ/	'lightening'
/khat/	/khaɰ/	'to have the creeps'
-c	-c	
/məc/	/məc/	'to know'
/thəc/	/thəc/	'to sell'
-k	-k	
/muk/	/muk/	'to smell'
/mpiak/	/mpiak/	'to deceive'
-k	-t	
/kwak/	/kwa:t/	'to beckon'

Pray	Mal	
-?	-?	
/mia?/	/mia?/	'rain'
/ko?/	/ko?/	'a fish basket'
-?	-h	
/nə?/	/nəh/	'a final particle'
/phra?/	/phlah/	'to release'
/khwra?/	/khuah/	'a shellfish'
-h	-h	
/ʔah/	/ʔah/	'they (plural)'
-l	-l	
/lɔ:l/	/lɔ:l/	'the buttocks'
/mo:l/	/mɔ:l/	'stairs'
-l	-n	
/mial/	/mian/	'smooth'
/ŋkhal/	/ŋkhon/	'to beat, to tap'
/khɔ:l/	/kho:n/	'to cry (of a hen)'
-r	-w	
/tha:r/	/thaw/	'a rope'
/kar/	/kaw/	'straight'

Pray	Mal	
-w	-w	
/ɕiw/	/siaw/	'sweet'
/paw/	/pa:w/	'to squash'
-j	-j	
/kuj/	/kuj/	'the fist'
/mo:j/	mo:j/	'a bun (of hair)'

3.1.2 Consonant Cluster Correspondences

Pray	Mal	
mp-	mp-	
/mpiak/	/mpiak/	'to deceive'
/mpə1/	/mpə1/	'to kill'
nt-	ŋk-	
/nti?/	/ŋki?/	'to squirm, to struggle'
pc-	pc-	
/pcəh/	/pcəŋlo?/	'to shake'
pc-	nt-	
/pcə1/	/ntɔ:1/	'the heel of foot'
/pcəh/	/nteh/	'a bowl'
pc-	ph-	
/pcəh/	/phəh/	'to pull sharply'

Pray	Mal	
ɲɕ-	ns-	
/ɲɕo:k/	/nso:k/	'the hair'
/ɲɕian/	/nsian/	'slope, noise'
ŋk-	ŋk-	
/ŋka:p/	/ŋka:p/	'the mouth'
/ŋkoh/	/ŋkoh/	'to nail'
ŋw-	ŋu-	
/ŋwam/	/ŋuap/	'to grope'
/ŋwal/	/ŋual/	'a village'
ŋw-	nu-	
/ŋwa?/	/nua?/	'this (year)'
ŋw-	tu-	
/ŋwa:r/	/tuaw/	'to cowl'
ph-	ph-	
/phiah/	/phiah/	'a direction, a side'
/phæ?/	/phæ?/	'three'
ph-	ŋk-	
/phɔk/	/ŋkɔk/	'to bite'
pl-	pl-	
/pli:n/	/plin/	'to turn (over)'

Pray	Mal	
pr-	pj-	
/pron/	/pjan/	'a pimple'
pr-	kj-	
/pra:ŋ/	/kjɔ:ŋ/	'clear (of water)'
th-	th-	
/thi:/	/thi:/	'the hand, the arm'
/thwɪh/	/thwɪh/	'high, up, above'
kh-	kh-	
/khæp/	/khæp/	'sandle'
/khæ:l/	/khæ:l/	'cucumber'
kh-	ph-	
/khət/	/phəc/	'to pluck (flowers)'
kl-	lh-	
/kla:ŋ/	/lhaŋ/	'clás. of a leaf'
kr-	kj-	
/krak/	/kjak/	'next (time)'
/kro?/	/kjo?/	'loud'
ɕw-	su-	
/ɕwa?/	/sua?/	'a dog'
mph-	mph-	
/mphah/	/mphoh/	'to slap'
/mpħa:c/	/mpħa:c/	'to swipe'

Pray	Mal	
mpr-	mpj-	
/mpra?/	/mpja?/	'rice straw'
/mpræ:ŋ/	/mpjaŋ/	'a plank'
nth-	nth-	
/nthw:r/	/nthwŋ/	'a bat'
/ntha:k/	/ntha:k/	'the tongue'
ŋkh-	ŋkh-	
/ŋkhal/	/ŋkhal/	'turbid'
/ŋkhɔj/	/ŋkhɔj/	'a chameleon'
ŋkl-	ŋkl-	
/ŋklatŋ/	/ŋklatŋ/	'a body, an object'
ŋkr-	nkj-	
/ŋkræ?/	/ŋkjæ?/	'a pestle'
/ŋkro:m/	/ŋkjo:m/	'area or ground under house'
phl-	phl-	
/phlæ?/	/phlæ?/	'a fruit'
/phlɔŋ/	/phlɔ:ŋ/	'a section of finger'
phl-	mpl-	
/phlæ:/	/mplæ?/	'to stick out (the tongue)'
phr-	phj-	
/phrɔh/	/phjɔh/	'to set pole upright in ground'

Pray	Mal	
phr-	phl-	
/phra?/	/phlah/	'to release'
khl-	khl-	
/khlih/	/khlih/	'to fall'
/khlak/	/khlək/	'chalf'
·		
chr-	phj-	
/khrām/	/phjam/	'human being, a person'
/khrem/	/phje:m/	'old (thing)'
·		
chr-	khj-	
/khrɔ:/	/khjɔ:/	'to beg'
·		
khw-	khw-	
/khwan/	/khwan/	'son/daughter'
/khwa:r/	/khwaŋ/	'an axe'
·		
khw-	khu-	
/khwaŋ/	/khuaŋ/	'in'
/khwak/	/khuak/	'a coconut grub'
·		
khw-	phu-	
/khwa?/	/phua?/	'yet'

3.2 Vowel Correspondence

i	i	
/pi?/	/pi?/	'full'
/ciŋ/	/kiŋ/	'to sew'

i	e	
/ŋi?/	/ŋe?/	'a day'
i	u:	
/ɲim/	/ju:m/	'a price'
i	ɔ	
/ɲim/	/ɲəm/	'to cry'
i	ia	
/ɕiw/	/ɕiaw/	'sweet (taste)'
i:	i	
/mi:/	/mi?/	'a negative maker'
/pli:n/	/plin/	'to turn over'
i:	i:	
/pi:t/	/ki:t/	'to wipe, to scrub'
/thi:/	/thi:/	'the hand, arm'
e	e	
/ket/	/klet/	'scales (of fish)'
/phe?/	/phe?/	'three'
e	e:	
/ɕem/	/se:m/	'a bird'
e	ɛ:	
/ŋken/	/ŋkɛ:l/	'to roll up (e.g. sleeves)'
/me:/	/mɛ:/	'mother'

e	ə	
/cem/	/cəm/	'weak (from working)'
e	a	
/pep/	/pəp/	'to catch'
/ceŋ/	/cən/	'the foot'
e	ia	
/ɕen/	/sian/	'the time before'
æ	ɛ	
/mæ?/	/mɛ?/	'new'
/pæŋ/	/pɛŋ/	'a word, a language'
æ	a	
/pæn/	/pən/	'grass'
/?æŋ/	/?ən/	'to do'
æ	a:	
/mlæw/	/ma:w/	'Adam's apple'
æ:	æ:	
/pæ:/	/pɛ:/	'you (plural)'
/kæ:p/	/kɛ:p/	'to carry in the arms'
æ:	e:	
/ɕilæ:w/	/thale:w/	'see the meaning in the glossary'

æ:	a	
/kæ:t/	/kat/	'some'
/mpræ:ŋ/	/mpjan/	'a plank'
æ:	ia	
/ŋkhæ:r/	/ŋkhiaŋ/	'the nail'
/kæ:n/	/kian/	'a pip'
u	u	
/cuh/	/cuh/	'to put on'
/thuh/	/thuh/	'high, up, above'
u	u:	
/thum/	/thu:m/	'to roof'
u	ə	
/pru:k/	/phlək/	'the day of T' in holiday'
/kruc/	/kjəc/	'to fall out'
u	ua	
/phuŋ/	/mphuaŋ/	'coterie group'
u:	u:	
/khlu:t/	/plu:t/	'to swallow'
u:	u	
/nthu:r/	/nthuŋ/	'a bat'
ə	ə	
/məc/	/məc/	'to know'
/nək/	/nək/	'a fishing-net'

ə	ə:	
/ʔəm/	/ʔə:m/	'to take a bath'
ə	a:	
/pɕəj/	/na:j/	'older sibling'
ə	ia	
/jək/	liak/	'to fear'
/jəʔ/	/ʔiaʔ/	'we (dual)'
ə:	i	
/ɕinə:r/	/niw/	'to moan'
ə:	ə	
/kə:k/	/kək/	'curry, to curry'
a	a	
/mat/	/mat/	'the face, the eyes'
/mah/	/mah/	'you'
a	e	
/pɕah/	/nteh/	'a bowl'
a	æ	
/man/	/mæn/	'female-in-low'
a	ə	
/nap/	/nəp/	'to grasp'
/khlak/	/khlək/	'chalf'

a	a:	
/pɕak/	/nsa:k/	'a chipmunk'
/ɲaw/	/ɲa:w/	'a squash'
a	o	
/ŋkhal/	/ŋkhon/	'to beat, to tap'
a	ɔ:	
/wanɲ/	/wɔ:ɲ/	'the chin'
a	ie	
/mpah/	/bieh/	'a mushroom, vegetable'
a:	a:	
/pa:l/	/pa:l/	'(light) to shine'
/ʔa:k/	/ʔa:k/	'sunshine'
a:	e:	
/wa:k/	/whe:k/	'ruin'
a:	ə	
/na:c/	/nəc/	'a sword'
a:	a	
/ɕa:m/	/sam/	'the right'
/tha:r/	/thauɲ/	'a rope'
a:	o:	
/na:/	/no:/	'a final particle'

a:	ɔ:	
/pra:ŋ/	/kɔ:ŋ/	'clear (of water)'
a:	ua	
/kha:p/	/khuap/	'the name of T'in holiday'
u	u	
/muk/	/muk/	'to smell'
/puc/	/puc/	'liquor'
u	u:	
/kum/	/ku:m/	'to winnow'
/kul/	/ku:l/	'a foot rice pounder for hucking rice'
u	u:	
/phul/	/phu:l/	'a crossbow'
u	ɔ	
/phuj/	/phəj/	'to spit'
u	o	
/muh/	/moh/	'the nose'
/nuh/	/noh/	'a chopping block'
/thuŋ/	/thuəŋ/	'a swamp'
u:	u:	
/cu:/	/ku:/	'every'
/cu:r/	/cu:/	'to go down'

u:	u	
/nthu:r/	/ntuɯ/	'the top edge of roof'
o	o	
/ŋkoh/	/ŋkoh/	'to nail'
/po?/	/po?/	'the breast'
o	a	
/pron/	/pjan/	'a pimple'
o	o:	
/thon/	/tho:n/	'to buy'
o	ua	
/khon/	/khuan/	'a younger sibling'
o:	o:	
/mo:j/	/mo:j/	'a bun (of hair)'
/pɕo:k/	/nsɔ:k/	'hair'
o:	o	
/ntho:p/	/kop/	'to fold up'
/ɕo:r/	/nsow/	'to blow the nose'
o:	ɔ	
/to:k/	/tɔk/	'to step on'
o:	ɔ:	
/ɕo:t/	/sɔ:t/	'sticky'
/mo:l/	/mɔ:l/	'stairs'

o:	ua	
/ro:c/	/luac/	'to finish'
ɔ	ɔ	
/pɔŋ/	/pɔŋ/	'to stand'
/nthɔŋ/	/nthɔŋ/	'the ankle or wrist joint'
ɔ	a	
/phɔr/	/phjaw/	'to straighten out legs'
/khɔl/	/ŋkhal/	'a large chip of wood'
ɔ	o	
/khɔr/	/koŋ/	'to poke'
/ʔɔt/	/ʔot/	'to angry'
ɔ	ɔ:	
/phlɔŋ/	/phlɔ:ŋ/	'a section of finger'
/khɔm/	/khɔ:m/	'the north, above'
ɔ	ua	
/khɔŋ/	/khuaŋ/	'in'
/ɕɔl/	/thual/	'to answer'
ɔ:	ɔ:	
/mɔ:n/	/mɔ:n/	'a young girl'
/mpɔ:l/	/mpɔ:l/	'a section of bamboo stem'
ɔ:	a	
/ŋɔ:j/	/naj/	'to raise the face up'

ɔ:	o:	
/nɔ:j/	/no:j/	'together'
/khɔ:l/	/kho:n/	'to cry (of a ken)'
ɔ:	ɔ	
/phɔ:t/	/phɔjh/	'a barking deer'
/tɔ:l/	/tɔl/	'to carry on a pole across the shoulders'
ia	ia	
/mia?/	/mia?/	'rain'
/mial/	/mian/	'blood'
ua	ua	
/ɕinuam/	/nhuam/	'a bamboo strip for tying'
/ɕinuah/	/nuah/	'to point with the finger'
ua	a	
/ŋkhuah/	/khah/	'to come off'
ua	o	
/cuah/	/coh/	'to spit'
ua	ɔ:	
/ruaŋ/	/jɔ:ŋ/	'a way'

4. The Loss of Elements

There are elements dropped in Mal but remaining in Pray as shown in the following sections:

4.1 Loss of Consonants

4.1.1 Loss of Initial Consonants

Pray		Mal		
mp-		b-		
/mpit/	[mbit]	/bit/	[bit]	'to turn on one side'
/mpah/	[mbah]	/bieh/	[bieh]	'a mushroom, vegetable'
ml-		l-		
/mlu?/		/lo?/		'to rest'
nt-		t-		
/ntah/		/tah/		'the forehead'
ŋɕ -		s-		
/ŋɕa:ŋ/		/sa:ŋ/		'a kind of bamboo'
mph-		ph-		
/mphut/		/phot/		'to become undone'
nth-		th-		
/nthu ^h /		/thu ^h /		'above, up, high'
/nthæ?/		/thæ?/		'a trace'

4.1.2 Loss of Second Members of Consonant Clusters.

ml-		m-		
/mlæw/		/ma:w/		'Adam's apple'

Pray	Mal	
ɲɕ-	ɲ-	
/ɲɕoʔ/	/ɲoʔ/	'a son-in-law'
ph-	p-	
/phun/	/p ^h un/	'dust'
pl-	p-	
/pləh/	/pih/	'T'in musical instrument made from bamboo section'
th-	t-	
/thəl/	/təl/	'to plant'

4.1.3 Loss of Third Members of Consonant Cluster

nth-	nt-	
/nthu:r/	/ntuɰ/	'the top edge of roof'
ŋkh-	kh-	
/ŋkhuah/	/khah/	'to come off'
/ŋkho:/	/kho:/	'to be tried'
ŋkh-	ŋk-	
/ŋkhəl/	/ŋkəl/	'to break'
phl-	ph-	
/phlɔ:k/	/phak/	'a knife sheath'
phr-	ph-	
/phra:/	/pha:/	'a cliff'

Pray	Mal	
khr-	kh-	
/khræ:w/	/khiaw/	'green'

4.1.4 Loss of Final Consonants

Pray	Mal	
/po:r/	/po:/	'to speak'
/cu:r/	/cu:/	'to go down'
/tak/	/t ^h a:/	'at'
/ʔih/	/ʔi:/	'we'
/ɕin/	/si:/	'a pig'
/khlɔc/	/khlɔ:/	'banana leaves'
/ɕu:n/	/su:/	'to mix'

4.2 Loss of Syllable

The presence of the minor syllable /ɕi-/ in Pray corresponds to the second member /h/ of consonant clusters in Mal.

Pray	Mal	
[ɕi'lôm]	[lhôm]	'loose'
[ɕi'nuâm]	[nhuâm]	'a bamboo strip'
[ɕi'jǎʔ]	[lhíaʔ]	'a thorn'

According to Filbeck, the phoneme /h/ of consonant clusters in Proto-T'in is changed to /ɕi-/ in Proto-Pray while remaining unchanged from Proto-T'in to Proto-Mal. (Filbeck, 1978:99).

Others corresponding examples are:

<u>Pray</u>	<u>Mal</u>	
[ɕi'mâl]	[mâl]	'life-force, soul'
[ɕi'mô:c]	[mó:c]	'an ant'
[ɕi'nuáh]	[nuáh]	'to point'
[ɕi'ŋkhâ1]	[ŋkhâ1]	'a hammer'
[ɕi'ʔóh]	[ʔóh]	'to steam'

5. The Added Elements

There are elements added in Mal as follow.

5.1 Added Initial Consonants.

Pray	Mal	
ɕ-	ns-	
/ɕæŋ/	/nsæŋ/	'the intestine'
/ɕo:r/	/nsow/	'to blow the nose'
j-	?j-	
/jak/	/?jak/	'excrement'
th-	nth-	
/thuk/	/nthuk/	'to pour'

5.2 Added Second Members of Consonant Clusters

Pray	Mal	
ɲ-	ɲh-	
/ɲam/	/ɲham/	'to clench one's fist'
t-	th-	
/tit/	/thi:t/	'small'
/taw/	/thaw/	'the name of T' in holiday'
k-	kh-	
/ka:/	/kha:/	'fish'
l-	lh-	
/lonɲ/	/lhonɲ/	'to drop off'
w-	wh-	
/wa:k/	/whe:k/	'ruin'
ml-	mpl-	
/mlæw/	/mplæw/	'Adam's apple'
/mlih/	/mplih/	'to drop away'

5.3 Added Third Members of Consonant Clusters

ph-	phj-	
/phɔr/	/phjɔɲ/	'to straighten out legs'
/phoh/	/phjoh/	'the loud clap that thunder makes'

5.4 Added Final Consonants

There are a few examples of this section as shown below.

Pray	Mal	
/mi:/	/mi?/	'a negative marker'
/pa:/	/pa?/	'you'
ˈjɯ:/	/jɯ:t/	'to stretch out'
/pia/	/piaɰ/	'two'

The added syllable in Mal is found in only one word.

Pray	Mal	
[cuak]	[pa'cuak]	'saliva'

6. Addenda

The following wordlist illustrates sets of lexical items which have the same phonological shapes or some variation in both Pray and Mal.

Pray	Mal	
/mphəc/	/kjəc/	'to cut'
/mphɔh/	/mpalɔh/	'a kind of utensils'
/ntəp/	/pəp/	'flat'
/ɲcwah/	/nəh/	'a tale'
/ɲɔo?/	/no?/	'a son-in-law'
/ŋka:k/	/ʔa:k/	'a crow'
/kwah/	/puah/	'the fire place'
/khrəh/	/klas/	'to break (of tooth)'

Pray	Mal	
/pcoh/	/pconlo?/	'to shake'
/pcək/	/lijək/	'to fear'
/pcə?/	/thia ^ˊ ?/	'below, south'
/ŋkuk/	/ŋkuah/	'a hole (in the ground)'
/ŋkro:ŋ/	/kluaj/	'a tall basket made of bamboo'
/cu?/	/kju?/	'deep'
/kə:r/	/mpħəw/	'a handle'
/khw:/	/phw?/	'same'
/khoj/	/khwa:j/	'small plants yielding starchy roots'
/khə?/	/ŋkju?/	'a skull, a shell'
/khwra?/	/khluah/	'a shellfish'
/khrəh/	/klajh/	'to break (of tooth)'
/ʔoh/	/ʔo:t/	'egg yolk'
/ʕino:ŋ/	/pɔkɔ:j/	'shower, steel wool'
/ʕiwa:c/	/kwac/	'to splash water with hands'
/ʕijɛŋ/	/ʔian/	'the bones'
/ʕijə?/	/ʔia?/	'far'
/ʕijə?/	/lhia?/	'a thorn'
/ʕiləp/	/mpləp/	'to turn face down'
/ʕilɔ:/	/khlɔ:/	'banana leaves'
/ʕira:/	/kja:/	'thin'

Pray	Mal	
/ɕwa:t/	/ciãɕ/	'to shape with a knife'
/jək/	/liak/	'to fear'
/jəʔ/	/ʔiaʔ/	'we (dual)'
/jat/	/thiat/	'small'

Although a rule cannot be made clearly for the correspondences between Pray and Mal, we may summarize that the Mal dialect is more primitive than the Pray dialect, in which more elements were lost and new things has been added to. However /r/ which is one of the most distinctive Mon-khmer consonants is still very common in Pray while in Mal this consonant has been replaced by /j/.

7. Dialectal Variation

After analysing the sound correspondences of Pray and Mal phonology, I have found that the reason for the shifts of some phonemes are not clear. This section will deal only with the systematic differences in both dialects to show the dialectal variation.

The phonemes that distinguish the Pray and the Mal dialects are shown below.

Pray	Mal
- There is the consonant /r/	- None. But the consonant /j/ corresponds to Pray /r/ functioning as initial consonant, second member and third member of consonant clusters and the consonant /ɣ/ corresponds to Pray /r/ in final position.
e.g. /ra:ŋ/ 'flower' /pron/ 'a pimple' /khrɔ:/ 'to beg' /ma:r/ 'a snake' /thɔ:r/ 'to cough'	e.g. /ja:ŋ/ 'flower' /pjan/ 'a pimple' /khjɔ:/ 'to beg' /maɣ/ 'a snake' /thɔ:ɣ/ 'to cough'
- None	- There is the diphthong /ie/ occurring in contrast with /ia/
- There is the occurrence of the minor syllable /ɕi-/	- None
- Pitches are not phonemic	- Pitches are phonemic

Chapter IV

CONCLUSION AND SUGGESTIONS

1. Conclusions

1.1 There are two types of intonation group in Pray; the rising contour and the falling contour. The rising contour is further divided into the low-rising contour and the rising contour. The first one is used for polar question with the final particles /?an, na:/, for request with the final particle /dæ:/ and for one-word negative /?aj/. The second one is used for exclamation. The falling contour is used for normal statement, command, content question and polar question with the final particle /?o?/. The polar question with the final particle /?an/ and the low-rising contour occurs in contrast with the normal statement with final particle /?an/ (which answers to that question) and the falling contour.

1.2 There are two types of stress group; monosyllabic stress group and polysyllabic stress group. The final position of the stress group is stressed while the other ones are not stressed.

1.3 There are two types of syllable according to the structure; open syllable and closed syllable and, also, two types of syllable according to their function in the stress group; minor syllable and major syllable.

1.4 There are seventeen consonant phonemes in Pray;
 /m, n, ɲ, ŋ, p, t, c, k, ʔ, ʙ, ɗ, ɣ, h, l, r, w, j/. All of them
 can function in initial position of the syllable. These consonants
 except /ʙ, ɗ, ɣ/ can also function in final position of the
 syllable. This Pray dialect has nineteen two-consonant clusters;
 /mp, ml, nt, ɲc, ɲɣ, ɲw, ŋk, ŋw, ph, pl, pr, th, cw, kh, kl, kr,
 kw, ʙr, ɣw/, fourteen three-consonant clusters; /mph, mpr, nth,
 ɲcw, ŋkh, ŋkl, ŋkr, phl, phr, phw, khl, khr, khw, kwr/ and four
 four-consonant clusters; /mphl, mphr, ŋkhr, khwr/.

There are eighteen single vowels; /i, i:, e, e:, œ, œ:,
 u, u:, ə, ə:, a, a:, o, o:, ɔ, ɔ:/ and three diphthongs;
 /ua, ua, ua/ in Pray.

Furthermore, there are two uncontrastive pitches in Pray;
 the level pitch and the high-falling pitch.

1.5 Besides the seventeen consonants in Pray, Mal has one
 more consonant; /ʒ/. Pray has the phonemes /ʙ, ɗ, ɣ, r/ whereas
 Mal has the phonemes /b, d, s, ɣ/ corresponding to those in Pray.
 My impression on the differences between Pray and Mal, except /r/
 in Pray and /ɣ/ in Mal, is that it is the matter of different inter-
 pretation. Besides the seventeen two-consonant clusters, Mal has
 eight more two-consonant clusters; /mh, nh, ph, lh, wh, jh, ʔw,
 ʔj/. Besides those three-consonant clusters mentioned above, Pray
 does not have /thw/ as in Mal whereas Mal does not have /ɲcw, kwr/
 as in Pray. Also, Pray has four four-consonant clusters mentioned
 above whereas Mal has only one; /mphl/.

These dialects have the same single vowels, but Mal has one diphthong more than Pray, that is, /ie/.

Mal has the low-rising pitch occurring in contrast with the non-low-rising pitch whereas Pray has only two uncontrastive pitches; the high-falling pitch and the level pitch.

1.6 Both Pray and Mal have two syllable patterns; the open syllable and the closed syllable. Both types of syllable in these dialects are the same.

1.7 Both Pray and Mal have two stress group structures; monosyllabic stress group and polysyllabic stress group. They are quite similar in both dialects.

2. Suggestions for Further Studies

2.1 A descriptive study of T'in morphology and syntax in Nan province.

2.2 A dialectological study of T'in in Nan province.

2.3 A comparative study of variations of Pray at Ban Wang Saw between the old and the young generations.

2.4 A comparative study between T'in and Khmu in Nan province.

2.5 A reconstruction of Proto-T'in.

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GLOSSARY

This glossary consists of three columns. The first and the second columns presents the Pray dialect and the Mal dialect respectively and the last column is the meanings.

The entries in this glossary are listed according to Pray dialect in the following order.

1. The initial consonant order is /m, n, ɲ, ŋ, p, t, c, k, ʔ, ʙ, d, ɸ, h, l, r, w, j/

2. The vowel order is /i, i:, ia, e, e:, æ, æ:, u, u:, ua, ə, ə:, a, a:, u, u:, ua, o, o:, ɔ, ɔ:/

3. Open syllables are listed before closed syllables.

4. One syllables are listed before two or three syllables.

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
/m-/		
m-	m-	transitive prefix adjoined to a few verbs
min, pit	lɔ:n	to play
mit	mi:t	a carver
mit nap	mi:t nap	scissors
mi:	mi?	negative marker, one
miam	miam	blood
mia?	mia?	rain
mial	mian	smooth, clean
mek		to use force against
me:	mæ:	mother
me:t		to pinch
mæ?	mæ?	new
mæ:n	mæ:n	to correct
mæ:ŋ wa:w		a scorpion
mæ:t	cəm	soft
mæ:w		a kitchen tool for grating coconut
mɔŋ	sa?	will
mɔŋ		the name of day in Pray week
mən	mpjah	dark
məc	məc	to know, to understand
məc cit	məc mphw?	to know
maj	?jah	feminine

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
man	mæm	female-in-law
manæw	phjɔ:k	a squirrel
mat	mat	the face, the eyes
mak	sɔ:p	to like, to love
ma?	pen nua	do not
mah	mah	you
maj	maj	the thumb
maj waj	mphan	a house fly
maj mu:j	maj	a fruit fly
mal	mo:j	again
mal kwa:ŋ	pa:w	a deer
ma:ŋ	ŋk w h	to collapse, to ruin
ma:r	ma w ŋ	a snake
ma:r pian		a cobra
ma:r cɔŋ		a python
ma:r ɕiŋsa:		a kind of snake
ma:r ri:t		Chrysopelea
muk	muk	to smell
muh	moh	the nose
muj	khjuŋ	fat
muan	muan	fun
mot		do not believe
mok	mphok	to cover (food)
mo:t	ŋcuk	to bend over, to bow head
mo:l	mo:l	stairs
mo:j.	mo:j	a bun (of hair)

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
mɔŋ	mua	dark
mɔ:n	mɔ:n	young girl
mɔ:ŋ	ku:l	a foot rice pounder for husking rice
mɔ:k		the fog
mpit [mbít]	bit	to turn on one side
mpiak [mbiák]	mpiak	to deceive
mpəl [mbəl]	mpəl	to kill
mpə:n [mbə:n]		a reed mat
mpə:t [mbə:t]	məm	to frown
mpat [mbat]	mpat	to sweep
mpah [mbáh]	bieh	a mushroom, vegetable
mpah [mbáh]	mpah	to open the eyes
mpah khro? [mbáh khró?]		the tettuce plant
mput [mbút]	nso:m	rattan
mpuk [mbúk]	ka:t	to wrap
mpuat [mbúat]	phasua?	a bee
mpuak [mbúak]	mpuŋ	pool, a recess (for water)
mpoh [mbóh]	kəp	to boil water
mpɔn [mbɔn]		to open the mouth (before crying)
mpɔ: [mbɔ:]		to cry (a cow)
mpɔ:l [mbɔ:l]	mpɔ:l	a section of bamboo stem
mpɔ:l tɔl [mbɔ:l tɔl]		the trachea
mphial	lhat	a door
mphæl tɔl		the uvula

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
mphəŋ		a fly that annoys livestock
mphət	ɲæp ɲæp	to wink
mphəc	kjəc	to cut
mphak		the palm; to lay cross
mphah	mphoh	to slap
mphar	swa:ɥ	to coil, to bandage
mphɑ:n	pəŋ	to proceed alongside of
mphɑ:c	mphɑ:c	to swipe
mphɑ:r		a flying squirrel
mphuŋ	mphuŋ	a hole
mphut	phot	to become undone
mphuk	lem	to grab
mphu?	ɲcuʰ	pregnant
mphuj	mphɑ:k	the eyebrows
mphul	mphul	the stomach
mphoj	mpjak	a fence; a bird's nest
mphɔ?	mphɔ?	to dream
mphɔh	mpalɔh	a kind of utensils to put food in for animals.
mphɔ:t	ɲah	a blanket
mphɔ:r	pal	to persuade, to lead
mphlɔŋ	ɲcɔŋ-lɔŋ	to hang up
mphlɔ:k	lɔ:t	to pul
mphri:t		to be scratched

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
mprit [mbrit]		to spread (the hair)
mpre: [mbrê:]	khæ:k	to take out (by fingers)
mpræ:ŋ [mbrê:ŋ]	mpjaŋ	a plank
mpra? [mbrá?]	mpja?	rice straw
mpro: [mbrô:]	miaŋ	to howl
mlih	mplih	to drop away
mle:k	ŋəh	to raise head to look upward
mlɔw	ma:w	Adam's apple
mlw?	mplw?	a sort, a story
mlak	mplak	to choke
mlu?	lo?	to rest
mlɔ?	khlan	to hiccup
mlɔ:ŋ	mplɔ:ŋ	to turn face up
/n-/		
nim	həp	not to move and speak
ni	nuah	the finger
ni:	ne:	this
nel		a part of a house's structure
næ?		to force out
nək	nək	a fishing-net
nɔ?	nəh	a polite imperative final particle
nam	nam	he, she
nam man	mplaŋ	fat
nam khu?		a bucket

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
nan	?ě:	that
naŋ	naŋ	the body
naŋ lɔ?	the?	true
nap nap	nep nep	to wag
na?	?ǎw	this
na:	no:	a question final particle
na:n	hin	after this (time)
na:c	nəc	a sword
na:j	pha:p	father or mother's sister
na:j	məm	a female in law
nuk	hɔ:n	a room
nuh	noh	a chopping block
nop	whaj	to put the hands together in salute
no?	kɔ:ŋ	a bamboo tupe
no:k	ŋklɔl	to bend down
nɔ:k	p̄huaŋ	water (not for drinking)
nɔ:j	no:j	together
nti? [ndí?]	ŋki?	to squirm, to struggle
nte? [ndé?]		beside
ntəp [ndəp]	pəp	flat
ntəh [ndəh]		here
ntɛ:ŋ [ndɛ:ŋ]	nəc	a knife
ntɛ:ŋ la:w [ndɛ:ŋ lɛ:w]	plǎ:k	a hand hoe used to sweep
ntə:r [ndə:r]	?ajh	loud (in speaking)

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ntak [ndák]	plu:	the legs
ntah [ndáh]	tah	the forehead
nto:n [ndô:n]	duy	over there
ntɔ? [ndóʔ]	kæ?	the arm-pit
ntɔh [ndóh]	ŋkəm sa?	to stagger
ntɔ:ŋ [ndó:ŋ]	nuan	a bridge
ntɔ:k [ndó:k]	ŋkju:p	a spoon
nthe:k	?uaŋ	to be tremulous
nthæ?	thæ?	a trace
nthæ:k	mpha:ŋ	to lean
nthuuh	thuuh	above, up, high
nthuər ?u:t	phajuŋ	the rainbow
nthu:		a final particle
nthu:r	nthuuy	a bat
nthəc	kɔt	torn
nthəc	nthan	a sore
nthan	nɔ:m khəuy khəuy	to be alarmed
nthah	sɔ:t	landing
nthaj	thəh	to sleep
nthal lɔ:l	nthal lɔ:l	a tail
ntha:k	ntha:k	the tongue
nthut		to trip over
nthu:	nthu:	a leaf
nthu:t	nthu:t	to blow
nthu:r	ntuuy	the top edge of roof

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ntho?	?æp	a container for steamed rice
ntho:p	kop	to fold up
ntho:r	nthu: nɔ:j	the ears
nthɔŋ		a write string
nthɔŋ	nthɔŋ	the ankle or wrist joint
nthɔ?	nthɔ?	smoke
/n/		
ɲim	ɲəm	to cry
ɲim	ɲu:m	a price
ɲi:		kinky
ɲep	ɲap	to catch
ɲən	ɲan	grass
ɲəŋ	ɲəŋ	a word, a language
ɲəl	mpja:	to chew
ɲər ɲər	-niau	the sides of body
ɲam	ɲam	black
ɲam	ɲham	to klench one's fist
ɲap	ɲəp	to grasp
ɲaw	ɲa:w	to squash
ɲa:m	ɲa:m	when
ɲa:ŋ		a basket for keeping a ken
ɲa:k	ɲǎ:k	diffical
ɲu:	sat	to push
ɲu: kwa:t	kwa:t	a broom

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ɲua?	ɲut	to poke or prod (someone)
ɲuah	thi:m	near
ɲo:r		an abyss
ɲɔŋ	ɲɔŋ	to stand
ɲɔ:n	ɲɔ:n	because
ɲɔ:t	ɲplih	to drop
ɲɔ:k	ɲɔ:k	a fish net
ɲciŋ [ɲjîŋ]	kɔ:c	a mongoose
ɲcen [ɲjêŋ]		to learn
ɲcet [ɲjêʔ]	di:t	to stamp (on)
ɲcək [ɲjəʔk]	lijək	to fear
ɲcəj [ɲjəʔj]	ɲa:j	older sibling
ɲcə:r [ɲjəʔ:r]	ɲək	to vibrate
ɲcah [ɲjəh]	nteh	a bowl
ɲcah [ɲjəh]	ɲhah	to pull sharply
ɲca:n [ɲjəh:ŋ]	kləh	to walk
ɲca:t [ɲjəh:t]	wa:	arm spread (a measure)
ɲcun [ɲjûŋ]	tuh	to crack
ɲcu:r [ɲju:r]	thia	to sag
ɲcok [ɲjək]	ŋkəw	join between branch and fruit
ɲcoh [ɲjoh]	ɲcoŋlo?	to shake
ɲco: [ɲjo:]	sa?	forest
ɲco:ŋ [ɲjo:n]	ɲɔk	to raise
ɲcɔl [ɲjɔl]	ntɔ:l	the heel of foot
ɲcɔk [ɲjɔk]	nthum	an ear of paddy

<u>Pray</u>		<u>Mal</u>	<u>Meaning</u>
ꞑꞑk ꞑꞑj	[ꞑꞑ ^h k ꞑꞑ ^h j]	mphəp	a dragonfly
ꞑꞑj	[ꞑꞑ ^h j]		a wolf
ꞑꞑ:k	[ꞑꞑ ^h :k]	sək	a cob web
ꞑꞑwəŋ	[ꞑꞑw ^h əŋ]	ntɔ:ŋ	a log lumber
ꞑꞑwəh	[ꞑꞑw ^h əh]	nah	a tale
ꞑꞑwə:r	[ꞑꞑw ^h ə:r]	mphɔh	an animal food container made of a long wood.
ꞑꞑin	[ꞑꞑtc ^h in]		fascia
ꞑꞑiaŋ	[ꞑꞑtc ^h iaŋ]	nsiaŋ	slop, noise
ꞑꞑen	[ꞑꞑtc ^h en]	că:k	rubbish
ꞑꞑep	[ntc ^h ep]		down
ꞑꞑet	[ntc ^h et]	nsən	to move slightly
ꞑꞑæ1	[ꞑꞑtc ^h æ1]		galingale
ꞑꞑær	[ꞑꞑtc ^h ær]	nsɔ:j	a grasshopper
ꞑꞑə̃m	[ꞑꞑtc ^h ə̃m]		purple
ꞑꞑəʔ	[ꞑꞑtc ^h əʔ]	thiáʔ	below, south
ꞑꞑə1	[ꞑꞑtc ^h ə1]		(of water) to ripple
ꞑꞑə:	[ꞑꞑtc ^h ə:]	?an	to cause
ꞑꞑə:r ꞑꞑə:r	[ꞑꞑtc ^h ə:r ꞑꞑtc ^h ə:r]	mpəŋ	wall made of wood orleaves
ꞑꞑək la:j	[ꞑꞑtc ^h ək lá:j]	nsa:k	a chipmunk
ꞑꞑəh	[ꞑꞑtc ^h əh]	məp	charcoal
ꞑꞑə:ŋ	[ꞑꞑtc ^h ə:ŋ]	sa:ŋ	a kind of bamboo
ꞑꞑə:ŋ ŋkhlət	[ꞑꞑtc ^h ə:ŋ ŋkhlət]	khwan	a crossbow

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ꞑꞑa:k [ꞑtc ^h â:k]	ʔa:n	to cry loudly
ꞑꞑul ꞑꞑal [ꞑtc ^h ul ꞑtc ^h al]		(of clothes) to be crumpled up
ꞑꞑo? [ꞑtc ^h ó?]	no?	a son-in-law
ꞑꞑo:k [ꞑtc ^h ô:k]	nso:k	the nair
ꞑꞑo:r [ꞑtc ^h ô:r]	mpəŋ	wall made out of leaves, wood
ꞑꞑɔl [ꞑtc ^h ɔl]	lhia?	a splinter
ꞑꞑɔ:n [ꞑtc ^h ɔ:n]		to teach
ꞑꞑwəŋ	mplɔh	the mountain
/ŋ-/		
ꞑꞑi?	ꞑꞑe?	a day
ꞑꞑil ꞑꞑil	nthɔŋ cəŋ	the ankles
ꞑꞑən ꞑꞑəŋ		the waist
ꞑꞑək	ꞑꞑɔp ꞑꞑɔp	to nod with the face
ꞑꞑa:t	-na:jh	a nudle
ꞑꞑa:j	na:j	easy
ꞑꞑa:r	lo:n	to be lost, to lose
ꞑꞑut	ꞑꞑkət	a shadow
ꞑꞑua		a cow
ꞑꞑua?	ntu:p	a hut
ꞑꞑuah		a part of roof's structure
ꞑꞑoŋ ꞑꞑoŋ		the sound of a dog barking
ꞑꞑɔn	thɔl	a piece (of something)

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ŋɔk	ŋɔ:n	petulant
ŋɔr		the brain
ŋɔ:n		to feel lonely
ŋɔ:n læ?		to miss
ŋɔ:n	ŋɔ:n	to look askance at
ŋɔ:j	ŋaj	to raise (one's head)
ŋken [ŋgên]	ŋkæ:l	to roll up (e.g. sleeves)
ŋkæŋ [ŋgâŋ]	ŋa:l	to husk rice by rolling between hands
ŋkæ1 [ŋgâ1]		the New Year's Day
ŋkæc [ŋgúc]	seh	lazy
ŋkəm [ŋgâm]	mpħəp	an insect
ŋkəm ŋkaŋ [ŋgâm ŋgâŋ]		a beetle having brilliant green integuments
ŋkəm plē:l [ŋgâm plê:l]		ladybug
ŋkəm tɔ:t [ŋgâm tɔ:t]		a black beetle having a horn
ŋkəm wəŋ [ŋgâm wâŋ]	nsɔjh	a hormet
ŋkən [ŋgân]		to be listless
ŋkat [ŋgát]	ŋkhajh	to sneeze
ŋka:p [ŋgâ:p]	ŋka:p	the mouth
ŋka:k [ŋgâ:k]	?a:k	a crow
ŋkuk [ŋgúk]	ŋkuah	a hole (in the ground)
ŋkuh [ŋgúh]	?uɣ	purulent matter
ŋkoh [ŋgóh]	ŋkoh	to nail

<u>Pray</u>		<u>Mal</u>	<u>Meaning</u>
ᵛkɔh	[ᵛgɔ́h]	pi:	the chest
ᵛkɔ:	[ᵛgɔ́:]	mpuh	to rot
ᵛkɔ:n	[ᵛgɔ́:n]	ᵛkəy	a stem, a brance of plant
ᵛkɔ:t	[ᵛgɔ́:t]		to rank (smell)
ᵛkhæ?		ᵛkhæ?	a tick (insect)
ᵛkhæ:r		ᵛkhiauy	the nail
ᵛkhəl		ᵛkəl	to break
ᵛkhə:t		ᵛkəm	to stagger in walk
ᵛkhal		ᵛkhal, khal	turbid
ᵛkhal		ᵛkhon	to beat, to tap
ᵛkhuah		khah	to come off
ᵛkhon		laŋ	a male
ᵛkho:		kho:	to be tried
ᵛkho:l		klet	scales (of fish)
ᵛkhɔl		khɔl	the back of the neck
ᵛkhɔj		ᵛkhɔj	a chameleon
ᵛkhɔ:		nɔ:k	the neck
ᵛkhra:t		ᵛkiap	rough
ᵛklaŋ	[ᵛglāŋ]	ᵛklaŋ	a body, an object
ᵛkric	[ᵛgríc]		to remain stuck
ᵛkri?	[ᵛgrí?]	du?	diligent
ᵛkri:	[ᵛgrí:]	ᵛkɔj	the wind
ᵛkra?	[ᵛgrǎ?]	ᵛkjǎ?	a pestle
ᵛkrək	[ᵛgrǎk]		a fence
ᵛkran	[ᵛgrāŋ]	ᵛkjaŋ	a post

<u>Pray</u>		<u>Mal</u>	<u>Meaning</u>
ŋkra:	[ŋgrâ:]	ŋkja:	a bamboo grate hanging a bove a fireplace
ŋkra:t	[ŋgrâ:t]	ŋkha	lightening
ŋkru:	[ŋgrû:]		stripe
ŋkruam	[ŋgrûam]	ŋklah	to tread on
ŋkroj	[ŋgrôj]	ŋklah	broken grains of rice
ŋkro:m	[ŋgrô:m]	ŋkjo:m	area or ground under house
ŋkro:n	[ŋgrô:n]	kluaj	a tall basket made of bamboo
ŋkro:t	[ŋgrô:t]		to be in fear
ŋkr>ŋ	[ŋgrôŋ]	patak	the shin
ŋkr>h	[ŋgrôh]	palaj	a morning
ŋkr>:	[ŋgrô:]	cah	to shout
ŋkr>:c	[ŋgrô:c]		a section
ŋwam		ŋuap	to grope
ŋwa?		nua?	this (year), now
ŋwal, ŋ>l		ŋual	a village
ŋwa:l		mpu:	to crawe
ŋwa:r		tuaw	to crawl
/p-/			
pit			a pail
pi?		pi?	full
pi:ŋ		kliw	a luch
pi:t		ki:t	to wipe, to scrub

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
pia	piaw	two
piak	piak	a beer
pe:l	we:t	to spin
pæ:	pæ:	you (plural; three or more), to defeat
put		to pry
pwh	pwh	to be blown away, to carry on back
pəc		to puncture
pək	phək	to dip up
pəl	pəl	to die
pəl bat		to be subject to spasms
pantəj	phe?	how many
paŋ	paŋ, ŋe:ŋ	to listen
paŋa?	paŋa?	the rice field
pat	phək	to dip out
patthəh		very much
pak	ŋkoh	(thorn) to pierce
pah	pah	light
paru:k dukda:k	pu:j	rugged, unsmooth
parlar	paja:u	the lightning
pa:	pa?	you (dual)
pa: nam	pa:m	they (dual)
pa:ŋ	khu:	cross beam running parallel to the base of a gable

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
pa:k	khuah	a ladle
pa:l	Pa:l	(light) to shine
pa:j	mphah	to overflow
pun	pun	to rob
pun _]	seden	to spread, to spring
puc	puc	liquor
pu: ja:		an edible vegetable
pua	jaksá [✓] :	to cure
poŋ	mpauŋ	mud
po?	po?	the breast
po:m	po:m	an earthen jar containing liquor
po:c		to keep in the mouth
po:k	wa:j	a tiger
po:r	pǒ [✓] :	to speak
pɔŋ	pɔŋ	to eat
pɔk	pɔk	to cut
pɔ:	pɔ:	enough
pɔ:ŋ	?ajh	blistered
pɔ:k	kuan	a ring
pɔ:k thi:	kuan	a ring
pɔ:j	pɔ:j	a bamboo shoot
phiba:	nhwá [✓] t	mad
phitwan		dispoint
phi?		to plead
phijet	pik	chili

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
phi:ɸa:	nua?	rice
phiak	kləj	to break
phiah	phiah	a direction, a side
phe?	phe?	spicy
phe:t		a spirit
phæ?	phæ?	three
phæw		a kind of vegetable
phæ:n	pakla:	the sholders
phuanj	mphuanj	coterie group
phəp	phəp	to shot (a gun)
phək	phək	to dig
phama:t		to be careless
phantəj	na:	where
phap>:ŋ		a window
phat	phat	to squeeze (with fist)
phak pəm		the parsley, genus Petroselinum
phak thiam		garlic
phak la?		Acacia
pha?	mplah	to let go, to release
phaw	tap	to wait
pha:		animal food
pha: nthəŋ		a pedestal called made of bamboo strips containing a white string.

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
pha: ꞑca:k	sok	cloth
pha: cet		a handkerchief
pha: lop		cloth for cover a mattress
pha: ꞑwa		a mattress
pha:ŋ	pha:ŋ	a winnowing basket
pha:j		a card game
phum		to break wind
phun	p ^h un	dust
phun kwah	p ^h un	ashes
phunꞑ	jən	to disperse
phunꞑ	mphonꞑ	to blow
phuc	suaj	to wash
phuh	phuh	to wash clothes
phuh	?ajh	to swell
phuj	phəj	to spit
phul	phu:l	a crossbow
phu:		betel
phot	phot	to arrive
phoh	phjoh	the loud clap that thunder makes
phoh	phoh	to split
pho:t	pho:t	to dote on
phək	ŋkək	to bite
phɔɾ	phjaɯ	to straighten out legs

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
phɔ:t	phɔjh	a barking deer
phliŋ	phi:ŋ	to grill
phle:w	lhuh	to twist, to wring
phlæ?	phlæ?	a fruit
phlæ? mphiɔŋ		the edible inflorescence of a banana plant
phlæ? nat		the pineapple
phlæ? na:w		the lemon
phlæ? nthi?	khluaj	banana
phlæ? nthæh		garden pea
phlæ? ꞑa:l		a tree of the family Euphorbiaceae
phlæ? ꞑɔp		the lungs
phlæ? ꞑa:m	kjam	bean pod
phlæ? pa:n		Seville orange
phlæ? puk	phlæ? puk	the pomelo
phlæ? pha:ŋ		a tree of the sumac family
phlæ? tan		the Indian jujube
phlæ? taw		the melon
phlæ? tɔ:m	phlæ? ?iaŋ	a coat button
phlæ? kiw		Citrus hystrix
phlæ? kuajte:t		the papaya
phlæ? khwa the:t		the tomato
phlæ? khɔk		the hog plum
phlæ? khwæ:n		the eggplant

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
phlæ? ɔɪdɑ:		the guave
phlæ? ɛet		the mango
phlæ? ɛaŋ		Monordica
Phlæ? lak the?		the wax gourd
phlæ? lak lɔ?		the plamkin
phlæ? lɔ:		a kind of fruit in a bunch
phlæ:	mplæ?	to stick out (the tongue)
phlæ:l		hail
phlɜ:n	nthok	to take off (clothes)
phlɔt phlɔt	ɲep ɲep	to blink the eyes
phlak	tam	a tap
phlah	phæ:n	a unit of a flat thing
phlar	bu:n	to bore a small hole into something
phla:n		to open
phla:t		to touch momentarily with the finger
phlɔŋ	phlɔ:ŋ	a section of finger
phlɔ:m	phlɔ:m	a land leech
phlɔ:k	phak	a knife sheath
phræ:w		a scar
phra?	phlah	to release
phra:	pha:	a cliff
phrɔh	phjɔh	to set pole upright in ground

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
phwah		to open a liquor jar
pli:n	plin	to turn (over)
plɛh	pih	T'in musical instrument made from bamboo section
plat		to put forth fresh leaves
plə:n	mplɔ:k	to roll (the eyes) upward
pluk		to turn siver gray
pruk	phlək	the name of Prav holiday
praj		the Prav people
pra:ŋ	kjɔ:ŋ	clear (of water)
pru:t	mpluk	to pull or drag along
pron	pjan	a pimple
prɔ:ŋ	sɔ:j	a spirit
/t-/		
tit	thi:t	small
tik tik	mpjue	on and on
ti:p	ŋkho:ŋ	to fold
tiaw	wæ:	trousers, pants
tew	ŋcɔŋlɔŋ	to hang up
tɛ:k	te?	to measure
təl	khlət	to shut up, to plug
tam	plu:t	to insert
tan	kan	if
tapɔt	ŋkhən	a hair bun
taphaw		lemon grass

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
tafaŋ		a bank
ta:k	ta:	at
ta?	sɔ:ɣ	shallow
ta?	?ɔ:ɣ	thin
taw	thaw	the name of day in Pray week
ta:		father or mother's brother
ta:ŋ		to load
ta:t	ŋe:ŋ	to hear
ta:t	mphe?	to show, to reveal
ta:t pa?	cə:n	to be bright (of light)
ta:t ?a:k	?ajh ?a:k	sunshine
ta:j		a past tense marker
to?	to?	to come
tol	khləm	round
tol koh		a stiff neck caused by hydro phobia
to:k	tɔk	to step on
tɔm	khujh	to sit
tɔŋ	tɔŋ	an egg
tɔttæ:	tokto:	a wall gecko
tɔk	khi:	to ride
tɔl	khɔk	Adam's apple
tɔ: (pɔ:)	ntən	not to know

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
tɔŋ	tɔŋ	an egg
tɔttɛ:	tokto:	a wall gecko
tɔk	khi:	to ride
tɔl	khɔk	Adam's apple
tɔ: (pɛ:)	ntən	not to know
tɔ:n	tɔ:n, tɔ:l	a slice, a piece of something
tɔ:ŋ		Coreopsis
tɔ:t		to crow
tɔ:l	tɔl	to carry on a pole across the shoulders
tɔ:r	ŋa:	to be a baby
thiŋ	tam	under
thi:	thi:	the hand, the arm
the?		a final particle
thən		to be very glad
thɛ?		after
thum	thu:m	to cover over, to put a roof on a house
thuh	thuh	high, up, above
thəp	pɔŋ	to bury or cremate a body
thəc	thəc	to sell
thəl	təl	to plant
thə:ŋ	mpləŋ	to lean against
thəŋ	khɔh	dry

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
thah	khwh	to take out of water by dipping
thaw	thok	lishen, mold
thaj	taj	a small sack
tha:n	lh _u am	to glow
tha:t		a pod
tha:t	nhəm	(of a chicken) to hatch
tha:k	t _u ŋ	to lead (an animal)
tha:r	thaw	a rope, cord
thun		amole rat
thun	th ^u an	a swamp
thuk	nthuk	to pour, to take out of (of a part of the body)
thul		to swell
thua	tiah	all over
thon	tho:n	to buy
tho:c	tho:c	to light the fire
th>k	th>k	to tie
th>h	s>t	(of a cobra) to strike
th>j	thajh	to strike a match
th>t	th>?	to puncture
th>k	th>:m	to pick out, take out
th>j		to guess
th>l		a kind of bird
th>r	th>:w	to cough

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
/c-/		
cin	kiŋ	to sew
ciŋcək	ceŋ	a house corner
cip		a negative particle
ci:		a banyan
ci:k	ki:k	to burn
ciaŋ	kiaŋ	a house
cem	cəm	weak (from working)
cen	kuŋ	from, until
ceŋ	can	the foot
ce:n	səc	pulp
ce:p		to beset
cəl	pathia?	an evening, a night
cə:r		to leak
cuh	cuh	to put on (a hat), heavy
cw:	ɲhom	to stare at
cwa	ɲw:m	the heart
cə?	jd?	dirty
caŋnak		how
cap	kap	suitable
cak	cak	to go
ca?	sa:	steamed rice (sticky rice)
ca? ŋkuh		glutinous rice baked in a bamboo cylinder
cah		a pool

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ca:	cən	slow
ca:m	tha:w	to hang out to dry
ca:m	ŋo:p	to be exposed to rain
ca:n		a plete
ca:n	sw:t	tasteless
ca:t	ca:n	balcony
ca:r	je:ŋ	a crab
ca:w	sol	to stir (rice) with the hand in water
ca:j nthu:r		a gable
cu?	cu?	to tell a lie
cu?	kju?	deep
cu:	ku:	every
cu:r	cu:	to go down
cu:r	thuah	the skin
cuak	pacuak	saleva
cuah	coh	to spit
cuar		to climb
cok	cok	to dig (into a bag)
co:t	luk	to piek (e.g. the teeth)
co:k	co:k	to absorb (water)
cɔŋ	sək	big
cɔ?		short
cɔ:	cok	a spade, a hoe
cɔ:m cɔ:m	ɟwŋɟwŋ	to walk stealthily

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
cɔ:n	tha:n	ear ring
eɔ:p	cu?	to tell a lie
cɔ:k	cɔ:k	a metal drinking cup
cɔ:j	laŋ	to help
cɔ:l		a mosquito
cwa:t	kliɛh	to chase
<u>/k-/</u>		
kin	c ^h in	a smell
kih	kih	to scratch
kih	phjem	old (thing)
kiw	jiw	the eyebrows
kiaŋ	læh	a stone
kiaŋ pu:		a tripod
kiaw ^h	kiaw	a sickle
kem		salty
kɛn		a palm civet
ket	klet	scales (of fish)
kɛn	kɛŋ	tight
kæ?		to grow up
kæ:		herbs used medicinally
kæ: ɓa:n	khwa:n	the headman of a village
kæ:m	kha:n	cape
kæ:n	kian	a pip
kæ:p	kæ:p, ke:p	to carry in the arms
kæ:t	kat	some

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
kɔ:w	kɔ:w	to hold a child on lap
kut	kut, khut	to think
kɔ?	klɔ?	the head
kɔh		to burn
kɔak	kɔ:p	shoes
kɔm	?om	to keep in the mouth
kɔŋ		a half
kɔ:t	kɔ̃:t	to give birth
kɔ:k	k k	curry, to boil food
kɔ:k pɔt		salty curry
kɔ:r	mpħəw	a handle
kam na:		before
kamkɔ:		the sweet basil
kantin		the lead tree
kaŋ	tuŋtaŋ	to start (while sleeping)
kap	kap	a box
kat	kat	to cut (e.g. one's throat)
katɔ:t	patɔ:t	the sound of chickens
katna:r	panəw	the wings
kacaŋ	kjəŋ	horn
kah		a final particle
kaj	?iaw	a chicken
kaj tu:r		a chick
kalɔmpi:		a cabbage
kar	kaw	straight

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
kafaj ɣo:		matches
ka:	kha:	the name of day in Pray week
ka:m		the muscles
ka:n	ka:n	to be defeated
ka:n thu:n		Caladium
ka:p	ka:p	to mout (e.g. a bone)
ka:t		a market
ka:j	ŋklɔh	from
kum	ku:m	to winnow, to separate husk from rice kernels
kup	pɔ:n	can, to get
kuŋ	kho:t	a prawn
kut	ku:t	to enter
kul	ku:l	a foot rice pounder for husking rice
kur kur		the sound of calling pigs
kuj	kuj	the fist
ku:c	ki:k	to make fire
kuar	phu:n	to stir (with a laddle)
konkoj		the knuckle of the hand
kop		a frog
kot	kot	to curl oneself up
kok	jum	a tree trunk
kok ɣinal	ɣal	a stump

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
kok lam	?uaŋ	a tree
ko?	ko?	a fish basket
koh	kjaŋ	hard
koj koj	wəj wəj	to swing
ko:p	but	a shirt
ko:j kha:w		a kind of bananas
ko:j ?ɔŋ		a kind of bananas
kɔŋ	kuaŋ, kaŋ	to hold in palm of hand
kɔp	ntun	a pile
kɔkɔk	jɔ:k	to hobble
kɔh	khɔ:n	to go up
kɔ?	kɔ?	to embrace
kɔ:	kɔ:	result clause in complex sentences
kɔ:		galingale
kɔ:m	khlo:	a white ant
kɔ:n	kɔ:n	a tube
khi:t		to scratch, to scrape
khiaŋ	khiaŋ	a lamp
khet	mpli:t	quiet
khe:t	səh	cool
khe:t	kieh	root
khəp	khəp	sandle
khəh	khəh	a mountain goat, a pail
khə:		a kind of vegetable

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
khæ:p		a gourd of the family Cucur bitaceae
khæ:l	khæ:l	cucumber
khun	ntæ:p	to lay on top of
khuh ŋkuaj	nthuh	to breathe
khu:	phu?	same
khəm	khəm	to roast on a stick
khəŋ ɔŋ	lh>?	middle
khət	phæ?	to pound
khət khət	khəy khəy	to have the creeps
khəc	phət	to pluck (flowers)
khə:j	nsa:w	a son-in-law
khap	ŋkjuw	a cage
khat	ŋaw	cold, to have a fever
khaw	khəŋ	the back (of body)
khaw nthu:r	mpuŋ ntuw	rooftap
khaj	khaj	to say
kha:	kha:	a fish
kha: pa:khɔ:		the snakehead
kha:ŋ	mpɔ:m	the cheek
kha:p	khuap	the name of day in Pray week
kha:p	mphaj mpham	a moth
kha:k		to expectorate
kha:l		a half

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
khuc	suw	to become rotten
khua	ce:w	clothes
khua	sa:n	to fly (in air)
khuan		a yam
khuaκ		hollow
khon	khuan	a younger sibling
khot	khot	to sit with the knees, the name of day in Pray week
khok	menkla:j	a monkey
khoj	khwa:j	small plants yielding starchy roots
khoj met		the sweet potato
khoj mannoŋ		a yam
khoj man lwat		a kind of yam with red peel
khoj ꞑco:		a yam-like plant, genus Dioscorea
khoj ꞑkra:p		a kind of yam with red pulp
khoj pha:w		a big red-peel yam
khoj ton		the cassava plant
khol	mpaw	mud
khɔm	khɔ:m	the north, above
khɔŋ	khuan	in

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
khɔt		a lance
khɔ?	nkju?	a skull, a shell
khɔ? nuj	ŋkju? ŋkjɔŋ	the knees
khɔ? ɓo:j		a deep spoon made of coconut shell
khɔ? kɔ?	mphaɔ:ŋ	the skull
khɔ? kul	ku:l	a mortar
khɔ? kham		a caterpillar
khɔl	ŋkhal	a large chip of wood
khɔr	kouj	to poke
khɔr ja:		a drug addict
khɔ:	klɔ:ŋ	the joint
khɔ:p		to fumble under water or in the dark
khɔ:l	kho:n	to cry (of a hen)
khlih	khlih	to fall
khɬɛ:p	khɬɛ:p	to pinch
khɬɛ:t	plɛ:t	to swallow
khɬɔp	khɬɔt	a lid, to close (door)
khɬak	khɬɔk	chalf
khɬa:l	waj	quickly
khuk		to blacken with dirty
khlo? muh	ntawj	to snore
khɬɔŋ	khɬɔ:ŋ	a husband, a man
khrem	phje:m	old (thing)

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
khre:t	hat	to buckle (a belt)
khre:m	nkah	erisp
khre:?	ca:	to get, right
khre:w	khiaw	green
khre:?		productive
khre:p	ta:m	to follow
khram	phjam	human being, a person
khrah	klajh	to break (of tooth)
khra:	sa:w	railings
khru:t	pha:t	to abrade, to scrape
khru:?	khju:	to beg
khwe:n	siah	(of a patient) to improve
khwan	kh an	son/daughter
khwan mɔ:n	mɔ:n ma:j	a young unmarried woman
khwan ba:w	nhum	a young unmarried man
khwan pca?	lia?	a grandchild
khwan	khuang	in
khwak fu:t	khuak	a coconut grub
khwa?	phua?	yet
khwa:k		to stick in the throat
khwa:r	khway	an axe
khwra?	khluah	a shellfish
khwra? til		a freshwater snail
khwra? la:		amollusk of the family Cardiidae

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
klenj		the sound of beating a piece of bamboo
kle:	kek	crosseyed
klak	klwl	to lick
kla:nj	lhanj	classifier for leaf
klɔnj		the sound of beating a piece of bamboo
krwɛ	kjɛc	to fall out
krak	kjak	next (time)
kraw	mha:w	to claw
kra:nj	kja:p	to be shy
kro?	kjo?	loud (of noise)
kro? muh	ntawj	to snore
kro? khər	khəw	thunder
krɔ:j	caw	to flow
kwənj		a kind of bamboo
kwak	kwa:t	to beckon
kwah	puah	the fire place
kwah phoj		a firewood remaining on the fire place
kwa:		more than
kwa:nj		gum used as fuel
kwra?		to retch

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
/?-/		
?i-	?i-	a prefix attached to nouns
?iŋ	si?	long (time)
?i?aw		a husband's younger sibling
?i?a:		a father's younger sibling
?ilunŋ		a wife older sibling
?ih	?i:	we (plural; three or more)
?ilɔ:k	ɲɔ:p	to be bruised
?i:t	kæ:	to repair
?æŋ	?aŋ	at
?æh		a final particle
?æ:		me
?æ:ŋ	?æ:m	to do
?æ:p	?æ:p	a cooked rice container
-		weaving by bamboo strips
?u:r	cu?	met, damp
?ə m	?ə:m	to take a bath
?ə p	?ə p	I, me, mine
?ə t	?ə t	to take
?an	joh	a question particle
?ac kop	lhɔ:j	a tadpole
?ah	?ah	they (plural; three or more)
?ah me:	mæ: ?ijah	a women

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
?ah khlonj	?onj khlonj	a man
?aw	?aw	a father
?aw nuan		a north-Thai people
?aw lo:nj	pu:	a grandfather
?aj	?aj	no, not
?aj khlu:n	khluak	an earth worm
?a:k	?a:k	the sonshine
?a:j	nkjoh	steam
?unj	?e:nj	an earthen jar
?u?		to live, to stay
?u:	?u:	a baby's cradle
?uaj	kho:j	to sleep
?on	?anj	to give
?op		stuffy
?ot	?ot	to endure
?o?	joh	a final particle
?o?	ho?	or
?oh	?o:t	egg yolk
?o:m	?o:m	to urinate
?o:t	pa?ojh	firewood
?ol	?e:nj	a pot
?onj	no:j	to see, to cure
?ot ?ot	?ot ?ot	to angry
?o:k	?o:k	to drink

<u>Pray</u>		<u>Mal</u>	<u>Meaning</u>
/b-/			
bet	✱	kɔʔ	a fish hook
bwt			a moment
bə:		na:w ^w	dumb
bak		sada:	almost
bah			interjection
ba:t		kja:w	a time
bun̩		jæ:w	to glow
bu:t		je:w	cataract (on eye lense)
buak			slime
boŋ			a kind of bamboo
bot		bot	the cloud
bok		bok	to chop
bɔ: ca:ŋ			a well
bɔ: ɤot		nse:w	gully, ravine
bræh		mpjɔ:j	old (age)
/d-/			
din ci:			a brick
deŋ		ben	to pull
de:		lal	the vagina
dæ:			a final particle
dæ:k		dǎ:k, thǎ:k	to shove, to crowd in the cockspur
dap			the name of day in Pray week

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
ɖaj		a final particle
ɖa:n		obstinate
ɖuh	whæt	often
ɖu: khwæ:n	t kcu:, k e:n	to look down on
ɖu:t	jæ:u	to sprout
ɖua		long
ɖok	kun	much, many
ɖok cile?		very much
ɖok cilit		naughty
ɖ :k		classifier for flower
/ɕ/		
ɕi-		nominalization prefix adjoined to a few verbs
ɕim	ce:m	to taste
ɕimə?		a bunch (e.g. of banana)
ɕiman	ma:n	a daughter-in-law
ɕimat		a fist
ɕima: lɔ?	suma:	to beg (someone) pardon
ɕima:t		a skink
ɕima:l	ma:l	life-force, soul
ɕimu:	mu:	a gum or resin from tree
ɕimop	?u:t	a star
ɕimo:c	mo:c	an ant
ɕin	twt	to suffer from congestion of the nose

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
ɕinit	bæ:p	the lips
ɕinil		the gum around a tooth
ɕinɤ:	mpjɤ:	a rat, a mouse
ɕinɤ:p	no? no?	to sit squat on the floor in a polite attitude
ɕinɤm		to be on guard against
ɕinɤ:r	niɥ	to moan
ɕina: phala:t		a strip of bamboo for weaving
ɕina:t	sana:t	a gun
ɕinum	pləp	to sink
ɕinuah	nuah	to point with the finger
ɕipɤŋ		fish bone
ɕipɤŋ pe:r		a rib
ɕipɤ:		mucus of the nose
ɕipua		a stick supporting a roof
ɕipɤam	ɲhuam	a bamboo strip for tying
ɕipɤ:j	ɲokɲo:j	shower, steel wool
ɕiŋ	si:	a pig
ɕiŋɤ:r		an owl
ɕiŋal	ŋal	a stump
ɕiŋa:t		to be in fear or suspense
ɕiŋa:r		camphor
ɕiŋkhal	ŋkhal	a hammer
ɕipiŋ		a zipper

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ɕipi:n	pi:n	the vina
ɕipan	pjan	a rash on the skin
ɕibaj	patəŋ	a loincloth for bathing without a bathroom
ɕibut		the globe amaranth
ɕit		a zipper
ɕitɯ: ?əŋ	khɿɿ? tia?	to pity
ɕita:m	huat huat	to whisper
ɕitun		a pock
ɕitu:p		climbing fish
ɕito:k	phuan	a tray on a pedestal
ɕik	thə:	earth
ɕikrɯ:		a lemon grass
ɕi?im	pi?	full
ɕi?e:	?e:	who
ɕi?əw	pəp	to be withered
ɕi?əw mpɸuj	nhu?	to furrow eyebrows
ɕi?əm	mpɸh	to speak
ɕi?ap	?o:t	to be annoyed by a noise
ɕi?aj		still not
ɕi?a:t	nat	barren
ɕi?um	?o:n	fragrant
ɕi?uh	həj	to leak
ɕi?u:	?u:	a simple Thai shirt
ɕi?oh	?oh	to steam

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ɕiʔɔh	ʔɔh	hot
ɕiʔɔl	ʔɔ:l	a pot
ɕiʔɔl ka:	ʔɔ:l	a tea-pot
ɕiʔɔl kha:ŋ	ʔæ:ŋ	a frying-pan
ɕiʔɔ:r	wi:t	to be drunk
ɕih	sih	to put on/in
ɕili:		maize
ɕileŋ	nthaŋ	a bracelet
ɕilæ:w	thale:w	a charm woven out of bamboo to place in rice field or above doopost or on a post leading in the house to ward off spirits, wild animals.
ɕiləp	mpləp	to turn face down
ɕiləpphləp		a butterfly
ɕilok		a cowbell
ɕilɔm	lhom	loose
ɕilɔ:	khlɔ:	banana leaves used for wrapping
ɕilɔ: khɔc	khlɔ:	banana leaves used for wrapping
ɕiri:		a cockroach
ɕirec		a mole rat
ɕirwa		a cock's comb

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
airakthak	cakcim	a house lizard
aira:	kja:	thin
airo?	?o:l	male genitals
ciw	siaw	sweet
ciwa?	ma?e:	what
ciwa:c	kwac	to splash water with hands
cijen	?ian	the bones
cija?	?ia?	far
cija?	lhia?	a thorn
cijah	?jah, ?iah	a wife
cijak		a spider
ciam	tap	to bash, to hit
cian	sian	the tooth
cem	se:m	a bird
cen	sen	a line
cen	sian	the time before
cep	ja:p	to drive out of away
ce?		a louse
ceh	seh	to hate
ce:t	khieh	to laugh
ceŋ	nsaŋ	the intestine
ceʔ		sour
ceʔ	sʔ	how many/much
ceʔ pʔen	lhia?	a thorn
ce:	s:	near, dry rice field

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
sa:ŋ	wā:m	to feel dizzy
sa:r	sɛ:u	a langur
sa:		a name
sa:p	lhu:m	to repair
səc	səc	meat
sə:r		to roast over an open fire
sam		throughout
san	saŋ	bitter
sak	lɔ:ŋ	to tell (a story)
sa?	sa?	a thing, air
sa? pɔŋ	sul	food (not rice but eaten with rice)
sasa:	ca?	a basket
sah	sah	to splash (water) out of (pool)
sa:	sa:	steamed rice (sticky rice)
sa: ku?	paŋa?	rice paddy
sa:m	sam	the right
sa:c	ka:jh	to comb
sa:k	sa:k	to tear
sa:r		to poke
samsu:	ŋkiap	drowsy
samsəŋ		to feel annoyed
sup	sup	to put on (shoes, hat)
sut	sut	end, last (of something)

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
ʃut		a mosquits net
ʃu?	su?	to smell bad
ʃu:n	su:	to mi
ʃu:t	si:m	to insert
ʃuan	so:p	to ask
ʃuanŋ	lɔ:ŋ	to filter
ʃuak	suak	to scold, salt
ʃua?	ʃhua?	the moon
ʃuar	tuŋ	to lead by the hand
ʃom		(to estimate) about
ʃo?	so?	to want, to hurt
ʃo:	so:	red
ʃo:p	ŋkħan	a hair bun
ʃo:t	sɔ:t	sticky
ʃo:j		a bobbin
ʃo:r	nsou	to blow the nose
ʃoŋ		a basket for a hen to sleep
ʃoppɔh	?e:p	a millipede
ʃɔk		the house sparrow
ʃɔkkɔ:k		strange
ʃɔ?	com	to blame in one's absence
ʃɔh	cɔh	to dip up (water, cooked rice)
ʃɔl	thual	to answer

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
ɤɔ:	sɔ:	other another
ɤɔ:n		the canna
ɤɔ:j	nsuajh	to slice
ɤwa?	sua?	a dog
ɤwah	thuah	the skin
ɤwa:t	ciawh	to shape with a knife
/n-/		
hi:p		to draw in breath through the teeth causing sibilant sound
he:w		a graveyard
hæ:ŋ		more
hə?	ja?	rubbish
hə:j		an exclamation
haŋ	haŋ	rich
ha:n	haw	to darē
ha:ŋ	ja:ŋ	to divorce
ha:p	tɔl	to carry on two ends of shoulder pole
hɔm ɓua		an onion
hɔm ɗuan		peppermint
hɔ:n	jo:n	hot
hɔ:n		a hollow

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
/l-/		
lik lik	ɲajh	to shake the head from side to side
leŋ	ntɔ:ɰ	to run
lek cam		a nail
lek ɤabaj		a file
leh	leh	to come
lɛ?	lɛ?	to search for
lɛ?	lɛ?	classifier of something and fruit
lɛh		to cut (a finger)
lɛl		fish gills
lɛ:		a kind of insect (We can see when it is rain)
lɛ:m	lɔ:ŋ	to tempt
lɛ:n		a monitor lizard
lɛ:n ɖa:w		a monitor lizard
lu:		to admire
lu:	ja:	not to do anything
lu:n	səŋ	naked
lu:k	nplõ:t	to peel, (of snake) losing skin
lua		a saw, to saw
lua patɔ:ŋ		a kind of saw
lɔm	no:j	together

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
lən	lən	shappen (a knife)
ləp	kiw	a valley
lək lək	nsil	to rinse out mouth
lə:	lapcom	to forget
lam	lam	wood
lan	nhap	to fall down
lap		to make the bed
la?		a kind of vegetable
law mun		to talk
laj		to tell
la:ŋ thi:	nha:ŋ	the plam
la:p	plǎ:	to mince (meat)
la:t	kɔm	to slice
la:c	lhō:n	to separate
la:w	mpat	to sweep
lun ?ɔ:k	lul	a bottle gourd
lut		the navel
luk	kǔ:k	a pen (for animal)
lu? khwan	phjut	to abort
luh	luŋ	to break a taboo of a spirit
lua		a donkey
lu:	lu:	to scramble for
lon	lhon	to drop off

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
lo?	bak	to forge or hunt for vegetables in forest
lo:t lo:t		to pat
lo:k	lo:k	(of flowers, leaves) to be tremulous
lɔŋ	lɔŋ	a classifier for person
lɔŋ te?	lɔk	yard
lɔ?	lɔ?	good
lɔ? ɲa:m	lɔ? mpjam	beautiful
lɔ? pɔŋ	lɔ? pɔŋ	delicious
lɔh	tajh	slope
lɔh ɕua	mplɔh	a hill
lɔ:ŋ	mul	a wild boar
lɔ:ŋ	lan	to ford
lɔ:t	lɔjh	to steal
lɔ:c	lɔ:c	the tip, the end
lɔ:l	lɔ:l	the buttocks
lɔ:j	lɔ:j	to swim
/r-/		
ri:t	nuan	ran, flesh
re:		a porcupine
re:t	kho:t	to slice off (e.g. strips from cane)
ræŋ	ja:ŋ	loud, strong

<u>Prav</u>	<u>Mal</u>	<u>Meaning</u>
rət əih	ŋkan	to bawl, to snap
rəh	kət	to tear
rəc		Bermuda grass
rəh	juh	to become loose, to unroll
rə:	cak	to go to walk
rak	jak	to love
ra?	ja?	to place (on)
rah	jah	to blossom
raw	thoh	to pull out off
ra:ŋ	ja:ŋ	a flower
ra:j	ja:j	cruel
ruk	juk	to water
rur	nthajh	the bladder
ruaŋ	juaŋ	the name of day in Prav week
ruaŋ . .	ja:ŋ	a way
roh	joh	to bark
ro:c	luac	to finish
rɔh	jɔh	outside, to get up
rɔ:		a corn on the foot
rɔ:k	jɔ:k	a toad
/w-/		
win	ŋkho:ŋ	to be crooked, to be arched
wit	těn, pun	to jump

<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
wi?	wi?	the left
wi:	pat	to blow
wen	wē:n	except
wæ?	khū:ŋ	ginger
wæ:n		a rurror
wæ:t	wæ:t	to surround
wəj	wəj wəj	to swing
wəŋ	wə:ŋ	the chin
wak ʔiŋə:r		an owl
wah	ʔah	to open (e.g. the mouth)
wah ŋkiap		to yawn
wal	ŋwa:j	to return
wa:ŋ	wa:ŋ	a year
wa:c		to cock the hammer of a gun
wa:k		..Bermuda grass
wa:k	whe:k	to destroy
wa:j		the name of day in Pray week
wa:r	ʔua	before



<u>Pray</u>	<u>Mal</u>	<u>Meaning</u>
/j-/		
jeh		of
je:n		an eel
ju:	ju: ^v t	to stretch (one's neck)
jak	liak	to fear
ja?	?ia?	we (dual)
jan		to press
jat	thiat	small
jak	?jak	excrement
ja: pun		Amaranthus
juŋ	khjuŋ, khuŋ	a village