THE THAI WRITING SYSTEM

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Thesis submitted for the degree of Ph.D.
University of Edinburgh
1981
To my mother
whom I love most dearly

Esp

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ם']ניבן זוחלאמק}ח
ABSTRACT

This thesis is a diacronic and synchronic study of the writing system of the standard Thai language. It is divided into three parts. Part I, which is the introductory part, contains two chapters. Chapter One discusses the relationship between speech and writing and a typology of writing systems. A brief sketch of the characteristics, the development and the phonological system of the Thai language is presented in Chapter Two.

Part II, concerning my original investigation on the ancient Thai writing system, is composed of three chapters. Chapter Three details characteristics of the first and the second oldest known Thai scripts called the Sukhothai script (1293 A.D.) and King Li Thai script (1357 A.D.). The question of the origin of the Thai script from the cursive form of the ancient Cambodian script is considered in the light of cultural, archaeological, epigraphic and linguistic evidence. The phonetic interpretation of proto-Thai sounds on the basis of historical spelling is also discussed in this chapter. Chapter Four analyses the phonetic correlates of the orthography and the characteristics of the third oldest known Thai script, King Narai script (1680 A.D.). The gradual development of the Thai sound symbols from the Sukhothai script, King Li Thai script and King Narai script is shown in detail. Chapter Five describes the proposed
reform of the Thai writing in 1917 by King Rame VI. The invention of new characters and setting up new rules of orthography which the king suggested for the Thai writing system are also presented.

Part III, which contains seven chapters, is my own phonetic analysis of the relationship, or the 'fit', between the sounds of the present Thai language and the symbols that are used to represent them. Discussion on the closeness or the fit between sounds and symbols, i.e. in the regularity with which a given symbol represents a given sound and the problems in reading and writing the script, is presented in various places throughout this part.

Chapter Six describes consonant symbols. Chapter Seven discusses syllable-initial consonant symbols. Vocalic symbols are reviewed in Chapter Eight. Chapter Nine is concerned with syllable-final consonant symbols. Chapter Ten deals with tonal markers. Chapter Eleven concerns punctuation, mathematical symbols, distinctive treatment of words, spaces, numerals and abbreviations. Writing styles are illustrated in the final chapter, Chapter Twelve.

The five appendices include a brief survey of earlier attempts to study the Thai script since 1854 A.D., a poem containing the designatory names of the forty-four Thai consonant symbols, the general system of transliteration of Thai characters into Roman invented by the Royal Thai academy, notes on the transliteration of English words into Thai characters, and suggestions using Thai phonetic symbols in transcribing Thai dialects.
ACKNOWLEDGEMENTS

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I would like to express my deep gratitude to my supervisors: Professor David Abercrombie who kindled my interest in the field of writing systems, for his constant encouragement in my research and for his guidance and suggestions throughout my work; Professor Ron Asher who everwillingly supplied me with a lot of useful materials and provided me with constructive comments and suggestions to explain many interesting points which I would otherwise have ignored. I should also like to thank Mr Alan Kemp who was always there whenever I urgently needed to discuss problems.

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Last but not least my thanks also go to my mother; my sister, Jintana Pahasit; my teachers, Jimmy G. Harris and M.R. Kalaya Tingsabadh; and my friends, Marie Azzopardi and H. Gorji, whose encouragement was enormous.
DECLARATION

This thesis is my original work and of my own execution and authorship

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Appendix 1

1.1(a) The photograph of Dictionarium Linguae Thai sive, Siaminsis Interpretatione Latina, Gallica et Anglica Illustratum, p.402 by D.J.B. Pallegoix (1854)

Examples of the transcription of the Thai alphabet done by myself (1), D.J.B. Pallegoix (2), G.B. McFarland (3), Peter A. Lanyon-Orgill (4), and Mary R. Haas (5):

1.2(a) consonant symbols
1.3(a) vocalic symbols

Appendix 3

The Roman characters which represent:

3.1(a) the Thai syllable-initial and final consonants
3.2(a) the Thai vowels

Appendix 4

The English phonemes and the Thai sound symbols which represent them:

4.1(a) syllable-initial consonants
4.2(a) syllable-final consonants
4.3(a) vowels

Appendix 5

Thai phonetic symbols used in transcribing:

5.1(a) Thai consonants
5.2(a) Thai vowels
5.3(a) Thai tones
PART ONE

INTRODUCTION
Chapter 1

WRITING SYSTEMS
Chapter 1

WRITING SYSTEMS

One of the most important characteristics of human behaviour is communication. In order to communicate thoughts and feelings, there must be a conventional system of signs or symbols which, when used by some persons, are understood by other persons receiving them.

Communication can be achieved by means of visual, auditory and tactual communication. Ways of communication appealing to the eye are, for example, using gesture, mimicry; signalling by means of fire, smoke, light or semaphore. Forms of auditory communication are, for instance, whistling, hissing or applauding; signalling by means of drums, trumpets; and speech. Ways of communicating feeling by the sense of touch are, for example, the handclasp, the backslap, handstroking of blind and deaf mutes.

Gelb (1963, p.3), suggested that the means of communication mentioned above are of momentary value and are therefore restricted as to time; as soon as the word is uttered or the gesture made, it is gone and it cannot be revived except by repetition. Moreover, they can be used only in communication between persons more or less in proximity to each other and are
therefore restricted as to space. It is clear that the need for finding a way to convey thoughts and feelings by means of visual communication not limited by time or space led to the development of writing.

Writing is expressed by marking on objects or on any other material. Any system of writing has to do with the representation of speech. It is true that we write what we want to say. Writing does not represent physical elements of speech, since it is not possible to show physical entities of sounds by marks on paper. In this case, writing is only the conventional system of representing human speech by means of visible marks.

"What are the elements to which we give our visual symbols?" To answer this question, Abercrombie (1965, pp.87-88) says:

"All systems of writing known to us give their symbols to words; the difference in them lies in the way those symbols are constructed. They may be simple symbols, or they may be made up from a small number of subsidiary signs; but however they are made up, it must not be forgotten that they will be read as words, and probably written as words also. In the process of learning any system of writing, one is, of course, conscious of the smaller elements which go to make up the complex word symbols; but the ordinary literate human being, reading naturally, pays no attention to individual letters. It is the shape of the word as a whole which his eye attends to. Were this not so, reading would be an impossibly laborious process. Those who write shorthand know also that it is impossible to attain any speed unless word symbols - 'outlines' - are written straight off, without analysis into the elements into which they were divided when they were learnt. Briefly, then, the object of writing is to provide an ambiguous symbol for every word in the language concerned."
Considering the ways their symbols are constructed, systems of writing are classified into three following types:

1. **Logographic system.** Chinese is the notable example of this type of system. In the logographic system each symbol represents a word. Very many symbols are needed in such a system. The Chinese system of writing places a tremendous burden upon the educational system since in order to learn to read and to write a minimum of useful words, the symbols representing each word in Chinese have to be individually memorised.

2. **Syllabic system.** In this system of writing, each symbol represents a syllable. It seems to be a rather more convenient system as it requires less symbols than the logographic one. Japanese syllabary is the notable example of this type of writing system.

3. **Alphabetic system.** The Roman alphabet as used in English, French, Spanish, etc. is an example of the alphabetic system. In this system each symbol represents a smaller part of a syllable. Some languages have a system of writing that is close to a phonemic system, each phoneme being represented by one symbol. This is more usually the case when the orthography was devised more recently, with the advantage of more advanced phonetic sophistication, as in the case of the Roman alphabet used for Turkish. Phonetics has given birth to the orthography of unwritten languages. Phoneticians study speech-sounds and analyse the phonology of a language and produce an orthography.
on the basis of phonological analysis.

It is important to note here that the type of writing system suited to one language may not necessarily be the best for another. For example, if a syllable structure of the language is CV, syllabic writing system is the most suitable one for this language. But for the language of syllable structure C V C, like English, alphabetic writing system is more suitable. Furthermore, the type of writing system suited to one purpose may not necessarily be the best for another. For quick writing, a shorthand writing is very suitable, but it is not easy to learn and requires very many symbols. A system which uses fewer signs, like alphabetic writing system, is easier to learn but it is not quick to write. The Thai writing system is an alphabetic system since each symbol represents a smaller part of a syllable. For example, to write a syllable <กัน> /-กัน/ "work", three symbols <ก> = <ก>, <น> = <น> and < unimaginable > are needed. The Thai writing is sometimes described as a syllabic writing because each Thai consonant symbol, when it occurs alone, is pronounced with a carrying vowel /o:/ as /- pok/ /- kok/ /- koh/, etc. This is only the case when consonant symbols are named. But when writing a syllable with the vowel /ο:/, the vocalic symbol for /ο:/ is always written except in certain words of Pali or Sanskrit origin. In principle, consonants and vowels are represented by separate symbols in the Thai writing. Apart from a number of implications

1. < > = orthographic symbol
   / / = phonemic symbol
which will be discussed in detail in various places throughout the thesis, the Thai writing system is quite regular as far as the spelling is concerned. Although a given phoneme may be represented by more than one symbol, a certain symbol in a certain position almost always represents a certain phoneme. Problems of the sort presented in English by <th>, pronounced as /θ/ in <thin>, or as /ð/ in <this>, or as /θ/ in <Thames> rarely occur in Thai writing.
Chapter 2

A BRIEF SKETCH OF THE CHARACTERISTICS OF THE THAI LANGUAGE
Chapter 2

A BRIEF SKETCH OF THE CHARACTERISTICS OF THE THAI LANGUAGE

The language under investigation is Standard Thai. Standard Thai is the national language of Thailand. At the present time Standard Thai with the Standard Thai writing system is used as the literary medium in Thailand. In addition to Standard Thai there are three main dialects spoken - in the south, the north, and the north-east of the country. At one time the northern and the north-eastern dialects had their own special systems of writing but these are no longer used.

The transcription of words in this thesis represents the pronunciation of Standard Thai speakers speaking in a citation form or a careful style of speech. The Thai language is one of the languages belonging to the most widespread language family in south-east Asia, called "the Tai family". These languages are spoken in Thailand by the Shan of north-eastern Burma, in the Lao kingdom, and by many isolated groups of the Thai race in China. There is no doubt that all these languages have come from a common source since they share a large number of words and are all the same in being monosyllabic
languages. Through the process of time the Thai language of each geographical area of the Thai race mentioned above becomes differentiated and modified to some extent. Nevertheless each group has retained the original characteristics of the language in that they are monosyllabic and tonal. The Thai language was once called "Siamese". Later we took the name "Thai" instead of "Siamese"; it means "the language of independence".

2.1 THE NATURE AND DEVELOPMENT OF THE THAI LANGUAGE

2.1.1 The nature of the language

The Thai language as spoken by the people of Thailand is monosyllabic in its formation of words. This is a characteristic to be found also in other Thai languages of the Tai family. It is stated by Phraya Anuman Rajadhon in his *Thai Language* (1961, p.5) that the Thai language belongs to a type of language technically called in philology an isolating language. Such a language has words each of which is free to enter into the construction of sentences without any modifications as to case, gender, number, mood or tense. Each word, therefore, is independent as a unit in a sentence. There are no hard and fast rules that make Thai words belong to a particular part of speech. The language does not make any use of inflections. It has one of the simplest grammars of all languages as far as inflections are concerned.

1. A monosyllabic language is one where the frequency of words of one syllable is very high in comparison to words of two or more syllables.
In syntax the order of the words is usually quite rigid though minor variations are occasionally permissible. The arrangement of words in a sentence of Thai is fundamentally "subject-verb-object", as in English. But Thai attributive constructions differ from those of English in that the noun must always precede the attribute, i.e. we say in Thai "suit new", "book red" instead of "new suit", and "red book" as in English.

One of the interesting points in Thai is that "grammatical words", such as articles, prepositions, conjunctions, etc. which serve as a help to clarify the "lexical words", i.e. nouns, verbs, etc. in a sentence, are not necessary if the context in the sentence is logically clear. For example "a red book" will be in Thai "book red", "a girl sits on a chair" will be in Thai "girl sit chair".

Obligatory categories of tense and number do not exist in Thai, and a sentence like \( \text{ตี๋มี่} \text{โรงเรียน} \) /\( _{-}\text{dek-pai-\text{ro}\text{\text{an}}-\text{ri}\text{an}} \) may mean "A child goes to school", "children go to school", or "A child went to school", "children went to school". (\( _{-}\text{dek} \) = child or children, \( _{-}\text{pai} \) = to go, \( _{-}\text{ro}\text{\text{an}}-\text{ri}\text{an} \) = school.) Nevertheless time and number may be shown by special words when needed. For instance, we add the word \( \text{ตี๋} \text{สำนักงาน} \) /\( \text{la}\text{\text{i}-\text{khon}} \) (many people), to the word \( \text{ตี๋} \)/\( _{-}\text{dek} \) (child) to point out plurality. As to tenses, if it is necessary to specify past time we can add a word like \( \text{เพื่อวัน} \) /\( \text{mu}\text{\text{a}-\text{wa}\text{\text{n}}} \) (yesterday), or
Thai uses classifiers when using numbers with nouns as in the English phrase "three strands of hair". It is important to observe here that the choice of classifiers is determined by the first noun. If we want to say "three strands of hair" we have to say, in Thai, <ติว / 'phom / 'sa:m / 'sen/>; ('phom/ = hair, /'sa:m/ = three, /'sen/ = a classifier for hair, ropes). <ติว> /-lam/ is a classifier for boats, so seven boats is <ติวเจ้าลำ> /-rai:a_t^et-lam/; (-rai:a/ = boat or boats, /-t^et/ = seven, /-lam/ = a classifier for boats). <ติว> /-khan/ is a classifier for vehicles (except carts), so two cars is <ติวเจ้าหก> /'rot-jon'so-.khan/; ('^rot-jon/ = a car or cars, /'so-.khan/ = two, /-khan/ = a classifier). If, in some words no classifier can be used appropriately, the first noun is repeated after the number, thus <สามสี่หก> /-khan'sa:m-khan/ means three men; (/-'khan/ = man or men, /'sa:m/ = three, /-khan/ = man or men).

2.1.2 The development of the language

Phraya Anuman Rajadhon pointed out in his Thai Language (1961, p.19) that in the course of history many groups of Thai-speaking people who also called themselves Thai (or Tai) migrated into the Indo-Chinese Peninsula from their old home in southern China in different groups and in different directions and periods of time. One group became the Shan of Burma,
another group became the Siamese or Thai of Thailand, another became the Lao and a number of the Thai with many tribal names in Tonking and southern China, and even in Hainan Island. The migration of the Thai of Thailand took place sometime in 400 B.E., we, roughly in the 5th to 10th century A.D., were within the empire of the Mon.

In the 10th century A.D. the Khmer (Cambodians) began to migrate into the Thai area and eventually succeeded the Mon, so that the Thai came to be ruled by the empire of the Khmer. The close contact of the Thai of Thailand with the Mon and the Khmer radically affected the Thai, physically, linguistically and culturally. The Mon were a comparatively civilised race in the Peninsula. They received their civilisation from India and had adopted Buddhism of the Southern School (Hinayanism), while the Khmer, another civilised race, were a highly Hinduised race, and at times adopted Buddhism both of the Northern (Mahayanism) and Southern School. The Southern School of Buddhism used Pali as its vehicle of thought and language, while the Northern School and Hinduism used Sanskrit. Consequently the Mon had in their language a considerable number of words derived from Pali. The Khmer also have borrowed many of their administrative, military and literary vocabularies from Sanskrit. With the advent of Theravada Buddhism at the beginning of the fifteenth century, Cambodians began to borrow Pali words, and continue to use Pali as a major source of neologisms today.  

1. The Buddhist era (B.E.) is 543 years before the Christian era (A.D.).
Figure 2.1 The map of Asia
There is much evidence to suggest that although in time the Thai became the dominant race in Central Thailand in succession to the Khmer, the Thai language had by now changed much through the influence of the Mon-Khmer. More and more Mon and Khmer words were adopted into the Thai language.

Moreover, a large number of polysyllabic words of Sanskrit and Pali origin were introduced into the Thai language, at first through the medium of the Mon and the Khmer languages, and later through direct borrowing from India and Ceylon.

As for other foreign influences on the Thai language, we have borrowed a large number of words from both western and oriental languages, Portuguese, English, Malay, Javanese, Tamil, Persian and Chinese. No doubt most of the words are due to cultural borrowings, international trades and commerce, and modern technology. Through all these borrowings the modern Thai language has enormous numbers of polysyllabic words.

2.2 THE PHONOLOGY

The phonology of Standard Thai has been studied by various scholars, such as Mary R. Haas (1942), William J. Gedney (1947), Eugenie Henderson (1949), A.S. Abramson (1960), R.B. Noss (1964), Theeraphan Luangthongkham (1976), Fang Kuei Li (1977), etc. The following is a brief summary, together with some of my own personal observations.
2.2.1 The consonant system

2.2.1.1 Initial consonants:

<table>
<thead>
<tr>
<th>Plosive</th>
<th>Affricate</th>
<th>Nasal</th>
<th>Trill</th>
<th>Lateral</th>
<th>Fricative</th>
<th>Semivowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilabial</td>
<td>p pʰ b</td>
<td>m</td>
<td></td>
<td></td>
<td>f</td>
<td>w</td>
</tr>
<tr>
<td>Labiodental</td>
<td>t h d</td>
<td>n</td>
<td>r</td>
<td>l s</td>
<td>j</td>
<td></td>
</tr>
<tr>
<td>Alveolar</td>
<td>t th d</td>
<td>n</td>
<td>r</td>
<td>l s</td>
<td>j</td>
<td></td>
</tr>
<tr>
<td>Alveolar-palatal</td>
<td>tʃ tʃʰ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palatal</td>
<td>k kh</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Velar</td>
<td>k kh</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glottal</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>h</td>
</tr>
</tbody>
</table>

\( p, t, tʃ, \) and \( k \) are unaspirated and are pronounced with simultaneous glottal closure. \( pʰ, th, tʃʰ, \) and \( kh \) are strongly aspirated. \( b \) and \( d \) are fully voiced.

2.2.1.2 Distribution of consonants:

All the preceding consonants are permitted as the initial consonant of a syllable. A cluster of two consonants of the following types is also permitted, namely:

\[ \begin{align*}
\text{pl-} & \quad \text{ph} \text{l-} \quad \text{kl-} \quad \text{khl-} \\
\text{pr-} & \quad \text{ph} \text{r-} \quad \text{tr-} \quad \text{kr-} \quad \text{khr-} \\
& \quad \text{kw-} \quad \text{khw-}
\end{align*} \]

2.2.1.3 Final consonants:

Only \( p, t, k, ?, m, n, n, \) occur as the final
consonant of a syllable. P, t, k, are not exploded in a syllable final position. Consonant clusters are not permitted in a final position of the syllable.

2.2.2 The vowel system

2.2.2.1 Pure vowels:

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Back-unrounded</th>
<th>Back-rounded</th>
</tr>
</thead>
<tbody>
<tr>
<td>close</td>
<td>i</td>
<td>u</td>
<td>u</td>
</tr>
<tr>
<td>half-close</td>
<td>e</td>
<td>y</td>
<td>o</td>
</tr>
<tr>
<td>half-open</td>
<td>e</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>open</td>
<td>a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All pure vowels may be short or long.

2.2.2.2 Diphthongs:

There are two groups of diphthongs in Standard Thai:

1. Those which may be followed by a final consonant: ia, ia, ua, ua; and wa, wa.

2. Those which are not permitted to be followed by a final consonant: iu, eu, eu, eu, ei, ei, ai, ai, au, au, oi, oi, o: i, ui and ri.

2.2.2.3 Triphthongs:

There are three triphthongs: iau, uai, and wai. They are not permitted to be followed by a final consonant.

2.2.3 The Tone system

There are five tones in standard Thai:
Tone | Thai Script | Transcription | Meanings
--- | --- | --- | ---
1. Mid. | ข้า | /-kha:/ | "a grass (Imperata cylindrica)"
2. Low | ข้า | /_-kha:/ | "galangal, a rhizome"
3. Falling | ฆ่ | /'kha:/ | "slave, servant"
4. High | ฆะ | /'kha:/ | "to engage in trade"
5. Rising | ฆ้ | /'kha:/ | "leg"

2.2.4 **Syllable structure**

Thai syllable structure can be summarised in the following formulae:

a. $C_1 (C_2) V_1 C_3 / T$

b. $C_1 (C_2) V_2 (C_3) / T$

$C_1 = $ one of the initial consonants: p, t, k, ?, ph, th, kh, b, d, t, t, f, s, h, m, n, r, l, w, j.

$C_2 = $ one of the approximants: r, l, w, that can be the second element of the clusters.

$C_3 = $ one of the final consonants: p, t, k, ?, m, n, n.

$V_1 = $ one of the short pure vowels: i, e, e, a, o, u, w, y; the diphthongs ia, ua, wa.

$V_2 = $ one of the long pure vowels: i:, e:, a:, o:, oe, u:, w:, y; the diphthongs i:a, u:a, w:a, iu, eu, e:u, e:u, eu, eu, e:u, au, a:u, y:i, ui, o:i, oi, o:i, ai, a:i; and the triphthongs ia:u, uai, wai.

$T = $ one of the tones: Mid /-kha/, Low /_-kha/,
Falling /ˈkʰa/, High /ʰkʰa/, Rising /ˈkʰa/.

2.3 WRITING SYSTEMS USED BY THE TAI-SPEAKING POPULATIONS

Li Fang Kuei divided writing systems used by the Tai-speaking populations in his *A Handbook of Comparative Tai* (1977, pp.22-23) into two following types:

1. The type which is based on Chinese writing. Many Tai speakers in Kwangsi and Kweichow, in China; and Tho in North Vietnam, use a modified system of Chinese writing. The tradition of this form of writing may date from quite early, going back at least several hundred years. It seems to be generally used in recording from songs which the Tai speakers love very much. While it need not be restricted to recording songs, it has not been found used for other purposes. Many speakers, of course, do not necessarily know this system of writing.

2. Another system of Tai writing is derived from Indic sources. There are many varieties of alphabets used by the Tai peoples in South-east Asia and in the South-western part of Yunnan, China. The system can be said to consist in general of two types, according to the accuracy with which the letters represent the sound system:

   a. The Siamese type. It is used in Thai, Lao, Black Tai, White Tai, Lü, etc. This type of alphabet has developed enough symbols to represent the different vowels and
diphthongs which are in general more complicated in Tai than vowel systems of Indian languages. It also preserves the old distinction between voiceless consonants, particularly the plosives such as p, ph, t, th, etc., and voiced consonants, such as b, d, etc. The Standard Thai Alphabet is the one best known in the Siamese type, as it is equipped with a full set of tonal markers, which are not always existent or consistently used in some other alphabets.

b. The Shan type. It does not provide enough symbols for the more complicated Tai vowels and diphthongs, and does not differentiate the old voiced consonants from the voiceless ones. Such are the alphabets of Ahom, Shan, Khamti, etc. This type of writing system has no tonal markers.

The earliest date of introduction of the alphabet to the various Tai peoples is not definitely known. The famous inscription of King Ram Khamhaeng of Sukhothai city of Thailand, which will be presented in the next chapter, is the earliest known dated document (1283 A.D.) The exact date of introduction of the Shan type of script is also not known, but some documents published by Izui (1949) come from the middle of the 15th century.
PART TWO

THE ANCIENT THAI WRITING SYSTEM
Chapter 3

The Orthography and the Characteristics of the Sukhothai Script and King Li Thai Script
Chapter 3

THE ORTHOGRAPHY AND THE CHARACTERISTICS OF THE SUKHOTHAI SCRIPT AND KING LI THAI SCRIPT

3.1 THE ORIGIN OF THE OLDEST KNOWN THAI WRITING

The earliest known Thai script was invented by King Ram Khamhaeng of Sukhothai kingdom in 1283 A.D. It was engraved on stone and has been preserved by the Thai as our national script. This first earliest known Thai writing is called "The Sukhothai script".

Scholars in Thai writing doubt if there were any scripts used in Thailand before the Sukhothai script. King Ram Khamhaeng wrote on his inscription that he invented

\[ \text{นี่รัศษ์} \text{ส่วน} \text{ไทย} \] /'nàh'swà-thàj-nì:/ "this particular form of the Thai script". Since he stated that the script he invented was only the particular style of the Thai script, this gave rise to the theory of there having been other Thai scripts before the time of the king. In my opinion this is very probable, because

1. George Coedes and Jean Burnay put forward this theory in their article "The Origins of the Sukhothai Script", JSS, 21 (1928), p.87. It has been supported by many Thai scholars, among them are Cham Thongkhamwan, a famous Thai epigrapher; Kamchay Thonglo, a scholar in Thai language; Khachon Sukhaphanit, a famous Thai historian, and many others.
Thai archaeologists have found a number of ancient inscriptions written before the time of King Ram Khamhaeng.\(^1\) The earliest ones were found at the Phra Prathom Chedi (dated 657 A.D.), in Lopburi Province (757-857 A.D.), and in Lamphoon Province (1257-1357 A.D.).\(^2\) The script used in these inscriptions was of ancient Mon origin. No other written records were found before that time. It could mean that the script adopted from the ancient Mon alphabet was the first script the Thai had had since we migrated into Indo-China. As already stated in Chapter 2 (The Development of the Thai Language, p.9) the Thai migrated into the Indo-Chinese peninsula from our own home in China sometime in 400 B.E. Historical evidence shows that while still in China we had been attacked by the Chinese and forced to migrate into Indo-China. It seems probable that these continuous troubles would not leave us time to invent any national script. After migrating into Indo-China the Thai were within the empire of the Mon, which was the governing race in that area, roughly from the 5th century A.D. on. There is evidence to indicate that the Thai received elements of culture from the Mon, so we might have adopted the ancient Mon script to use as our national writing. Moreover other groups within the Thai race, e.g. Thai Ahom, Thai Lü, Phu Thai, also have scripts

which were adopted from the Mon. So it is very probable that in early centuries the Thai of Thailand also had adopted the ancient Mon script to use in writing, as appeared in the inscriptions which have already been mentioned.

In the 10th century A.D. the Khmer (Cambodians) began to migrate into the Thai area and eventually succeeded the Mon so that the Thai came to be ruled by the empire of the Khmer. Thai archaeologists found stone inscriptions written from the 10th century A.D. on. The script was similar to the cursive form of the Khmer alphabet which was used in Cambodia in the thirteenth century, so it has been proved beyond doubt that before the Sukhothai script, the Thai had used two scripts which were adopted from the ancient Mon and Khmer scripts.

It is stated in Thai history that King Si Intharathit of Sukhothai city freed Thailand from the Khmer and established Sukhothai as the capital of Thailand in 1257 A.D. From that time on the Thai became the dominant race in central Thailand. King Ram Khamhaeng, the second son of King Si Intharathit, was a very independent lord. He had a strong national feeling and so wanted to form a new official Thai script which he wished to have as something purely Thai, free from Mon or Khmer influence. He therefore invented a Thai script called "the Sukhothai script" in 1283 A.D. as already stated on p.17. It is well known as the earliest Thai writing.

The stone inscription of King Ram Khamhaeng is now
kept in the Thai national museum, Bangkok, Thailand. (See Fig. 3.1, p.21.) Attempts to read the inscriptions were made by Thai and European scholars, among them were Prince Mahamongkut, the future King Rama IV (1833), Sir John Bowring, a British envoy (1855), Adolf Bastian (1864), the Crown Prince Vachiravut, the future King Rama VI (1907), C.B. Bradley (1909), George Coedes (1918), Jean Burnay (1918), Cham Thongkhamwan (1962), Pichai Santaphirom (1962), A.B. Griswold (1971), and Prasert Na Nagara (1971).

Although there were many difficulties in understanding the inscription, which were caused by obsolete words, archaic spelling and ambiguous syntax, all scholars have produced documents in deciphering the inscription. It is clear that the main purpose of these scholars in reading the inscription was to obtain information about historical events and also to find out the origins and meanings of words and to trace back the origin of the script. None of their work presented the detailed phonetic description of the orthography and the characteristic of the script except that of Thongkhamwan which discusses the shapes of symbols of the script. The inscription gives a lot of information about the biography of the kings of the Sukhothai kingdom (1237-1438 A.D.), a description of Sukhothai city and the customs of the country.

I was taught to read the Sukhothai script by Professor Prasert Na Nagara, a famous Thai historian of Sukhothai period, while doing my data collection in Thailand in 1978-1979. Without his teaching I would never have been able to understand the script by myself. To the eye acquainted only with present
Figure 3.1 The stone inscription of King Ramkhamhaeng kept in the national museum of Thailand, Bangkok.
Thai writing, the Sukhothai script seemed at first completely foreign to me.

The question of the ultimate source of the Sukhothai script has been under debate for many years. However, after careful examination in comparing shapes of letters of the scripts, George Coedès (1925) and Cham Thongkhamwan (1962), reached the conclusion that the ultimate source of the Sukhothai script was a form of the ancient Brahmi script of South India called "Grantha".

The Brahmi script was first used in inscriptions issued by King Asoka in 269 B.E. He ruled over the area which covered almost the whole of the subcontinent of India and Pakistan north of the Kaveri Valley. The Brahmi script of these inscriptions has been termed "Asokan Brahmi".

Coedès stated that there are two forms of the Brahmi script. One of the two called Devanagari, is used in northern India; the second, called Grantha, is used in southern India. Both Devanagari and Grantha share the characteristics of the Brahmi script in that each consonant symbol such as the consonant symbol for /k/ when not modified by a vocalic symbol before, after, above or below to form /ki/, /ku/, etc. will automatically be pronounced /ka/.

Another common feature of the Brahmi, Devanagari and Grantha scripts is that there are two sets of vocalic symbols in their writing systems. The first is used when a vowel occurs

in a syllable by itself without an initial consonant. The second is used as a part of a syllable with an initial consonant. Each of the vowels, except /a/, has two vocalic symbols to represent it. For example, the vowel /i/ in a syllable /i/ and in a syllable /ki/ is represented by two different forms of a vocalic symbol. As the vowel /a/ occurs with every consonant symbol unless that consonant symbol is modified by one of the other vocalic symbols, there is no need to have another form of vocalic symbol to represent it when it occurs as a part of a syllable with an initial consonant.

The Grantha form of the Brahmi script is the origin of the Khmer script. The Grantha came to be used in Indo-China through the spread of the Buddhist religion and contact in trade. In 300 B.E. Ceylon became the first country in South-East Asia which brought the Grantha script into use. The earliest inscription in Khmer language is that found at Ankor Borei in Takeo Province of southern Cambodia, and is dated in 611 A.D. The script on this inscription is similar to the Grantha script.

There are two forms of the ancient Khmer script. The first was a monumental form used in, for example, Phra Traipidok and other sacred books; the second was a cursive form used in ordinary writing.

Coedès and Thongkhamwan stated that as far as the shapes of letters are concerned it is obvious that the Sukhothai

script derived from the cursive form of the ancient Khmer alphabet. Besides the similarity in the shapes of the letters, I think, when we consider the evidence of contact between these two nations, the theory in favour of the ancient Khmer origin of the Sukhothai script is greatly strengthened. As mentioned above, during the tenth to thirteenth centuries A.D. the Thai were ruled by the empire of the Khmer. This close contact of the Thai with the Khmer radically affected the Thai, physically, linguistically and culturally. There is a great number of loan words of Khmer origin in the Thai language today. Many of the Thai rites and ceremonies, e.g. the festival of hair-cutting, coronation and ploughing, are of Khmer origin. Moreover the early Thai religious architecture, as seen in Sukhothai Province, in Lopburi and elsewhere, reproduces distinct characteristics of the Khmer.

My observations on the shapes of letters of the Asokan Brahmi, the Grantha, the cursive form of the ancient Khmer, are based on a published work of George Coedès (1925), Cham Thonghamwan (1962), and Dani Ahmed (1963). Of the Sukhothai script they are based on the rubbing of the inscription. From these observations, it is clear that there is a great epigraphic similarity among them. Moreover the relationship among the three scripts is abundantly seen in the shapes of letters; the arrangement of consonants into five groups based on position of articulation, proceeding from the back to the front of the mouth; and in the fact that in all scripts each consonant symbol is pronounced with an
accompanying vowel.

I attempt to show here the similarity of the shapes of letters of the scripts by reproducing them side by side in Figure 3.2 (pp.26-28). The symbols of the Asokan Brahmi, the Grantha, and the cursive form of the Khmer alphabet are copied from a published work of Cham Thongkhamwan (1962). Of the Sukhothai script, they are copied from the rubbing of the inscription. The phonetic value of each symbol of the source scripts is as used in Asokan Brahmi script. In the Sukhothai script it is that of the present Thai pronunciation. Since we adopted nearly all the consonant symbols from the source scripts the Sukhothai script contains many more symbols than are needed in our language. Many consonants are represented by more than one symbol, as can be seen in the chart. For vocalic symbols we had to invent many more symbols to represent vowels because the Thai vowel system is much more complicated that that of the source scripts. Only some of the vocalic symbols in the Sukhothai script are presented in the following charts.
### Figure 3.2

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>The Asokan Brahmi</th>
<th>The Grantha</th>
<th>The cursive form</th>
<th>The ancient Khmer</th>
<th>Phonetic values</th>
<th>The Sukhothai</th>
</tr>
</thead>
<tbody>
<tr>
<td>ka</td>
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<td>ड</td>
<td>ड</td>
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<td>को:</td>
<td>फै</td>
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<tr>
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<td>ख</td>
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<td>को:</td>
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<tr>
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<td>को:</td>
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<tr>
<td>Phonetic values</td>
<td>The Asokan Brahmi</td>
<td>The Grantha</td>
<td>The cursive form of ancient Khmer</td>
<td>Phonetic values</td>
<td>The Sukhothai</td>
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</table>
2. **Vocalic symbols**

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>The Asokan Brahmi</th>
<th>Grantha</th>
<th>The cursive form of ancient Khmer</th>
<th>Phonetic values</th>
<th>The Sukhothai</th>
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<tbody>
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<td></td>
<td>A</td>
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<td>A</td>
<td>B</td>
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</tbody>
</table>

1. A is a set of vocalic symbols which is used when a vowel occurs in a syllable by itself without an initial consonant.

2. B is a set of vocalic symbols which is used when a vowel occurs as a part of syllable with an initial consonant.

3. A dash shows the position of a syllable-initial consonant symbol.
However, I have found that the Sukhothai script differs from the source scripts in the following points:

1. There are two sets of vocalic symbols in the source scripts as can be seen in the chart on p.28. But in the Sukhothai script there is only one set of vocalic symbols to be used as a part of a syllable with an initial consonant, because a syllable in Thai always begins with a consonant. Moreover, the place of vocalic symbols in a syllable of the Sukhothai script is different from that of the source scripts. In the Sukhothai script the place of vocalic symbols is either before or after a syllable – initial consonant symbol, but in the source scripts vocalic symbols are written either before, after, above, or below the initial consonant symbol of the syllable.

2. The most original as well as the most interesting feature in the Sukhothai script is the notation of tones which do not exist in the source scripts.

Let us now assume it is likely that the genealogy of the Thai script is as follows:
Figure 33 The Origin of the Thai Script

The Brahmi Script

- The Southern Brahmi Script (The Grantha)
  - The Ancient Khmer Script
    - The Monumental Form
    - The Cursive Form
  - The Ancient Thai Script
    - The Sukhothai Script
      - King Li Thai Script
        - King Narai Script
          - The Present Thai Script
- The Northern Brahmi Script (The Devanagari)
  - The Ancient Mon Script
    - The Burmese Script
The Sukhothai script of King Ram Khamhaeng, was used till 1357. In 1357, in the reign of King Li Thai, the grandson of King Ram Khamhaeng, a new script called "King Li Thai script" came to be used. From my observations it is evident that the shapes of letters of King Li Thai script are based on the Sukhothai ones, although some of them were modified. The most striking thing I found in King Li Thai script was the place of vocalic symbols. There, vocalic symbols were written either before, after, above, or below a syllable initial consonant symbol, as in the Asokan Brahmi, the Grantha and the Khmer writing.

There are a lot of extant inscriptions, engravings written in King Li Thai script, for example Nakhon Chum inscription (1357), Wat Phrayun inscription (1370), Wat Changlom inscription (1384), etc. Details can be seen in the list of names of inscriptions, engravings and ancient documents on pp.333-335. Inscriptions and engravings are now kept in the National Museum and Library of Thailand, Bangkok, and in a museum or a temple in different parts of Thailand. King Li Thai script had been developed and used in Thai writing till King Narai script was brought into use in 1680.

1. Inscriptions were mostly named after the place where they were found or where they are kept. They were mostly found in temples. <Wat> here means temples in Thai. Some of them were named after the name of the king who ruled the country when they were inscribed. A given inscription may be inscribed in different years; for instance, Si Chum inscription was first inscribed in 1341, but it was completed in 1361. In this case the inscription is dated 1341-1361.
I studied the orthography and characteristics of King Li Thai script from rubbings and photographs of the inscriptions. The symbols of the Sukhothai script and King Li Thai script shown in the chapter are copied from the rubbings of the inscriptions which are now kept in the National Library of Thailand. Most of the symbols show slight variations from one occurrence to another in the rubbings. In this case I chose the shapes which were used most frequently; and where the symbols show great variations from one occurrence to another, all the variations are presented.

Both the Sukhothai script and King Li Thai script were written from left to right and there were no spaces between words. A letter was not capitalised in the beginning of a sentence as in the English writing system. At the end of a sentence a full stop was not used. All these characteristics are still preserved in the present Thai writing system.
Figure 3.4 The Sukhothai script (1283 A.D.) in detail.
Notes on the interpretation of the Sukhothai script shown in Figure 3.4, line 8, p.33

(1) ⟨ฮวัลลิกะนิวัฒน์⟩

(2) ⟨saːmph‘niːsroːiwaːkʰnainmwːaŋskoːkʰaitʰ⟩

(3) /ˈsam-pʰan_sːiː rɔːi -wːaː -kʰon -nai -mwːaŋ suk ‘kʰoː- thai /

"(the length of the wall was) three-thousand-four-hundred /-waː:/ (a Thai linear measurement) ... people in the Sukhothai city ...."

The comparison of the Thai writing (1), the Roman transliteration (2) and the phonetic transcription (3) reveal the fact that there are certain problems with regard to the interpretation of the script. For example:

1. There are two vocalic symbols to represent /ai/: ⟨ə⟩ as in /-nai/, and ⟨ɔː⟩ as in /-thai/.

2. Vocalic symbols ⟨iː⟩ = ⟨iː⟩ ; ⟨ɛː⟩ , ⟨ɔː⟩ = ⟨ai⟩ ; ⟨ɔː⟩ = ⟨u⟩ , and ⟨ɛː⟩ = ⟨oː⟩ are written in front of a syllable-initial consonant symbol as in the syllables /ˈsiːː/ ; /-nai/, /-thai/; /-suk/, and /-khoː/.

3. The vowel /a/ in a syllable with a final consonant symbol is not written, but it is shown by the reduplication of the syllable-final consonant symbol. As in the syllable /-phan/, the vowel /a/ is shown by the reduplication of the syllable-final consonant symbol ⟨kʰoː⟩ = ⟨n⟩. Details can be seen on pp.70-71.

1. The dash shows the position of a syllable-initial consonant symbol.
4. A vocalic symbol $\langle {\mathcal F} \rangle < \langle \mathfrak{O} \rangle = \langle \omega:a \rangle$ is made up of two components. The one written in front of a syllable-initial consonant symbol is $\langle {\mathcal F} \rangle$, it does not represent anything when it occurs by itself, and the one after is $\langle \mathfrak{O} \rangle = \langle ? \rangle$. Taken together, the two components represent $/\omega:a/$, as in the syllable $/\text{mu}:\text{an}/$.

3. A vocalic symbol $\langle -\mathfrak{O}\rangle < \langle \mathfrak{O} \rangle = \langle \omega:i \rangle$ is also made up of two components $\langle \mathfrak{O} \rangle = \langle ? \rangle$ and $\langle \mathfrak{O} \rangle = \langle j \rangle$. Taken together, they represent $/\omega:i/$ as in the syllable $/\text{ro}:\text{i}/$. Both of them are written after a syllable-initial consonant symbol.
Figure 36  King Li Thai Script (Nakhon Chum inscription, 1357 A.D.), now kept in the National Library of Thailand, Bangkok.
Figure 3.7 Notes on the interpretation of King Li Thai script shown in Figure 3.6, line 3, p.36

(1) <นิน (มี บุญ บุญ)

(2) <mainm:anfa:q?nnn>

(3) /'mi?-nai-mw:an'fa:q-?an-niq/

"There is one in Fang city ...."

To interpret this writing, one has to be aware of the following points:

1. A vocalic symbol (<)<i> is written above a syllable-initial consonant symbol as in the syllable /'mi?/.

2. A vocalic symbol (<)<ai> is written in front of a syllable-initial consonant symbol as in the syllable /-nai/.

3. A vocalic symbol (<)<w:a> is made up of three components. The one written in front of a syllable-initial consonant symbol is (<)<e:>, the one above is (>) = <i>, and the one after is (<)<?>. Taken together, the three components represent /w:a/, as in the syllable (<w>:?) /mw:an/.

4. The vowel /a/ in a syllable with a final consonant symbol is not written, but it is shown by the reduplication of a syllable-final consonant symbol, as in the syllable /-?an/>. 
3.2 CONSONANT SYMBOLS

3.2.1 Epigraphic evidence showing the derivation of the shapes of consonant symbols from the cursive form of the Khmer alphabet

There were thirty-nine consonant symbols in the Sukhothai script and King Li Thai script, but only thirty-seven of them have been preserved in the present Thai writing system.1 As already stated, the nearest source of the Sukhothai script was the cursive form of the ancient Khmer alphabet. The resemblance of most of the Sukhothai consonant symbols to the Khmer ones is clear, although King Ram Khamhaeng modified the shapes of many of them.

The process of adaptation from the cursive form of ancient Khmer script to the Sukhothai one as suggested by Cham Thongkhamwan (1962), and from my own personal observations; also the shapes of consonant symbols of King Li Thai script are shown in Figure 3.8. Consonants are rearranged into five groups based on position of articulation, proceeding from the front to the back of the mouth. The phonetic value given for each consonant symbol is that of present Thai pronunciation. Each consonant symbol is pronounced with the carrying vowel /ɔ/; for instance, the consonant symbol for /k/ when not modified by a vocalic symbol to form /ki?, /-ki:/, /ke?, /-ke:/ will automatically be pronounced /-ko:/.

There is also an inherent tone belonging to each consonant symbol which is either the mid tone as in ² /ko:/, or the rising tone as in × /kʰo:/.

Details are discussed in the present Thai writing system part, pp.131-133.

1. The ones which were lost will be indicated in the chart.
These arrows show that the adapted form is the mirror image of the original one.
<table>
<thead>
<tr>
<th></th>
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<th>Phonetic values</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Khmer symbol" /></td>
<td><img src="image2" alt="Phonetic symbol" /></td>
<td><img src="image3" alt="Phonetic symbol" /></td>
<td><img src="image4" alt="Phonetic symbol" /></td>
<td><img src="image5" alt="Phonetic symbol" /></td>
<td>The cursive form of the Khmer 13th century</td>
</tr>
<tr>
<td><img src="image6" alt="Khmer symbol" /></td>
<td><img src="image7" alt="Phonetic symbol" /></td>
<td><img src="image8" alt="Phonetic symbol" /></td>
<td><img src="image9" alt="Phonetic symbol" /></td>
<td><img src="image10" alt="Phonetic symbol" /></td>
<td>The process of adaptation from the cursive form of the Khmer to the Sukhothai</td>
</tr>
<tr>
<td><img src="image11" alt="Khmer symbol" /></td>
<td><img src="image12" alt="Phonetic symbol" /></td>
<td><img src="image13" alt="Phonetic symbol" /></td>
<td><img src="image14" alt="Phonetic symbol" /></td>
<td><img src="image15" alt="Phonetic symbol" /></td>
<td>The Sukhothai 1283 A.D.</td>
</tr>
<tr>
<td><img src="image16" alt="Khmer symbol" /></td>
<td><img src="image17" alt="Phonetic symbol" /></td>
<td><img src="image18" alt="Phonetic symbol" /></td>
<td><img src="image19" alt="Phonetic symbol" /></td>
<td><img src="image20" alt="Phonetic symbol" /></td>
<td>King Li Thai 1357 A.D.</td>
</tr>
</tbody>
</table>
These two were completely abolished in 1927 A.D.

<table>
<thead>
<tr>
<th>Phonetic values</th>
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<tbody>
<tr>
<td>The cursive form of the Khmer 13th century</td>
</tr>
<tr>
<td>The process of adaptation from the cursive form of the Khmer to the Sukhothai</td>
</tr>
<tr>
<td>The Sukhothai 1283 A.D.</td>
</tr>
<tr>
<td>King Li Thai 1357 A.D.</td>
</tr>
</tbody>
</table>
It is interesting to note here that in Thai writing, many consonant symbols have different phonetic values when they occur in syllable-final position. The comparison of the phonetic values of consonant symbols in syllable-initial position and their values in syllable-final position is illustrated in Figure 3.9.
<table>
<thead>
<tr>
<th>The Sukhothai script</th>
<th>King Li Thai script</th>
<th>Phonetic values in syll.-initial position</th>
<th>Phonetic values in syll.-final position</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Sukhothai script" /></td>
<td><img src="image2" alt="King Li Thai script" /></td>
<td><img src="image3" alt="Phonetic values in syll.-initial position" /></td>
<td><img src="image4" alt="Phonetic values in syll.-final position" /></td>
</tr>
</tbody>
</table>

**Figure 3.9**
3.2.2 A brief sketch of the phonetic interpretation of 
<Ə>,<Ə>,<Ə>, and <Ə> through historical spelling

As already seen, the consonants /'kʰɔ:/ and /'kʰɔ:/ are represented by more than one consonant symbol for each of them:

/'kʰɔ:/ is represented by <ə> and <ə>.

/-kʰɔ:/ is represented by <ə>, <ə> and <ə>.

Fang Kuei Li suggested in his A Handbook of Comparative Tai (1977, p.23) that in the Thai language original voiced consonants have become devoiced and the distinction between old voiced and voiceless consonants is utilised to mark the difference in tones. The original voiceless consonants are called the middle (unaspirated) or high (aspirated) consonants and the original voiced consonants, the low consonants. This implies that <ə> and <ə> of the /'kʰɔ:/ are original voiceless consonants; <ə>, <ə> and <ə> of the /'kʰɔ:/ are original voiced consonants.

In present Thai pronunciation, besides the difference in tones, all these five consonant symbols are pronounced as a velar /kʰ/. George Coedès and Jean Burnay put forward a hypothesis on the phonetic interpretation of the consonant symbols <ə>, <ə>, <ə> and <ə> in their article "<ə>et<ə>et leur origine" (JSS, 21 (1972), p.199) that in ancient Thai these four consonant symbols represented four different phonemes. Suriya Ratakul suggested in her article "Where have <ə> and <ə> gone?" (Journal of Thammasat University (1952), p.39) that <ə> and <ə> did not occur in the Asokan Brahmi, the Grantha or the Khmer
writing, so if they had not represented different sounds in Thai, King Ram Khamkaeng would not have invented new symbols to represent them in the Thai writing. And in the Sukhothai script, $\langle \mathfrak{a} \rangle$ and $\langle \mathfrak{e} \rangle$ occurred in contrast in a minimal pair. But a minimal pair of $\langle \mathfrak{a} \rangle$ and $\langle \mathfrak{o} \rangle$ was not found since these two symbols were rarely used in the script. In later periods starting from 1341, $\langle \mathfrak{a} \rangle$ and $\langle \mathfrak{e} \rangle$ of //kʰɔː// occurred in free variation, and so did $\langle \mathfrak{a} \rangle$ and $\langle \mathfrak{o} \rangle$ of //kʰɔː//. These four consonant symbols were kept in the Thai writing until 1927, when $\langle \mathfrak{a} \rangle$ and $\langle \mathfrak{o} \rangle$ were completely abolished. Present Thai writing now has $\langle \mathfrak{a} \rangle$ to be used as //kʰɔː//; and $\langle \mathfrak{a} \rangle$ and $\langle \mathfrak{o} \rangle$ to be used as //kʰɔː//.

Coedes and Burnay suggested in the same article that $\langle \mathfrak{a} \rangle$, $\langle \mathfrak{e} \rangle$, $\langle \mathfrak{o} \rangle$, and $\langle \mathfrak{u} \rangle$ represented four different phonemes but they did not make it clear which phonemes $\langle \mathfrak{a} \rangle$ and $\langle \mathfrak{o} \rangle$ represented. But for $\langle \mathfrak{e} \rangle$ and $\langle \mathfrak{o} \rangle$, they proposed a hypothesis that they were "spirante gutturante" because R.P. Savina found two words in Thai Nung written with $\langle \mathfrak{e} \rangle$ and $\langle \mathfrak{o} \rangle$ which are

1. For example, the word //kʰap// "to drive away" was consistently written with $\langle \mathfrak{a} \rangle$, and the word //kʰap// "to sing" was always written with $\langle \mathfrak{a} \rangle$.
2. For example, the word //kʰun// "the king" was always written with $\langle \mathfrak{e} \rangle$ in the Sukhothai script, but in Si Chum inscription (1341-1361) it was written with either $\langle \mathfrak{e} \rangle$ or $\langle \mathfrak{a} \rangle$. The word //kʰam// "night" was always written with $\langle \mathfrak{o} \rangle$ in early inscriptions but in Phra Sadet inscription (1525) it was written with $\langle \mathfrak{o} \rangle$.  

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pronounced as /xla/ and /xva/. ¹

Another hypothesis was proposed by G. André Haudricourt in his article "Les Occlusives Uvulaires en Thai", (Bulletin de la Société de Linguistique de Paris (1952), p.87) that <ɔ> and <ŋ> represented uvular plosive consonants, since he found a uvular consonant in White Tai. Ratakul strongly supported Haudricourt's hypothesis in the same article that she would assume <ɔ> represented a uvular plosive /qʰ/ and <ŋ> represented /G/ since they almost always occurred with back vowels in early Thai writing. From my own observations, in the Sukhothai script where <ɔ> and <ɔ> occurred in contrast and that led us to assume that they represented two different phonemes, there were eleven words written with <ɔ>; six occurred with front vowels, three with back vowels, and two occurred as an initial consonant of a cluster /kw-/ with front vowels. Of <ŋ>, among four words, one occurred with a front vowel, one with a back vowel, two occurred as an initial consonant of a cluster /kw-/ with front vowels. For the <ɔ> among ten words, four occurred with back vowels, one occurred as an initial consonant of a cluster /kw-/ with a front vowel, and five with front vowels. <ŋ> among six words, three with back vowels and another three with front vowels. So it is clearly seen that <ɔ> and <ŋ> did not almost always occur with back vowels and their corresponding <ɔ> and <ŋ> also frequently occurred with back vowels,

¹. R.P. Savina, Dictionnaire étymologique français-nung-chinois, Hong Kong, 1924. The two words are /xla/ "left (opposite to right)" and /xvam/ "matter".
instead of front vowels as expected. I would like to suggest that it is rather dangerous to judge points of articulation of consonants by considering only the phonetic qualities of their accompanying vowels, because velar consonants do not always occur with front vowels and uvular consonants, nor do they always occur with back vowels. In Persian, for example, /kh/ occurs with front vowels as in the word /khif/ "a hand bag" and also occurs with back vowels as in the word /khur/ "to be blind". /qh/ also occurs with both front and back vowels, with front vowels as in the word /qhir/ "tar", with back vowels as in the word /qu'ri/ "a tea pot".

The most recent hypothesis on the phonetic interpretation of < español>, < español>, < español> and < español> was proposed by Fang Kuei Li (1977) who suggested that in the Sukhothai script < español> represented /kh/ and < español> represented /x/, agreeing on the whole with Lü and White Tai.¹ For < español> and < español>, he suggested that < español> was a letter corresponding to Indic /g/ to indicate that the voicing was probably maintained at the time of the introduction of the Thai script.² Of the < español> he stated that in the Sukhothai script, it represented /n/ as appears in Sack.³ Li's hypothesis supports his theory that in the Thai language original voiced consonants have become devoiced and the distinction of old voiced and voiceless consonants is utilised to mark the

² Ibid., p.198, and also see the chart on p.26.
³ Ibid., p.214.
difference in tones, because in recent times we pronounce \(<\mathcal{O}\) and \(<\mathcal{E}\) with an inherent rising tone as /'kʰɔː/; and pronounce \(<\mathcal{O}\), \(<\mathcal{E}\) with an inherent mid tone as /-kʰɔː/. I found that Li's phonetic interpretation of these four consonant symbols is convincing since it agrees on the whole with other Thai languages and dialects. For example, \(<\mathcal{O}\) and \(<\mathcal{E}\) are also pronounced as /kʰ/ and /x/ in Lü and White Tai and \(<\mathcal{O}\) is still pronounced as /x/ in Sack and some Pu-i dialects.

All scholars in proto-Tai reached the conclusion that \(<\mathcal{O}\>, \(<\mathcal{E}\), \(<\mathcal{O}\), and \(<\mathcal{E}\), represent four different phonemes. But the question of the phonetic interpretation of them is still under debate. Careful investigation on comparative Tai is needed to be done before bringing this matter to a conclusion.

3.2.3 Three syllabic consonant symbols, \(<\mathcal{O}\>, \(<\mathcal{E}\), \(<\mathcal{E}\>

A syllabic consonant symbol is a symbol which represents a syllable, that is to say it is a single consonant symbol which represents both an initial consonant and also a vowel of a syllable. There were three syllabic consonant symbols in King Li Thai script.

1. \(<\mathcal{O}\>) was pronounced as /-rɛː/ as in the word \(<\mathcal{O}\>\> /'rɛːk/ "an auspicious occasion". Here a syllabic consonant \(<\mathcal{O}\> represented /-rɛː/ and the consonant symbols \(<\mathcal{E}\> = \langle k\rangle and \(<\mathcal{E}\> = \langle s\rangle function as syllable-final consonant

1. The tone of the syllable is changed because of the influence of a syllable-final consonant.
symbols, but only ⟨fusc⟩ is pronounced as /k/.¹

2. ⟨f⟩ was pronounced as /-rw:/, as in the word
   ⟨f⟩ /-rw:/ "or".

3. ⟨g⟩ was pronounced as /-lw:/, as in a syllable
   ⟨g⟩ /-lw:/ of the word ⟨gōw⟩ /-lw:-thai/ "the name
   of one of the Sukhothai kingdom kings".

3.2.4 The ways of writing syllable-initial consonant
sequences in the Sukhothai script

Syllable-initial consonant sequences in the Thai
language are divided into three kinds:

1. Those pronounced as consonant clusters, for example,
   the word ⟨kō⟩ = ⟨kwa:⟩ "more, more than" is pronounced
   /kwa:/.

2. Those pronounced as single consonants, for example,
   the word ⟨tō⟩ = ⟨thō⟩ "to dress" is pronounced /-son/.

3. Those pronounced in two syllables with an intervening
   unwritten vowel /a/, for example, the word ⟨taːd⟩ = ⟨tlaːd⟩
   "market" is pronounced /_taʔaːt/.

All sorts of syllable-initial consonant sequences in
the Sukhothai script were mostly written as ligatures. But
they were occasionally written adjacent to one another at the
beginning of the syllable. The percentage of occurrence of

¹ Since only one consonant is permitted in a syllable-final
   position in Thai, so only the ⟨fusc⟩ = ⟨k⟩ is pronounced.
   The pronunciation of syllable final consonant sequences is
discussed in section 3.2.6, pp. 59-60.
2 In a syllable with a final consonant symbol the vocalic symbol
   for /o/ is not written.
syllable-initial consonant sequences written as separate symbols is extremely low. I doubt if it was an accidental mistake done by an inscriber, or a new way of writing consonant sequences which the king tried to introduce to the Thai writing system. All sorts of syllable-initial consonant sequences were written as separate symbols in the King Li Thai script as is still the case in the present Thai writing system.

We now turn to the epigraphic evidence showing the two ways of writing syllable-initial consonant sequences in the Sukhothai script as ligatures and as separate symbols. The ratio of occurrence is also shown here so that we can see how frequently each one occurred. The phonetic values of the consonant sequences are as used in the present Thai pronunciation. A combination of two consonants only is permitted in the initial position of the syllable. The figures in the last column, for example 2-29, show face number - line number.
### Figure 3.10

1. Those pronounced as consonant clusters

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Written as ligatures</th>
<th>Written as separate symbols</th>
<th>Ratio of occurrence</th>
<th>Examples, transcription, meanings, and sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. /pr-/</td>
<td>பிர</td>
<td>2/4</td>
<td>பிரா</td>
<td>/ˈprʌr/</td>
</tr>
<tr>
<td></td>
<td>பிர</td>
<td>2/4</td>
<td>பிரா</td>
<td>/ˈpræː/</td>
</tr>
<tr>
<td>2. /tr-/</td>
<td>டிரே</td>
<td>4/4</td>
<td>டிரே</td>
<td>/ˈtriː/</td>
</tr>
<tr>
<td>3. /kr-/</td>
<td>கிரே</td>
<td>3/3</td>
<td>கிரே</td>
<td>/ˈkreɪ/</td>
</tr>
<tr>
<td>4. /pl-/</td>
<td>பிளே</td>
<td>3/4</td>
<td>பிளே</td>
<td>/ˈpləʊ/</td>
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<tr>
<td></td>
<td>பிளே</td>
<td>1/4</td>
<td>பிளே</td>
<td>/ˈpləʊ/</td>
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<tr>
<td>5. /kl-/</td>
<td>கிளே</td>
<td>5/6</td>
<td>கிளே</td>
<td>/ˈklaʊ/</td>
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<tr>
<td></td>
<td>கிளே</td>
<td>1/6</td>
<td>கிளே</td>
<td>/ˈkliː/</td>
</tr>
<tr>
<td>Phonetic values</td>
<td>Written as ligatures</td>
<td>Written as separate symbols</td>
<td>Ratio of occurrence</td>
<td>Examples, transcription, meanings, and sources</td>
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<tr>
<td>6 /kw-/</td>
<td>ฉก</td>
<td>ฉก</td>
<td>$\frac{3}{4}$</td>
<td>ฉก /kwaː/ more, more than 1-22</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>ฉก /kwaːŋ/ to be broad 4-17</td>
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<td>7 /pr-/</td>
<td>นถ</td>
<td>นถ</td>
<td>$\frac{12}{12}$</td>
<td>นถ /prːram/ regularly 1-16</td>
</tr>
<tr>
<td>8 /kr-/</td>
<td>ศร</td>
<td>ศร</td>
<td>$\frac{13}{15}$</td>
<td>ศร /kʰrai/ who 1-20</td>
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<td></td>
<td></td>
<td>ศร</td>
<td>$\frac{2}{15}$</td>
<td>ศร /kʰruː/ a teacher, monk 4-13</td>
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<tr>
<td>9 /pl-/</td>
<td>ขม</td>
<td>ขม</td>
<td>$\frac{4}{4}$</td>
<td>ขม /plːiː/ to offer, share 3-8</td>
</tr>
<tr>
<td>10 /kʰw-/</td>
<td>ประเทศไทย</td>
<td>ประเทศไทย</td>
<td>$\frac{3}{3}$</td>
<td>ประเทศไทย /kʰwaː/ right contrasted with left 1-5</td>
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<tr>
<td>1. written with an initial &lt;ค&gt;</td>
<td>ไทย</td>
<td>ไทย</td>
<td>$\frac{3}{3}$</td>
<td>ไทย /kʰwaːm/ a matter, case 2-1</td>
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<tr>
<td>2. written with an initial &lt;ก&gt;</td>
<td>ไทย</td>
<td>ไทย</td>
<td>$\frac{3}{3}$</td>
<td>ไทย /kʰwaːm/ a matter, case 2-1</td>
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<tr>
<td>Phonetic values</td>
<td>Written as ligatures</td>
<td>Written as separate symbols</td>
<td>Ratio of occurrence</td>
<td>Examples, transcription, meanings, and sources</td>
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</tr>
</tbody>
</table>

**Figure 3.11**

Those pronounced as single consonants
<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Written as ligatures</th>
<th>Written as separate symbols</th>
<th>Ratio of occurrence</th>
<th>Examples, transcription, meanings and sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. ( \text{y} = \text{s} ) and ( \text{r} = \text{t} ) pronounced as /s/</td>
<td>य</td>
<td>1</td>
<td>अ त न बदलयः / ( &quot;\times i - \text{ni} - \text{ra}-\text{ra}-\text{t} )t ( / )</td>
<td>the name of the king 4-1</td>
</tr>
<tr>
<td>5. ( \text{h} = \text{m} ) and ( \text{w} = \text{m} ) pronounced as /m/</td>
<td>व</td>
<td>2</td>
<td>वाल</td>
<td>/ ( _\text{ma:k} ) /</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>वालमृगम / / ( _\text{ma:k`mu:ya} ) /</td>
<td>2-4</td>
</tr>
<tr>
<td>6. ( \text{h} = \text{n} ) and ( \text{w} = \text{n} ) pronounced as /w/</td>
<td>उ</td>
<td>3</td>
<td>उ</td>
<td>/ ( _\text{wai} ) /</td>
</tr>
<tr>
<td>7. ( \text{h} = \text{n} ) and ( \text{w} = \text{n} ) pronounced as /n/</td>
<td>न</td>
<td>4</td>
<td>न</td>
<td>/ ( _\text{na:} ) /</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>नाउ</td>
<td>/ ( _\text{nu:ya} ) /</td>
</tr>
<tr>
<td>Phonetic values</td>
<td>Written as ligatures</td>
<td>Written as separate symbols</td>
<td>Ratio of occurrence</td>
<td>Examples</td>
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<tr>
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</tr>
<tr>
<td>8. &lt;ล&gt; = &lt;h&gt; and &lt;ก&gt; = &lt;l&gt; pronounced as /l- /</td>
<td>รก</td>
<td>2</td>
<td>8</td>
<td>วาน</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>งาน</td>
</tr>
<tr>
<td>9. &lt;ข&gt; = &lt;k&gt; and &lt;ว&gt; = &lt;j&gt; pronounced as /j- /</td>
<td>จจ</td>
<td>3</td>
<td>4</td>
<td>ดู</td>
</tr>
<tr>
<td>10. &lt;ฮ&gt; = &lt;h&gt; and &lt;ฤ&gt; = &lt;l&gt; pronounced as /j- /</td>
<td>รร</td>
<td>6</td>
<td>6</td>
<td>อยู่</td>
</tr>
</tbody>
</table>
3. Those pronounced in two syllables with an intervening unwritten vowel:

In the present Thai pronunciation, syllable-initial consonant sequences which are not pronounced in clusters, or as single consonants, are pronounced in two syllables by the intrusion of an unwritten vowel /a/. In citation form, the vowel of an intruded syllable is /aʔ/ since in Thai short pure vowels not followed by a consonant or another vowel in a syllable are always followed by a glottal stop in stressed syllables. But when pronounced in connected running speech, the intruded syllable becomes unstressed, and the vowel becomes neutralised as /a/ and also accompanied by tonal changes. For example, /-taʔ-laːt/ "market" pronounced in citation form is actually pronounced /-te-laːt/ in connected running speech.

I found some words in Sukhothai script of which syllable-initial consonant sequences are pronounced in two syllables with an intervening unwritten vowel /a/. Most of them were written as ligatures, only a few of them were written as separate symbols as shown in Figure 3.12.
<table>
<thead>
<tr>
<th>Examples, transcription, meanings, and sources</th>
<th>Written as ligatures</th>
<th>Written as separate symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>jabi /?a?_räi/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>to be delicious, 1-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kąp /?ga?_karp/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>a custom duty, 1-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tar-wan /?ar-wan/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>the sun, 2-27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tar-lait /?ar-lait/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>a market, 3-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kar-dam /?ar-dam/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>a writing board, 3-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tar-jaŋ /?ar-jaŋ/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>a kind of rope to fasten an elephant, 3-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>thar-lan /?a?_lan/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>the name of the town, 3-22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sa?_tət-bok /?a?_tət-bok/</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>to build, 3-22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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3.2.5 The advantage of writing syllable-initial consonant sequences as ligatures

Writing syllable-initial consonant sequences as ligatures, as in the Sukhothai script, avoids confusion in reading words which can be read more than one way. In the present Thai writing, words are not written with spaces between them as is done in writing English, French, Spanish, etc., so there are problems as regards the analysis of syllable division. For example, in <[zǐ]>,

there are four sound symbols and the order is a vocalic symbol <'o'> — a consonant symbol <'z'> = <'k'> — a consonant symbol <'n'> = <'l'> — a consonant symbol <'j'> = <'n'>.

If we consider <'z'> = <'k'> and <'n'> = <'l'> as a cluster, this group of sound symbols will be read as a monosyllabic word /'k:no:/ "to swing". But if we do not, it will read as two monosyllabic words /'k:ho:-lon/ (/'k:ho:/ = cow, /'lon/=to go down). Here the <'z'> = <'k'> functions as a syllable-initial consonant of <[zǐ]>/'k:ho:/ and <'n'> = <'l'> does as a syllable-initial consonant of <[n]>/'lon'/.

This confusion is avoided in the Sukhothai script by writing consonants

1. The orthographic symbols shown here are as used in the Sukhothai script.
2. /'k:ho:-lon/ is a permissible cluster in Thai.
3. Consonant symbols <'z'> = <'l'> and <'j'> = <'n'> written adjacent to one another are read as /'lon/', although a vocalic symbol for /'o'/ is not written here. In Thai writing a vocalic symbol for /'o'/ is not written when the syllable has a final consonant symbol.
as ligatures if they are clusters, and writing them as separate symbols if they are not.

A combination of two consonants only is permitted in the initial position of the syllable in Thai. Syllable-initial consonant sequences can sometimes be read as a single consonant. In this case only one of the two consonants is pronounced, for example <\text{ชช}>; here there are four sound symbols and the order is a vocalic symbol <\text{ช}> = \langle \varepsilon \rangle — a consonant symbol <\text{ษ}> = \langle h \rangle — a consonant symbol <\text{น}> = \langle n \rangle.

\[
\langle \text{ชช} \text{ษ} \text{น} \rangle = \langle \varepsilon \text{hn} \rangle
\]

If we consider \langle \text{ษ} \rangle = \langle h \rangle and \langle \text{น} \rangle = \langle n \rangle as a single consonant, this group of sound symbols will be read as /'nɛː/ "duckweed". But it can also be read as /'heːn/ "to guard, to keep for oneself", if we consider \langle \text{ษ} \rangle = \langle h \rangle as a syllable-initial consonant, and \langle \text{น} \rangle = \langle n \rangle as a syllable-final consonant. In the Sukhothai script, this confusion is avoided, since \langle \text{ษ} \rangle = \langle h \rangle and \langle \text{น} \rangle = \langle n \rangle are written as ligatures when they function as a single consonant, and they are written as separate symbols when they do not.

3.2.6 The way of writing syllable-final consonant sequences

The syllable structure of the Thai language is

\begin{align*}
\text{a. } \quad & C_1 (C_2) V_1 C_3 / T \\
\text{b. } \quad & C_1 (C_2) V_2 (C_3) / T^1
\end{align*}

1. For details, see Chapter 1, p.14.
In Thai writing one can recognise pure Thai words among foreign loanwords as their syllables end with either a vocalic symbol\(^1\) or a single consonant symbol. For foreign loanwords which have syllable-final consonant sequences, in most cases the original spelling is always retained in Thai writing, but only one of the final consonants is pronounced,\(^2\) and in most cases it is the first one in the sequence.\(^3\) For example, the word \(\text{<\text{ka:nt}>}\) = \(\text{<nt}>\) "the beloved" is a monosyllabic Sanskrit loanword in Thai. The final consonant symbols \(\text{<nt>}\) are retained in writing, but only the \(\text{<n>}\) is pronounced. So the word is pronounced /<\text{ka:n}>/. In Sukhothai script and King Li Thai script, syllable-final consonant sequences of foreign loanwords were written adjacent to one another as separate symbols, as is still true of the present Thai writing.

3.2.7 General remarks on uncertain spelling

As already shown, a great many of Thai consonant

1. A vocalic symbol, regardless of representing a pure vowel, a diphthong or a triphthong, is considered as one single unit.
2. Since only /p, t, k, ?, m, n, q/ are permissible in the final position of a syllable. So a final fricative, affricate of foreign words is pronounced as a stop. A final voiced stop is pronounced as a voiceless counterpart. A final trill or lateral, is pronounced as a nasal.
3. In rare cases, the second consonant of the sequence is pronounced instead of the first, for example, a monosyllabic word \(\text{<ma:rkh>}=\text{<ma:k>}/\text{ma:k}/\) "a route", here there are two syllable-final consonant symbols, the first is \(\text{<r>}=\text{<r>}/\text{r}/\), the second is \(\text{<kh>}=\text{<kh>/kh>/}\). But only the \(\text{<kh>/kh>/}\) is pronounced as a syllable-final consonant /kh/.
symbols have identical pronunciation in the initial position, for example, the consonant /s/ has three consonant symbols, (`<`, `<`, `<`), to represent it. In this case the choice of the consonant symbol is determined only by the dictates of the rules of correct spelling. One has to memorise the correct spelling of certain words. The spelling in the Sukhothai script and also in King Li Thai script was very uncertain.

3.3 VOCALIC SYMBOLS

3.3.1 Epigraphic evidence showing the derivation of the shapes of vocalic symbols from the cursive form of the Khmer alphabet

There are two kinds of vocalic symbols in Thai:

1. Simple vocalic symbols: composed of one component.
2. Complex vocalic symbols: composed of two or more components. Consonant symbols for /w, j, ʔ/ also work as one of the components of a complex vocalic symbol.

It is very important to remember that the individual components of a complex often have phonetic qualities which have no relation to the qualities they have when they function as simplexes. One has to memorise complex symbols as independent units.

King Ram Khamhaeng adopted the shapes of the ancient Khmer vocalic symbols to be used in his Sukhothai script. But he changed the place of vocalic symbols to be either in front, or after a syllable-initial consonant symbol. In King Li Thai

1. In ancient Khmer script, vocalic symbols were written either before, after, above, or below the initial consonant symbol of the syllable.
script, the place of vocalic symbols was the same as in the ancient Khmer script.

A syllable-initial consonant symbol and a simple vocalic symbol were joined together as ligatures in the Sukhothai script. I found a few words which were written as separate symbols, but the frequency of occurrence is so low that I assume they were just accidental mistakes made by an inscriber. In the case of complex vocalic symbols, not all of the component parts of the complex symbols were joined with a syllable-initial consonant symbol, as we can see in examples in Figure 3.13. In King Li Thai script, a syllable-initial consonant symbol and a vocalic symbols were written as separate symbols.

In the Thai writing, words are not written with spaces between them. But in the Sukhothai script, in most cases, in a syllable with a final consonant symbol, there was a little spacing between a syllable-final consonant symbol and the rest of the syllable. So the order of composite sound symbols of a syllable in the Sukhothai script was that a syllable-initial consonant symbol and the vocalic symbol were followed by the spacing and the syllable-final consonant symbol. For example, a monosyllabic word /'saːm/ "three"

1. Words which had no spacing between a syllable-final consonant symbol and the rest of the syllable were also found, but the frequency of occurrence was low.
was written as shown below:

\[ \langle \text{ชต} \text{ว} \rangle \]
\[ \langle \text{สต} \text{ม} \rangle \]

\[
\downarrow \quad \downarrow
\]

\[
\text{a ligature of a syllable-initial consonant symbol and a simple vocalic symbol}
\]
\[
\text{a syllable-final consonant symbol}
\]

In cases of more than one syllable-final consonant symbol, after the spacing, these symbols were written adjacent to one another.

In King Li Thai script, each composite sound symbol of a syllable was written as a separate symbol. There was no spacing between a syllable-final consonant symbol and the rest of the syllable.

Epigraphic evidence showing the derivation of the shapes of the Sukhothai vocalic symbols from the cursive form of the ancient Khmer alphabet, and the shapes of vocalic symbols of King Li Thai script are illustrated in Figure 3.13. The dash shows the position of a syllable-initial consonant symbol. In the Sukhothai script, when a dash and a vocalic symbol are joined together, that shows there is a ligature. $C_3$ represents a syllable-final consonant symbol. There is spacing between a syllable-final consonant symbol and the rest of a syllable in the Sukhothai script.
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<td>ɨo</td>
<td>ə-</td>
<td>əw</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰɨː/ not, no</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>0- c₃</td>
<td>ən ɨ uy</td>
<td>-c₃</td>
<td>-c₃</td>
<td>/-kin/ to eat</td>
</tr>
<tr>
<td>2. /iː/ - #</td>
<td>ɨ-</td>
<td>ə-</td>
<td>əw</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰɨː/ ghost</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>0- c₃</td>
<td>ən ɨ uy</td>
<td>-c₃</td>
<td>-c₃</td>
<td>/-tʰin/ foot, feet</td>
</tr>
<tr>
<td>3. /eː/ - #</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>ɨn ɨ</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰeːn/ a senior monk</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>l- c₃</td>
<td>l- ɨn</td>
<td>l- c₃</td>
<td>l- c₃</td>
<td>/ʰeːn/ a senior monk</td>
</tr>
<tr>
<td>4. /εː/ - #</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>ɨn ɨ</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰkɛː/ bravery</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>l- c₃</td>
<td>l- ɨn</td>
<td>l- c₃</td>
<td>l- c₃</td>
<td>/ʰkɛː/ to, for</td>
</tr>
<tr>
<td>5. /ɛː/ - #</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>ɨn ɨ</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰsɛːk/ to part</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>l- c₃</td>
<td>l- ɨn</td>
<td>l- c₃</td>
<td>l- c₃</td>
<td>/ʰsɛːk/ to part</td>
</tr>
<tr>
<td>6. /aː/ - #</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>ɨn ɨ</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰtʰaː/ market</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>-c₃ c₃</td>
<td>ɨn ɨ</td>
<td>-c₃</td>
<td>-c₃</td>
<td>/ʰpraː/ monk</td>
</tr>
<tr>
<td></td>
<td>-c₃ c₃</td>
<td>-c₃ c₃ c₃</td>
<td>ɨn ɨ</td>
<td>-c₃ c₃</td>
<td>-c₃</td>
<td>/ʰtʰaŋ/ both, altogether</td>
</tr>
<tr>
<td></td>
<td>-c₃ c₃ c₃</td>
<td>-c₃ c₃ c₃ c₃</td>
<td>ɨn ɨ</td>
<td>-c₃ c₃ c₃</td>
<td>-c₃</td>
<td>/ʰtʰaŋ/</td>
</tr>
<tr>
<td>7. /aː/ - #</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>ɨn ɨ</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰhɛː/ five</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>-c₃</td>
<td>ɨn ɨ</td>
<td>-c₃</td>
<td>-c₃</td>
<td>/ʰbɛːn/ house, home</td>
</tr>
<tr>
<td>8. /ə/ - #</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>ɨn ɨ</td>
<td>ɨ-</td>
<td>ɨ-</td>
<td>/ʰpʰaː/rrɔː/ to be pleasing (of something heard or read)</td>
</tr>
</tbody>
</table>

¹ The syllable-final consonant symbol is reduplicated
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<td>9. /ɔː/</td>
<td>- #</td>
<td>-</td>
<td>ឃ</td>
<td>-</td>
<td>ឃ</td>
<td>/ˈpʰɔː/ father</td>
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<tr>
<td></td>
<td>-c₃</td>
<td>-</td>
<td>ឃ</td>
<td>-</td>
<td>ឃ</td>
<td>/ˈtɔː/ to fight</td>
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<td></td>
<td></td>
<td></td>
<td>ឃ</td>
<td>-</td>
<td>ឃ</td>
<td>/ˈnɔːŋ/ younger sibling</td>
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<td></td>
<td></td>
<td></td>
<td>ឃ</td>
<td>-</td>
<td>ឃ</td>
<td>/ˈpʰɔːŋ/ blessings</td>
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<tr>
<td>10. /o/</td>
<td>- #</td>
<td>-c₃</td>
<td>ឃ</td>
<td>-</td>
<td>ឃ</td>
<td>/ˈhɔː/ to fly</td>
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<td></td>
<td></td>
<td></td>
<td>ឃ</td>
<td>-</td>
<td>ឃ</td>
<td>/ˈtɔːn/ oneself</td>
</tr>
<tr>
<td>11. /oː/</td>
<td>- #</td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈkʰɔː/ of the word</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈsuʔˈkʰɔːːtʰai/</td>
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<td>ឃ</td>
<td>ឃ</td>
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<td>name of the town</td>
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<td></td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈkʰɔːk/ a mound</td>
</tr>
<tr>
<td>12. /u/</td>
<td>- #</td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈsʊː/ of the word</td>
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<td></td>
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<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈsuʔˈkʰoː-θai/</td>
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<td></td>
<td></td>
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<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈlʊk/ to watch</td>
</tr>
<tr>
<td>13 /uː/</td>
<td>- #</td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈpʰuː/ person</td>
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<td></td>
<td></td>
<td></td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈruːp/ of the word</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>ឃ</td>
<td>ឃ</td>
<td>ឃ</td>
<td>/ˈprəːruːp/ a Buddha image</td>
</tr>
</tbody>
</table>

1 This rule of orthography of writing ɔː+c₃ is used only when c₃ is written with <s> or <r>, but it is pronounced as /-n/ in a syllable-final position. 2 See No.11.
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<td>/a/ - #</td>
<td>a</td>
<td>a</td>
<td>-</td>
<td>a</td>
<td>b</td>
<td>/a/ of the word</td>
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<td></td>
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<td></td>
<td></td>
<td>/-baam-a/ to tend</td>
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<tr>
<td></td>
<td>a</td>
<td>a</td>
<td>-</td>
<td>a</td>
<td>b</td>
<td>/a/ to be born</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>/a/ name</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>/a/ to get on</td>
</tr>
<tr>
<td>/i/ - #</td>
<td>i</td>
<td>i</td>
<td>-</td>
<td>i</td>
<td>i</td>
<td>/i/ of the word</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td>/-ti-aam-i/ since</td>
</tr>
<tr>
<td>/e/ - #</td>
<td>e</td>
<td>e</td>
<td>-</td>
<td>e</td>
<td>e</td>
<td>/e/ of the word</td>
</tr>
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<td></td>
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<td></td>
<td>/-ti-aam-e/ since</td>
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</tr>
<tr>
<td>17. /əː/ - #</td>
<td>២ ៣ ៤ ៥</td>
<td>- ៣ ៤ ៦</td>
<td>-ű, ២ ethers  │ ត-ស / a classifier for animals</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>-c₃</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>២ ៣ ៤ ៦</td>
<td>-ű ២ ៤ ៦</td>
<td></td>
<td></td>
<td></td>
<td>/muan/ of the word</td>
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<td></td>
<td></td>
<td>/ma:k’muan/ mangoes</td>
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<tr>
<td>18. /wːa/ - #</td>
<td>ក្ក-៤ ៤ ៦</td>
<td>-៤ ៦ ៤</td>
<td></td>
<td></td>
<td></td>
<td>/puːa/ I, me</td>
</tr>
<tr>
<td></td>
<td>-c₃</td>
<td>-c₃</td>
<td></td>
<td></td>
<td></td>
<td>/pʰwaːn/ friends</td>
</tr>
<tr>
<td></td>
<td>ក្ក-៤ ៤ ៦</td>
<td>-៤ ៦ ៤</td>
<td></td>
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<tr>
<td>19. /iu/ - #</td>
<td>-ű</td>
<td>-ű</td>
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<td></td>
<td></td>
<td>/niu/ fingers</td>
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<tr>
<td>20. /eːu/- #</td>
<td>-ű</td>
<td>-ű</td>
<td></td>
<td></td>
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<td>/leːu/ to be bad</td>
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<tr>
<td>21. /ɛːu/- #</td>
<td>-ű</td>
<td>-ű</td>
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<td></td>
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<td>/lɛːu/ already</td>
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<td>22. /ai/- #</td>
<td>២ ៣</td>
<td>២ ៣ ៤ ៦</td>
<td></td>
<td></td>
<td></td>
<td>/pʰai/ to go</td>
</tr>
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<td></td>
<td>២ ៣</td>
<td>២ ៣ ៤ ៦</td>
<td></td>
<td></td>
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<td>/tai/ Thai</td>
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<td></td>
<td>២ ៣</td>
<td>២ ៣ ៤ ៦</td>
<td></td>
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<td>/sai/ to be clear</td>
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<td>23. /aːi/- #</td>
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<td>២ ៣ ៤ ៦</td>
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<td>/tai/ to die</td>
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<td>-----------------</td>
<td>-----------</td>
<td>---------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>24. /au/ - #</td>
<td>អូ</td>
<td>អូ</td>
<td>សូ</td>
<td>សូ</td>
<td>/pau/</td>
<td>to burn</td>
</tr>
<tr>
<td>25. /a:u/ - #</td>
<td>អូ</td>
<td>អូ</td>
<td>សូ</td>
<td>សូ</td>
<td>/p:au/</td>
<td>coconuts</td>
</tr>
<tr>
<td>26. /i:u/ - #</td>
<td>អូ</td>
<td>អូ</td>
<td>សូ</td>
<td>សូ</td>
<td>/ti:u/</td>
<td>words</td>
</tr>
<tr>
<td>27. /o:i/ - #</td>
<td>អូ</td>
<td>អូ</td>
<td>សូ</td>
<td>សូ</td>
<td>/toi/</td>
<td>to give</td>
</tr>
<tr>
<td>28. /i:i/ - #</td>
<td>អូ</td>
<td>អូ</td>
<td>សូ</td>
<td>សូ</td>
<td>/li:i/</td>
<td>entirely, quite</td>
</tr>
</tbody>
</table>

3. TRIPHTHONGS

| 29. /iau/ - #   | អូ | អូ | សូ | សូ | /diau/ | one, sing |
| 30. /uai/ - #   | អូ | អូ | សូ | សូ | /duai/ | also, together |
| 31. /uai/ - #   | អូ | អូ | សូ | សូ | /puai/ | name of a girl |

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3.3.2 Notes on the vocalic symbol <£>

Observations on the Sukhothai script and King Li Thai script reveal the fact that a vocalic symbol <£> had three functions in ancient Thai.

1. When used alone in a stressed syllable, it represented /a/. For example, in <U35£> = <pʰra>/<pʰra/> "a monk, prefixes to the names of kings and of things associated with royalty, gods, objects of worship", <r0£> = <la>/<la/> "abandon, set free".

2. It also occurred with another short vocalic symbol, for example, with /i/, /u/ as in the words <££> /£i/? "to criticise", <££> /£u/? "to reach, to get on". Since in Thai short vowels not followed by a consonant in stressed syllables are followed by a glottal stop, I would suggest that the function of <£> in this case was to confirm the occurrence of a glottal stop which occurs after short vowels.

I also found that <£> was occasionally used after syllable-final unaspirated stop consonants, but never occurred after syllable-final nasal consonants. It is stated by Jimmy G. Harris in his "Phonetic Notes on Some Siamese Consonants" (Tai Phonetics and Phonology (1972), p.11) that the unaspirated stops p, t, k in Thai are phonetically transcribed as ?p, ?t, ?k since they are pronounced with simultaneous oral and glottal

---

1. Phonetically it represents [aʔ]; since in Thai, short vowels not followed by a consonant in stressed syllables are always followed by a glottal stop; in unstressed syllables the glottal is dropped.
closures. This gave rise to a hypothesis that the function of \(<\mathcal{S}\) here was also to confirm the occurrence of a simultaneous glottal stop with syllable-final unaspirated consonants.

3. When used with a long vocalic symbol, it functioned as a vowel shortening symbol of that long vowel. In King Li Thai script, it is consistently used as a vowel shortening symbol of the vowel /e:, au, o:/ to obtain /e, o, o/. It also sometimes functioned as a vowel shortening symbol of /a:/.

In the ancient Khmer script and the Sukhothai script, when /a/ was followed by a syllable-final consonant symbol, the vocalic symbol for /a/ was not written, but it was represented by reduplicating the syllable-final consonant symbol. For example, a syllable /_kap/ "with, and, against", was written as:

```
\[
\begin{align*}
\text{a syllable-initial consonant symbol} \\
\downarrow \\
\langle \text{\textbackslash a \textbackslash w\textbackslash u} \rangle = \langle \text{\textbackslash k \textbackslash b\textbackslash b} \rangle \\
\text{reduplication of a syllable-final consonant symbol}
\end{align*}
\]
```

1. See Figure 3.13, pp.64-65.
In the case of having more than one final consonant symbol, reduplication of consonant symbols was not used. Final consonant symbols were just written adjacent to one another. For example, a syllable /-sat/ "a creature, an animal" had two final consonant symbols, \( \langle \text{\texttt{t}} \rangle = \langle \text{\texttt{t}} \rangle \) and \( \langle \text{\texttt{w}} \rangle = \langle \text{\texttt{w}} \rangle \) and it was written as:

A syllable-initial consonant symbol  

\[
\langle \text{\texttt{t}\texttt{sw}} \rangle = \langle \text{\texttt{stw}} \rangle
\]

the first final consonant symbol  

\[
\langle \text{\texttt{t}} \rangle
\]

the second final consonant symbol

In King Li Thai script, \( \langle \text{\texttt{t}} \rangle \) /"mah-\text{\texttt{n-tat/}
came into occasional use for /a/ when it was followed by a syllable-final consonant.\(^1\) It was written above a syllable-final consonant symbol,\(^2\) for example a syllable /-jan/ "to be still", was written as

\[
\langle \text{\texttt{j\texttt{n}}} \rangle = \langle \text{\texttt{j\texttt{g}}} \rangle
\]

Eventually the place of \( \langle \text{\texttt{a}} \rangle \) was moved to be above

---

1. It first appeared in Si Chum inscription (1341-1360) and it was used only when a syllable-final consonant was /-g/, but reduplication of a syllable-final consonant symbol was still used from time to time till the 15th century.

2. In the case of having more than one final consonant symbol, it was always written above the first.
a syllable-initial consonant symbol as is still the case in the present Thai writing system.

When /a/ occurred with a syllable-final consonant /m/, there were two interesting ways of representing /-am/ in King Li Thai script:

1. /-am/ was represented by <—>, for example the syllable /kam/ of the word /kam-laŋ/ "strength, capacity" was written as <k> = <k>. A consonant symbol <f> = <k> functioned as a syllable-initial consonant /k/, and <—> functioned as /-am/.

2. /-am/ was represented by <—>, for example a syllable /tham/ "to do" was written as <t> = <t_h>. A consonant symbol <U> = <t_h> was a syllable-initial consonant /th/, and <—> functioned as /-am/.

In certain monosyllabic words, and also a certain syllable of polysyllabic words, /a/ was represented by <SS> = <rr>, for example the monosyllabic word /phan/ "kind, type, sort" was written as <WSSW> = <p_rrn>. <W> = <p> was a syllable-initial consonant, <SS> = <rr> was a vowel /a/ and <Q> = <n> was a syllable-final consonant /n/.

---

1. It was first moved to be above a syllable-initial consonant symbol in Wat Summanakut inscription (1359-1368). In a syllable with initial consonant sequences, it was written above the second.
2. The dash shows a position of a syllable-initial consonant symbol.
3. The origin of <—> may be from a modifier called /anusvareh/, <—> of Sanskrit writing. /anusvareh/ is a modifier which may be added to a character to indicate a modification in the realisation of the character. It is written with a character in various contexts, and is realised in various ways according to the context. One of the realisations is as the nasal consonant of the class to which the following character belongs. Details can be seen in Introduction to the Devanagari Script, by H.M. Lambert (1953) pp. 26-29.
4. Two alveolar trills were written adjacent to one another.
3.3.3 Remarks on vowel length distinction in ancient Thai

The short vowels /e/, /o/, /o/, /i/, /w/, /ia/, /ua/, /wa/, /eu/, /eu/ and /oi/ occur in the present Thai pronunciation and there are vocalic symbols to represent them in the present Thai script. But the vocalic symbols to represent these short vowels were not found in the Sukhothai script. For Thai words pronounced with those short vowels in the present Thai pronunciation, they were written with long vocalic symbols instead, for instance /e/ was written with <e:>, /o/ was written with <o:>, etc. Using long vocalic symbols to represent short vowels also occurred in King Li Thai script and King Narai script (the third oldest Thai script which will be presented in Chapter 3).

Another interesting thing I found in the Sukhothai, King Li Thai, and King Narai scripts is that short and long vocalic symbols were used interchangeably, for example, words pronounced with a short vowel in the present Thai pronunciation were written in the ancient scripts with either a short or its long vocalic symbol. For instance, the word for /-tiʔ/ "to criticise" was written with either <i> or <i:]. Words pronounced with a long vowel in the present Thai were written in the ancient scripts with either a short or its long vocalic symbol, e.g. the word for /-tiː/ "to hit with the hand" was written with either <i:> or <i]. This is very interesting because vowel length distinction is phonemic in present Thai; although in running connected speech long vowels become short vowels, in citation or careful style of
speech the length distinction is always preserved. For instance:

"^ri?/ "to begin, start, originate"
/-ri: / "to be oblong, oval"
/-pa?:/ "to meet by chance"
/-pa:/ "to throw"

The evidence provided by the ancient Thai scripts leads me to think that vowel length distinction was not phonemic in ancient Thai; because if it were, short and long vocalic symbols should not have been used interchangeably in the writing system which represents speech in citation form, and there should have been different vocalic symbols to represent short vowels and their long counterparts as in the present Thai script. Further investigation is needed, however, before one can reach a firm conclusion on this matter.

3.4 TONAL MARKERS

3.4.1 The first two tonal markers in Thai

There were two tonal markers in the Sukhothai and King Li Thai scripts. Both of them were superscripts.

1. The /-e:k/ symbol <—> indicating low or falling tone.

2. The /-tho:/ symbol <——> indicating high, or falling tone. The shape of this tonal marker was changed to <——> in Wat Asokaram inscription (1399).
A tone of a Thai syllable is conditioned by two tone-conditioning factors: (1) the inherent tone of a syllable initial consonant; and (2) the nature of the syllables. This is why one tonal marker indicates more than one tone in Thai, since it varies according to these two tone-conditioning factors. Details will be discussed in the chapter on tonal markers in the present Thai writing system.

3.4.2 The place of a tonal marker in a syllable

The place of a tonal marker was not at all consistent. It was written either above a syllable-initial consonant symbol or above a vocalic symbol. In a syllable with initial consonant sequences, it was written either above the first or the second consonant symbol. In the case of a superscript vocalic symbol, a tonal marker was placed above a vocalic symbol. In very rare instances, it was written above a syllable-final consonant symbol. In a syllable with a diacritic ‹—›, it was written before the ‹—›.

Examples showing the place of a tonal marker:

1. Above a syllable-initial consonant symbol
   \[\hat{+} \hat{\jmath} \hat{\ell} \hat{\nu} \hat{\nu} = \hat{+} \hat{\kappa} \hat{\alpha} : \hat{m} \]\( /\hat{\kappa} \hat{h} \hat{a} : \hat{m}/ "to cross"
   \[\hat{+} \hat{\eta} \hat{\tau} \hat{\gamma} \hat{\gamma} = \hat{+} \hat{\kappa} \hat{\w} \hat{\alpha} : \] \( /\hat{\kappa} \hat{\w} \hat{\alpha} : / "to be better"
   \[\hat{+} \hat{\eta} \hat{\tau} \hat{\gamma} \hat{\gamma} = \hat{+} \hat{\kappa} \hat{\w} \hat{\alpha} : \hat{\eta} \]\( /\hat{\kappa} \hat{\w} \hat{\alpha} : \hat{\eta}/ "to be broad, wide"

2. Above a vocalic symbol
   \[\hat{i} \hat{\jmath} \hat{\nu} \hat{\nu} = \hat{+} \hat{\b} \hat{a} : \hat{\eta} \] \( /\hat{\b} \hat{a} : \hat{\eta}/ "house, home"
   \[\hat{i} \hat{\jmath} \hat{\ell} \hat{\nu} \hat{\nu} \hat{\nu} = \hat{+} \hat{\n} \]\( /\hat{\n}/ "this, these"
3. Above a syllable-final consonant symbol

\[ + \langle \text{ha:m} \rangle = \langle \text{ha:m} \rangle /'\text{ha:m}/ \quad \text{"to forbid"} \]

4. Before \(\langle \text{—} \rangle\) (The function of \(\langle \text{—} \rangle\) has already been discussed on p. 72)

\[ +\langle \text{s} \rangle = \langle \text{s} \rangle /'\text{scm}/ \quad \text{"oranges"} \]

There were two special symbols used in King Li Thai script for the sake of economy in the writing system. The first one was \(\langle \text{—} \rangle\) /'ma:i ja?mok/ which was used as a repetition symbol to indicate that a preceding word or a phrase was to be repeated, for instance:

\[ \langle \text{—} \rangle \quad \text{"or" was read as /-dai-dai/} \]

\[ \langle \text{—} \rangle \quad \text{"always" was read as /_sa?m:_sa?m:/} \]

The other one was \(\langle \text{—} \rangle\) /'pai-ja:nno:/ and this was used to indicate that a familiar well-understood word or phrase had been omitted in writing, but that word or phrase should be pronounced when reading aloud, for example:

\[ \langle \text{—} \rangle \quad \text{"I, used when speaking to a member of a royal family"} \]

was read as /'kha:Apha?Apha?Atja:/.

\[ \langle \text{—} \rangle \quad \text{is used to represent /'pha?Apha?Apha?Atja:/ here.} \]

\[ \langle \text{—} \rangle \quad \text{"a greeting word used when speaking to a member of a royal family" was read as /_pro:t'kla:u_pro:t_kra?m:/} \]

\[ \langle \text{—} \rangle \quad \text{is used to represent /_pro:t_kra?m:/} \].

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The use of <9> was more limited than that of the
<7> since it could be used only with a certain predictable word
or phrase. But <7> could be used with any word or phrase
which was to be repeated. Both of them occurred in the following
ancient Thai script and are still preserved in the present Thai
writing.

3.5 DIACRITICS

There were two diacritics in King Li Thai script:

1. <— > was placed above the first consonant symbol
   of the syllable initial consonant sequences to indicate an
   intruded unwritten vowel /a/, for example, <ผะ> =<sp a:n> /_sa?-pha:n/ "bridge". Here the vowel /a/ of
   the syllable /_sa?/ was indicated by <— >. <ผะ> =<mha:> /'ma?'ha:/ "great". Here the vowel /a/ of the
   syllable /'ma?/ was indicated by <— >.

2. <— > had three functions:
   (a) to represent /-om/, for example a monosyllabic
   word /tchom/ "to admire" was written as <— > =<t<_phi>, here

1. A diacritic here is used in the sense that it is an auxiliary
   mark or symbol added above, below, or after a consonant or
   vocalic symbol to give more phonological information about the
   pronunciation of a syllable.
2. Details of syllable-initial consonant sequences pronounced in
   two syllables with an intervening unwritten vowel /a/ have
   already been discussed on p.56
3. As already discussed on p.72.
4. The dash shows the position of a syllable-initial consonant.
\(<\mathcal{S}\) = \(<t_e^h\)> represented a syllable-initial consonant symbol /t_e^h/, and \(<\text{—}\> = \langle-om\rangle.

(c) to represent a final consonant /m/ of a syllable with a vowel /u/, for example: /-t_hum/ "to assemble" was written as \(<\mathcal{S}\> = \langle t_e^h\>\), here \(<\mathcal{S}\> = \langle t_e^h\>\) was a syllable-initial consonant /t_e^h/, \(<\text{—}\>\) was a vowel /u/ and \(<\text{—}\>\) was a syllable final consonant /-m/.

3.6 NUMERALS

Thai numerals from 0 to 9 with their names are listed in Figure 3.14. I could not find some numerals written in the Sukhothai script and King Li Thai script, since in ancient Thai it was more common to write the names of the numerals rather than the numerals themselves.
Figure 3.14

<table>
<thead>
<tr>
<th>Thai names</th>
<th>The Sukhothai script</th>
<th>King Li Thai script</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>_nwnj</td>
<td>6</td>
</tr>
<tr>
<td>Two</td>
<td>'sorn</td>
<td>2, 3</td>
</tr>
<tr>
<td>Three</td>
<td>'sa:m</td>
<td>3</td>
</tr>
<tr>
<td>Four</td>
<td>_si</td>
<td>3</td>
</tr>
<tr>
<td>Five</td>
<td>'ha</td>
<td>3</td>
</tr>
<tr>
<td>Six</td>
<td>_hok</td>
<td>3</td>
</tr>
<tr>
<td>Seven</td>
<td>_tpep</td>
<td>3</td>
</tr>
<tr>
<td>Eight</td>
<td>_pep</td>
<td>3</td>
</tr>
<tr>
<td>Nine</td>
<td>_ka:u</td>
<td>3</td>
</tr>
<tr>
<td>Zero</td>
<td>'sun</td>
<td>0</td>
</tr>
</tbody>
</table>
Chapter 4

THE ORTHOGRAPHY AND THE CHARACTERISTICS OF KING NARAI SCRIPT
Chapter 4

THE ORTHOGRAPHY AND THE CHARACTERISTICS OF KING NARAI SCRIPT

It is stated in Thai history that Ayudhaya city was established as the capital of Thailand instead of Sukhothai city in 1378. During early periods of the Ayudhaya kingdom King Li Thai script had been used, though certain changes had been introduced through process of time. In 1680, during the reign of King Narai, the script called "King Narai script" was brought into use. King Narai script has been developed and preserved as our national Thai script up to now, although in 1917 King Rama VI of Chakkri dynasty proposed a new script for Thai writing but he found no success. Details of the proposed script will be discussed in the next chapter.

There were a number of records written in King Narai script in King Narai's reign (1656-1688) and in later periods of the Ayudhaya kingdom. In King Narai's reign the art of Thai writing became very active. The first Thai grammar book was written in 1672 by Phra Horathibodii. It was used as a basic textbook in studying Thai in later periods. Phra Horathibodii also wrote a book, "Historical Chronicle of Ayudhaya Period" in 1680.
George Coedès stated in his "Siamese Documents of the Seventeenth Century" (JSS (1921), p.7) that the intercourse between Siam and Europe became very active in the reign of King Narai. As regards France alone, the period extending from 1680 to 1688 saw no less than three ambassadors sent by King Narai to King Louis XIV, who in turn dispatched two French ambassadors to the court of Siam. It goes without saying that these active diplomatic relations implied a considerable number of written documents, letters, reports, instructions, etc. But these were utterly destroyed in the burning of the capital by Burma in April 1767. Fortunately, the documents received in France, and the minutes of the letters sent to Siam, have been preserved in their integrality and are to be found in Paris. King Narai's period is considered a golden period of Thai writing, art, literature. Other books written in King Narai script in later periods after King Narai's reign were, for example, /-nan-tho:-pa?-nan'tha?-su:t-kham/lu:an/ in 1736, /พระเจ้าวิจิตรศิลป์ทวีปติ้อง>/ in 1738. Both were written by Chao Fa Thammathibet, a famous Thai writer in Ayudhaya period.1

From my observations, as far as the shapes of letters are concerned, King Narai script is very similar to the present

1. These two books are about Buddhist religion, and they have not been published. They were written with very beautiful Thai language. The writing style used in /-nan-tho:-pa?-nan'tha?-su:t-kham/lu:an/ is considered the most beautiful writing style in Ayudhaya period. An illustration of it can be seen in Figure 4.7, p.90.
Thai script. But the rules of orthography of the script are still based on King Li Thai script. There are two forms of King Narai script. The first is a normal form used in ordinary writing, the second is called "the compressed script" used in, for example, official documents, prose and verse.¹ It is interesting to note here that in the Sukhothai period written records were always engraved on stones. But the writing in the Ayuthaya period was otherwise. It was done not only on stones but also on palm leaves and paper.

My observations on the orthography and the characteristics of King Narai script are based on rubbings and photographs of inscriptions; for example Wat Chulamani inscription (1680), Wat Phra Bogrommathat inscription (1717); on photocopies of written diplomatic documents, i.e. letter of Ok Phra Visut Sunthorn, Thai ambassador to Marquis de Seigneley, minister of Louis XIV of France (1688), a treaty of commerce between the French envoys and the delegates of the King of Siam (1688); on books, for instance "Historical Chronicle of Ayudhaya Period" written by Phra Horathibodii in 1680, "Phra Malai Khamluang" written by Chao Fa Thammathibet in 1736 (see details in the list of names of inscriptions, engravings and ancient written documents on pp.333-335).

¹. The reason why it is called "the compressed script" is unknown. It is an artistic, decorative, elaborate, attention-getting style of writing.
Figure 4.1 The normal form of King Narai Script

A book "Historical Chronicle of Ayudhaya Period" written by Phra Horathibodi in 1680 A.D., now kept in the national library of Thailand, Bangkok.
"On that day, there was an earthquake. We led the army to ..."

The comparison of the Thai writing (1), the Roman transliteration (2) and the phonetic transcription (3) show that there are certain problems with regard to the interpretation of the script, for instance:

1. Vocalic symbols <9->, <7-> = <a:>, and < ll -> = <e:> are written before a syllable-initial consonant symbol as in the words /-nai/, /'wai/; and /ph:n/.

2. Vocalic symbols <a> = <a> and <i-> = <i:> are written above a syllable-initial consonant symbol as in the words /-wan/, /'nan/, /'thap/; and /di:n/, /tgi:n/.

3. In a syllable with a final consonant, a vocalic symbol for /o/ is not written in Thai writing as in the word /'jok/.

4. A vocalic symbol <ll-> = <e:u> is made up of two components. The one in front of a syllable-initial consonant symbol is <ll-> = <e:>, and the one after is <-> = <w>.

Taken together in combination, these two components represent /e:u/ as in the syllable /'le:u/.

1. See details of <-> on p.71.
Figure 4.3 The compressed form of King Narai Script

Letter of Ok Phra Visut Sunthorn

Embassador to Marquis de Seigneley, the son of Colbert and Minister of Louis XIV, 1688 A.D., now kept in the Ministry of Foreign Affairs, Paris, France.
Notes on the interpretation of King Narai script: the compressed form shown in Figure 4.3, line 3, p. 85

1. In a syllable without a final consonant symbol, the vocalic symbol <a> = <—> is either written or unwritten. It is written in the syllable /'phra?/, but it is not written in the syllables /'ma?/ and /'kra?/. There are no definite rules to indicate when it is written in this ancient script. In the present Thai script, the cases when it is written can be seen in Chapter 8, pp. 170-172.

2. In a syllable with a final consonant symbol, the vocalic symbol for /a/ = < — > is written above a syllable-initial consonant symbol as in the syllables /'an/, /'nap/, and /'sat/.

3. The vocalic symbol <n—> = <e: > is written before a syllable-initial consonant symbol as in the syllable /'le:/.

"My respect and belief in the king ...."

The comparison of the Thai writing (1), the Roman transliteration (2) and the phonetic transcription (3) reveal the fact that there are certain problems with regard to the interpretation of the script, for example:

(1) < "ชัยบุตรเจ้าปทุมทิพย์" >

(2) < "mnkwa:mnbt e:lnbno:bt:p ramha:krstr" >

(3) /'an-khwa:m*nap/thw:-le: *nop*no:p-to:*phra?*ma?*ha: _kra?:_sat/
4. The vocalic symbol \( \langle - \mathcal{O} \rangle = \langle w: \rangle \) has two components. The one above a syllable-initial consonant symbol is \( \langle - \mathcal{O} \rangle \), it does not represent anything when it occurs by itself. The one after is \( \langle - \mathcal{O} \rangle = \langle ? \rangle \). Taken together in combination, they represent /\text{w}/ as in the syllable /\text{tʰw}/.

5. The second final consonant symbol \( \langle \mathcal{V} \rangle = \langle r \rangle \) of the syllable /-sat/ is not pronounced. Details of syllable-final unpronounced consonant symbols can be seen in Chapter 9, pp.200-201.
Figure 4.5 The normal style of Thai script in 1736 A.D.

A book 〈พระมาลัยคัมภีร์เจริญ〉 "Phra Malai Khamluang" written by Chao Fa Thammathibet, now kept in the national library of Thailand, Bangkok.
/pha?ma?ha: 'the:n/ ...."

To interpret this writing one has to be aware of the following points:

1. The vocalic symbols <I—> = <e:> and <ll—> = <e:> are written before a syllable-initial consonant symbol as in the syllables /'the:n/ and /-te:/.

2. The vocalic symbol <ll-> = <a> is written in the syllable /*pha?*/ but it is not written in the syllable /*ma*/.

3. The vocalic symbol <l—> = <au> is made up of two components. The one in front of the syllable-initial consonant symbol is <l—> = <e:> and the after it is <—> = <a:>. Taken together in combination these two components represent /au/, as in the syllable /*tau*/.

4. In a syllable final position the consonant symbol <t> = <r> is pronounced as /-n/ as in the syllable /*the:n/; and the consonant symbol <t> = <ph> is pronounced as /-t/ as in the syllable /*ra:t*/.
Figure 4.7 The compressed style of Thai script in 1736 A.D.

A book <“Nanthopananthasut Khamluang”> by Chao Fa Thammathibet, now kept in the national library of Thailand, Bangkok.
Notes on the interpretation of the compressed style of Thai script in 1736, shown in Figure 4.7, line 1, p.90

"The punishment resulting from my mistakes ..."

The comparison of the Thai writing (1), the Roman transliteration (2) and the phonetic transcription (3) show that there are certain problems with regard to the interpretation of Thai writing, for example:

1. The vocalic symbols <ø> = <o:>, <ɔ> = <e:>, and <ɛ> = <e> are written in front of a syllable-initial consonant symbol as in the syllables /'vHo:n/, /'he:n/.

2. The vocalic symbols <ɛ> = <i> and <a> are written above a syllable-initial consonant symbol as in the syllable /'he:n/.

3. The vocalic symbol <ɔ> = <au> is made up of two components. The one in front of a syllable-initial consonant symbol is <ɛ> = <e> and the one after is <a>.

   Taken together in combination, these two components represent /au/, as in the syllable /'tcau/.

4. In a syllable final position, the consonant symbols <ɔ> = <s>, and <d> are pronounced as /-t/ as in the syllables /'vHo:t/ and /'he:n/.
4.1 CONSONANT SYMBOLS

There were thirty-eight consonant symbols in King Narai script. Five more additional symbols were found in the reign of King Borommatat of the Ayudhaya kingdom in 1736. Up to this period Thai writing had forty-four consonant symbols, but only forty-two of them have been preserved in the present Thai writing.

Only two syllabic consonant symbols were found in King Narai script. The first was \(<\mathcal{O}\)> which was pronounced as \(/\text{Arw}\)/ as in the word \(<\mathcal{O}\mathcal{O}\>/\text{Arw}-\text{du}/ "season", or \(/\text{rv}\;/ as in the word \(<\mathcal{O}\mathcal{H}\>/\text{rv}-\text{k}/ "an auspicious occasion". The second was \(<\mathcal{O}\mathcal{O}\)> pronounced as \(/\text{ru}\;/ as in the word \(<\mathcal{O}\mathcal{O}\>/\text{ru}/ "or".

Syllable initial and final consonant sequences were written adjacent to one another as separate symbols in King Narai script.

I attempt to show here the gradual development of the shapes of Thai consonant symbols by reproducing the Sukhothai script, King Narai script: the normal form and the compressed form, and the present Thai script in Figure 4.9.

---

1. The normal form of King Narai script is copied from "Historical Chronicle of Ayudhaya Period" written by Phra Horathikodii. The compressed form is copied from a diplomatic document "Letter of Ok Phra Visut Sunthorn, Thai ambassador to the Marquis de Seigneley, minister of Louis XIV of France".
### Figure 4.4: Consonant Symbols

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The present Thai script
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**The Sukhothai Script**
1283 A.D.

**King Li Thai Script**
1357 A.D.

**King Nara Script**
1680 A.D.

**The Compressed Form**

**Additional Symbols Found in 1736 A.D.**

**The Present Thai Script**
4.2 VOCALIC SYMBOLS

Vocalic symbols of King Narai script also had two forms, normal and compressed. They were the same as vocalic symbols of King Li Thai script; written either before, after, above, or below the initial consonant symbol of the syllable. A syllable-initial consonant symbol and a vocalic symbol were written as separate symbols. In a syllable with a final consonant there was no spacing between a syllable-final consonant symbol and the rest of a syllable, as in the Sukhothai script.

I found two more additional vocalic symbols in King Narai script. They were symbols to represent a monophthong /u/ and a diphthong /ui/. Both of them were first used in a book "Historical Chronicle of Ayudhaya Period" by Phra Horathibodii in 1680.

As already stated in Chapter Three, pp.70-71, in the Sukhothai script, when /a/ was followed by a syllable-final consonant symbol the vocalic symbol for /a/ was not written, but it was represented by reduplicating the syllable-final consonant symbol. In King Li Thai script, <—> came into occasional use still used from time to time till the 15th century. In King Narai script, /a/ was mostly represented by <—>, but the reduplication of a syllable-final consonant symbol came into occasional use again till the 18th century.

The shapes of vocalic symbols in a syllable without a final consonant symbol of the Sukhothai script, King Li Thai
script, King Narai script: the normal form and the compressed form, and the present Thai script are illustrated in Figure 4.10. Rules of orthography of vocalic symbols in a syllable with a final consonant symbol of the Sukhothai script and King Li Thai script have already been described in Chapter Three, Figure 3.13, pp.64-68. Those of King Narai script are not discussed here since they were the same as those of King Li Thai script. As for the vocalic symbols of the present Thai writing, details will be described in the section on the present Thai writing system, Chapter 8, pp.156-190.
**Figure 4.10 Vocalic Symbols**

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4.2.1 A brief remark on a vocalic symbol \(<\circ>\)

In the Sukhothai script and King Li Thai script a vocalic symbol \(<\circ>\) had three functions as already discussed in Chapter 3, pp.69-70. Besides these three I found that in King Narai script \(<\circ>\) was sometimes written at the end of a line. The function of \(<\circ>\) here is obscure to me. It may simply function as a line-ending symbol of the script.

4.2.2 The use of a vowel-shortening symbol \(<---\)

The vowel shortening symbol \(<---\), known as \(<\text{รทำ}>=\text{ma:itai}khu:/\), was first found in King Narai script. It first appeared in Wat Chulamani inscription (1687). It was used in combination with the vocalic symbol \(<\text{ล}>=\text{e:}>\) to obtain /e/ in a syllable with a final consonant symbol which has no tonal marker. For example, the vocalic symbol for /e:/ was \(<\text{ล}>=\text{e:}>\) and the vocalic symbol for /e/ in a syllable with a final consonant which has no tonal marker was \(<\text{ล}>=\text{e:}>\), as in the word \(<\text{เม}>=\text{e:tm}>>\text{to be full}. First, it was put above a syllable-final consonant symbol, but eventually it appeared above a syllable-initial consonant symbol as \(<\text{ล}>=\text{e:}>\) and this is still true of the present Thai writing. It could not be used if a tonal marker was required in the writing. In King Narai script it was used only with the vocalic symbol for /e:/ to obtain /e/; but in the present Thai script, it is used not only with a vocalic symbol for /e:/ but also with vocalic
symbols for /ɛ:/, /ɔ:/, /eːu/, /ɛːu/ and /ɔːi/ to obtain /ɛ/, /ɔ/, /eːu/, /ɛːu/ and /ɔːi/ in a syllable with a final consonant symbol which has no tonal marker. Details will be discussed in the section on the present Thai writing, Chapter 8, pp.174-176.

4.3 TONAL MARKERS

King Narai script also had two tonal markers, the /eːk/ symbol <—> indicating low or falling tone, the /tʰoː/ symbol <—> indicating high or falling tone. The place of a tonal marker was still very inconsistent. It was either above a syllable-initial or final consonant symbol, or above a vocalic symbol.

The characteristics of the Sukhothai script, King Li Thai script stated in p.32 were still preserved in King Narai script. The symbols <"/> /"māː:l'jaʔmok/ and <"/> /'pai-ja:n'noːi/ were also used.

4.4 DIACRITICS AND NUMERALS

4.4.1 Diacritics

Two diacritics in King Li Thai script as discussed in Chapter 3, pp.77-78 also appeared in King Narai script. The <—> still remained the same shape but the shape of the <—> was changed to <—>

One new diacritic was found in King Narai script.
It was \( \text{-} \) and it represented a vocalic symbol \( \text{o} \) in a syllable with a final consonant symbol. For example, \( \text{/hok/} \)

"six" was written as \( \langle \text{hk} \rangle \), here \( \langle \text{hk} \rangle \) was a syllable-initial consonant \( /h/ \), \( \langle \text{-} \rangle \) represented a vowel \( /o/ \) and \( \langle \text{k} \rangle \) represented a syllable-final consonant \( /k/ \).

### 4.4.2 Numerals

The gradual development of the shapes of Thai numerals is illustrated in Figure 4.11.
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<td>1357 A.D.</td>
<td></td>
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<tr>
<td>KING NARAI SCRIPT</td>
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<tr>
<td>1680 A.D.</td>
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</tr>
<tr>
<td>THE PRESENT THAI SCRIPT</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.11

NUMERALS.
Chapter 5

A PROPOSED REFORM OF THAI WRITING
Chapter 5

A PROPOSED REFORM OF THAI WRITING

In the year 1764 King Taksin established Thonburi city as the capital of Thailand instead of Ayudhaya city, but after only eighteen years King Yot-Fa-Chulaloke or Rama I, chose Bangkok to be the capital of Thailand in 1782. Subsequently, and prior to the commencement of the construction of the new capital, King Rama I proclaimed himself the new king of Thailand and the first monarch of the Chakkri dynasty of Ratanakosin kingdom on January 13, 1782. From that time on Thailand has been ruled by kings of the Chakkri dynasty. The present king is King Rama IX of the dynasty.

The art of Thai writing became more active from the 17th century on. Written records during this period have been done mostly on paper. King Narai script has been used in Thai writing, although it has been gradually modified through the process of time. Printing in Thailand was first started in 1821 in the reign of King Rama III. Captain James Low, a British officer who worked in the East India Company in Singapore, was the founder of printing in Thailand. He set up a Thai printing cast to print a book entitled "A Grammar of the Thai, or Siamese
This book was widely used among Europeans in Thailand at that time. Later on, American missionaries began coming to Thailand to spread Christianity. They rented James Low's printing cast to print religious pamphlets.

The first printing press of Thailand was founded in Bangkok by an American missionary called D.B. Bradley in 1837, but it printed only religious pamphlets, books for American missionaries. The only non-religious item printed from this press was an announcement from the court of Siam to prohibit smoking opium in Thailand. At a later period King Rama IV established a royal Thai printing press to print Thai official documents.

In 1892 Mr Edwin H. McFarland, an American secretary to the Thai minister of education in the reign of King Rama V, brought with him after his return from America the first Thai typewriter, which he had succeeded in making in that country. Bertha Blout McFarland noted in McFarland of Siam (1958, p.105) that owing to the array of the numerous characters of the Thai alphabet, McFarland could not find any typewriter on the market that could accommodate all the Thai alphabet. At last he took a bold step by eliminating two Thai characters of the alphabet, i.e. <ธ>, <ณ>, which were rarely used in current writing. Incidentally, these two letters gradually ceased to be used at all.²

1. This book is now kept in the National Library of Thailand, Bangkok.
2. They were completely abolished in 1927, as already stated on p.41.
King Rama VI had a strong feeling that the relationship or the fit between the sounds of the Thai language and the symbols that were used to represent them was not so close, and so wanted to revise the Thai script. He proposed a new Thai script called "King Rama VI script". The proposal was written in his own handwriting on April 6, 1917. For consonant symbols he preferred to retain the shapes of consonant symbols of King Narai script. For the vocalic symbols, he invented new characters and set up new rules of orthography. The most striking thing in his proposal was changing the place of vocalic symbols in a syllable to be after the initial consonant symbol of the syllable only. He suggested that words should be written with spaces between them, as in the English writing system. He also introduced the use of punctuation marks, such as the full stop, colon, and semi-colon. The king found no success in proposing a new Thai script since the Thai were already used to the King Narai script, and so his script was not adopted. The King Narai script has been developed and preserved by the Thai as our national Thai script up to the present day.
Figure 5.1 < A proposed reform of Thai writing written in King Rama the Sixth's own handwriting on April 6th, 1917 A.D., now kept in the national library of Thailand, Bangkok.>
Notes on the interpretation of the proposed reform of Thai writing shown in Figure 5.1, lines 6, 7, p.108

(1) <กิจ ทำ หน้า หนึ่ง ตาม แผน ที่ มี ไว้ แล้ว ดัง นี้>

(2) <ต้า กิจ: หuai พร้า: เปา: แทร: สาราน: , ผ: เม: ล:>

          กิจ: บ:>


          -ล: -กิจ: บ: /

"I would like to pay respect to the Lord Buddha's teachings, father, mother and teachers ...."

It is clear from the writing above that in King Rama VI script, words were written with spaces between them, a punctuation mark <,) was used, and vocalic symbols were written after a syllable-initial consonant symbol. The consonant symbols <ก> = <h> and <ก> = <r> of the syllables /'wai/ and /'si:/ were not pronounced.
5.1 CONSONANT SYMBOLS

There were forty-two consonant symbols written in King Rama VI script. The shapes of consonant symbols are not illustrated here since they were the same as those of King Narai script.

5.1.1 The ways of writing syllable-initial consonant sequences

Syllable initial consonant sequences in the Thai language are divided into three kinds:

1. Those pronounced as consonant clusters.
2. Those pronounced as single consonants.
3. Those pronounced in two syllables with an intervening unwritten vowel /a/.

It is clear that it is very difficult for a learner of Thai writing to know how to pronounce syllable-initial consonant sequences in Thai since there is more than one way to pronounce them. King Rama VI proposed a system to indicate the pronunciation of each kind of syllable-initial consonant sequence, as follows:

1. Of those pronounced as consonant clusters, a dot \( <.> \) was put above the first consonant symbol of the cluster, for example the word /-kru\(\nu\)/ "metropolis, city" was written as \( <\hat{kru}\underline{\nu}> \) = \( <kru\nu> \).

For writing foreign loanwords which have more than two

1. Details have already been given in Chapter 3, p.49.
consonants in a cluster, a dot <.> was placed above the second consonant symbol of a cluster, for example the word /strim/ "stream" was written as <นิม> = <stri:m>.

2. For those pronounced as single consonants, the dot <.> was written below the consonant symbol which is rendered silent, for example the word /_Io:k/ "to trick, to deceive" was written as <โมก> = <hlo:k>.

3. Of those pronounced in two syllables by the intrusion of an unwritten vowel /a/, the king stated that since the vowel /a/ was pronounced, it must be written. He suggested writing a vocalic symbol for /a/ = <? > to represent the intruded vowel /a/. For example, the word /_ka?'ru?-na:/ "to be kind" was written as <นูน> = <karuna:>. Here the vocalic symbol for /a/ was written between <k> and <r> to indicate the vowel /a/.

5.1.2 The ways of writing syllable-final consonant sequences

Syllables of pure Thai words always end with either a vocalic symbol or a single consonant symbol, as already stated in Chapter 3, p.60. For foreign loanwords which have syllable-final consonant sequences, the original spelling is normally retained in Thai writing, but only one of the final consonants is pronounced, and in most cases it is the first of the sequence. In King Rama VI script, syllable-final consonant sequences were written adjacent to one another as separate symbols, and the king stated two rules for writing them, as follows:
1. In the case of having two final consonants, the first of which was pronounced, a special symbol called /~tha^n^tha?kha:t/<— was placed above the second consonant symbol to show that it was rendered silent. For example, the word /~ka:n/ "the beloved" was written as <ka:nt>. Here the <—> was written over the <t> to show that it was not pronounced.

2. In rare cases, the second consonant of the sequences was pronounced instead of the first. For example, a word /'ma:k/ "route" was written as <ma:rk>. Here the second consonant symbol <kh> was pronounced as /-k/. In this case the dot <.> was placed under the first consonant symbol to indicate that it was not pronounced. The king stated the reason for using the dot <.> instead of the <—> to mark the non-final silent consonant symbol was that it looked untidy to put the <—> above any consonant symbols but the final one, so he used the dot <.> instead.

For syllabic consonant symbols which were used in the three previous ancient script, the king did not mention them in his proposals.

5.2 VOCALIC SYMBOLS

There were thirty-five vocalic symbols in King Rama VI script. They represented eighteen monophthongs, fourteen diphthongs, and three triphthongs. They were written after the initial consonant symbol of the syllable only. The vocalic symbols of King Rama VI script were different from those of the
Sukhothai script, King Li Thai script and King Narai script by the fact that the vocalic symbols of those three ancient scripts were always written with a syllable-initial consonant symbol. This is because a Thai syllable always begins with a consonant. In Thai all vowels are pronounced with an initial glottal stop in citation form, as /-ʔiː, -ʔeː, -ʔeː, -ʔaː/, etc. but the glottal stop is dropped in running connected speech. To obtain syllables pronounced /-ʔiː, -ʔeː, -ʔeː, -ʔaː/, etc. vocalic symbols were written with a syllable-initial consonant symbol <∅> = <ʔ>. For example, a monosyllabic word /-ʔiː/ "title used with first names of women for purpose of insult" was written as <ʔiː>, a monosyllabic word /-ʔaː/ "younger paternal uncle or aunts, i.e. the younger brother or sister of one's father" was written as <ʔaː>. But the vocalic symbols of King Rama VI script were otherwise. They could be written themselves without a syllable-initial consonant symbol <∅> = <ʔ> So the two words mentioned above were written as <∅> = <iː>, and <∅> = <aː> without a consonant symbol <∅> = <ʔ>. In a way it could mean that the king wanted to write vowels in running connected speech which normally occur without an initial glottal stop. Since the initial glottal stop which occurs with vowels in citation form is dropped in running connected speech, there is no need to write it down in writing. Besides that, the king might have introduced this way of writing vocalic symbols to the Thai alphabet through the influence of the Asokan Brahmi, the Grantha and the Khmer
writing systems. In those writing systems, there was a set of vocalic symbols which could be written alone without a syllable initial consonant symbol as already stated in Chapter 2, p.29.

There were two forms of vocalic symbols in King Rama VI script: carefully written form and fast written form. The king wrote his proposal in a fast written form. The shapes of vocalic symbols shown in Figure 5.3 are copied from the king's handwritten proposal. In the charts the dash shows the place of a syllable-initial consonant symbol. C₃ represents a syllable-final consonant symbol. As can be seen, the vocalic symbols were written after a syllable-initial consonant symbol only.
<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Carefully written form</th>
<th>Fast written form</th>
<th>Example of last written form</th>
<th>Transcription and meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/i/ — #</td>
<td>— 0</td>
<td>— 6</td>
<td>English</td>
<td>/_tiː/ to criticize</td>
</tr>
<tr>
<td></td>
<td>— C3</td>
<td>— OC3</td>
<td>English</td>
<td>/_tiː/ to adjoin</td>
</tr>
<tr>
<td>2/iː/ — #</td>
<td>— 0</td>
<td>— 4</td>
<td>English</td>
<td>/-tiː/ to hit</td>
</tr>
<tr>
<td></td>
<td>— C3</td>
<td>— OC3</td>
<td>English</td>
<td>/-tiːn/ feet</td>
</tr>
<tr>
<td>3/e/ — #</td>
<td>— 96</td>
<td>— 96</td>
<td>English</td>
<td>/-terː/ to kick</td>
</tr>
<tr>
<td>4/eː/ — #</td>
<td>— 9</td>
<td>— 9</td>
<td>English</td>
<td>/-keː/ to be distinguished</td>
</tr>
<tr>
<td></td>
<td>— C3</td>
<td>— OC3</td>
<td>English</td>
<td>/-keːn/ standard, limit</td>
</tr>
<tr>
<td>5/eɪ/ — #</td>
<td>— 96</td>
<td>— 96</td>
<td>English</td>
<td>/'ɪzː/ and</td>
</tr>
<tr>
<td>6/eɪ/ — #</td>
<td>— 96</td>
<td>— 9</td>
<td>English</td>
<td>/'hæː/ cast net, fish net</td>
</tr>
<tr>
<td></td>
<td>— C3</td>
<td>— OC3</td>
<td>English</td>
<td>/'hæn/ to reserve for oneself</td>
</tr>
<tr>
<td>7/a/ — #</td>
<td>— 1</td>
<td>— 1</td>
<td>English</td>
<td>/'tʃaː/ will, shall</td>
</tr>
<tr>
<td></td>
<td>— C3</td>
<td>— IC3</td>
<td>English</td>
<td>/tpat / to arrange</td>
</tr>
<tr>
<td>8/aʊ/ — #</td>
<td>— 9</td>
<td>— 7</td>
<td>English</td>
<td>/-taː/ eye</td>
</tr>
<tr>
<td></td>
<td>— C3</td>
<td>— IC3</td>
<td>English</td>
<td>/-tam/ to chase</td>
</tr>
<tr>
<td>9 /ɔ/ — #</td>
<td>— ɔʃ</td>
<td>— ɔ</td>
<td>English</td>
<td>/hɔː/ to fly</td>
</tr>
<tr>
<td>Phonetic values</td>
<td>Carefully written form</td>
<td>Fast written form</td>
<td>Example of fast written form</td>
<td>Transcription and meanings</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------</td>
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<td>-------------------------------</td>
<td>---------------------------</td>
</tr>
</tbody>
</table>
| 10 /s/ 1 - q | - q | - q | ṭṭ | ṭṭ | ṭṭ to be enough
| | - q | - q | ṭṭ | ṭṭ | ṭṭ to swell |
| 11 /o/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ table, desk
| | - q | - q | ṭṭ | ṭṭ | ṭṭ oneself |
| 12 /a/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ cow
| | - q | - q | ṭṭ | ṭṭ | ṭṭ base (as of tree) |
| 13 /u/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ to try hard
| | - q | - q | ṭṭ | ṭṭ | ṭṭ to crawl under |
| 14 /u/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ person
| | - q | - q | ṭṭ | ṭṭ | ṭṭ to tie, bind |
| 15 /y/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ to be dirty |
| 16 /s/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ to meet
| | - q | - q | ṭṭ | ṭṭ | ṭṭ to anoint, consecrate |
| 17 /w/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ modifier meaning 'faintly used esp. with <.executor>‘ ‘smell bad’
| | - q | - q | ṭṭ | ṭṭ | ṭṭ building |
| 18 /w/ 1 - q | - ḍ | - ḍ | ṭṭ | ṭṭ | ṭṭ to rumour
| | - q | - q | ṭṭ | ṭṭ | ṭṭ to forget |
## 2. Diphthongs

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Carefully written form</th>
<th>Fast written form</th>
<th>Example of fast written form</th>
<th>Transcription and meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 /ia/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/si:i/ to loose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- C3</td>
<td>- cancellationToken-</td>
<td>/si:i/ to sound, noise</td>
<td></td>
</tr>
<tr>
<td>20 /wa/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/tɔwɔ:/ to be bad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- C3</td>
<td>- cancellationToken-</td>
<td>/tɔwɔn:/ to urge</td>
<td></td>
</tr>
<tr>
<td>21 /wa/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/mu:i:/ when</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- C3</td>
<td>- cancellationToken-</td>
<td>/mu:i:/ town</td>
<td></td>
</tr>
<tr>
<td>22 /iu/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/niu:/ to be hungry</td>
<td></td>
</tr>
<tr>
<td>23 /eu/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/leu:/ to be bad</td>
<td></td>
</tr>
<tr>
<td>24 /eu/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/le:i:/ to be finished</td>
<td></td>
</tr>
<tr>
<td>25 /ai/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- pai:/ to go</td>
<td></td>
</tr>
<tr>
<td>26 /ai/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- tai:/ to die</td>
<td></td>
</tr>
<tr>
<td>27 /au/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- hau:/ lice</td>
<td></td>
</tr>
<tr>
<td>28 /au/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- hau:/ white</td>
<td></td>
</tr>
<tr>
<td>29 /oi/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- kɔi:/ to wait</td>
<td></td>
</tr>
<tr>
<td>30 /oi/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- doi:/ by, with, by means of</td>
<td></td>
</tr>
<tr>
<td>31 /ui/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- kui:/ to chat</td>
<td></td>
</tr>
<tr>
<td>32 /ui/ - #</td>
<td>- cancellationToken-</td>
<td>- cancellationToken-</td>
<td>/- kui:/ to be used to</td>
<td></td>
</tr>
</tbody>
</table>
3. Triphthongs

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Carefully written form</th>
<th>Fast written form</th>
<th>Example of fast written form</th>
<th>Transcription and meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>33. /iau/</td>
<td>- Qed</td>
<td>- Qem</td>
<td>/k'iau/ to chew</td>
<td></td>
</tr>
<tr>
<td>34. /uai/</td>
<td>- Qam</td>
<td>- Qem</td>
<td>/q'uai/ to help</td>
<td></td>
</tr>
<tr>
<td>35. /uai/</td>
<td>- Qam</td>
<td>- Qem</td>
<td>/n'uai/ to be exhausted</td>
<td></td>
</tr>
</tbody>
</table>
5.2.1 Notes on the vocalic symbol \( <\textcircled{\text{O}} > = <\textcircled{\text{o}} > \)

In the Thai writing system the vocalic symbol \( <\textcircled{\text{O}} > \) is normally written in pure Thai words, in a syllable both with and without a final consonant symbol. For example:

\[
<\text{ก} Θ> = <k^h\text{ o} > /'kho:/ "to beg"
\]

\[
<\text{ก} Θ> = <k^h\text{ o} > /'kho:/ "canal".
\]

There are some cases which \( <\textcircled{\text{O}} > = <\textcircled{\text{o}} > \) is not written. Details of these cases will be discussed in Chapter 8, pp.184-186, in the section on the present Thai writing system.

The following is a brief summary:

1. When the vowel /\textcircled{o}:/ occurs in an initial open syllable of a polysyllabic word beginning with \( <\text{ว} > = <\text{b} > \), for example the word /-\text{b}o.-\text{di}:/ "king" is written as /<\text{bd}i>/.  

2. When the vowel /\textcircled{o}:/ occurs in an open syllable of a polysyllabic word beginning with \( <\text{ว} > = <\text{w} >, <\text{สม} > = <\text{m} >, <\text{ณ} > = <\text{th} >, <\text{ร} > = <\text{t} >, <\text{โ} > = <\text{so} >, <\text{เร} > = <\text{s} >, <\text{ผ} > = <\text{s} >, <\text{ว} > = <\text{h} > or <\text{ผ} > = <\text{?} >. And the syllable which follows the syllable with /\textcircled{o}:/ is pronounced /'\text{ra}?:/ in all cases, for example:

   The syllable /-\text{ว}o:/ of the word /-\text{ว}o:\text{^ra}?:-\text{di}:/ "elegant word for body" is written without a vocalic symbol for /\textcircled{o}:/.

   The syllable /-\text{ม}o:/ of the word /-\text{m}o:\text{^ra}?:\text{na}?:/ "elegant word for death" is written without a vocalic symbol for /\textcircled{o}:/.

3. When the vowel /\textcircled{o}:/ occurs in a closed syllable having
\( \langle \text{ร} \rangle = \langle \text{ร} \rangle \) as a final consonant symbol. For Thai \( \langle \text{ร} \rangle \)

= \( \langle \text{ร} \rangle \) is pronounced as /n/ in the final position of a syllable, for example:

\( \langle \text{งร} \rangle = \langle \text{กร} \rangle /-\text{kən/} "a literary word for hands"

\( \langle \text{ωร} \rangle = \langle \text{ хр} \rangle /-\text{hən/} "blessings".

For the first two cases King Rama VI suggested writing a symbol called /-\text{pə:jə:njо:}/ after the initial consonant symbol of the syllable with a vowel /ə:/, as shown in the examples below:

The first case

/-\text{bə:-dิ/} "king" was written as \( \langle \text{ร} \rangle = \langle \text{บ'dι:] \rangle \)

The second case

/-\text{wə:^ra?-dิ/} "elegant word for body" was written as

\( \langle \text{ร} \rangle \rangle = \langle \text{w'radi:] \rangle .

/-\text{mə:^ra?^na?/} "elegant word for death" was written as

\( \langle \text{ร} \rangle \rangle = \langle \text{m'rna:] \rangle .

For the last case the King suggested not to write any symbol to represent the vowel /ə:/ there. So /-\text{kən/} "a literary word for hands" was still written as \( \langle \text{งร} \rangle = \langle \text{กร} \rangle \) and /-\text{hən/} "blessing" was also still written as \( \langle \text{ωร} \rangle = \langle \text{ хр} \rangle \).

5.3 TONAL MARKERS

King Rama VI script had four tonal markers, the /-\text{e:k/ symbol} \( \langle \rangle \), the /-\text{tho:/ symbol} \( \langle \rangle \), the /-\text{trι:/ symbol} \( \langle \rangle \), and the /\text{t∫at.ta?-wa:/ symbol} \( \langle \rangle \). The place of a

1. The last two tonal markers came into use in the 18th century, during the Thonburi kingdom.
tonal marker was consistent. It was above a syllable-initial consonant symbol. In a syllable with initial consonant sequences it was written above the second one. For example:

1. Above a syllable-initial consonant symbol
   \[ \langle \text{ม่ } \rangle = \langle \text{m: } \rangle /'\text{m}:/' \text{mother} \]
   \[ \langle \text{พ่ } \rangle = \langle \text{pʰ: } \rangle /'\text{pʰ}:/' \text{father}. \]

2. Above the second consonant symbol in a syllable with initial consonant sequences.
   \[ \langle \text{ก้า } \rangle = \langle \text{kla: } \rangle /'\text{kla:}/' \text{to be brave} \]
   \[ \langle \text{คว่ำ } \rangle = \langle \text{kʰwa:n } \rangle /'\text{kʰwa:n}/ \text{to throw}. \]

5.4 NUMERALS

Thai numerals in King Rama VI script were the same as those of the present Thai script as already illustrated in Chapter 4, Figure 4.11, p.104. The symbols \[ \langle \text{่ } \rangle /'\text{m}:i`ja?mok/, \] and \[ \langle \text{ำ } \rangle /`pai`ja:n`no:i/ \] used in King Li Thai script and King Narai script were still used in King Rama VI script.
PART THREE

THE PRESENT THAI WRITING SYSTEM
The present Thai writing system represents Standard Thai language which is the national language of Thailand. My investigations on the description of the orthography and the characteristics of the script are based on our national Thai grammar textbooks used in primary, secondary and high schools in Thailand. Analysis of the relationship between the sounds of the Standard Thai and the symbols that are used to represent them is my own. I used myself, as an informant, to investigate the sounds of the Standard Thai, and a number of other Thai speakers. Recordings from radio and television were also used when analysing the irregularity in reading certain words. The explanation of how the writing system fits our language, where the problems lie, and the difficulties which people have in learning to read and write it, are from my own observations.

The present Thai writing system is directly descended from King Narai writing, though certain changes have been introduced through the process of time.¹ It is the same as all the ancient

¹ Early attempts to study the Thai script since 1854 were made by a number of scholars, among them were J.B. Pallegoix (1854), L. Ewald (1881), B.O. Cartwright (1907), etc. For a brief survey of the previous work done on the Thai script by these scholars, see Appendix One, pp.301-309.
Thai scripts in the sense that it is written from left to right and there are no spaces between words. Spaces are, however, used at the end of a phrase, clause, or sentence. At the end of a sentence, a period is not used. A letter is not capitalised at the beginning of a sentence, as in the English writing system.
Chapter 6

CONSONANT SYMBOLS
Chapter 6

CONSONANT SYMBOLS

6.1 LIST OF FORTY-FOUR THAI CONSONANT SYMBOLS AND THEIR NAMES

There are forty-four consonant symbols listed in Standard Thai dictionaries, but the third ⟨ฎ⟩ and the fifth ⟨ฎ⟩ are obsolete, having been replaced by the second ⟨ฎ⟩ and the fourth ⟨ฎ⟩ respectively as discussed previously in Chapter 3, p.45.

Each consonant symbol, such as the consonant symbol for /k/, when not modified by a vocalic symbol to form /–ki?:/, /–ki:/, /–ke?:/, /–ke:/, etc. is pronounced with a carrying vowel /ɔ:/.

Many consonant symbols have different phonetic values when they occur in syllable final position. Since some consonants are represented by more than one consonant symbol, each consonant symbol has been given an arbitrary designatory name to be used when spelling words orally. The arbitrary names of consonant symbols normally have two parts. The first part is always monosyllabic and is the pronunciation of the consonant with the carrying vowel /ɔ:/ as /–kɔ:/, /–khɔ:/, /’khɔ:/, etc. The second part mostly has one syllable, rarely two and it refers to a name of a familiar things which has the sound of that consonant.
For example, the second part of the name of /k/ is /_kai/ "chicken". So the complete name of /k/ is /-kɔ: _kai/. The designatory names of the forty-four Thai consonant symbols have been composed as a poem which Thai children learn to recite.¹

In Figure 6.1 the consonant symbols of the Standard Thai writing system are listed in dictionary order. Each consonant symbol is followed by its phonetic value in a syllable initial position before a vowel, its romanised letters, the transcription of its name and the meaning of its name. All the following examples used in this thesis, unless stated otherwise, are uttered in citation form or careful style of speech.

¹ The transcription of the poem is shown in Appendix Two, p.311.
<table>
<thead>
<tr>
<th>Number</th>
<th>Thai symbols</th>
<th>Phonetic values</th>
<th>Transcription of Thai names</th>
<th>Meanings of Thai names</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>k</td>
<td>/ -kɔː _kai /</td>
<td></td>
<td>chicken</td>
</tr>
<tr>
<td>2</td>
<td>k</td>
<td>/ h ɔː _kai /</td>
<td></td>
<td>egg</td>
</tr>
<tr>
<td>3</td>
<td>k</td>
<td>/ h ɔː _k u:at /</td>
<td></td>
<td>bottle</td>
</tr>
<tr>
<td>4</td>
<td>k</td>
<td>/ h ɔː _kwa:i /</td>
<td></td>
<td>buffalo</td>
</tr>
<tr>
<td>5</td>
<td>k</td>
<td>/ -k ɔː _k on /</td>
<td></td>
<td>person</td>
</tr>
<tr>
<td>6</td>
<td>k</td>
<td>/ -k ɔː _ra?ː _k an /</td>
<td></td>
<td>bell</td>
</tr>
<tr>
<td>7</td>
<td>η</td>
<td>/ -ηɔː _nu /</td>
<td></td>
<td>snake</td>
</tr>
<tr>
<td>8</td>
<td>tɔ</td>
<td>/ tɔː _tɔːn /</td>
<td></td>
<td>plate</td>
</tr>
<tr>
<td>9</td>
<td>tɔ</td>
<td>/ tɔː _tɔ n /</td>
<td></td>
<td>cymbal</td>
</tr>
<tr>
<td>10</td>
<td>tɔ</td>
<td>/ tɔː _tɔ ɔ n /</td>
<td></td>
<td>elephant</td>
</tr>
<tr>
<td>11</td>
<td>s</td>
<td>/ -sɔː _so:/</td>
<td></td>
<td>chain</td>
</tr>
<tr>
<td>12</td>
<td>tɔ</td>
<td>/ tɔː _kəː _tɔ n /</td>
<td></td>
<td>a kind of tree</td>
</tr>
<tr>
<td>13</td>
<td>j</td>
<td>/ jɔː _jůː /</td>
<td></td>
<td>lady</td>
</tr>
<tr>
<td>14</td>
<td>d</td>
<td>/ dɔː _tɔ n _tɔː _təː _dɪː /</td>
<td></td>
<td>a tall head gear worn by an actor</td>
</tr>
<tr>
<td>15</td>
<td>t</td>
<td>/ tɔː _p aʔ _tak /</td>
<td></td>
<td>goad</td>
</tr>
<tr>
<td>16</td>
<td>t</td>
<td>/ tɔː _t ʰ an /</td>
<td></td>
<td>base pedestal</td>
</tr>
<tr>
<td>17</td>
<td>t</td>
<td>/ t h ʰ _n ʰ -n ʰ _m o n _t h ʰ /</td>
<td>name of a giant’s wife in Ramayana epic</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Thai symbols</td>
<td>Phonetic values</td>
<td>Transcription of Thai names</td>
<td>Meanings of Thai names</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>-----------------</td>
<td>----------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>18</td>
<td>มี</td>
<td>tʰ</td>
<td>/-tʰː 'pʰːtʰːau /</td>
<td>old person</td>
</tr>
<tr>
<td>19</td>
<td>จะ</td>
<td>n</td>
<td>/-nːː-neeː /</td>
<td>young Buddhist disciple</td>
</tr>
<tr>
<td>20</td>
<td>ด</td>
<td>d</td>
<td>/-dː-dek /</td>
<td>child</td>
</tr>
<tr>
<td>21</td>
<td>ต</td>
<td>t</td>
<td>/-tː-τau /</td>
<td>turtle</td>
</tr>
<tr>
<td>22</td>
<td>พ</td>
<td>tʰ</td>
<td>/tʰːtʰːhŋ /</td>
<td>sack, bag</td>
</tr>
<tr>
<td>23</td>
<td>อ้</td>
<td>h</td>
<td>/-tː'ar'hːnː /</td>
<td>soldier</td>
</tr>
<tr>
<td>24</td>
<td>ธ</td>
<td>h</td>
<td>/-tː'hːtːŋ /</td>
<td>flag, emblem</td>
</tr>
<tr>
<td>25</td>
<td>น</td>
<td>n</td>
<td>/-nːː'nuː /</td>
<td>mouse, rat</td>
</tr>
<tr>
<td>26</td>
<td>บ</td>
<td>b</td>
<td>/-bː- bai 'mai /</td>
<td>leave</td>
</tr>
<tr>
<td>27</td>
<td>ป</td>
<td>p</td>
<td>/-pː-plaː /</td>
<td>fish</td>
</tr>
<tr>
<td>28</td>
<td>ป</td>
<td>pʰ</td>
<td>/pːʰː pʰːnː /</td>
<td>bee</td>
</tr>
<tr>
<td>29</td>
<td>ต</td>
<td>f</td>
<td>/'tː 'faː /</td>
<td>lid, cover</td>
</tr>
<tr>
<td>30</td>
<td>ป</td>
<td>pʰ</td>
<td>/pʰːpʰːnː /</td>
<td>tray with pedestal base</td>
</tr>
<tr>
<td>31</td>
<td>ฟ</td>
<td>f</td>
<td>/-fː-fan /</td>
<td>teeth</td>
</tr>
<tr>
<td>32</td>
<td>ป</td>
<td>pʰ</td>
<td>/pʰːsːmː- pːau /</td>
<td>a kind of sail boat, junk</td>
</tr>
<tr>
<td>33</td>
<td>ม</td>
<td>m</td>
<td>/-mːr'mːaː /</td>
<td>horse</td>
</tr>
<tr>
<td>34</td>
<td>จ</td>
<td>j</td>
<td>/-jːr'jak /</td>
<td>giant</td>
</tr>
<tr>
<td>35</td>
<td>ร</td>
<td>r</td>
<td>/-rːrːwːa /</td>
<td>boat, ship</td>
</tr>
<tr>
<td>36</td>
<td>ล</td>
<td>l</td>
<td>/-lː-ˈlinj /</td>
<td>monkey</td>
</tr>
<tr>
<td>Number</td>
<td>Thai symbols</td>
<td>Phonetic values</td>
<td>Transcription of Thai names</td>
<td>Meanings of Thai names</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>-----------------</td>
<td>-----------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>37</td>
<td>ว</td>
<td>/wɔː\wɛ̂n/</td>
<td>/wɔː\wɛ̂n/</td>
<td>ring</td>
</tr>
<tr>
<td>38</td>
<td>สา</td>
<td>/sɔː\saː-ləː/</td>
<td>/sɔː\saː-ləː/</td>
<td>pavillion</td>
</tr>
<tr>
<td>39</td>
<td>สง</td>
<td>/sɔː-rɔː\swiː/</td>
<td>/sɔː-rɔː\swiː/</td>
<td>hermit</td>
</tr>
<tr>
<td>40</td>
<td>ลิ้น</td>
<td>/sɔː\swiː/</td>
<td>/sɔː\swiː/</td>
<td>tiger</td>
</tr>
<tr>
<td>41</td>
<td>หัว</td>
<td>/hɔː\hiːp/</td>
<td>/hɔː\hiːp/</td>
<td>box</td>
</tr>
<tr>
<td>42</td>
<td>ประตู</td>
<td>/pɔː\tʰɔː\tʰuː/</td>
<td>/pɔː\tʰɔː\tʰuː/</td>
<td>a kind of kite</td>
</tr>
<tr>
<td>43</td>
<td>ตา</td>
<td>/tɔː\tʰaːŋ/</td>
<td>/tɔː\tʰaːŋ/</td>
<td>basin</td>
</tr>
<tr>
<td>44</td>
<td>หอ</td>
<td>/hɔː\noŋ\huiːk/</td>
<td>/hɔː\noŋ\huiːk/</td>
<td>owl</td>
</tr>
</tbody>
</table>
The reason why we have more consonant symbols than are needed in our language has already been stated in Part Two (ancient Thai writing, p. 25). Having more than one consonant symbol to represent a given consonant makes the task of writing Thai rather difficult since one has to memorise the correct choice of the consonant symbol of certain words. For example, /n/ in the syllable /-nan/ and /-na:/ of my name /-nan-tha?-na:/ has to be spelled with <&amp/> /-no:-nu:/ only. However, although a given consonant may be represented by more than one consonant symbol, a certain consonant symbol in a certain position almost always represents a certain consonant.

All Thai consonant symbols except <&khow/> /-ko:-kai/ and <&tho/> /-tho:-thon/ are started with the production of a small circle. If there is more than one circle, the one on the left is always started first. It is very important to note whether the circle is to the left or to the right of its connecting line since it is the only difference between

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&amp;khow</td>
<td>/-khwa:/</td>
</tr>
<tr>
<td>&amp;kho</td>
<td>/-kho:/</td>
</tr>
<tr>
<td>&amp;tho</td>
<td>/-thu:/</td>
</tr>
<tr>
<td>&amp;pho</td>
<td>/-phwa:/</td>
</tr>
<tr>
<td>&amp;fo</td>
<td>/-fa:/</td>
</tr>
</tbody>
</table>

The way of making the forty-four Thai consonant symbols is illustrated in Figure 6.2. The symbols are listed in dictionary order.
Thai consonant symbols are divided into three tonal classes known as Middle, High and Low. Their Thai names are /\- Tak 's\:\n-kla: n/ "middle consonant symbols", numbering nine; /\- Tak 's\:\n-su: n/ "high consonant symbols", consisting of eleven, and /\- Tak 's\:\n-tam/ "low consonant symbols", containing the remaining twenty-four. This must be memorised because the tonal markers have different values depending upon the tonal class of the syllable-initial consonant symbol with which they are being used.

Every consonant symbol when pronounced in isolation is pronounced with a carrying vowel /o:/ as already stated. Middle consonant symbols are pronounced with mid tone as /\- ko:/, /\-\- ko: /, etc. High consonant symbols are pronounced with rising tone as /\- kh:\:, /\- h:\:/, /\- t\:\h:\:, /\- t\:\h:\:/, etc. Low consonant symbols are pronounced with mid tone as /\- h:\:, /\- kh:\:, /\- t\:\h:\:, /\- t\:\h:\:/, etc. Although middle and low consonant symbols have the same inherent tone as mid tone, they belong to different groups because a given tonal marker has different values in a syllable initiated by a mid or low consonant symbol. Details will be given in Chapter 10. For each voiceless high consonant, there is a corresponding low consonant which has the same phonetic value except for tone. It is noted by Fang Kuei Li in his A Handbook of Comparative Tai (1976), p.23, that the voiceless low consonants were originally voiced. They have become devoiced, and the distinction
of old voiced and voiceless consonants is utilised to mark the
difference in tones. That is why in present Thai language a
voiceless high consonant is pronounced with rising tone and its
corresponding voiceless low consonant is pronounced with mid tone
as shown in the following chart.¹ Pairing of high and low
consonants makes it possible to indicate the five tones used with
different types of syllables in the Thai language. Details will
be discussed in Chapter 10 about tonal markers.

The three tonal classes of consonant symbols are shown
in Figure 6.3.

---

¹ I found Li's hypothesis is probable because the unpaired low
consonants are voiced consonants: m, w, n, r, l, j, and ṇ.
**Figure 6.3**

<table>
<thead>
<tr>
<th>MIDDLE CONSONANT SYMBOLS</th>
<th>PRONOUNCED WITH MID TONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>p</td>
</tr>
<tr>
<td>b</td>
<td>b</td>
</tr>
<tr>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>k</td>
<td>k</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH CONSONANT SYMBOLS</th>
<th>LOW CONSONANT SYMBOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRONOUNCED WITH RISING TONE</td>
<td>PRONOUNCED WITH MID TONE</td>
</tr>
<tr>
<td>p</td>
<td>p</td>
</tr>
<tr>
<td>f</td>
<td>f</td>
</tr>
<tr>
<td>s</td>
<td>s</td>
</tr>
<tr>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>kh</td>
<td>kh</td>
</tr>
<tr>
<td>h</td>
<td>h</td>
</tr>
<tr>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>w</td>
<td>w</td>
</tr>
<tr>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>l</td>
<td>l</td>
</tr>
<tr>
<td>j</td>
<td>j</td>
</tr>
<tr>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

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A syllable-initial consonant /j/ in the present Thai pronunciation is represented by two consonant symbols, <ฝ> and <น> as already shown in the chart. It has been debated whether these two consonant symbols represented two different phonemes in ancient Thai. That is, ă ă ă ă ă represented /j/ and ă ă ă ă ă represented /n/. From my own research in investigating the phonology of Chaiyaphum, a north-eastern Thai dialect spoken in the north-eastern part of Thailand, I found out that in this dialect words which are written with <ฝ> are pronounced with /j/ while those which are written with <น> are pronounced with /n/. In the ancient Thai scripts which I have investigated, words which are pronounced with /j/ in Chaiyaphum dialect were quite consistently written with <ฝ>, while words which are pronounced with /n/ were also consistently written with <น>. Since in the present Thai writing system there are two consonant symbols to represent a syllable initial /j/, it is probable that /j/ and /n/ may have persisted to the time of the introduction of the Thai writing system, but /n/ has merged with /j/ in the present Thai pronunciation. In other Thai languages, Black Tai, White Tai, Ahom, /j/ and /n/ are still preserved as different phonemes, while in some other Thai languages, Lungchow, Po-ai, /n/, has merged with /j/.¹

6.4 TWO SYLLABIC CONSONANT SYMBOLS

6.4.1 <τ> , when it occurs alone in a syllable-initial position, can be read in three ways:

1. as /"ri?/ - as in the word <τιιτη>/"rit/ "power",
2. as /"rw?/ - as in the word <τρου>/"rwo-dii/ "heart", and
3. as /"rw?/ - as in the word <τρου>/"rwo-k/ "an auspicious occasion".

When <τ> occurs as a second consonant of the syllable-initial consonant sequences, it can be read as either /"ri?/ or /"rw?/ only. It occurs only after <τ> =<k>, <τ> =<kʰ>, <τ> =<t>, <τ> =<tʰ>, <τ> =<s>, <τ> =<s>, <τ> =<n>, <τ> =<p>, <τ> =<pʰ>, <τ> =<m>, and <τ> =<h>. When it occurs after <τ> =<k>, <τ> =<kʰ>, <τ> =<t>, <τ> =<tʰ>, <τ> =<p>, and <τ> =<p>, the sequences are in most cases pronounced as clusters since /kr-, kʰr-, tr-, pr- and pʰr-/ are permitted syllable-initial clusters in Thai. For example, when <τ> occurs after <τ> =<k> in the syllable <τιιτη>/"krit/ of the word <τιιτη>/"krit/ "Britain", the sequence is pronounced as a cluster /kr-/. But when <τ> occurs after the rest of the consonant symbols mentioned above, the sequences are pronounced by the

1. When <τ> occurs after <τ> =<kʰ> or <τ> =<pʰ>, the sequences are sometimes pronounced by the intrusion of an unwritten vowel /a/ although /kr-/ and /pʰr-/ are permitted syllable-initial clusters in Thai. For example, the sequence <τιιτη> in the word <τιιτη>/"kha?"rw?_hat/ "villa" is pronounced by the intrusion of /a/ between <τ> =<kʰ> and <τ> , and the sequence <τιιτη> in the word <τιιτη>/"pʰa?"rw?_hat/ "Thursday" is pronounced by the intrusion of /a/ between <τ> =<pʰ> and <τ>.

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intrusion of an unwritten vowel /a/. For example when <ŋ> occurs after <s> in the word /sa/'rīṇ-
“elegant word for property”, the sequence is pronounced by the intrusion of /a/ between <s> and <ŋ).

6.4.2 <r> is pronounced as /r/ as in the word /ˈr/ "or". It always occurs alone in a syllable-initial position without a final consonant.
Chapter 7

SYLLABLE-INITIAL CONSONANT SYMBOLS
Chapter 7

SYLLABLE-INITIAL CONSONANT SYMBOLS

All consonant symbols presented in Chapter 6 can occur in a syllable-initial position. Each consonant symbol has the phonetic value as already stated in Figure 6.1 on pp.126-128, except the $\{\text{ฑ} \}$ which is in most cases pronounced as $/\text{th}/$ but is pronounced as $/\text{d}/$ when it occurs in a syllable initial position of the second syllable of the following words:

\begin{itemize}
  \item $\{\text{ลบดิ} \}$ /-ban_dit/ "learned man, pundit"
  \item $\{\text{ลบด} \}$ /-ban_du?/ "white elephant"
  \item $\{\text{ลบดู} \}$ /-ban_doo?/ "a kind of drum"
  \item $\{\text{บันด} \}$ /-bun_do?/ "white lotus"
  \item $\{\text{บันด} \}$ /-mon_dop/ "a structure with a pyramidal spire".
\end{itemize}

7.1 SYLLABLE-INITIAL CONSONANT SEQUENCES

One of the difficulties in reading Thai writing is that there is more than one way to pronounce syllable-initial consonant sequences in Thai. The correct pronunciation of a given consonant sequence has to be memorised. All sorts of syllable-initial consonant sequences are written adjacent to one another as

\footnote{1. $\{\text{ฑ} \}$ is originally from a letter representing $/\text{d}/$ in Asokan Brahmi script. The lack of $/\text{d}/$ in Thai has led us to substitute $/\text{d}/$, the nearest Thai sound, in these words.}

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separate symbols as has been the case since the time of King Li
Thai script.

7.1.1 Syllable-initial consonant sequences pronounced as
consonant clusters

A combination of two consonants only is permitted as a
syllable-initial consonant cluster in Thai. The first consonant
of the cluster is an unaspirated/or aspirated voiceless stop and
the second is either /r/, /l/ or /w/:

\[ \begin{align*}
pl & \rightarrow phl- \\
pr & \rightarrow phr- \\
k & \rightarrow kl- \leftarrow khl- \\
tr & \rightarrow kr- \leftarrow khr- \\
w & \rightarrow kw- \leftarrow khw-
\end{align*} \]

When a lateral /l/ or a trill /r/ is the second member
of a syllable initial cluster it is usually deleted in the running
connected speech, e.g.

- /pʰlaːt/ \rightarrow /pʰaːt/ "to miss, fall"
- /pʰlɔt/ \rightarrow /pʰɔt/ "to take off, remove"
- /pʰræːp/ \rightarrow /pʰɑːp/ "to subdue"
- /pʰruːat/ \rightarrow /pʰuːat/ "to examine".

Though /l/ and /r/ are two different phonemes in Thai
there is a strong tendency to replace /r/ with /l/ even among
educated Thai, but one can understand the meaning of a word from
the context.

- /raːk/ "to love" \rightarrow /lak/ ( /raːk/ /lak/ actually means to steal)
<ra> /-ra:/ "mould, fungus" → /-la:/
<la> /-la:/ actually means
i. donkey,
ii. to say good-bye
(upon one's departure).

The permissible consonant symbols in a cluster are illustrated in Figure 7.1. The first consonant symbol of the cluster is either a middle, high or low consonant symbol, but the second is a low consonant symbol. If the first and the second consonant symbols of the cluster belong to different tonal classes, a syllable is pronounced according to the tone rules of the first consonant symbol. For example, the cluster <ni> = <kʰw> in the word <niwa:n> /'khwa:n/ "axe" consists of a high consonant symbol <n> = <kʰ> and a low consonant symbol <w> = <w>. In this case the syllable having a cluster <ni> = <kʰw> as a syllable-initial consonant cluster is pronounced according to the tone rules of high consonant symbols. Details of tone determination in a syllable will be discussed in Chapter 10 on tonal markers.
### Figure 7.1

<table>
<thead>
<tr>
<th>Phonetic Values</th>
<th>Thai Symbols</th>
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</tr>
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<tbody>
<tr>
<td>pr</td>
<td>พระ</td>
<td>pl</td>
<td>ปะ</td>
<td>tr</td>
<td>ตร</td>
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</tbody>
</table>

1. **Begin with**

   - Middle con. symbols

2. **Begin with**

   - High con. symbols

3. **Begin with**

   - Low con. symbols
Examples

7.1.1.1 The clusters which begin with middle consonant symbols:

1. /pr-/  \( <\text{pr}> = <\text{pr}> \\)
   \( <\text{pr} \text{ap} > / \text{prap} / \text{"to fine"} \)
   \( <\text{pr} \text{ap} \text{p} > / \text{pra:p} / \text{"to conquer"} \)

2. /pl-/  \( <\text{pl}> = <\text{pl}> \\)
   \( <\text{pl} \text{a} > / \text{pla:} / \text{"fish"} \)
   \( <\text{pl} \text{e} \text{i} > / \text{plei} / \text{"to release"} \)

3. /tr-/  \( <\text{tr}> = <\text{tr}> \\)
   \( <\text{tra} > / \text{tra:} / \text{"band, trademark, seal"} \)
   \( <\text{tra} \text{n} > / \text{tru:n} / \text{"ankle chain (for prisoners)"} \)

4. /kr-/  \( <\text{kr}> = <\text{kr}> \\)
   \( <\text{kr} \text{u} > / \text{krəu} / \text{"metropolis, city"} \)
   \( <\text{kr} \text{a} > / \text{kra:u} / \text{"to be tough, harsh"} \)

5. /kl-/  \( <\text{kl}> = <\text{kl}> \\)
   \( <\text{kl} \text{a} > / \text{kləp} / \text{"to turn back, go back, return"} \)
   \( <\text{kl} \text{a} \text{n} > / \text{klən} / \text{"to swallow"} \)

6. /kw-/  \( <\text{kw}> = <\text{kw}> \\)
   \( <\text{kw} \text{a} > / \text{kwa:} / \text{"deer"} \)
   \( <\text{kw} \text{i} > / \text{wai} / \text{"cart"} \)

7.1.1.2 The clusters which begin with high consonant symbols:

1. /\text{ph}1-/  \( <\text{ph}1> = <\text{ph}1> \\)
   \( <\text{ph} \text{e} > / \text{phie} : / \text{"wound, cut"} \)
   \( <\text{ph} \text{ia} > / \text{phia:n} / \text{"to destroy"} \)
2. /khr-/  \( \text{cluster} = \text{khr} \)
   \( /'\text{khrum}/ \) "to be solemn, grave"
   \( /'\text{krom}/ \) "to be loud, noisy"

3. /khl-/  \( \text{cluster} = \text{khl} \)
   \( /'\text{khl}:t/ \) "to be timid"
   \( /'\text{klo:k}/ \) "to pound, crush into a pulp"

4. /khw-/  \( \text{cluster} = \text{khw} \)
   \( /'\text{khw}:/ \) "left"
   \( /'\text{kwa:n}/ \) "axe"

7.1.1.3 The clusters which begin with low consonant symbols:

1. /phr-/  \( \text{cluster} = \text{phr} \)
   \( /'\text{phriau}/ \) "to be slender, slim"
   \( /'\text{phrom}/ \) "carpet"

2. /phi-/  \( \text{cluster} = \text{phi} \)
   \( /'\text{phi:t}/ \) "to miss, fall"
   \( /'\text{phlo:i}/ \) "precious stone, gem, jewel"

3. /khr-/  \( \text{cluster} = \text{khr} \)
   \( /'\text{khrau}/ \) "beard"
   \( /'\text{kren}/ \) "to be strict"

4. /khl-/  \( \text{cluster} = \text{khl} \)
   \( /'\text{khiw:an}/ \) "to move, shift"
   \( /'\text{kxi:m}/ \) "to be half-asleep, be in a dreamy state"
5. /kʰw-/ \(<\text{kʰw}>\) = \(<kʰw>\)

\(<\text{kʰwa}:i>\) /kʰwa:/ "buffalo"

\(<\text{kʰwam}>\) /kʰwam/ "to turn over, turn upside down"

7.1.2 Syllable-initial consonant sequences pronounced as single consonants

A combination of two consonant symbols are permitted in this class of syllable-initial consonant sequences in Thai. In this class, although two initial consonant symbols are written they are pronounced as a single consonant. In general either the first or the second consonant symbol is pronounced. The one exception is the sequence \(<\text{tʰ}>{\text{r}}\) = \(<\text{tʰr}>\) pronounced as \(<\text{t}>\) = \(<\text{s}>\), which pronounced consonant bears no relation to either of the component written consonant symbols.

The permissible consonant symbols in sequences pronounced as single consonants are shown in Figure 7.2. The first consonant symbol is either a middle, high or low consonant symbol. The second is a low consonant symbol. For the tone of a syllable, if the first symbol is pronounced, the tone is pronounced according to the tone rules of the first consonant symbol. But if the second consonant symbol is pronounced and it belongs to a different tonal class from the first consonant symbol, it is always converted into the tonal class of the first consonant symbol. Then the tone of a syllable is pronounced according to the tone rules of the first consonant symbol.
### Figure 7.2

<table>
<thead>
<tr>
<th>Phonetic Values</th>
<th>Thai Symbols</th>
<th>Permissible Consonant Sequences Pronounced as Single Consonants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. begin with</td>
<td></td>
<td></td>
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<tr>
<td>middle con. symbols</td>
<td></td>
<td></td>
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<tr>
<td>2. begin with</td>
<td></td>
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<tr>
<td>high con. symbols</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. begin with</td>
<td></td>
<td></td>
</tr>
<tr>
<td>low con. symbols</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.1.2.1 The sequences which begin with middle consonant symbols:

1. The sequence $<?j>$ pronounced as /j-/. In this sequence the middle consonant symbol $<?>$ converts the following low consonant symbol $<j>$ into a middle consonant symbol. So the tone of a syllable is pronounced according to the tone rules of middle consonant symbols. In the present Thai writing, there are only four monosyllabic words written with $<?j>$ pronounced as /j-/, as shown below:

- $<\text{라하} > /\text{ja}: / "prohibitive, completive particle"
- $<\text{라하} > /\text{ju}: / "to stay, remain"
- $<\text{라하가} > /\text{ja}:o / "kind, sort, variety"
- $<\text{라하가} > /\text{ja}:k / "to wish, wish to".

It is stated by Li Fang Kuei in his A Handbook of Comparative Tai (Hawaii, 1977), pp.181-182, that the above four words are pronounced as /?j/ in a number of Thai languages spoken in Wu-ming, Lin yün, T'ien-pao, etc., and that leads Li to assume that $<?j>$ represented a glottalised consonant /?j/ in the time of the introduction of the Thai writing system. Li also noted that this pre-glottalised consonant /?j/ has merged with /j/ in other Thai dialects, not only in the Thai language.

2. The sequence $<\text{라라} > = <t\text{p}\text{r}>$ pronounced as /t\text{p}-/. In this sequence, the mid consonant symbol $<\text{p}> = <t\text{p}>$ which is the first consonant symbol of the sequence is pronounced. So the tone of a syllable is pronounced according to the tone rules of middle
consonant symbols. In the present Thai writing there is only one monosyllabic word written with \(<\text{ต์ร}>=<\text{tчr}>\) pronounced as /tч-/. The word is \(<\text{ต์ร}>/-\text{คิ่น}/ "to be true".

7.1.2.2 The sequences which begin with a high consonant sequence:

1. The sequence \(<\text{ต์ร}>=<\text{sr}>\) pronounced as /s-/.
In this sequence the high consonant symbol \(<\text{ต์}>=<\text{s}>\) which is the first consonant symbol of the sequence is pronounced. Therefore the tone of a syllable is pronounced according to the tone rules of high consonant symbols.

Examples of words written with \(<\text{ต์ร}>=<\text{sr}>\) pronounced /s-/ are:

- \(<\text{ระจิํ} >/\text{\'sоi}/ "ornamental chain, string of jewels, pearls, etc."
- \(<\text{ระจิ} >/\text{\'sао}/ "to build, construct"
- \(<\text{ระน} >/\text{\'son}/ "to bathe"
- \(<\text{ระจิ} >/\text{-set}/ "to be finished, ready".

2. The sequence \(<\text{ต์ร}>=<\text{sr}>\) pronounced as /s-/.
In this sequence, the high consonant symbol \(<\text{ต์}>=<\text{s}>\) which is the first consonant symbol of the sequence is pronounced. Therefore the tone of a syllable is pronounced according to the tone rules of high consonant symbols.

Examples of words written with \(<\text{ต์ร}>=<\text{sr}>\) pronounced as /s-/ are:

- \(<\text{ระจิ} >/\text{-set 'thи}/ "rich person"
<Čeř> /'si:/ "splendour, excellence, glory"
<Šeř> /'sau/ "to be sad, sorrowful"
<Čeřžá> /'sat-tha:/ "confidence, faith"

3. The sequences <Čr> = <hw> pronounced /w-/
<Črm> = <hm> " /m-/
<Črh> = <hr> " /r-/
<Črl> = <hl> " /l-/
<Črn> = <hn> " /n-/
<Črj> = <hj> " /j-/
<Črq> = <hj> " /j-/
<Črň> = <hn> " /ň-/

In these sequences the high consonant symbol <Čr> = <h> is written in front of the low consonant symbol <Čr> = <w>.
<Čn> = <m>, <Čr> = <r>, <Čl> = <l>, <Čn> = <n>, <Čj> = <j>, <Čq> = <j> or <Čq> = <ń>, and it converts the following low consonant symbol into a high consonant symbol. In all these sequences, as already stated, the second low consonant symbol is pronounced. As it has been converted into a high consonant symbol by means of a leading <Čr> = <h>, the tone of a syllable is pronounced according to the tone rules of the high consonant symbols.

Examples

1. The sequence <Čw> = <hw> pronounced as /w-/
<Čw> /'wa:n/ "to be sweet"
<Čw> /'wao/ "to hope"
2. The sequence \(<\text{hm}\> = \langle\text{hm}\rangle\) pronounced as /\text{m}-/, \\
\langle\text{ma}\rangle \quad /'\text{ma}: / \quad "\text{dog}"

3. The sequence \(<\text{hr}\> = \langle\text{hr}\rangle\) pronounced as /\text{r}-/, \\
\langle\text{ru}\rangle \quad /'\text{ru}:\text{ra}: / \quad "\text{to be luxurious}"

4. The sequence \(<\text{hl}\> = \langle\text{hl}\rangle\) pronounced as /\text{l}-/, \\
\langle\text{la:n}\rangle \quad /'\text{la:n} / \quad "\text{niece, nephew}"

5. The sequence \(<\text{hn}\> = \langle\text{hn}\rangle\) pronounced as /\text{n}-/, \\
\langle\text{nmai}\rangle \quad /'\text{nmai} / \quad "\text{to be tired, weary, fatigued}"

6. The sequence \(<\text{hj}\> = \langle\text{hj}\rangle\) pronounced as /\text{j}-/, \\
\langle\text{ja}\rangle \quad /'\text{ja}: / \quad "\text{to divorce}"

7. The sequence \(<\text{hj}\> = \langle\text{hj}\rangle\) pronounced as /\text{j}-/, \\
\langle\text{jai}\rangle \quad /'\text{jai} / \quad "\text{to be large, big}"

8. The sequence \(<\text{ho}\> = \langle\text{ho}\rangle\) pronounced as /\text{h}-/, \\
\langle\text{ja}\rangle \quad /'\text{ja}: / \quad "\text{to be lonely}".

7.1.2.3 The sequences which begin with a low consonant symbol

There is only one sequence which begins with a low consonant symbol, that is the sequence \(<\text{hr}\> = \langle\text{hr}\rangle\) pronounced
as \(<s> = <s\rangle. Since \(<s> = <s\rangle is a low consonant symbol, so the tone of a syllable is pronounced according to the tone rules of low consonant symbols. In the present Thai writing, there are seventeen words written with \(<t_h> = <t_h\rangle pronounced as \(<s> \rangle and they have been composed as a poem which Thai children learn to recite.

\(<\text{เนชัน} > \quad \text{su-at-son} /"figure, shape"
\(<\text{ราม} > \quad \text{sa:p} /"to know"
\(<\text{ราม} > \quad \text{sa:m} / 1."to be bad"
\quad 2."literary word for 'to be young, small''
\(<\text{ราม} > \quad \text{sa:i} /"sand"
\(<\text{ทส} > \quad \text{su:t} / 1."to sink (as a building)"
\quad 2."to get worse (of a patient)"
\(<\text{ทส} > \quad \text{so:m} /"to deteriorate, degenerate, decline"
\(<\text{รัตติ} > \quad \text{in-si:} /"eagle"
\(<\text{รัตติ} > \quad \text{in-si:} /"organic"
\(<\text{ธน} > \quad \text{mat-si:} /"the name of a princess in Wetsandon epic"
\(<\text{ษ} > \quad \text{si:t} /"a headgear"
\(<\text{นัน} > \quad \text{non-si:} /"a kind of tree"
\(<\text{พัน} > \quad \text{phut-sa:} /"jujube"
\(<\text{สาน} > \quad \text{su:an} /"chest, breast"
\(<\text{สา} > \quad \text{sai} /"banyan tree"
\(<\text{สป} > \quad \text{sap} /"wealth, money, treasure"
\(<\text{สึก} > \quad \text{se:k} /"to insert between"
\(<\text{ท=R} > \quad \text{tch:a-tch:a-sau} /"the name of one of the provinces in Thailand"

1. Both syllables are written with \(<t_h> = <t_h\rangle."
7.1.3 Syllable-initial consonant sequences pronounced in two syllables with an intervening unwritten vowel

Syllable-initial consonant sequences which are not pronounced as consonant clusters or single consonants, are pronounced in two syllables by the intrusion of an unwritten vowel after the first of the two consonants. The intruded vowel, which is either /a/ or /ə:/, though pronounced, is not written. There are, however, some cases where such a vowel is written. These different cases will be discussed in Chapter 8 on vocalic symbols, pp.170-172.

The rules for determining the tones of the intruded syllable with the vowel /a/ and the syllable which follows it are described below.¹

1. If the first consonant symbol is a high consonant symbol and it precedes a low consonant symbol, in most cases, it converts the low consonant symbol into a high consonant symbol. So both an intruded syllable and the syllable which follows it are pronounced according to the tone rules for high consonant symbols. When pronounced in running connected speech; the intruded syllable is unstressed, and /a/ becomes neutralised as /ə/, and the tone of the syllable is changed from whatever it may be to be a mid tone. The following are examples. The intruded syllable is underlined.

<แผนที่> /kʰaʔ 'ja:i/ → /kʰə 'ja:i/ "to expand, enlarge"

<แผนที่> /tʰaʔ 'ja:t/ → /tʰə 'la:t/ "to be brainy"

¹. In citation form /a/. is pronounced as /aʔ/, because in Thai all short vowels not followed by a consonant or another vowel in a syllable are always followed by a glottal stop.
In rare cases, no conversions occur. Each of the two consonant symbols governs the tone of its own syllable in accordance with the rules for its own tonal class. So the intruded syllable is pronounced according to the tone rules for high consonant symbols, and the syllable which follows it, is pronounced according to the tone rules for low consonant symbols, for instance:

1. If the first consonant symbol is a middle consonant symbol and it precedes a low consonant symbol, in most cases, it converts the low consonant symbol into a middle consonant. So both an intruded syllable and the syllable which follows it are pronounced according to the tone rules for middle consonant symbols. In rapid speech, the intruded syllable is unstressed and /a/ becomes neutralised as /ə/ and the tone of a syllable is changed from whatever it may be to be a mid tone.

| <นั้นๆ> | /phaʔ-təŋ/ → /phaʔ-təŋ/ "to face" |
|<กระชาน> | /khaʔ-buːn/ → /khaʔ-buːn/ "procession" |
|<นั้นๆ> | /tʰhaʔ-pʰθʔ/ → /tʰhaʔ-pʰθʔ/ "to be particular to" |
|<จั่น> | /ʔatʔ-saʔ-win/ → /ʔatʔ-saʔ-win/ "knight" |
|<พิษ> | /ʔatʔ-saʔ-di:/ → /ʔatʔ-saʔ-di:/ "police in a prison" |

| <กิจ> | /ʔaʔ-istik/ → /ʔaʔ-istik/ "to be funny, comical" |
|<บูรา> | /ʔaʔ-naːt/ → /ʔaʔ-naːt/ "to be a pity" |
In rare cases, no conversions occur. Each of the two consonant symbols governs the tone of its own syllable in accordance with the rules for its own tonal class. So the intruded syllable is pronounced according to the tone rules for middle consonant symbols, and the syllable which follows it is pronounced according to the tone rules for low consonant symbols. For instance:

- [해사] `/_tcaʔ-rit/ → /-_tcaʔ-rit/  "affectation"
- [해사] `/_tcaʔ-mu:k/ → /-_tcaʔ-mu:k/  "nose"
- [해사] `/_ut-taʔ-lut/ → /-_ut-te_lut/  "to be in confusion"

3. With all other combinations of consonant symbols, no conversions occur. Each of the two consonant symbols, therefore, governs the tone of its own syllable in accordance with the rules for its own tonal class, whatever it may be, i.e.

(a) a high consonant symbol precedes a middle consonant symbol.

- [해사] `/_phaʔ-tpon/ → /-_phaʔ-tpon/  "to fight"
- [해사] `/_saʔ-de:q/ → /-_saʔ-de:q/  "to perform"
- [해사] `/rat-thaʔ-ba:n/ → /_rat-thaʔ-ba:n/  "government"
(b) a middle consonant symbol precedes a high consonant symbol.

<เก่งเรื่อย> /-kaʔ/se:m / → /-kaʔ/se:m / "to be happy"
<สำนัก> /-kaʔ/si:an / → /-kaʔ/si:an / "milk"

(c) a low consonant symbol precedes a high consonant symbol.

<สำนัก> /-waʔ/ san / → /-we san / "rainy season"
<สำนัก> /-phʔaʔ/hu:phot / → /-phʔaʔ/hu:phot / "plural"

(d) a low consonant symbol precedes a middle consonant symbol.

<สำนัก> /-kʰaʔ/tiʔ / → /-kʰaʔ/tiʔ / "motto"

As already seen in all examples, when pronounced in running connected speech the intruded syllable is unstressed, and /aʔ/ becomes neutralised as /a/, and the tone of the syllable is changed from whatever it may be to a mid tone. When /aʔ/ is neutralised as /a/ and also accompanied by tonal change, the neutralised syllable is called "linker syllable" by Peter Bee. Bee suggested in his article "Restricted Phonology in Certain Thai Linker-Syllables", Studies in Tai Linguistics in Honour of William J. Gedney, (1975, p.17) that

"... phononologists agree that vowel quantity is phonemic in Thai. The syllables which I wish to term linker syllables have as vowel the phoneme /a/, a short vowel quantitatively speaking, realized as [ə]."

Bee gives some examples, e.g. phannana, ʔēkkaraat, sāttawat, etc., the middle syllables of each word are called linker-syllables by Bee. He suggests that linker syllables do not
conform to the accepted phonological rule that all Thai syllables which are phonemically short must close with some final consonant or other. Only in artificial dictation style do they close with a glottal final. Only in dictation style, they bear the phonemic tone we would expect from the spelling. Otherwise, (in normal speech, that is) the pitch of the syllables seems to be self-adjusting, as unobtrusive as a linker should be, accommodating itself to the clear realisation of tones in what went before and what is to come after.

Permissible consonant clusters as discussed on pp.138-143 are pronounced with an intruded vowel /a/ between the two consonants in many words. When they are pronounced as such, the rules for determining the tones of the intruded syllable with the vowel /a/ and the syllable which follows are the same as those which have already been discussed.

Examples

\(<\text{ษ} > = <\text{pr}> in <\text{บริษัท}> is pronounced as
\(/ -\text{pa?} -\text{rin}-\text{ja}: / \rightarrow / -\text{pa}-\text{rin}-\text{ja}: / "\text{diploma, degree}"
\/<\text{ล} > = <\text{pl}> in <\text{พลัง}> is pronounced as
\(/ -\text{pa?}-\text{lat} / \rightarrow / -\text{pa}-\text{lat} / "\text{administrative assistant, deputy}"
\/<\text{ทร} > = <\text{tr}> in <\text{ตรัสร> is pronounced as
\(/ -\text{ta?-ra:n} / \rightarrow / -\text{ta}-\text{ra:n} / "\text{prison}"
\/<\text{คร} > = <\text{kr}> in <\text{ครัต}> is pronounced as
\(/ -\text{ka?\text{^r}u?-na:} / \rightarrow / -\text{ka}-\text{ru-na:} / "\text{mercifulness}"
\/<\text{คว} > = <\text{kw}> in <\text{ควง} > is pronounced as
\(/ -\text{ka?-wi:} / \rightarrow / -\text{ka}-\text{wi:} / "\text{poet}"

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"<ผ์า> = <pʰ> in <ผ์ิภ> is pronounced as
/phaʔ-iit /  →  /pʰaʔ-iit / "to produce"

"<ผ์า> = <pʰ> in <ผ์ิภ> is pronounced as
/phaʔ-laʔ /  →  /pʰaʔ-laʔ / "physical strength"

For syllable-initial consonant sequences pronounced
with an intruded vowel /ɔ:/, no conversions of the tone of the
following consonant symbol by means of the preceding consonant
symbol occurs. So each of the two consonant symbols governs the
tone of its own tonal class, whatever it may be. When pronounced
in running connected speech, the intruded syllable is unstressed,
and the intruded /ɔ:/ becomes /ɔ/ as shown below. The intruded
syllable with /ɔ:/ is underlined.

"<ผี่>  /-boː-di:/  →  /bɔ-ːdi:/  "great, king"

"<ผิภิภ>  /-boː-riʔ-kaːn /  →  /bɔ-ː-riʔ-kaːn / "service"

"<ะะ่ะ>  /θɔː-raʔ-maːn /  →  /θɔ-ː-raʔ-maːn / "to torture"

"<ะะ่ะ>  /sɔː-raʔ-sak /  →  /sɔ-ː-raʔ-sak / "elegant word for
to be brave"

"<ะะ่ะ>  /ʔak sɔː-raʔ-saːt /  →  /ʔak sɔ-ː-raʔ-saːt / "liberal arts"
Chapter 8

VOCALIC SYMBOLS
Chapter 8

VOCALIC SYMBOLS

8.1 THE SHAPES OF VOCALIC SYMBOLS AND THEIR RULES
OF ORTHOGRAPHY

Vocalic symbols in the present Thai script represent
eighteen monophthongs, twenty diphthongs and three triphthongs.
A number of vocalic symbols have different forms when they occur
in a syllable with a final consonant symbol. Vocalic symbols
are divided into two main types:

1. Simple vocalic symbols: composed of one component.

They are written either in front, after, above or below a syllable-
initial consonant symbol. The following are some examples:

in front: (i) in a syllable with a single initial consonant symbol,
\(<\text{tn}\> = \langle e:t^h \rangle /-\text{the}/ "to pour"
\(<\text{t}s^m\> = \langle e:ln \rangle /-\text{le:n}/ "very wet mud"

(ii) in a syllable with initial consonant sequences,
\(<\text{p}l\> = \langle e:pl \rangle /-\text{ple}/ "a cradle"
\(<\text{pr}^m\> = \langle e:kro \rangle /-\text{kre:}/ "to be in awe of"

after: (i) in a syllable with a single initial consonant symbol,
\(<\text{ta}\> = \langle ta: \rangle /-\text{ta}/ "eyes"
\(<\text{ta}^m\> = \langle ta:m \rangle /-\text{ta:m}/ "to follow"
(ii) in a syllable with initial consonant sequences,
\[ <\text{ปลา}> = <\text{pla}:> \quad /'-\text{pla}:/ \quad "\text{fish}" \]
\[ <\text{ปลาด} > = <\text{p}^h\text{la} : d > \quad /'\text{p}^h\text{la} : t / \quad "\text{to miss, fail, slip}" \]

above: (i) in a syllable with a single initial consonant symbol,
\[ <\text{ต} > = <\text{t} > \quad /'-\text{ti}:/ \quad "\text{to hit}" \]
\[ <\text{หิน} > = <\text{t} \text{n}> \quad /'-\text{ti}:n/ \quad "\text{feet}" \]

(ii) in a syllable with initial consonant sequences, the vocalic symbol is written on the second consonant of the sequences,
\[ <\text{ทร} > = <\text{tr} > \quad /'-\text{tri}/ \quad "\text{literary word for three}" \]
\[ <\text{ปลาด} > = <\text{pl} \text{n} > \quad /'-\text{pl} \text{n}/ \quad "\text{water leech}" \]

below: (i) in a syllable with a single initial consonant symbol,
\[ <\text{ด} > = <\text{d} > \quad /'-\text{du}: / \quad "\text{to be fierce, cruel, harsh}" \]
\[ <\text{กด} > = <\text{k}^h\text{d} > \quad /'-\text{k}^h\text{ut} / \quad "\text{to dig}" \]
\[ <\text{กข} > = <\text{k} \text{x} > \quad /'-\text{k} \text{x}/ \quad "\text{teacher}" \]
\[ <\text{ปลุก} > = <\text{pl} \text{k} > \quad /'-\text{pl} \text{k}/ \quad "\text{to grow plants}" \]

2. Complex vocalic symbols: composed of two or three components. Simple vocalic symbols (except the ones written under a syllable-initial consonant symbol), and consonant symbols ำ, ฯ, ฯ, ฯ = ʔ, w, j also function as one of the components


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of a complex vocalic symbol. But when functioning as component parts of a complex, they have phonetic values which have no relation to the values they have when functioning as simple vocalic symbols or as consonant symbols. One has to memorise complex symbols as independent units. Simple vocalic symbols, when functioning as a component of a complex, still stay in the same place as they do when they are independent simple vocalic symbols. Two components of a complex can be written successively in front or after a syllable initial consonant symbol, but not above.

Ambiguity in reading the Thai script is caused by vocalic symbols being written in various places in a syllable and because a simplex can function as one of the components of a complex. For example:

<ชวล> = <e:pʰla:> can be read as

(i) a monosyllabic word /-pʰla:/ "axle, shaft". Here the consonant sequence <เษ> = <pʰ> functions as a syllable-initial consonant cluster /pʰ-1/ and <1-7> functions as a complex vocalic symbol for /aː/.

(ii) it might also be read as a two-syllable word /-pʰe:-la:/ "time, occasion", if we consider that in a syllable <เษ> /-pʰe:/, <1> = <e:> functions as a simple vocalic symbol for /e:/ and <เษ> = <pʰ> represents a syllable-initial consonant symbol for /pʰ-1/. In a syllable <เษ> /-1a:/, <เษ> = <1> functions as a syllable-initial consonant symbol for /1-1/ and <-1> = <a:> represents a simple vocalic symbol for /aː/.
It is evident that the ambiguity in reading this group of sound symbols is caused by vocalic symbols being written in various places in a syllable and because a simplex can function as one of the components of a complex. So it is ambiguous if <l> represents two simple vocalic symbols, (a) <l> of a syllable /pʰe:/, and (b) <l> of a syllable /lə:/; as well as functioning as a complex vocalic symbol <l> of a syllable /pʰlau/.

Ambiguity in reading Thai writing also arises from using the same sound symbols to represent both vocalic/consonant symbols. For example:

<p>h = /pʰ/ can be read as a monosyllabic word /pʰəm/ "to be skinny", if we treat <q> as a vocalic symbol for /ə:/ And it can also be read as a two-syllable word /pʰlaughter/ "to vomit", if we consider <q> as a syllable-initial consonant symbol for /ʔ/ of the syllable /ʔom/.

The vocalic symbols of the present Thai script are the same as those of the Sukhothai script, King Li Thai script and King Narai script in that they are always written with a syllable-initial consonant symbol <q> = <ʔ>. This is because vowels in Thai are always pronounced with an initial glottal stop /ʔ/ as /ʔi-, ʔe/, etc. To write a syllable /ʔi:/, for example, the vocalic symbol for /i:/ is written with a consonant symbol for /ʔ/ as <q>. Details have already been given in chapter 5, p. 113.

1 The vocalic symbol for /i:/ is written above the syllable-initial consonant symbol in Thai writing.
It is important to note here once again that in a stressed syllable without a final consonant symbol, short vocalic symbols represent phonetic values of the vowels plus a glottal stop as /_ti?, _te?, _te?/, etc., since all short vowels not followed by a consonant or another vowel in a syllable are always followed by a glottal stop in stressed syllable. In unstressed syllable the glottal is dropped and often accompanied by tonal change. For example,

\[
\text{soldier} \quad \rightarrow \quad /\text{tha} \text{ha:n}/
\]

\[
\text{blessing} \quad \rightarrow \quad /\text{si} \text{ri}/
\]

\[
\text{literary word for morning} \quad \rightarrow \quad /\text{si} \text{ri}/
\]

\[
\text{history} \quad \rightarrow \quad /\text{pra} \text{wat-ti} \text{sa:t}/
\]

\[
\text{square} \quad \rightarrow \quad /\text{tcat-tu} \text{rat}/
\]

Theeraphan Luangthongkham suggested that vowel change and vowel reduction in unstressed syllables are quite common. The following are her examples: ¹

(a) vowel length is no longer distinctive: short vowels remain short and long vowels are shortened.

tapu: 'nail' \(\rightarrow\) tapu:
pen'ro:k_pra?_sa:t 'nervous breakdown' \(\rightarrow\) pen'ro:k prasa:t

(b) vowels become centralised, e.g.

tapu: 'nail' \(\rightarrow\) tapu:
khra:wa:n 'caravan' \(\rightarrow\) khrawa:n

(c) diphthongs become monophthongs, e.g.

\[ \text{'mai, hen khrai 'to see nobody' } \rightarrow \text{'ma, hen khrai} \]
\[ \text{kin,sia_thi? 'Eat it' } \rightarrow \text{kin-sa_thi?} \]

(d) tripthongs become diphthongs, e.g.

\[ \text{pai 'duei kan 'to go together' } \rightarrow \text{pai 'due kan} \]
\[ \text{ro:/diau -na? 'wait a minute' } \rightarrow \text{ro:/ die-na?} \]

The shapes of vocalic symbols of the present Thai script and their rules of orthography are illustrated in Figure 8.1. The dash shows the position of syllable-initial consonant symbols. \( C_3 \) represents a syllable-final consonant symbol.
### Figure 8.1

#### 1. MONOPHTONGS

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Thai symbols</th>
<th>Examples</th>
<th>Simple or complex</th>
<th>Transcription and meanings of examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 /ɨ/ - #</td>
<td>- C₃</td>
<td>ฎา่</td>
<td>S</td>
<td>/ɨː/ to criticize</td>
</tr>
<tr>
<td></td>
<td></td>
<td>พิณ</td>
<td></td>
<td>/tìː/ to adjoin</td>
</tr>
<tr>
<td>2 /ɨː/ - #</td>
<td>- C₃</td>
<td>ฎา้</td>
<td>S</td>
<td>/ɨː/ to hit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>พิณ</td>
<td></td>
<td>/tìː/ feet</td>
</tr>
<tr>
<td>3 /ɤ/ - #</td>
<td>- C₃</td>
<td>ฎา็</td>
<td>C</td>
<td>/ɤː/ to be mushy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>พิณ</td>
<td></td>
<td>/tìːp/ nails</td>
</tr>
<tr>
<td>4 /ɛː/ - #</td>
<td>- C₃</td>
<td>ฎา็</td>
<td>S</td>
<td>/ɛː/ trick</td>
</tr>
<tr>
<td></td>
<td></td>
<td>พิณ</td>
<td></td>
<td>/tìːn/ very wet mud</td>
</tr>
<tr>
<td>5 /ɛ/ - #</td>
<td>- C₃</td>
<td>ฎา่</td>
<td>C</td>
<td>/ɛː/ to pick out</td>
</tr>
<tr>
<td></td>
<td></td>
<td>พิณ</td>
<td></td>
<td>/kʰɛː/ to be hard, firm</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Thai symbols</th>
<th>Examples</th>
<th>Simple or complex</th>
<th>Transcription</th>
<th>and meanings of examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. /ɛn/ - #</td>
<td>น- น- ถ- ถ-</td>
<td>ถ- ถ-</td>
<td>S</td>
<td>/kʰɛn/</td>
<td>the moon</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/kʰɛn/</td>
<td>arms</td>
</tr>
<tr>
<td>7. /a/- #</td>
<td>ป- ป- ป- ป-</td>
<td>S</td>
<td></td>
<td>/paa/</td>
<td>to meet</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/paa/</td>
<td>in, at</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/pak/</td>
<td>to embroid</td>
</tr>
<tr>
<td>8. /a/- #</td>
<td>ป- ป- ป- ป-</td>
<td>S</td>
<td></td>
<td>/pa:/</td>
<td>to throw</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/pa:/</td>
<td>mouth</td>
</tr>
<tr>
<td>9. /ɔ/- #</td>
<td>ป- ป- ป- ป-</td>
<td>C</td>
<td></td>
<td>/ɔp:/</td>
<td>to take the hem out</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/ɔp:/</td>
<td>to lock</td>
</tr>
<tr>
<td>10. /ɔ/- #</td>
<td>ป- ป- ป- ป-</td>
<td>S</td>
<td></td>
<td>/tɔn/</td>
<td>serene</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/tɔn/</td>
<td>of the word&lt;เกี่ยง&gt;</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/tɔn/</td>
<td>a literary</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/tɔn/</td>
<td>word for walking</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/tɔn/</td>
<td>to reserve</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td></td>
<td></td>
<td>/tɔn/</td>
<td>to go, move about</td>
</tr>
<tr>
<td>Phonetic values</td>
<td>Thai Symbols</td>
<td>Examples</td>
<td>Simple or complex</td>
<td>Transcription and meanings of examples</td>
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<td>-----------------</td>
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<td></td>
</tr>
<tr>
<td>11 /o/ - #</td>
<td>ㅏ ㅑ</td>
<td>ㅗㅑ</td>
<td>C</td>
<td>/pɔː/ to pile on thickly (as paint, plaster)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-C₃</td>
<td>-C₃</td>
<td></td>
<td>/pɔk/ cover, to cover</td>
<td></td>
</tr>
<tr>
<td>12 /o/ - #</td>
<td>ㅏ ㅑ</td>
<td>ㅗㅑ</td>
<td>S</td>
<td>/pɔː/ to be barely clothed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-C₃</td>
<td>-C₃</td>
<td></td>
<td>/pɔm/ to bulge, protrude</td>
<td></td>
</tr>
<tr>
<td>13 /u/- #</td>
<td>ㅗ ㅗ</td>
<td>ㅗㅛ</td>
<td>S</td>
<td>/pʊː/ to be decayed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-C₃</td>
<td>-C₃</td>
<td></td>
<td>/pʊ/ to emerge, rise up</td>
<td></td>
</tr>
<tr>
<td>14 /u/- #</td>
<td>ㅗ ㅗ</td>
<td>ㅗㅛ</td>
<td>S</td>
<td>/pʊː/ person</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-C₃</td>
<td>-C₃</td>
<td></td>
<td>/pʊk/ to tie, bend</td>
<td></td>
</tr>
<tr>
<td>Phonetic values</td>
<td>Thai symbols</td>
<td>Examples</td>
<td>Simple or complex</td>
<td>Transcription and meanings of examples</td>
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<td>--------------------------------------</td>
<td></td>
</tr>
<tr>
<td>15. /t/ - #</td>
<td>/-t/</td>
<td>/t'k/</td>
<td>C</td>
<td>/t'k'/ to meet by chance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/-t/</td>
<td>/t'k/</td>
<td>C</td>
<td>/t'k'/ to flood</td>
<td></td>
</tr>
<tr>
<td>16. /s/ - #</td>
<td>/-s/</td>
<td>/s'k/</td>
<td>C</td>
<td>/s'k'/ to swell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/-t/</td>
<td>/s'k/</td>
<td>C</td>
<td>/s'k'/ to account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/-s/</td>
<td>/s'k/</td>
<td>C</td>
<td>/s'k'/ to semester</td>
<td></td>
</tr>
<tr>
<td>17. /w/ - #</td>
<td>/-w/</td>
<td>/w'k/</td>
<td>S</td>
<td>/w'k'/ &quot;faintly, slightly&quot; used esp. with /n'w'/ &quot;smell bad&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/-w/</td>
<td>/w'k/</td>
<td>S</td>
<td>/w'k'/ brick building</td>
<td></td>
</tr>
<tr>
<td>18. /w/ - #</td>
<td>/-w/</td>
<td>/w'k/</td>
<td>C</td>
<td>/w'k'/ to be heavy, stuffed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/-w/</td>
<td>/w'k/</td>
<td>C</td>
<td>/w'k'/ to be shallow, superficial, easy</td>
<td></td>
</tr>
</tbody>
</table>
2. DIPHTHONGS

<table>
<thead>
<tr>
<th>Phonetic values</th>
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<tbody>
<tr>
<td>19. /ia/</td>
<td>ลำ</td>
<td>ลำ</td>
<td>C</td>
<td>/pʰia/ a slap, the sound of a slap</td>
</tr>
<tr>
<td></td>
<td>- #</td>
<td>ลำ</td>
<td>C</td>
<td>/pʰia/ to be worn out</td>
</tr>
<tr>
<td></td>
<td>- C₃</td>
<td>ลำ</td>
<td>C</td>
<td>/pʰiǎn/ in the word /pʰiǎn⁴pʰam/ to make a wrong move, mistake</td>
</tr>
<tr>
<td>20. /ia/</td>
<td>ลำ</td>
<td>ลำ</td>
<td>C</td>
<td>/jǔa/ to be angry</td>
</tr>
<tr>
<td></td>
<td>- #</td>
<td>ลำ</td>
<td>C</td>
<td>/jǔa/ to provoke, annoy</td>
</tr>
<tr>
<td></td>
<td>- C₃</td>
<td>ลำ</td>
<td>C</td>
<td>/jǔap/ to fall in</td>
</tr>
<tr>
<td>Phonetic values</td>
<td>Thai symbols</td>
<td>Examples</td>
<td>Simple or complex</td>
<td>Transcription and meanings of examples</td>
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<td>----------------</td>
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<td>------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>23/ʔa/</td>
<td>̂/ำ/</td>
<td>ำง</td>
<td>C</td>
<td>ʔa/ the sound of disgusting</td>
</tr>
<tr>
<td>24/ʔa/</td>
<td>̂/ำ/</td>
<td>ำง</td>
<td>C</td>
<td>ʔa/ to help, support</td>
</tr>
<tr>
<td></td>
<td>-C₂</td>
<td>ำง</td>
<td>C</td>
<td>ʔa/ to reach for</td>
</tr>
<tr>
<td>25/iu/-</td>
<td>iě/ีว</td>
<td>C</td>
<td>/hiu/ to be hungry</td>
<td></td>
</tr>
<tr>
<td>26/êu/-</td>
<td>iě/ีว</td>
<td>C</td>
<td>/êu/ to be quick</td>
<td></td>
</tr>
<tr>
<td>27/eːu/-</td>
<td>iě/ีว</td>
<td>C</td>
<td>/eːu/ to be bad</td>
<td></td>
</tr>
<tr>
<td>28/eu/-</td>
<td>่ง/ง่าย</td>
<td>C</td>
<td>/pʰeu/ to jump, leap</td>
<td></td>
</tr>
<tr>
<td>29/eu/-</td>
<td>่ง/ง่าย</td>
<td>C</td>
<td>/mɛu/ cut</td>
<td></td>
</tr>
<tr>
<td>Phonetic symbols</td>
<td>Thai symbols</td>
<td>Examples</td>
<td>Simple or complex</td>
<td>Transcription</td>
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<td>------------------</td>
<td>-------------</td>
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<td>-------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>30 /ai/</td>
<td>-นั้</td>
<td>น้ำ</td>
<td>S</td>
<td>/nài/</td>
</tr>
<tr>
<td></td>
<td>-นิ</td>
<td>นิ</td>
<td>S</td>
<td>/nài/</td>
</tr>
<tr>
<td></td>
<td>-นิ</td>
<td>นิ</td>
<td>C</td>
<td>/tài/</td>
</tr>
<tr>
<td></td>
<td>-นั้</td>
<td>นั้</td>
<td>C</td>
<td>/nài/</td>
</tr>
<tr>
<td>31 /ai/</td>
<td>-นั้</td>
<td>น้ำผัก</td>
<td>C</td>
<td>/nài/</td>
</tr>
<tr>
<td>32 /au/</td>
<td>-ำ</td>
<td>นำ</td>
<td>C</td>
<td>/kʰɔː/</td>
</tr>
<tr>
<td>33 /au/</td>
<td>-ำ</td>
<td>นำ</td>
<td>C</td>
<td>/kʰɔː/</td>
</tr>
<tr>
<td>34 /ɔi/</td>
<td>ɔ</td>
<td>ɔ</td>
<td>C</td>
<td>/pʰɔːi/</td>
</tr>
<tr>
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</tr>
<tr>
<td>35 /ɔ:i/-#</td>
<td>- ระ</td>
<td>คุณ</td>
<td>C</td>
<td>/kʰɔ:i/ to wait</td>
</tr>
<tr>
<td>36 /ɔ:i/-#</td>
<td>- ระ</td>
<td>คุณ</td>
<td>C</td>
<td>/dɔ:i/ by, with, by means of</td>
</tr>
<tr>
<td>37 /u:i/-#</td>
<td>- ระ</td>
<td>คุณ</td>
<td>C</td>
<td>/kʰu:i/ to talk</td>
</tr>
<tr>
<td>38 /i:i/-#</td>
<td>- ระ</td>
<td>คุณ</td>
<td>C</td>
<td>/kʰ:i:i/ to be used to</td>
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3. TRIPHTHONGS

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<td>40 /uai/-#</td>
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<td>C</td>
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<td>คุณ</td>
<td>C</td>
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8.2 REMARKS ON THE VOWEL /a/

8.2.1 The choice of writing \(<\vec{a}>\) for /a/

The vowel /a/ in a syllable without a final consonant symbol is represented by a symbol \(<\vec{a}>\), known as ³วิพิธธนิ: ¹wiʔ'san'tʔa?niː/. But \(<\vec{a}>\) is sometimes unwritten and that gives rise to having syllable-initial consonant sequences pronounced with an intruded vowel /a/ in the Thai writing system as already discussed in chapter 7, pp.150-155. The choice of writing \(<\vec{a}>\) or not is determined mainly by the dictates of the rules of correct spelling and that causes a tremendous burden for a learner of Thai writing to remember in which cases \(<\vec{a}>\) should be written. However, I found that in the following cases \(<\vec{a}>\) is normally written:

1. In monosyllabic words pronounced with /a/, i.e. 
\(<\varepsilon]\ /pʰa?/ "to meet"
\(<\varepsilon]\ /pʰla?/ "to turn away (from), move away (from), part (with), leave, abandon"

There is one monosyllabic word in which \(<\vec{a}>\) is not written, and that is \(<\varepsilon]\ /nʔa?/ "at, in, of (place or time)".

2. When /a/ occurs in a final syllable of a polysyllabic word, \(<\vec{a}>\) is always written, e.g.
\(<\varepsilon]\ /sɪːsaʔ/ "head"
\(<\varepsilon]\ /mʔaːnaʔ/ "effort"
\(<\varepsilon]\ /mʔaːraʔ/ "occasion"
\(<\varepsilon]\ /wiːraʔ/ "bravery"
3. When /o/ occurs in a non-final syllable of a polysyllabic word, <-t> is either written or unwritten. Rules indicating when <-t> should be written, are not definite. The choice of writing <-t> or not is determined mainly by the dictates of the rules of correct spelling. However, Kamchay Thonglo stated in his Thai Grammar (1976, pp.193-195) that in the following cases <-t> should be written.

(i) in pure Thai words, for example,
< ติสาน > /-sa?-pa:n/ "bridge"
< มะละกอ > /'ma?la?-ko:/ "papaya"

(ii) in pure Thai words or words of any foreign origin which syllable-initial consonants are /kr-, tr-, pr-, phr-/, for instance,
< กระติก > /-kra?_tik/ "flask"
< บรรทศ > /-_tra?-ku:n/ "ancestry"
< ประกาศ > /-_pra?_ka:t/ "announcement"
< พระราช > /-phra?-ba:t/ "royal term for foot"

In the syllables /-kra/, /-_tra/, /-_pra/, /'phra?/ of the words above; if the vocalic symbol <-t> were not written, they might also be read as /-ko:n/, /-to:n/, /-po:n/ and /-pho:n/. This is because in Thai writing a vocalic symbol for /o:/ is not written when the vowel /o:/ occurs in a closed syllable having <-t> = <r> as a final consonant /-n/.

(iii) in words of any foreign origin, except those of Pali, Sanskrit or English origin, i.e.
"ba?_mi:/ "a kind of noodles" (Chinese)
"ra?-tu:/ "the governor of the town" (Indonesian)
"ma?-de:'wi:/ "queen" (Indonesian)
"ra?-bi:ap/ "1. order (as of things arranged) 2. system, form 3. rules" (Cambodian)

(iv) in a syllable pronounced with /a/ of disyllabic words which derive from compound words, <-z> is written, for example,

<ตา> /-ta:/ "eyes" + <ปี> /-pu:/ "crab" ——
<จม> /_ta?-pu:/ "nail"
<ตา> /-ta:/ "eyes" + <วัน> /-wan/ "day" ——
<พระ> /_ta?-wan/ "the sun"

In a non-final syllable of a polysyllabic words of Pali or Sanskrit or English, <-z> is not written, for example:

<จิตรณา> /_ra?_tcha?-ra:/ "angel" (Pali)
<ขันธะ> /-nan_tcha?-na:/ "joy" (Sanskrit)
<กล> /_sa?-ki:/ "ski" (English)
<กลมิ]า> /_sa?_ma:t/ "smart" (English)

8.2.2 The dual function of <-z>

Examination of the present Thai script reveals the fact that <-z> has two functions, as follows:

1. It represents /a/ when used alone in a syllable without a final consonant symbol as already discussed on p.170.

2. When used as a component of a long complex vocalic
symbol; it functions as a vowel-shortening symbol of that long vowel. In the present Thai script it is written with the vocalic symbols <ā→ /e/, <ā-→ /e/, <ā-ə → /au/, <ā→ /o/, <ā-ā → /o:, <ā-ə → /i:a/, <ā → /u:a/ and <ā-ə → /w:a/ to obtain <ā-→ /e/, <ā-ə → /e/, <ā-ə → /o/, <ā-ə → /i/, <ā-ə → /ia/, <ā-ə → /ua/ and <ā-ə → /wa/, as already illustrated in the chart on pp.162-167.¹

The frequency of occurrence of the short diphthongs /ia/, /ua/ and /wa/ is much lower than their long counterparts /i:a/, /u:a/ and /w:a/. They are used only in onomatopoes and certain foreign words. E.J.A. Henderson stated in her article "Prosodies in Siamese: A Study in Synthesis" (Jones and Laver, Phonetics in Linguistics: A Book of Readings, 1973, p.131) that:

"... shortness in syllables of this pattern may be a special feature proper to onomatopoes and certain foreign words, and not of general application."

The complex vocalic symbols <ā→ /e/, <ā-ə → /e/, <ā-ə → /o/, <ā-ə → /i/ which have <ā→ as one of the components are used only in a syllable without a final consonant symbol. When the vowels occur in a syllable with a final consonant symbol, they are represented by different forms of vocalic symbols which will be

¹. It is unusual that a vocalic symbol for /ɔ/ is obtained by the combination of a vocalic symbol <ā→ /au/ plus <ā→ as opposed to <ā→ instead of by the combination of a vocalic symbol <ā→ /ɔ:/ plus <ā→ as it should be.
When /a/ is followed by a syllable-final consonant symbol, it is represented by a special symbol called /han-ka:tl/ and is written above a syllable-initial consonant symbol. For example:

\[
\text{<\text{"han"> = <\text{\text{"w\text{"an}}}}} /-\text{\text{"wan}}/ \text{"day"}
\]

\[
\text{<\text{"\text{"r\text{"an}}}> = \text{<\text{"\text{"r\text{"k}}}}} /-\text{\text{"rak}}/ \text{"to love"}
\]

\[
\text{<\text{"\text{"l\text{"an}}}> = \text{<\text{"\text{"l\text{"k}}}}} /-\text{\text{"lak}}/ \text{"to steal"}
\]

In a syllable with initial consonant sequences, it is written above the second consonant symbol. For example:

\[
\text{<\text{"\text{"p\text{"b\text{"a}}}}} = \text{<\text{"\text{"p\text{"b\text{"p}}}}} /-\text{\text{"prap}}/ \text{"to fine"}
\]

\[
\text{<\text{"\text{"k\text{"w\text{"a}}}}} = \text{<\text{"\text{"k\text{"w\text{"w}}}}} /-\text{\text{"k\text{"wan}}}/ \text{"smoke"}
\]

\[
\text{<\text{"\text{"p\text{"l\text{"a}}}}} = \text{<\text{"\text{"p\text{"l\text{"p}}}}} /-\text{\text{"phian}}/ \text{"suddenly, immediately"}
\]

8.3 OTHER FORMS OF VOCALIC SYMBOLS FOR /e/, /o/, /u/, /i/ AND /o/ IN A SYLLABLE WITH A FINAL CONSONANT SYMBOL

8.3.1 For the vowels /e, e, o/

/e/ is represented by \text{<\text{"\text{"e\text{"t}}}}} as in the word \text{<\text{"\text{"e\text{"t}}}}} /-\text{\text{"tem}}/ \text{"to be full"}

/\text{e}/ is represented by \text{<\text{"\text{"e\text{"t}}}}} as in the word \text{<\text{"\text{"e\text{"t}}}}} /\text{\text{"k\text{"e\text{"n}}}/ \text{"to be hard, firm, strong", and}

/o/ is represented by \text{<\text{"\text{"o\text{"t}}}}} as in the word \text{<\text{"\text{"o\text{"t}}}}} /\text{\text{"l\text{"k}}}/ \text{"to lock"}

In these three vocalic symbols, the symbol}
known as <[^1]virlvi>/ is written with the vocalic symbols <[^1]> /e:/, <[^2]lvir>/e:/ and <[^3]lvir>/ɔ:/ to obtain /e, e and ɔ/. So I would suggest that <[^1]> also functions as a vowel-shortening symbol here. It is, however, different from <[^2]lvir> in that it can be used with the vocalic symbols <[^1]> /e:/, <[^2]> /e:/ and <[^3]> /ɔ:/ only in a syllable with a final consonant symbol and when there is no tonal marker required in the writing of a syllable as in the examples above.

In a syllable with a final consonant symbol and a tonal marker, /e/ ~ /e:/, /e/ ~ /e:/ and /ɔ/ ~ /ɔ:/ are represented by the same vocalic symbols, as seen in the examples below:

   "to be keen in something" is read with a short vowel /e/ as /keŋ/.
   "deer" is read with a long vowel /e:/ as /keŋ/.

2. <[^2]C3> for /e/ ~ /e:/
   "1. to fix up; 2. to compare; 3. to ornament" is read with a short vowel /e/ as /teŋ/.
   "1. to daub, smear, anoint. 2. point, score (in game or contest)" is read with a long vowel /e:/ as /tem/.
3. $\langle \! - \! C_3 \! \rangle$ for /ə/ ~ /ɔː/ 

$\langle \! ง้ํา \! \rangle$ "groove, channel, ditch" is read with a short vowel as /ˈrɔː/.

$\langle \! งิ่ว \! \rangle$ "to be hot" is read with a long vowel as /ˈrɔːːn/.

$\langle \! – \! \rangle$ also functions as a vowel-shortening symbol for $\langle \! งื่ – แง \! \rangle = \langle \! \epsilon : u \! \rangle$, $\langle \! งี – แง \! \rangle = \langle \! \epsilon : u \! \rangle$ and $\langle \! – แง \! \rangle = \langle \! \epsilon : i \! \rangle$ to obtain $\langle \! งื่ – แง \! \rangle = \langle \! \epsilon u \! \rangle$, $\langle \! งี – แง \! \rangle = \langle \! \epsilon u \! \rangle$ and $\langle \! – แง \! \rangle = \langle \! \epsilon i \! \rangle$, for example:

/εu/ is represented by $\langle \! งี – แง \! \rangle$ as in the word $\langle \! งิ่ว ก้ํา \! \rangle$ /ˈrεu/ "to be quick"

/εu/ is represented by $\langle \! งี – แง \! \rangle$ as in the word $\langle \! งิ่ว ก้ํา \! \rangle$ /ˈphıeu/ "to jump, leap quickly and suddenly", and

/ɔi/ is represented by $\langle \! – แง \! \rangle$ as in the word $\langle \! งิ่ว ก้ํา \! \rangle$ /ˈphıoi/ "to fall to sleep without having intention to sleep".

All these six vowels /εu/, /εːu/, /εu/, /εːu/, /ɔi/, and /ɔːi/ occur only in a syllable without a final consonant in Thai. Here again $\langle \! – \! \rangle$ can not be used with $\langle \! งื่ – แง \! \rangle$ /εu/, $\langle \! งี – แง \! \rangle$ /εːu/ and $\langle \! – แง \! \rangle$ /ɔːi/ if a tonal marker is required in writing a syllable. In a syllable with a tonal marker /εu/ ~ /εːu/, /εu/ ~ /εːu/, and /ɔi/ ~ /ɔːi/ are also represented by the same vocalic symbols, i.e.

1. $\langle \! งื่ – แง \! \rangle$ for /εu/ ~ /εːu/

$\langle \! งิ่ว \! \rangle$ "exclamation showing teasing" is read with a short vowel /εu/ as /ˈrεu/.
"intensifier used with /e:u/ "watery" is read with a long vowel /e:u/ as /pe:u/.

2. /eu/ ~ /e:u/ a girl's nickname is read with a short vowel /eu/ as /peu/.
   /e:u/ as /re:u/.

   /e:u/ as /re:u/.

   "a snare, trap" is read with a long vowel /e:u/ as /re:u/.

3. /oi/ ~ /o:i/ "to hang" is read with a short vowel /oi/ as /hoi/
   /o:i/ as /no:i/.

   "little" is read with a long vowel /o:i/ as /no:i/.

8.3.2 For the vowel /x/

The vowel /x/ in a syllable without a final consonant symbol is represented by <ɨ-ɀ> as in the word <ɨɀɀɀ> /tɕːʔ/ "to meet by chance". But in a syllable with a final consonant symbol, it is represented by <ɨ-ɀ> . In a syllable with a final consonant symbol, /x:/ is also represented by <ɨ-ɀ> .

1. There are two forms of a vocalic symbol to represent /x:/ in a syllable with a final consonant symbol:

   1. <ɨ-ɀ>, this form was frequently used in the ancient Thai script, especially in the Sukhothai script and King Li Thai script. But in the present Thai script there are only two words written with this form:
   <ɨɀɀɀ> /tɕː:m/ "semester, term"
   <ɨɀɀɀ> /tʰxː:n/ "a final particle used at the end of a religious or court speech"

   2. <ɨ-ɀ>, this form is used in all words pronounced with /x:/, except the two mentioned above.
So both /০/ and /০:/ are represented with the same vocalic symbol. For instance:

- /প্রো/ "to be out of date" is read with a short vowel /০/ as /প্রো/
- /পোল/ "walk" is read with a long vowel /০:/ as /পোল/.

It is clear that it must be rather difficult for a learner of Thai writing to read Thai words since some short vowels and their long counterparts are represented by the same vocalic symbol as shown above. From my own observations I found that, although a short vowel and its long counterpart are represented by the same vocalic symbol, the symbol can be read either short or long depending upon a certain tone, and only in a certain type of syllable. Knowing this point helps a reader, to some extent, to know when the vocalic symbols should be read short or long. Details will be given in chapter 10 about tonal markers.

8.3.3 For the vowel /০/

When the vowel /০/ occurs in a syllable with a final consonant symbol, the vocalic symbol is not written. Only the initial and final consonant symbols are written adjacent to one another. For example, a syllable /লোম/ "wind" is written as <লোম> = <লম>. In a syllable with initial and final consonant sequences, all consonant symbols are written adjacent to one another. For instance, the monosyllabic word /প্রোম/ "Brahma"
is written as $<\text{ขว่า}> = <\text{p}^hr\text{m}>$. Here the sequence $<\text{ขว}> = <\text{p}^hr>$ is a syllable-initial consonant sequence pronounced /pʰr/ and the sequence $<\text{หม}> = <\text{hm}>$ is a syllable-final consonant sequence but only the $<\text{ม}> = <\text{m}>$ is pronounced as /m/ since only one consonant is permitted in a syllable final position in Thai.

Ambiguity in reading Thai writing arises because a vocalic symbol is not always written as can be seen in the example below:

$<\text{ก้วย}> = <\text{o}^h\text{i}\eta>$ can be read either as

1. A monosyllabic word /kʰiːoː/ "to swing". Here the consonant sequence $<\text{ก้วย}> = <\text{k}^h\text{i}>$ functions as a syllable-initial consonant cluster /kʰi-/; $<\text{i}> = <\text{o}>$ functions as a vocalic symbol for /o:/ and $<\text{โย}> = <\eta>$ does as a syllable-final consonant symbol for /-ŋ/.

2. It might also be read as two monosyllabic words /kʰoː/, and /-oːŋ/ (/kʰoː/ = cow, /-oːŋ/ = to go down.) In a syllable /kʰoː/, $<\text{ก้}> = <\text{k}^h>$ functions as a syllable-initial consonant symbol for /kʰ-/. $<\text{i}> = <\text{o}>$ functions as a vocalic symbol for /o:/ In a syllable /-oːŋ/, $<\text{โย}> = <\text{l}>$ functions as a syllable-initial consonant symbol for /l-/. $<\text{โย}> = <\eta>$ functions as a syllable-final consonant symbol for /-ŋ/. The vocalic symbol for /o/ is not written.

Ambiguity in reading this group of sound symbols arises because words are not written with spacing between them in
Thai, so it is uncertain whether it represents a monosyllabic word /-kʰioŋ/ or two monosyllabic words /-kʰo:/, and /-loŋ/. Moreover, I think if vocalic symbols were always written, and were written after a syllable-initial consonant symbol only, ambiguity in reading words would not occur. For example, if a vocalic symbol for /o/ in the syllable /-loŋ/ was written, and a vocalic symbol <ɨ> = <o:> was written after the consonant symbol <ŋ> = <kʰ>, it would be immediately apparent that this group of sound symbols must be read as /-kʰo:/, /-loŋ/ only.

8.4 NOTES ON <รร>

<รร> is a symbol which is composed of two consonant symbols for /r/ written adjacent to one another and it has two functions in the present Thai script:

8.4.1 When it occurs after a syllable-initial consonant symbol <ระ> = <b>, <รผ> = <pʰ>, <ระ> = <m>, <รร> = <tʰ>, <ระ> = <s>, <ระ> = <tɕ>, <ระ> = <k>, <ระ> = <kʰ>, <ระ> = <kʰ> or <ระ> = <h> of a syllable without a final consonant symbol, it represents /-an/. That means it functions as both a vowel and a syllable-final consonant. The following are examples:

1. After <ระ> = <b>

<มิลิล์> /-ban^thuk/ "to load on (a truck, a ship, a train)"
2. After $\langle \text{ŋ} \rangle = \langle p^h \rangle$

$\langle \text{ŋan-ja} \rangle$ /'phan-ja:/ "elegant word for wife"

3. After $\langle \text{m} \rangle = \langle m \rangle$

$\langle \text{man\_ja:t} \rangle$ /'man\_ja:t/ "manners"

4. After $\langle \text{t} \rangle = \langle t^h \rangle$

$\langle \text{than} \rangle$ /'than/ "a human being who lives like gods"

5. After $\langle \text{s} \rangle = \langle s \rangle$

$\langle \text{san} \rangle$ /'san/ "elegant word for to choose, select"

6. After $\langle \text{t} \rangle = \langle t^h \rangle$

$\langle \text{t\_ja} \rangle$ /'t\_ja:/ "etiquette, ethics"

7. After $\langle \text{k} \rangle = \langle k \rangle$

$\langle \text{kan-krai} \rangle$ /'kan-krai/ "scissors"

8. After $\langle \text{h} \rangle = \langle k^h \rangle$

$\langle \text{h\_ja} \rangle$ /'h\_ja:/ "elegant word for colour, complexion"

9. After $\langle \text{h} \rangle = \langle k^h \rangle$

$\langle \text{k\_ja} \rangle$ /'k\_ja:/ "a kind of sword"

10. After $\langle \text{h} \rangle = \langle h \rangle$

$\langle \text{h\_sa} \rangle$ /'h\_sa:/ "joy".

8.4.2 When it occurs after a syllable-initial consonant symbol $\langle \text{w} \rangle = \langle w \rangle$, $\langle \text{t} \rangle = \langle t^h \rangle$, $\langle \text{s} \rangle = \langle s \rangle$, $\langle \text{k} \rangle = \langle k \rangle$ or $\langle ? \rangle = \langle ? \rangle$ of a syllable with a final consonant, it represents /a/. That means it functions only as a vowel of the syllable.

For example:

1. After $\langle \text{w} \rangle = \langle w \rangle$

$\langle \text{wan} \rangle$ /'wan/ "elegant word for colour, complexion"
After \( <\text{ร} > = <\text{ต}^h > \)
\( <\text{ธам} > /-\text{ธาม} / "\text{Buddhist principles}" 

After \( <\text{ส} > = <\text{s} > \)
\( <\text{สัป} / "\text{elegant bound initial element meaning all, all kind of}"

After \( <\text{k} > = <\text{k} > \)
\( <\text{kام} / "\text{misfortune, object (of a verb)}"

After \( <\text{า} > = <\text{ต} > \)
\( <\text{าต} / "\text{elegant word for words}"
\( <\text{ร} > \text{ representing } /\text{a} / \text{ or } /\text{-an} / \text{ is used only in pure Thai words or words of Pali or Sanskrit origin.}

8.5 THREE DIFFERENT WAYS OF WRITING /-am/

There are three ways of writing /-am/ in the present Thai script. The proper spelling of words must be memorised.

8.5.1 \( <\text{ะ} > \), this way of writing /-am/ is used in the following cases:

1. In writing pure Thai words, i.e.
\( <\text{ธำ} > /-\text{ธำ} / "\text{to make, to do}"
\( <\text{จำ} > /-\text{จำ} / "\text{to remember}"

2. In writing Pali and Sanskrit loans, i.e.
\( <\text{นำม:รู้} > /-\text{ถาม:รู้} / "\text{holy}"

3. In writing words of any other foreign origin except those of English origin, i.e.
8.5.2 /a/ can be represented by <ত> as already stated in section 8.4, pp.181-182. So when a final consonant is /m/, /-am/ is represented by <তম>. For example, a monosyllabic word /-tham/ "Buddhist principles" is written as <তঝম>. Here a consonant symbol <ত> = <t> is a syllable-initial consonant /th/, <ত> functions as a vowel /a/, and <ম> = <m> represents a syllable-final consonant /m/. /-am/ written in this way is used only in a few words of Pali or Sanskrit origin.

8.5.3 <তম>, /a/ in a syllable with a final consonant symbol is <তম> as already discussed on p.174. So when C₃ is /m/, a syllable is written as <তম>. This way of writing /am/ is used in the following cases:

1. In writing Pali and Sanskrit loans, i.e.
   <คำพระ} /'samlha:t/ "to interview"
   <คำวะ} /'tam-ho:n/ "sky"

2. In writing English loans, i.e.
   <คำแ} /'pam/ "pump"
   <คำม} /'tan-la?bam/ "album"

8.6 UNWRITTEN <ত> = <o:>

<ত> is a vocalic symbol for /o:/ and it is normally
written to represent /ɔ:/ in a syllable both with and without a final consonant symbol of pure Thai words. For example,

<ต่ำ>  /ˈkʰɔː/  "to beg"
<คอลป>  /ˈkʰɔːŋ/  "canal"

But in the case of words of Pali or Sanskrit origin, <–> is not written; for example:

1. When the vowel /ɔ:/ occurs in an initial open syllable of a polysyllabic word beginning with <ก> = <b>, for instance
<ก็ต>  /bɔː̂-tː/  "king"
<กิจการ>  /bɔː̂-rîʔ-kaːn/  "service"
<กิจกรรม>  /bɔː̂-rîʔ-pʰoːk/  "to consume, eat"
<กิจจากร>  /bɔː̂-rîʔ-tɔːːk/  "to donate"

For the last three examples, it is obvious to a native speaker of Thai that there must be intrusion of /ɔ:/ between /b/ and /r/ although a vocalic symbol for /ɔ:/ is not written, because a cluster /br/ is not permitted in Thai. The word <กิจตรา> /ˈbritːə/ "British" would be pronounced as /bɔː̂-rîʔ-tít/ by the Thai who does not know much English. He would automatically intrude /ɔ:/ between /b/ and /r/, as he always does in reading Thai words.

2. When the vowel /ɔ:/ occurs in an open syllable of a polysyllabic word beginning with <ก> = <w>, <ญ> = <m>,
<ฑ> = <tʰ>, <ฒ> = <tʰ>, <ษ> = <s>, <ษ> = <s>,
<ช> = <s>, <ฌ> = <n>, <ฏ> = <tʃ>, <ฏ> = <h> or
<ฏ> = <ʔ>. The syllable which follows the syllable with /ɔ:/

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is pronounced /"ra?/ in all cases, as in the examples below:

- /-wo:ra?-ka:i/ "elegant word for body"
- /-mə:ra?-na?/ "elegant word for death"
- /-mə:ra?-dok/ "inheritance"
- /-thə:ra?-ma:n/ "to torture"
- /-thə:ra?-jot/ "to betray"
- /-thə:ra?-ni:/ "elegant word for earth, ground, soil"
- /'so:ra?-sak/ "elegant word for to be brave"
- /-?a?so:ra?-phit/ "poison"
- /-ak'so:ra?-se:t/ "liberal arts"
- /-no:ra?-the:p/ "king"
- /-no:ra?-ka:n/ "a female elephant"
- /-tɔ:ra?-don/ "a literary word for travelling"
- /-tɔ:ra?-li:/ "a literary word for walking"
- /'ho:ra?-di:/ "a literary word for south-west"
- /'ho:ra?-da:n/ "a kind of mineral"
- /-?o:ra?-phin/ "elegant word for lotus"
- /-?o:ra?-tɔɔh:n/ "elegant word for to be beautiful"

3. When the vowel /ɔ:/ occurs in a closed syllable having /r/ as a final consonant symbol. In Thai /r/ = /r/ is pronounced as /-n/ in the final position of a syllable. For example:

- /kr/ = /ko:n/ "a literary word for hands"

1. The transcription of examples below are of careful speech. When pronounced in running connected speech /ɔ:/ becomes /ɔ/, and /"ra?/ becomes /-ra/>. 
8.7 FOUR DIFFERENT WAYS OF WRITING /ai/

There are four vocalic symbols to represent /ai/ in the present Thai writing. The proper spelling of words must be memorised.

8.7.1 < 发 > , this vocalic symbol for /ai/ is used in the following cases:

1. In writing pure Thai words, for example
   < ป > /-pai/ "to go"
   < ไกล > /-klai/ "to be far away"
   < ไว > /-wai/ "to be quick, fast".

2. In writing Pali and Sanskrit loans which are pronounced with /ai/, for example
   < ไพ่ส่าเก > /-pha'sa:n/ "elegant word to be extensive, broad, vast"
   < ไวยากร > /-mai-tri:/ "friendship"
   < ไพ่รูป > /-pha'ro:t/ "progress"

3. In writing words of other foreign origin which are pronounced with /ai/, for example
   < วีต > /-wai-ta:-min/ "vitamin" (English)
   < ไมโครโฟน > /-mai-kho:-fо:n/ "microphone" (English)
8.7.2 <ai>, this vocalic symbol for /ai/ is used only in twenty pure Thai words which are listed below:

1. <กน> /-jai/ "to be big, large"
2. <กน> /-mai/ "to be new"
3. <กน> /'hai/ "to give"
4. <กน> /'tcha/i/ "to use"
5. <กน> /'pha/i/ of the word <กน> /-sa?p'ai/ "daughter-in-law"
6. <กน> /-fai/ "to be engrossed in"
7. <กน> /-t'ai/ "heart, mind, spirit"
8. <กน> /-s'ai/ "to put in, insert"
9. <กน> /'lai/ in the word <กน> /'ton' 'lai/ "to be infatuated with"
10. <กน> /-khr'ai/ "who, someone, anyone"
11. <กน> /'khr'ai/ "to desire"
12. <กน> /-bai/ "a boat's sails"
13. <กน> /'s'ai/ "to be clear"
14. <กน> /-d'ai/ "which"

1. All these twenty words have been incorporated in a poem composed to help the Thai to memorise the correct spelling of the words.
2. From my own observations, it has become more common to pronounce this word with a long vowel as /'tcha:i/.
Li Fan Kuei stated in his A Handbook of Comparative Tai (1977, pp.256, 288-289) that in Lungchow, one of the Thai languages spoken in China, words written with /<1-/> in the Thai language are pronounced with /ai/, while words written with /<7-/> are pronounced with /aw/. This gives rise to the hypothesis that in ancient Thai /<1-/> was pronounced as /ai/ and /<7-/> was pronounced as /aw/. Support for this hypothesis is found in the fact that some of the above twenty words have homonyms spelled with /<1-/> , as shown below:

- /<1-/> /`ha:i/ in the word /`ro:`:ha:i/ "to cry": a homonym with no.3
- /<7-/> /`tcai/ "skein (of threads, yarn)" : a homonym with no.7
- /<1it/> /`lai/ "to flow": a homonym with no.9
- /<7it/> /`sai/ "to push, shove (forward, away)" : a homonym with no.13

1. This word is now pronounced with a long vowel as /'ta:i/, although it is written with a short vocalic symbol <ai>.
2. The syllable /<1-/> is now pronounced with a long vowel as /`ha:i/ in present Thai pronunciation, although it is written with a short vowel <ai>.
<ต> /-dai/ as in the word <มหาสน> /-ban-dai/ "stair" : a homonym with no.14

<น> /-nai/ "spinning wheel" : a homonym with no.15

<ท> /'tai/ "torch" : a homonym with no.17

<ภ> /-jai/ "why, what" : a homonym with no.19.

From the evidence above, I venture to suggest that in ancient Thai <ต> and <น> were pronounced differently. <ต> was pronounced as /ai/ and <น> was pronounced as /aw/ as is still the case in Lungchow.

8.7.3 <ต> , this symbol is seldom used, except for writing words of Pali or Sanskrit origin, for example
<พันธุ์> /-phantsong'hai/ "to be countless"
<ถวาย> /-pʰai:warnai/ "king"
<ข้าม> /-ʔa:-tʰa:-nai/ "horse"

8.7.4 <ภ> ; this symbol is used in writing Pali and Sanskrit loans in Thai to indicate that the words are originally foreign.
<ชนะ> /-tʰai/ "victory"
<ชนะ> /-wai/ "age"
<ภัย> /-pʰai/ "danger"
From examples which have already been given, it is clear that ambiguities in reading Thai script are caused by the following factors:

1. Words are written without spacing between them.
2. Vocalic symbols are written in different places in a syllable.
3. Vocalic symbols are not always written.

(Ambiguities caused by these three factors above can be seen in the examples on pp.179-180.)

4. A simplex also functions as one of the components of a complex (see the example on p.158).
5. The same symbols are used both as consonant symbols and also as vocalic symbols (see the example on p.159).
6. There is more than one way to read a given vocalic symbol (see examples on pp.175-178).

There are a number of Thai words which can be read more than one way because of the factors above. This makes it rather difficult for a learner of the Thai writing to obtain the correct pronunciation of the words, unless he understands the context of the utterance well, so that he can guess what the word should be. As far as the spelling is concerned, there is also a problem in writing Thai since a given phoneme may be represented by more than one symbol, for example /ai/ being represented by four symbols, and that causes a burden for a learner of Thai writing to memorise the rules of correct spelling.
Chapter 9

SYLLABLE-FINAL CONSONANT SYMBOLS
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SYLLABLE-FINAL CONSONANT SYMBOLS

All syllable-initial consonant symbols except \( <\text{m}> = <p^h>, \)
\( <\text{n}> = <f>, \) \( <\text{m}> = <t^h>, \) \( <\text{r}> = <t^h>, \) \( <\text{y}> = <h>, \) \( <\text{w}> = <h> \)
and \( <\text{q}> = <?> \) can function as syllable-final consonant symbols. Only
/p, t, k, ?, m, n, ñ/ are permissible in the final position of a
syllable. So a final fricative, or an affricate sound symbol, is
pronounced as a stop. A final voiced stop is pronounced as its
voiceless counterpart. A final trill, or a lateral, is pronounced
as a nasal. The comparison of the phonetic values of consonant
symbols in syllable-final position and their values in syllable-
initial position is illustrated in Figure 9.1. There is no conson¬
ant symbol to represent a syllable-final glottal stop. The final
syllable /p, t, k/ are not exploded. They are phonetically
transcribed as \([p^o, t^o, k^o]\), for example:

\[<\text{t}^\text{ap}> \quad [\text{tap}^o] \quad "\text{liver}"
\]

\[<\text{t}^\text{at}> \quad [\text{tat}^o] \quad "\text{to cut}"
\]

\[<\text{t}^\text{ak}> \quad [\text{tak}^o] \quad "\text{laps}"
\]

9.1 EXAMPLES OF HAVING DIFFERENT CONSONANT SYMBOLS TO
REPRESENT THE SAME SOUND IN SYLLABLE-FINAL POSITION

9.1.1 Examples of a syllable-final /—p/ being represent by

1. \( <\text{m}> = <\text{b}> \)

\[<\text{t}^\text{am}> \quad /\text{ra:p}/ \quad "\text{to be flat, smooth, level}"
\]

\[<\text{t}^\text{am}> \quad /\text{t}^\text{CHIP}/ \quad "\text{to sip, take a little bit at a time}"
\]

2. \( <\text{w}> = <\text{p}^\text{h}> \)

\[<\text{p}^\text{aw}> \quad /\text{pha:p}/ \quad "\text{picture, image, figure}"
\]

\[<\text{p}^\text{aw}> \quad /\text{p}^\text{hop}/ \quad "\text{world, earth, ground}"
\]
<table>
<thead>
<tr>
<th>Thai consonant symbols</th>
<th>Phonetic values in syll.- initial position</th>
<th>Phonetic values in syll.- final position</th>
</tr>
</thead>
</table>

Figure 9.1
3. \( <n> = <p^h> \)

\( <\text{ลำ} > \) /ˈlaːp/ "unexpected piece of good fortune"

\( <\text{โล} > \) /ˈloːp/ "to be greedy, covetous"

4. \( <p> = <p> \)

\( <\text{ลำ} > \) /ˈsaːp/ "to curse"

\( <\text{บ้า} > \) /ˈbaːp/ "sin, fault"

5. \( <s> = <\text{f} > \)

\( <\text{kอ} > /ˈkɔp/ "golf"

\( <\text{ชั่ว} > /^\text{w}^\text{p}^\text{i}^\text{t}/ "office"

9.1.2 Examples of a syllable final /—t/ being represented by

1. \( <\text{ร} > = <\text{d} > \)

\( <\text{กด} > /ˈkot/ "to press, push"

\( <\text{หก} > /ˈhot/ "beach"

2. \( <\text{ร} > = <\text{d} > \)

\( <\text{ก} > /ˈkot/ "regulation, rule, law"

3. \( <\text{ท} > = <\text{t} > \)

\( <\text{จด} > /ˈtʰit/ "mind, heart, soul"

\( <\text{ชั่ว} > /ˈtʰiːw^\text{i}^\text{t}/ "life"

4. \( <\text{ร} > = <\text{t} > \)

\( <\text{ตรา} > /ˈpraːkot/ "to appear"

\( <\text{ป่า} > /^\text{w}^\text{a}^\text{l}^\text{a}^\text{t}/ "literary word for forehead"

5. \( <\text{ยา} > /<\text{t}^h> \)

\( <\text{ยา} > /ˈbaːt/ "tical, baht (monetary unit of Thailand)"

\( <\text{ราน} > /^\text{s}^\text{a}^\text{t}^\text{tha}^\text{t}/ "to have faith in"
6. $\langle z \rangle = \langle t^h \rangle$

$\langle \text{วัน} \rangle$ /-ʔaːwut/ "weapons, arms"

$\langle \text{รัก} \rangle$ /-kroːt/ "to be angry"

7. $\langle \text{อ} \rangle = \langle t^h \rangle$

$\langle \text{รถ} \rangle$ /-krut/ "Garuda, a mythical bird"

8. $\langle \text{พื้น} \rangle = \langle t^h \rangle$

$\langle \text{พื้น} \rangle$ /-phruːt/ "literary word for progress"

$\langle \text{พื้น} \rangle$ /-wut/ "literary word for to grow, prosper"

9. $\langle \text{อ} \rangle = \langle t^h \rangle$

$\langle \text{รถ} \rangle$ /-rot/ "car"

$\langle \text{รถ} \rangle$ /_-kʰaʔ_bot/ "to rebel, rebellion"

10. $\langle \text{อ} \rangle = \langle t^h \rangle$

$\langle \text{น} \rangle$ /-rat/ "state, nation"

$\langle \text{เงิน} \rangle$ /-ʔat/ "money"

11. $\langle \text{ท} \rangle = \langle t^\theta \rangle$

$\langle \text{ท} \rangle$ /-ʔaːt/ "might, may"

$\langle \text{ตรวจ} \rangle$ /-truːːt/ "to inspect, examine"

12. $\langle \text{อ} \rangle = \langle t^\theta \rangle$

$\langle \text{พื้น} \rangle$ /-pʰuːt/ "vegetation, plants"

$\langle \text{ท} \rangle$ /-kʰot/ "literary word for elephants"

13. $\langle \text{พื้น} \rangle = \langle s \rangle$

$\langle \text{รถ} \rangle$ /-kʰaːt/ "gas"

14. $\langle \text{ส} \rangle = \langle s \rangle$

$\langle \text{รถ} \rangle$ /-rot/ "taste, favour"

$\langle \text{พื้น} \rangle$ /-pʰaʔ_auʔ_duʔ/ "parcel"
15. \[ \theta \rightarrow s \]
\[ \theta \rightarrow \text{"direction, point of the compass"} \]
\[ \phi \rightarrow \text{"to look at carefully"} \]
16. \[ \nu \rightarrow s \]
\[ \nu \rightarrow \text{"punishment"} \]
\[ \kappa \rightarrow \text{"paper"} \]

9.1.3 Examples of a syllable-final \( -k \) being represented by

1. \[ \kappa = \kappa \]
\[ \text{'suk} \rightarrow \text{"to be cooked"} \]
\[ \text{'phak} \rightarrow \text{"vegetables"} \]
2. \[ \kappa = \kappa \]
\[ \text{'ro:k} \rightarrow \text{"disease"} \]
\[ \text{'tak-khi:} \rightarrow \text{"fire"} \]
3. \[ \gamma = \kappa \]
\[ \text{'me:k} \rightarrow \text{"cloud"} \]
\[ \text{'mak\'kha?-wa:n} \rightarrow \text{"god"} \]
4. \[ \gamma = \kappa \]
\[ \text{'suk} \rightarrow \text{"happiness"} \]
\[ \text{'le:k} \rightarrow \text{"numeral, figure"} \]

9.1.4 Examples of a syllable-final \( -m \) being represented by

\[ \nu = \nu \]
\[ \text{'sa:m} \rightarrow \text{"three"} \]
\[ \text{'ta:m} \rightarrow \text{"to chase, follow"} \]
9.1.5 Examples of a syllable final /—n/ being represented by

1.  
   \[<\text{n}>=<\text{n}>\]
   
   \[<\text{เร}\\text{ะ}\\text{n}>=/\\text{ร\\text{ื}}:\text{า}\\text{n}/\] "house, household"

2.  
   \[<\text{ทร}\\text{n}>=/\\text{k\\text{่}}\text{n}/\] "to trim, prune"

3.  
   \[<\text{ก\\text{่}}\\text{n}>=/\\text{k\\text{่}}\\text{n}/\] "1. you
      2. good, virtue, value, quality"

4.  
   \[<\text{ว\\text{่}}\\text{n}>=/\\text{ว\\text{่}}\\text{n}/\] "1. colour, complexion
      2. caste"

5.  
   \[<\text{น}>=<\text{j}>\]
   
   \[<\text{ก\\text{่}}\\text{n}>=/\\text{ก\\text{่}}\\text{n}/\] "1. to be black
      2. to be deathly, dead-like"

6.  
   \[<\text{บ}>=<\text{j}>\]
   
   \[<\text{เห\\text{่}}\\text{n}>=/\\text{พ\\text{่}}\\text{n}/\] "the moon"

   \[<\text{ก\\text{่}}\\text{ร\\text{ุ}}:\text{า}\\text{n}>=/\\text{k\\text{่}}\\text{ร\\text{ุ}}:\text{า}\\text{n}/\] "to groan, moan"

9.1.6 Examples of a syllable final /—g/ being represented by

\[<\text{j}>=<\text{g}>\]

\[<\text{ห\\text{่}}\\text{n}>=/\\text{ห\\text{่}}\\text{n}/\] "tail"

\[<\text{s\\text{่}}\\text{n}>=/\\text{s\\text{่}}\\text{n}/\] "two"
9.2 SYLLABLE-FINAL CONSONANT SYMBOLS WITH SILENT VOCALIC SYMBOLS

\(<-\) is a superscript vocalic symbol for \(/i/\) and \(\_\_\_\) is a subscript vocalic symbol for \(/u/\). These two vocalic symbols are always pronounced when they are written with a syllable-initial consonant symbol. But when they are written with a syllable-final consonant symbol of a monosyllabic word or a syllable-final consonant symbol of a final syllable of a polysyllabic word, they are not pronounced. Only a syllable-final consonant symbol is pronounced as shown in the examples below:

9.2.1 A syllable-final consonant symbol with a silent \(\_<\_\_\_\_\_\_\_\) = \(\_<i>\)

\(<\text{ja:}t>\) = \(\text{ja:}t\) /ˈjaːt/ "relative, kin"
\(<\text{phu:m}>\) = \(\text{phu:m}\) /ˈphuːm/ "1. earth, place 2. level, status, background"
\(<\text{pawk}:\_\_\_\_\_\_\_\_}\) = \(\text{pawk}:\_\_\_\_\_\_\_\_\) /ˈpawk/ "story, history"
\(<\text{wbt}>\) = \(\text{wbt}\) /wɪˈbat/ "destruction"

9.2.2 A syllable-final consonant symbol with a silent \(\_<\_\_\_\_\_\_\_\) = \(\_<u>\)

\(<\text{tha:}t>\) = \(\text{tha:}t\) /ˈthaːt/ "element"
\(<\text{he:}t>\) = \(\text{he:}t\) /ˈheːt/ "reason, cause"
\(<\text{me:n}>\) = \(\text{me:n}\) /ˈmeːn/ "place for keeping the dead"

1. In this word the second \(<i>\) is not pronounced since it occurs in a final syllable of a polysyllabic word.
9.3 CANCELLATION OF SYLLABLE-FINAL CONSONANT SYMBOLS

As already stated in chapter 1, p.14, the structure of syllables in Thai is

(a) \( C_1 \ (C_2) \ V_1 \ C_3 / T \)
(b) \( C_1 \ (C_2) \ V_2 \ (C_3) / T \)

One of the ways to recognise pure Thai words among foreign loans is that their syllables always end with either a vowel or a single consonant. And as already noted a number of vowels are not permitted to be followed by a final consonant.

For writing loanwords, the syllable-final consonant symbol of the original spelling is always retained in the Thai writing, but they are pronounced according to a Thai syllable structure. For example, the English loan "pipe" is pronounced with the vowel /ai/ which is not permitted to be followed by a final consonant in Thai. So a final /—p/ is not pronounced, although it is written, and the word is pronounced as /'pai/ in Thai.

For foreign loanwords which have syllable-final consonant sequences, the original spelling is always retained in the Thai writing, but only one of the final consonant symbols is pronounced, and in most cases it is the first of the sequence.

For example, the English loanword "pump" is pronounced as /'pam/ in Thai. The final /—p/ is not pronounced although it is written.

9.3.1 Cancellation of syllable-final consonant symbols by means of a sound-killing symbol <—>

A special symbol called <onium>
"ma:i-than'tha'?kh\a:t/ "a sound-killing symbol" is placed above a syllable-final unpronounced consonant symbol to show that it is rendered silent. So "pipe" pronounced in Thai as /\pʰ/ is written as 〈\pʰ〉 = 〈aippʰ〉 and "pump" pronounced in Thai as /\pʰm/ is written as 〈\pʰm〉 = 〈\pmpʰ〉. The 〈—〉 is written above the consonant symbol 〈\n〉 = 〈pʰ〉 of both words to indicate that it is not pronounced.

More examples are:

〈\tha:un〉 = 〈tʰa:un〉 /-tha:u/ "town"
〈\wос〉 = 〈wos〉 /-wο/ "race, family, stock"
〈\ka:n〉 = 〈ka:n〉 /-ka:n/ "the beloved"
〈\sih〉 = 〈sīh〉 /'sīh/ "lion".

Of the syllables with more than two final consonant symbols, of which only the first is pronounced, the 〈—〉 is written above the last final consonant symbol to indicate that all consonant symbols except the first one are silenced. For example, the word /\lak/ "name of a prince in Ramayana epic" is written as 〈\laksrn〉 = 〈\lksrn〉. Here the 〈—〉 is placed above the last final consonant symbol 〈\n〉 = 〈n〉 to indicate that all preceding final consonant symbols except the 〈\n〉 = 〈k〉 are rendered silent.

More examples are:

〈\ka:n〉 /-ka:n/ "gold"
〈\sa:t〉 /-sa:t/ "(branch or field of) knowledge"

1. 〈—〉 is a tonal marker indicating a high tone.
If \( \sim \) is placed over a syllable-final unpronounced consonant symbol with a superscript vocalic symbol \( \sim \) = \( \iota \), or a subscript vocalic symbol \( \sim \) = \( \upsilon \), both a final consonant symbol and a vocalic symbol are silenced, i.e.

\[
\begin{align*}
&<\text{ร}>&=<\text{ร}^\iota>& /\text{ร}i/ &\text{"power"} \\
&<\text{ส}>&=<\text{ส}^\iota>& /\text{ส}i/ &\text{"rights"} \\
&<\text{พ}>&=<\text{พ}^\upsilon>& /\text{พ}h/ &\text{"breed, kind, species"}.
\end{align*}
\]

### 9.3.2 Unmarked syllable-final silent consonant symbol

The \( \sim \) is in rare cases not used to mark a syllable-final silent consonant symbol. Such unmarked silent consonant symbol is in all cases \( \sim \) = \( \r \) preceded by a stop/or an affricate consonant symbol. When \( \sim \) = \( \r \) is preceded by a stop consonant symbol, the sequence is, in most cases, a permissible syllable-initial consonant cluster in Thai. For example, the word /\text{-but}/ "son or daughter" is written as \( <\text{บ}>&=<\text{บร}>& /\text{บ}h/ \). The final sequence \( <\text{ร}>&=<\text{ตร}>& \) is a permissible syllable-initial consonant cluster in Thai but when it occurs in a syllable-final position only the \( <\text{ร}>&=<\text{ต}>& \) is pronounced. This way of pronouncing a syllable-final sequence is applied only when a consonant sequence occurs in syllable-final position of a monosyllabic word or in final syllable of a
polysyllabic word.

More examples are,

\[
\begin{align*}
&<\text{\textbackslash m\textbackslash t\textbackslash r}> = <\text{\textbackslash b\textbackslash t\textbackslash r}> \text{ /-\textbackslash b\textbackslash t\textbackslash /} \text{ "card"} \\
&<\text{\textbackslash m\textbackslash t\textbackslash r}> = <\text{\textbackslash m\textbackslash t\textbackslash r}> \text{ /-\textbackslash m\textbackslash t\textbackslash /} \text{ "friends"} \\
&<\text{\textbackslash t\textbackslash c\textbackslash r}> = <\text{\textbackslash t\textbackslash c\textbackslash k\textbackslash r}> \text{ /-\textbackslash t\textbackslash c\textbackslash k\textbackslash /} \text{ "machine"} \\
&<\text{\textbackslash e\textbackslash p\textbackslash h\textbackslash t\textbackslash c\textbackslash r}> = <\text{\textbackslash e\textbackslash p\textbackslash h\textbackslash t\textbackslash c\textbackslash r}> \text{ /-\textbackslash p\textbackslash h\textbackslash t\textbackslash c\textbackslash /} \text{ "diamond"} \\
&<\text{\textbackslash s\textbackslash m\textbackslash k\textbackslash h\textbackslash r}> = <\text{\textbackslash s\textbackslash m\textbackslash k\textbackslash h\textbackslash r}> \text{ /-\textbackslash s\textbackslash m\textbackslash k\textbackslash h\textbackslash r\textbackslash /} \text{ "to volunteer"}
\end{align*}
\]

9.3.3 Unmarked non-final silent consonant symbol

Of the syllables with two final consonant symbols, in rare cases the second symbol of a syllable-final consonant sequence is pronounced instead of the first one. For example, the word

\[
<\text{\textbackslash m\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash k}\text{\textbackslash h}> = <\text{\textbackslash m\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash k}\text{\textbackslash h}> \text{ /-\textbackslash m\textbackslash a\textbackslash :\textbackslash r\textbackslash k\textbackslash /} \text{ is read as /\textbackslash m\textbackslash a\textbackslash :\textbackslash k\textbackslash /}. \text{ Here the second consonant symbol is pronounced. Since }<\text{\textbackslash \textbackslash}>\text{ is rarely used over any but the syllable-final silent consonant symbol, so a non-final symbol }<\text{\textbackslash h}> = <\text{\textbackslash r}>\text{ is left unmarked. Such unmarked non-final silent consonant symbol is in all cases either }<\text{\textbackslash h}> = <\text{\textbackslash r}>\text{ or }<\text{\textbackslash h}> = <\text{\textbackslash h}>. \text{ The following are some more examples:}
\]

1. Unmarked silent \(<\text{\textbackslash h}> = <\text{\textbackslash r}>
\[
<\text{\textbackslash s\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash t}\text{\textbackslash h}> = <\text{\textbackslash s\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash t}\text{\textbackslash h}> \text{ /-\textbackslash s\textbackslash a\textbackslash :\textbackslash t\textbackslash /} \text{ "special occasions"}
<\text{\textbackslash s\textbackslash a\textbackslash :\textbackslash m\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash t}\text{\textbackslash h}> = <\text{\textbackslash s\textbackslash a\textbackslash :\textbackslash m\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash t}\text{\textbackslash h}> \text{ /-\textbackslash s\textbackslash a\textbackslash :\textbackslash m\textbackslash a\textbackslash /} \text{ "to be able, capable"}
\]

2. Unmarked silent \(<\text{\textbackslash h}> = <\text{\textbackslash h}>
\[
<\text{\textbackslash p\textbackslash r\textbackslash a\textbackslash :\textbackslash h\textbackslash m}\text{\textbackslash n}> = <\text{\textbackslash p\textbackslash r\textbackslash a\textbackslash :\textbackslash h\textbackslash m}\text{\textbackslash n}> \text{ /-\textbackslash p\textbackslash r\textbackslash a\textbackslash /} \text{ "Brahmi"}
<\text{\textbackslash p\textbackslash r\textbackslash h\textbackslash m\textbackslash t\textbackslash c\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash i}> = <\text{\textbackslash p\textbackslash r\textbackslash h\textbackslash m\textbackslash t\textbackslash c\textbackslash a\textbackslash :\textbackslash r}\text{\textbackslash i}> \text{ /-\textbackslash p\textbackslash r\textbackslash o\textbackslash m\textbackslash a\textbackslash /-\textbackslash t\textbackslash c\textbackslash a\textbackslash /-\textbackslash r\textbackslash i\textbackslash /} \text{ "virgin".}
\]
In rare cases <—> is written over a non-final silent consonant symbol of a syllable. It is particularly used in recent loanwords from English, for example:

<ชาร์ด> = <kʰa:rd> /'kʰe:t/ "card"
<แรมิ> = <ma:rtʃʰ> /'ma:t/ "to march"
<ท์แฮก> = <tʃʰ 1k> /'tʃʰək/ "chalk"

9.4 DOUBLE FUNCTIONS OF A SYLLABLE-FINAL CONSONANT SYMBOL

9.4.1 Double functions of a syllable-final consonant symbol with the intrusion of a linker syllable

There is a special class of compound words of Pali or Sanskrit origin, in which junction is marked by the intrusion of a linker syllable.

<table>
<thead>
<tr>
<th>meaning</th>
<th>pronunciation of components by themselves</th>
<th>pronunciation in junction</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;government service&quot;</td>
<td>/'raːt/ &quot;royal&quot;</td>
<td>/'raːt-tʃʰə-kaːn/</td>
</tr>
<tr>
<td></td>
<td>/-kaːn/ &quot;work, affair(s), matters(s)&quot;</td>
<td></td>
</tr>
</tbody>
</table>

1. A linker syllable is a syllable which has the vowel /ə/?.
   When pronounced in running connected speech, the syllable is unstressed and /ə/? becomes neutralised as /ɔ/ and the tone of the syllable is changed from whatever it may be to a mid tone.
   Details have already been given in chapter 7, p.153. Examples of words consisting a linker syllable in this section and in the following sections are pronounced in casual speech or running connected speech.

2. Compound words of this sort are coined by combining Pali and/or Sanskrit words together by means of the technique called <คำเมทาน> /saʔ.maːt/, and the compound words are called <คำเมทาน> /kʰam_saʔ_maːt/.

3. A linker syllable is underlined.
Here the consonant symbol \(<\text{ห}>=\text{ต}^\text{ห}\) which is the final consonant symbol of the first component of the compound words, has double functions, as

1. A syllable-final consonant of the syllable /'ra:t/',
\(<\text{ห}>=\text{ต}^\text{ห}\) is pronounced as /—t/ in a syllable final position.
2. A syllable-initial consonant of the linker syllable /—t'chə/.

Another example is

<table>
<thead>
<tr>
<th>meanings</th>
<th>pronunciation of components by themselves</th>
<th>pronunciation in junction</th>
</tr>
</thead>
<tbody>
<tr>
<td>/'tchɔn/</td>
<td>/'tchɔn/ &quot;water&quot;</td>
<td>/'tchɔn-le-nai/</td>
</tr>
<tr>
<td>/-nai/</td>
<td>/'-nai/ &quot;eyes&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Here the consonant symbol \(<\text{น}>=\text{น}\) which is the final consonant symbol of the first component of the compound word has double functions, as

1. A syllable-final consonant of the syllable /'t'chɔn/',
\(<\text{น}>=\text{น}\) is pronounced as /—n/ in a syllable-final position.
2. A syllable-initial consonant of the linker syllable /—lə/.

More examples are,

\(<\text{ก}'> \quad /'\text{kam}-\text{ma}-\text{k}ə:n/ \quad (/'\text{กระทะ}'/'\text{kam}' \quad + \quad /'\text{k}ə:n/ \quad ) \quad "\text{labourer, worker}" \\
<\text{พ}'> \quad /'\text{phon}-\text{lə}-\text{məw:aŋ}/ \quad (/'\text{พล}'/'\text{phon}' \quad + \quad /'\text{ гражд}'/'\text{məw:aŋ}/ \quad ) \quad "\text{citizen}" \\
<\text{ร}'> \quad /'\text{rat}-\text{thə}-\text{bə:n}/ \quad (/'\text{รัฐ}'/'\text{rat}' \quad + \quad /'\text{ผา}^\text{บ}'/'\text{bə:n}/ \quad ) \quad "\text{government}" \\
<\text{รา}'> \quad /'\text{ra:t}-\text{t'chə}-\text{ʔo}^\text{ro}t/ \quad (/'\text{รัฐ}'/'\text{ra:t}' \quad + \quad /'\text{จิ}^\text{ร}^\text{ษ}'/'\text{ʔo}^\text{ro}t/ \quad ) \quad "\text{prince}"
As already seen, vocalic symbols <.alt> and <alt> have a consonant symbol <alt> as one of the component parts of their symbols, and a vocalic symbol <alt> also has a consonant symbol <alt> as one of the component parts of the symbol. In a few cases when the vocalic symbols occur in a non-final syllable of a polysyllabic word, the <alt> = <j> and <alt> = <w> are pronounced again as a syllable-initial consonant of a linker syllable, e.g.

<organs>: the <alt> = <j> of the vocalic symbol <alt> of the syllable <alt> is pronounced again as a syllable-initial consonant of the linker syllable <alt>.

"things which are given to people for making merit": the <alt> = <j> of the vocalic symbol <alt> of the syllable <alt> is pronounced again as a syllable-initial consonant of the linker syllable <alt>.

"1. to pray; 2. to rewrite Phra Traipidok (a sacred book)": the <alt> = <j> of the vocalic symbol <alt> of the syllable <alt> is pronounced again as a syllable-initial consonant of the linker syllable <alt>.

"to pray, meditate": the <alt> = <w> of the vocalic symbol <alt> of the syllable <alt> is pronounced again as a syllable-initial consonant of the linker syllable <alt>. 
For a final consonant symbol of a non-final syllable of a polysyllabic word, it normally functions only as a syllable-final consonant. The intrusion of a linker syllable does not occur in this case. This is one of the features which enables one to distinguish between /kham\_sa\_ma\_t/ and ordinary polysyllabic words, for instance:

\[
\begin{align*}
\text{m} & = \langle \text{wtt} \rangle /\text{wat-thu}/ \text{"materials"} \\
\text{n} & = \langle \text{t} \rangle \text{functions only as a syllable final consonant} \\
\text{m} & = \langle \text{rke-r} \rangle /\text{rak-re}/ \text{"armpits"} \\
\end{align*}
\]

functions only as a syllable-final consonant /-t/ of the syllable /\text{wat}/

The intrusion of a linker syllable does not occur in this case.

There are a number of polysyllabic words which are pronounced with the intrusion of a linker syllable. So the final consonant symbol of a non-final syllable of the word has double functions. It is the influence of the pronunciation of /kham\_sa\_ma\_t/. The following are some examples:

\[
\begin{align*}
\text{t} & = \langle \text{t\_t\_ak-ka\_t\_pi} \rangle /\text{to be ticklish} \\
\text{n} & = \langle \text{k} \rangle \text{functions as a syllable-final /-k/ of the syllable /\text{t\_t\_ak}/ and a syllable initial /k-/ of a linker syllable /-ka/}. \\
\text{t} & = \langle \text{t\_ch\_un-le-mun} \rangle /\text{to mill around (as a crowd)} \\
\text{n} & = \langle \text{l} \rangle \text{functions as a syllable-final /-n/ of the syllable /\text{t\_ch\_un}/ and a syllable initial /l-/ of a linker syllable /-le/}. \\
\end{align*}
\]

More examples are:

- /t\uk-ke-ta:/ "doll"
- /wat-th^a-na:/ "to progress"
- /h\uk-ke-th\uk/ "to be clamorous"
- /sok-ke-prok/ "to be dirty"

As already seen, since the cases when the intrusion of a linker syllable occurs are not very definite, the correct pronunciation of certain words has to be memorised.

9.4.2 Double functions of a syllable-final cluster with the intrusion of a linker syllable

When a consonant cluster composed of a stop consonant symbol followed by $<\text{r}> = <r>$ occurs in a syllable-final position of a monosyllabic word or in a syllable-final position of a polysyllabic word, only the stop consonant symbol is pronounced as already discussed on pp.200-201. But when the cluster occurs in syllable-final position of a non-final syllable of a polysyllabic word, the stop consonant symbol is pronounced as a syllable-final consonant of a non-final syllable, then both the stop consonant symbol and the $<\text{r}> = <r>$ are pronounced again as a syllable-initial cluster of the linker syllable. For example:

the word $<\text{t\kra:j}\text{a:n}> = <\text{t}\kra:j\text{a:n}> /-\text{t}\kra:j\text{a:n}/$ "bicycle", here a cluster $<\text{t\kra:j}\text{a:n}> = <\text{k}> = <k>$ occurs in syllable-final position of the non-final syllable $/\text{t}\kra:/$ but only the $<\text{k}> = <k>$ is pronounced. Then the cluster is pronounced again as a syllable-initial cluster of the linker syllable $/-\text{k}\kra:/$.

1. Polysyllabic words pronounced in this way are mostly $<\text{k\h}\text{am}\text{.sa?\ma:}\text{t}> /-\text{k}\h\text{am}\text{.sa?\ma:}\text{t}/$. 

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Another example is:

\[ \text{<ช่าง> } = \text{<ทรกร> /-ตช-ทร-ค:น/ "artist".} \]

In this word a cluster \(<ทร> = \langle t \rangle\) occurs in syllable-final position of a non-final syllable /-ตช/, but only the \(<ต> = \langle t \rangle\) is pronounced. Then the cluster is pronounced again as a syllable-initial cluster of the linker syllable /-ทร/. 

9.4.3 Double functions of a syllable-final consonant symbol without the intrusion of a linker syllable

In some cases a syllable-final consonant symbol of a non-final syllable of a polysyllable word has double functions as already stated above, but when it is pronounced the second time, it is pronounced without the intrusion of a linker syllable. For example, in the word \(<ธิด> = \text{<ตริ> /-บุต-ตริ:/} "daughter", here \(<ต> = \langle t \rangle\) functions as a syllable-final /-ต/ of the syllable /-บุt/.. Then it is pronounced as the first consonant segment of the cluster /ตร/ of the syllable /-ตริ:/.

A syllable-final consonant symbol having a double function, occurs only in the case when that final consonant symbol and the initial consonant symbol of the following syllable can form a permissible consonant cluster in Thai. So that final consonant symbol can be pronounced again as the first consonant segment of the syllable-initial cluster of the following syllable.

Another example is \(<ลูก> = \text{<กกร> /-ตก-กรี:/} \]
"king". Here the \(<\text{k}\)= \(<\text{k}\)first functions as a syllable-final consonant symbol of the syllable /_t\text{cak}/. And it is pronounced again as the first consonant segment of the cluster \(<\text{k}\text{v}\>=\langle\text{kr}\rangle of the syllable /-\text{kr}\text{v}/.

9.4.4 Double functions of a syllable-final consonant symbol with a superscript \(<\text{-}\)= \(<\text{i}\) or a subscript \(<\text{-}\)= \(<\text{u}\) 

As already stated on p 197 , a superscript \(<\text{-}\)= \(<\text{i}\) and a subscript \(<\text{-}\)= \(<\text{u}\) are not pronounced when they are written with a syllable-final consonant symbol of a monosyllabic word or a final syllable of a polysyllabic word. When the final-consonant symbol occurs in a non-final syllable of polysyllabic words (which are mostly \(<\text{k}\text{h}\text{am}\text{s}\text{a2}\text{ma}\text{t}/), it always has double function. It is first pronounced as a syllable-final consonant of a non-final syllable. Then it is pronounced again with its superscript \(<\text{-}\)= \(<\text{i}\) or subscript \(<\text{-}\)= \(<\text{u}\) for example:

in the polysyllabic word \(<\text{p}\text{r}\text{a}\text{w}\text{t}\text{s}\text{a}:\text{t}/ = \langle\text{p}\text{r}\text{aw}\text{t}\text{s}\text{a}\text{t}/, "history", \(<\text{t}\)= \(<\text{t}\)is first pronounced as a syllable-final consonant /-\text{t}/ of the syllable /\text{wat}/ while the accompanying \(<\text{-}\)= \(<\text{i}\)is silent. But when it is pronounced again as a syllable on its own as /\text{ti}/, the \(<\text{-}\)= \(<\text{i}\)is also pronounced.

Another example is the polysyllabic word \(<\text{s}\text{q}\text{u}\text{a}\text{r}/ = \langle\text{s}\text{q}\text{u}\text{a}\text{r}/ /\text{t}\text{c}\text{a}\text{t}\text{tu}\text{\text{rat}/ "square", \(<\text{t}\)= \(<\text{t}\)is first
pronounced as a syllable final consonant /-t/ of the syllable /-tʃat/ while the accompanying `<-χ>` is silent. But when it is pronounced again as a syllable on its own as /-tu?/, the `<-χ>` is also pronounced.

The transcription of the two words above represents their pronunciation in careful speech. When pronounced in running connected speech, they become /-pראWat-ti-sa:t/ and /-tʃat-tu-rat/. In the first word /-pרא?/ becomes /-pרא/, and /-ti?/ becomes /-ti/. In the second word, the syllable /-tu?/ becomes /-tu/. According to Bee (see pp.153-154) the syllable /-pרא/ would be considered a linker syllable. In fact the syllables /-ti/ and /-tu/ also have the characteristics of the linker syllables in that when pronounced in running connected speech, the glottal final of the vowel of the syllables is dropped and the tone of the syllables is changed to be a mid tone.
Chapter 10

TONAL MARKERS
Chapter 10

TONAL MARKERS

10.1 A BRIEF SKETCH OF PHONETIC PROPERTIES OF TONES

There are five tones in standard Thai:

<table>
<thead>
<tr>
<th>Tones</th>
<th>Thai script</th>
<th>Transcription</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>mid</td>
<td>onResume</td>
<td>/-kʰa:/</td>
<td>&quot;a grass (Imperata Cylindrica)&quot;</td>
</tr>
<tr>
<td>low</td>
<td>onResume</td>
<td>/-kʰa:/</td>
<td>&quot;galangal, a rhizome&quot;</td>
</tr>
<tr>
<td>falling</td>
<td>onResume</td>
<td>/'kʰa:/</td>
<td>&quot;slave, servant&quot;</td>
</tr>
<tr>
<td>high</td>
<td>onResume</td>
<td>/'kʰa:/</td>
<td>&quot;to engage in trade&quot;</td>
</tr>
<tr>
<td>rising</td>
<td>onResume</td>
<td>/'kʰa:/</td>
<td>&quot;leg&quot;</td>
</tr>
</tbody>
</table>

The tone names are conventional but not fully descriptive. The mid tone is pronounced with a quite noticeable fall. The low tone starts lower than the mid tone and gradually moves down. The falling tone begins with an initial rise and then falls to low. The high tone starts high and gradually moves up and then falls at the end. In a closed syllable ending with a final stop consonant with a short vowel, the fall in pitch at the end does not occur. Both the falling and high tones are closed in pre-pausal position by a weak glottal closure. The rising tone starts low and then rises up. The following diagrams show tonal movement of tones done by a pitch computer. The
subject was myself. Figure 10.1 shows tonal curves of all five tones in an open syllable with a long vowel. Figure 10.2 shows tonal curves of low, falling and high tones in a closed syllable ending with a final stop consonant. Each utterance was pronounced four times. The tonal movement of each repetition shows very slight variations.

1. Mid and rising tone do not occur in a closed syllable ending with a final stop consonant.
Figure 10.1

1. Mid tone

2. Low tone

3. Falling tone

4. High tone

5. Rising tone
/mæ/, /mi:/, /mu:/

1. mid tone

2. low tone

3. falling tone

4. high tone

5. rising tone
Figure 10.2

- **High Tone**
  - /'mak/ (low tone)
  - /`mak/ (falling tone)
  - /- mak/ (low tone)

- **Low Tone**
  - /- mak/ (low tone)
  - /`mak/ (falling tone)
  - /`mak/ (low tone)
10.2 THE FOUR TONAL MARKERS AND THEIR NAMES

There are four tonal markers in the Thai writing system:

1. \( ^{1*1-7} \) /ma:i-ʔe:k/ — indicating low or falling tone.
2. \( ^{7U_{17}} \) /ma:i-tho:/ — indicating falling or high tone.
3. \( ^{7I_{17}} \) /ma:i-tri:/ — indicating high tone.
4. \( ^{l*i^7Vn7} \) /ma:i_tcat_taʔ-wa:/ — indicating rising tone.

All tonal markers are superscripts. They are placed over the initial consonant symbol of a syllable whose tone they mark. In a syllable with initial consonant sequences, the tonal marker is placed over the second of the two consonant symbols. And if that syllable already has a superscript vocalic symbol, the tonal marker is placed above the vocalic symbol.

Examples showing the place of a tonal marker:

1. Above a syllable-initial consonant symbol in a syllable with a single consonant.
   \( ^{zjq} \) = \( ^{pa:} \) /pa:/ “forest”
   \( ^{zjq} \) = \( ^{ʔa:n;} \) /ʔa:n/ “to read”

2. Above the second consonant symbol in a syllable with an initial consonant sequence.
   \( ^{aikhw} \) = \( ^{aikh} \) /kʰwai/ “1. to cross
   2. to be twisted, crossed”
   \( ^{kla:} \) = \( ^{kla:} \) /kła:/ “1. to dare, venture, to be brave
   2. to be strong, powerful”
3. Above the superscript vocalic symbol.

\(<\text{ร}⟩ = \langle \text{หเว}⟩ \quad /'khrw:\rangle \quad "\text{half}"

\(<\text{ร}⟩ = \langle \text{ญ}⟩ \quad /'phw:n:/ \quad "\text{floor, ground}"

10.3 THE TONAL VALUES OF TONAL MARKERS

To determine the tone of a syllable one has to consider the tonal values of tonal markers. As already seen on p.215, some tonal markers indicate more than one tone. This is because the values of tonal markers are dependent upon two following factors:

(i) the tonal class of the syllable-initial consonant symbol: if it is a middle, high or low consonant symbol, and

(ii) the type of a syllable with which it is used.

For the tonal class of the syllable-initial consonant symbols; as already discussed in chapter 6, pp.131-133, Thai consonant symbols are divided into three major tonal classes known as Middle, High and Low. Middle consonant symbols are pronounced with the inherent mid tone. High consonant symbols are pronounced with rising tone. Low consonant symbols are pronounced with mid tone. The following chart shows the three tonal classes of consonant symbols.
<table>
<thead>
<tr>
<th>MIDDLE CONSONANT SYMBOLS</th>
<th>PRONOUNCED WITH MID TONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>ป</td>
</tr>
<tr>
<td>b</td>
<td>บ</td>
</tr>
<tr>
<td>t</td>
<td>พ</td>
</tr>
<tr>
<td>d</td>
<td>ด</td>
</tr>
<tr>
<td>k</td>
<td>ก</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH CONSONANT SYMBOLS</th>
<th>PRONOUNCED WITH RISING TONE</th>
<th>LOW CONSONANT SYMBOLS</th>
<th>PRONOUNCED WITH MID TONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>pⁿ</td>
<td>ปน</td>
<td>pⁿ</td>
<td>ปน</td>
</tr>
<tr>
<td>tⁿ</td>
<td>พน</td>
<td>tⁿ</td>
<td>พน</td>
</tr>
<tr>
<td>sⁿ</td>
<td>สน</td>
<td>sⁿ</td>
<td>สน</td>
</tr>
<tr>
<td>tⁿ</td>
<td>พน</td>
<td>kⁿ</td>
<td>กน</td>
</tr>
<tr>
<td>h</td>
<td>ฮ</td>
<td>r</td>
<td>ร</td>
</tr>
<tr>
<td>n</td>
<td>น</td>
<td>w</td>
<td>ว</td>
</tr>
<tr>
<td>l</td>
<td>ล</td>
<td>l</td>
<td>ล</td>
</tr>
<tr>
<td>j</td>
<td>จ</td>
<td>j</td>
<td>จ</td>
</tr>
</tbody>
</table>
For the type of a syllable, there are two main types of syllable which must be differentiated in order to understand the rules for writing the tonal markers. They are called /kham-pen/ "Live syllables" and /kham-ta:i/ "Dead syllables" in traditional Thai terminology. Their characteristics are described below:

1. /kham-pen/ Live syllables comprise the following,

(i) all open syllables ending with either a long pure vowel, a diphthong (except the ia, ua, wa), or a triphthong, for example,

-pa:/ "to throw"

-hipu/ "to be hungry"

-rw:a/ "boat"

-suai/ "to be pretty"

-suai/ "to be unlucky"

(ii) all closed syllables ending with one of the three nasals /m, n, n/. In the written language, there are more than one consonant symbols to represent /-n/ in a syllable-final position as already stated in chapter 9, p.196. The following are some examples:

-lom/ "wind"

-ka:n/ "time"

-kwi:an/ "a cart"

-thon/ "to be puzzled"
D <ญี่ปุ่น> /mans/ "younger sibling"
<ญี่ปุ่น> /mwan/ "town, city"

2. <ญี่ปุ่น> /kham-ta:i/ Dead syllables comprise

the following:

(i) all closed syllables ending with either a short
pure vowel, or one of the diphthongs, /ia, ua, wa/; followed by
a glottal stop, for example,
<ญี่ปุ่น> /_ti?/ "to criticize"
<ญี่ปุ่น> /_phia?/ "the sound of a slap"
<ญี่ปุ่น> /_phua?/ "the sound of slapping, beating, cracking"
<ญี่ปุ่น> /_?wa?/ "the sound of swallowing saliva or water
(in big gulps)"

(ii) all closed syllables ending with one of the three
stops /p, t, k/. Consonant symbols which represent these three
stop consonants are presented in chapter 9, pp.191-195.
<ญี่ปุ่น> /_tap/ "liver"
<ญี่ปุ่น> /_pa:k/ "mouth"
<ญี่ปุ่น> /_khu:at/ "bottle"
<ญี่ปุ่น> /'1w:ak/ "to choose"

The following are the rules of reading tonal markers
which depend upon the two factors as already stated.

1. Tonal markers when used with a syllable-initial middle
consonant symbol beginning a live syllable or a dead
syllable:

1.1 A live syllable

There are five tones which occur in a live
syllable initiated by a middle consonant symbol. Absence of a
tonal marker indicates mid tone. The four tonal markers indicate low, falling, high and rising tone respectively.

**Figure 10.3**

<table>
<thead>
<tr>
<th>Tonal Markers</th>
<th>Tones</th>
<th>Examples</th>
<th>Transcriptions</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>mid</td>
<td>ɲa</td>
<td>/-pa:/</td>
<td>to throw</td>
</tr>
<tr>
<td>&lt;→</td>
<td>low</td>
<td>ɲa</td>
<td>/_pa:/</td>
<td>forest</td>
</tr>
<tr>
<td>&lt;→</td>
<td>falling</td>
<td>ɲa</td>
<td>/'pa:/</td>
<td>elder aunt</td>
</tr>
<tr>
<td>&lt;→</td>
<td>high</td>
<td>ɲi</td>
<td>/'ke:/</td>
<td>to be counterfeit</td>
</tr>
<tr>
<td>+</td>
<td>rising</td>
<td>ɲi</td>
<td>/'ke:/</td>
<td>to be chic</td>
</tr>
</tbody>
</table>

The tones which frequently occur in this type of a syllable are those above the ——— line. Those which are below this ——— line are considered rare tones and found mostly in the following types of words:

1. onomatopoetic or imitative words
2. final polite particles
3. exclamative words
4. recent loanwords taken from Chinese or English
5. pet names or nicknames.

**General remarks**

All four tonal markers can be used in a live syllable initiated by a middle consonant symbol. Each one indicates a certain tone as already shown in the chart.

1. This statement also applies to Figures 10.4, 10.6, 10.8, and 10.9.
1.2 A dead syllable

There are only three tones which occur in a dead syllable initiated by a middle consonant symbol. Absence of a tonal marker indicates low tone. \( \Downarrow \) indicates falling tone. \( \searrow \) indicates high tone.

<table>
<thead>
<tr>
<th>Tonal Markers</th>
<th>Tones</th>
<th>Examples</th>
<th>Transcriptions</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>low</td>
<td>( \downarrow )</td>
<td>( /_pəʔ/ )</td>
<td>to meet by chance</td>
</tr>
<tr>
<td>( \searrow )</td>
<td>falling</td>
<td>( \rceil )</td>
<td>( /təʔ/ )</td>
<td>1. the intimate final polite particle</td>
</tr>
<tr>
<td>( \searrow )</td>
<td>high</td>
<td>( \rceil )</td>
<td>( /təʔ/ )</td>
<td>2. yes (in answer to a question)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>table, desk</td>
</tr>
</tbody>
</table>

General remarks

The \( \Downarrow \) and \( \searrow \) tonal markers are never used with a dead syllable initiated by a middle consonant symbol since low tone is shown by absence of a tonal marker, and rising tone does not occur in this type of a syllable.

2. Tonal markers when used with a syllable-initial high consonant symbol beginning a live or a dead syllable:

2.1 A live syllable

There are only three tones used in a live syllable initiated by a high consonant symbol. Absence of a tonal marker
indicates rising tone.  \( \hat{-} \) indicates low tone.  \( \hat{-} \) indicates falling tone.

### Figure 10.5

<table>
<thead>
<tr>
<th>Tonal Markers</th>
<th>Tones</th>
<th>Examples</th>
<th>Transcriptions</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>rising</td>
<td>( \nu )</td>
<td>( /'kha:/ )</td>
<td>1. legs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2. very polite form for yes (in answer to a question)</td>
</tr>
<tr>
<td>( \hat{-} )</td>
<td>low</td>
<td>( \nu )</td>
<td>( /'kha:/ )</td>
<td>an aromatic rhizome used in cookery and medicine</td>
</tr>
<tr>
<td>( \checkmark )</td>
<td>falling</td>
<td>( \nu )</td>
<td>( /'kha:/ )</td>
<td>servant, attendant</td>
</tr>
</tbody>
</table>

**General remarks**

(i) the \( \checkmark \) tonal marker is never used in a live syllable initiated by a high consonant symbol since high tone never occurs in this type of syllable.

(ii) the \( \hat{+} \) tonal marker is also never used in this type of syllable because rising tone is indicated by absence of a tonal marker.

### 2.2 A dead syllable

When a high consonant symbol begins a dead syllable, absence of a tonal marker indicates low tone, and \( \hat{-} \) indicates falling tone.
<table>
<thead>
<tr>
<th>Tone Markers</th>
<th>Tones</th>
<th>Examples</th>
<th>Transcription</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>low</td>
<td>$^{\downarrow}$</td>
<td>/$\text{p}^{\text{h}}\text{u}?$/</td>
<td>to decay</td>
</tr>
<tr>
<td>$&lt;\rightarrow&gt;$</td>
<td>falling</td>
<td>$\downarrow\downarrow\downarrow$</td>
<td>/$\text{h}^{\text{e}}\text{g}$/</td>
<td>onomatopoetic sound of laughing</td>
</tr>
</tbody>
</table>

**General remarks**

(i) The $<\rightarrow>$ tonal marker is never used in a dead syllable initiated by a high consonant symbol since low tone is indicated by absence of a tonal marker.

(ii) The $<\rightarrow>$, and $<\rightarrow>$ tonal markers are also never used because high tone and rising tone never occur in this type of a syllable.

3. **Tonal markers when used with a syllable-initial low consonant symbol beginning a live or a dead syllable:**

3.1 **A live syllable**

There are only three tones used in a live syllable initiated by a low consonant symbol. Absence of a tonal marker indicates mid tone. $<\rightarrow>$ indicates falling tone. $<\rightarrow>$ indicates high tone.
Figure 10.7

<table>
<thead>
<tr>
<th>Tonal Markers</th>
<th>Tones</th>
<th>Examples</th>
<th>Transcription</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>mid</td>
<td>],&amp;kon</td>
<td>/'kha:/</td>
<td>to get stuck</td>
</tr>
<tr>
<td>&lt; — &gt;</td>
<td>falling</td>
<td>],&amp;kon</td>
<td>/'kha:/</td>
<td>value</td>
</tr>
<tr>
<td>&lt; — &gt;</td>
<td>high</td>
<td>],&amp;kon</td>
<td>/'kha:/</td>
<td>to engage in trade</td>
</tr>
</tbody>
</table>

General remarks
(i) The < — > tonal marker is never used in a live syllable initiated by a low consonant symbol since high tone is shown by the < — > tonal marker.
(ii) The < — > tonal marker is also never used because rising tone never occurs in this type of a syllable.

3.2 A dead syllable
There are only two tones used in a dead syllable initiated by a low consonant symbol. In this case it makes a difference if the vowel of a syllable is either:

- **group (a)** a short pure vowel, or one of the diphthongs /ia, ua, wa/.

- **group (b)** a long pure vowel, or one of any other diphthongs (except ia, ua, wa).

If the vowel of a syllable belongs to group (a), absence of a tonal marker indicates high tone and < — > indicates falling tone.
<table>
<thead>
<tr>
<th>Tonal Markers</th>
<th>Tones</th>
<th>Examples</th>
<th>Transcriptions</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>high</td>
<td>/'lo/</td>
<td>/'lo/</td>
<td>to abandon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/'lak/</td>
<td></td>
<td>to steal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/'phia?/</td>
<td></td>
<td>onomatopoeic sound of slapping</td>
</tr>
<tr>
<td>&lt;i&gt;</td>
<td>falling</td>
<td>/'kha?/</td>
<td>/'kha?/</td>
<td>formal final polite particle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/'lok/</td>
<td></td>
<td>of the word &lt;'harn' &gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>/'lok'lek/</td>
<td>to have a restless, shifting manner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General remarks

(i) The <i> tonal marker is not used in this type of a syllable since high tone is shown by absence of a tonal marker.

(ii) The <i> tonal marker is also not used because a falling tone is shown by the <i> .

(iii) The <i> tonal marker is also not used because rising tone never occurs in this type of a syllable.

If the vowel belongs to group (b), absence of a tonal marker indicates falling tone, <i> indicates high tone.
Figure 10.9

<table>
<thead>
<tr>
<th>Tonal Markers</th>
<th>Tones</th>
<th>Examples</th>
<th>Transcription</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>falling</td>
<td>ídaːn</td>
<td>/'tʃʰːtː/</td>
<td>1. to lift, raise, elevate, exalt.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ʀɪː ʀɪː</td>
<td>/'riːak/</td>
<td>2. to activate, control, direct (esp. from behind the scene) to call, to be called</td>
</tr>
<tr>
<td>&lt;—&gt;</td>
<td>high</td>
<td>ɪd̥aːn</td>
<td>/'tʃʰːtː/</td>
<td>shirt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ɪɑːk</td>
<td>/'hwaːk/</td>
<td>onomatopoetic sound of breathing</td>
</tr>
</tbody>
</table>

General remarks

(i) The <—> tonal marker is never used in this type of a syllable because high tone is shown by <—> tonal marker.

(ii) The <—> tonal marker is also never used because rising tone never occurs in this type of a syllable.

As already seen in the charts, mid tone does not occur in a dead syllable. This is the case when a syllable is stressed and uttered in careful speech. But in the case of a dead unstressed syllable ending with a short pure vowel, when it is pronounced in connected running speech, the tone always becomes neutralised as a mid tone, the vowel is also neutralised and the glottal stop which normally follows a short vowel is also dropped, as discussed in various places before. The following are further examples:
As already seen it is complicated to read and write tones in Thai writing. From my own experience as a native speaker of Thai, I do not find it difficult to read tones in Thai writing because I know correct pronunciation of words. But when it comes to writing, I sometimes find it difficult to indicate the tone I want, especially when writing rarely used words; since a tone of a syllable is not always indicated by a tonal marker, and some tonal markers indicate more than one tone, as already shown. Many educated Thai sometimes make mistakes in writing tonal markers because of this complication.

To make it clearer and easier to memorise the tonal values of the four tonal markers in different conditions, I attempt to summarise their values in a live or a dead syllable initiated by a middle, high or low consonant symbol in Figures 10.10 and 10.11.
<table>
<thead>
<tr>
<th>Syllable - initial consonant symbols</th>
<th>Absence of a tonal marker</th>
<th>ใว่</th>
<th>ใฟ้</th>
<th>ใเสร้</th>
<th>ใจักรา</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle con. symbols</td>
<td>Mid</td>
<td>Low</td>
<td>Falling</td>
<td>High</td>
<td>Rising</td>
</tr>
<tr>
<td>High con. symbols</td>
<td>Rising</td>
<td>Low</td>
<td>Falling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low con. symbols</td>
<td>Mid</td>
<td>Falling</td>
<td>High</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Figure 10.11

#### DEAD SYLLABLES

<table>
<thead>
<tr>
<th>Syllable-initial con. symbols</th>
<th>Absence of a tonal marker</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>i</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>V</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>St</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>I</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle con. symbols</th>
<th>group a</th>
<th>Low</th>
<th>Falling</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>group b</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High con. symbols</th>
<th>group a</th>
<th>Low</th>
<th>Falling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>group b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low con. symbols</th>
<th>group a</th>
<th>High</th>
<th>Falling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>group b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Syllable-initial con. symbols</th>
<th>Absence of a tonal marker</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>i</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>V</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>St</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>I</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle con. symbols</th>
<th>group a</th>
<th>Low</th>
<th>Falling</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>group b</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High con. symbols</th>
<th>group a</th>
<th>Low</th>
<th>Falling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>group b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low con. symbols</th>
<th>group a</th>
<th>High</th>
<th>Falling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>group b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10.4 IRREGULAR READINGS FOR TONES: LOW TONE INSTEAD OF HIGH/OR FALLING TONE

10.4.1 There are disyllabic words which have irregular readings for the tone of their second syllable. According to the spelling, a syllable should have been pronounced with high tone or falling tone but it is pronounced with low tone. They are disyllabic words which derive from monosyllabic words which were pronounced with low tone. The second syllable of the derived words maintain the tone of the original words. The derivational process of coining new words is called /phie:ŋ-kham/. The meanings of some new words are slightly different from the original ones. Some of the derived words are used only in literature, and not in ordinary spoken language.
1. **low tone instead of high tone**

<table>
<thead>
<tr>
<th>A syllable</th>
<th>The tone being pronounced</th>
<th>The tone according to the spelling</th>
<th>The original words pronounced with low tone</th>
<th>Meanings of derived words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. /_ri?/ of the word /_dam_ri?/</td>
<td>low</td>
<td>high</td>
<td>/_tri?/</td>
<td>elegant word for to contemplate, plan, consider</td>
</tr>
<tr>
<td>2. /_ret/ of the word /_sam_ret/</td>
<td>low</td>
<td>high</td>
<td>/_set/</td>
<td>to be finished, ready</td>
</tr>
</tbody>
</table>
| 3. /_rap/ of the word /_tam_rap/ | low | high | /_trap/ | 1. prescription, formula (esp. medicine)  
2. text book, reference book |
| 4. /_rat/ of the word /_dam_rat/ | low | high | /_trat/ | to speak, talk, say, tell (royal speech) |
| 5. /_lap/ of the word /_kra?_lap/ | low | high | /_klat/ | a literary word for to feel intense |
| 6. /_lat/ of the word /_kra?_lat/ | low | high | /_klop/ | 1. to cover with earth, fill up with earth, bury  
2. to shut, to hide |
| 7. /_lop/ of the word /_kra?_lop/ | low | high | /_klot/ | a kind of umbrella used by monks or royal people |
2. low tone instead of falling one

<table>
<thead>
<tr>
<th>A syllable</th>
<th>The tone being pronounced</th>
<th>The tone according to the spelling</th>
<th>The original words pronounced with low tone</th>
<th>Meanings of derived words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. &lt;ถูก&gt; /-ra:p/ of the word &lt;กาม-รูป&gt; /-kam-ra:p/</td>
<td>low</td>
<td>falling</td>
<td>&lt;กาม&gt; /-kra:p/</td>
<td>to subdue</td>
</tr>
<tr>
<td>2. &lt;ลอก&gt; /-lo:k/ of the word &lt;กระออก&gt; /-kra?lo:k/</td>
<td>low</td>
<td>falling</td>
<td>&lt;กระออก&gt; /-klo:k/</td>
<td>1. to turn, roll 2. to go back on one's word</td>
</tr>
<tr>
<td>3. &lt;ราว&gt; /-ru:at/ of the word &lt;ท้าร้าจุ] /-tam.ru:at/</td>
<td>low</td>
<td>falling</td>
<td>&lt;ท้าร้าจุ&gt; /-tru:at/</td>
<td>policeman</td>
</tr>
<tr>
<td>4. &lt;ราว&gt; /-ru:at/ of the word &lt;สั่งร้าจุ] /-sam.ru:at/</td>
<td>low</td>
<td>falling</td>
<td>&lt;สั่งร้าจุ&gt; /-su:at/</td>
<td>to examine</td>
</tr>
</tbody>
</table>
10.4.2 There is another type of disyllabic word which also has irregular readings for the tone of the second syllable. The first syllable always begins with either a middle or high consonant symbol. But the second syllable begins with a low consonant symbol. In this case, the preceding syllable which begins with a middle or high consonant symbol governs the tone of its own syllable and the following syllable. That is to say, the second syllable, although it begins with a low consonant symbol, is also pronounced according to the tone rules of the middle/or high consonant symbols. For this reason, in all cases the second syllable is pronounced with low tone, although according to the spelling it should have been pronounced as either high or falling tone. The tone conversion of the second syllable by means of the first syllable here is similar to what happens in the case of syllable-initial consonant sequences pronounced with an intruded syllable stated in chapter 7, pp.150-152, but in this case the preceding syllable has its own vowel and the vocalic symbol is always written.
1. **low tone instead of high tone**

   The tone being pronounced: low tone
   The tone according to the spelling: high tone

---

### Figure 10.14

<table>
<thead>
<tr>
<th>A syllable</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <code>&lt;ริ&gt;</code> <code>/ริ/?</code> of the word <code>&lt;สิ&gt;</code> <code>/สิ.?/?</code></td>
<td>splendour, beauty, excellence, glory, wealth</td>
</tr>
<tr>
<td>2. <code>&lt;พา</code> <code>/พา/?</code> of the word <code>&lt;กระทรวง&gt;</code> <code>/ป.เรา.?/</code></td>
<td>account, story, history</td>
</tr>
<tr>
<td>3. <code>&lt;รัต</code> <code>/รัต/?</code> of the word <code>&lt;คาม</code> <code>/คาม.?/</code></td>
<td>royal term for to speak</td>
</tr>
<tr>
<td>4. <code>&lt;พุทธ</code> <code>/พุทธ/?</code> of the word <code>&lt;มหาพุทธ&gt;</code> <code>/พุทธ.?/</code></td>
<td>1. law, legal act, regulation 2. prescribe</td>
</tr>
<tr>
<td>5. <code>&lt;ฮก</code> <code>/ฮก/?</code> of the word <code>&lt;สม</code> <code>/สม.?/</code></td>
<td>a paint on a forehead to bring blessings, glory, wealth</td>
</tr>
<tr>
<td>6. <code>&lt;รู</code> <code>/รู/?</code> of the word <code>&lt;นิ่ง</code> <code>/นิ่ง.?/</code></td>
<td>elegant term for man, male</td>
</tr>
</tbody>
</table>
2. **low tone instead of falling tone**

The tone being pronounced: **low tone**  
The tone according to the spelling: **falling tone**

**Figure 10.15**

<table>
<thead>
<tr>
<th>A syllable</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. /re:k/ of the word /di?re:k/</td>
<td>to be great, special</td>
</tr>
<tr>
<td>2. /ma:t/ of the word /pra?ma:t/</td>
<td>to be overconfident, careless, negligent</td>
</tr>
<tr>
<td>3. /ma:t/ of the word /ram_ma:t/</td>
<td>government official, royal attendant, courtier, councillor</td>
</tr>
</tbody>
</table>
| 4. /ra:t/ of the word /?up_pa?ra:t/ | 1. a future king  
2. a second important person after the king |
| 5. /jo:t/ of the word /pra?jo:t/ | usefulness, advantage |
| 6. /jo:k/ of the word /pra?jo:k/ | sentence |
10.4.3 There are words which have irregular readings for the tone of a syllable without any reasons. They are mostly recent loanwords from English, though some of them are Sanskrit loans. Examples are:

<table>
<thead>
<tr>
<th>A syllable</th>
<th>The tone being pronounced</th>
<th>The tone according to the spelling</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. &lt;phet&gt;</td>
<td>high</td>
<td>falling</td>
<td>diamond</td>
</tr>
<tr>
<td>2. &lt;wet&gt;</td>
<td>high</td>
<td>falling</td>
<td>toilet</td>
</tr>
<tr>
<td>3. &lt;tphok&gt;</td>
<td>high</td>
<td>falling</td>
<td>chalk</td>
</tr>
<tr>
<td>4. <a href="">me:t</a></td>
<td>high</td>
<td>falling</td>
<td>metre</td>
</tr>
<tr>
<td>5. &lt;lot/ of the word <a href="">lot-tu:ri:/</a></td>
<td>high</td>
<td>falling</td>
<td>lottery</td>
</tr>
<tr>
<td>6. &lt;ro:p/ in the word <a href="">ju:ro:p/</a></td>
<td>low</td>
<td>falling</td>
<td>Europe</td>
</tr>
<tr>
<td>7. &lt;dok/ of the word <a href="">dok-tu:/</a></td>
<td>high</td>
<td>low</td>
<td>doctor</td>
</tr>
</tbody>
</table>

10.5 THE PAIRING OF HIGH AND LOW CONSONANTS

As already stated in chapter 6, p.131, for each of the low consonants which is a voiceless consonant, there is a corresponding high consonant which is identically pronounced except for the tones. A high consonant is pronounced with rising tone
but a low consonant is pronounced with mid tone. A number of both high and low consonants are represented by more than one consonant symbol, as shown below.

<table>
<thead>
<tr>
<th>High consonant symbols pronounced with rising tone</th>
<th>Low consonant symbols pronounced with mid tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>pʰ</td>
<td>ฬ</td>
</tr>
<tr>
<td>f</td>
<td>ḷ</td>
</tr>
<tr>
<td>th</td>
<td>ฅ ḷ</td>
</tr>
<tr>
<td>s</td>
<td>ṣ ḷ ḷ</td>
</tr>
<tr>
<td>tɕʰ</td>
<td>ḱ</td>
</tr>
<tr>
<td>kʰ</td>
<td>ḷ ṭ</td>
</tr>
<tr>
<td>h</td>
<td>ḷ</td>
</tr>
</tbody>
</table>

10.5.1 Indication of tones by means of the pairing of high and low consonants

In a live syllable initiated by a high consonant, there are only three tones, rising, low and falling. In the same type of syllable but initiated by a low consonant, there are also three tones, mid, falling and high (see Figure 10.10, p.228). Having the pairing of high and low consonants makes it possible to indicate all five tones in a live syllable, mid, rising, low, falling and high tones as illustrated in Figure 10.18. A dash indicates that the syllable having the tone indicated cannot be written with the type of consonant indicated.
<table>
<thead>
<tr>
<th>Tones</th>
<th>High consonant</th>
<th>Low consonant</th>
<th>Transcription</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>mid</td>
<td>—</td>
<td>kafka</td>
<td>/'kha:/</td>
<td>to get stuck</td>
</tr>
<tr>
<td>rising</td>
<td>kafka</td>
<td>—</td>
<td>/'kha:/</td>
<td>leg</td>
</tr>
<tr>
<td>low</td>
<td>—</td>
<td>kafka</td>
<td>/'kha:/</td>
<td>an aromatic rhizome used in cookery and medicine</td>
</tr>
<tr>
<td>falling</td>
<td>kafka</td>
<td>kafka</td>
<td>/'kha:/</td>
<td>1. using a high consonant: it means servant, attendant 2. using a low consonant: it means value</td>
</tr>
<tr>
<td>high</td>
<td>—</td>
<td>kafka</td>
<td>/'kha:/</td>
<td>to engage in trade</td>
</tr>
</tbody>
</table>

From the chart we see that in a live syllable there are two ways of writing a syllable with falling tone. But no ambiguity occurs, since certain words must be spelled one way, others the other way. As far as the pronunciation is concerned, it makes no difference whether a high or a low consonant is used. For a high or low consonant which is represented by more than one consonant symbol, /ph/, /th/, /kh/ and /s/ for example, a correct choice of consonant symbol in writing certain words must be memorised.

In a dead syllable initiated by a high consonant, there are only two tones, low and falling. In the same type of a syllable but initiated by a low consonant, there are also only two tones, high and falling (see Figure 10.11 on p.229). Having
the pairing of high and low consonants makes it possible to indicate three tones in a dead syllable, low, high and falling, as shown below in Figure 10.19.

<table>
<thead>
<tr>
<th>Tones</th>
<th>High consonant</th>
<th>Low consonant</th>
<th>Transcription</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>ฟชิ</td>
<td>-</td>
<td>/tʰchʰ:t/</td>
<td>magnificent, magnificently</td>
</tr>
</tbody>
</table>
| falling| ฟชิ           | ชิ            | /tʰchʰ:t/        | 1. using a high consonant symbol, it has no meaning  
2. using a low consonant symbol, it means:  
   i. to lift, raise, elevate, exalt  
   ii. to activate, control, direct, esp. from behind the scenes | |
| high   | -             | ชิ            | /tʰchʰ:t/        | shirt                                         |

From the chart we see that in a dead syllable there are two ways of writing a falling tone. But no ambiguity occurs, since the one spelled with a syllable-initial high consonant symbol has no meaning.

10.5.2 The conversion of unpaired low consonants into high consonants by means of the leading high consonant /h/

The rest of the low consonants which are not paired with high consonants are voiced nasals, a voiced trill, a voiced lateral and voiced semivowels, as shown below:
All these above low consonants can be converted into high consonants by means of placing a high consonant /h/ \( <\text{ญ}> \) in front of the low consonant which is to be converted.\(^1\) And this causes a consonant sequence pronounced as a single consonant as already discussed in chapter 7, pp.147-148. When it is converted, a low consonant still retains its phonetic quality, except that the inherent tone is changed from mid tone to rising tone. Among all of the above low consonant symbols, the \( <\text{ญ}> \) and \( <\text{ญ}'>\) do not happen to occur in converted form. Figure 10.21 shows the low consonant symbols which can be converted into high consonant symbols by means of the leading high consonant symbol \( <\text{ญ}> \).

---

1. According to Thai terminology, when \( <\text{ญ}> \) serves in this function it is known as \( <\text{ญ}'> \) /'hoi-nam/' "h-leading" and it is not pronounced.
Having the pairing of high and low consonants makes it possible to indicate all five tones in a live syllable initiated by a voiced nasal, a voiced trill, a voiced lateral, or a voiced semivowel. Figure 10.22 illustrates how to write all five tones in a live syllable by using both converted and unconverted consonant symbols.

**Figure 10.22**

<table>
<thead>
<tr>
<th>Tones</th>
<th>High consonant</th>
<th>Low consonant</th>
<th>Transcription</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>mid</td>
<td>—</td>
<td>↛</td>
<td>/-na:/</td>
<td>rice field</td>
</tr>
<tr>
<td>rising</td>
<td>ञות</td>
<td>—</td>
<td>/'na:/</td>
<td>to be thick</td>
</tr>
<tr>
<td>low</td>
<td>ञות</td>
<td>—</td>
<td>/_na:/</td>
<td>of the word &lt;ณูม Nunes&gt; &quot;custard apple&quot;</td>
</tr>
</tbody>
</table>
| falling | 忸            | ƺ           | /'na:/        | 1. using a high consonant symbol, it means "face"  
|         |                |               |               | 2. using a low consonant symbol, it means ought to, interesting (to do) |
| high    | —              | ƺ           | /^na:/        | younger aunt, or uncle                        |

Figures 10.23 and 10.24 present the way to write both converted and unconverted consonant symbols in a dead syllable.

1. With a vowel of group (a)
10.6 A BRIEF SKETCH ON HOW TO READ THE TONE OF A SYLLABLE INITIATED BY SYLLABLE-INITIAL CONSONANT SEQUENCES

10.6.1 How to read the tone of a syllable initiated by syllable-initial consonant sequence pronounced as a consonant cluster

Figure 7.1, showing the permissible syllable-initial consonant symbols in a cluster, is illustrated in chapter 7, p.140.

As already stated, the first consonant symbol of the cluster is either a middle, high or low consonant symbol. But the second is a low consonant symbol. There are two rules in reading the tone.

---

1. Hereafter a middle consonant symbol will be represented as m. con. symbol, a high consonant symbol as h. con. symbol, and a low consonant symbol as l. con. symbol.
of a syllable initiated by a consonant cluster. They are:

10.6.1.1 if the first and the second symbols belong to the same tonal class, the tone of a syllable is pronounced according to the tone rules of both consonant symbols: 1 e.g.,

1. A cluster \(<\text{пл}>=<\text{ph}\>) in the monosyllabic word \(\text{пложь} /-\text{ph}j\text{o}/ "precious stone, gem, jewel", consists of 1. con. symbols \(<\text{п}>=<\text{p}\>\) and \(<\text{ж}>=<\text{l}\>\). The syllable is a live syllable since it is an open syllable ending with a diphthong /о:i/, so it is pronounced with mid tone as a live syllable without a tonal marker initiated by a 1. con. symbol is pronounced. 2

2. The monosyllabic word \(\text{плать}/\text{phla:t}/ "to miss, fall" is also initiated by the same cluster \(<\text{пл}>=<\text{ph}\>)\. But the syllable is a dead syllable since it is a closed syllable ending with a final stop /-т/, so the syllable is pronounced with falling tone as a dead syllable without a tonal marker initiated by a 1. con. symbol is pronounced.

10.6.1.2 if the first and the second consonant symbols belong to different tonal classes, the tone of a syllable is pronounced according to the tone rules of the first consonant symbol: 3 e.g.,

1. A cluster \(<\text{хт}>=<\text{kh}\>) in the word \(<\text{хтва}>=\text{khwa:q}/ "to throw" consists of a h. con. symbol \(<\text{х}>=<\text{k}\>) and a 1. con. symbol \(<\text{т}>=<\text{w}\>, then the tone of a syllable is pronounced according

---

1. This rule applies to a syllable initiated by \(<\text{нр}>=<\text{pr}\>, \,<\text{п}>=<\text{ph}\>, \,<\text{ж}>=<\text{l}\>, \,<\text{ч}>=<\text{k}\>, \,<\text{ш}>=<\text{w}\>, or \,<\text{р}>=<\text{phw}\>.
2. Details of how to determine the tone of a live/or dead syllable when being initiated by a high, middle or low consonant symbol are already presented in Figures 10.10 and 10.11, on pp.228,229.
3. This rule applies to a syllable initiated by \(<\text{м}>=<\text{pr}\>, \,<\text{м}>=<\text{pl}\>, \,<\text{т}>=<\text{tr}\>, \,<\text{ч}>=<\text{kr}\>, \,<\text{щ}>=<\text{k}\>, \,<\text{н}>=<\text{kw}\>, \,<\text{щ}>=<\text{p}\>, \,<\text{н}>=<\text{kh}\>, \,<\text{к}>=<\text{k}\>, or \,<\text{к}>=<\text{khw}\>.
to the tone rules of h. con. symbols. The syllable is a live syllable because it is a closed syllable ending with a final nasal /-ŋ/, so it is pronounced with falling tone as a live syllable with the <—> tonal marker initiated by a h. con. symbol is pronounced.

2. The monosyllabic word <[parent]/<kʰwɜ:k>/ "spikes, barbs (metal or wood), esp. for use in making snares" is also initiated by the same cluster <kwɜ> = <kʰwɜ>. But the syllable is a dead syllable because it is a closed syllable ending with a final stop /-k/, so it is pronounced with low tone as a dead syllable without a tonal marker initiated by a h. consonant symbol is pronounced.

10.6.2 How to read the tone of a syllable initiated by syllable-initial consonant sequence pronounced as a single consonant

Figure 7.2 showing the permissible consonant symbols in a sequence pronounced as a single consonant is illustrated in chapter 7, p.144. The first consonant symbol is either a middle, high, or low consonant symbol. But the second is always a low consonant symbol. The rules of reading the tone of a syllable can be summarised into the three following rules:

10.6.2.1 if the first consonant symbol is pronounced, the tone of a syllable is pronounced according to the tone rules of the first consonant symbol: 1

For instance:

1. The sequence <kwɜ> = <sr> as in the word

---

1. This rule applies to a syllable initiated by <kwɜ> = <tʃr> pronounced as /tʃ/ and <kwɜ> = <sr>, <kwɜ> = <sr> pronounced as /s/.
"ornamental chain, string of jewels, pearls", consists of a h. con. symbol \(<\mathrm{s}\)=\(<\mathrm{s}\) and a l. con. symbol \(<\mathrm{r}\)=\(<\mathrm{r}\). In this sequence only the first con. symbol \(<\mathrm{s}\)=\(<\mathrm{s}\)is pronounced, so the syllable is pronounced according to the tone rules of h. con. symbols. The syllable is a live syllable since it is an open syllable ending with a diphthong /oi/, so it is pronounced with falling tone as a live syllable with the \(<\mathrm{^v}\) tonal marker initiated by a h. con. symbol is pronounced.

2. The monosyllable word \(<\text{\textit{\textasciitilde{r}art}}\)/ \(<\text{\textit{\textasciitilde{r}a\text{\textit{t}}}}\) "to be finished, ready", is also initiated by the sequence \(<\text{\textit{\textasciitilde{r}}a}\)=\(<\text{\textit{\textasciitilde{s}\r}}\). In this sequence only the first consonant symbol \(<\mathrm{s}\)=\(<\mathrm{s}\)is pronounced, so the syllable is pronounced according to the tone rules of h. con. symbols. The syllable is a dead syllable since it is a closed syllable ending with a final stop /-t/, so it is pronounced with low tone as a dead syllable without a tonal marker initiated by a h. con. symbol is pronounced.

10.6.2.2 if the second symbol is pronounced and it belongs to different tonal class from the first consonant symbol, it is always converted into the tonal class of the first consonant symbol. Then the tone of a syllable is pronounced according to the tone rules of the first consonant symbol:

For instance:

1. The sequence \(<\text{\textit{\textasciitilde{r}a\text{\textit{h}}}m}\)=\(<\text{\textit{\textasciitilde{h}}m}\)as in the word \(<\text{\textit{\textasciitilde{h}a\text{\textit{h}}}m}\)

<table>
<thead>
<tr>
<th>1. This rule applies to a syllabic initiated by</th>
<th>1/</th>
<th>2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>(&lt;\mathrm{j})=(&lt;\mathrm{j}m)&gt; pronounced as</td>
<td>(/\mathrm{j})</td>
<td></td>
</tr>
<tr>
<td>(&lt;\mathrm{hw})=(&lt;\mathrm{h}m)&gt;</td>
<td>(/\mathrm{m})</td>
<td></td>
</tr>
<tr>
<td>(&lt;\mathrm{hl})=(&lt;\mathrm{h}l)&gt;</td>
<td>(/\mathrm{l})</td>
<td></td>
</tr>
<tr>
<td>(&lt;\mathrm{hj})=(&lt;\mathrm{h}j)&gt;</td>
<td>(/\mathrm{j})</td>
<td></td>
</tr>
</tbody>
</table>

245
"dog", consists of a h. con. symbol <m> = <m> and a 1. con. symbol <w> = <m>. In this sequence the second consonant symbol <w> = <m> is pronounced, so it is converted into the h. con. symbol by means of the leading h. con. symbol <m> = <m>.¹ The syllable is a live syllable because it is an open syllable ending with the vowel /a:/, so it is pronounced with rising tone as a live syllable without a tonal marker initiated by a h. con. symbol is pronounced.

2. The monosyllabic word <muːak> "hat", is also initiated by the same sequence <hm>. In this sequence <m> is pronounced, so it is converted into a h. con. symbol by means of the leading <hm> = <h>. The syllable is a dead syllable because it is a closed syllable ending with a final stop /-k/, so it is read with low tone as a dead syllable without tonal marker initiated by a h. con. symbol is pronounced.

10.6.2.3 The sequence <tr> pronounced as a low consonant symbol <s> = <s>. This sequence consists of 1. con. symbols <t> = <th> and <r> = <r>, but it is pronounced as a low consonant symbol <s> = <s>, so the tone of a syllable initiated by <tr> = <tr> is pronounced according to the tone rules of low consonant symbols:

For instance:

1. The sequence <tr> = <tr> in a monosyllabic <trɔːm> /saːi/ "sand", is pronounced as a 1. con. symbol <s> = <s>, so

---

¹ Details of the conversion of low consonants into high consonants by means of the leading h. consonant symbol <m> = <m> is already discussed on pp.239-242.
the tone of a syllable is pronounced according to the tone rules of 1. con. symbols. The syllable is a live syllable because it is an open syllable ending with a long vowel /aːi:/, so it is pronounced with mid tone as a live syllable without a tonal marker initiated by a 1. con symbol is pronounced.

2. A monosyllabic word <(mi)u>/Nsa:p/ "to know", is also initiated by <mi> = <tʰr> pronounced as <s> = <s>. The syllable is a dead syllable since it is a closed syllable ending with a final stop /p/, so it is pronounced with falling tone as a dead syllable without a tonal marker, with the vowel of group (b), initiated by a 1. con. symbol is pronounced.

10.6.3 How to read the tone of a syllable initiated by syllable-initial consonant sequence pronounced in two syllables with an intervening unwritten vowel /a/ or /ɔː/:  

The rules for determining the tones of the intruded syllable with the vowel /a/ and the syllable which follows it are as presented below:

10.6.3.1 if the first consonant symbol is a h. con. symbol and it precedes a 1. con. symbol, in most cases it converts the 1. con. symbol into a h. con. symbol. So both intruded syllable and the syllable which follows it are pronounced according to the tone rules for h. con. symbols:

For example:

in the word <mi)u>/Nkʰa?/jaːi/ "to expand, enlarge",

1. In rare cases, no conversions occur. Each of the two consonant symbols governs the tone of its own syllable in accordance with the rules for its own tonal class, as already discussed in chapter 7, p.151.
the h. con. symbol \(<p> = <k^h> of an intruded syllable /_k^ha/\) precedes a l. con. symbol \(<j> = <j> of the syllable /ja:i/\). In this case \(<p> = <k^h> converts \(<j> into a h. con. symbol, so both intruded syllable /_k^ha/ and the following syllable /ja:i/ are pronounced according to the tone rules for h. con. symbols. The intruded syllable /_k^ha/ is a dead syllable, since it ends with a short vowel /a/ followed by a glottal stop. So it is pronounced with low tone as a dead syllable without a tonal marker initiated by a h. con. symbol is pronounced. This is how it is pronounced according to the spelling and it is true in careful speech, but when pronounced in running connected speech the vowel /a/ of the intruded syllable becomes neutralised as /a/ and the tone also becomes neutralised as mid tone as already stated on p.150. The syllable /ja:i/ is a live syllable since it is an open syllable ending with a long vowel /a:i/, so it is pronounced with rising tone as a live syllable without a tonal marker initiated by a h. con. symbol is pronounced. If the \(<j> was not converted into a h. con. symbol and still stayed as a l. con. symbol, the syllable would be pronounced with mid tone instead.

10.6.3.2 if the first consonant symbol is a m. con. symbol and it precedes a l. con. symbol, in most cases, it converts the l. con. symbol into a m. con. symbol. So both intruded syllable and the syllable which follows it are pronounced according to the tone rules for m. con. symbols.

For example:

in the word \(<_t^a?_la:t/> "market", the m. con.

1. See the footnote on p.247.
symbol $<\mathfrak{m}> = <t>$ of an intruded syllable /-ta/? precedes a l. con. symbol $<\mathfrak{n}> = <l>$ of a syllable /-la:t/. In this case $<\mathfrak{m}> = <t>$ converts $<\mathfrak{n}> = <l>$ into a m. con. symbol, so both intruded syllable /-ta/? and the following syllable /-la:t/ are pronounced according to the tone rules for m. con. symbols.

10.6.3.3 with all other combinations of consonant symbols, no conversions occur. So each of the two consonant symbols governs the tone of its own syllable in accordance with the rules for its own tonal class, whatever it may be:

For example:

In the disyllabic word $<\text{มิชที่}> /-sa?-de:\eta/ "to perform", the h. con. symbol $<\mathfrak{m}> = <s>$ of an intruded syllable /-sa/? precedes a m. con. symbol $<\mathfrak{n}> = <d>$ of the syllable /-de:\eta/, so both intruded syllable /-sa/? and the following syllable /-de:\eta/ are pronounced according to the tone rules for its own tonal class. The intruded syllable /-sa/? is pronounced with low tone as a dead syllable without a tonal marker initiated by a h. consonant is pronounced. This is the way it is pronounced according to the spelling and it is true in careful speech. In running connected speech /-sa/? realises as /-se/. The syllable /-de:\eta/ is pronounced with mid tone as a live syllable without a tonal marker initiated by a m. consonant symbol is pronounced.

The rule for determining the tones of the intruded syllable with the vowel /o:/ and the syllable which follows it is that, no conversions of the following consonant symbol by means
of the preceding consonant symbol occurs. So each of the two consonant symbols governs the tone of its own tonal class, whatever it may be. For example, in the word <-aware> /-bɔ:w-ka:n/ "service", the m. con. symbol <ῇ> = <b> of an intruded syllable precedes a l. con. symbol < LTC> = <r> of the syllable /ˈri/?/. But no conversion occurs here. The intruded syllable /-bɔ:/ is pronounced with mid tone as a live syllable without a tonal marker initiated by a m. con. symbol is pronounced. The syllable /ˈri/?/ is pronounced with high tone as a dead syllable without a tonal marker initiated by a l. con. symbol is pronounced. Again that is how it is pronounced in careful speech and according to the spelling, but in running connected speech /ˈri/?/ realises as /-rï/.

10.7 OBSERVATIONS ON READING VOWEL LENGTH UNDER DIFFERENT TONES AND DIFFERENT TYPES OF SYLLABLES

As already stated in chapter 8, pp.175-176 in a syllable with a final consonant symbol and a tonal marker, /e/ ~ /e:/, /ɛ/ ~ /ɛ:/, and /ɔ/ ~ /ɔ:/ are represented by the same vocalic symbols as < LTC> for /e/ ~ /e:/, < LTC> for /ɛ/ ~ /ɛ:/ and < LTC> for /ɔ/ ~ /ɔ:/ since the < LTC> which is used to indicate the shortening of a vowel cannot be employed when a tonal marker is required in the writing of a syllable. In this case there is no way in the writing system to differentiate /e/ ~ /ɛ/ ~ /ɔ/ from the long counterparts in a syllable with a final symbol and a tonal marker. From my own observations in having three subjects who are native speakers of Standard Thai to read through all the words written
with these vocalic symbols, I would like to make general statements of when they are read short or long under different types of syllables and different tones, as shown below:

10.7.1. \( \langle \cdot \circ \rangle \) for /e/ ~ /e:/

1. In a syllable with a final nasal under either low, or rising tone, the vocalic symbol is in all cases read short. The following are some examples:

(a) under low tone

\[ \langle \text{phen} \rangle /\text{phen}/ \] "to jump, leap"

\[ \langle \text{ben} \rangle /\text{ben}/ \] "1. to swell out, expand, enlarge 
   2. to boast, act big"

\[ \langle \text{ken} \rangle /\text{ken}/ \] "to be keen on something"

(b) under rising tone

\[ \langle \text{ken} \rangle /\text{ken}/ \] "car"

\[ \langle \text{pen} \rangle /\text{pen}/ \] "fixed, fixedly, precise, precisely"

\[ \langle \text{en} \rangle /\text{en}/ \] "exclamation expressing pain, discomfort used by dogs"

In a syllable under high or falling tone, the vocalic symbol is pronounced either short, or long (depending upon the words), for example:

(c) under high tone

pronounced short

\[ \langle \text{wen} \rangle /\text{wen}/ \] "to omit, skip, skip over"

\[ \langle \text{mem} \rangle /\text{mem}/ \] "to fold the edge or border in"

\[ \langle \text{pen} \rangle /\text{pen}/ \] "to lose"
pronounced long

1. to drift, be adrift
2. adrift, aimlessly, randomly

(to be beautiful, cute)

under falling tone, it is in most cases pronounced short, e.g.

"porcupine"

"to play"

"to hurry, speed up, accelerate, urge"

I found that it is pronounced long, only in a monosyllabic word "a kind of deer" and in a syllable of the word "to be gangly, gangling, awkward, clumsy".

2. In a syllable with a final stop, it is in most cases pronounced short under high tone. Most words are recent loanwords from English, e.g.,

"peg"

"jet"

"technique"

"to be pretending to be snobbish"

"common term for Chinese"

In rare instance, it is pronounced long. They are words

1. A syllable ending with a stop is considered a dead syllable. A dead syllable can have either low, high, or falling tone only, as already stated in Figure 10.11 on p.229. It is stated by Jackson T. Gandour in his article "Tonal Rules for English Loanwords in Thai", Studies in Tai and Mon Khmer Phonetics and Phonology in Honour of Eugenie J.A. Henderson, (1979), p.103, that the majority of English checked monosyllabic words or the non-final checked syllable of polysyllabic words are pronounced with high tone.
pronounced with /ei/ in standard English. Since we do not have 
/ei/ in Thai, so we pronounce it as a long /e:/ instead.

< ASET > /'tʃe:k/ of the word < ASET > /'min'tʃe:k/ "milk shake"

< ASET > /'the:p/ "tape"

< ASET > /'khe:k/ "cake"

10.7.2 < 11-3 > for /e/ ~ /e:/

1. In a syllable with a final nasal under either low or 
rising tone, the vocalic symbol is in all cases read short. The 
following are some examples:

(a) under low tone

< ASET > /'be.n/ "to divide, to share"

< ASET > /'ph.n/ "a classifier for thin, flat, objects, 
e.g. sheets of paper, boards"

< ASET > /'te.n/ "1. to fix up, beautify 
2. to ornament, decorate, adorn 
3. to compose (e.g. verse)"

(b) under rising tone

< ASET > /'pr.n/ "imitative term for the trumpeting of an elephant"

< ASET > /'tq.n/ "to behave coquettishly, to lecture coquettishly"

In a syllable under high or falling tone, the vocalic 
symbol is read either short or long, depending upon the words.

For example:

(c) under high tone

pronounced short (they are mostly English loanwords in Thai)

< ASET > /'kən/ "gang"
pronounced long

"tank"

pronounced short

"cheek"

(d) under falling tone

In a syllable with a final stop, it is in most cases pronounced short with high tone. Most words are recent English loanwords pronounced with high tone, for example,

"gas"

"act"

"jacket"
In rare instances, it is pronounced long; for example,

In a syllable with a final nasal under rising tone, it is pronounced short in all cases. For example,

In a syllable under high tone, it is pronounced long only, e.g.

In a syllable under low tone, or falling tone, it is pronounced either short or long, for example:

(a) under low tone, in most cases it is pronounced short, e.g.

(b) under low tone, in most cases it is pronounced long, e.g.}

"to be clean, clear, bright, fair (especially of complexion)"
"1. to bulge, protrude
2. to be protruberant, protruding, bulging out"
"place, den (often of undesirable activities such as gambling, cockfighting, etc.)"
In rare instances it is pronounced long, e.g.

\[\text{\`k\text{\textipa{n}}}\] /\textipa{k\text{\textipa{n}}}/ "1. previous
   2. first
   3. before"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "1. to be soft, tender
   2. to be young"

(b) under falling tone, it is pronounced short or long,

depending upon the words, e.g.,

pronounced short

\[\text{\`h\textipa{n}}\] /\textipa{h\textipa{n}}/ "room"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "to stare at"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "to learn by heart"

\[\text{\`\textipa{n}}\] /\textipa{n\textipa{n}}/ "calf"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "to echo"

pronounced long

\[\text{\`k\textipa{n}}\] /\textipa{k\textipa{n}}/ "lump"

\[\text{\`\textipa{n}}\] /\textipa{\textipa{n}}/ "to feed (to the mouth)"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "to cry, whine, whimper"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "to go by a roundabout way, to detour"

2. In a syllable with a final stop, it is in most cases

pronounced short with high tone. Most words are recent English

loanwords, e.g.,

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "top"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "1. faucet, spigot, tap, cock
   2. cork"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "to lock"

\[\text{\`\textipa{\textipa{n}}}\] /\textipa{\textipa{n}}/ "knock"
"knot"

"to be
noisy, loud (as a large crowd)"

"to walk,
hoof it, (e.g. when transportation is not
available)"

In some cases it is read long, as in the word <ตอก> /
^o:t/, <ภัต> /t:ot/.  They are common nicknames which do
not mean anything. Thai people like to invent nicknames for their
children because we use them instead of "I, me" when talking
intimately to our elders, or friends. The word <ติชั่น> /
^di?t'chan/ "I, me" used by a female speaker, and <พอม> /
'phom/ "I, me" used by a male speaker, are formal terms, although <พอม> /
'phom/ is eventually becoming informal. When I started learning
English and had to use the word "I" when talking to my elders and
friends, I felt uncomfortable since I translated it into the word
<ติชั่น> /^di?t'chan/ in Thai. And that made it sound very
formal to me since I am used to using my nickname instead. Many
Thai nicknames are nonsense, but they are used because they sound
nice.

In a syllable with a tonal marker, /eu/ ~ /e:u/, /eu/ ~ /e:u/ and /oi/ ~ /o:i/ are also represented by the same
vocalic symbols as <ิ> for /eu/ ~ /e:u/, <ิ> for
/eu/ ~ /e:u/ and <ิ> for /oi/ ~ /o:i/ since the <—> which
is used to indicate the shortening of a vowel can not be employed
when a tonal marker is required in the writing of a syllable. In
this case there is no way in the writing system to differentiate
/əu/, /e_u/ and /ɔ/ from the long counterparts in a syllable with a tonal marker. From my investigations in having subjects to read through all the words written with these vocalic symbols, I would like to make general statements of when they are read short or long under different tones. All of them occur only in a syllable without a final consonant.

10.7.4 $\langle 1-7 \rangle$ for /əu/ ~ /e_u/

This vocalic symbol is very seldom used in the Thai writing system, especially when having a tonal marker with it. I found only two words written with it, and they are pronounced as shown below:

1. $\langle 1 \rangle$ /'əu/ "exclamation showing teasing" is read short under high tone.

2. $\langle 2 \rangle$ /'pe:u/ "intensifier used with /'le:u/ 'watery'" is pronounced long under rising tone.

10.7.5 $\langle 1-7 \rangle$ for /əu/ ~ /e_u/

1. It is pronounced short in all cases under low and rising tone, the following are examples.

(a) under low tone

$\langle 1 \rangle$ /'pʰe:u/ "softly, lightly, faintly (of sound, voice, touch)

(b) under rising tone

$\langle 1 \rangle$ /'tɛ:u/ "to be clear, bright (of eyes, voice)"
"peu/ "intensifier used with /ta:/ 'eye's means bright"

2. It is pronounced either short or long under high or falling tone, for example:

(a) under high tone

pronounced short
<แม่ >/ 'peu/ of the word <แม่ >/ 'boe萱ueu/
"an intensifier used with /ta:/"

<แม่ >/ 'peu/ "a girl's nickname"

<แม่ >/ 'peu/ "a girl's nickname"

pronounced long
<แม่ >/ 'le:u/ "1. to be finished
2. already
3. then, afterwards, later"

<แม่ >/ 're:u/ "snare, trap"

<แม่ >/ 'me:u/ "the name of a hill tribe in the north of Thailand"

(b) under falling tone

pronounced short
<แม่ >/ 'tpeu/ "to be melodious, pleasing to the ear"

<แม่ >/ 'weu/ "to hear instinctively"

<แม่ >/ 'weu/ "to be direct, steadfast"

pronounced long, in one word only, that is

<แม่ >/ 'ke:u/ "crystal, glass"

10.7.6  < พ.กก > for /ɔi/ ~ /ɔːi/

1. It is pronounced short under low tone and rising tone in all cases, for instance:
(a) **under low tone**

< 받으 / kroi/ "to be stale"

< 씹으 / -tci/ "to hit by fist"

< 뜨으 / -noli/ "1. a little bit
2. a little while"

(b) **under rising tone**

< 저지 / 'tci/ "to be sad, hopeless, discouraged (refers to facial expression); to look sick, spiritless"

< 저지 / '?oci/ "intensifier used with < 멜루 / '요요 / 'yellow''

2. It is pronounced long in all cases under high tone.

The following are some examples:

< 멜으 / 'no:i/ "to be little, less, small, slight (in quantity)"

< 애으 / 'jo:i/ "1. to slip down
2. to hang down, droop"

< 색으 / 'go:i/ "1. hundred
2. classifier for hundreds
3. to string, thread"

3. It is pronounced either short or long, depending upon the words, under falling tone,

**pronounced short**

< 색으 / 'koi/ "1. the little finger
2. tails (the reverse of a coin)"

< 저지 / '?oci/ "sugar cane"

< 애으 / 'jo:i/ "1. to digest
2. to be minor, subordinate, to be a part
3. to break up into small particles"

**pronounced long**

< 저지 / 'do:i/ "to be inferior"

< 저지 / 'toci/ "a girl's nickname"
Chapter 11

PUNCTUATION, SPECIAL ORTHOGRAPHIC SYMBOLS, MATHEMATICAL SYMBOLS, DISTINCTIVE TREATMENT OF WORDS, SPACES, NUMERALS AND ABBREVIATIONS
Chapter 11

PUNCTUATION, SPECIAL ORTHOGRAPHIC SYMBOLS, MATHEMATICAL SYMBOLS, DISTINCTIVE TREATMENT OF WORDS, SPACES, NUMERALS AND ABBREVIATIONS

11.1 PUNCTUATION

The punctuation marks used in the present Thai writing system are both traditional ones developed from the ancient Thai scripts and recently borrowed ones from the English writing system. The punctuation marks, their names and examples, are listed below:

11.1.1 < - > /jaʔ tiʔ-phan/ is used to indicate that a word has been interrupted at the end of a line and is continued in the next. Such divisions are made between syllables, i.e.

< สา-วรรคม > /ʔoaʔ-wo:n/ "to long for, yearn for, miss"
< ต.ก. > /- suʔ-pha:p/ "to be polite"
< บรร.ป. > /-tchin_tαʔ-na:/ "thought"
< ป.ต. > /_ʔat_tphaʔ-ra:/ "angel"

11.1.2 < > /maʔ hapʔphaʔphaʔk/ or /l.tput/ is used in writing abbreviations, time and numbering a list, i.e.

---

1. The functions of punctuation are as described by Randolph Quirk and Sidney Greenbaum in their A University Grammar of English, (1973), pp.458-461.
1. In writing abbreviations.
   <ช.r.> = <โรงเรียน> /'ro:n-ri:an/ "school"
   <ช.m.> = < มกราคม> /'mok-ka?-ra:-khom/ "January"

2. In writing time. When used in writing time it is read as <ต.ค>/-t\\(\text{\shortparallel})t.\(\text{\shortparallel}k/.
   <8.30 น.>/_pe:t_t\\(\text{\shortparallel})t.\(\text{\shortparallel}sa:m\'su:n-no:/ "8.30 a.m."
   <2.15 น./'_sa:n_t\\(\text{\shortparallel})t.\(\text{\shortparallel}nu\'ha:-no:/ "2.15 p.m."

3. In numbering a list.
   <ที่ "หมาย" นี้ ใช้ ตัวเลข>
   /-tu:a-no:-mi:'so:n_tpha?n\'nit-khw:
   1. น 
   2. น

"There are two consonant symbols to represent /n/
   1. น
   2. น"

11.1.3 <, > <ดุสทภัก> /_t\\(\text{\shortparallel})tun\'la?pha:k/ or <ฉลางช่อ>
   /_t\\(\text{\shortparallel})t.\(\text{\shortparallel}lu:k'nam/ is a comma, i.e.
   <เพิ่งนิยมใช้>, จำนวนเสริมมากกว่า>
   /_tpha?n_tpha?p'si:'kha:u'khiau'le?\'mu:an/
   "I like white, green and violet".

11.1.4 <; > <ศิลปะ> /_\?at'tha?pha:k/ or <จุฬาภรณ์>
   /_t\\(\text{\shortparallel})t.\(\text{\shortparallel}kh\'rwn/ is a semicolon, i.e.

1. Although these two punctuation marks are listed in Thai grammar books, they are not really used in ordinary writing. Moreover, a full stop is not used at the end of a sentence. Not using these three punctuation marks makes it confusing to read Thai, especially when reading aloud. Suggestions on writing these punctuation marks have been made by Thai scholars since 1844, but they found no success. Nowadays the majority of Thai people write without using them in all kinds of writing.
"My informants are Mr Niphon Khwandi, age 20; Miss Patama Khwandi, age 26; Mrs Kanchana Phondi, age 30."

11.1.5 < : > /_cut_khu:/ is a colon, for example:
< เรารู้แล้วว่าคุณชอบอะไรบ้าง:
1. < - > มันต่างๆ
2. < . > ฉันทำงาน
3. < , > ฉันทำงาน

"The punctuation marks used in the Thai writing system are as follows:
1. < - >
2. < . >
3. < , > "

11.1.6 < ? > /_prat_sa?-ni:/ is a question mark, for instance:
< ทานข้าวไหมคะ?
/tha:n_kha?_nom^mai^kha?/
"Would you like some sweet?"
11.1.7 < ! >  "จงกระหุ่น" /-wat′saʔtɕʰai:ɾiː/ is an exclamation mark, i.e.
< ค้าหมายว่า ! > /-tɕʰaiʔiːɾu/ "My goodness!"
< ค้านะจะยี่ย ! > /-kʰunʰpʰraʔtɕʰuai/ "Gosh!"

11.1.8 < ( ) >  "ฉันหนี" /"naʔ kʰaʔ liʔ kʰit/ or
< เหลี่ยม > /-wɔŋ⁴ləp/ are parentheses, for instance,

1. Used to indicate editorial additions, corrections, or explanations, i.e.,
< การวิจัยของโพธิ์ ( คุณหน้า 26 ) น่าสืบเนื่องมาก >
/-kʰənʰwiʔ tɕai kʰoŋ raiʰwat du:′naː jìːsip′naː sɔŋ tɕaiˈmaːk/
"Raiwat's analysis (see p.20) is very interesting."

2. Used to enclose numerals or letters marking divisions or enumerations in the text, i.e.,
< เล่มสามในภาษาไทยมีผังการจัดจำแนก 2 ชั้นกั้น>
(1) ผังสำระภายใน
(2) ผังสำระหลั่ง

/-rù:p ʔsaʔ rəʔnaiʰpʰaː səːtʰai bəŋ ʔɔː kʰɛn sɔŋ tɕʰaʔ nɨt kʰw:
_nuŋ rù:p ʔsaʔ rəʔdיאw sɔŋ rù:p ʔsaʔ rəʔpʰaʔ səːm/
"There are two main kinds of vocalic symbols in Thai
(1) simple vocalic symbols
(2) complex vocalic symbols."

< เล่มสี่ในภาษาไทยมีผังการจัดจำแนก 3 ชั้นกั้น>
(3) เล่มสี่สำระติดกั้น
(4) เล่มสี่สำระหลั่ง 2 ชั้น
(5) เล่มสี่สำระหลั่ง 3 ชั้น >
"There are three main kinds of vowels in Thai:
(a) monophthongs
(b) diphthongs
(c) triphthongs."

1.1.9 « " » <ซัมพะรักษ์> /ʔæn^ja?-pra?_ka:t/ is a quotation mark, i.e.,
1. Used to enclose direct questions, for example:
< "กี่นิ้วมีเล็บเท่าไหร่" >
/ˈsaːtʰaːm wa:kʰun nap thwː saːt saʔ naʔ rai/,
Sophak asked, "What is your religion?"
2. Used to give special importance or emphasis to certain words, for example:
< "สำหรับเที่ยงมื้อเย็นราวหกโมงเศษ ยังไม่ได้กินข้าว ที่ใด ที่ไร " >
/tʰam-thai^theː pʰaʔ-jaiŋ-diau^thiːʔa:k siʔaŋʔaʔ tɔŋ praʔ wiʔ san^tʰaʔ-niʔ saʔ mː jok wɛn-kʰam waʔ naʔ "thiː pʰeː waː thiː niː:-weː-iaː^niː:/
"Pure Thai monosyllabic words pronounced with /a/ are always written with a vocalic symbol <-ʔ> except the word 'na' which means, in, at."

11.2 SPECIAL ORTHOGRAPHIC SYMBOLS
The following are special orthographic symbols in the Thai writing system:
11.2.1 <กู> <ไฉไลแก้> /"ma:i'ja?'mok/ is used to indicate that a preceding word or a phrase is to be repeated, i.e.,
<เพิ่มมากกว่า> /_sa?'muk:_sa?'muk/ "always"
<เร้าขอมาที่ร้านเก่าที่ซิม> /-p'tcha:i-ma:'thiau'thi: '

"Pricha often comes here."

"I have told you not to be careless."

11.2.2 <กู> <ไฉไลแก้>/-pai-ja:n'noch:/ is used to indicate that a familiar, well-understood word or phrase has been omitted in writing, but that that word or phrase should be pronounced when read aloud, e.g.,
<สายเก่า> = <สายการณ์> /-na:'jok'rat tha?-mon-tri:/

"prime minister."

"a greeting phrase used when speaking to a member of a royal family."

11.2.3 <กษัตริย์> <ไฉไลแก้> /-pai-ja:n-jai/ or
<ฯ> /"ja?/ represents "et cetera" and is pronounced /"ja?/
when encountered in a text. There is another punctuation mark which also represents "et cetera", it is <...> /-t\ut\_khai-p\_la:/ and is also pronounced /"la?/ when encountered in a text. The following are examples:

< ตีวีสดิเระสีสก๊องท์เก้า บน ชั้น ที่ 3 ไม้นัก, ที่ 4 ไม้นัก, ที่ 5 ไม้นัก, ที่ 6 ไม้นัก, ที่ 7 ไม้นัก, ที่ 8 ไม้นัก >

/-nai\'swu:an sat-mi sat-ta:ng ta:ng t\_chen\'_swi:a\'_sin-to:^
ma:^
-kwa:^
l\_la?/

"There are several kinds of animals in a zoo, for example tigers, lions, horses, deer, etc."

< สัตว์แฝด ซื้อ ดิ้นขี้เกง ถ่านไฟ, ม้า, กระต่าย, สัตว์ปีก, สัตว์น้ำ, ปลา, สัตว์เลี้ยง> /-sin\'_thi: t\_chen\'_ta:n\'_swi:^
-dai\_ka:^
-fe:\_kha?^
nom-pan_khai
phon\_la?/ma:^
l\_la?/

"What I have to get are coffee, bread, eggs, fruit, etc."

11.2.4 < » < สมbol__ja: » /-bup\^\_pha?^
\_san\_ja: / is used to indicate that a word or a phrase above which it occurs is to be repeated, for instance:

< 2 + 2 แม\_น 4 > /'so:n\_bu:ak\'_so:n\_pen\_si:/ "two plus two equals four"
< 3 + 3 6 > /'sa:m\_bu:ak\'_sa:m\_pen\_hok/ "three plus three equals six"

(The word < แม\_น > /-pen/ "to equal" is secondly indicated by < » >)

11.3 MATHMATICAL SYMBOLS

Below are some of the common mathematical symbols used in mathematics, geometry and statistics:
11.4 DISTINCTIVE TREATMENT OF WORDS

Devices to give special expression-emphasis, irony, or whatever, to the written word is done in the Thai writing system by the use of italics, quotation marks or underlining to achieve

1. Italics is a special sloping style of writing which is analogous to italics in the Roman alphabet.
special effects. The following are some examples:

"She never lets anybody hear the word sorry from her."

"I only can say 'I don't want it.'"

"My most favourite song of those composed by the King is Rain Drops."

11.5 SPACES

In Thai writing, words are written without spaces between them as is done in writing English, French, Spanish, etc. Spaces are normally used at the end of a phrase, clause or a sentence. They typically occur in places where a comma, a semicolon, and a period are used and also in the following situations:

1. Used between phrases or clauses within a sentence.

"That blouse ... I don't want it."

2. Used between sentences in a cohesive group of sentences, i.e.
"He sings beautifully, I really enjoy listening to him."

3. Used before and after numerals, i.e.

"I come to the department between 9 and 10 a.m."

4. Used between coordinate words in lists, i.e.

"My favourite fruits are mangoes, papayas, water melons and guavas."

5. Used between the first and the second names of people, e.g.

"Mr Thanet Tongsiri."

"Miss Kathaliya Tongsiri."

Spaces are not used between a title like "Mr" = < นาย > /-na:i/ , "Miss" = < นางสาว > /-na:ŋ'sa:u/ , or "Mrs" = < นาง > /-na:ŋ/ and the first names as shown in the examples above.

6. Used before and after the following special orthographic symbols, and punctuation marks: < . > , < ? > , < . > , < - > , < > , < : > , < > , < ? > , < ! > , < ( ) > , < ' >

Examples have already been shown on pp.261-267.
The first line of each paragraph is always indented, for example:

"..."

"The prime minister is going to pay a state visit to different European countries for forty-five days. Those countries are, for example, Britain, France, Germany, Switzerland, etc. The country in which he will stay longest is 'Britain'."

11.6 NUMERALS

Thai numeral symbols were borrowed from the Cambodian source as was also the script. Arabic numerals are equally well known and as a matter of fact in ordinary writing people use Arabic numerals. Thai numerals are normally used only in publications.

The actual Thai numerals and their names are listed in the following chart.
The Thai numeral system is based on the decimal system and the higher numbers are formed by the use of zero. In Thai numerals involving four or more symbols, a comma is placed after every three symbols, counting from the right to the left. The higher numbers of Thai numerals are as follows:
<table>
<thead>
<tr>
<th>Arabic numerals</th>
<th>Thai numerals</th>
<th>Thai names</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>๑๐</td>
<td>/-sip/</td>
</tr>
<tr>
<td>19</td>
<td>๑๙</td>
<td>/-sip`ka:u/</td>
</tr>
<tr>
<td>20</td>
<td>๒๐</td>
<td>/`ji:_sip/</td>
</tr>
<tr>
<td>29</td>
<td>๒๙</td>
<td>/<code>ji:_sip</code>ka:u/</td>
</tr>
<tr>
<td>90</td>
<td>๙๐</td>
<td>/ka:u:_sip/</td>
</tr>
<tr>
<td>100</td>
<td>๑๐๐</td>
<td>/_nun`ro:i/</td>
</tr>
<tr>
<td>101</td>
<td>๑๐๑</td>
<td>/_nun`ro:i?et/</td>
</tr>
<tr>
<td>189</td>
<td>๑๘๙</td>
<td>/ ฒนสิระมาลีศวนา</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/_nun<code>ro:i?et_sip</code>ka:u/</td>
</tr>
<tr>
<td>201</td>
<td>๒๐๑</td>
<td>/<code>so:n</code>ro:i?et/</td>
</tr>
<tr>
<td>1,000</td>
<td>๑,๐๐๐</td>
<td>/_nun`phan/</td>
</tr>
<tr>
<td>1,051</td>
<td>๑,๐๕๑</td>
<td>/_nun<code>phan</code>ha:_sip?et/</td>
</tr>
<tr>
<td>1,786</td>
<td>๑,๗๘๖</td>
<td>/_nun<code>phan_tet</code>ro:i?et_sip_hok/</td>
</tr>
<tr>
<td>10,000</td>
<td>๑๐,๐๐๐</td>
<td>/_nun`mu:n/</td>
</tr>
<tr>
<td>12,523</td>
<td>๑๒,๕๒๓</td>
<td>/ ทรงพจน์ศิริชัยสาระที่สาม</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/_nun<code>mu:n</code>so:n<code>phan</code>ha:<code>ro:i</code>ji:_sip`sa:m/</td>
</tr>
<tr>
<td>100,000</td>
<td>๑๐๐,๐๐๐</td>
<td>/_nun`se:n/</td>
</tr>
<tr>
<td>174,831</td>
<td>๑๗๔,๘๓๑</td>
<td>/ ทรง sembl เล็กน้อยสืบเรื่อยมาสิ่งมิได้ /_nun<code>se:n_tet</code>mu:n<code>si:</code>phan<code>pe:t</code>ro:i</td>
</tr>
<tr>
<td></td>
<td></td>
<td>`sa:m_sip?et/</td>
</tr>
<tr>
<td>1,000,000</td>
<td>๑,๐๐๐,๐๐๐</td>
<td>/_nun`la:n/</td>
</tr>
<tr>
<td>126,500,000</td>
<td>๑๒๖,๕๐๐,๐๐๐</td>
<td>/ ทรงราชย์สมบูรณ์ลำดับหนึ่ง /_nun<code>ro:i</code>ji:_sip_hok<code>la:n</code>ha:`se:n/</td>
</tr>
<tr>
<td>1050,400,000</td>
<td>๑๐๕๐,๔๐๐,๐๐๐</td>
<td>/ ทรงผนังสารที่สี่สิ่งมิได้ /_nun<code>phan</code>ha:_sip<code>la:n</code>si:`se:n/</td>
</tr>
</tbody>
</table>
11.7 ABBREVIATIONS

The use of abbreviations is very common in Thai. All kinds of abbreviations in the present Thai writing system are written with a period. In abbreviations only the syllable-initial consonant symbol(s) of a word is used, for instance,

\(<\text{ม.}> = \langle\text{บาท} > \) /baːt/ "Baht" (monetary unit of Thailand)

\(<\text{น.ส.}> = \langle\text{นางสาว} > \) /naːŋsaːːu/ "Miss"

As already stated in chapter 6, p. 124, each consonant symbol when pronounced in isolation is pronounced with a carrying vowel /οː/ as \(<\text{ก.}> /kʰɔː/\), and \(<\text{จ.}> /kʰɔː/\), so when being used in abbreviation the syllable-initial consonant symbol(s) of a word is pronounced with a carrying vowel /οː/ as well. For instance,

\(<\text{ม.}> \) for \(<\text{บาท} > /baːt/\) is pronounced /-bɔː/ 

\(<\text{น.ส.}> \) for \(<\text{นางสาว} > /naːŋsaːːu/\) is pronounced /-nɔːːsɔː/ 

There are instances where the writing of only the initial consonant symbol in an abbreviation would result in ambiguity. In such cases, both the initial consonant symbol and a vocalic symbol are used. For example:

\(<\text{ม. ก.}> /-mː-khɔː/ = \langle\text{มีกรกึ่ง} > /mːn̩ːkʰom/\) "March"

\(<\text{ม. ผ.}> /-mː-joː/ = \langle\text{มีพระมหาราช} > /mːpʰaːmːtʰaːn/\) "April"

\(<\text{ม. ช.}> /-miʔ-joː/ = \langle\text{มีชัย} > /miʔtʰaːn̩ːmːtʰaːn/\) "June"

When a consonant symbol is written with a vocalic symbol as seen in the examples above, a carrying vowel /οː/ is dropped and a syllable is pronounced according to the combination of a consonant and a vowel as /-mː, -mː, ^mː/.

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Examples of commonly used abbreviations

11.7.1 Titles before names

1. social titles, for instance

< מי. > /-nɔː:'sɔː/ = /mām sārjā / "Miss"
< ผู้. > /-dɔː:'jɔː/ = /jāt jīmā / "a social title for a girl of under 15 years of age"
< ผู้. > /-dɔː:'tʃɔː/ = /jāt jīmā / "a social title for a boy of under 15 years of age."
< ผู้. > /-mɔː:'tʃɔː/ = /mām tīmā / "a title for those in the grandchild generation of royal descent, or treated as such."
< ผู้. > /-mɔː:'lɔː/ = /mām lūːmā / "a title for those in the great great grandchild generation of royal descent, or treated as such."

Normally abbreviations are not commonly used for personal first names. But recently people started abbreviating their first names when writing a signature. I think it is the influence from the west; for example,

< ผู้. > /-tʰɔːːlūːmātʰɔːːkham/ for ผู้. ทีป การ Miss Luangthongkham
< ผู้. > /-thiː:raʔphan'lūːmātʰɔːːkham/ "Theeraphan Luangthongkham"
< ผู้. > /-nɔːːdāːnwiʔwat/ for ผู้. นันทน์ ดานวิษณุ "Nantana Danvivathana".

2. Civil or military titles

A civil or military title written before a person's first name is commonly abbreviated. The following list includes many frequently used abbreviations:

1. Higher titles are normally not subject to abbreviation.
'so: 'sa:/ = "Member of the House of Representatives"

"minister (of the ministry)"

"deputy minister (of the ministry)"

"assistant professor"

"associate professor"

"director"

"head of the department"

"lecturer"

"general"

"military lieutenant-general"

"military major general."

"colonel"

"lieutenant-colonel"

"major"

"captain"

"first lieutenant"

"second lieutenant."

1. The following military titles are normally pronounced in full form.
11.7.2 Academic Degrees

The abbreviations for academic degrees are written after a person's surname, as shown in the examples below:

/naːŋ'saːuŋ wiːt saːʔaʔ niː saːiʔ maː bon-ʔaː bon-ʔaː/ "Miss Witsani Saiubol, B.A."

The following list includes many frequently used abbreviations for academic degrees:

/-ʔaːʔ raːʔaːʔ saːʔt-baːn diːt/ "Bachelor of Liberal Arts"
/-ʔoːʔ thɔːʔ-ʔoːʔ/ "Bachelor of Engineering"
/-ʔaːʔ jaːʔaːʔ saːʔt-baːn diːt/ "Bachelor of Science"
/-ʔaːʔ paːʔaːʔ saːʔt-baːn diːt/ "Bachelor of Arts"
/-ʔoːʔ-thɔːʔ-ʔoːʔ/ "Bachelor of Medicine"
/-saʔaʔ-paʔaʔ-aʔaʔ-kam maʔaʔ saːʔt-baːn diːt/ "Bachelor of Architecture"
/-ʔaːʔ maʔaʔ haːʔ-baːn diːt/ "Master of Laws"
/-ʔaːʔ raːʔaʔ maʔaʔ haːʔ-baːn diːt/ "Master of Political Science"
/-duːʔ saːʔ diːʔ-baːn diːt/ "Doctor of Philosophy (Ph.D.)"
11.7.3 Time

1. Years

<ก.ศ.>  /-กข:ส:>/  =  <กrijtat_kà_rà_t>/  ^krit_ta?_sak_ka?_ra:t/
   "A.D. (Christian era)"

<พ.ศ.>  /-พข:ส:>/  =  <พุทธศาก>/  ^phut^tha?_sak_ka?_ra:t/

"B.E. (Buddhist Era) - In Thai dates, only the Buddhist era is used. The Buddhist era is reckoned from the year of the death of the Buddha, usually considered to be 543 years before the beginning of the Christian era. So when confronted with a Buddhist era date, subtract 543 years to obtain the Christian era equivalent, e.g., B.E. 2523 - 543 = A.D. 1980."

2. Months

<ก.ศ.>  /-มข:กข:>/  =  <มกราคม>/  ^mok_ka?-ra:-khom/  "January"

<ก.พ.>  /-กข:ผข:/  =  <กุมภาพันธ์>/  ^kum-pha:-phan/  "February"

<ก.ย.>  /-มข:กข:/  =  <เมษายน>/  ^mi:-na:-khom/  "March"

<ก.ค.>  /-เม:-จำนวน>/  =  <เมษายน>/  ^me:sa:-jon/  "April"

<ก.ค.>  /-พข:กข:/  =  <พฤษภาคม>/  ^phut_sa?-pha:-khom/  "May"

<ก.พ.>  /-มข:จำนวน>/  =  <พฤษภาคม>/  ^mi?_thu?-na:-jon/  "June"

<ก.ธ.>  /-กข:กข:/  =  <กรกฎาคม>/  ^ka?rak_ka?_da:-khom/  "July"

<ก.ย.>  /-สข:กข:/  =  <สิงหาคม>/  ^sin'ha:-khom/  "August"

<ก.ค.>  /-กข:จำนวน>/  =  <กันยายน>/  ^kan-ja:-jon/  "September"

<ก.ค.>  /-ตข:กข:/  =  <ตุลาคม>/  _tu?-la:-khom/  "October"

<ก.ย.>  /-พข:จำนวน>/  =  <พฤศจิกายน>/  ^phutSa?-tgi?-ka:-jon/  "November"

<ก.ธ.>  /-ธข:กข:/  =  <ธันวาคม>/  ^than-wa:-khom/  "December"
3. **Days of the week**

The names of the days of the week should be spelled out in the text but may be abbreviated in other situations according to the following system:

- < ฒ. > = < "วันอาทิตย์" > /-wan-ʔaː^hīt/ "Sunday"
- < จ. > = < "วันจันทร์" > /-wan-tʃan/ "Monday"
- < ค. > = < "วันพุธ" > /-wan-ʔɔŋ-kʰaːn/ "Tuesday"
- < ง. > = < "วันพฤหัสบดี" > /-wan^phut/ "Wednesday"
- < พ. > = < "วันศุกร์" > /-wan^phaʔr Wilmington/ "Thursday"
- < ศ. > = < "วันเสาร์" > /-wan_suk/ "Friday"
- < ส. > = < "วันอาทิตย์" > /-wan^sau/ "Saturday"

4. **Time of the day**

- < น. > = < "นั้น" > /-naː^liʔ-kaː/ "o'clock" (of time on the 24 hour basis), i.e.
  - 01.00 น. = 1 a.m.
  - 12.00 น. = 12 a.m.
  - 13.00 น. = 1 p.m.
  - 24.00 น. = 12 p.m.

When a date is written in its full form, the day of the week precedes, followed by the day of the month, the month, and the year, as in the following example:

< วันเสาร์ 25 มิถุนายน พ.ศ. 2523 >
/wan^sau^thiː^jiː^sip^haː^miʔ^thuʔ^naː^kɔ^n^phɔː^sɔː^sɔː^phɔːn^haː^rɔː^i^jiː^sip^saː^m/ "Saturday, June 25, 2523 B.E."

A shortened form of a date is written as shown below:

< 25 มิ. 2523 >
/jiː^sip^haː^miʔ^kɔ^n^phɔː^n^haː^rɔː^i^jiː^sip^saː^m/ "June 25, 2523 B.E."

---

1. < ฒ > /-wan/ means "day" in Thai.
11.7.4 Metric System

1. Length

\[ \text{\textasciitilde ko:-mo:}/ = \text{\textasciitilde ki?-lo:} \text{me:t}/ "\text{\textasciitilde ki?-lo:me:t}/ "\text{ki?-lo:me:t}/ "kilometre" \]

\[ \text{\textasciitilde ho:-mo:}/ = \text{\textasciitilde he:k-to:} \text{me:t}/ "\text{\textasciitilde he:k-to:me:t}/ "hectometre" \]

\[ \text{\textasciitilde do:-kho:-mo:}/ = \text{\textasciitilde de:-kha:} \text{me:t}/ "\text{\textasciitilde de:-kha:me:t}/ "decametre" \]

\[ \text{\textasciitilde mo:}/ = \text{\textasciitilde me:t}/ "\text{\textasciitilde me:t}/ "metre" \]

\[ \text{\textasciitilde do:-mo:}/ = \text{\textasciitilde de:} \text{\textasciitilde si?-me:t}/ "\text{\textasciitilde de:} \text{\textasciitilde si?-me:t}/ "decimetre" \]

\[ \text{\textasciitilde so:-mo:}/ = \text{\textasciitilde sen\_ti?me:t}/ "\text{\textasciitilde sen\_ti?me:t}/ "centimetre" \]

\[ \text{\textasciitilde mo:-mo:}/ = \text{\textasciitilde min\_li?me:t}/ "\text{\textasciitilde min\_li?me:t}/ "millimetre" \]

2. Weight

\[ \text{\textasciitilde ko:-ko:}/ = \text{\textasciitilde ki?-lo:-kram}/ "\text{\textasciitilde ki?-lo:-kram}/ "kilogramme" \]

\[ \text{\textasciitilde ho:-ko:}/ = \text{\textasciitilde he:k-to:-kram}/ "\text{\textasciitilde he:k-to:-kram}/ "hectogramme" \]

\[ \text{\textasciitilde do:-kho:-ko:}/ = \text{\textasciitilde de:-kha:-kram}/ "\text{\textasciitilde de:-kha:-kram}/ "decagramme" \]

\[ \text{\textasciitilde ko:}/ = \text{\textasciitilde kram}/ "\text{\textasciitilde kram}/ "gramme" \]

\[ \text{\textasciitilde do:-ko:}/ = \text{\textasciitilde de:} \text{\textasciitilde si?-kram}/ "\text{\textasciitilde de:} \text{\textasciitilde si?-kram}/ "decigramme" \]

\[ \text{\textasciitilde so:-ko:}/ = \text{\textasciitilde sen\_ti?-kram}/ "\text{\textasciitilde sen\_ti?-kram}/ "centigramme" \]

\[ \text{\textasciitilde mo:-ko:}/ = \text{\textasciitilde min\_li?-kram}/ "\text{\textasciitilde min\_li?-kram}/ "milligramme" \]

3. Capacity

\[ \text{\textasciitilde ko:-lo:}/ = \text{\textasciitilde ki?-lo:-lit}/ "\text{\textasciitilde ki?-lo:-lit}/ "kilolitre" \]

\[ \text{\textasciitilde ho:-lo:}/ = \text{\textasciitilde he:k-to:-lit}/ "\text{\textasciitilde he:k-to:-lit}/ "hectolitre" \]

\[ \text{\textasciitilde do:-kho:-lo:}/ = \text{\textasciitilde de:-kha:-lit}/ "\text{\textasciitilde de:-kha:-lit}/ "decalitre" \]

\[ \text{\textasciitilde lo:}/ = \text{\textasciitilde lit}/ "\text{\textasciitilde lit}/ "litre" \]

\[ \text{\textasciitilde do:-lo:}/ = \text{\textasciitilde de:} \text{\textasciitilde si?-lit}/ "\text{\textasciitilde de:} \text{\textasciitilde si?-lit}/ "decilitre" \]

\[ \text{\textasciitilde so:-lo:}/ = \text{\textasciitilde sen\_ti?-lit}/ "\text{\textasciitilde sen\_ti?-lit}/ "centilitre" \]

\[ \text{\textasciitilde mo:-lo:}/ = \text{\textasciitilde min\_li?-lit}/ "\text{\textasciitilde min\_li?-lit}/ "millilitre" \]
11.7.5 Names of the Ministries, government organizations, Universities

"Office of the President of the Council of Ministers"

"Ministry of Defence"

"Ministry of Finance"

"Ministry of Public Health"

"Ministry of Industry"

"Ministry of Agriculture"

"Ministry of Communication"

"Ministry of Economics"

"Ministry of Interior"

"Ministry of Justice"

"Ministry of Education"

"Ministry of Foreign Affairs"
Names of Provinces

Names of provinces are abbreviated when written on a car number plate. The following are some examples:

- Bangkok
etc.

11.7.7 Miscellaneous Abbreviations commonly used

<table>
<thead>
<tr>
<th>Thai Abbreviation</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>/-tchao-mo:/</td>
<td>&quot;Chiengmai&quot;</td>
</tr>
<tr>
<td>/-tso-koi:/</td>
<td>&quot;Tak&quot;</td>
</tr>
<tr>
<td>/-so-phao:/</td>
<td>&quot;Suphanburi&quot;</td>
</tr>
<tr>
<td>/-no-mo:/</td>
<td>&quot;Nakhonratchasima&quot;</td>
</tr>
<tr>
<td>/-tchao-bo:/</td>
<td>&quot;Chonburi&quot;</td>
</tr>
<tr>
<td>/-thao-bo:/</td>
<td>&quot;Chanthaburi&quot;</td>
</tr>
<tr>
<td>/-tchao-jo:/</td>
<td>&quot;Rayong&quot;</td>
</tr>
<tr>
<td>/-tchao-ra:/</td>
<td>&quot;Chaiyaphum&quot;</td>
</tr>
<tr>
<td>/-tchao-ro:/</td>
<td>&quot;Chieng Rai&quot;</td>
</tr>
<tr>
<td>/-no:so-pho:/</td>
<td>&quot;newspaper&quot;</td>
</tr>
<tr>
<td>/-ro-mo://</td>
<td>&quot;Thai Railways&quot;</td>
</tr>
<tr>
<td>/-ko-mo:/</td>
<td>&quot;law&quot;</td>
</tr>
<tr>
<td>/-tco-mo:/</td>
<td>&quot;letters&quot;</td>
</tr>
<tr>
<td>/-po-bo:/</td>
<td>&quot;post cards&quot;</td>
</tr>
<tr>
<td>/-po-lo:/</td>
<td>&quot;postscript, (P.S.)&quot;</td>
</tr>
<tr>
<td>/-no-ro:/</td>
<td>&quot;pupils in schools&quot;</td>
</tr>
<tr>
<td>/-no:so:/</td>
<td>&quot;students in colleges or universities&quot;</td>
</tr>
<tr>
<td>/-ro-ro:/</td>
<td>&quot;schools&quot;</td>
</tr>
</tbody>
</table>
The abbreviation "tho:/" is used in front of a telephone number, e.g. 5210662 = tel. 5210662

The abbreviation "w." is used in front of a telephone number, e.g. 5210662 = tel. 5210662

The abbreviation "bo:/" is used in front of a baht. The unit of currency of Thailand

The abbreviation "so:-to:/" is used in front of a hundredth part of a baht.

The abbreviation "tco:/* or "tco:/" is used in front of a province.

The abbreviation "tco:/" is used in front of a road, street.

The abbreviation "mo:/" is used in front of a subdivision of a

The abbreviation "tho:/" is used in front of a province.
CHAPTER 12

WRITING STYLES
Chapter 12

WRITING STYLES

12.1 TYPEWRITTEN STYLE

The samples of different Thai typescript of the present Thai script are shown below. The transcription and the translation of each text are also given.

Text 1

นิคมกินเลิฟ

เลิฟเบิร์ดเชส

พีกนิยมชิงโยชิ

ชูแรกยางเอ้ย

มู่ริโย

แรมช่า

แปลงปอง

วัตถุทางณัฐวิ

Transcription

/-na:-khi:-mi:^phi:th phi:ang
^lwa:tham-de:-tcho:
^phi^no:l-jin^jo:'so:
-tch:hu:'ha:n^oe:n^oa:

Translation

Great indeed is the power of the dragon as the sun,
Yet humbly and slowly it meanders its way shy,
Minuscule indeed is the power of the tiny scorpion,
Yet it swaggers its tail and boasts to the sky.

(The translation is copied from The Languages of the World by Kenneth Katzner, 1977, p.224.)
Ripened figs are pretty and pleasing to the eyes, Their colours seduce both the sight and palate, Alas, the cores rot with maggots inside, For evils are but false fronts and gilded waste.

(The translation is copied from The Languages of the World, by Kenneth Katzner, 1977, p.224.)
The following text is copied from King Ram Khamhaeng inscription: the first oldest known Thai script, face 1, lines 1-13

Transcription

/’pho:-ku:’tchw:’si:-?in’tha?:-ra:’thit’me:-ku:’tchw:-na:’sawi:ag
’phi:-ku:’tchw:-bain-mu:an:tu:-mi:’phi:’no:’thor:-dau’ha:-khon
’tphu:-tcha:’sa;m’phi:’ji:’so:’phi:’phw:’a’phi:’a:i-ta:i-tca:k
’tphw:a-tha-mte:-jan’le:k’mua:-ku:’khun:jai’da:’i:slip’ka:u’khau’khun
’khun’sa:m-tchron’hu:a’sai’khun’sa:m-tchron_khap:ma’hu:a’khwa:
’khun’sa:m-tchron_klaw:an’khau’phraif:fa:’na:’sa’pho:-ku:’ni:’ja?
’ja:i-phai:i_tca’?tzen-ku:’bo:’ni:-ku:’khi:’tcha:q:be:k’phon-ku:
_khap’khau_kh:in’pho:-ku:’ku:’to:’tcha:’duai’khun’sa:m-tchron
-ton-ku:’phun’tcha:q’khun’sa:m-tchron-tua’tchw:’ma:’t’mu:an’phe:
’khun’sa:m-tchron’phai’in’i:’pho:-ku:’tchw:’khun’tchw:-ku:’tchw:
The name of my father is Si Intharathit. The name of my mother is Su'ang. The name of my brother is Ban Muang. I have three brothers, and two sisters. My eldest brother died when I was young. When I was nineteen years old, Khun Sam Chon of Chod city of Burma came to attack Tak city of Thailand. My father went to fight. My father went out to the left, but Khun Sam Chon came in on the right and he attacked us. Our citizens escaped in confusion. I did not escape. I fought with Khun Sam Chon on an elephant's back. I defeated him, so my father named me 'Ram Khamhaeng'. During my father's reign, I served and cared for both my father and mother. I always brought them the nice meat, fish and fruit...
If Thailand continues to exist,
We go on living,
But if Thailand is overthrown,
Our nation is dead.
12.2 HANDWRITTEN STYLE

Following are five samples of handwritten style. The text used in all samples is copied from King Ramkhamhaeng inscription: the first oldest Thai script, face 1, lines 1-13; the same as text 3 in the typewritten style, p.257.

12.2.1 Fast Handwritten Style

Example 1:
Example 2:

...
12.2.2 Carefully written style

Example 1:
Example 2:
Artistic handwritten style

12.2.2 Artistic handwritten style
following are samples of printed styles in an assortment of sizes.

niùgkètìsaìzì

pàk 1

ông

sàsàtsàrâjìà yì pùráhàònmànwànràchàn à.o. (kàiìmsàgìì)

òàìì

râxàbìnlàòìì pàkgùùòrgùùncíì

sàxàwikàòorgùùììàììngàììmàngàscàrtìì

pàkgùùòrgùùììàììngàììphàpàñàllumìì

ààjììbùììàììngàììniùgkètìsaìzììàììngàrùììncètìì

ùùììngàììmàììnhàùììlìì

màììnhàùììlììììììmàììsàrtìì

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২. ভাষাচ্যুততার নামকরণ

ভাষাচ্যুততার নামকরণ হয়েছে ভাষাক্ষেত্রের বিভিন্ন ভাষার প্রতিনিধিত্ব করা হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে। এই মানুষের ভাষায় নামকরণ করা হয়েছে।

(১) মানুষের ভাষায়

মানুষের ভাষায় নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।

(২) সমাজসেবা

সমাজসেবা নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।

(৩) আইনসেবা

আইনসেবা নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।

(৪) স্বাস্থ্যসেবা

স্বাস্থ্যসেবা নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।

(৫) শিক্ষাসেবা

শিক্ষাসেবা নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।

(৬) ব্যবসায়সেবা

ব্যবসায়সেবা নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।

(৭) কৃষিসেবা

কৃষিসেবা নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।

(৮) প্রাকৃতিকসেবা

প্রাকৃতিকসেবা নামকরণ হয়েছে। এই নামকরণের জন্য বিভিন্নভাষায় নামকরণ করা হয়েছে।
หน้ากษาไทย
ของ
ก้านยัย ทองหล่อ
อาจารย์ภาษาไทย โรงเรียนจิตวรา
และ
กรรมการช่างป่าทันกรม แห่งราชบัณฑิตยสถาน
นายวิบ
อาจารย์พิเศษ วิชาภาษาไทย
ในคณะครุศาสตร์ฯ จุฬาลงกรณ์มหาวิทยาลัย
วิทยาลัยวิชาการศึกษา ปทุมาน
โรงเรียน
กรุงเทพคริสต์เตียนวิทยาลัย
สตรีมานษาภูผาราม และ สตรีศิริศรียาน

หัวขึ้นส่วนจำกัด
ยวัฒนาสัจัน
864 วป.วรา กรุงเทพฯ โทร. 2216483
ผู้แทนงานภาษา

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หลักภาษาเขมร

ของ

คำธิการณ์ข้า ทองคำวรรณ
ศิลปศาสตร์บัณฑิต (โบราณคดี) กิตติมศักดิ์
อธิปอาจารย์วิชาวิชาภาษาเขมร

ใน
คณะอักษรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

และ
คณะโบราณคดี มหาวิทยาลัยศิลปากร

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พนักงานรูป
สมัชชาสันติที่สกุล
พ.ศ. ๒๔๙๓

สารบัตรทางธุรกิจสำหรับ
ราชบัณฑิตยสถาน

ราชบัณฑิตยสถาน
APPENDICES
A BRIEF SURVEY OF EARLIER ATTEMPTS TO STUDY THE THAI SCRIPT SINCE 1854 A.D.

Earlier attempts to study the Thai script since 1854 were made by notable scholars, among whom were D.J.B. Pallecoix (1854), L. Ewald (1863), O. Frankfurter (1900), B.O. Cartwright (1915), C.B. Bradley (1924), F. Otto Schrader (1924), G.B. McFarland (1944), Peter A. Lanyon-Orgill (1955), Mary R. Haas (1956, 1964), E.M. Anthony and Udom Warotamasikkhadit (1968). All these scholars have produced valuable work on the Thai script. Almost every writer has noted interesting points in the characteristics of the Thai writing system, but very few of them have discussed the script in its total context. However, I would like to mention briefly in this appendix the previous work of the following writers: D.J.B. Pallecoix, G.B. McFarland, Peter A. Lanyon-Orgill and Mary R. Haas.

Pallegoix is the first writer in the 19th century who produced books concerning the Thai alphabet. In 1854 he produced two outstanding books: *Dictionarium Linguae Thai sive Siamensis Interpretatione Latina, Gallica et Anglica Illustratum*, and

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1. It was hoped to include a discussion of J. Marvin Brown (1979) in this appendix, but it has not proved possible to obtain a copy.
Description du Royaume Thai ou Siam (2 volumes). As for the first one, the Thai characters are written with a beautiful, artistic style of handwriting (see the example in Figure 1.1(a) on p.303), but there is no introduction to indicate the system of transcription to represent Thai sounds, and that makes it rather difficult for a foreign student of Thai writing to understand what sounds the symbols in his transcription represent. Moreover, he fails to give a satisfactory analysis of the sound system of the language; for example, the final consonants /-p,-t,-k/ as in the words /tap/ "liver", /tat/ "to cut" and /tak/ "laps" are transcribed as /B, D, G/, although these three voiced plosives do not occur in a syllable-final position in Thai. Besides that, Pallegoix's system of transcription is not very consistent; for example the consonant symbols /w/ and /n/ in a syllable-final position are transcribed as either /PH/ or /B/. In his Description du Royaume Thai ou Siam (Volume 1, pp.370-378), Pallegoix discusses briefly the sound system of the Thai language: consonants, vowels, and tones. In this book, his romanised letters to represent consonants and vowels are not capitalised as those in Dictionarium .... His explanation of the tones of the Thai language is in terms of western musical notation and is not entirely accurate.

A good dictionary of Thai-English compiled by G.B. McFarland came out in 1944. In the introduction to the dictionary, the brief system of transcription of Thai sounds is
A shaved head.

Bald.

A scalp, wicked, immodest, a rogue, a great babbler. Impudent.

To play in an unbecoming manner.

He who pronounces obscene words, wanton in words.

A term of endearment, however this word is used rather contemptuously.

A term of endearment, however this word is used rather contemptuously.

He said.

To take away the bark, to strip off the pulp at its ends.

To take the bones out of meat.

Empty purse.

To take a walk for recreation. To be foppish; to be foppish.

A great grand-son, a great grand-daughter.

To come down (this word expresses descent, decrease). End-side.

To come down from the house.

To pacify.
given. McFarland fails to provide suitable symbols to represent Thai sounds. The Thai alphabet is represented by general romanised letters, for example the vowel /wa/ is represented by <ur-ah>. It is obvious that such a system of transcription does not enable a student of Thai to read Thai writing correctly. His transcription of consonants is not very satisfactory either; for example, the unaspirated consonants /p, t, k/ are transcribed as /bp, dt, gk/, but it is very interesting to see how early linguists interpreted the unaspirated sounds in Thai. It is clear that the defects found in the work of Pallegoix and McFarland are due to the fact that in those periods the study of phonetics was not advanced.

In later periods, with the advantage of more advanced phonetic sophistication, scholars of Thai writing began to describe the Thai script in a more systematic way. In his chapter on "Alphabet and Pronunciation" of the book An Introduction to the Thai (Siamese) Language for European Students, Peter A. Lanyon-Orgill describes the sound system of the Thai language with a systematic way of transcribing sounds. Explanation of how to pronounce Thai sounds is also given, though in very general terms. For example, the vowel /o/ is described as "short vowel as in English home, and French eau in beau, but shorter and with a slight 'catch' in the breath". Lanyon-Orgill also makes a mistake in interpreting the final consonant /-p, -t, -k/ as /-b, -d, -g/. His work lacks accuracy in spelling the Thai forms and Thai words are misspelt throughout the book. His attempts to describe the tonal classes
of consonant symbols, the phonetic values of the four tonal markers \( \langle \text{^-} \rangle, \langle \text{~'} \rangle, \langle \text{-} \rangle, \langle \text{^+} \rangle \), although very brief, are accurate.

The most advanced work on the interpretation of the orthography and the characteristics of the Thai script is that of Mary R. Haas. In 1956, Haas wrote a book *The Thai Writing System* which deals with the Thai alphabet in much more detail than those of others. Her discussion on the relationship between the sounds of the Thai language and the symbols that are used to represent them is very useful as a basic ground for research on the Thai writing system, although the analysis of the phonology of the Thai language is not fully satisfactory, in that she also transcribes the final unaspirated consonants \(/-p, -t, -k/\) as \(/-b, -d, -g/\). Her explanation of the functions of consonant symbols, vocalic symbols and tonal markers, though it lacks a number of important points, is accurate and reasonably precise. A classic *Thai-English Student's Dictionary* compiled by Haas and her group came out in 1964, and it has been regarded as the greatest of the authorities since its publication. Thai words are printed in Thai characters but the total context of the Thai script is not discussed in this dictionary.

Examples of the transcription of the Thai alphabet done by myself (1), D.J.B. Pallecoix (2), G.B. McFarland (3), Peter A. Lanyon-Orgill (4) and Mary R. Haas (5), are shown side by side in the following charts. The transcription of the Thai sounds in my work is based on the IPA transcription.
**Figure 12(a)**

<table>
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<th>Thai Symbols</th>
<th>Phonetic Values</th>
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1. Phonetic values in a syllable-initial position
2. Phonetic values in a syllable-final position
3. A dash indicates that a consonant symbol is never written in a syllable-final position to function as a syllable-final consonant.

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These three consonant symbols also function as one of the components of a complex vocalic symbol. See details on p. 157-158.
<table>
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<td>i</td>
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</table>

1 Mary Hoos (1956)
2 Mary Hoos (1964)
<table>
<thead>
<tr>
<th>Number</th>
<th>Thai symbols</th>
<th>Phonetic values</th>
<th>D. J. B. Polk-Goos</th>
<th>G. B. McFerrand</th>
<th>Peter A. Lanyon-Origins</th>
<th>Mary Haas</th>
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<td>ay-oh</td>
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<td>27</td>
<td>ei</td>
<td>eu</td>
<td>EU</td>
<td>a-oh, or ay-oh</td>
<td>ew</td>
<td>eew</td>
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<td>a-oh</td>
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</tr>
</tbody>
</table>
APPENDIX 2

A POEM CONTAINING THE DESIGNATORY NAMES OF THE FORTY-FOUR THAI CONSONANT SYMBOLS

2.1 THE POEM WRITTEN IN THAI IN CAREFUL WRITTEN STYLE

ก เล่ห กลก ผังโฉนด ซ ขจรจังเจ้า
ท ทงมั่น ข ที่เชล ซ จางยงผ่า สง วิชลี
จ จิตใช้ ล รสตัง ซ ซื้องหงส์ ซ ใช้ป่า ณ พระเจ้า
ณ ทรงเล่ามา ณ สรรค์สตมผืน ณ สรักกทนหน ณ ชาน
เฝ้ากรง ณ หนแรกนานทันขว่า ณ ผู้แม่ทั่มพร ณ เมืองใหม่
ณ กิจติทิมษณ ณ ห่าหลัง ณ งามยอมณ ณ ทิพสรส-fired
ณ ธนยิ่งอัน ณ หมพาฝ่าผ ณ มีเนียทังมัน ณ หลาทักษ์
ณ ผงท่าน ผ ผาทะะง ณ ผางจากง ผ ผี่ปั้นชาติตร
ณ ท้าทายการ ณ ลาทากก ณ มักธนผืน ณ เรื่อง
ผายไป ณ ดินทิรรา ณ หนทางยาง ณ ท้าสุญชัยนา
ณ ภูกระยะมร ฝ สิ่งทิวทั่ง หน หมิ่นผ ณ จัน
ท้าทาย ณ ข้างนี้นี้ ณ บกหล้า

310
2.2 TRANSCRIPTION

-ko:'i-ko:kai'khai-nai'lau'kho:khun•hii
-kho:rua•khui•khawi:i'hau-na:-kho:-kho•kho:n'khau-n'khau-ra?
-kho:ra•nu:-tcai'kai-tco:-tca:n'tcha;i-di'tchau:
-tchau•tco•tchau•tcha:n'win•i:-so'la:m-thi-tchau:
ka:tchau•ku•-kan-jo:jin'so•pha:-do'tcha?da:'swa•am-phlan
-to:pa?tak'heh'na:tha:n'khau-ma:-ro•na:na:mon
-tho:na'hau-tho:pha:'thau-din'jor-no:ne:n'mai-mo•do:
-dek'tau•mon-to:tau'tau•tun'tho:thun•ka:khon-tho•tha?
'ha:n'ot-thon-tho:thon-khon•ni?'jom-no:nu•fak_fai-bo•bai
^ma:i'thap'thom-po:pla:ta:klo•pha:'phun•tham-ram•fo:fa:thon
-tho:n-phu•pain•wai•tang•fan•sa?_aat'cng-phu:'sam-phau•kai:n
-bai-mo:ma:kho'kho:jak'khau_jai-ro:rua•pha:i•pai•li:lin
-tai-ra:u-wo:we:n-lo:n•ja'so:'sa:la:'ni:ap'jau'so•lw:si:nu:at
-ja:u'so:'swa-da:u'kha?no•nh•hi:p•sai•pha:-lo•tco?la:tha:
pha?jo:no?na:nw:an•no•no•nok'huk-ta:to:

2.3 MEANING

A chicken. An egg is in a chicken-coop. A bottle is ours. A buffalo goes to a rice-field. A person is vigorous. A bell is on the wall. A snake is brave. A plate is useful. A pair of cymbals is struck to make a loud noise. An elephant runs away. A chain is used to tie up something. / ka?tchau:/ trees stand side by side in pairs. A lady is very attractive. A tall headdress is immediately worn. A goad is quick-tempered. A
base is brought underneath. /-na:ŋ-mon-tho:/ (a giant's wife in Ramayana epic) has a white face. An old person walks quietly. A Buddhist disciple does not look at us. A child invites a priest. A turtle has a fat back. A bag is carried on a shoulder. A soldier is patient. A flag is admired by people. A rat pays attention to something. Leaves fall and keep piling up. A fish has round eyes. Bees make a hive. A wall is long-lasting. A tray with a pedestal base is put down. Teeth are very clean. A boat's sails are spread. A horse is active. A giant has big fangs. A boat is rowed. A monkey is on a rail. A ring is inlaid with coloured enamelling compound. A pavilion is quiet. A hermit has a long beard. A tiger is active. A box is for keeping cloth. A /_tɕu?-la:/ kite is arrogant. A basin is full of water. An owl has big eyes.
APPENDIX 3

THE GENERAL SYSTEM OF TRANSLITERATION OF THAI CHARACTERS INTO ROMAN INVENTED BY THE THAI ROYAL ACADEMY

3.1 CONSONANTS

The general system of transliteration of Thai characters into Roman alphabet was invented by the Royal Academy on March 6, 1939, and has been used in Thailand up to now. Figures 3.1(a) illustrates the Roman characters which represent the Thai syllable-initial and final consonants.
### 3.1.1. Syllable-initial consonants

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Roman characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>b</td>
</tr>
<tr>
<td>p</td>
<td>p</td>
</tr>
<tr>
<td>pʰ</td>
<td>ph</td>
</tr>
<tr>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>w</td>
<td>w</td>
</tr>
<tr>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>d</td>
<td>d</td>
</tr>
<tr>
<td>tʰ</td>
<td>th</td>
</tr>
<tr>
<td>s</td>
<td>s</td>
</tr>
</tbody>
</table>

### 3.1.2. Syllable-final consonants

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Roman characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>m t n k ŋ</td>
</tr>
<tr>
<td>tʰ</td>
<td>t n k ng</td>
</tr>
</tbody>
</table>
### 32 Vowels

**Figure 3.2 (a)**

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Roman characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>i - i:</td>
<td>i</td>
</tr>
<tr>
<td>e - e:</td>
<td>e</td>
</tr>
<tr>
<td>e - ɛ:</td>
<td>ɛ</td>
</tr>
<tr>
<td>a - a:</td>
<td>a</td>
</tr>
<tr>
<td>o - o:</td>
<td>o</td>
</tr>
<tr>
<td>u - u:</td>
<td>u</td>
</tr>
<tr>
<td>i - ɛ:</td>
<td>ɛ</td>
</tr>
<tr>
<td>m - u:</td>
<td>u</td>
</tr>
<tr>
<td>ia - ia:</td>
<td>ia</td>
</tr>
<tr>
<td>ua - ua:</td>
<td>ua</td>
</tr>
<tr>
<td>wa - wa:</td>
<td>wa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Roman characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>iu</td>
<td>iu</td>
</tr>
<tr>
<td>eu - eu:</td>
<td>eo</td>
</tr>
<tr>
<td>Zu - Zu:</td>
<td>Zo</td>
</tr>
<tr>
<td>aι - aι:</td>
<td>ai</td>
</tr>
<tr>
<td>au - au:</td>
<td>ao</td>
</tr>
<tr>
<td>ci - ci:</td>
<td>ci</td>
</tr>
<tr>
<td>oi - oi:</td>
<td>oi</td>
</tr>
<tr>
<td>ui</td>
<td>ui</td>
</tr>
<tr>
<td>ti - ɔei:</td>
<td>ɔei</td>
</tr>
<tr>
<td>lau</td>
<td>lao</td>
</tr>
<tr>
<td>wai</td>
<td>wai</td>
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<tr>
<td>wai</td>
<td>wai</td>
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</tbody>
</table>
3.3 GENERAL REMARKS AND SOME EXAMPLES

Tones are not marked in transliteration. The hyphen is to be used to indicate a syllable division where in the case of its omission the word may be read in another way.

<table>
<thead>
<tr>
<th>Phonetic Transcription</th>
<th>Transliteration</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>/_ kaʔ_sat/</td>
<td>kasat</td>
<td>king</td>
</tr>
<tr>
<td>/'si:a-tçai/</td>
<td>siachai</td>
<td>to be sad</td>
</tr>
<tr>
<td>/_bw:a/</td>
<td>bu'ä</td>
<td>to be bored</td>
</tr>
<tr>
<td>/_kv:t/</td>
<td>kœt</td>
<td>to be born</td>
</tr>
<tr>
<td>/'thuai/</td>
<td>thuai</td>
<td>bowl</td>
</tr>
<tr>
<td>/-ta:-klom/</td>
<td>ta-klom¹</td>
<td>round eyes</td>
</tr>
<tr>
<td>/_pa:k'lat/</td>
<td>pak-lat²</td>
<td>name of a town</td>
</tr>
</tbody>
</table>

1. Without a hyphen (as taklom), it can be read as /_tak-lom/ "to air".
2. Without a hyphen (as paklat), it can be read as /-pa:_klat/ /-pa:/ "to throw". /_klat/ "to sew".
NOTES ON THE TRANSLITERATION OF ENGLISH WORDS INTO THAI CHARACTERS

English words are widely used in the Thai language in both speaking as well as writing, although there is a general feeling against the use of English words in the language. As far as the pronunciation is concerned, we replace many English phonemes which do not occur in Thai by the Thai phonemes which have a similar place and manner of articulation. In transliteration the English phonemes are represented by the Thai sound symbols as illustrated in Figures 4.1(a), 4.2(a), and 4.3(a). The pronunciation of loanwords follow the way they are written in Thai.

4.1 CONSONANTS

4.1.1 Syllable-initial consonants

The English syllable-initial consonants and the Thai consonant symbols which represent them are shown side by side in Figure 4.1(a). The transcription of English phonemes is based on the accent of Standard English which is called "R.P.", or "Received Pronunciation". The sound symbols representing R.P. here are those generally found in IPA transcription of English. The transcription of Thai words are of those whose English is roughly at elementary level.

3. The transliteration stated here is the one which is most frequently used, however, exceptions may be found.
<table>
<thead>
<tr>
<th>English syll. - initial consonants</th>
<th>Thai syll. - initial consonant symbols</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>t^p</td>
<td>ต^เพ</td>
<td>/'pam/ petrol station</td>
</tr>
<tr>
<td></td>
<td>า 'ป'</td>
<td>/'pon-luu-t^pan/ pollution</td>
</tr>
<tr>
<td>b</td>
<td>บ 'บ'</td>
<td>/'bia/ beer</td>
</tr>
<tr>
<td>m</td>
<td>ม 'ม'</td>
<td>/'mai/ mile</td>
</tr>
<tr>
<td>f</td>
<td>ฟ 'ฟ'</td>
<td>/'fa:m/ farm</td>
</tr>
<tr>
<td>v</td>
<td>ว 'ว'</td>
<td>/'wia/ view</td>
</tr>
<tr>
<td>w</td>
<td>า 'ว'</td>
<td>/'wik/ wig</td>
</tr>
<tr>
<td>t</td>
<td>ท 'ท'</td>
<td>/'ten/ tent</td>
</tr>
<tr>
<td>h</td>
<td>า 'ห'</td>
<td>/'t^h' tank</td>
</tr>
<tr>
<td>d</td>
<td>ด 'ด'</td>
<td>/'dii-sai/ design</td>
</tr>
<tr>
<td>s</td>
<td>ซ 'ซ'</td>
<td>/'suit/ suit</td>
</tr>
<tr>
<td></td>
<td>า 'ส'</td>
<td>/'sup/ soup</td>
</tr>
<tr>
<td>z</td>
<td>ซ 'ส'</td>
<td>/'sip/ zip</td>
</tr>
<tr>
<td>n</td>
<td>น 'น'</td>
<td>/'noi/ note</td>
</tr>
<tr>
<td>l</td>
<td>ล 'ล'</td>
<td>/'lip/ lift</td>
</tr>
<tr>
<td>English syll.-initial consonants</td>
<td>Thai syll.-initial consonant symbols</td>
<td>Examples</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>r</td>
<td>ร์ ร์</td>
<td>เช่ร์ / se:r um / serum</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>เจ่ฏ / 'tget / jet</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>จ่ฏก / 'tɡ k'ko: / gigolo</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>ท่หำ / -tʰ ha / cheer</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>ท่ก / -tʰ k / to share</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>จ่ลิ / 'jen'li: / jelly</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>ย่ส์ / 'jɪ:t / yeast</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>กุก / 'kuk / cook</td>
</tr>
<tr>
<td>ḷ</td>
<td>ḷ ḷ</td>
<td>แคม / 'kɛm / camp</td>
</tr>
<tr>
<td>g</td>
<td>ก ก</td>
<td>ก่ช / 'kɔt / gaz</td>
</tr>
<tr>
<td>h</td>
<td>ฮ ฮ</td>
<td>โฮเทล /-'no:-ten / hotel</td>
</tr>
</tbody>
</table>
GENERAL REMARKS

1. Words of a syllable initial /θ/ or /θ/ are not found to be adopted in the Thai language.

2. Many of the Thai consonant symbols are represented by a great number of consonant symbols, i.e., /s/ is represented by <ס>, <ר> and <ר> ; /n/ is written with <ר> and <ר> ; and /l/ is written with <ס> and <ס>. But not all of the consonant symbols for a consonant are used in writing words of English origin in Thai. For example, only <ס> and <ס> are used for /s/, only <ס> is used for /n/ and only <ס> is used for /l/. The choice of a consonant symbol is determined by the tone of a syllable. For example, in writing a word <סס> /סס/ "zip", a consonant symbol <ס> is chosen in order to obtain a high tone of the syllable as it is pronounced in Thai. In the cases where any consonant symbol can be used without upsetting the tone of a syllable, from my observations, a consonant symbol which is more frequently used in the Thai writing system is chosen. For example, using either a consonant symbol <ס> or <ס> for /l/ is acceptable in obtaining a given tone of a syllable since both have the same inherent tone but <ס> is chosen in writing the English /l/ because it is more frequently used in writing Thai.

For syllable-initial consonant clusters, each consonant component is represented by a Thai consonant symbol as in the following examples:

The initial cluster /kʰr/ of the word /kʰrɪm/ "cream" is
written as \( \langle \text{พ} \rangle (\langle \text{ส} \rangle = /k^h/, \langle \text{ร} \rangle = /r/). \)

The initial cluster /sp/ of the word /sprig/ "spring" is written as \( \langle \text{ส} \rangle \) (\( \langle \text{ส} \rangle = /s/, \langle \text{ร} \rangle = /p/). \)

The syllable-initial consonant clusters in Thai are namely: /pl, pr, pl, ph, tr, kl, kr, kw, kh, kh, kh/. For other combinations of consonants in English words, each consonant is represented by a certain Thai consonant symbol as already discussed. But the clusters are normally pronounced in the two following ways:

1. The clusters are reduced to only one initial consonant with the second or the third component omitted, for instance:

   The word /draft/ "draft" is pronounced as /\textipa{daːp}/ (the second component /r/ of the cluster is omitted).

   The word /stju/ "stew" is pronounced as /\textipa{saʔtː}/ (the third component /j/ of the cluster is omitted).

   The following clusters: /bl, br, fl or fr/ are eventually accepted among new generation of educated Thai speakers, i.e.

   /\textipa{blu di:n}/ "blue jean" is pronounced /\textipa{-bluː-ji:n}/

   /\textipa{breik}/ "brake" is pronounced /\textipa{-breːk}/

   /\textipa{flat}/ "flat" is pronounced /\textipa{-flet}/

   /\textipa{fri}/ "free" is pronounced /\textipa{-friː}/

2. The clusters are separated by the intrusion of an unwritten vowel /a/, for instance,

   /\textipa{steik}/ "steak" is pronounced as /\textipa{-saʔtːeːk}/

   /\textipa{twist}/ "twist" is pronounced as /\textipa{tʰaʔwit}/

   /\textipa{skript}/ "script" is pronounced as /\textipa{-saʔkʰrip}/.
4.1.2 Syllable-final consonants

The Thai consonant symbols used as syllable-final consonants in words of English origin are shown in Figure 4.2(a).

In Thai, the English /pʰ, b, f, or v/ are pronounced as /-p/, the final /th, d, s, z, tʃ, dʒ, j or ʒ/ are pronounced as /-t/, the final /l/ is pronounced as /-n/ and the final /kʰ, or g/ are pronounced as /-k/.
<table>
<thead>
<tr>
<th>English syll.</th>
<th>Thai syll.</th>
<th>final consonant</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>p</td>
<td>ถิ่บ</td>
<td>/ˈtop/ top</td>
</tr>
<tr>
<td>t</td>
<td>ต์</td>
<td>ถิ่บ</td>
<td>/ˈtip/ tip</td>
</tr>
<tr>
<td>m</td>
<td>แม</td>
<td>ถิ่บ</td>
<td>/ˈklap/ club</td>
</tr>
<tr>
<td>g</td>
<td>ก</td>
<td>ถิ่บ</td>
<td>/ˈgɔp/ golf</td>
</tr>
<tr>
<td>r</td>
<td>ธ</td>
<td>ถิ่บ</td>
<td>/ˈsɪp/ to serve</td>
</tr>
<tr>
<td>t</td>
<td>ต์</td>
<td>/ˈkrım/ cream</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>น</td>
<td>/ˈbʊt/ boot</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>ด</td>
<td>/ˈflɛt/ flat</td>
<td></td>
</tr>
<tr>
<td>s</td>
<td>ฮ</td>
<td>/ˈkæt/ card</td>
<td></td>
</tr>
<tr>
<td>z</td>
<td>ซ</td>
<td>/ˈtʃɛt/ tennis</td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>ข</td>
<td>/ˈkæt/ gas</td>
<td></td>
</tr>
<tr>
<td>t</td>
<td>ต์</td>
<td>/ˈtʃɛt/ jazz</td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>จ</td>
<td>/ˈbɛt/ beige</td>
<td></td>
</tr>
<tr>
<td>tj</td>
<td>ตัจ</td>
<td>/ˈkʰlɛt/ clutch</td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>จ</td>
<td>/ˈflɛt/ flash</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>น</td>
<td>/ˈprʊn/ prune</td>
<td></td>
</tr>
<tr>
<td>l</td>
<td>ลำ</td>
<td>/ˈhɔn-tɛn/ hotel</td>
<td></td>
</tr>
<tr>
<td>k</td>
<td>ค</td>
<td>/ˈbreɪk/ brake</td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>ง</td>
<td>/ˈpɛk/ peg</td>
<td></td>
</tr>
<tr>
<td>η</td>
<td>η</td>
<td>/ˈsaр-ˈprɛŋ/ spring</td>
<td></td>
</tr>
</tbody>
</table>
Only one consonant /p, t, k, ?, m, n, or η/ is permitted in a syllable-final position in Thai, so Thai words always end with either a vowel or a single consonant. For English loans which have syllable-final clusters, all the consonant components of the clusters are written in the Thai writing but only one of them which represents either /p, t, k, m, n, or η/ is pronounced. A special symbol called "a sound killing symbol" is written above an unpronounced consonant symbol to show that it is rendered silent. For example the word /bank/ "bank" is written as /'bɛŋ/, the <— is written above the consonant symbol /k/ to indicate that it is not pronounced. Another example is the word /mai/ which is written as /'mai/, the <— is written above the consonant /l/ to indicate that it is rendered silent. In Thai the vowel /ai/ is not permitted to be followed by a consonant. <— is also sometimes written above a non-final unpronounced consonant of a syllable, for example /'kha:t/ "card", /'fɔ:m/ "farm", /'kɔp/ "golf".

Of the syllables with more than two final consonant symbols, and only the first is pronounced, the <— is written above the last final consonant symbol to indicate that all consonant symbols except the first one are rendered silent. For example the word /wɔltz/ "waltz" is written as /'wɔt/, the <— is written above the last final consonant symbol /t/ to indicate that
all preceding consonant symbols except the first one, the \(<\text{a}\)>, are not pronounced.

4.2 VOWELS

The English vowels and Thai vocalic symbols which represent them are illustrated in Figure 4.3(a). For the English diphthongs which do not occur in Thai, these are reduced into pure vowels.
<table>
<thead>
<tr>
<th>English vowels</th>
<th>Thai vocalic symbols</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ɨː</td>
<td>/ˈkriːm/</td>
</tr>
<tr>
<td>i</td>
<td>ɨː</td>
<td>/ˈwɪk/</td>
</tr>
<tr>
<td>eː</td>
<td>eː</td>
<td>/breɪk/</td>
</tr>
<tr>
<td>eː</td>
<td>eː</td>
<td>/test/</td>
</tr>
<tr>
<td>a</td>
<td>æː</td>
<td>/bæŋk/</td>
</tr>
<tr>
<td>æː</td>
<td>æː</td>
<td>/fɑːr/</td>
</tr>
<tr>
<td>o</td>
<td>aː</td>
<td>/ˈdraːp/</td>
</tr>
<tr>
<td>o</td>
<td>aː</td>
<td>/ˈlok/</td>
</tr>
<tr>
<td>o</td>
<td>oː</td>
<td>/boʊt/</td>
</tr>
<tr>
<td>o</td>
<td>oː</td>
<td>/ˈdɑːp/</td>
</tr>
<tr>
<td>o</td>
<td>uː</td>
<td>/ˈkʊk/</td>
</tr>
<tr>
<td>o</td>
<td>uː</td>
<td>/ˈbʊt/</td>
</tr>
<tr>
<td>a</td>
<td>əː</td>
<td>/ˈkluːp/</td>
</tr>
<tr>
<td>English vowels</td>
<td>Thai vocalic symbols</td>
<td>Examples</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>a</td>
<td>อำเภอ ai (ai)</td>
<td>ไป /'pai/ pipe</td>
</tr>
<tr>
<td></td>
<td>อำ ai</td>
<td>พาย / 'pai / pie</td>
</tr>
<tr>
<td>o</td>
<td>อำ o</td>
<td>ท่าน / t'a:n / town</td>
</tr>
<tr>
<td>e</td>
<td>อำ e</td>
<td>ฝ่าย / t'e:i / foil</td>
</tr>
<tr>
<td>i</td>
<td>อำ i</td>
<td>เศรษฐ / s'op / to serve</td>
</tr>
<tr>
<td>a</td>
<td>อำ a</td>
<td>เบีย / 'bia / beer</td>
</tr>
<tr>
<td>o</td>
<td>อำ o</td>
<td>ท้า / t'wa / to tour</td>
</tr>
<tr>
<td>1 a</td>
<td>อำ 1 a</td>
<td>วิ่ง / 'wi:x / visa</td>
</tr>
<tr>
<td>2 a</td>
<td>อำ 2 a</td>
<td>พาลัง / 'sa:m' / to be smart</td>
</tr>
</tbody>
</table>

1 used in a stressed syllable of the word.
2 used in an unstressed syllable of the word.
APPENDIX 5

SUGGESTIONS ON USING THAI PHONETIC SYMBOLS IN TRANSCRIBING THAI DIALECTS

by Theeraphan L. Thongkham

The system of transcribing Thai dialects by using Thai phonetic symbols was suggested by Theeraphan L. Thongkham in a Linguistic Seminar of the Indigenous Languages of Thailand Research Project at the Central Institute of English Language, Bangkok, Thailand, in September 5-23, 1977. The idea of the system shown in this appendix is copied from the hand-out which was given in a seminar. The arrangement of the charts is my own.
5.1 Consonants

Figure 5.1 (a)

5.1.1 Syllable-initial consonants

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>b</th>
<th>p</th>
<th>pʰ</th>
<th>t</th>
<th>w</th>
<th>m</th>
<th>d</th>
<th>tʰ</th>
<th>s</th>
<th>n</th>
<th>r</th>
<th>l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thai phonetic symbols</td>
<td>ต่</td>
<td>ตง</td>
<td>ตงฮ</td>
<td>ติ</td>
<td>ฒ</td>
<td>ฌ</td>
<td>จ</td>
<td>ฒฮ</td>
<td>ส</td>
<td>น</td>
<td>ร</td>
<td>ล</td>
</tr>
</tbody>
</table>

| Phonetic values | tɕ | tɕʰ | j | ɲ | ɡ | ɤ | ɣ | ɣ | k | kʰ | ข | ฃ | น |
| Thai phonetic symbols | ฏ | ฏฮ | จ | ญ | กล | แ | ง | โ | ก | กฮ | ข | ฃ | น |

5.1.2 Syllable-final consonants

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>p</th>
<th>m</th>
<th>t</th>
<th>n</th>
<th>k</th>
<th>ɲ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thai phonetic symbols</td>
<td>ต่</td>
<td>ฌ</td>
<td>ญ</td>
<td>น</td>
<td>ก</td>
<td>ญ</td>
</tr>
</tbody>
</table>

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5.2 Vowels

The following charts illustrates the Thai phonetic symbols which represent vowels. Unless otherwise stated, each vowel is represented by the same symbol when it occurs either with or without a final consonant.

**Figure 5.2 (a)**

5.2.1. Monophthongs

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Thai phonetic symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>(/^)</td>
</tr>
<tr>
<td>iː</td>
<td>(/)</td>
</tr>
<tr>
<td>e</td>
<td>(#) / /k / /k /</td>
</tr>
<tr>
<td>eː</td>
<td>(r)</td>
</tr>
<tr>
<td>e</td>
<td>(#) / /k / /k /</td>
</tr>
<tr>
<td>eː</td>
<td>(r)</td>
</tr>
<tr>
<td>a</td>
<td>(#) / /k / /k /</td>
</tr>
<tr>
<td>aː</td>
<td>(r)</td>
</tr>
<tr>
<td>o</td>
<td>(#) / /k / /k /</td>
</tr>
</tbody>
</table>

5.2.2. Diphthongs

<table>
<thead>
<tr>
<th>Phonetic values</th>
<th>Thai phonetic symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>iːu</td>
<td>(/)</td>
</tr>
<tr>
<td>iːu</td>
<td>(/)</td>
</tr>
<tr>
<td>eu</td>
<td>(r)</td>
</tr>
<tr>
<td>eːu</td>
<td>(r)</td>
</tr>
<tr>
<td>eːu</td>
<td>(r)</td>
</tr>
<tr>
<td>eːu</td>
<td>(r)</td>
</tr>
<tr>
<td>Phonetic values</td>
<td>Thai phonetic symbols</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>ai</td>
<td>ณ-</td>
</tr>
<tr>
<td>a:i</td>
<td>ณ-กิ</td>
</tr>
<tr>
<td>au</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>ai-u</td>
<td>ณ-กิ</td>
</tr>
<tr>
<td>wi</td>
<td>ณ-กิ</td>
</tr>
<tr>
<td>w:i</td>
<td>ณ-กิ</td>
</tr>
<tr>
<td>y:i</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>y:i-i</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>w:y</td>
<td>ณ-กิ</td>
</tr>
<tr>
<td>w:y:i</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>i</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>u:i</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>ui</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>u:i-i</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>ia</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>wa</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>5.2.3. Triphthongs</td>
<td></td>
</tr>
<tr>
<td>iau</td>
<td>ณ-กิ</td>
</tr>
<tr>
<td>wai</td>
<td>ณ-ก</td>
</tr>
<tr>
<td>uai</td>
<td>ณ-ก</td>
</tr>
</tbody>
</table>
### Tones

#### Figure 5.3 (a)

<table>
<thead>
<tr>
<th>High - tall</th>
<th>High - level - fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>m`</td>
<td>m`</td>
</tr>
<tr>
<td>Mid - fall</td>
<td>Mid - level - fall</td>
</tr>
<tr>
<td>m\</td>
<td>m\</td>
</tr>
<tr>
<td>Low - fall</td>
<td>Low - level - fall</td>
</tr>
<tr>
<td>m\</td>
<td>m\</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High - rise</th>
<th>High - level - rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>m\</td>
<td>m\</td>
</tr>
<tr>
<td>Mid - rise</td>
<td>Mid - level - rise</td>
</tr>
<tr>
<td>m\</td>
<td>m\</td>
</tr>
<tr>
<td>Low - rise</td>
<td>Low - level - rise</td>
</tr>
<tr>
<td>m\</td>
<td>m\</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High - level</th>
<th>High - fall - rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>m`</td>
<td>m`</td>
</tr>
<tr>
<td>Mid - level</td>
<td>Mid - fall - rise</td>
</tr>
<tr>
<td>m`</td>
<td>m`</td>
</tr>
<tr>
<td>Low - level</td>
<td>Low - fall - rise</td>
</tr>
<tr>
<td>m`</td>
<td>m`</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High - rise - fall</th>
<th>Mid - rise - fall</th>
<th>Low - rise - fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>m\</td>
<td>m\</td>
<td>m\</td>
</tr>
<tr>
<td>m\</td>
<td>m\</td>
<td>m\</td>
</tr>
<tr>
<td>m\</td>
<td>m\</td>
<td>m\</td>
</tr>
</tbody>
</table>

5.4 ....... is a pause.
LIST OF NAMES OF INSCRIPTIONS, ENGRAVINGS AND ANCIENT DOCUMENTS
List of names of inscriptions, engravings and ancient documents presented in Part Two: The Ancient Thai Writing System

1. Inscriptions and engravings

The following are the names of inscriptions and engravings. Their names are followed by the date they were inscribed, and the place where they are now kept is in parentheses.² The rubbings of all of them are now kept in the Department of Letters, the National Library of Thailand, Bangkok.

Abbreviations

NMT The National Museum of Thailand (in Bangkok)
NLT The National Library of Thailand (in Bangkok)
NCK The National Museum of Chan Kasem Palace (in Ayudhaya city)
MAE Ministère des Affaires Etrangères

1. King Ramkhamhaeng inscription, 1283 (NMT)
2. Nu'ñgroičhet inscription, 1339
3. Si Chum inscription, 1341-1361 (NLT)
4. Na Khon Chum inscription, 1357 (NLT)
5. Wat Khaokop inscription, 1357 (NLT)

1. The dates given for these inscriptions are those found in Collections of Inscriptions by Office of the President of the Council of Ministers (1965).
2. The place where some inscriptions are kept is not indicated because I could not trace them.
6. Wat Taphan inscription, 1357 (Taphan Temple, Chaiya District, Surat Thani Province)
7. Wat Mahathat inscription, 1357-1457 (Mahathat Temple, Ayudhaya Province)
8. Khao Summanakut inscription, 1359-1368 (NLT)
9,10,11,12. Wat Pa Mamuang inscriptions, 1361 (NLT)
13. Wat Phra Yuhn inscription, 1370(71) (NMT)
14. Phukhao Krailat inscription, 1379
15. Lanthongkham inscription, 1384
16. Kao Sipsi inscription, 1384
17. Wat Changlom inscription, 1384 (NMT)
18. Wat Mahathat inscription, 1392 (NMT)
19. Wat Chang Kham inscription, 1392 (NMT)
20. Kotmai Laksana Chon inscription, 1397 (NMT)
21. Wat Asokaram inscription, 1399 (NMT)
22. Wat Hinthong inscription, 1399-1419 (NMT)
23. Wat Tathen Khungnang inscription, 1404 (NMT)
24. Chosq Chetroikoksiphok inscription, 1404 (NMT)
25. Wat Pa Dnxng inscription, 1406 (NLT)
26. Wat Srasak inscription, 1417 (NMT)
27. Wat Sng Khop inscription, 1413 (Sng Khop Temple, Chainat Province)
28. Wat Chedi Nqi inscription, 1419-1438 (NMT)
29. Rpi Phra Yukhonbat inscription, 1426 (Bowon Niwet Temple, Bangkok)
30. Than Phra Isuan inscription, 1510 (The Museum of Kamphnxng Phet, Kamphnxng Phet Province)
31. Kaosipchet inscription, 1514
32. Phra Sadet inscription, 1525 (NLT)
33. Wat Khema inscription, 1536 (NLT)
34. Engraving on the margin of a bell, 1638 (U-Thong National Museum, Suphanburi Province)
35. Wat Pamok inscription, 1657 (Pamok Temple, Pamok District, Ang-Thong Province)
36. Engraving on the bronze bell, 1667 (Khongkhawadi Temple, Tha Sala District, Nakhonsithammarat Province)
37. Engraving on the iron bell, 1677 (NCK)

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38. Wat Chulamani inscription, 1680 (Chulamani Temple, Phitsanulok Province)
39. Wat Phrabqrommathat inscription, 1717 (Phra Borqmmathat, Channat Province)
40. Chan Kasem Palace inscription, 1728 (NCK)
41. Wat Tephachan inscription, 1734 (NCK)
42. Chan Kasem Palace inscription, 1745 (NCK)
43. Chan Kasem Palace inscription, 1755 (NCK)
44. Phra Borqmmakot inscription, 1749
45. Chan Kasem Palace inscription, 1755 (NCK)
46. Chan Kasem Palace inscription, 1758 (NCK)
47. Engraving on the clay plate, 1798 (Thep Urumphang Temple, Nonthaburi Province)

2. Documents

1. Three official letters from Siam to Danish tradesmen to allow them to trade in Siam, 1621 (NLT)
2. A book "Chindamani" written by Phra Horathibodii, 1672 (NLT)
3. Historical Chronicle of Ayudhaya Period written by Phra Horathibodii, 1680 (NLT)
4. Letter of Ok Phra Visut Sunthorn, Thai ambassador to Marquis de Seigneley, minister of Louis XIV of France, 1688 (MAE)
5. Letter of Ok Phra Visut Sunthorn, Thai ambassador to Monsieur de Lagney, director of the East India Company, 1688 (MAE)
6. A treaty of commerce between the French envoys and the delegates of the King of Siam, 1688 (MAE)
7. A book "Nanthopananthasut Khamluang" by Chao Fa Thammathibet, 1736 (NLT)
8. A book "Phra Malai Khamluang" by Chao Fa Thammathibet, 1738 (NLT)
9. Siamese documents called "Mu'ang Thalang documents" (about the war between Siam and Burma) (NLT)
    six documents written in 1785
    six documents written in 1786
    eight documents written in 1787
    one document written in 1788
    two documents written in 1789
    one document written in 1790
10. The proposed reform of Thai writing by King Rama VI, 1917 (NLT)
BIBLIOGRAPHY
Abbreviations:

JSS  Journal of the Siam Society
JAOS Journal of the American Oriental Society
JRASB Journal of the Royal Asiatic Society of Bengal
TAPA Transactions of the American Philological Association
CIEL Central Institute of English Language, Office of State Universities, Bangkok


(1924). "Some Features of the Siamese Speech and Writing", JAOS, Vol.44.


(1968). The Origin of the Thai Script, Bangkok: Khrurusapha.


——— (1854). Description du Royaume Thai ou Siam, (2 volumes), Paris: Mission de Siam.


Symposium on the Relationship between Thai Script and Indian Script, (in Thai), Bangkok: Phaisansiri.


Additions to Bibliography
