## CHAPTER 3 <br> Phonological Patterns of the Secret Language of the Thai Blind

As I have discussed in chapter 2, the Thai blind employ language patterns different from other Bangkok Thai at both phonological and syntactic levels. I have also discussed some of the differences in syntactic patterns of the language used in the blind communities. In this chapter, I will focus on each phonological form which I claim are derived from the modification of each syllable of normal Thai. Those forms are inherent in the Thai blind and serve as a basic function to satisfy their needs for private, or personal, communication.

To differentiate the blind in-group language from the sighted Thai, I will first state what the language of the Thai blind derives from the combination of word forms of normal Thai and the special word forms of their own invention. The latter forms are derived from the modification of a syllable in normal Thai words according to some phonological rules. The surface form of a word comes from breaking up a source word into syllables, the separation of the onset and the rhyme of a source syllable, and the application of a set of phonological rules with each syllable. Through these linguistic processes, the in-group language is recognized with difficulty by outsiders.

It is remarkable that some sound patterns correspond with sounds from other languages, and can cause outsiders to believe that the blind are speaking those languages. As Mr. Somporn Kaenla, an alumnus at the Bangkok School for the Blind, stated, he always used the in-group language to communicate among friends, and one day at school he was fascinated by some comments from a new volunteer who was working with a blind student. He heard the volunteer talking with a group of students who were gossiping about her in the secret language. As Mr. Somporn Kaenla explained, the volunteer said: "How intelligent my younger friends are! You can speak French very fluently while I do not know even a word of that language." Of course French was not being spoken at all. We can see that this special-invented language makes the communication among blind people almost inaccessible to outsiders unless they have social interaction with the blind and are absorbed in the in-group language.

After a six month period of data collection from the five blind communities and data analysis process, I discovered that the secret language of the blind consists of the combination of words of two categories, i.e., words of normal Thai and those of their own
invention. A newly-invented word of the group is the modification of a normal Thai word according to some phonological rules. There are six phonological patterns of words derived from normal Thai which are widely used among Thai blind. Some patterns are more complicated than others in terms of phonological derivations. Also, each pattern is applied diversely in different groups of blind people. Before exploring those sound patterns, I will first discuss some important concepts used in my analysis of the data.

### 3.1 General concepts in describing the secret sound patterns

As mentioned earlier, the Thai blind create their in-group jargon by modifying syllables of certain Thai words through the use of the secret sound patterns. To describe the in-group sound patterns, I used the terms onset and rhyme and some phonological rules to describe the secret sound patterns occurring with the deviant words.

### 3.1.1 Onset and rhyme

Before getting to know the terms onset and rhyme, let us first discuss what composes the syllable of a word. A word can have one syllable or more, and each syllable consists of segments: an initial, vowel and final sounds. Tones also play an important role to signal changes in meaning in some languages such as Thai.

Let us look at the word /bâ:n/ as an example, Obviously, this word is composed of only a single syllable. It has the following syllable structure:the sound /b/ is an initial; the sound /a:/ is a vowel; and the sound $/ \mathrm{n} /$ is a final sound. The falling tone in this word also plays an important part to form the structure of the syllable of the word.

The website <gsep.pepperdine.edu/gsep/as/rica/RICAGlossary.html> defines the two terms "onset" and "rhyme" as follows:
"Onset and rhyme - these are intersyllabic units that are smaller than words and syllables but larger than phonemes. The onset is the portion of the syllable that precedes the vowel (e.g., in the word "black" the onset is "bl"). The rhyme is the portion of the syllable including the vowel(s) and any consonant(s) that follow (e.g., the word or syllable "out" is a rhyme without an onset)."

The above definition will be applied to analyze the collected data of the in-group sound patterns in chapter 3 . In this thesis, I will use the term "onset" to refer to the initial sound of each syllable in an analyzed word. The term "rhyme" is used to refer to the remaining segments of the word which follow the onset: vowel, final sound and tone. The following diagram will demonstrate the onset and rhyme of a syllable:

Figure 3.1 Onset and rhyme in a syllable.


Hence, the word /bâ:n/ will have its syllable structure as follows:
Figure 3.2 Complete structure of the onset and rhyme of the word /bâ:n/.


### 3.1.2 Phonological rules

In the previous section, I have discussed the concepts of onset and rhyme, which will be used as a foundation for my analysis. However, these concepts are insufficient to
describe the linguistic occurrences inside newly invented words. Some additional phonological rules must be constructed to capture the actual linguistic occurrences inside the jargons of the Thai blind. To derive the constructed rules, I apply some phonological rules as a knowledge base. Before we come to the part of the language description in which these rules will be applied, I will mention some phonological rules in the generative framework.

I will first begin by discussing the formal properties of generative rules. To come to the point, generative rules are 'sequentially ordered rewriting rules'. What does this mean? First, rewriting rules are rules that change or transform one symbol into another symbol. For example, the symbol a may be transformed into $\mathbf{b}$ after we apply a phonological rule. After the transformation, the old symbol a will not exist any longer. Secondly, generative phonological rules must be in order of sequence. We can see that these rules must be applied one after another; and, we cannot apply more than one rule at once. The current phonological rule also generates the output for the next phonological rule. Lastly, each generative phonological rule has its own order in the series. Changing the order of the rules may result in inaccurate output.

As an example of a set of generative rules, consider the following rules:
(1) Rule 1: Vowel Raising
e -> i/ ___C0i
(2) Rule 2: Palatalization
t-> c /___i

Rule 1 (Vowel Raising) says that e becomes (is rewritten as) in in environment preceding Ci (where C stands for the set of consonants and C 0 stands for zero or more consonants). Rule 2 (Palatalization) states that t becomes c if it follows i. A sample derivation of forms to which these rules apply looks like this (where UR stands for Underlying Representation, SR stands for Surface Representation):[3]
(3) UR: temi
(4) Rule 1: timi
(5) Rule 2: cimi
(6) SR: cimi *

In addition to the underlying and surface levels, an intermediate level has been created as the result of applying rules 1 and 2 in succession. The application of rule 1 produces the intermediate form timi, which then serves as the input to rule 2 . Not only are these rules sequential, they are ordered, such that rule 1 must apply before rule 2 . Rule 1 has a feeding relationship to rule 2; i.e., rule 1 increases the number of forms that can undergo rule 2 by creating more instances of i. Consider what would happen if they were applied in the reverse order. Given the input form temi, rule 2 would do nothing, since its environment is not satisfied. Rule 1 would then apply to produce the incorrect surface form timi. **

It should be noted that the rules above are not directly employed for the analysis; however, the analytical process of the generative framework in which the rules are incorporated is applied to describe the collected data of the secret language. For example, we can see that the phonological rules which are used to describe the data are in sequential order; i.e., each rule cannot be changed in its order. We also cannot apply many rules at one time.

To describe the secret sound patterns, I created some phonological rules to describe my collected data of the secret language. That terminology may not be posited in correspondence with the definitions in other linguistic frameworks. Here are the phonological rules used to describe the sound patterns of deviant words:

[^0]Table 3.1 Phonological rules used to describe the secret sound patterns.

| Rules | Definitions |
| :--- | :--- |
| A. Phonological insertion rule | Inserting a sound into the blank <br> onset/rhyme position of a syllable. |
| B. Sound addition rule | Adding a sound to the onset or rhyme <br> part of the syllable. |
| C. Sound split rule | Separating the onset and rhyme into <br> two incomplete syllables. |
| D. Syllabic shuffling rule | Moving the onset part of the source <br> syllable to the onset part of the newly <br> occurring syllable. |
| E. Tone duplication rule | Copying the initial tone of the source <br> syllable to the new syllable. |

### 3.2 The insertion of phonological segments in between onset and rhyme of the source syllable

My first impression of overhearing the speech of a young blind speaker talking to a friend reminded me of the sound of a moving train. When I took the data and analyzed the sound patterns of each syllable in the words, I was able to identify the appropriate phonological rule to describe the phonological pattern of the utterance with no difficulty. To convey secret messages in the group, the Thai blind create their own language by inserting some sounds in between the onset and the rhyme of the syllable of normal Thai words, and use the in-group language pattern at a high speed of talk. That can prevent outsiders to receive the message with full comprehension or, as discussed earlier, mislead their perception of the language.

The example below was taken from my participation in the conference set up by Thailand Association of the Blind at Khon Kaen Hotel in Khon Kaen Province on May 17-20, 1999. The conference was held to select regional representatives to work for blind citizens in each region. There were approximately one hundred participants including blind delegates from all over Thailand and a group of students from Khon Kaen

University working as volunteers who were assigned to take care of the blind participants. At the conference, I overheard a blind lady talking with her boyfriend:
(7) A: /wîp phâ:jǎ: thî: chû: nàpcók sàpcǔaj máj hǎ: sǎ:thâ: di: thò:/

B: /mâj hěn là?cú: lə:j wâ: khàpcaj hǎ:/

I transcribed the data, read it out loud to a group of blind people, and asked them to translate it into normal Thai. Interestingly, all of them gave the same result as follows:
(8) A:/wî phû:j̄̄ thĩ: chû: nók sǔa:j máj hă:

NAME Lady who name NAME Beautiful PAR PAR
sianthê: di: thò:/
beautiful-voiced very PAR
"wi! is the lady named Noak beautiful? Her voice is very sweet."
$\begin{aligned} & \text { B:/mâj hěn rú: la:j wâ: khraj hǎ:/ } \\ & \text { Not see } \text { know PAR PAR who PAR }\end{aligned}$ "I don't know. Who is she?"

The comparison between the data in (7) and (8) clearly suggests the differences of language between normal Thai and the language used in the blind community. In such a secret situation where sighted people were around, the blind realized that it would be impolite and embarrassing to gossip about the sighted on an unfavorable topic. They shifted from their regular language use to the secret language pattern. Instead of calling the third person's name /nók/ in a simple way, they turn to use the word/nà?cók/ so as to keep their conversation secret from the outsiders.

Since some of my blind friends kindly translated the data in (7) into normal Thai, as shown in (8), I found that the italicized words in (7) derive from a simple phonological pattern. Let us take the word /sŭaj/ in (8) as an example. This word consists of one
syllable. We first divide the syllable into two parts: onset and rhyme. Then, we add an empty syllable after the source syllable, as shown below:

Figure 3.3 Output after adding an empty syllable after the word/sǔaj/.


The above figure shows that the onset contains the sound of $/ \mathrm{s} /$, and the rhyme segment has the sound /uăj/. The next step was to apply the sound movement rule to move the rhyme of the first syllable to the rhyme of the second syllable, as shown in figure 3.4

Figure 3.4 Output after moving the rhyme of /sǔaj/ to that of the second syllable of the secret word derived from /sǔaj/

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The tree diagram in figure 3.4 shows the split of the source syllable into two separate syllables. We can clearly recognize, however, that neither syllable meets the criterion to become a complete syllable-the first syllable does not have the rhyme segment and the second syllable lacks the onset segment. To make both syllables complete, we first add the /àp/ sound to the rhyme of the first syllable, as illustrated in figure 3.5 .

Figure 3.5 Output after adding /c/ to the rhyme of the first syllable of the secret word derived from /sǔaj/.


The onset of the second syllable is still missing; therefore, we add the /c/ sound to the onset of the second one in sequence. Hence, the Thai blind use the word/sàpcǔaj/ in a secret situation to replace the word/sǔaj/, which is a normal Thai word. The diagram in figure 3.6 will illustrate the phonological transformational rule as discussed above.

Figure 3.6 Output after adding /ap/ to the onset of the second syllable of the secret word derived from /sǔaj/.


The diagrams from figure 3.3 to 3.6 represent the overall process of the first secret sound pattern used by the Thai blind. However, the process can be analyzed in more concise direction.

The first step is to split the source word into syllables and apply the phonological rules with each syllable. Let us take the word / sǔaj/ as an example of our analysis again. Obviously, this word contains only one syllable, so this syllable will be transformed through the use of the phonological rules.

Next, we use the syllabic insertion rule to add the new syllable / càp/ after the source syllable, and separate the two syllables into onset and rhyme. Hence, the word /sǔaj/ will appear as follows:

Figure 3.7 Output after adding the /càp/ syllable after the word/sǔaj/.
/sǔaj/


After adding the new syllable after the source syllable, we then use the sound movement rule to interchange the rhymes of the two syllables. Hence, the outcome of the word/sǔaj/ will look exactly like the diagram in figure 3.6 (see figure 3.6).

Here is just an example of regularity in the first phonological pattern in the secret language. However, the collected data suggests that the phonological pattern is irregular with some words. Let us sit back and think of the following word through the secret phonological pattern that we have discussed. If we think of the words that begin with the sound /c/ such as /caj/ (= "mind or heart"), /cû:ci:// (= "fussy"), /câwlê://(= "flirting", used as a blind in-group jargon) etc, we can guess right away that the second syllable of these words, when applying the phonological pattern to them, will possess the same syllabic form as the source syllable. That can make it easier for outsiders to detect the meaning of the secret syllable.

I will clarify this point by using the word/caj/ as an example. Imagine, if we split the word /caj/ into two segments, we all agree that the onset of the word has the sound $/ \mathrm{c} /$ as its property, and the rhyme segment contains the sound /aj/, as shown in figure 3.8.

Figure 3.8 The two incomplete syllables of the word/caj/.


After we split the source into two incomplete syllable parts, we apply the phonological insertion rule to fill the rhyme segment of the first syllable with the sound
/â/ and add the sound/c/ to the onset of the second syllable successively. Hence, we obtain a new form as /cà?caj/. Figure 3.9 illustrates this phonological process.

Figure 3.9 Adding /à?/ to the rhyme of the first syllable and/c/ to the onset of the second syllable of the secret word derived from /caj/.


I have tested my hypothesis by creating a list of words consisting of a syllable beginning with $/ \mathrm{c} /$, and have asked a group of blind people to repeat them using this phonological pattern. I was informed that they do not use this sound pattern with such words. There are at least two factors that make the form unpopular among blind people. First, the onsets of both syllables share the same /c/ sound. To pronounce the two syllables in succession is unfamiliar to them. Importantly, the second syllable shares the same form with the original syllable. To apply the phonological pattern to the word as such does not disguise their intent, and also makes the language redundant. As a result, the blind turn to other phonological patterns to fulfill their needs to keep their communications secret. Let us go back to the last example of the word/caj/. Instead of saying /càpcaj/, the Thai blind employ the other rules to form new patterns such as /lajcon/, /ca:/ etc. We will discuss the derived forms of these words later on in this chapter.

### 3.3 Shuffling of syllable parts

The data provides evidence for another pattern widely used in the blind community. This language pattern is more complicated and more difficult to be recognized by outsiders than the previous pattern. According to Mr. Somporn Kaenla, some sighted people comment that this pattern sounds as if the blind are communicating among themselves in the French language.

On June 19, 1999, I went to meet a female teacher at the Bangkok School for the Blind and had an opportunity to overhear a group of blind students talking in the playground. They were talking about the volunteers who came to help the students studying in the integrated schools (the regular schools where the blind students study together with the sighted students). Here is part of that conversation:
(9) A: /lajpon lu:dэn Pà?ca:Psà?cǎ: kan di:/

B: /lajpon lâjmon lâ:jdon nô:/

According to my blind friends who helped interpret the secret message, the data in (9) is equivalent to the one in normal Thai as illustrated below:
(10) A: /paj du: Pa:sǎ: kan sip /
go see volunteer together PAR
"Let's go to see the volunteer."
B: /paj mâj dâ:j rò:k/
go not can ร PAR
"We can't go for sure."ORN UNIVERSITY/

When I compared the data in (9) and (10), I was able to identify the phonological pattern used in the secret language. Let us take the word/paj/ to exemplify the pattern. Like the previous phonological pattern, the speakers of the secret language first have to cut the source word into separate syllables and slit each syllable into the onset and rhyme units. Hence, the word/paj/ which has only one syllable is divided into parts of two syllables which have the onset and rhyme as shown in figure 3.10.

Figure 3.10 Output after adding an empty syllable after the word /paj/.


After we split the source syllable into two separate parts, we apply the syllable part shuffling rule to interchange the position of the newly occurring syllables. Hence, the word /paj/ will take the following form:

Figure 3.11 Output after moving the onset of the first syllable to that of the second syllable of the secret word derived from $/ \mathrm{paj} /$.


We can see that both syllables lack some syllable parts, i.e., the first syllable does not have the onset part and the second one lacks the rhyme part. The language data
suggests that we have to add the $/ / /$ to the onset of the first syllable. Hence, the word /paj/ will look like figure 3.12.

Figure 3.12 Output after adding /I/ to the onset of the first syllable of the secret word derived from/paj/.


To complete the phonological pattern, we have to add the sound $/ \mathrm{on} /$ to the rhyme of the second syllable. Hence, the Thai blind will use the word /lajpon/ in the secret language to mean $/ \mathrm{paj} /(=$ to go) in normal Thai. Figure 3.13 illustrates the derived form of the word/paj/ in the secret language.

Figure 3.13 Output after adding $/ \mathrm{O} /$ /to the rhyme of the second syllable of the secret word derived from /paj/.


It should be noted that some steps in the analytical procedures discussed above can be put together to form a more concise analytical process. To walk in another direction in analyzing the sound pattern, we first separate the analyzed word into syllables. Then, we add the syllable /lon/ after the source syllable and separate the two syllables into onset and rhyme. Let us take a look at the word/paj/ again. Obviously, this word has only one syllable, so the syllable will be transformed into the secret sound pattern. We add the syllable /lon/after/paj/ and split the two syllables into onset and rhyme, as illustrated below:

Figure 3.14 Output after adding the syllable /lon/ after the word/paj/.


Then, we use the sound movement rule to interchange the rhymes of the two syllables to derive the targeted phonological form. Hence, after we interchange the rhymes of the two syllables, we will derive the exact phonological form as illustrated in figure 3.13.

This phonological pattern, however, seems unpopular among blind teenagers. The blind teenagers usually use another sound pattern in place of the pattern which has just been discussed since the new pattern is more complicated, making it easier to hide secrets from the non-group members.

### 3.4 Shuffling of syllable parts with more complex phonological rules

My interviews with many blind teenagers revealed that the phonological pattern illustrated above is unpopular among them; they use a phonological pattern which
sounds more phonologically complex. I will take the conversation of a group of students at the Bangkok School for the Blind to describe the derivation of the sound pattern.
(11) $A: /$ wannôn lèkdùk lo:mu: lâ:hû: lûn phǒm ma: na:/
b: /lá?jú: càt lŭ: plà:w/
a: /phâ:jǎ: li:sù: lonkhun/

The dialog of the blind students in (11) can be translated into normal Thai as follows:
(12) A: /wannán dèk mo: hâ: rûn phǒmma: na:/

That day Children $m$. five Generation I Come PAR "That day, my m. 5 classmates came here."
B: /jár mâ:k rŭ: plà:w/
large number very or not
"Are there many people coming?"
A: /phû:jīn si: khon/
lady four CLASS
"Four girls."

Obviously, this phonological pattern shares almost the same form as that in figure 3.13. The data can be analyzed through almost the same phonological rules but the current phonological pattern requires more rules. If we compare the data in (11) and (12), we see that the word /dèk/ (= a kid) in normal Thai will be spoken as /lèkdùk/ in the secret language. We get the derivation of the word in the blind in-group language through the following process:

First, we have to consider the number of syllables contained in the source word and cut the word into syllable parts; hence, the word /dèk/ has only one syllable. After we identify all the syllables of the source word, we pass each syllable through the phonological rules.

The syllabic insertion rule is the first rule to be triggered, enabling an empty syllable to take place after the source syllable. Then, the two syllables are divided into onset and rhyme. Hence, the word / dèk/ will appear as in figure 3.15 .

Figure 3.15 Output after adding an empty syllable after the word/dèk/.


After adding an empty syllable after the source syllable, the sound movement rule is triggered to shift the onset of the first syllable to the onset of the second syllable. The word /dèk/ will, therefore, look like figure 3.16.

Figure 3.16 Output after moving the onset of the first syllable to that of the second syllable of the secret word derived from /dèk/.

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If we look at figure 3.12 in the previous example, we will see that the same phonological rule must be applied to the onset of the first syllable. That is, we must apply the rule of addition to add the $/ / /$ sound to the onset of the first syllable. The word/dèk/ will look like figure 3.17.

Figure 3.17 Output after adding $/ / /$ to the onset of the first syllable of the secret word derived from /dèk/.


It is clear from figure 3.17 that the rhyme of the second syllable is empty. Unlike figure 3.13 which adds $/ \mathrm{o} /$ / sound to that position, the data suggests that the onset of the second syllable contains the / $u /$ sound and takes three attributes from the first syllable: vowel length, tone, and final sound. Please look at figure 3.18 below:

Figure 3.18 Output after adding /u/ to the rhyme of the second syllable of the secret word derived from /dèk/.


We can see that the phonological pattern discussed in this section can be explained in a more concise way. We can walk along this path by following the procedures below.

First, we separate the source word into syllables and apply the phonological rules to each syllable. Then, the syllabic insertion rule must be employed to add the syllable /lu/ after the source syllable, and the two syllables must be then divided into onset and rhyme. Let us come back to the word /dèk/, a one-syllable word. After we carry out these steps, we will obtain the following form:

Figure 3.19 Output after adding the /lu/ syllable after the word/dèk/.


The next step is to use sound movement rule to interchange the onsets of the two syllables. Hence, we will obtain the form of the word / dèk/ as shown below:

Figure 3.20 Output after interchanging the onsets of the two syllables of the secret word derived from /dèk/.


The last step in this transformational process is to use a sound duplication rule by copying the tone, vowel length and final sound of the rhyme of the first syllable to the rhyme of the second syllable. Hence, after completing this step, the word /dèk/ will take the form as illustrated in figure 3.18.

It should be noted that some data hints at the possibility that this sound pattern is not regular in all word syllables. It does not occur with the syllable beginning with $/ / /$ such as /la:w/, /lia/ etc. This is because the onsets of both syilables share the same /// sound. To pronounce the two syllables in succession would be unfamiliar to them. Also, the form of the second syllable is similar to the source syllable. To apply the phonological pattern to the word, as such, not only fails to disguise the intent of the speaker, but also makes the language more redundant. Hence, they turn to apply other language patterns such as the phonological form in section 3.2 or that in the next section.

### 3.5 Replacing the rhyme of the source syllable with the /a:/ sound

We have discussed three phonological patterns which are widely used among Thai blind in the previous sections. The words derived from those patterns are difficult for outsiders to recognize in conversation; however, those words are not context-dependent, i.e., the members of the group can perceive and trace back to the original word in normal

Thai without a context. If we ask the blind to determine the original form of the word /pacaj/ or /lajpon/, we will receive an immediate answer that those two words derive from the word /paj/ in normal Thai. In other words, one word form in the secret language represents only one word in normal Thai.

The collected data suggests further that there is another pattern which is very simple in phonological structure. But, in terms of semantics, the words falling under this pattern are sometimes ambiguous; one word form may correspond with more than one word form in normal Thai. We can hardly perceive the meanings of those words unless they appear in discourse. Interestingly, this phonological pattern is used to form euphemistic terms in the blind communities (See chapter 5). Before we discuss these points, let us first explore the derivational form of this phonological pattern.

I went to the Bangkok School for the Blind on June 20, 1999 to meet a friend who was a teacher trainee there. I passed by a group of young blind students who were gossiping about an unfavorable school restriction which they opposed. Fortunately, I took a tape recorder with me, so the entire conversation was recorded and used as data in this thesis. Here is a part of the conversation:
(13) A: /kha?cu: na?ca: nĩ: læ̀? pha?ja?ja:m tò:tâ:n Pâ:ŋ wâ: rû:npĥ̃i: sìtka:w chô:p sǒ:n hâj dèk la:má: nô: lứ:/

B: /hô:j suaj thò:/
C: /lǽ:w sitkàw kô: sia mòt la:j/
A: /sitkàw kô: suaj nô: diawní: câ:lâ: phâ:jǎ: mâjhěn dâj ləj wâ:/

The dialog above can be decoded as follows:


| nô: | lús:/ |
| :--- | :--- |
| PAR | you |

"The teacher named Na tried to stop the alumni from coming back to school by stating that the alumni would teach the students to be absorbed in dirty issues."

"Then, the alumni are unlucky. Now we cannot flirt around the girls any more."

We can see from this dialog that the word /phâ:jă:/ is deviated from normal Thai words. If we inspect the phonological form of those words, we can clearly see that each syllable of the deviant words simply end with the /a:/ sound. When analyzing the data, I discovered that there is a high frequency of use of this pattern among blind speakers. To transform Thai words into such form is an easy task. Believe it or not, some words derived from the simple form can correspond with various word forms in normal Thai. That can create ambiguity in a conversation. The ambiguous forms are sometimes a technique of joke of the blind speakers. This kind of joke may be circulated among blind
people, and is usually very difficult to be understood by outsiders. We will come back to this point in 5.3.

Let us examine the phonological form through the word/phû:jıin/ in (14). When comparing this word with the dialog in (13), it is obvious that the speaker uses /phâ:jă:/ to refer to the same entity. To apply phonological rules to the source word, we have to separate the words of normal Thai into syllables; hence, the word /phû:jin/ can be split into two syllables, i.e., /phû:/ and/jī/, as in figure 3.21.

Figure 3.21 Output after splitting the word /phû:jin/ into two syllables.


After breaking the source words into syllables, we apply phonological rules to each syllable. As appearing earlier in the description of the previous sound patterns, each syllable has to be analyzed as onset and rhyme. Let us come back to the word /pû:jıı/ $/$ This word, as shown in figure 3.21, consists of two syllables. In the first syllable, we view /ph/ as onset and /û:/ as rhyme, and in the second one, the /j/ sound is viewed as onset and $/$ Pij/ as rhyme. Figure 3.22 illustrates the onset and rhyme of this word.

Figure 3.22 The onset and rhyme of each syllable of the word /phû:jin/.


My analysis is not complete at the separation of the two words into onset and rhyme. To transform the Thai words into this phonological pattern, other rules also have to be applied to the phonological transformational process. We must assign the sound deletion rule to delete the rhyme of the source syllable and add the /a:/ to the rhyme parts of two syllables as in figure 3.23.

Figure 3.23 Output after adding the sound /a:/ to the rhyme of each syllable of the secret word derived from /phû:jip/.


To derive the identical form of the word of the secret sound pattern used in the Bangkok blind community, we must apply the tone duplication rule to copy the tone from the source syllable to the target syllable. The blind, therefore, usually use the word
/phâ:jǎ:/ to refer to the word woman or lady. Figure 3.24 illustrates the complete form of the exemplified word in the secret language.

Figure 3.24 Output after duplicating the tone of each syllable of the source word to that of the target syllable of the secret word derived from /phû:jin/.


As discussed earlier, words of this phonological pattern are often ambiguous to the listeners and can create a sense of humor among the Thai blind. There are unlimited words ending with the /a:/ sound in normal Thai. The Thai blind also employ the /a:/ sound in their special language. It is probable that the pronounced syllables ending with /a:/ used to communicate among the group may be ambiguous, that is, those words may correspond with words in normal Thai or words created from special phonological patterns of their own group. It is, therefore, difficult for an outsider acquaintance to detect the real meaning in the conversation of the Thai blind.

If we ask native Thai speakers to think of the words beginning with the same initial consonant and similar tone, we will get an infinite number of words. Let us think of the words beginning with the $/ \mathrm{m} /$ and that have a mid-tone, we will get such simple words as /ma:/ (= "to come"), /maw/ (= "drunken"), or such words which are unaccepted in public as /mia/ (= "wife"). If we put these words in our sound pattern, all words will simply come up with the single form /ma:/ in the secret language.

We also accept that the words which contain a syllable ending with the /a:/ sound are unlimited in Thai. Again, let us take the word/ma:/ as an example. This word exists
in normal Thai as a verb which has various meanings in different contexts. This word is also incorporated in the secret language to signify something beyond its original meaning. In general, the blind use this word to replace the word/mial, meaning "wife" in normal Thai, but in some contexts, the word may signify something else

Here is a concrete example I have taken from the natural conversation of two blind speakers talking at the Thailand Association of the Blind on June 5, 1999. The dialog clearly demonstrates the complexity of this secret pattern.

| A: Inùj paj ka: lâ: | kan | máj | Pâw/ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nui Go eat | PUZZLED WORD | together | PAR | PAR | "Let's go and eat "Larp" meat salad or drink "Laow" alcohol together."

B: /mâj dâj rò:k diaw mi: pràpchum/ Not can PARTICLE In a moment have meeting "I can't do so. We have a meeting in a moment."

A: /mi: prà?chum lǽw thammaj Pâw/
Have Meeting So why PARTICLE
"We have a meeting, and then why?"
B: Imâj di: na: lă pràpchum di:
Not good PARTICLE after Meeting good kwà:/

COMPARATIVE
ADVERB DENOTING COMPARATIVE
"That's not good. We had better go and drink after the meeting."
A: /Púa chuan lú: paj kin lâ:p I invite you go eat a kind of Thai local food
mâj châj paj kin lâw ná? wó:j/

Not be go eat Alcohol PARTICLE PARTICLE
"I invite you to go with me to eat a kind of Thai local food, not to drink alcohol."

B: /lǽ:wkô: mâj bò:k/
So Not tell
"Why don't you tell me before?"

The conversation in (15) demonstrates the ambiguity of the secret language. The highlighted words are just an example of vagueness in communication via this language pattern. In natural conversations of the blind, this type of ambiguity can be a joke amongst them. Let us take a close look at the phrase /ka:lâ:/ to inspect the ambiguity of this phrase together

If we take the phrase /kin lâw/ into account, we can see that the conversation in (7) contains the two possible interpretations of the phrase. It is possible that this phrase is derived from the phrase either /kin lâw/ or /kin lâ:p/ in normal Thai.

Let us apply the pattern discussed earlier with the phrase /kin lâw/. It is apparent that this phrase consists of two syllables, /kin/ and //âw/. According to our phonological rules, we have to split each syllable into onset and rhyme as shown in figure 3.25.

Figure 3.25 The onset and rhyme of each syllable in the phrase /kin lâw/.


The next step of our analysis is to delete the rhyme of each syllable and add the la:/ to it. Figure 3.26 will illustrate the transformational process.

Figure 3.26 Output after adding the sound /a:/ to the rhyme of each syllable of the secret phrase derived from/kin lâw/.


To get the actual phonological form, we have to apply the tone duplication rule to copy the tone of each syllable of the original phrase to that of the target one. Figure 3.27 will demonstrate the final step.

Figure 3.27 Output after duplicating the tone of each source syllable to the target syllable of the secret phrase derived from /phû:jin/.


Let us compare the phonological form derived from the previous example with the phrase /kin lâ:p/. We should all agree that the phrase /kin lâ:p/ consists of two syllables, /kin/ and /lâ:p/. To put this phrase into our phonological form, we have to
extract the onset and rhyme from each syllable of the phrase. Figure 3.28 illustrates the structure of the first transformational rule.

Figure 3.28 The onset and rhyme of each syllable in the phrase /kin lâ:p/.


The next step of our analysis is to delete the rhyme of each syllable and add the /a:/ to it. Figure 3.29 provides a clear picture after applying this phonological rule.

Figure 3.29 Output after adding the sound /a:/ to the rhyme of each syllable of the secret phrase derived from/kin lâ:p/.

จุพาลงกรณัร/kin lâ:p/ぇาลัย


To get the actual phonological form, we have to apply the tone duplication rule to copy the tone of each syllable of the original phrase to that of the target syllable. Figure 3.30 demonstrates the derivation of the final phonological rule.

Figure 3.30 Output after duplicating the tone of each source syllable to the target syllable of the secret phrase derived from /kin lâ:p/.


If we compare the sound derivational process of the two phrases discussed earlier, we will notice that these two phrases are identical in their sound derivational structures. That caused a problem of miscommunication between the two blind speakers. The problem of communication originated from the ambiguity of the phrase /ka: lâ:/. If we use our analytical framework to explain the ambiguity, we can see that the phrase /ka: la:/ is identical in initial consonant and tone with the phrases/kin lâw/ and /kin lâ:p/. These phonological similarites are a source of ambiguity which can create either jokes or miscommunication between two people.

Since the words originated from this phonological pattern have various referential functions in the language, the blind listeners can convey their secret messages among their peer groups. To detect the real meaning of the utterance of the interlocutors, the blind listeners must pay attention to the context and be alert to the sound system of the

Thai language. The complexity of this deviant phonological process is a tool to keep the outsiders from trespassing into their secret world.

### 3.6 Replacing the rhyme of the source syllable with the /o:/ sound

Another phonological pattern used to communicate among blind people is simple in its derivation. Words falling under this pattern are polysyllabic nouns, especially the names (and possibly titles) of people or places which should not be exposed to other members outside the group.

Let us explore this type of phonological pattern together. Here is a conversation I overheard at the Thailand Association of the Blind. In this situation, the blind members are discussing a new staff member who has just come to work for the organization.
(16) A: /co:no:thô: mà:j day khǎm thò:/
staff member new sound funny PAR
"The new staff person is not good (idiomatic expression.)"
B: /thammaj Pâw?
why PAR
"Why?"
C: /núk wâ: phûakraw ta:bà: rư: janŋaj wá:/
think that we blind or how PAR

In this dialog, the blind interlocutors are complaining about the unpleasant service they have received from the new staff member. The word/co:no:tho:/ in the dialog refers to the word /câ:wnâ:thĩ:/ in normal Thai. This word is derived from the phonological rules which are quite similar to the previous sound pattern. Here is how the phonological rules trigger the word form.

The first step in our analysis is to figure out how many syllables the source word contains. Obviously, the word/câ:wnâ:thí:/ consists of three syllables as below.

Figure 3.31 Output after splitting the word /câ:wnâ:thĩ:/ into syllables.


The next step is to separate onset and rhyme from each syllable of the source word. Each syllable of the word has its onset and rhyme as illustrated in figure 3.32.

Figure 3.32 The onset and rhyme of each syllable of the word /câ:wnâ:thî:/.


Then, we assign the sound deletion rule to delete the rhyme of each syllable. The result of the deletion will come out as shown in Figure 3.33.

Figure 3.33 Output after deleting the rhyme of each syllable of the secret word derived from /câ:wnâ:thĩ:/.


We then add the $/ \mathrm{s}: /$ sound to the rhyme of each syllable. After proceeding through this model, we derive the new word form as shown in Figure 3.34 below:

Figure 3.34 Output after adding the sound $13: /$ to each syllable of the secret word derived from /câ:wnâ:thĩ:/.


The above word form does not correspond to the data we have in hand. To make it sound right, we must end up our model by applying tone addition by adding the falling tone to the rhyme of the last syllable of the new word form. Hence, we derive the actual form of word used by the blind speakers. Figure 3.35 illustrates the derived form of the word.

Figure 3.35 Adding the falling tone to the last syllable of the secret word derived from /câ:wnâ:thî:/.


This phonological pattern raises some issues which need further discussion. First, we can see from the previous example that the source word /câ:wnậthî:/ has its last syllable which is tone correspondent with that of its derived word /co:no:tho:/. This can lead to a misconception that the last syllable of every source word is identical in tone with its derived word. The collected data, however, suggests that every word falling under this sound pattern has the falling tone in the last syllable although the last syllable in the source word contains other tones. That will be illustrated later in this section.

Besides, words derived from the phonological rules can be interpreted differently, which leads to ambiguity. We can see that this phonological pattern is very simple but words derived from this pattern can be varied. For example, the word /jo:l̂̀:/ can
correspond to certain names of people such as /caPran/, /caPru:n/ or /camràt/. Secrets can be easily concealed through the use of this sound pattern. Only the listeners who share the same experience with the speakers will understand what the speakers intend to say.

My study does not end with the examination of the five phonological patterns described above. To ensure their security in discussing secrets, the Thai blind use even more complex phonological patterns in their conversations. In the next section, we will focus on the complexity of the secret language pattern of the Thai blind.

### 3.7 Mixing types

We have discussed in chapter 1 that non-verbal language such as posture, gestures and facial expressions are key factors in communication which can signal a speaker's secret message. Like sighted people, the blind also need to keep the out-group members from trespassing into the secret world among peers through non-verbal language. They cannot, as we all know, convey or receive a message through the visual channel which is an essential tool to keep the non-linguistic communication going. Therefore, they exploit their linguistic devices to fulfill the desire to communicate through the extension of sound patterns of syllables in normal Thai.

In the previous sections, we have discussed the five deviant sound patterns to convey messages among the blind. However, these five phonological patterns cannot guarantee the security of being found out by outsiders. To create a more complex phonological pattern is another alternative to disable the outsider's language perception so that the blind can disguise their communication from the sighted world.

On May 22, 1999 I went to the Thailand Association of the Blind to interview a group of young blind people concerning some interesting points in my thesis. Before I got to work, I heard a few blind friends talking about a beautiful-voiced young lady who was in the same vicinity. This conversation attracted my attention so I decided to sit down and join in their discussion. At the same time, I recorded the conversation on cassette to use as my data. Here is a part of the conversation:
(18) A: *khápcaj hǎ: phĩ: tǐ : phǒm màj hěn rapcú: làkcon la:j wâ:/

B: fápca: Pàj ta?cǒj yaj lâw/
A: /phî: fi: rapcú: dâ:j janŋaj Pâw/
B: ßàj ta?cǒj ba?còk phĩi: na:/

The dialog in (18) demonstrates almost all the phonological patterns discussed earlier in this chapter. However, as I analyzed the data in this dialog, I found it quite difficult to apply the above phonological models with some words-especially the word fápca:/ Thanks to my blind friends, I have the complete decoding of the secret conversation in hand as follows:

| (19) $\mathrm{A}: \quad$ phoj lât màj hěn rú:làkcon la:j/ |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
|  | who PAR brother Tee 1 not see know | PAR |

"My brother, Tee! Who is that lady? I really don't know her."
B: Ifæ!n アàjtǒj naj lâw/
girlfriend mr. Toy youknow PAR
"She is Toy's girlfriend."
A: /phĩ: f̂il: rú: dâ:j jannaj làp/
brother Tee know can how PAR
"How do you know she is his girlfriend, my brother Tee?"
B: Ràjtǒj bò:k phĩ: na:/
Mr. Toy tell me PAR
"Toy told me that."

If we apply the phonological framework provided earlier to decode the data above, we will not derive the original form of some syllables in the conversation. Let us consider the word /fæn/ in (19) in detail and apply our phonological process with this word. In the first model of our analysis, the insertion of phonological segments in between the onset and rhyme of the source syllable as in section 3.2 , will transform this
word to /fá?cæ:n/. If we apply our second model-the Syllable Shuffling, in section 3.3with this sample word, we will get the form /læ:nfon/ or /læ:nfu:n/. When applying the third rule of replacing the Rhyme of the source word with the /a:/ sound as in section 3.4, the word /fæ:n/ will become /fa:/. However, if we compare the word /fapca:/ in (18) with the word /fæn/ in (19), we realize that our highlighted word in (18) does not correlate with any particular phonological form of these three models.

That does not mean we cannot interpret the puzzling word through our analytical framework. The phonological form of such words can be decoded through the combination of two models. We can test this analytical framework by taking one word as an example and applying our framework to derive our target phonological form.

Let us come back to the word/fæ:n/which is the highlighted sample of our mixing model. According to our analytical framework, each word must be split into syllable parts by its syllable borders and each separate syllable will be split into onset and rhyme. Hence, our word will be analyzed to contain only one syllable which has the /f/ sound as onset and the $\nsupseteq: n /$ as rhyme as illustrated in figure 3.36.

Figure 3.36 The onset and rhyme of the syllable of the word fæ:n/.


To derive the target phonological form, we have to apply two sound models in sequence by first applying the rule in section 3.5 with our source syllable. To activate this
model, we have to delete the rhyme of the source syllable and add the /a:/ sound to the rhyme of the source syllable, then we derive the new word form fa:/ as follows:

Figure 3.37 Output after adding the sound /a:/ to the rhyme of the syllable of the secret word derived from fæ:n/.


Next, we must duplicate the tone of the source syllable onto the target syllable. Since the word fa:n/ contains mid-tone, the new word fa:/ will take the mid-tone as shown in figure 3.37.

After replacing the rhyme of the source word with the $/$ :/ sound and duplicating the tone, we still do not derive the identical word form shown in (12). To derive the target phonological form, we apply the model in section 3.2 with the word form which is the outcome of the previous model. From this standpoint, the word form derived from the previous model will become the source syllable of the new model. To generate the target word form via the active model, we first have to create an empty syllable after the source syllable; then, we will obtain two syllables in sequence. Figure 3.38 illustrates the new extended syllable occurring in our exemplified word.

Figure 3.38 Output after adding an empty syllable after the word fa:/.


After generating a new syllable, we apply the phonological movement rule to shift the rhyme of the first syllable to the same position in the second syllable. Applying this rule with the word fa: :, we obtain the following word structure:

Figure 3.39 Output after moving the rhyme of the first syllable to that of the second syllable of the secret word derived from fa:n/.


To derive the final word form, we have to apply the sound addition rule to add the rapito the rhyme of the first syllable as illustrated in figure 3.40.

Figure 3.40 Output after adding the sound $/ a$ ? $/$ to the rhyme of the first syllable of the secret word derived from fa:n/


However, the onset of the second syllable is still empty. According to the model in 3.2, we have to add /c/ to the onset of the second syllable. After we apply the rule with our word, we get the form fá?ca:/ which is identical to the form in (19). Figure 3.41 gives a clear picture of the complete phonological form after executing the two models with the word fæ:n/.

Figure 3.41 Output after adding the sound $c$ c to the rhyme of the second syllable of the secret word derived from fa: n .


ff

'á

/c/
RHYME
a:

### 3.8 Conclusions

In this chapter, I have discussed the six phonological patterns derived from the modification of each word syllable in normal Thai: (1) the insertion of phonological segments in between the onset and rhyme of the source syllable (section 3.2), (2) shuffling of syllable parts (section 3.3), (3) shuffling of syllable parts with more complex phonological rules (section 3.4), (4) replacing the rhyme of the source syllables with the a:/ sound (section 3.5) (5) Replacing the rhyme of the source syllables with the $/ \mathrm{o}: /$ sound (Section 3.6) and (6) the mixing type model, the phonological form derived from the combination of the two phonological patterns (section 3.7). Additionally, the transformational processes of each phonological pattern have been stated in detail throughout this chapter.

The data I have collected from the blind communities suggests further that the blind do not stick to any particular pattern in their conversations (see data in (1) to (12). Using the phonological patterns interchangeably in a conversational discourse can deceive or mislead an outsider's understanding of the language being used. In order for outsiders to trespass into the secret world, they have to learn the in-group language and tune their auditory system to these particular phonological patterns. That takes much time and effort.


[^0]:    * From http://www.sil.org/pckimmo/two-level_phon.html
    **From http://www.sil.org/pckimmo/two-level_phon.html

