THE PHONOLOGICAL STUDY OF PADAUNG
(LONG-NECKED KAREN) AT BAN NAISOI, TAMBOLO PANG MU,
MUANG DISTRICT, MAE HONG SON PROVINCE

SARINYA KHAMMUANG

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Sarinya Khammuang
This thesis is an attempt to present a phonological study of Padaung language as spoken at Ban Naisoi, Tambol Pang Mu, Muang District, Mae Hong Son Province by using the Tagmemic theory.

The result of this study shows that the phonological system is composed of twenty-two consonant phonemes (b, p, ph, d, t, th, j, c, ch, g, k, kh, ?, s, h, m, n, ñ, r, l, w, y), thirteen vowel phonemes (i, e, è, a, ò, u, o, ò, ia, ai, òi, òu, òa), and four tonemes: mid level tone, low-falling tone, high-falling tone and high-rising tone. The syllable structure is C(C)V(C). There are three types of syllables: presyllable, minor syllable and major syllable. There are three types of phonological words: monosyllabic words, disyllabic words and trisyllabic words. Intonation is caused by tone of the final syllable of a statement either falling or rising.

It should be noted that vocalisation using a breathy voice is done for only a few words in the Padaung language. It can be assumed that the breathy voice may be lost in the future.
ทิพยากรณ์ บัวปรี มีจุดมุ่งหมายเพื่อศึกษาโครงสร้างลингก้าภาพตอง (กะเหรี่ยงคอยาว) บ้านในมวล ด้วยเป้าหมาย อ่านออกmos จังหวัดแม่ฮ่องสอนโดยใช้ทฤษฎีเทคนิคพื้นฐาน

ผลการศึกษานั้นพบว่าทั้งสิ้นเสียงพุ่ยมี 22 หน่วยเสียงคือ / b, p, ph, d, t, th, j, c, ch, g, k, kh, ?, s, h, m, n, ñ, r, l, w, y/ หน่วยเสียงสำรวมมี 13 หน่วยเสียงคือ / i, e, e, a, o, œ, õ, ə, a, ã, ə/, หน่วยเสียงสำรวมพุ่ยมี 4 หน่วยเสียงคือ วรรณยุกต์กลาง วรรณยุกต์ต่ำ วรรณยุกต์สูงกลางและวรรณยุกต์สูงสุด โครงสร้างพยางค์ประกอบด้วย C(C)CV(C)

พยางค์ประกอบด้วย พยางค์นำ พยางค์หลักและพยางค์รอง ลักษณะประกอบด้วยคำพยางค์เดียว คำพยางค์และคำที่พยางค์ ท่อนเสียงมีสองประเภทคือ ท่อนอันเสียงชื้นและท่อนอันเสียงดก ทั้งนี้ขึ้นอยู่กับระดับเสียงวรรณยุกต์ของพยางค์สุดท้ายในประโยค

เป็นที่น่าสังเกตว่าลักษณะเสียงพุ่ยมีหลากหลายในการพยากรณ์มีปรากฏนัยยมมาก ลักษณะ

ว่าลักษณะเสียงพุ่ยมีอย่างจะหายไปในที่สุด
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<td>Aspirated</td>
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<td>Buddhist Era</td>
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<td>C</td>
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<td>C₁</td>
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<td>IPA.</td>
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<td>vol.</td>
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[21] /2/ a low-falling tone
[52] /3/ a high-falling tone
[45] /4/ a high-rising tone
CHAPTER I
INTRODUCTION

1.1 Rationale

There are many ethnic groups in Thailand. The nine major ethnic groups are: Karen, Hmong, Lisu, Lahu, Akha, Yao, Lua, Thin and Khmu. Of all the nine groups, Karen has the largest population. According to the Public Welfare Department, Labour and Social Welfare Ministry (1995:9), there are approximately 353,110 Karen people in Thailand. This number constitutes 41.38% of the total hilltribe population in the country. The Karen group can be divided into four main groups: Pwo Karen, Sgaw Karen, Bwe or Bre and Taungtu or Pa-O. Pwo Karen are mostly found in the western provinces: Kanchanaburi, Tak, Prachuapkhiri Khan, Phetchaburi. Sgaw Karen live mainly in the provinces of Chiang Mai, Chiang Rai and Mae Hong Son. Besides these two main groups, there is one Karen group which is well known among tourists but there has been little academic research on them -- the Padaung or the long-necked Karen.

1.2 Objectives

1.2.1 To study the phonological system of the Padaung language spoken at Ban Naisoi, Tambol Pang Mu, Muang district, Mae Hong Son Province.

1.2.2 To study the history and way of life of the Padaung people.
1.3 Scope of the Study

This study deals with intonation, phonological words, syllables, phonemes, and the tonal system of the Padaung language as spoken by a native speaker migrating from Loikaw, the capital of Kayah State, Myanmar to the present location in Naisoi village.

1.4 Benefits of the Study

1.4.1 This study provides knowledge of information on Padaung phonology, the history and the way of life of the Padaung people.
1.4.2 This study is useful to the field of Tibeto-Burman linguistics since it provides additional information on an unexplored Karen dialect.
1.4.3 This study will help minimize the language barrier between those who need to communicate with Padaung and the Padaung people.
1.4.4 This study will help increase understanding between local people and the Padaung people.

1.5 General Information about Padaung

Padaung call themselves Kae Kong Du (B. Bunkham B.E. 2499) or Kayan. They are known by the names Lekur, and the “long-necked Karen” or “giraffe woman” according to the woman’s appearance.

The Padaung’s homeland was in Yunnan province of The People’s Republic of China. In 1000, they migrated to the Salween River Basin in Myanmar. Due to political conflicts in Myanmar, government officials have implemented a military policy which has caused the Padaung people to flee the violence. So they have moved to settle near the neighboring minority who has a stronger power of military.

Padaung speakers are concentrated in Loikaw City in north-western Kayah State and the adjacent town of Phekon in southern Shan State. There are 85,000 speakers of Padaung in Myanmar (Moseley and Asher 1994:182). There are also
Padaung living in the southwest of Kayah State. A smaller number of Padaung speakers also reside in Mae Hong Son province (Kauffman 1983:3).

1.6 Language Affiliation

Padaung language belongs to the Karenic family which is comprised of at least six major languages. It is generally agreed that Karenic languages belong to the Sino-Tibetan stock and are more closely related to Tibeto-Burman than to Sinitic. However, their exact relation to the Tibeto-Burman family is still disputed.

Benedict (1972:6) grouped Karen with Tibeto-Burman under the Tibeto-Karen stock whereas Matisoff (1973:84) placed Karen under Tibeto-Burman. There are some linguistic features which differentiate the Karenic languages from other languages in the Tibeto-Burman group. For example, Karenic languages have the word order SVO whereas other languages of Tibeto-Burman group have SOV (Fraser 1995:159).

Karen is classified into three main groups by geographical designation; northern, central, and southern groups. The northern group is the Pa-O, living in Shan State, Myanmar. The southern group has the two largest groups of Karen, the Sgaw and the Pwo. The central Karen refers to the Karen language spoken in Kayah State of Myanmar, the adjacent areas in Myanmar and Mae Hong Son Province, Thailand as diagrammed below (Kauffman 1983:3).
Figure 1: Alternate places of Karenic languages within Sino-Tibetan (Fraser 1995:159)

Figure 2: Geographical groupings of Karenic Languages (Fraser 1995:160)
1.7 Geographical Location

1.7.1 Padaung in Thailand

Padaung came to Thailand at the end of 1984 as the Burmese military were wiping out the Kayah minority on the Thai-Myanmar border situated across Tambol Pha Bong and Tambol Pang Mu, Muang district, Mae Hong Son. The result of insurgency and repression caused Kayah and Padaung people to come to Thailand. Thai officials have taken care of them as a refugee since 1985.

Later on, the governor of Mae Hong Son province had a policy to open the city to tourism. One way to promote Mae Hong Son to tourists was the long-necked Karen. So he talked to a Kayah leaders about opening the long-necked Karen village to tourists by setting up a long-necked Karen village tourism center at Pai riverside in order to satisfy tourists’ convenience and to increase visitors. At that time, there were eight Padaung women who wore neck brass rings. After the number of long-necked Karen new arrivals increase, there was a need for them to set up new households at Ban Naisoi.

1.7.2 Location

Mae Hong Son, a northwestern province of Thailand, is bordered by Myanmar to the north and west, Tak Province in the south, and Chiang Mai Province in the east. Mae Hong Son Province is administratively divided into six districts, and one subdistrict: Muang, Mae Sa Riang, Mae La Noi, Pai, Khun Yuam, Sob Moei and Pang Ma Pha subdistrict. It has an area of 12,681 square kilometers. Mae Hong Son province can be reached from Chaing Mai either by Highway No. 108 via Mae Sa Riang, or Highway No. 1095 via Pai which shortens the distance to about 274 kilometers.

Ban Naisoi, Tambol Pang Mu is about 30 kilometers from Muang district. There are several refugee ethnic groups here because Ban Naisoi is located in the border area where the majority of the people are predominantly Tai-Yai. The Padaung village is three kilometers from Tai-Yai villages. According to the 1996
unofficial record, there are 31 Padaung women who wear brass rings in Ban Naisoi, and 44 Padaung men.
Figure 3: Map of Mae Hong Son Administrative District

Source: Adapted from Documents of The Tourism Authority of Thailand (1993)
Figure 4: Map of Padaung Location

Source: Adapted from National Geographic.
1979 vol. 155 No. 6, p.800
1.8 Legend of long-necked Padaung women

There are many legends about the Padaung women’s wearing brass rings. The Padaung believed that in the past, spirits disliked the Padaung people so they sent a tiger to harm them, especially the women. Padaung’s ancestor feared that if all the women died, their tribe would become extinct so all Padaung women wore neck-rings to prevent themselves from the tiger. According to Somsonge (1989:31), the historical reason for wearing neck-rings is that, in the past Padaung, or Lekhur, were proud of their life as brave warriors. They had conquered the Burmese. Later the Burmese and the Bengalis became allies fighting against the Padaung people. The Padaung then had to flee in defeat. The Padaung took their nine years old princess to escape with a miraculous tree called “Padaung tree” which had a yellow trunk like gold. When the Padaung arrived at a safe place, the princess bound the Padaung tree to her neck and declared that she would take off the Padaung tree from her neck when the Lekhur conquered the Burmese. After that, the Lakhur started putting rings onto a girl’s neck when she was nine years old.

The customs of wearing neck-rings in the distance past involved a young girl who had to be born on a full moon Wednesday and be a direct descendant of the Padaung in order to be entitled to wear the rings. Refusal to follow the practice might lead to sanctions and ostracization. Such social pressure could even lead to suicide. At present, all Padaung women wear brass rings, regardless of their date of birth.

The total weight of the brass rings, usually from Myanmar’s Benglong City, is around 2.5 kilograms. Rings are heated and arranged into a circle. Each person carries nine rings at this initial phase, and she has to be careful to avoid injury to her neck.

Padaung women normally carry two sets of brass rings. The first set, consists of five rings, and is used as a base on the shoulder. The next set of twenty rings is worn around the neck. Little rings on the back of the neck hold the two sets of rings together. A new brass ring is added every four years. In a lifetime, ring changes occur on nine occasions, the last one at the age of 45. The maximum number of rings worn by Padaung women is thirty-two rings, weighing 13 to 15 kilograms and are as much as 35 centimeters in length. The normal number of rings worn by women in Ban Naisoi is around 22, with two to seven kilograms in weight and nine inches in length.
Rings are worn until the women die. Pregnant women temporarily take off the rings, but put them back again after childbirth. Brass rings are also taken off when a woman undergoes punishment as the result of marital infidelity.

1.9 The Way of Life

Padaung people are similar to other Karens with regard to customs of love, work, marriage, and the like. Rice farming is the main agricultural pursuit followed by planting, cotton, tobacco, vegetables, fruits, and bamboo shoots.

Animal husbandry is another important occupation of the Padaung people. Barter trade with lowland markets involves exchanging agricultural products for salt, betel leaves, and handicraft equipment. Rice liquor is another well-known product. Padaung women carry out a range of activities, from cultivating the field to trading. Padaung males are famous as hunters. Their hunting method includes using hunting dog and muzzle-loading rifle.

1.9.1 Housing

Padaung houses are of the raised floor variety, made from wood or bamboo with a grass thatched roof. Fireplace, mat, pot, jar, and utensils and equipment are kept outside the house. Animals are kept under the living quarters. The shape of the house resembles other Karen groups' houses. Pagodas may be found in some villages, while others have Buddhist temples.

A Padaung village may be regarded as an independent community. Village activities are administered by its leader and a council of elders. The council also looks after the practice of rituals and other customs, including the administration of justice.

1.9.2 Marriage

Padaung courtship involves a go-between who takes initiation, on behalf of a male, to ask for permission to marry from the bride-to-be's family. Marriage
presents from the male include buffalos, cows and a bronze gong. The bride lives in her parents’ household for six months after the marriage. After such time, she moves to live with her husband. During pregnancy, the woman must not eat domestic animals, only wild animal meat is edible. The husband performs midwife duties for his wife’s childbirth. After the childbirth, they eat only one particular kind of cooked rice. The wife maintains this practice for 15 days while the husband does it for a considerably longer period.

1.9.3 Belief and Religion

Animism is one of the Padaung’s belief systems. They believe that spirits can cause sickness and bring misfortune. When this occurs, a spirit leader will get in touch with the spirits in order to try to rectify the bad circumstances. Before a rainy season, the Padaung people holds a ceremony to please the spirits in the hope that the coming harvest time will be good and plentiful.

About ten percent of Padaung are Buddhists. Spirits are a part of their belief system which involves setting up spirit shrines in the vicinity of their livelihood, such as their houses, village area, field, river and forest. Christianity is also popular. Catholic missionaries are found in some villages. The deceased are buried, not cremated, with the corpse’s head pointing westward.

1.9.4 Dressing

Padaung male dress is similar to other Karen groups — shirt, trousers and a turban. During rituals or solemn occasions, males wear short trousers and put wooden or rattan rings on the upper calf. They also adorn themselves with ankle rings decorated with white bead ornaments. In contrast, Padaung women display a remarkably different costume from other Karen groups.

Padaung costumes and ornaments are described in the Illustrated Encyclopedia of Mankind (1991:1549) as follows:

A Padaung woman in full costume is an impressive sight. Her long black hair is wound up into an elaborate bun on top of her
head and secured with a large silver comb and long wooden or silver pins. Covering it are one or more strips of cloth knotted at the front. In her ear lobes are silver plugs from which dangle silver chains and beads, often joined together by another chain under the chin. Around the neck are twenty or more brass rings, which rise from a collar of about five large rings resting on the shoulders. The collar is kept apart from the neck rings by a vertical brass coil at the rear. Over the collar she wears necklaces of silver chain, coins and beads. Her clothes are a sleeveless smock of plain white cloth reaching to the hips, over which is worn a black jacket.

Her narrow skirt of hand-woven cloth is folded at the front and reaches the knees. Round her legs are two more sets of brass rings separated at the top of the calf by pieces of cloth to prevent chafing. For the same reason other strips of cloth may be worn around the ankle above her bare feet, and tiny embroidered cushions placed under the chin. The costume is completed with five or more bracelets of smooth brass or aluminium on each wrist. The neck rings arouse the most curiosity from strangers. They stretch the neck and force the chin upwards and forwards, so that Padaung women eventually acquire a characteristic forward thrust of the head, a raised chin, and a voice best described as strangulated.
Figure 5: Padaung village

Figure 6: Weaving
Figure 7: Bathing and Washing

Figure 8: Dancing
Figure 9: Celebrating on New Year's Day

Figure 10: Cooking on New Year's Day
1.10. Previous Studies of the Central Karen Group

The previous studies of Central Karen languages include A Grammatical Sketch of Eastern Kayah (Red Karen) by David Solnit (1986) and Notes on Western Kayah Li (Western Red Karen Phonology) by John Bryant R., Khu Klawreh and Khu Noah (1993).

Solnit (1986) describes the phonology and grammar of the Eastern Kayah (Red Karen) language spoken at Khun Huay Dya, the village on the right bank of the Paaj river and Huaj Sya Thaw, Huaj Dya, the villages on the left bank of the Paaj river, Mae Hong Son Province, Thailand.

Since the present study is focused on phonology, the review of Solnit’s work will be confined to Eastern Kayah Phonology as follows:

The syllable structure is \((C_1)(C_2)^T(G)V\)

- \(C_1\) is any consonant
- \(C_2\) is a liquid
- \(G\) is a glide
- \(V\) is a vowel
Consonant Phonemes: There are 21 single consonant phonemes, as follows:

<table>
<thead>
<tr>
<th>Labial</th>
<th>Dental</th>
<th>Alveolar-Palatal</th>
<th>Retroflex</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>vl. unasp</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
<td>(?)</td>
</tr>
<tr>
<td>vl. asp</td>
<td>ph</td>
<td>th</td>
<td>ch</td>
<td>kh</td>
<td></td>
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<tr>
<td>voiced</td>
<td>b</td>
<td>d</td>
<td>(j)</td>
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<td></td>
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<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td></td>
<td>(j)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>voiced</td>
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<td></td>
<td></td>
<td>Fricative</td>
<td>s</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>voiced</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>continaunt</td>
<td>w</td>
<td>l</td>
<td>(j)</td>
</tr>
</tbody>
</table>

(Solnit 1986:14)

Solnit notes (1986:14) "/j/ varies between standard palatal glide and voiced palatal fricative, also occasionally appearing as a slightly prenasalized alveopalatal affricate [\"dz\", especially in the low falling tone." He (1986:15) further states "zero initial: in non-particles this is realized as either glottal stop or zero, the former more common after pause or in emphatic speech, the latter more common in connected speech. In particles it is always zero: the clitic nature of particles finds phonetic expression in their being fused to the preceding morpheme if they begin with a vowel."

Vowel phonemes: There are 10 single vowels /i e \varepsilon a \varrho y u o \varepsilon/.
**Tones**: There are 4 major tones and one marginal tone.

- **Mid tone**: 33 \( \text{ quizá } \quad \text{ a} \)
- **Low level tone**: 22 \( \text{ quizá a} \)
- **Low falling tone**: 21 \( \text{ possibly } \quad \text{ a} \)
- **High tone**: 55 \( \text{ possibly } \quad \text{ a} \)
- **High falling tone**: 52 \( \text{ possibly aa} \)

The marginal tone is a high-falling tone. Solnit (1986:22) mentions about the marginal tone that “the high falling-tone is quite rare, occurring most often in animal names and some other polysyllabic morphemes…” He treats the high-falling tone as an allotone of the high tone. Suriya (1986:XL-XLI) notes that this tone is insignificant because it is predictable, that is, it occurs with a question particle or emphatic sentence.

Bryant et al (1993) collected the data from the speakers of the Western Kayah Li language who migrated from the Kyebogyi dialect area in Myanmar to a village at the border area of Mae Hong Son Province, Thailand.

The phonological description of the Western Kayah Li language is as follows:

The syllable structure is \( V, C_1 V, C_1 C_2 V, C_1 C_2 C_3 V \)

- \( C_1 \) is any consonant
- \( C_2 \) is \( r, l \)
- \( C_3 \) is \( j, w \)
- \( V \) is a vowel

There are four types of word: one syllable words, two syllable words, three syllable words and compound words.
Kayah Li Consonants

There are 22 consonant phonemes as follows:

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<tr>
<th>Consonant Type</th>
<th>Labial</th>
<th>Inter</th>
<th>Alveolar</th>
<th>Alveolar</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
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<td>Approximant</td>
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(Bryant 1993:8)
Kayah Li Vowels

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<th>Central</th>
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<td>Close</td>
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<td>Half-Close</td>
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<td>Half-Open</td>
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<td>Open</td>
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<td>a</td>
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</tbody>
</table>

(Bryant 1993:14)

Diphthongs: /ɯə/

All vowels and diphthongs can also be breathy.

Breathy vowels are phonemic in western Kayah Li and non-phonemic in Eastern Kayah Li. The breathy vowels cannot occur with aspirated initial consonants.

Tones: There are four tones in Western Kayah Li

- **Low tone** 1
- **Mid tone** 3
- **High-Mid tone** no-marking
- **High tone** 5

Low, high-mid, and high tones occur with a glottal stop. Vowels with a mid tone are distinctively longest.
CHAPTER II
METHODOLOGY

2.1. Preparation

At the preliminary stage of this study, the literature review of the Karen languages is carried out. The field work area is also studied in detail to get a general knowledge of its geography, history, society, culture and way of life.

A word list is prepared by using the following sources:

1. Southeast Asian Word List Mahidol University Field Methods (revised 1990)
2. A Lexical Survey Mahidol University Field Methods (revised 1990)
3. The Oxford - Duden Pictorial Thai & English Dictionary

The word list consists of the words which are used in daily life. It can be classified as follows:

1. Nature, Geography
2. Utensils, Household Appliances
3. Part of human body
4. Plant and Animal
5. Food and Cooking
6. Clothes and Ornaments
7. Weather, Direction, time
8. Numeration
9. Kinship term, Pronoun
10. The name of things which use in daily life
11. Action
12. Senses and Emotions
13. Communication, Transportation
14. Quantity, Quality
15. Entertainment, Recreation
Besides the word lists, pictures are also prepared to facilitate the eliciting of data.

2.2 Field Work

2.2.1 Survey of Field Work Area

A preliminary survey was made in December 1995 in order to examine several areas which are suitable for the author to stay in and are also not too far from the provincial administrators. The survey also helped the author get acquainted with the people in the research area. Since the Padaung people lived along the Myanmar-Thailand border, during the survey, several factors such as accommodation and facilitation needed to be put into consideration.

2.2.2 Data Collecting

The data were first collected in December 1996. The lexical items as appeared in the prepared word list were pronounced in standard Thai to the informant and the question “What do you call this thing?” was asked. The informant pronounced the word in her local dialect several times. The author then mimiced the word and asked the informant if the word was pronounced correctly.

Besides the direct questions, pictures and real objects were used along with the question “What is this?” The informant was also asked to describe the pictures and tell a story. The next step is to transcribe the words into the International Phonetic Alphabet and to record them on a cassette tape. After all words in the word list had been asked, they were organized alphabetically in note cards and filed in a rhyme book. In August 1997, the collected data were rechecked again.

2.3 Source of Data

My main informant is Miss Ma Ca. She came from Loikaw, the capital of Kayah State, Myanmar. She came to Mae Hong Son province about five years ago.
She was 15 years old at the time of data collecting and had 22 brass rings on her neck. She began wearing brass rings when she was seven years old.

The data were checked with a 17 years old woman. Her name is Miss Ma Ba. She also came from Loikaw and had 19 brass rings on her neck. Both of them could speak and understand only few Thai words. They earned their living by selling woven cloths and souvenirs.

2.4 Descriptive Approach

The phonological approach used in this study is Tagmemics, which sees phonology as a hierarchy of ranks. The phonological hierarchy is postulated with such ranks of the intonation group, the phonological word, the syllable and the phoneme. The unit of each rank has a structure stated in terms of the rank below (except for the lowest rank, the phoneme) and the function stated in terms of the rank above (except for the highest one, the intonation).

The phonological hierarchy can be diagrammed as follows:

```
The intonation group
 ↓    The phonological word
     ↓    The syllable
        ↓    The phoneme

Function
```

Figure 4: The Phonological Hierarchy
2.5 Procedure

The procedure of phonological analysis is as follows:

2.5.1 Transcribe the data by using a phonetic transcription.
2.5.2 Check the data by using a checking list.
2.5.3 Record the data on a cassette tape.
2.5.4 Interpret ambiguous sounds by using unambiguous syllable patterns.
2.5.5 Rewrite the data according to the interpretation.
2.5.6 Make a phonetic chart by separating the consonant chart from the vowel chart.
2.5.7 Circle suspect pairs by putting phonetically similar sounds within the same circle.
2.5.8 Analyze the data to find significant sounds by using the contrastive and complementary distribution principles.
CHAPTER III
THE INTONATION GROUP

3.1 Definition

The intonation group is the highest rank in the hierarchy. Its structure is stated in terms of final contours.

3.2 Structure

Intonation types are determined by the pitch contours of the final syllables. The falling contour is the intonation group that the final syllable pitch pattern have pitches 21, 33 and 52. The rising contour is the intonation group that the final syllable pitch pattern has pitch 45 as exemplified below.

Falling Contour

[khi:\^45 do\^21 than\^21 khi:\^45 phu\^21] “The more I grow, the pretty I am.”

I  big  more  I  beautiful   (affirmative statement)

[khi:\^45 ta\^33 ju\^21 aw\^52 be\^21] “I want to smoke the opium.”

I  want  smoke  opium   (affirmative statement)
father eat food

“My father is eating.”

(i) affirmative statement

I child man

“My baby is a boy.”

(affirmative statement)

I not married

“I am not married.”

(negative statement)

smoke opium not good

“Smoking the opium is not good.”

(negative statement)

not sleep

“Don’t sleep”

(negative statement)

I open door polite word

“Open the door, please.”

(request statement)

give me doll 1 classifier

“Give me the doll, please.”

(request statement)
May eat I polite word

“May I have some candy?”
(request statement)

Go, now!
(command statement)

“Stand up!”
(command statement)

“Sit!”
(command statement)

Whose house is this?
(content question)

“How old are you?”
(content question)

“What is your name?”
(content question)
"What are you doing?"
(content question)

"When are you going to go Bangkok at when Bangkok?"
(content question)

"Would you like to sing a song with me?"
(invitation statement)

"Would you like to go to a waterfall?"
(invitation statement)

Rising Contour

"I am a student."
(affirmative statement)
“Did you have lunch yet?”
(Polar question)

“Can you swim?”
(Polar question)

“Now, what time is it?”
(content question)

The intonation group patterns are predictable according to the pitch of the final syllables and thus they are not contrastive.
CHAPTER IV
THE PHONOLOGICAL WORD

4.1 Definition

The phonological word is defined as the rank which functions as the unit of the intonation group and whose structure is stated in terms of syllable.

4.2 Structure

In terms of stress, the stress group in this language can be divided into three types: Monosyllabic word, Disyllabic word and Trisyllabic word.

The symbols used in describing the phonological word are:
- Strong stress is marked by ( 's.)
- Weak stress is marked by ( ,w.)
- An unstressed syllable is marked by (z.)
- Syllable breaks are indicated by a low dot (.)

4.2.1 Monosyllabic word

A monosyllabic word is a word with only one syllable. The strong stress usually occurs on that syllable. Its structure is ( 's.)

Examples:  ['tʃeɪt]  “to stab”
            ['θweɪ]  “right side”
            ['be:]  “duck”
            ['de:]  “rabbit”
            ['pha:]  “father”
4.2.2 Disyllabic word.

A disyllabic word is a word with two syllables. It can be classified according to its structure into two sub-types.

Sub-type I
This sub-type is composed of a presyllable which is unstressed followed by a major syllable. The strong stress is on the last syllable. Its structure is (z. 's.)

Examples:  
[ məʔ21 'khuʔ21]  “night”  
[ kaʔ21 'khu:52]  “teeth”  
[ məʔ21 'ke:33]  “pineapple”  
[ məʔ21 'kle:33]  “tamarind”  
[ kəʔ21 'phaʔ21]  “shoes”

Sub-type II
This sub-type is composed of two syllables. The weak stress falls on the first syllable and the strong stress is on the last syllable. Its structure is (, w. 's.)

Examples:  
[ ,hiʔ21 'khuʔ21]  “roof”  
[ ,khawʔ21 'θaʔ21]  “mango”  
[ ,dawʔ2 'pa:21]  “axe”  
[ ,phuʔ25 'daj52]  “navel”  
[ ,nu:ʔ2 'məw52]  “powdered milk”  
[ ,naj52 'mər:52]  “beehive”

4.2.3 Trisyllabic word

A Trisyllabic word is a word with three syllables. It is classified into two subtypes.
Sub-type I: The weak stress falls on the first and second syllables and strong stress falls on the last syllable. Its structure is (, w., w. 's.)

Examples:

[, plaŋ³³, ?aw⁵², tchuː⁵²] “rainbow”
[, khluj²¹, phuː⁴⁵, əa⁵²] “papaya”
[, thuː⁵², thu:j²¹, laŋ⁴⁵] “to flow”
[, haŋ²¹, khoː²¹, laŋ⁴²] “foot”

Sub-type II: The first syllable is unstressed. The minor stress falls on the second syllable and the strong stress falls on the last syllable. Its structure is (z, w. 's.)

Examples:

[ma³³, laː³³, thəw⁵²] “cabbage”
[ma²¹, hu⁴⁵, laŋ⁴⁵] “green onion”
[ma³³, sa⁴⁵, ra⁴⁵] “a kind of vegetable”
[kə³³, laŋ²¹, klaŋ²¹] “toy”
4.3 Note on Phonological word

In addition to the three types of words mentioned above, there is a group of words consisting of four syllables. Some syllables have independent meanings and some do not. Therefore, it is unclear if these words should be analysed as tetrasyllabic words or compound words. The symbol ‘?’ below represents the syllables having no independent meanings.

Examples:

- \([\text{ka}^{33} \text{ ti}^{52} \text{ tu}^{52} \text{ th}^{21}]\) “sweat”
  \(? \quad \text{“descent”}\)

- \([\text{ka}^{33} \text{ bu}^{21} \text{ lai}^{52} \text{ ew}^{21}]\) “a dimple”
  \(\text{“cheek”} \quad \text{?} \quad \text{?}\)

- \([\text{ta}^{24} \text{ ni}^{33} \text{ r}^{21} \text{ cu}^{54}]\) “a friend”
  \(? \quad \text{?} \quad \text{?}\)

- \([\text{tu}^{53} \text{ pra}^{33} \text{ to}^{33} \text{ thu}^{52}]\) “a go-between”
  \(? \quad \text{“human being”} \quad \text{?}\)

- \([\text{bu}^{52} \text{ tu}^{21} \text{ cu}^{21} \text{ kla}^{52}]\) “a fork”
  \(\text{“spoon”} \quad \text{?} \quad \text{?}\)
5.1 Definition
The syllable is defined as the rank whose structure is stated in terms of phonemes and whose unit functions in the phonological word.

5.2 Structure
The structure of syllable is described in terms of segments consisting of a vowel and usually a tone and one or two consonants as periphery.

5.3 Types of Syllable
There are three types of syllable: presyllable, minor syllable and major syllable. The symbol used in describing the syllable are:

- **C** is a consonant.
- **V** is a vowel.
- **T** is a tone.

5.3.1 Presyllable
The presyllable is defined as a syllable which has [ə] in free variation with [a] vowel and bears only non-stress. This syllable type bears the low pitch which is neutralized and thus becomes a mid level pitch.

The structure of the presyllable is: [Cə] ~ [Ca]

Examples:

- [ma²¹ˌkliː³³ 'əə²²¹] ~ [ma²¹ˌkliː³³ 'əə²²¹] “tamarind”
- [ka²¹ˌlaŋ²¹ 'klaŋ³³] ~ [ka²¹ˌlaŋ²¹ 'klaŋ³³] “a toy”
- [ka²¹ˌlaŋ²¹ 'mej⁵²] ~ [ka²¹ˌlaŋ²¹ 'mej⁵²] “mattress”
- [ba²¹ˌlaŋ⁴⁵] ~ [ba²¹ˌlaŋ⁴⁵] “jackfruit”
- [ka²¹ˌphaʔ²¹] ~ [ka²¹ˌphaʔ²¹] “shoes”
- [ka²¹ˌdaŋ⁵²] ~ [ka²¹ˌdaŋ⁵²] “door”
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Table 1: The co-occurrence of a consonant with /a/ in the presyllable and the single initial consonant of a major syllable.

+ : occurrence
- : non-occurrence
The co-occurrence of a consonant with [ə] in the presyllable and the single initial consonants of major syllables in Table 1 shows that:

1. The consonant phonemes /p, ph, th, d, kh, ch, j, q, h, w, y/ in major syllables never occur with the presyllables.
2. The consonant phoneme /t/ follows the presyllable /nə/ only.
3. The consonant phoneme /ŋ/ follows the presyllable /tə/ only.
4. The presyllable /rə/ is followed by /b, ch/ only.
5. The presyllable /rə/ can occur with all of initial consonant phonemes except /t, q, h, w/.
6. No consonants in the presyllables occur with identical consonants in the major syllables.
5.3.2 Minor syllable

A minor syllable is defined as a syllable which always takes weak (secondary) stress. It can be either open or closed syllables.

There are four subtypes of the minor syllable as the following:

a) Subtype I: Its structure is CV₁
   Examples: [meː52 'naŋ21] “fishhook”
   [neː52 'phiːa33] “malaria”
   [toʔ21 'phaː52] “orchid”
   [kiː33 'oː33] “school”

b) Subtype II: Its structure is CCV₁
   Examples: [praː33 'muʔ21] “woman”
   [twiː21 'koʔ21] “feeding bottle”
   [bloː21 'tuʔ21] “sexual intercourse”
   [bweː21 'caʔ21] “a ascetic”

c) Subtype III: Its structure is CV₂C
   Examples: [poŋ33 'daː33] “powder”
   [kaj21 'phuː42] “a brooch”
   [kan21 'oːa21] “eggplant”
   [bej52 'baw21] “a cradle”

d) Subtype IV: Its structure is CCV₂C
   Examples: [phlow21 'phlǐː45] “eyelids”
   [klaŋ21 'ŋaw21] “to sing”
   [hwaʔ21 'taː52] “a bamboo strip”
   [khluj52 'boː52] “the inflorescence of the banana plant”
Table 2: The co-occurrence of single initial consonants and vowels of a minor syllable

+ : occurrence
- : non-occurrence

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The co-occurrence of single initial consonants and vowels of minor syllable in Table 2 shows that:

1. All consonant phonemes can be the initials of minor syllable except /j/.
2. All consonant phonemes except /g, j/ can occur before /a/.
3. Only /e/ can occur after /g/.
4. Only /u, a/ can occur after /w/.
5. Only /ai/ can occur after /p, c, kh/.
6. Only /au/ can occur after /b, th, n/. 
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Table 3: The co-occurrence of initial consonant clusters and vowels of minor syllable.

- : occurrence
- : non-occurrence
The co-occurrence of initial consonant clusters and vowels of minor syllable of Table 3 shows that:

1. The vowels /e, ur, ia, ai, ua/ never occur with consonant cluster in minor syllables.
2. The consonant phoneme /pr/ occurs with /a/ only.
3. Only /e/ occurs with /bw, nw/.
4. Only /a/ occurs with /kw, khw, hw/.
5. Only /i/ occurs with /sw, cw/.
6. Only /o/ occurs with /phl/.
7. Only /u/ occurs with /khl/.
8. The consonant clusters /pw, thw, gw, chw, khw/ have not been found in minor syllables.
5.3.3 Major Syllable

The major syllable is defined as a syllable which always takes strong stress. It can be either closed syllable or open syllable. Its structure is $C (C) V^T (C)$.

There are four different subtypes of a major syllable as the following:

a). Subtype I : $C V^T$
Examples: ['lo:21] "stone"
['θu:33] "brass"
['ne:33] "five"
['pha:32] "father"

b). Subtype II : $C C V^T$
Examples: ['θwi:21] "blood"
['kwe:33] "run"
['gwa:33] "husband"
['θwi:21] "dog"

c). Subtype II : $C V^T C$
Examples: ['pəw21] "cow"
['kaŋ33] "spider"
['tʃaŋ52] "elephant"
['phuŋ52] "soft"

d). Subtype III : $C C V^T C$
Examples: ['plaj33] "tongue"
['klaŋ21] "to play"
['bwaŋ21] "fat"
['kʰləw21] "cold"
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Table 4: The co-occurrence of single initial consonant and vowels of a major syllable

+    : occurrence
-
    : non-occurrence
The co-occurrence of single initial consonants and vowels of the major syllable in Table 4 shows that:

1. All consonant phonemes can be the initial consonant of a major syllable.
2. All vowel phonemes can occur in a major syllable.
3. Only /e/ can occur with the initial /w/ of a major syllable.
4. Only /p, th, c, l/ occur before /ai/.
5. Only /a, u, ə/ occur with the initial /j/ of a major syllable.
6. Only /ur, u/ occur with the initial /g/ of a major syllable.
7. Only /ə, ur, a/ occur with the initial /ŋ/ of a major syllable.
8. All diphthongs never occur with /th, kh, j, g, n, ŋ, s, r, w, y/.
9. All vowels except /ua, əur/ occur after /l/.
Table 5: The co-occurrence of initial consonant clusters and vowels of a major syllable.

+ : occurrence  
- : non-occurrence
The co-occurrence of initial consonant clusters and vowels of a major syllable in Table 5 shows that:

1. The diphthongs never occur after consonant cluster of a major syllable.
2. Only /u/ occurs after /kr/.
3. Only /a, u/ occur after /kl, khl/.
4. Only /ə/ occurs after /kl, pr/.
5. Only /i/ occurs after /sw, cw/.
6. Only /e/ occurs after /nw/.
7. Only /a/ occurs after /br, khw/.
5.4 Stress in Padaung

Stress is defined in terms of volume (intensity) and duration of vowel. It functions in syllable rank. In Padaung, stress is predictable by the types of syllables and its position in a phonological word. Therefore, the word stress needs not to be marked overtly at the phonemic level.

Types of Stress
Stress can be divided into two types, i.e. stress and non-stress.

Type 1: Stress: Strong Stress and Weak Stress.

a). Strong Stress (Primary Stress)

Strong stress has the most volume and greatest vowel length of all. It is the only strongest stress that occurs on the peak of the major syllable. This strong stress is obligatory in a phonological word (a stress group) and it is marked by (').

Examples:
- ['θɔː^52] "rotten"
- ['ʨʰuː^52] "chicken"
- ['ŋuː^52] "two"
- ['kweː^33] "to run"
- ['leː^52] "sister-in-law"
- ['phaː^52] "father"

b). Weak Stress (Secondary Stress)

Weak stress is weaker than strong stress. It occurs on any minor syllable and is marked by (,).

Examples:
- [ 'waj^21 ʨʰuː^52] "take a bath"
- [ 'θʊː^33 ʔa^21] "cucumber"
- [ 'luː^33 ʔoː^33] "a square"
- [ 'bej^52 ʔaw^21] "cradle"
- [ 'paw^21 ʔaj^21] "sweet basil"
Type II: Non-Stress: Zero-Stress

Zero stress has no stress with the least volume and shortest length of vowel length. It occurs on presyllables and it is unmarked.

Examples:

- \[\text{'kaws}^2\text{"mattress"}\]
- \[\text{'ma}^2\text{"night"}\]
- \[\text{'ba}^2\text{"the east"}\]
- \[\text{'a}^2\text{"green"}\]
- \[\text{'a}^2\text{"thin"}\]

5.5 Syllable Function

The syllables have two main functions in the phonological word: nuclear syllable and peripheral syllable.

5.5.1 Nuclear Syllable

The syllable in this class functions as the nucleus of the phonological word. The nuclear syllable is a major syllable and always takes strong (primary) stress. It always occupies the last position in a word.

Examples:

- \[\text{\text{"hole"}\}\]
- \[\text{\text{"wife"}\}\]
- \[\text{\text{"wind"}\}\]
- \[\text{\text{"bad habit"}\}\]
- \[\text{\text{"pregnant"}\}\]
- \[\text{\text{"lighter"}\}\]
- \[\text{\text{"garlic"}\}\]
5.5.2 Peripheral Syllable

The syllables in this class function as the periphery of the phonological word. Every peripheral syllable can occur in any position, except the final one, of a phonological word. It can be divided into two sub-classes: weakly stressed peripheral syllable and zero-stressed peripheral syllable.

- Weakly Stressed Peripheral Syllable

A weakly stressed syllable is a minor syllable. It always takes a secondary stress.

Examples:

[ʔa:] 'piaw]\] “have a good time”
[ccccccc] 'whu]\] “mist”
[la:] 'bo]\] “a flagstaff”
[hu]\] “clothes”
[bi:] 'su]\] “a kind of vegetable”
[ba] 'sa]\] “love”

- Zero - Stressed Peripheral Syllable

An unstressed syllable is a presyllable. This kind of syllable has [ə] ~ [a] as the vowel of the syllable and it takes the mid pitch.

Examples:

[ta] 'kia]\] “sugar”
[ka] 'maj]\] “tail”
[ba] 'lan]\] “the south”
[ʔa] 'ia]\] “narrow”
[mo ,θi:] 'nu]\] “Wednesday”
[ma ,du:] 'tew]\] “yard long bean”
[mo ,ke:] 'θa]\] “pineapple”
5.6 Syllable Boundary and Syllable Break

5.6.1 Phonetic Transcription

Stress marks the beginning of a syllable. That is, the strong stressed sign (') indicates the beginning of a major syllable and the weakly stressed sign (,) indicates the beginning of a minor syllable. The beginning of the non-stress syllable, i.e. the presyllable is marked by the initial consonant of the presyllable. Since Padaung syllables end with either a final consonant or a vowel (with tone), the syllable ending is marked by the final consonant or vowel, and a following consonant (or a consonant cluster) marks the beginning of the next syllable.

Examples:

<table>
<thead>
<tr>
<th>Major Syllable</th>
<th>V</th>
<th>C</th>
<th>[thuː⁵²]</th>
<th>'law²¹</th>
<th>“river”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>C</td>
<td>[bej⁵²]</td>
<td>'baw²¹</td>
<td>“a cradle”</td>
</tr>
<tr>
<td>Minor Syllable</td>
<td>V</td>
<td>C</td>
<td>[liː²¹ baː⁵²]</td>
<td>'thuː⁵²</td>
<td>“a pen”</td>
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<td></td>
<td>C</td>
<td>C</td>
<td>[θəŋ²¹]</td>
<td>'daw²¹</td>
<td>“good at”</td>
</tr>
<tr>
<td>Presyllable</td>
<td>V</td>
<td>C</td>
<td>[ka³³]</td>
<td>'laŋ⁴⁵</td>
<td>“jackfruit”</td>
</tr>
</tbody>
</table>

5.6.2 Phonemic Transcription

Stress is predictable by the syllable position in the phonological word and by the syllable structure. The final syllable in a phonological word represents the major syllable. The former final syllable represents the minor syllable. And the non-final syllable in /Ca/ or /Ca/ structure represents the presyllable. Therefore stress is not to be marked in the phonemic transcription.
CHAPTER VI
PHONEMES

6.1 Definition

The phoneme is defined as the rank whose units function in the syllable. It is the lowest rank of the hierarchy and, therefore, has no stable structure.

6.2 Function

There are three major classes of phonemes according to their function in the syllable: consonants, vowels and tones.

6.3 Consonant Phonemes

Padaung consonant phonemes function as a syllable periphery. There is no contrast between short and long consonant. There are 22 consonant phonemes in Padaung: / b, p, ph, d, t, th, c, j, ch, g, k, kh, ?, m, n, ñ, s, h, l, r, w, y /. All of these phonemes can occur initially in a syllable. The phonemes / l, r, w / can also occur as the second element in the consonant cluster. There are seven final consonants: / k, ?, m, n, ñ, w, y /.

In the following chart, the phonemes will be grouped according to their manners and points of articulation.
<table>
<thead>
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<th>Point of Articulation</th>
<th>Labial</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
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Table 6: Consonant Phoneme Chart
6.3.1 Consonants Formational Statements

\(/p/\) represents \(\text{p}1\), a voiceless unaspirated bilabial stop. It occurs in syllable initial position.

Examples:

- \(/p\text{aw}^2/\) \(\text{paw}^{21}\) “cow”
- \(/p\text{u}^2/\) \(\text{pu}^{21}\) “younger”
- \(/p\text{w}_1/\) \(\text{w}_1\) “nest”
- \(/p\text{n}_3/\) \(\text{n}_3\) “gong”
- \(/p\text{y}_1/\) \(\text{y}_1\) “tongue”

\(/\text{ph}/\) represents \(\text{ph}_1\), a voiceless aspirated bilabial stop. It occurs in syllable initial position.

Examples:

- \(/\text{ph}_1\text{a}^3/\) \(\text{pha}^{52}\) “father”
- \(/\text{ph}_3\text{u}^3/\) \(\text{phu}^{52}\) “abdomen”
- \(/\text{ph}_4\text{h}_4/\) \(\text{phh}^{52}\) “child”
- \(/\text{ph}_2\text{a}^3/\) \(\text{pha}^{21}\) “give”
- \(/\text{ph}_3\text{y}^3/\) \(\text{phu}^{52}\) “soft”

\(/\text{b}/\) represents \(\text{b}_1\), a voiced bilabial stop. It occurs in syllable initial position.

Examples:

- \(/\text{b}_1\text{e}^2/\) \(\text{be}^{21}\) “opium”
- \(/\text{b}_3\text{e}^3/\) \(\text{be}^{33}\) “duck”
- \(/\text{b}_0\text{w}^2/\) \(\text{baw}^{21}\) “classifier of kerosene cane”
- \(/\text{b}_3\text{n}_3/\) \(\text{baw}^{52}\) “a glass”
- \(/\text{b}_3\text{w}_2/\) \(\text{baw}^{21}\) “fat”

\(/\text{t}/\) represents \(\text{t}_1\), a voiceless unaspirated alveolar stop. It occurs in syllable initial position.

Examples:

- \(/\text{t}_0\text{o}^2/\) \(\text{to}^{21}\) “key”
- \(/\text{t}_2\text{i}^2/\) \(\text{ti}^{21}\) “horse”
- \(/\text{t}_1\text{aw}^3/\) \(\text{aw}^{33}\) “go, walk”
- \(/\text{t}_1\text{na}^4/\) \(\text{n}_1\) “smile”
\(\text{t}\text{uan}^2\text{}/\text{t}\text{uan}^{21}\) "porcupine"

\(\text{th}/\) represents \(\text{th}\), a voiceless aspirated alveolar stop. It occurs in syllable initial position.

Examples:
\(\text{th}\text{aw}^2\text{/}\text{th}\text{aw}^{21}\) "bird"
\(\text{thaw}^2\text{/}\text{thaw}^{21}\) "pig"
\(\text{thaŋ}^3\text{/}\text{thaŋ}^{52}\) "beer"
\(\text{thi}^3\text{/}\text{thi}^{52}\) "kick"
\(\text{thwi}^2\text{/}\text{thwi}^{21}\) "dog"

\(\text{d}/\) represents \(\text{d}\), a voiced alveolar stop. It occurs in syllable initial position.

Examples:
\(\text{di}^4\text{/}\text{di}^{45}\) "a charcoal grip"
\(\text{de}^1\text{/}\text{de}^{33}\) "rabbit"
\(\text{do}^1\text{/}\text{do}^{33}\) "to scold"
\(\text{dan}^4\text{/}\text{dan}^{45}\) "aluminum"
\(\text{duan}^2\text{/}\text{duan}^{21}\) "a kind of knife"

\(\text{i}/\) represents \(\text{t}\text{i}\), a voiceless unaspirated alveo-palatal affricate.

It occurs in syllable initial position.

Examples:
\(\text{ca}^2\text{cai}^2\text{/}\text{ca}^{21}\text{cai}^{21}\) "right side"
\(\text{co}^3\text{ce}^2\text{/}\text{co}^{52}\text{ce}^{21}\) "to tie"
\(\text{cwi}^2\text{/}\text{cwi}^{21}\) "to lead"
\(\text{cuay}^4\text{cu}^2\text{/}\text{cuay}^{45}\text{cu}^{21}\) "same"
\(\text{cɛŋ}^3\text{klaw}^2\text{/}\text{cɛŋ}^{52}\text{klaw}^{21}\) "a chopping block"

\(\text{ch}/\) represents \(\text{t}\text{ch}\), a voiceless aspirated alveo-palatal affricate.

It occurs in syllable initial position.

Examples:
\(\text{cha}^9\text{/}\text{t}\text{cha}^{921}\) "star"
\(\text{cha}^3\text{/}\text{t}\text{cha}^{52}\) "pain"
\(\text{chi}^1\text{/}\text{t}\text{chi}^{52}\) "sweet"
\(\text{cho}^9\text{/}\text{t}\text{cho}^{921}\) "to plant"
/čɔŋ³/ /čɔŋ⁵⁵²/ “elephant”

/ d / represents /tʃ/, a voiced alveo-palatal affricate which occurs in syllable initial position.
Examples: /ju⁴²/ /tʃu⁴²ⁱ/ “rat”
/ʃɔ⁴²/ /tʃɔ⁴²¹/ “monkey”
/pɔ⁴¹ jɔ⁴⁴/ /pɔː³³ tʃa⁴⁵⁵¹/ “loud”
/kɔ⁴¹ jɔ⁴⁴/ /kɔ³³ tʃa⁴⁵⁵¹/ “toilet”

/k/ represents /k/, a voiceless unaspirated velar stop. It occurs in syllable initial and in final position of only few words.
Examples: /kiaw¹/ /kiaw³³¹/ “to fry”
/kaw¹/ /kaw³³¹/ “mouth”
/kaŋ¹/ /kaŋ³³¹/ “spider”
/tɔk³ ke²/ /tɔk³² ke²¹/ “gecko”
/ka² kɔk³/ /ka²¹ kɔk⁵²/ “broken”

/kʰ/ represents /kh/, a voiceless aspirated velar stop. It occurs in syllable initial position.
Examples: /kʰu³/ /kʰu⁵⁵²/ “a kind of deer”
/kʰe³/ /kʰe⁵²/ “an anvil”
/kʰi⁴/ /kʰi⁴⁵¹/ “I”
/kʰu⁴²/ /kʰu⁵²¹/ “bridge”
/kʰiāŋ³/ /kʰiāŋ⁵²/ “brother-in-law”

/g/ represents /g/, a voiced velar stop. It occurs in syllable initial position.
Examples: /gwa¹/ /gwa³³¹/ “husband”
/guy⁴/ /guy⁴⁵¹/ “to squeeze”
/tə⁴ gum³/ /tə³³ gum³³¹/ “wind”
/gwe²/ /gwe²¹/ “elder”
/klan\textsuperscript{2} guy\textsuperscript{4} tur\textsuperscript{3}/

"brace and bit"

/\textit{?}/ represents /\textit{h}, a glottal stop. It occurs in syllable initial position and syllable final position.

Examples:

/\textit{?}aw\textsuperscript{3}/

/\textit{?}aw\textsuperscript{52}/

"to drink"

/\textit{?}an\textsuperscript{2}/

/\textit{?}an\textsuperscript{21}/

"to eat"

/\textit{?}uy\textsuperscript{2}/

/\textit{?}uy\textsuperscript{21}/

"delicious"

/\textit{?}a\textsuperscript{4} ?i\textsuperscript{92}/

/\textit{?}a\textsuperscript{33} ?i\textsuperscript{21}/

"dark"

/\textit{?}u\textsuperscript{4}/

/\textit{?}u\textsuperscript{45}/

"to blow"

/\textit{m}/ represents /\textit{m}, a voiced bilabial nasal. It occurs in syllable initial position and in final position of few words.

Examples:

/\textit{ma}\textsuperscript{3}/

/\textit{ma}\textsuperscript{42}/

"wife"

/\textit{mi}\textsuperscript{4}/

/\textit{mi}\textsuperscript{45}/

"grass"

/\textit{mian}\textsuperscript{1}/

/\textit{mian}\textsuperscript{33}/

"name"

/\textit{ham}\textsuperscript{2} pha\textsuperscript{4} sa\textsuperscript{22}/

/\textit{ham}\textsuperscript{21} pha\textsuperscript{45} sa\textsuperscript{21}/

"lemon"

/\textit{hom}\textsuperscript{3}/

/\textit{hom}\textsuperscript{52}/

"blanket"

/\textit{n}/ represents /\textit{n}, a voiced alveolar nasal. It occurs in syllable initial position and syllable final position.

Examples:

/\textit{na}\textsuperscript{1}/

/\textit{na}\textsuperscript{33}/

"you"

/\textit{mwe}\textsuperscript{1}/

/\textit{mwe}\textsuperscript{33}/

"seven"

/\textit{mu}\textsuperscript{2}/

/\textit{mu}\textsuperscript{21}/

"nipple"

/\textit{man}\textsuperscript{3} law\textsuperscript{2}/

/\textit{man}\textsuperscript{52} law\textsuperscript{21}/

"lie"

/\textit{mun}\textsuperscript{4} na\textsuperscript{22}/

/\textit{mun}\textsuperscript{45} na\textsuperscript{21}/

"water buffalo"

/\textit{n}/ represents /\textit{n}, a voiced velar nasal. It occurs in syllable initial position and syllable final position. \textit{n} is realized as /\textit{n}/ when preceded by the phoneme /\textit{n}/.

Examples:

/\textit{nur}\textsuperscript{2}/

/\textit{nur}\textsuperscript{21}/

"trousers"

/\textit{nu}\textsuperscript{3}/

/\textit{nu}\textsuperscript{52}/

"two"
ŋen³ kiaw¹  [ŋen⁵ kiaw³³]  “to cook in a pan
with a little oil”

/s/ represents [s], a voiceless alveolar fricative. It occurs in syllable initial position. There is a free variation between [s] and [θ]

Examples:

/saʔ⁴/  [sa⁹⁴⁵]  -  [θaʔ⁴⁵]  “heart”
/si³/  [si:⁵²]  -  [θi:⁵²]  “three”
/suʔ⁴/  [su⁹⁴⁵]  -  [θu⁹⁴⁵]  “liver”
/stu⁴/  [stu³³]  -  [θu:³³]  “brass”

/h/ represents [h], a voiceless glottal fricative. It occurs in syllable initial position

Examples:

/hiʔ²/  [hi⁰²¹]  “house”
/heʔ⁴/  [he⁹⁴⁵]  “spicy”
/hɔ³/  [hɔ:³³]  “loose”
/han⁴²/  [han⁰²¹]  “soil”
/hu̯an⁴ɛe⁴¹/  [hu̯an⁴⁵ ɛe:³³]  “blouse”

/l/ represents [l], a voiced alveolar lateral. It occurs in the syllable initial position and as the second member of consonant clusters.

Examples:

/la⁴/  [la⁰⁴⁵]  “moon”
/lu²/  [lu:²¹]  “thread”
/klaŋ² ŋaw²²/  [klaŋ²¹ ŋaw²¹]  “to sing”
/ble⁴/  [ble⁰⁴⁵]  “shoulder”
/leiŋ³/  [leiŋ⁵²]  “to dance”

/r/ represents [r], a voiced alveolar trill. It occurs in the syllable initial position and as the second member of consonant clusters.

Examples:

/rui²/  [rui²¹]  “root”
/ma² ri¹/  [ma²¹ ri:³³]  “a watch”
Examples:

- /ruŋ/ — [ruŋ⁵] — "root"
- /maŋ²/ — [maŋ⁵] — "a watch"
- /ruan⁴/ — [ruan⁴] — "silver"
- /braŋ²/ — [braŋ²] — "clothes brush"
- /pra¹/ — [pra²] — "human being"

/ w / represents / w /, a voiced labio-velar approximant. It occurs in the syllable initial and final position and as the second member of consonant clusters.

Examples:

- /wanŋ²/ — [wanŋ²] — "take a bath"
- /kwe¹/ — [kwe²] — "run"
- /bwi²/ — [bwi²] — "tobacco"
- /ʔaw³/ — [ʔaw³] — "drink"
- /phaw³/ — [phaw³] — "flower"

/ y / represents / j /, a voiced palatal approximant. It occurs in the syllable initial and final position.

Examples:

- /jo/ — [jo³] — "shadow"
- /jaŋ/ — [jaŋ²] — "wooden partition"
- /jaw³/ — [jaw³] — "mirror"
- /phay³/ — [phay³] — "mother’s mother"
- /khuy³/ — [khuy³] — "nine"
6.3.2 Classification of Consonants

There are 22 consonant phonemes in Padaung: /p, ph, b, t, th, d, c, ch, j, k, kh, g, ?, m, n, ɳ, s, h, l, r, w, y/. These phonemes, according to their position in the syllable, may be divided into three classes:

- Class 1 (C₁) Initial Consonants
  All consonants can occur in the initial position of the syllable.

- Class 2 (C₂) Cluster-second Consonants
  This class functions as the second member of the initial consonant cluster. They are /l, r, w/.

The co-occurrence of C₁ and C₂ is restricted to three patterns of consonant cluster as follows:

a). - l - cluster (C₁l)
  C₁ are /p, ph, b, k, kh/
  C₂ is /l /

C₁ and C₂ make five - l - clusters /pl, phl, bl, kl, khl/.

Examples: /pla³/  [pla:³³] "arrow"
          /phle⁴/  [phle:⁴⁵] "fast"
          /ble⁴/  [ble:⁴⁵] "shoulder"
          /klaŋ²/  [klaŋ:²¹] "to play"
          /khləw²/  [khləw:²¹] "cold"

b). - r - cluster (C₁r)
  C₁ are /p, b, k /
  C₂ is /r /

C₁ and C₂ make three - r - clusters /pr, br, kr/.

Examples: /pra¹/  [pra:³³] "human being"
c). \(-w-\) cluster (C\(_1\)w)

C\(_1\) are /p, b, th, c, ch, k, kh, g, m, n, s, h/.

C\(_2\) is /w/.

C\(_1\) and C\(_2\) make twelve -w- clusters /pw, bw, thw, cw, chw, kw, khw, gw, mw, nw, sw, hw/.

Examples:

- /tpwe\(^{1}\)/tpwe\(^{33}\) “a plate”
- /tbwi\(^{2}\)/tbwi\(^{21}\) “tobacco”
- /thwe\(^{4}\)/thwe\(^{945}\) “right side”
- /tcwi\(^{2}\)/tcwi\(^{21}\) “sealing wax”
- /tchw\(^{2}\)/tchw\(^{21}\) “feather”
- /tkwe\(^{1}\)/tkwe\(^{33}\) “run”
- /tkhwa\(^{3}\)/tkhwa\(^{52}\) “wrench”
- /tgwa\(^{1}\)/tgwa\(^{33}\) “husband”
- /tmwa\(^{2}\)/tmwa\(^{21}\) “pillow”
- /tmwe\(^{1}\)/tmwe\(^{33}\) “seven”
- /tswi\(^{2}\)/tswi\(^{21}\) “blood”
- /thwa\(^{2}\)/thwa\(^{21}\) “bamboo”
<table>
<thead>
<tr>
<th>$C_1$</th>
<th>$C_2$</th>
<th>$-1-$ (C₁ l)</th>
<th>$-r-$ (C₁ r)</th>
<th>$-w-$ (C₁ w)</th>
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<td>p</td>
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Table 7: Co-occurrence of the first consonants ($C₁$) and second consonants ($C₂$) in consonant clusters.
The co-occurrence of the first consonants (C₁) and the second consonants (C₂) in Table 7 shows that:

1. There are three consonant phonemes /l, r, w/ that occur as the second member of a consonant cluster.

2. The first and the second member of the cluster do not appear to be the same phonemes, there are no /ww/ and /rr/ clusters in this study.

3. A voiceless cluster alveolar consonant phoneme /t/, a voiced palatal affricated /j/, a glottal consonant phoneme /?/, a voiced velar nasal consonant phoneme /ŋ/ and a voiceless alveolar fricative phoneme /s/ are not found as either member of the consonant cluster in this study.

4. In -l- cluster, only bilabial plosives and velar plosives /p, ph, b, k, kh/ occur as the first member of the cluster of this kind.

5. In -r- cluster, only plosives /p, b, k/ occur as the first member of this cluster.

6. In -w- cluster, almost all consonant phonemes, except voiceless aspirated bilabial stop, voiceless unaspirated alveolar stop, voiced alveolar stop, voiced palatal stop, a glottal phoneme, voiced alveolar nasal, velar nasal, alveolar fricative, lateral and trill: /ph, t, d, j, ?, n, ŋ, s, l, r/ occur as the first member of the consonant cluster.

7. Only /p/ occurs with all of the consonant clusters /l, r, w/. 
- Class 3 (C₃) Final Consonants

This class functions as the final consonant of the syllable which consists of /k, ?, m, n, ñ, w, y/.

Examples:

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<tr>
<th>Consonant Phoneme</th>
<th>Example</th>
<th>Meaning</th>
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<td>/t̂k/</td>
<td>tok²ke²</td>
<td>&quot;gecko&quot;</td>
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<tr>
<td>/?e/</td>
<td>ðe⁹²</td>
<td>&quot;ginger&quot;</td>
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<tr>
<td>/ham²pha⁴sa²²/</td>
<td>ham¹pha:⁴⁵sa²¹</td>
<td>&quot;lemon&quot;</td>
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<tr>
<td>/mun¹na³²/</td>
<td>mun³³na³²¹</td>
<td>&quot;water buffalo&quot;</td>
</tr>
<tr>
<td>/kaŋ¹/</td>
<td>kaŋ³³</td>
<td>&quot;spider&quot;</td>
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<tr>
<td>/phaw³/</td>
<td>phaw⁵²</td>
<td>&quot;flower&quot;</td>
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<tr>
<td>/phay²/</td>
<td>phaj²¹</td>
<td>&quot;give&quot;</td>
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</table>

6.3.3 Consonant Phoneme Contrast

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<th>Consonant Phonemes</th>
<th>Examples</th>
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</thead>
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<td>/p - /ph/</td>
<td>/put⁴⁄</td>
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<td>/phu⁴⁄</td>
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<td>&quot;beer&quot;</td>
</tr>
<tr>
<td>/b/-m/</td>
<td>/bo³/</td>
</tr>
<tr>
<td>/mo³/</td>
<td>&quot;a nipple of baby bottle&quot;</td>
</tr>
<tr>
<td>/c/-ch/</td>
<td>/cu³/</td>
</tr>
<tr>
<td>/cho³/</td>
<td>&quot;chicken&quot;</td>
</tr>
<tr>
<td>/c/-j/</td>
<td>/cuay⁴cu²²/</td>
</tr>
<tr>
<td>/ju²²/</td>
<td>&quot;rat&quot;</td>
</tr>
<tr>
<td>/th/-ch/</td>
<td>/thwi²²/</td>
</tr>
<tr>
<td>/chwi²²/</td>
<td>&quot;bone&quot;</td>
</tr>
<tr>
<td>/k/-kh/</td>
<td>/ku²²/</td>
</tr>
<tr>
<td>/ku²²/</td>
<td>&quot;bridge&quot;</td>
</tr>
<tr>
<td>/?/-k/</td>
<td>/ka¹ tw²²/</td>
</tr>
<tr>
<td>/ka¹ ku²²/</td>
<td>&quot;hip&quot;</td>
</tr>
<tr>
<td>/k/-g/</td>
<td>/kuy⁴/</td>
</tr>
<tr>
<td>/guy⁴/</td>
<td>&quot;to squeeze&quot;</td>
</tr>
<tr>
<td>/?/-t/</td>
<td>/raw³ raw³/</td>
</tr>
<tr>
<td>/raw³ raw³/</td>
<td>&quot;put on&quot;</td>
</tr>
<tr>
<td>/?/-c/</td>
<td>/ray²²/</td>
</tr>
<tr>
<td>/cay²²/</td>
<td>&quot;a bamboo basket&quot;</td>
</tr>
<tr>
<td>/c/-t/</td>
<td>/cu²²/</td>
</tr>
<tr>
<td>/tu²²/</td>
<td>&quot;cut&quot;</td>
</tr>
<tr>
<td>/s/-t/</td>
<td>/su²²/</td>
</tr>
<tr>
<td>/tu²²/</td>
<td>&quot;cut&quot;</td>
</tr>
<tr>
<td>/s/-th/</td>
<td>/swi¹/</td>
</tr>
<tr>
<td>/thwi¹/</td>
<td>&quot;dog&quot;</td>
</tr>
</tbody>
</table>
\text{m} / \text{n} /  \quad  /\text{mian}^{1}/ \quad  \text{"name"} \\
\text{n} / \text{n} /  \quad  /\text{mian}^{1}/ \quad  \text{"grammatical word"} \\
\text{n} / \text{ŋ} /  \quad  /\text{me}^{1} \text{ sa}^{2}/ \quad  \text{"cotton"} \\
\text{ŋ} / \text{n} /  \quad  /\text{me}^{1}/ \quad  \text{"five"} \\
\text{ŋ} / \text{ŋ} /  \quad  /\text{muy}^{2}/ \quad  \text{"snail"} \\
\text{ŋ} / \text{ŋ} /  \quad  /\text{muy}^{2}/ \quad  \text{"a sensitive grass"} \\
\text{ŋ} / \text{ŋ} /  \quad  /\text{muy}^{2}/ \quad  \text{"snail"} \\
\text{n} / \text{ŋ} /  \quad  /\text{guy}^{4}/ \quad  \text{"to squeeze"} \\
\text{n} / \text{n} /  \quad  /\text{naw}^{3}/ \quad  \text{"vulva"} \\
\text{n} / \text{n} /  \quad  /\text{yaw}^{3}/ \quad  \text{"mirror"} \\
\text{d} / \text{d} /  \quad  /\text{de}^{1}/ \quad  \text{"rabbit"} \\
\text{d} / \text{d} /  \quad  /\text{le}^{1}/ \quad  \text{"kidney"} \\
\text{d} / \text{d} /  \quad  /\text{day}^{2}/ \quad  \text{"bullfrog"} \\
\text{d} / \text{d} /  \quad  /\text{ray}^{2}/ \quad  \text{"rattan"} \\
\text{l} / \text{l} /  \quad  /\text{pla}^{1}/ \quad  \text{"arrow"} \\
\text{l} / \text{l} /  \quad  /\text{pra}^{1}/ \quad  \text{"human being"}
### 6.4 Vowel Phonemes

Padaung vowel phonemes function phonemes as the syllable nucleus. There are 13 vowel phonemes: /i, e, æ, u, o, ə, ia, ai, əu, ua/.

The length of vowel is not contrastive. All vowel phonemes are shown in the table below.

<table>
<thead>
<tr>
<th>Tongue position</th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tongue height</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td>i</td>
<td>u</td>
<td>u</td>
</tr>
<tr>
<td>Half-close</td>
<td>e</td>
<td>ə</td>
<td>o</td>
</tr>
<tr>
<td>Half-open</td>
<td>ə</td>
<td></td>
<td>ə</td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diphthongs</th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>ia</td>
<td>əu</td>
<td>ua</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>ai</td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Padaung Vowel Phonemes
6.4.1 Vowel Formational Statements.

/ i / represents [ i ], a close front unrounded vowel.

Examples: /mi/ [mi:\textsuperscript{4}] “grass”
/khi/ [khi:\textsuperscript{52}] “I”
/hi\textsuperscript{21}/ [hi:\textsuperscript{21}] “house”
/si\textsuperscript{3}/ [\textsuperscript{52}] “three”
/thwi\textsuperscript{2}/ [thwi:\textsuperscript{21}] “dog”

/ e / represents [ \textsuperscript{1}e ], a half-close front unrounded vowel.

Examples: /be\textsuperscript{2}/ [be:\textsuperscript{21}] “opium”
/le\textsuperscript{1}/ [le:\textsuperscript{33}] “sister-in-law”
/pe\textsuperscript{2}le\textsuperscript{2}/ [pe:\textsuperscript{21}le:\textsuperscript{21}] “sea”
/\textsuperscript{52}e\textsuperscript{3}/ [\textsuperscript{52}e:\textsuperscript{52}] “ginger”
/te\textsuperscript{1}ba\textsuperscript{2}/ [te:\textsuperscript{33}ba\textsuperscript{21}] “tell”

/ e / represents [ \textsuperscript{1}e ], a half-open front unrounded vowel.

Examples: /ple\textsuperscript{94}/ [ple\textsuperscript{945}] “house lizard”
/thwe\textsuperscript{4}/ [thwe\textsuperscript{945}] “right side”
/le\textsuperscript{1}/ [le:\textsuperscript{33}] “kidney”
/kwe\textsuperscript{1}/ [kwe:\textsuperscript{33}] “run”
/\textsuperscript{52}e\textsuperscript{3}klaw\textsuperscript{2}/ [\textsuperscript{52}e\textsuperscript{52}klaw\textsuperscript{21}] “a chopping block”

/ u / represents [ u ], a close central unrounded vowel.

Examples: /su\textsuperscript{1}/ [su:\textsuperscript{33}] “brass”
/thu\textsuperscript{3}/ [thu:\textsuperscript{52}] “water”
/cu\textsuperscript{2}/ [\textsuperscript{52}cu:\textsuperscript{52}] “do not”
/\textsuperscript{52}ju\textsuperscript{3}/ [\textsuperscript{52}ju:\textsuperscript{52}] “two”
/khu\textsuperscript{3}/ [kh\textsuperscript{u:\textsuperscript{52}}] “a kind of deer”
/ə/ represents [ə], a half-close central unrounded vowel.

Examples:

/kə³ hə³/  [kə³ hə³]  "be full" (stomach)
/θə³ hə³/  [θə³ hə³]  "already"
/sə³/  [θə³]  "roten"
/rəw²/  [pəw²]  "cow"
/θəw²/  [θəw²]  "bird"
\(/\circ/ \text{represents } [\circ], \text{a half-open back rounded vowel.}

Examples:  
\(/k\circ^{2}/ \quad [k\circ^{21}] \quad \text{“bottle”} \\
\(/b\circ^{1}/ \quad [b\circ^{33}] \quad \text{“fence”} \\
\(/m\circ^{3}/ \quad [m\circ^{52}] \quad \text{“open”} \\
\(/\check{c}p\circ^{2}/ \quad ([\check{c}p\circ^{21}] \quad \text{“to plant”} \\
\(/\check{p}p\circ^{4}d\circ^{3}/ \quad [\check{p}p\circ^{45}d\circ^{52}] \quad \text{“to cook”} \\

\(/\ia/ \text{represents } [\ia], \text{a high front unrounded to open central unrounded vowel.}

Examples:  
\(/\ka\ia^{3}/ \quad [\ka\ia^{52}] \quad \text{“brother-in-law”} \\
\(/m\ia^{3}p\ia^{1}/ \quad [m\ia^{35}p\ia^{33}] \quad \text{“malaria”} \\
\(/m\ia^{1}k\ia^{1}/ \quad [m\ia^{35}k\ia^{33}] \quad \text{“fast”} \\
\(/m\ia^{1}\ia^{1}/ \quad [m\ia^{35}\ia^{33}] \quad \text{“name”} \\
\(/\ia\ia^{3}/ \quad [\ia\ia^{52}] \quad \text{“dance”} \\

\(/\au/ \text{represents } [\au], \text{a half-close central unrounded to high closed central unrounded vowel.}

Examples:  
\(/\ba^{1}\au^{2}/ \quad [\ba^{33}\au^{21}] \quad \text{“West”} \\
\(/\theta\au^{92}/ \quad [\theta\au^{921}] \quad \text{“heavy”} \\
\(/\eta\au^{92}/ \quad [\eta\au^{921}] \quad \text{“cry”} \\
\(/\delta\au^{1}\au^{3}/ \quad [\delta\au^{35}\au^{52}] \quad \text{“belt”} \\

\(/\ai/ \text{represents } [\ai], \text{an open central unrounded to close front unrounded vowel.}

Examples:  
\(/\kai^{92}/ \quad [\kai^{921}] \quad \text{“hammer”} \\
\(/\pai^{94}/ \quad [\pai^{945}] \quad \text{“a drinking straw”} \\
\(/\ca^{1}\cai^{92}/ \quad [\ca^{33}\cai^{921}] \quad \text{“right side”} \\

\(/\ua/ \text{represents } [\ua], \text{a close back rounded to open central unrounded vowel.}

Examples:  
\(/\ua^{2}/ \quad [\ua^{45}] \quad \text{“silver”} \\
\(/\ua^{4}c\ua^{2}/ \quad [\ua^{45}\ua^{21}] \quad \text{“same”} \\
\(/\ua^{4}c\ua^{3}/ \quad [\ua^{45}\ua^{33}] \quad \text{“clothes”} \)
6.4.2 Vowel Phoneme Contrast

\[ \text{ai} - \text{a} \]
\[ \text{thi}^3 \]  “kick”
\[ \text{ta}^1 \text{the}^3 \]  “rugged”
\[ \text{ai} - \text{i} \]
\[ \text{chwi}^2 \]  “bone”
\[ \text{chwe}^2 \]  “crab”
\[ \text{ai} - \text{a} \]
\[ \text{chi}^3 \]  “sweet”
\[ \text{cha}^3 \]  “sell”
\[ \text{ei} - \text{e} \]
\[ \text{me}^1 \text{sa}^2 \]  “a kind of fruit’
\[ \text{me}^1 \text{sa}^2 \]  “cotton”
\[ \text{ei} - \text{e} \]
\[ \text{may}^2 \text{phe}^3 \]  “matches”
\[ \text{may}^2 \text{pho}^3 \]  “a lighter”
\[ \text{ai} - \text{i} \]
\[ \text{ma}^3 \]  “wife”
\[ \text{mo}^3 \]  “open”
\[ \text{oi} - \text{o} \]
\[ \text{mo}^2 \]  “dessert”
\[ \text{mo}^2 \]  “sky”
<table>
<thead>
<tr>
<th>Sound</th>
<th>Pinyin</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/u/</td>
<td>chu³</td>
<td>“six”</td>
</tr>
<tr>
<td>/chu³</td>
<td></td>
<td>“chicken”</td>
</tr>
<tr>
<td>/u/</td>
<td>lu²</td>
<td>“thread”</td>
</tr>
<tr>
<td>/lo²</td>
<td></td>
<td>“stone”</td>
</tr>
<tr>
<td>/ia/</td>
<td>tian² li²</td>
<td>“write”</td>
</tr>
<tr>
<td>/tuan²</td>
<td></td>
<td>“porcupine”</td>
</tr>
<tr>
<td>/u/</td>
<td>phuy³</td>
<td>“soft”</td>
</tr>
<tr>
<td>/phuay³</td>
<td></td>
<td>“Jack of Diamonds”</td>
</tr>
<tr>
<td>/u/</td>
<td>mui²</td>
<td>“pants”</td>
</tr>
<tr>
<td>/mua²</td>
<td></td>
<td>“cry”</td>
</tr>
<tr>
<td>/a/</td>
<td>an²</td>
<td>“eat”</td>
</tr>
<tr>
<td>/bo²</td>
<td>yan²</td>
<td>“starch”</td>
</tr>
<tr>
<td>/uan²</td>
<td>thu³</td>
<td>“swim”</td>
</tr>
<tr>
<td>/i/</td>
<td>khi²</td>
<td>“salty”</td>
</tr>
<tr>
<td>/kha²</td>
<td></td>
<td>“shoot”</td>
</tr>
<tr>
<td>/khai²</td>
<td></td>
<td>“hammer”</td>
</tr>
</tbody>
</table>
6.5 Tones

There are four contrastive tones in Padaung.

<table>
<thead>
<tr>
<th>Phonemic Notation</th>
<th>Description</th>
<th>Tone stick</th>
<th>Phonetic Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>/1/</td>
<td>a mid-level tone</td>
<td>[3]\n</td>
<td></td>
</tr>
<tr>
<td>/2/</td>
<td>a low-falling tone</td>
<td>[2]\n</td>
<td></td>
</tr>
<tr>
<td>/3/</td>
<td>a high-falling tone</td>
<td>[2]\n</td>
<td></td>
</tr>
<tr>
<td>/4/</td>
<td>a high-rising tone</td>
<td>[4]\n</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Padaung Tones

6.5.1 Formational statements.

/1/ represents [33], a mid-level tone. The pitch pattern of this tone starts at mid-level pitch and goes on the same range.

Examples:

- /kaw/ \(\rightarrow\) kaw [33] "mouth"
- /le/ \(\rightarrow\) le [33] "kidney"
- /ka luw/ \(\rightarrow\) ka [33] luw [33] "hair"
- /kaŋ/ \(\rightarrow\) kaŋ [33] "spider"
- /a mɔ/ \(\rightarrow\) a [33] mɔ [33] "pot handle"
/2/ represents [2⁰] - [3⁰] and [1⁻²], a low-falling tone. The pitch pattern of this tone starts slightly below mid-level pitch and moves down to low level pitch. It has two allotones as follows:


Examples:

/thaw²/ [thaw²] - [thaw³] "pig"
/phay²/ [phaj²] - [phaj³] "give"
/do²/ [do²] - [do³] "big"
/ma²/ [ma²] - [ma³] "to do"

/1⁻²/ a low falling tone accompanied with breathiness. It occurs with an unaspirated stop, affricate and trill.

Examples:

/ri²/ [ri²] "to cut" (scissors)
/pi²/ [pi²] "goat"
/paw² cay²/ [paw² [cay²] "sweet basil"
/cuy²/ [cuy²] "to lead"

/3/ represents [5²], a high-falling tone. The pitch pattern of this tone starts around high pitch and falls down to a low level pitch.

Examples:

/raw³/ [raw⁵²] "good"
/lian³/ [lian⁵²] "dance"
/ho³/ [ho:⁵²] "loose"
/pha³/ [pha:⁵²] "father"
/than³/ [than⁵²] "beer"

/4/ represents [⁴⁵] and [1⁻⁴⁵], a high-rising tone. The pitch pattern of this tone starts around mid high pitch and rises to a high pitch. It has two allotones as follows:

[⁴⁵] a high-rising tone.
Examples: \( /\text{khi}^4/ \) \( [\text{khi}^{45}] \), \( " I " \)
\( /\text{mi}^4/ \) \( [\text{mi}^{45}] \), \( " grass " \)
\( /\text{phu}^4/ \) \( [\text{phu}^{45}] \), \( " beautiful " \)

\( [\ldots^{45}] \) a high rising tone accompanied with breathiness. It occurs with unaspirated voiceless stop.

Examples: \( /\text{pi}a^4/ \) \( [\text{pi}a^{45}] \), \( " weaving bag " \)
\( /\text{ta}^4/ \) \( [\text{ta}^{45}] \), \( " fish " \)

### 6.5.2 Tone Contrast

\( /1/ \) - \( /2/ \)
\( /\text{lu}^1/ \), \( " exhausted " \)
\( /\text{lu}^2/ \), \( " thread " \)

\( /1/ \) - \( /3/ \)
\( /\text{mo}^1/ \), \( " a nipple of feeding bottle " \)
\( /\text{mo}^3/ \), \( " open " \)

\( /1/ \) - \( /4/ \)
\( /\text{a}^1/ \), \( " one " \)
\( /\text{a}^4/ \), \( " moon " \)

\( /2/ \) - \( /3/ \)
\( /\text{phay}^2/ \), \( " give " \)
\( /\text{phay}^3/ \), \( " mother of mother " \)

\( /2/ \) - \( /4/ \)
\( /\text{a}^1\text{khi}^2/ \), \( " salty " \)
\( /\text{khi}^4/ \), \( " I " \)

\( /3/ \) - \( /4/ \)
\( /\text{phu}^4/ \), \( " beautiful " \)
\( /\text{phu}^3/ \), \( " father of father " \)
6.6 Notes on Some Phonetic Features of Padaung Language

Suriya (1988:96) states that breathy voice is a common linguistic feature of Austroasiatic language family.

In Padaung language breathy voice has been found in few words such as:

- \([p^{[41]}]\) “goat”
- \([p^{[45]}]\) “woven bag”
- \([t^{[45]}]\) “fish”
- \([t^{[45]}\) “to lead”
- \([r^{[41]}]\) “cut” (scissors)
- \([r^{[41]}]\) “root”
- \([r^{[41]}w^{[41]}]\) “snake”

The breathy voice only occurs with an unaspirated stop, affricate, and trill in the initial position of major syllables. The pitch on breathy syllables is either low or high.

Breathiness is barely audible in Padaung language. I noticed that when my main informant spoke, the breathiness was hardly audible. When I asked her mother to repeat the same word, breathiness was then heard.

Moreover, it has been found that among all unaspirated stops which occur with breathy voice, only the initial voiceless unaspirated stop \(p\) also occurs with a clear voice as exemplified below.

Example: \([pc^{[21]}le^{[21]}]\) “sea”

\([paw^{[21]} \text{tca}^{[21]}]\) “sweet basil”

Therefore, it is predicted that the original forms of these words may have a breathy voice which has been lost later on. Therefore, it can be anticipated that the breathy voice may disappear in the next generation.
Besides breathiness, the trill [ r ] is in the process of being replaced by the lateral [ l ] as exemplified below. Younger informants tend to replace [ r ] with [ l ] whereas older informants still preserve the trill [ r ]. Therefore, there is a tendency that the trill [ r ] may disappear in the future.

Examples: 

\[ \text{[rauŋ}^{21} \, \text{ʔa}^{21}] \rightarrow \{\text{lauŋ}^{21} \, \text{ʔa}^{21}\} \quad \text{"pumpkin"} \]

\[ \text{[rauŋ}^{21} \, \text{kʰw}^{52}] \rightarrow \{\text{lauŋ}^{21} \, \text{kʰw}^{52}\} \quad \text{"pumpkin peel"} \]

\[ \text{[rauŋ}^{21} \, \text{mə}^{33}] \rightarrow \{\text{lauŋ}^{21} \, \text{mə}^{33}\} \quad \text{"pumpkin stalk"} \]
CHAPTER VII
CONCLUSION AND SUGGESTIONS
FOR FURTHER STUDIES

Based on the geographical classification of the Karenic branch, the Padaung language is placed in the central Karen group. The Padaung people recently immigrated to Thailand. They differ from other Karen groups residing in Thailand such as Sgaw and Pwo Karen which belong to the southern Karen group. Other Karen languages of the central group, namely Eastern Kayah and Western Kayah Li have been studied by Solnit (1986) and Bryant (1993) respectively. However, there has been little research on the Padaung language so I decided to study the phonology of this language.

The goal of this study is to describe the Padaung phonology as spoken at Ban Naisoi, Tambol Pang Mu, Muang District, Mae Hong Son Province. The significant phonetic characteristic of the Padaung language is breathiness which is a typical feature of the central Karen group as found in Western Kayah, (Bryant 1993). Another significant phonetic characteristic of the Padaung language is the richness of final consonants. There are seven final consonants in the Padaung language, whereas Eastern Kayah and Western Kayah have no final consonant.

The linguistic framework used for the phonological analysis is Tagmemics.

7.1 Research Result

The Phonological description of the Padaung language includes the intonation, the phonological word, the syllable, and the phonemes.
7.1.1 Intonation

The intonation patterns are not distinctive. Tones of the final particles cause the falling and rising intonation.

7.1.2 Phonological Word

The phonological word consists of monosyllabic words, disyllabic words and trisyllabic words. The monosyllabic words have one syllable carrying a strong stress. The disyllabic words have two syllables and can be classified according to its structure into two sub-types; sub-type I, the strong stress is on the last syllable and unstressed is on the first syllable, sub-type II, the strong stress is on the last syllable and the weak stress is on the first syllable. The trisyllabic words have three syllables and can be classified according to its structure into two sub-types; sub-type I, the strong stress is on the last syllable, the weak stress is on the second syllable and unstressed is on the first syllable, sub-type II, the strong stress is on the last syllable and the weak stress is on the first and the second syllable.

7.1.3 Syllable

According to the syllable structure, there are three types of syllables: presyllable, minor syllable and major syllable. The presyllable consists of /ə/ or /a/ and has a low pitch which is neutralized and becomes a mid level pitch. The major and minor syllables consist of all vowel phonemes and also all tonemes. There is no contrast between short and long vowels. Therefore, the length of vowels is non-phonemic.

There are three types of stress: strong stress, weak stress and zero stress.

7.1.4 Phonemes

Consonants: There are 22 consonant phonemes /p, ph, b, t, th, d, c, j, ch, k, kh, g, ?, m, n, η, s, h, l, r, w, y/. 
Vowels: There are 13 vowel phonemes /i, e, e, a, u, o, ə, ə, ə, ə, ə, ə, ə, ə/. 

Tones: There are four tones in Padaung.

/1/ [33] a mid-level tone.

[.. 21] a low-falling tone with breathy voice.
/3/ [52] a high-falling tone.

[ .. 45] a high-rising tone with breathy voice.

It should be noted that the breathiness is in the process of being lost as seen in the speech of young informants who speak with barely audible breathiness.

7.2 Discussion

The phonological study of the Padaung language fills the gap of Karenic studies in that when adding this research result to the previous studies of the Central Karen group, it yields a complete picture of the linguistic studies of the Central Karen group.

Furthermore, the present study can be used in a comparative study of Karenic languages.

Finally, it is hoped that the study of the Padaung language will bring a better understanding between the Padaung people and the local Thai people.

7.3 Problems in the study

7.3.1 The Padaung houses were situated along both sides of the road leading to a Kayah refugee camp and it was difficult to find a quiet place to elicit the data. Therefore, there was an interfering sound when eliciting the data. Furthermore, the informant could not go out of her area because of the political reason. As a result, the quality of data recording was not as good as it should be.

7.3.2 During the peak season of tourism, the data collection could not be
made because there were many tourists visiting the Padaung village and the informant had to meet visitors.

7.3.3 During the initial period of data collection, an interpreter was needed to help me elicit the data. So I was not confident of the accuracy of the data. However, one year later, the informant could understand a little Thai and I could speak some Padaung language so no interpreter was required.

7.3.4 The research area is on the Myanmar-Thailand frontier. Even though I had a permission from the government officials to work in this area, I had to be careful and could not go out of the government secure area.

7.4 Suggestions For Further Studies.

7.4.1 To compare Karenic languages of all groups.

7.4.2 To conduct an acoustic study of Padaung language and compare the result with the present research.

7.4.3 To compare a phonological study of the Padaung people with brass rings and Padaung without brass rings, assuming that the brass rings influence pronunciation.

7.4.4 To study other aspects of the Padaung language such as syntax, morphology and sociolinguistics.

7.4.5 To investigate a linguistic change of the Padaung speech of people from different generations.
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APPENDIX

The following Padaung lexical items are listed with general meanings.

The entries are arranged in the following order.

1. The initial consonants are arranged according to their points of articulation, i.e. bilabial, dental, alveolar, palatal, velar and glottal. Thus, the order of the initial consonants is /b, p, ph, d, t, th, j, c, ch, g, k, kh, ?, s, h, m, n, ?/.

2. The order of the vowels is /i, e, e, a, o, u, o, o, ia, ai, eu, ua/.

3. The order of the tones is /1, 2, 3, 4/.
/bi² yoŋ⁴ tay²/
/bi⁴ lu⁹²/
/bi⁴ su⁹²/
/be²/
/bey³ baw²/
/be⁴/
/be²/
/ba² dəw³/
/ba² sa⁹²/
/ba² su⁹²/
/ba² hu⁹² lay³/
/ba² laŋ²/
/ba² lo¹ ʔe¹ sa⁹²/
/ba² lo⁹²/
/ba³/
/banŋ²/
/banŋ³/
/banŋ³/
/bay³ su⁹³/
/ba² pia²/
/ba² tha⁹²/
/bə¹ cu⁴⁴/
/bə³ caw³/
/ba² ku¹ kaw³/
/ba² khli⁹²/
/ba² ʔianŋ²/
/ba² raw³/
/bəw²/ candle
/bury
/a kind of vegetable
/opium
/cradle
/duck
/question word
/television
/love
/charcoal
/onion
/jackfruit
/laffa
/apologize
/stamp
/bamboo shoot
/glass of water
/spear
/fermented soybean
/to weave a bag
/to weave cloth
/spoon
/a kind of vegetable
/to weave a scarf
/battery
/starch
/maiden
/classifier of kerosene cane
baw², baw³, bu⁴ ba² ta⁴ khe⁴², bu⁴ ba² si³, bu⁴ pur², bu⁴ daw³, bu⁴ kru¹ daw³, ble⁴, ble², blo² cu⁹², blu² kle³, bwi², bwe³, bwe⁹ ca⁹², bwan⁷

/ p /

pi² dan², pi⁹², pi⁹⁴ a¹ phɔ⁹⁴, pe² le², pe⁹⁴, pe⁹⁴ ba⁹², pe⁹⁴ bli⁹⁴, pa² ka¹ a³, paŋ⁴ ka², paw² cay², paw² cay² lay¹, pai⁹⁴, pa¹ ka¹ do³, butterfly, husk, winged bean, a kind of vegetable, mosquito, everyday, three days from today, shoulder, leech, sexual intercourse, take off (shoes), tobacco, full, ascetic, fat, ruler, goat, pocket, sea, split, knife, kapok, dumb, electric fan, sweet basil, holy basil, a drinking straw, pot cover
<table>
<thead>
<tr>
<th>Thai Word</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>/pa̞1 kiaw¹/</td>
<td>pan</td>
</tr>
<tr>
<td>/paw²/</td>
<td>lime</td>
</tr>
<tr>
<td>/paw²/</td>
<td>cow</td>
</tr>
<tr>
<td>/paw² lu⁹²/</td>
<td>cart</td>
</tr>
<tr>
<td>/pu¹/</td>
<td>rope</td>
</tr>
<tr>
<td>/pu⁹⁴/</td>
<td>a kind of animal</td>
</tr>
<tr>
<td>/pu⁹²/</td>
<td>younger</td>
</tr>
<tr>
<td>/pu⁴ le²/</td>
<td>betel</td>
</tr>
<tr>
<td>/pøŋ¹ da¹/</td>
<td>powder</td>
</tr>
<tr>
<td>/pøŋ¹ nu⁹² thu³/</td>
<td>milk</td>
</tr>
<tr>
<td>/prey¹/</td>
<td>buy</td>
</tr>
<tr>
<td>/pra¹/</td>
<td>classifier of person, aged</td>
</tr>
<tr>
<td>/pra¹ cuá³/</td>
<td>elegant man</td>
</tr>
<tr>
<td>/pra¹ chew¹/</td>
<td>to shout</td>
</tr>
<tr>
<td>/pra¹ khaw³/</td>
<td>man</td>
</tr>
<tr>
<td>/pra¹ khaw³ phaw³ pra¹ mu⁹²/</td>
<td>force to rape</td>
</tr>
<tr>
<td>/pra¹ khaw³ kua² ?an² thaw³/</td>
<td>a groom</td>
</tr>
<tr>
<td>/pra¹ mu⁹² kua² ?an² thaw³/</td>
<td>a bride</td>
</tr>
<tr>
<td>/pra¹ klaŋ² náw²/</td>
<td>singer</td>
</tr>
<tr>
<td>/pra¹ hu⁹²/</td>
<td>robber</td>
</tr>
<tr>
<td>/pra¹ mu⁹²/</td>
<td>woman</td>
</tr>
<tr>
<td>/pra¹ miañ³ kiaw¹/</td>
<td>superstar</td>
</tr>
<tr>
<td>/pra¹ mu⁹² cu³ caw² pra¹ khaw³ cu³ caw²/</td>
<td>homosexual</td>
</tr>
<tr>
<td>/pra¹ ya¹/</td>
<td>wrench</td>
</tr>
<tr>
<td>/pra¹ yɔ¹/</td>
<td>doll</td>
</tr>
<tr>
<td>/pra⁹⁴ kaw¹/</td>
<td>a sparking plug</td>
</tr>
<tr>
<td>/praŋ¹/</td>
<td>rainbow</td>
</tr>
<tr>
<td>/pray¹/</td>
<td>intestine</td>
</tr>
<tr>
<td>/pro⁹⁴/</td>
<td>to vomit</td>
</tr>
<tr>
<td>/ple⁹⁴/</td>
<td>house lizard</td>
</tr>
</tbody>
</table>
/pla\textsuperscript{1}/
/pla\textsuperscript{q}/
/play\textsuperscript{4}/
/play\textsuperscript{1}/

/\textipa{\textipa{phi\textsuperscript{2}}}/
/\textipa{\textipa{phi\textsuperscript{2} sa\textsuperscript{2} cu\textsuperscript{3} nay\textsuperscript{2}}}/
/\textipa{\textipa{phey\textsuperscript{3}}}/
/\textipa{\textipa{pha\textsuperscript{1}}}/
/\textipa{\textipa{pha\textsuperscript{3}}}/
/\textipa{\textipa{phaw\textsuperscript{1}}}/
/\textipa{\textipa{phaw\textsuperscript{3}}}/
/\textipa{\textipa{phaw\textsuperscript{3} mu\textsuperscript{2}}}/
/\textipa{\textipa{phaw\textsuperscript{3} lay\textsuperscript{1}}}/
/\textipa{\textipa{phay\textsuperscript{2}}}/
/\textipa{\textipa{phay\textsuperscript{2} o\textsuperscript{2} nu\textsuperscript{2}}}/
/\textipa{\textipa{phaw\textsuperscript{2} o\textsuperscript{0} o\textsuperscript{2}}}/
/\textipa{\textipa{phay\textsuperscript{2}}}/
/\textipa{\textipa{phur\textsuperscript{3}}}/
/\textipa{\textipa{phu\textsuperscript{3}}}/
/\textipa{\textipa{phu\textsuperscript{4}}}/
/\textipa{\textipa{phu\textsuperscript{3} day\textsuperscript{2}}}/
/\textipa{\textipa{phu\textsuperscript{3} do\textsuperscript{2}}}/
/\textipa{\textipa{phu\textsuperscript{3} cha\textsuperscript{3}}}/
/\textipa{\textipa{phu\textsuperscript{4} sa\textsuperscript{2}}}/
/\textipa{\textipa{phu\textsuperscript{3} lu\textsuperscript{1} e\textsuperscript{1}}}/
/\textipa{\textipa{phu\textsuperscript{3} yi\textsuperscript{1} lan\textsuperscript{4}}}/
/\textipa{\textipa{phuy\textsuperscript{3}}}/

\textit{arrow}
\textit{to clap hands}
\textit{loud}
\textit{tongue}
\textit{card, skin, near}
\textit{cannot breathe}
\textit{mother of mother}
\textit{ash}
\textit{father}
\textit{embrace, to hold a baby}
\textit{flower}
\textit{a kind of flower}
\textit{a kind of flower}
\textit{to give}
\textit{to feed milk}
\textit{termite}
\textit{straw}
\textit{mother of father}
\textit{abdomen, grandfather}
\textit{beautiful}
\textit{naval}
\textit{pregnant}
\textit{to suffer from diarrhea}
\textit{calf}
\textit{flute}
\textit{catarrh}
\textit{soft}
small, narrow
twin
children
poor
group
raft
pomelo
to cook
to abort
Ace of Club
Jack of Diamonds
exhaust
film
fast
eyelid
to spit
earring
a charcoal grip
belt
rabbit
mat
water flakes
a photograph, a picture
dry cell battery
flashlight
enough
basket
aluminum
/daw^3 pa^2/
/da^2 ti^2/
/da^2 /
/da^2 cu^3 than^3/
/da^3 che^2a/
/da^2 /
/da^2 ?o^3w^3/
/da^2 su^2/
/da^3 ka^3/
/da^2/
/da^3 /
/du^1/
/du?4/
/du^4 maw^1/
/da^1/
/da^3 ?a^1 da^3/
/da^2 /
/da^2 cha^2 tcy^4 cha^2/
/da^3 thu^2/
/da^3 kaw^2/
/da^3 /
/da^3 te^1/
/da^3 thuy^2/
/da^3 pli^22/
/da^3 pwe^1/
/da^4 klu^2^4/
/duan^2/
/duan^2 tu^2^4/

axe
riding (horse)
knife
dull (knife)
to stab (knife)
bullfrog
frog
toad
heel
read
classifier of a book
with, and
to saw
they
scold
dishveled (hair)
big
drum
boiled
sickle
food
glutinous rice in bamboo
tube
bowl
cooked rice (hot, fresh)
plate
cooked rice
( cold and tasteless)
knife, fork
to cut (knife)
a brooch

liquor
horse
zebra
tell
to greet
forget
pleasant
exhaust
sorry
a prominent nose
a flattened nose
nostril
philtrum
nose hair
pincers
angry
grass
tattoo
a headache reliever pill
a kind of drug
garbage
lazy
rugged
dislike
animal
cymbals
/ta¹ he⁴ ju² ?ay²/
bird pepper
catch a cold
gun

/president
pleasant
to smile
to laugh
friend

/ta¹ hə³/
gun

/ta¹ na¹/

/ta¹ naw³/ 
pleasant
to smile

/ta¹ ɲa⁴/

to laugh
friend

/ta¹ ɲa⁴ do²/
what

/ta¹ ɲo¹ ñə² cu⁴/
vegetable
doctor
centipede

/ta¹ ra²/

/ta¹ ra⁴/

/ta¹ ra⁴ ku⁴/

/ta¹ ru² ta¹ bag³/

/ta¹ ru² ñe³/

/ta¹ ro²/

/ta¹ ro² ta⁵/ 

/ta¹ ro⁴ ta¹ ra⁴/

/ta¹ lo⁵/ 

/ta¹ yu²/

/ta⁴ chi³/ 

/ta⁴ chwi²/ 

to smile
to laugh

/ta⁴ ka¹ may²/ 

/ta⁴ ?aw²/ 
fish

/ta⁴ me⁴/

/ta⁴ rəw²/ 

/taŋ² ca¹ łoŋ¹/ 
someone
to urinate
to come

to go, to walk

centipede

to excrement
to urinate

come here

go now
/taw₁ saʔ²/  
salt
/to kan¹/  
inside
/to kuy²/  
to meander
/to klɔ³ ʔa¹ raw³/  
diligent
/to klɔ⁰²/  
grasshopper
/to khu⁰²/  
turtle
/to khu⁰² kəw³/  
carapace of the turtle
/to khu² yuy²/  
(shell)
/to³/  
to hide in a turtle shell
/to³ du³/  
box
/to³ ?u⁰³/  
this
/to³ ka¹ khi³/  
here
/to³ ka¹ ŋa³/  
behind
/to³ ma¹/  
in front of
/tow²/  
where
/to⁰²/  
ant
/to⁰² pha³/  
key
/tok⁰³ ke²/  
orchid
/tu⁰⁴/  
gecko
/tianj² li²/  
to cut
/tua¹ ʔe² ca¹ ŋa¹ pha⁴ la¹ kay²/  
to write
/toan²/  
to move a little bit
/toan² chwan²/  
porcupine
/ th /  

/thi² biʔ²/  
television
/thi³/  
to kick
"a bamboo strip woven together"  
"a pigtail"  
"to rub"  
"already"  
"close"  
"umbrella"  
"heavy"  
"corrugated iron roof"  
"pliers"  
"file"  
"wrap beam"  
"cloth beam"  
"chisel"  
"nail"  
"to read"  
"round"  
"scissors"  
"bear"  
"to ascend"  
"to get on a bus"  
"to breathe"  
"pig"  
"pigsty"  
"to push"  
"bird"  
"bird-wing"  
"a kind of bird"  
"vulture"  
"bird-nest"
water, gold
hail
glass
water flask
pail
waterfall
to push	tab
a pole for carrying loads
across the shoulder
hot water
stream
to flow
well water
kettle
drop (water)
river
hospital
lime
when
next week
next life
next time
next month
bowl
red lime
paper box
to plane wood
dog
wolf
right side

woman teacher
man teacher
to strangle
bottom gourd
cannot
to come
going home
sewing machine
ring
policeman
chopping block
aunt
ironing board
monk
Buddhism church
a bowl carried by a
Buddhist priest
soap
student
syringe
elbow
the ring finger
left side
right side
motorcycle
fore arm
/ca² kaw³ ka²/ broken arm
/ca² kaw³ caw²/ arm
/ca² khur⁹²/ raft
/ca² khɔw²/ back hand
/ca² ?aw²/ nothing
/ca² hua¹/ king
/ca² hua¹ phɔ¹ daw³ do²/ king’s nephew
/ca² hua¹ phɔ¹ khaw³/ prince
/ca² hua¹ phɔ¹ mu⁹²/ princess
/ca² hua¹ mu⁹²/ queen
/ca² ma¹ daw³/ tomorrow
/ca² mu⁹²/ the thumb
/ca² ya¹/ palm
/ca² ya³ thu⁹⁴/ lines of hands
/ca² yu⁹²/ the index finger
/can⁴ thu⁹³/ mist
/can⁴/ to wash
/can⁴⁴/ good at
/can⁴² daw³/ a little
/can⁴² daw² ha³/ little
/can⁴ la¹ kay⁴ hu⁹²/ a woven bamboo basket
/cay²/ fresh
/cai⁹⁴/ to tie
/coi³ ce⁹²/ to take a photograph
/cəy⁴ da⁴ po¹/ elbow
/cui¹ dəy¹ kə⁹⁴/ lazy
/cui¹ klɔ²/ knuckle
/cui¹ now³ me⁹⁴/ necklace
/cui²/ the ring finger
/cui² ca² ku¹ ?e²/ a little finger
/cui² ca⁹²/
live
salt
nail
glove
do not
not at all
easy
do not know
wide
not yet
cannot remember
a white dot in a finger nail
not, no
dirty
foe
to burn
a go-between
umbrella
tomorrow
student
same
how much
to lead, suck, sealing wax
to kiss
a bottle of milk
mushroom
/ch/

/ch\$/
/ch^2 baw^3 /
/ch^3 phu^4/
/che^3/
/che^4/
/che^4 ta^1 tu^2/ 
/cha^3/
/cha^3/
/cha^3 phu^3/
/cha^3 cha^2 /
/cha^3 cha^2 pian^2 mo^1/
/cha^3 ka^1 kl^2/
/cha^3 ka^1 khu^3/
/cha^3 hu^3/
/cha^3 pho^4 /
/cha^3 ka^1 ku^3/
/cha^3 kaw^3/
/cha^3 me^2/
/cha^3 mu^2/
/cha^3 mo^1/
/chaw^3/
/che^5/
/che^5/
/che^1 le^2/

/chu^2/
/chur^3/
/chur^3 du^2 gu^3 ma^3/
/chur^3 du^2 la^2 ma^3/
/chu³ ʔaw³/  to crow
/chu³ ʔi⁶/  hail
/chu³ ʔi³ ma¹/  thirteen
/chu²/  launder
/chu²/  taro
/chu³/  six
/chuy²  ka¹  du²  saʔ²/  litchi
/chuy²¹  saʔ²/  button, hook
/chɔʔ²/  to plant, mountain
/chua³  pra¹  yɔ¹/  drawing
/chwi²/  bone
/chwe²/  crab
/chwe²/  rain
/chwan²/  feather

/j/
/juʔ²/  rat
/juʔ²  day²/  mouse trap
/jɔʔ²/  monkey
/jaiʔ²  tɔŋ²/  the name of recreation

/k/
/ki¹  thɔw³/  plastic bag
/ki¹  ʔo¹/  school
/ki¹  ʔo¹  ta¹  ba³/  church
/ki¹  ʔo¹  ta¹  phɔʔ⁴/  student
/ki¹  ioʔ²/  scale
/kal ti⁴ tu³ than⁵/  
sweat
/kal pia⁵/  
eraser
/kal plœ⁹⁴/  
lip
/kal plœ⁹⁴ chwan⁴⁷/  
mole
/kal phu⁴ sa⁹⁷/  
calf
/kal phew⁴⁷/  
waist
/kal ba⁹²/  
back
/kal baw⁹³/  
white hair
/kal bo⁹³/  
neck
/kal bu⁹²/  
cheek
dim⁹³⁶ pui⁴/  
dimple
/kal bu⁹² lay³ ?ew²⁷/  
hard palate
/ka⁴ da³⁷/  
forehead
/ka⁴ da⁹⁴⁷/  
goiter
/ka⁴ du³⁷/  
leg
/ka⁴ dey²⁷/  
belt
/ka⁴ dey²⁷ pui⁴/  
thigh
tooth
/ka⁴ duay²⁷/  
Adam’s apple
/ka⁴ ci⁷⁴²/  
radio
/ka⁴ ca⁹⁴²/  
toilet
/ka⁴ ca⁹⁴² kəw²⁷/  
toilet bowl
/ka⁴ ca¹/  
middle
/ka⁴ cu³³⁴²/  
sock
tomato
/ka⁴ chu²⁷ sa⁹²/  
bread
/ka⁴ chu⁹²⁷/  
rain
toilet bowl, scarf
/ka⁴ chwe²⁷/  
head
/ka⁴ kaw³/  
broke
/ka⁴ kok³/  
head
/ka⁴ klœ²/  

/ka₁ klɔ² ma¹ pha³/
a wound at the head

/ka₁ klu²/
hip

/ka₁ krɯ²/
hat

/ka₁ krɯ⁴/
owl

/ka₁ khi¹/
corn

/ka₁ khi¹ kʰw³/
corn-peel

/ka₁ khi¹ lu²/
corn-thread

/ka₁ khi¹ bαŋ³/
corn-seed

/ka₁ khi¹ klu⁹²/
pod of corn

/ka₁ khi²/
back

/ka₁ kʰe⁶⁴ di⁹⁴/
hairpin

/ka₁ khɯ³/
tooth

/ka₁ khɯ³ bli⁹⁴/
gum

/ka₁ khɯ³ do²⁷/
molar

/ka₁ khɯ³ phoʰ⁴⁴/
ingisor tooth

/ka₁ khɯ³ cu³⁷/
canine tooth

/ka₁ khay²/
strap

/ka₁ sa⁷⁴/
scratch

/ka₁ su⁷²/
comb

/ka₁ θe³/
bomb

/ka₁ θu²⁷²/
to hiccup

/ka₁ may²/
tail, nail

/ka₁ ne²/
now

/ka₁ now³/
horn

/ka₁ nu⁹² /
muddy

/ka₁ li² pɯ¹/
necklace

/ka₁ la¹ θuŋ² tu¹ thɯ³/
bathroom

/ka⁶ laŋ² bɯ² pɯ² hɯŋ⁴ ce¹/
wardrobe

/ka⁶ laŋ² pɑ¹ hɯŋ⁴ ce¹/
screwdriver

/ka⁶ laŋ² pɔ¹ hɯŋ⁴ ce¹/
clothes hanger
mop
zipper
to punch a hole on the ear
key-holder
drill
razor
pan
toy
brace and bit
garbage
mattress, mosquito net
bed
mousetrap
frill
handle-wheel
bench
clothesline
ironing
nail clipper
tobacco
hair
damaged-hair
scale
lazy
Padaung people
guitar
car
wheel
car-roof
car-hood
spider
eggplant (Aubergine)
spider web
hot
a kind of eggplant
night
eggplant
a kind of eggplant
a kind of eggplant
white eggplant
dragonfly
a kind of eggplant
mouth
a wound inside the mouth
to cut grass with a
sweeping motion
brooch
strap
shoe
shoe rope
bald
be full (stomach)
something like that
chair
inside
outside
upstairs
sack
papaya
downstairs
/kuy¹/
millipede
/kuy² ke³ thu³/
to pour
/kə²²/
bottle
/kləw³/
a heddle
/kləw³ ka¹ lan² do²/
a bell-stick
/kra¹ ma¹ daw³/
three days from today
/kru¹ ma¹ daw³/
the day after tomorrow
/kra²²/
market
/klu²²/
smoke
/kian¹/
fast
/kiaw¹ /
to fry
/kua²/
to begin
/kuan² /
nearly
/kuan² thu³/
to swim
/kuan² kha²²/
to hunt
/kuan⁴ /
put on
/klan¹ ma¹ ya¹/
thunder
/klan¹ ma¹ lay¹/
lightening
/klan¹ ma¹ lan¹/
thunderbolt
/klan² /
to play
/klan²jaw²/
to sing
/kwe¹/
to run
/kwa¹/
wrench
/kwa² ?a¹ ?a³/
to dig

/kh/

/salty
/khi²²/
I
/khi⁴/
deer
/khi⁴ ?o²/
<table>
<thead>
<tr>
<th>Thai Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/kha^3/</td>
<td>bright</td>
</tr>
<tr>
<td>/kha^2/</td>
<td>bitter</td>
</tr>
<tr>
<td>/kha^92/</td>
<td>shoot</td>
</tr>
<tr>
<td>/khaw^2 sa^2/</td>
<td>mango</td>
</tr>
<tr>
<td>/khai^2/</td>
<td>hammer</td>
</tr>
<tr>
<td>/khay^3/</td>
<td>tiger</td>
</tr>
<tr>
<td>/khay^3 do^2/</td>
<td>a kind of tiger</td>
</tr>
<tr>
<td>/khay^3 chwi^2/</td>
<td>lion</td>
</tr>
<tr>
<td>/khew^3/</td>
<td>chair</td>
</tr>
<tr>
<td>/khu^3/</td>
<td>a kind of deer</td>
</tr>
<tr>
<td>/khu^2/</td>
<td>to dig</td>
</tr>
<tr>
<td>/khu^2 saw^3/</td>
<td>different</td>
</tr>
<tr>
<td>/khu^92/</td>
<td>bridge</td>
</tr>
<tr>
<td>/khuy^2/</td>
<td>skink, chameleon</td>
</tr>
<tr>
<td>/khuy^2 ka^4 luw^2/</td>
<td>bald</td>
</tr>
<tr>
<td>/khuy^3/</td>
<td>nine</td>
</tr>
<tr>
<td>/kho^1 ra^1 kha^1 la^92/</td>
<td>ivy gourd</td>
</tr>
<tr>
<td>/khwa^3/</td>
<td>wrench</td>
</tr>
<tr>
<td>/khia^3 le^3 huy^3/</td>
<td>fighting</td>
</tr>
<tr>
<td>/khian^3/</td>
<td>brother-in-law</td>
</tr>
<tr>
<td>/khli^92/</td>
<td>louse</td>
</tr>
<tr>
<td>/khle^94/</td>
<td>road</td>
</tr>
<tr>
<td>/khlo^1 ǩa^1 laŋ^2 caŋ^3/</td>
<td>bag</td>
</tr>
<tr>
<td>/khlo^1 ǩa^1 laŋ^2 haw^3/</td>
<td>backpack</td>
</tr>
<tr>
<td>/khlu^3 sa^92/</td>
<td>banana</td>
</tr>
<tr>
<td>/khlu^3 bo^3/</td>
<td>the inflorescence of the banana plant</td>
</tr>
<tr>
<td>/khlu^4 phu^4 sa^92/</td>
<td>papaya</td>
</tr>
<tr>
<td>/khlow^2/</td>
<td>cold</td>
</tr>
<tr>
<td>/khlow^9/</td>
<td>tall</td>
</tr>
</tbody>
</table>
/ g /

/gwe² pra¹ mu³²/  older sister
/gwe² pra¹ khaw³/  older brother
/gwa¹/  husband
/guy⁴/  to squeeze

/ ? /

/?e²⁴/  to bite
/?e³/  ginger
/?e³⁴/  sack (classifier)
/?e⁴⁴/  to rip
/?e³⁴ ke⁴/  white people
/?e³⁴ ka¹ le³⁴/  yellow
/?a¹ baŋ³/  white
/?a¹ baw³¹/  thin
/?a¹ bu³¹/  full
/?a¹ bwe¹ ha³¹/  fat
/?a¹ bwan²¹/  thick
/?a¹ di³¹/  rotten
/?a¹ du³¹/  big
/?a¹ du² raw³¹/  bigger
def (knife)
/?a¹ do² khlo³¹/  have a good time
/?a¹ duan² ro³¹/  mad
/?a¹ pi¹ ?o²¹/  near, short
/?a¹ phi²²/  small
/?a¹ phi²² hu²²/  seed
/?a¹ pho¹ ti³¹/
blind
cheap
tall, long
to stop
heavy
round
sharp
tall
thin
brown
straight
wet
wrong
dry
sweet
drawing
wound
middle
hot
middle
blue
steam
salty
bitter
bright
younger (sister, brother)
hard
swell
dark
narrow
/ʔə1 si3/
/ʔə1 sa3/
/ʔə1 sa4ʔaw3ʔə2/
/ʔə1 həʔə4/
/ʔə1 meym3 ta1khi3/
/ʔə1 meym3 ca1ʔə3/
/ʔə1 meym3 kloʔə2/
/ʔə1 meym3 saʔə2/
/ʔə1 meym3 naŋ2 maŋ2 pra1tu3/
/ʔə1 meym3 maŋ2 na1ŋaw1cuʔətaw1/
/ʔə1 mo3/
/ʔə1 naʔwətu3/
/ʔə1 naʔwədo2/
/ʔə1 now3/
/ʔə1 leʔə2/
/ʔə1 la1thoʔə2yuʔ2/
/ʔə1 lay1/
/ʔə1 lay1baŋ3/
/ʔə1 lo1/
/ʔə1 lo1gey3roʔə2/
/ʔə1 ra1/
/ʔə1 raw3/
/ʔə1 raw3ʔə1yuŋ2/
/ʔə1 ruʔə2/
/ʔə1 yəw2/
/ʔə1 yəw3/
/ʔə1 yuʔə4/
/ʔəŋ2/
/ʔəŋ2thaw2/
/ʔəŋ1diʔə4/

green
rotten, lymph
a bunch of fruits
spicy
to lie on one side
to lie supine
to lie prone
to snore
bury (corpse)
dead person
pot handle
cheap
expensive
soft
wide
fighting
red
pink
black
dirty
to warm
good
smart, expert
gray
to carry
a rash on the skin
far
to eat
marry
coconut
/ʔaŋ⁴ naʔ²/
/ʔaw⁴ deʔ²/
/ʔaw⁴ naʔ³/
/ʔaw⁴ la¹ kay³ huʔ²/
/ʔaw³/
/ʔaw³/
/ʔaw³/
/ʔaw³ raw³/
/ʔay²/
/ʔu³ daw³/
/ʔu³ kay²/
/ʔu³ maw¹/
/ʔu³ la¹ do³/
/ʔu²/
/ʔu⁹²/
/ʔu² cu⁴ tu³/
/ʔu² ka¹ may²/
/ʔu² lo⁹²/
/ʔuy²/
/ʔu⁹⁴/
/ʔo⁴ mey³/
/ʔo¹ piaw²/
/ʔo¹ caʔ⁴/

/s/

/si¹ hə³/
/si³/
/si³ naŋ²/
/si³ no¹/
/sa⁹⁴ tha⁹²/ heartbeat
/sa⁹⁴ thu²/ saliva
/sa¹ chuu² sa⁹²/ a kind of fruit
/sa¹ kla⁴ sa⁹²/ star gooseberry
/sa¹ o⁹⁴/ letter
/sa¹ so⁹²/ lung
/sa¹ suy³ sa⁹²/ orange
/sa¹ suy³ sa¹ do²/ pomelo
/sa¹ hu⁴ sa⁹²/ litchi
/sa¹ maw³ chuu³/ water spinach
/sa¹ ru⁴ sa⁹²/ santol
/sa¹ ra⁹⁴/ shy
/sa⁹⁴/ heart
/sa⁹⁴ than²/ inhale
/sa⁹⁴ laŋ³/ exhale
/s₃/ rotten
/su¹/ brass
/su² phan³/ stick
/su² phe⁹²/ bark
/su² thə³ la¹/ the roof made of leaves
/su¹ sa²²/ cucumber
/su² sa²²/ fruit
/su² la¹/ leaf
/su² lay²/ lipstick
/tu⁹²/ tree
/təu²/ egg
/tu²/ louse
/tu² tha⁴/ worm
/su³/ die
/su³ lian³ ma¹ phlow²/ to lift an eyebrow
/suy^3 che^4/  fear
/su^4/  liver
/so^2/  kite, airplane
/swi^2/  blood
/swi^2 laŋ^2/  breeding

/hi^2/  house
/hi^2 tu^1/  a wall of the house
/hi^2 kaw^3/  inside the house
/hi^2 khu^2/  roof
/hi^2 sə^3/  floor
/ham^2 pha^4 sa^9^2/  lemon
/haŋ^2/  soil
/haŋ^2 ba^2 ?i^3/  dust
/haŋ^2 pha^2^2/  knee
/haŋ^2 phu^4 sa^9^2/  calf
/haŋ^2 phuŋ^2/  mud
/haŋ^2 phla^9^2/  hoe
/haŋ^2 də^3/  leg
/haŋ^2 chu^3/  pestle
/haŋ^2 kli^3/  Chinese chive
/haŋ^2 klu^9^2/  mud
/haŋ^2 kho^2 la^2/  foot
/haŋ^2 le^9^2/  lap
/he^9^4/  spicy, hot
/hu^3/  pounded rice
/huy^2 ka^1 plɔ^9^2/  to whistle
/huy^2/  throw, broom
loose
bamboo
split bamboo partition
blouse
sleeves
undershirt
hook of blouse
pocket
a button
brassiere
collar
handkerchief
drunken
forest
grass
matches
lemon grass
nylon for fishing rod
fishing
a rod for fishing
fishhook, harpoon
sleep
to lean
baby bed
wrist
ankle bone
galingal
to do
/ma^2/
/ma^3/
/ma^1 pha^2 bo^2/
/ma^1 pha^2 klu^2/
/ma^1 pha^4 sa^2/
/ma^1 du^2 th^aw^3/
/ma^1 duan^4 ro^4/
/ma^4 ca^2/
/ma^1 caw^2/
/ma^1 chi^2/
/ma^1 chwan^2/
/ma^1 ke^2 may^2/
/ma^1 kuy^4/
/ma^1 kia^4/
/ma^1 ?o^4 sa^2/
/ma^1 hu^24 do^2/
/ma^1 hu^24 bow^3/
/ma^1 hu^24 lay^3/
/ma^1 sa^2 la^3^1/
/ma^1 me^2/
/ma^1 ni^2/
/ma^1 ney^2/
/ma^1 ?e^3 ?ew^2/
/ma^1 ra^2 chwan^2/
/ma^1 la^1 ka^2 sa^2/
/ma^1 lu^4 lian^2/
/ma^1 yuan^2 ne^2^4/
/maw^1/
/maw^2 sa^2^2/
/may^2/

work
wife, classifier of house
boot shoe
slipper
lamina
yard long bean
smooth
minor wife
wet
fight
eyelashes
burn
matches
fast
coconut
onion
garlic
shallot
lettuce
broken
but
age
slow
eyebrow
guava
dancing
really
group
areca
fire
matches
lighter
gas oven
smoke
lamp
light bulb
white of the eyes
eyebrows
mother, sun
to slide
the east
at noon
day
zipper
Sunday
pineapple
tamarind
green tamarind
night
Wednesday
evening
Chinese chive
spring onion
Friday
Tuesday
morning
Saturday
Monday
cabbage
Chinese kale
pupil of the eyes
Thursday
East Indian spinach
a stem of East Indian
spinach
yesterday
a fruit of East Indian
spinach
tendril of East Indian
spinach
curry
eyes
age
water buffalo
teat
boat
sky
to open
name
cat
sheriffs
city
all
pillow
pillow slip
yes
who
/ni¹ ?uy²/
/ne¹ sa³²/
/ne³ phia¹/
/ne⁹²/
/ne¹ sa³¹/
/na¹/
/na³ ko³/
/na¹ sur²/
/na¹ huy²/
/na¹ ra¹ ma² pha³⁴/
/na²/
/na¹²/
/na² ti⁹²/
/na² the⁹⁴/
/na² ka¹ ci³/
/na² hi⁴/
/na² ri⁴/
/na² yu⁴ ðε⁹⁴/
/naw² ðo² khu²/
/naw² ne⁹²/
/nay²/
/nay² kaw³/
/nay² ma¹ pha³/
/naj² pra¹ do²/
/naj² pra¹ che³²/
/naj³ phaw²/
/naj² kaw²/
/naj² te⁹²/

good smell
camachile
malaria
sword stick, year
cotton
you
shin
think of
broom
to lull to sleep by singing
listen
ghost
eyelids
to have a stroke
listening
hear
watch
coriander
menstruation
next year
bee
beehive
to stab (bee)
rich
poor
sit on the lap
to have a fever
to fall from the tree
/nan³ law²/
/to tell a lie

/nu²/
nipple

/nu² thu³/
milk

/nu² mo¹/
teat

/nu² mow³/
powdered milk

/nwe¹/
seven

/nwe¹ ka¹ la²²/
taro

/nwe¹ ma² kiw³/
sweet potato

/nian¹/
will

/ŋe² lu²/
grieve

/ŋe² kiw³/
to cook in a pan with a

/ŋe¹/
little oil

/ŋe² nuu¹/
five

/ŋa² ti¹ ta⁴/
Friday

/ŋa² lu¹/
canned fish

/ŋaw²/
a kind of vegetable

/ŋaw² bay³/
pants

/ŋaw² ta³ khan³/
a kind of pants

/ŋaw² kaw³/
skirt

/ŋu² law³ ki¹/
panties

/ŋu³/
sarong, loincloth

/ŋu³ chu³/
two

/ŋuy²/
twenty

/ŋuy² ta¹ pli¹/
shell

/ŋuy² thà¹ lo³/
a kind of shell (flat shape)

/ŋuy² ka⁴ luw²/
a kind of shell (round shape)

/a bun of hair
/ŋəm²/  cry

/li² bo³/  pencil
/li² bo³ ður³/  pen
/li² ðæ³ dæn²/  air-pump
/le¹/  knee
/le³/  sister-in-law
/le³ phi³/  eraser
/le³ di¹ la²/  armpit
/le³ pi³ bəw³/  bomb
/le³/  kidney
/la⁴/  moon
/la⁴ bwe¹/  full moon
/la⁴ ce⁰²/  half moon
/la⁴ ma²/  the waning moon
/la¹ blæŋ²/  sometime
/la¹ ður³/  ten
/la¹ klæw²/  to hit
/la¹ ðæ³ bəw³/  cloud
/la¹ ðæ³ bəw³/  the white cloud
/la¹ saŋ¹/  a million
/la¹ maŋ²/  oil
/la¹/  one
/la¹ so¹/  ten thousand
/la¹ say¹/  a hundred thousand
/la¹ re⁰²/  one thousand
/la¹ ya²/  one hundred
/la⁰²/  leaf
dlæf/
to descend
flag
flagstaff
to fall
to fall (leaves)
paper
pink
to tell a lie
exchange
orange
tried, exhausted
thread
cart
wheel barrow
spoon
four
square
stone
sand
dance
to lick
to stick out
saw

cut (scissors)
to harvest
good
together
clothesline
/ray^2/
/ra^2 bəw^3/
/ra^2 chwi^2/
/ra^2 chwan^2/
/raw^2/
/raw^2 si^3/
/raw^2 kaw^3/
/ruy^2/
/ruaŋ^4/
/ruaŋ^4 bo^1/
/ruaŋ^4 pi^2/
/ruaŋ^4 sa^n2/
/ruaŋ^4 phlo^1/
/ruaŋ^4 kaw^3/
/ruaŋ^4 mɔ^1/
/ruaŋ^4 bəw^3 sa^n2/

/rattan/ straw
/rib/ eyebrows
/snak/ snack
/green snack/ snack's hole
/root/ root
/silver/ silver
/bracelets/ purse
/pumpkin/ pumpkin
/pumpkin seed/ pumpkin skin
/the calyx of pumpkin/ wax gourd

/screwdriver/ screwdriver
/take a bath/ take a bath

/police station/ police station
/police/ police
/soldier/ soldier
/plane wood/ plane wood
/ice/ ice
/vise/ vise
/earthworm/ earthworm
banana leaves used for wrapping
betel
mirror
carry
to carry on the shoulder
movie
wooden partition
badminton
the name of recreation
far, fly
a pregnant woman want to eat something with sour taste
point
coriander leaf
a flower of parsley
a fruit of parsley
sensitive grass
shadow
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