

សម្រាប់បង្កើតការអាសយដ្ឋាន

CAMBODIAN SYSTEM OF WRITING

and BEGINNING READER

with Drills and Glossary

by Franklin E. Huffman

with the assistance of
Chhom-Rak Thong Lambert and Im Proum



New Haven and London, Yale University Press, 1970

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PREFACE

The purpose of this book is to prepare the student to read and write Cambodian. It is designed to be used in conjunction with the author's Modern Spoken Cambodian (New Haven, Yale University Press, 1970) in an intensive or semi-intensive beginning course. The phonological transcription used is that developed during five years of study and teaching of the Cambodian language, and is identical with that used in Modern Spoken Cambodian. The book contains four parts:

Part One: The Cambodian System of Writing

This section presents a formal analysis of the relationship between the sounds of modern Cambodian (the phonology) and the symbols used to represent them (the writing system). It aims to acquaint the student with all the regular aspects of the Cambodian writing system, as well as with the major irregular subsystems. Although it is primarily intended for students, it has independent interest to the general linguist as a description of how the Cambodian writing system works.

Part Two: Programmed Reading Exercises

This section provides the student with a systematic, step-by-step approach to reading and writing Cambodian syllables. It consists of 225 cumulative exercises, each of which introduces and provides practice in a limited amount of new information. Periodic review exercises provide a test of the student's progress, and refer by number to exercises in which the points involved were first introduced. Since the primary aim of this book is to develop facility in reading, most of the exercises involve a symbol-to-sound operation. However, some of the exercises involve a sound-to-symbol operation, since it is felt that the best way to help the student recognize the sometimes minute differences between symbols is to have him write them himself. This section is essentially a programmed approach to the same information that is presented in Part One. Individual differences in learning habits provide at least part of the justification for including both a summary and a programmed approach in the same book.

Part Three: Beginning Cambodian Reader

This section consists of fifty reading selections graded in difficulty, ranging from short simple narratives to essays on various aspects of Cambodian culture. Each new vocabulary item is listed on the same page on which it first occurs, and is followed by its transcription and definition. It is not entered again unless it occurs with a different grammatical function. This section is designed to be used following Part One and/or Part Two, and in conjunction with a course in spoken Cambodian, but it would be independently useful for the student interested only in reading. Its aim is to develop the student's reading ability to the point where he can read unedited Cambodian texts with the aid of a dictionary.

Part Four: Cambodian-English Glossary

The Glossary includes not only the some 2,000 vocabulary items introduced in the Reader, but also all examples used throughout the other sections of the book. Each item is followed by its transcription, its definition(s), and the number of the story in which it first occurred. The Glossary should also be useful to the student as an aid in reading other Cambodian materials.

This book is an outgrowth of three years of study of the Cambodian language at the School of Oriental and African Studies of the University of London, in Southeast Asia, and at Cornell University, and of two years of teaching Cambodian at Yale University. It was brought to completion under a contract between the U.S. Office of Education and Yale University, which is gratefully acknowledged. Gratitude is also due the Department of East and South Asian Languages and Literatures of Yale University, which kindly granted me sufficient time from teaching duties to complete the work.

It would be impossible to mention all those who have assisted in bringing this work to completion. Thanks are especially due to Professor Fang-kuei Li of the University of Washington, who first suggested the Cambodian language as a field of study; Mrs. Judith M. Jacob of the London School of Oriental and African Studies, who gave me the first practical introduction to Cambodian; Professor Robert B. Jones of Cornell University, for his help and guidance during the preparation of a dissertation on Cambodian grammar, as well as for reading and criticizing an early draft of this book; Mrs. Chhom-Rak Thong Lambert, who wrote and adapted all of the selections in the Reader; Mr. Im Proum, for his painstaking work in writing all of the Cambodian script in two final drafts of the book; and the Yale University Press, which dealt patiently with the many problems of adapting a manuscript involving multiple writing systems to the printed page.

F. E. H.

New Haven
September 1969

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I. INTRODUCTION

A. THE LANGUAGE

Cambodian, also known as Khmer, is the official language of the Kingdom of Cambodia. It is spoken by some 5,000,000 people in Cambodia, and mutually intelligible dialects are spoken by approximately 400,000 inhabitants of the provinces of Buriram, Surin, and Srisaket in northeastern Thailand, and by approximately 450,000 people in the Mekong Delta region of South Vietnam.

Cambodian is the major modern representative of the Mon-Khmer language family, which includes, besides Mon in Lower Burma, also hundreds of related dialects scattered over most of mainland Southeast Asia, such as the Palaung, Wa, and Riang in Burma; the Khmu, Lamet, and So in Laos; the Kuy, Chong, and Lawa in Thailand; the Stieng, Biet, and Samre in Cambodia; the Bahnar, Halang, and Sre in Vietnam; and possibly the Semang and Sakai in Malaya.¹ No wider affiliation for the Mon-Khmer family has been conclusively demonstrated, although most linguists now think that Vietnamese is related to Mon-Khmer. Pater Wilhelm Schmidt's hypothesis of an Austroasiatic language family on the Southeast Asian mainland, including, besides Mon-Khmer, also the Munda languages of northeastern India, Khasi in Assam, the Cham group in South Vietnam and Cambodia, Nicobarese, and Semang and Sakai in the Malay peninsula,² is unwarranted by present evidence, and his further grouping of Austroasiatic with the Austronesian languages of island Southeast Asia to form an Austric superstock is even more speculative, although many of Schmidt's assumptions have been proven correct by later research.

As for foreign influences on the language, the Cambodians have borrowed much of their administrative, military, and literary vocabulary from Sanskrit. With the advent of Theravada Buddhism at the beginning of the fifteenth century, Cambodian began to borrow Pali words, and continues to use Pali as a major source of neologisms today. Although Cambodian and Thai are not, so far as we know, genetically related, a high percentage of their vocabulary stems from a common source, as the result both of mutual borrowing over a long period of historical contact, and of common borrowing of learned terminology from Pali and Sanskrit. During the period of French domination, many French words were borrowed into the language and have become a part of the colloquial language, especially in urban areas. There is also a smattering of Chinese and Vietnamese loanwords in colloquial speech.

Unlike its neighbors Thai and Vietnamese, which are tonal and essentially monosyllabic, Cambodian is non-tonal and has a high percentage of disyllabic words. Like the Malayo-Polynesian languages, it has a relatively complex morphology, forming disyllabic derivatives from monosyllabic bases by prefixation and infixation, although these processes are rarely productive in the language.

1. Frank M. LeBar, Gerald D. Hickey, and John K. Musgrave, Ethnic Groups of Mainland Southeast Asia (New Haven, Human Relations Area Files, 1964), pp. 287-88.

2. P. Wilhelm Schmidt, "Les peuples mon-khmêr; trait d'union entre les peuples de l'Asie centrale et de l'Austronésie," Bulletin de l'École Française d'Extrême-Orient, 7 (1907), pp. 213-63.

The typical stress pattern in such disyllables is an unstressed presyllable followed by a stressed main syllable. Even polysyllabic loanwords from Pali and Sanskrit tend to be assimilated to this pattern of alternation between an unstressed and a stressed syllable.

B. THE SYSTEM OF WRITING

The Cambodian script (called /qaqsaā kmae/ ‘Khmer letters’), as well as the Thai, Lao, Burmese, Old Mon, Old Cham, and Old Javanese scripts, are all derived from some form (or perhaps from various forms) of the ancient Brahmi script of South India. The earliest form of this script so far discovered in Southeast Asia is that of the Vo-can Sanskrit inscription of the second or third century A.D., in the area of the old kingdom of Funan.³ The exact geographical source in India of these scripts has not been determined, but epigraphers find great similarity between the earliest inscriptions in Southeast Asia and those of the early Pallava kingdom of Kanchi on the Coromandel coast of India.⁴ The earliest inscription in the Cambodian language is that found at Angkor Borei in Takéo Province of southern Cambodia, and is dated 611 A.D.⁵ Since this inscription was found in what would have been the area of Funan, the first known Indianized kingdom in Southeast Asia (first century A.D. to c. 550 A.D.), and since no vernacular inscriptions dating from the time of Funan have been discovered in the area, Cambodian may have been the language of Funan. At any rate, the fact that Cambodian was the language of Chen-La (550–802 A.D.), Funan’s successor in the Mekong Valley, and of the great kingdom of Angkor (802–1431 A.D.), whose suzerainty at its height extended eastward to the sea, northward to Tongking and northern Laos, westward to Burma, and southward to Malaya, is attested by an abundance of stone inscriptions covering the period from the seventh to the eighteenth centuries.⁶ Furthermore, the fact that pockets of speakers of Mon-Khmer-related dialects are found all over mainland Southeast Asia seems to indicate that Mon-Khmer in fact represents a much older linguistic substratum which was later engulfed, partially assimilated, and pushed into the hills by succeeding migrations of Vietnamese, Tai, and Burmese.

Part One of this book is a description of the relationship, or the “fit,” between the sounds (i.e. the phonological structure) of modern Cambodian and the symbols (i.e. the written system) that are used to represent them. Writing systems differ widely in terms of the closeness of the fit between sound and symbol; i.e. in the regularity with which a given symbol represents a given sound. By this yardstick, the Cambodian writing system is a much better writing system than, for example, that used to represent English. A description of the English writing system would consist, after a nucleus of “regular” spellings, of an almost endless list of exceptions. An example of this confusing irregularity is the variety of sounds repre-

3. K. Kumar Sarkar, “The Earliest Inscription of Indochina,” Sino-Indian Studies, 2 (1956), pp. 77–87.

4. K. A. Nilakanta Sastri, “L’Origine de l’alphabet du Champa,” Bulletin de l’École Française d’Extrême-Orient, 35, pp. 233–41.

5. L. P. Briggs, The Ancient Khmer Empire (Philadelphia, The American Philosophical Society, 1951), p. 15, n. 18.

6. Georges Maspero, Grammaire de la langue khmère (Paris, Imprimerie Nationale, 1915), p. 23.

sented by the symbols -ough in the words rough, cough, bough, slough, and hic-cough. The Cambodian writing system, on the other hand, represents the sounds of Cambodian with remarkably little ambiguity, especially at the level of common vocabulary.⁷ There are exceptions, of course, especially at the level of learned vocabulary borrowed from Sanskrit and Pali sources. These exceptions will be dealt with as exhaustively as possible, but it would be impossible, even for as regular a writing system as Cambodian, to list them all.

Although Cambodian spelling has historically been plagued by a lack of standardization, much progress has been made toward standardization in recent years, largely through the efforts of the scholars of the Buddhist Institute, whose excellent two-volume official dictionary — /waccənaanukram kmae/ ‘Cambodian Dictionary’ (Item 4 in the Bibliography) — has been used as the authority for the spellings in this book. Common alternative spellings are given for some words.

7. Assuming one is dealing with a homogeneous dialect; differences of pronunciation from one dialect to another are another matter.

II. PHONOLOGY

In order to talk about the relationship between sound and symbol, one must have an accurate description of the sound system of the language. The system of transcription used herein was devised for use in the author's Modern Spoken Cambodian textbook, and represents the segmental phonemes of standard Cambodian, which is taught in the schools and spoken by educated Cambodians. Although some colloquial dialects, notably that of Phnom Penh and the immediately surrounding area, differ considerably from the standard at the phonological level, standard Cambodian is virtually identical with the dialect spoken by the majority of the people in the central provinces, and is understood throughout the country.

If this book is used concurrently with Modern Spoken Cambodian, neither the sound system of the language nor the transcription used here will present a problem to the student. For the student who has no prior acquaintance with the sound system, an attempt is made below at a phonetic description of the sounds represented by the transcription. Such descriptions, however, are at best approximate, and it is recommended that the student have the examples listed in this section pronounced by a native speaker if at all possible.

A. CONSONANTS

The consonant phonemes of Cambodian are arranged in an articulatory chart below. The terminology used in the chart is useful in later chapters in dealing with the relationships between the writing system and certain groups of articulatorily related consonants. It is also relevant to the arrangement of consonant symbols in the Cambodian alphabet. Those symbols preceded by a hyphen occur both initially and finally.

Chart 1. Consonants

| | <u>Labial</u> | <u>Dental</u> | <u>Palatal</u> | <u>Velar</u> | <u>Glottal</u> |
|--------------|---------------|---------------|----------------|--------------|----------------|
| Stops: | | | | | |
| Voiceless | -p | -t | -c | -k | -q |
| Voiced | b | d | | | |
| Spirants: | | | | | |
| Voiceless | (f) | | s | | -h |
| Continuants: | | | | | |
| Nasal | -m | -n | -ñ | -ŋ | |
| Semivocalic | -w | | y | | |
| Lateral | | -l | | | |
| Trilled | | | r | | |

Phonetic Key

- /p/ Voiceless unaspirated bilabial stop. In initial position like the p in pin, but without the aspiration; or like the p in spin. In final position like the p in up.

- /t/ Voiceless unaspirated dental stop. Initially like the t in top, but without the aspiration; or like the t in stop. Finally like the t in hot.
- /c/ Voiceless unaspirated palatal stop. Initially like the ch in cheese, but without the aspiration. Finally it represents an unreleased closure made with the blade of the tongue against the front part of the hard palate.
- /k/ Voiceless unaspirated velar stop. Initially like the k in key, but without the aspiration; or like the k in ski. Finally like the ck in back. After the vowels /ii, ei, ee, or ae/ it is intermediate between /c/ and /k/; the two never contrast in that position.
- /q/ Voiceless unaspirated glottal stop. Initially like the closure which occurs at the beginning of the word Oh! when pronounced explosively. Finally like the closure which occurs at the end of the first Oh in the exclamation Oh, oh (he's done it again!).
- /b/ Voiced unaspirated bilabial stop. Like the b in bin, but more tense.
- /d/ Voiced unaspirated dental stop. Like the d in day, but more tense.
- /f/ Voiceless labio-dental spirant. Like the f in fool. Occurs only in a few loanwords.
- /s/ Voiceless dental groove spirant. Like the s in sit.
- /h/ Voiceless glottal spirant. Initially like English h in hot. In final position its point of articulation is much fronter, somewhat like the German ch in Ich.
- /m/ Voiced bilabial nasal. Like the m in mom, ham.
- /n/ Voiced dental nasal. Like the n in no, on.
- /ñ/ Voiced palatal nasal. Like ny in canyon, but occurs initially and finally in Cambodian.
- /ŋ/ Voiced velar nasal. Like ng in sing, but occurs both initially and finally in Cambodian. After the vowels /ii, ei, ee, ae/ it is intermediate between /ñ/ and /ŋ/; the two never contrast in that position.
- /w/ Voiced labio-dental semi-vowel. Spirantized in initial position, like the English v in voodoo, but with more lip-rounding. May be delabialized in final position.
- /y/ Voiced palatal semi-vowel. Like English y in you, but more tense.
- /l/ Voiced lateral. Like English l in late, ale.
- /r/ Voiced retroflex. May be slightly trilled initially, but usually pronounced as a single flap, like the Spanish r in pero.

B. INITIAL CONSONANT SEQUENCES

Eighty-five two-place initial consonant sequences /CC-/ and two three-place sequences /CCC-/ occur in Cambodian words. Their distribution is shown below.

Chart 2. Initial Consonant Sequences

| C1 | C2 | | | | | | | | | | | | | | | C3 | | | |
|----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----|----|
| | p | t | c | k | q | b | d | m | n | ñ | ŋ | w | y | l | r | s | h | th | kh |
| p | | x | x | x | x | | x | | x | x | x | | x | x | x | x | x | | |
| t | x | | | x | x | x | | x | x | | x | x | x | x | x | | x | | |
| c | x | | | x | x | x | x | x | x | | x | x | | x | x | | x | | |
| k | x | x | x | | x | x | x | x | x | x | x | x | x | x | x | x | x | x | |
| s | x | x | | x | x | x | x | x | x | x | x | x | | x | x | | | x | |
| q | | | | | | | | | | | | x | | | | | | | |
| m | | x | x | | x | | x | | x | x | | | | x | x | x | x | | |
| l | x | | | x | x | x | | x | | | x | x | | | | x | | x | |

When the stops /p t c k/ occur as the first member of two-place initial consonant sequences /CC-/, they are unaspirated before /r s h/, slightly aspirated before voiceless stops and all continuants other than /r/ (except in the homorganic sequence /kŋ-/) and released with slight vocalism before /q b d/ and in the sequence /kŋ-/. When the consonants /q m l/ occur as the first consonant of /CC-/ sequences, they are released with slight vocalism.

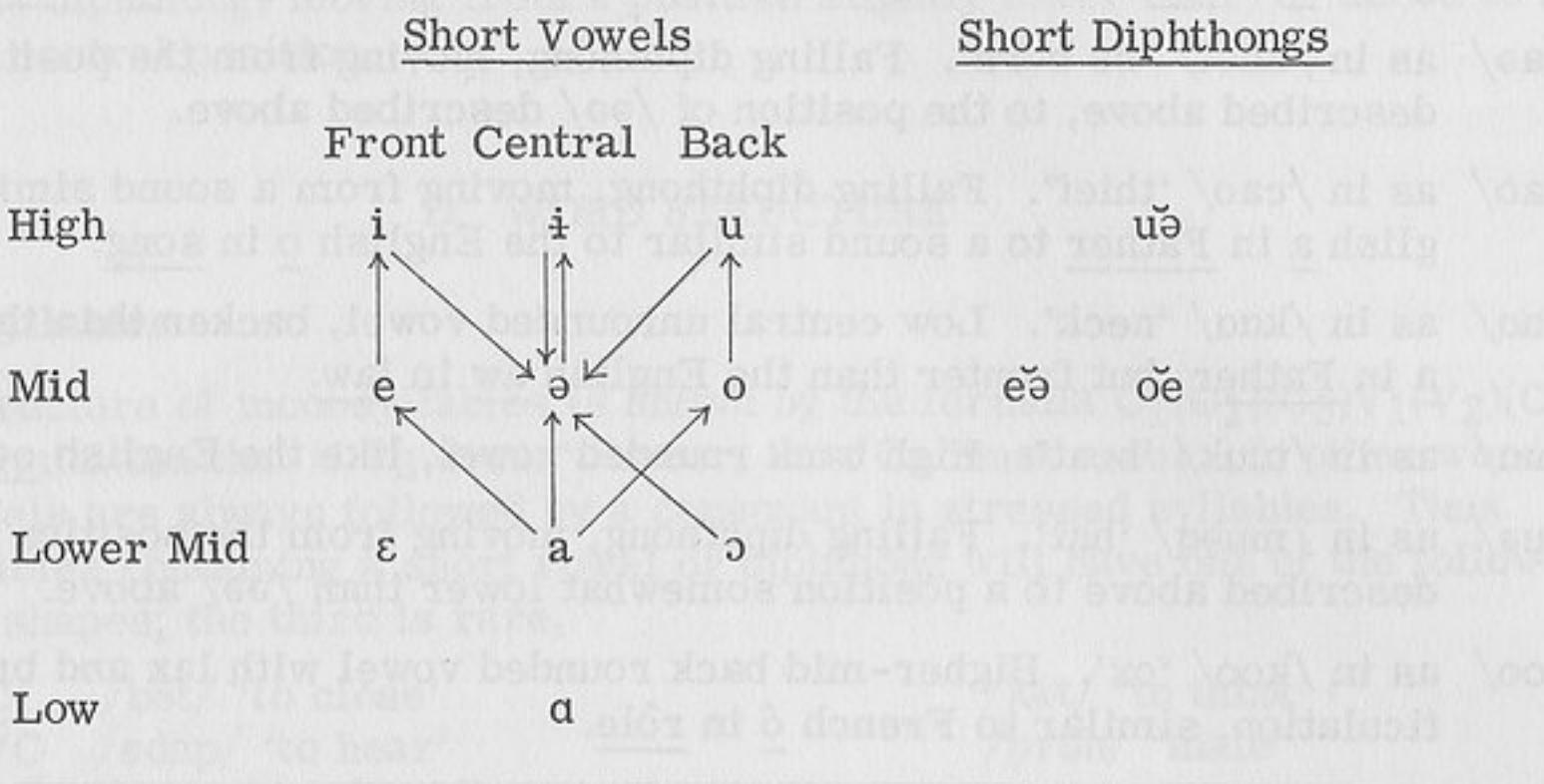
C. VOWELS

There are thirty-one different vowels and vowel combinations which occur as vocalic nuclei of Cambodian syllables. These nuclei are here analyzed as consisting of only thirteen vowel phonemes: ten short vowels and three short diphthongs. In Chart 3 the arrows represent sequences of vowel phonemes (long diphthongs). Long vowels and long diphthongs, which are equivalent in length, are treated as sequences of two short vowels. The long vowels /ɛɛ/ and /ɔɔ/ have no short counterparts. The short diphthongs, which are equivalent in length to short vowels, have no long counterparts, and so must be treated as unit phonemes. They are written with a breve to distinguish them from long diphthongs. The following nuclei occur:

- 10 long vowels: /ii, ee, ɛɛ, ɨɨ, əə, aa, ɑɑ, uu, oo, ɔɔ/
- 10 long diphthongs: /iə, ɨə, uə, ei, əɨ, ou, ae, aə, ao, ɔə/
- 8 short vowels: /i, e, ɨ, ə, a, ɑ, u, o/
- 3 short diphthongs: /eə, uə, oə/
- 31 vowel nuclei.¹

1. Other analyses of the vowel system are possible, of course, but whatever

Chart 3. Vowels



Phonetic Key

Long Vowels and Diphthongs

- /ii/ as in /ciik/ ‘to dig’. High front unrounded vowel like English ee in cheek.

/iə/ as in /biə/ ‘playing cards’. Falling diphthong, moving from a high front to a mid central position.

/ee/ as in /leen/ ‘to play’. Higher-mid front unrounded vowel with lax and breathy articulation; similar to French é in année.

/ei/ as in /kmeiŋ/ ‘to be young’. Tense diphthong starting at a point lower than, and ending at a point higher than, /ee/ above.

/ɛɛ/ as in /lɛɛŋ/ ‘to quit’. Lower-mid front unrounded vowel with lax and breathy articulation; similar to French ai in aide. Occurs long only.

/ɨɨ/ as in /lɨɨ/ ‘to hear’. High central unrounded vowel made by raising the center of the tongue toward the soft palate while keeping the lips flat or spread.

/iə/ as in /ciə/ ‘to believe’. Falling diphthong, moving from a high central to a mid central position.

/əə/ as in /ləə/ ‘on’. Higher-mid central unrounded vowel with lax and breathy articulation; similar to French eu in peu.

/əi/ as in /məɪn/ ‘10,000’. Tense diphthong moving from a position lower than, and ending at a point higher than, /əə/ above.

/aa/ as in /kaa/ ‘work’. Tense lower-mid front-of-center unrounded vowel similar to the French a in va. (This vowel is fronter and higher than the English a in Father; to pronounce it as such would confuse it with the vowel /aa/ to the ear of a Cambodian).

the analysis, thirty-one vocalic contrasts must be maintained for an accurate representation of standard Cambodian syllables.

- /ae/ as in /kmae/ 'Khmer'. Falling diphthong, starting at a point similar to English a in sat and moving to a position similar to English e in set.
- /aə/ as in /kaət/ 'be born'. Falling diphthong, moving from the position of /aa/ described above, to the position of /əə/ described above.
- /ao/ as in /cao/ 'thief'. Falling diphthong, moving from a sound similar to English a in Father to a sound similar to the English o in song.
- /aa/ as in /kaa/ 'neck'. Low central unrounded vowel, backer than the English a in Father, but fronter than the English aw in law.
- /uu/ as in /tuuk/ 'boat'. High back rounded vowel, like the English oo in boot.
- /uə/ as in /muəq/ 'hat'. Falling diphthong, moving from the position of /uu/ described above to a position somewhat lower than /əə/ above.
- /oo/ as in /koo/ 'ox'. Higher-mid back rounded vowel with lax and breathy articulation, similar to French ô in rôle.
- /ou/ as in /koun/ 'offspring'. Tense falling diphthong, moving from a position lower than, to a position higher than, /oo/ above; like American English o in go.
- /ɔɔ/ as in /rɔɔk/ 'to seek'. Lower-mid back semi-rounded vowel with lax and breathy articulation. Occurs only long.
- /ɔə/ as in /pɔə/ 'color'. Falling diphthong, moving from the position of /ɔɔ/ described above to a position lower and backer than /əə/ above.

Short Vowels and Diphthongs

- /i/ as in /cih/ 'to ride'. High front unrounded short vowel, like English i in sit.
- /e/ as in /seh/ 'horse'. Mid front unrounded short vowel, like English e in set.
- /ɨ/ as in /kit/ 'to think'. High central unrounded short vowel; shorter and lower than /iɪ/ described above.
- /ə/ as in /bət/ 'to close'. Mid central unrounded short vowel, slightly higher than u in standard American English but.
- /a/ as in /kat/ 'to cut'. Lower-mid front-of-center unrounded short vowel, similar to French a in patte.
- /ɑ/ as in /kat/ 'to jot down'. Low central unrounded short vowel, identical in quality with its long counterpart /aa/ above.
- /u/ as in /tuk/ 'to keep'. High back rounded short vowel, lower in quality than its long counterpart /uu/ described above.
- /o/ as in /kon/ 'film'. Mid back rounded short vowel, slightly diphthongized [o^u] in some environments.
- /ɛə/ as in /neəq/ 'person'. Tense falling diphthong, moving from a position lower than /e/ above to a mid central position.
- /uə/ as in /luəq/ 'to sell'. Sometimes falling, sometimes rising, short diphthong, moving from a position somewhat lower than /u/ above to a mid central position.

/oə/ as in /koət/ ‘3rd person pronoun’. Sometimes falling, sometimes rising, short diphthong, moving from a position slightly lower than /o/ above to a mid central position.

D. WORD STRUCTURE

1. Monosyllables

The structure of monosyllables is shown by the formula C₁(C₂)(C₃)V₁(V₂)(C₄), with the limitation that if V₂ doesn’t occur, then C₄ must occur. In other words, short vowels are always followed by a consonant in stressed syllables. Thus monosyllables containing a short vowel or diphthong will have one of the following three shapes; the third is rare.

- | | | |
|----------|-----------------------------------|------------------|
| 1) CVC | /bət/ ‘to close’ | /kit/ ‘to think’ |
| 2) CCVC | /sdap/ ‘to hear’ | /proh/ ‘male’ |
| 3) CCCVC | /sthət/ (~ /θət/) ‘to be located’ | |

Monosyllables containing a long vowel or diphthong occur in the following five shapes; the fifth is rare.

- | | | |
|-----------|------------------------------|-----------------------|
| 1) CV | /kaa/ ‘work’ | /puu/ ‘uncle’ |
| 2) CVVC | /baan/ ‘to have’ | /qaoy/ ‘to give’ |
| 3) CCVV | /chii/ ‘to be ill’ | /psaa/ ‘market’ |
| 4) CCVVC | /craən/ ‘much’ | /sqaat/ ‘to be clean’ |
| 5) CCCVVC | /sthaan/ (~ /thaan/) ‘place’ | /lkhaon/ ‘drama’ |

Sequences of three initial consonants occur only rarely, and then C₃ is always /h/.

2. Disyllables

Minor disyllables² consist of an unstressed presyllable of shape CV+, CrV+, CVN+, or CrVN+, followed by a stressed syllable. Minor syllables occur with high frequency in Cambodian, and might almost equal the monosyllable in total inventory if not in frequency. In minor disyllables the vowel of the unstressed presyllable is usually reduced to /ə/ in normal speech.

- Examples: CV+S /kakáay ~ kəkáay/ ‘to scratch about’
 CrV+S /prakán ~ prəkán ~ pəkán/ ‘to object’
 CVN+S /baŋkáət ~ bəŋkáət ~ pəkáət/ ‘to originate’
 CrVN+S /prambéy ~ prəmbéy ~ pəmbéy/ ‘eight’

Major disyllables consist of two stressed syllables in close juncture. Most such words are compounds; some, however, are morphologically simple (as are the first two examples below).

- Examples: /sìəwphíw/ (~ /səphíw/) ‘book’
 /phiəsáa/ ‘language’
 /bùəŋ-súəŋ/ ‘to pray’
 /sdúəc-sdáəŋ/ ‘insignificant’

2. My use of the terms “minor” and “major” disyllable differs somewhat from that of Henderson in Eugénie J. A. Henderson, “The Main Features of Cambodian Pronunciation,” Bulletin of the School of Oriental and African Studies, 14 (1952), pp. 149–74.

3. Polysyllables

Polysyllables are rare in colloquial speech, and can usually be identified as loanwords from Pali, Sanskrit, or French sources. Words of up to six syllables occur in formal speech, and even longer words occur in written texts. Such polysyllables tend to conform in normal speech to the stress pattern typical of disyllables; i.e. alternation of an unstressed with a stressed syllable.

- Examples:
- Three syllables: /thòəm+mə+dáa/ 'usually'
 - Four syllables: /pút+tə+sáh+snáa/ 'Buddhism'
 - Five syllables: /ríəc+ròət+tháa+phi+báal/ 'royal government'
 - Six syllables: /wi+cáa+rə+náq+kə+tháa/ 'editorial'

E. MARGINAL PHONEMES AND PHONEME COMBINATIONS

Certain marginal phonemes and combinations are introduced by French loanwords which are not completely assimilated to the phonological structure of native Cambodian words.

- Phonemes:
- /š/ in /šaek/ 'check' (Fr. cheque)
 - /z/ in /qaazii/ 'Asia' (Fr. Asie)
 - /g/ in /qanglei/ 'English' (Fr. anglais)

- Combinations: /by/ and /eə/ in /byeə/ 'beer' (Fr. bière)

III. THE CONSONANT SYMBOLS

A. NAMES AND VALUES OF THE CONSONANT SYMBOLS

There are thirty-three consonant symbols in the Cambodian writing system. As in the Indic alphabet from which they are derived, they are arranged in five groups based on position of articulation, proceeding from the back to the front of the mouth, and a sixth group usually labeled Miscellaneous. These designations are accurate for modern Cambodian, except that the "Retroflexes" are pronounced as dentals in Cambodian. In the chart below, the consonant symbols of Cambodian are listed in their dictionary order, which should be memorized by the student for efficiency in the use of dictionaries. Each symbol is followed by its name when pronounced in isolation, and its values before a vowel, when first in a consonantal cluster, and when in final position.

Chart 1

| Group | No. | Symbol | Name | Values | | |
|----------|-----|--------|------|-----------------|---------------------|-------|
| | | | | Before Vowel | First in Cluster | Final |
| VELARS | 1 | ក | kaa | k | k | k |
| | 2 | ខ | khaa | kh | k | k |
| | 3 | គ | koo | k | k | k |
| | 4 | ឃ | khoo | kh | k | k |
| | 5 | ឃ | coo | ŋ | - | ŋ |
| PALATALS | 6 | ច | caa | c | c | c |
| | 7 | ឆ | chaa | ch | c | - |
| | 8 | ច | coo | c | c | c |
| | 9 | ឆ | choo | ch | c | - |
| | 10 | ឃ | cu | ñ | - | ñ |

| Group | No. | Symbol | Name | Values | | |
|---------------|-----|--------|-------|--------------|------------------|-------|
| | | | | Before Vowel | First in Cluster | Final |
| RETROFLEXES | 11 | ជ | daa | d | d | t |
| | 12 | ឃ (ជ) | thaat | th | t | t |
| | 13 | ឃ | ceo | d | - | t |
| | 14 | ឃុ | theo | th | - | t |
| | 15 | ឃ | naa | n | n | n |
| DENTALS | 16 | ឃ | taa | t | t | t |
| | 17 | ឃ | thaat | th | t | t |
| | 18 | ឃ | ceo | t | t | t |
| | 19 | ឃ | theo | th | t | t |
| | 20 | ឃ | ceo | n | - | n |
| LABIALS | 21 | ឃ | baa | b | p | p |
| | 22 | ឃ | phaa | ph | p | p |
| | 23 | ឃ | ceo | p | p | p |
| | 24 | ឃ | pheo | ph | p | p |
| | 25 | ឃ | ceo | m | m | m |
| MISCELLANEOUS | 26 | ឃ | yeo | y | - | y |
| | 27 | ឃ | reo | r | - | ∅ |
| | 28 | ឃ | leo | l | l | l |

| Group | No. | Symbol | Name | Values | | |
|--------------------------|-----|--------|------|-----------------|---------------------|-------|
| | | | | Before Vowel | First in Cluster | Final |
| MISCELLANEOUS (cont.) | 29 | ៥ | waa | w | - | w |
| | 30 | ៥៥ | saa | s | s | h |
| | 31 | ៥Ể | haa | h | ∅ | - |
| | 32 | ៥ể | laa | l | - | - |
| | 33 | ៥Ễ | qaa | q | q | - |

B. NOTES ON THE CONSONANT SYMBOLS

1. The Two Series

Notice that the names of some consonant symbols have the vowel /aa/ while others have the vowel /ɔɔ/. Consonants which are pronounced with an inherent /aa/ vowel are called កុខូសាំង ស្រែ: /qakhoosaq/ ‘voiceless’ in Cambodian, and consonants which are pronounced with an inherent /ɔɔ/ are called កុខូសាំង ស្រែ: /khoosaq/ ‘voiced’, based on the values which they had in the Indic writing system.¹

These terms are not relevant to the phonological values of the two series of consonants in modern Cambodian, since each consonant symbol has the same phonological value as its counterpart in the opposite series. Thus we will refer to them simply as the 1st Series and 2nd Series respectively. The distinction between the two series is essential to reading Cambodian, since the value of a following vowel symbol is determined by the series to which the initial, or “governing,” consonant symbol belongs. In other words, the Cambodian writing system doubles the function of its vowel symbols by using two sets of consonant symbols with a single set of vowel symbols. It follows that there are two consonant symbols for every consonant sound, and two values for every vowel symbol. Thus Cambodian has a syllabic writing system, in the sense that the pronunciation of syllables is represented by configurations of symbols, as opposed to an alphabetic writing system, where a sequence of symbols has a one-to-one relationship with a sequence of sounds. This idea of configuration is strengthened by the fact that vowel symbols are written before, above, below, after, and around the consonant symbol after which they are pronounced.

-
1. The two series are sometimes also referred to as សំនើស្តីសំនើស្តី /samleij touc/ ‘small voice’ and សំនើស្តីសំស៊ុំ /samleij thom/ ‘large voice’, or សំនើស្តីសំសាន /samleij sraal/ ‘light voice’ and សំនើស្តីសំសាន /samleij tñüən/ ‘heavy voice’ respectively.

2. Conversion

Those 1st series symbols which lack a counterpart in the 2nd series, namely ប /baa/, ស /saa/, ហ /haa/, and ឃ /qaa/ can be “converted” to 2nd series symbols by the addition of the diacritic ត្រៃសពាំ /trəysap/ (^) to the 1st series symbol, giving បោ /baa/, សោ /saa/, ហោ /haa/, and ឃោ /qaa/, so that a following vowel symbol is pronounced with its 2nd series value.² Those 2nd series symbols which have no counterparts in the 1st series, namely ឃ /ŋaa/, ឃូ /ñaa/, ម /maa/, យ /yaa/, រ /raa/, and វ /waa/, can be converted to 1st series symbols by the addition of the diacritic មុេកកៅទោន /museqkətoən/ ("), giving ឃ /ŋaa/, ឃូ /ñaa/, ម /maa/, យ /yaa/, រ /raa/, and វ /waa/. When a vowel symbol that is written above the consonant symbol occurs with a converted consonant symbol, the /museqkətoən/ (") and /trəysap/ (^) are replaced by the ក្រិចក្រាម /kbiəh kraom/ (-) under the consonant symbol; e.g. *សិ > សិ /sii/ ‘to eat’, *មេន > មេន /məin/ ‘10,000’. However, the /trəysap/ is usually written above a converted ហ or ឃ despite a superscript vowel, although either form may occur; e.g. ហីង ~ ហីង /hiŋ/ ‘a kind of toad’; ឃី ~ ឃី /qii/ ‘an interjection’. In the dictionary, words spelled with these converted symbols follow words spelled with their counterparts and having the same vowel symbol.

The /museqkətoən/ is also used to convert the symbol ប /baa/ to បោ /paa/, which does not otherwise exist in the 1st series. All words spelled with បោ follow all words spelled with ប in the dictionary order.

3. The Symbol ប /baa/

When ប /b/ is followed by the vowel symbol ា, it has the alternative form បា to distinguish it from ប + ា and from ហា; e.g. បាយ បាយ /baay/ ‘cooked rice’ បាស បាស /caay/ ‘to spend’, ហាយ ហាយ /hay/ ‘horse (lit.)’.

The symbol ប /b/ is pronounced /p/ in the following circumstances:

-
2. The /trəysap/ should be carefully distinguished from the សាំរាំ /saq/ (^) which occurs as an integral part of the symbols សាំ, សាំ, មាំ, ឃាំ, ឃាំ, and ឃូ.

- b) When it occurs with a subscript:

丈/pdəy/ husband

 /praə/ to use

Such words follow words spelled with "ss" in the dictionary.

- c) In some words an initial **ւ** is pronounced /p/ even though it is written neither with the /museqkətōən/ nor a subscript. Such words are listed inconsistently in the dictionary, sometimes occurring among words spelled with an initial **ւ**, and sometimes among words spelled with initial **Վ**.

ပေါ်ပေး /paccay/ money (clergy)

ព័ត៌មាន /paccoban/ the present

- d) In final position:

गृह्ण' /prap/ to tell

ଚୁପ୍ /chup/ to stop

4. The Symbol ຖ /taa/

The symbol is normally pronounced /t/ (/taa/ ‘old man’,

/truət/ ‘to examine’), but when it occurs as the initial symbol of disyllabic words whose first syllable ends in a nasal /m, n, ñ, or ɳ/, it is pronounced /d/; e.g. ធម្មាយ /dənwaay/ gift. In the official Cambodian Dictionary ឌ is used as the initial for all disyllables whose underlying form is spelled with a ឌ or ឌ, e.g.: ឌិត, ឌិតិត, ឌិតិតិត, ឌិតិតិតិត, etc.

 /taa/ to continue

> ଦମ୍ନା /damnaa/ extension

 /tlay/ to be valuable

> ດຳລ່າຍ /damlay/ value

Derivatives of bases spelled with $\ddot{\text{w}}$ /d/ are spelled with $\ddot{\text{v}}$.

걷다 /daə/ to walk

> ଦମ୍ପାତ୍ /dampaat/ process

However, due to the homophony between *ā* and *ā̄* in this position, such words may be found spelled either way.

5. The Retroflexes

Since there are no retroflex consonants in Cambodian, the Retroflex symbols are available for other uses. The symbols and are used to represent /d/

in the 1st and 2nd series respectively, and the Retroflex nasal  is used to represent a 1st series /n/. The symbols  /tha:/,  /dha:/ and  /thaa/ are rare, occurring only in a few words of Pali or Sanskrit origin.

6. The Aspirates

Symbols       , and  , which represented aspirated consonants in the script from which they were borrowed, represent sequences of a stop + /h/ in Cambodian. When they occur as the first member of a written cluster, however, they represent the unaspirated stops /p t c k/.

7. Final -

Notice that when  /r/ occurs in final position, it is not pronounced (represented Ø in the chart); e.g.   /kaa/ 'work',   /kmae/ 'Cambodian'.

8. Special Combinations

The symbol  is combined with the subscript form of  (- ; see Chapter V) to represent the consonant /f/; e.g.   /fək/ 'to train',    /kaafei/ 'coffee'. In some words  is pronounced /waa/ as if it were the 1st series counterpart of  ; e.g.   /wouŋ/ 'flock, crowd'.  also sometimes combines with the subscript forms of  /məo/,  /nəo/, and  /ləo/ to represent the 1st series counterparts of those symbols; e.g.   /maa/,   /naa/, and   /laa/.

C. THE TWO SERIES CONTRASTED

In the following chart, each consonant symbol is correlated with its counterpart in the opposite series, and both forms are exemplified. Where possible, the examples are words whose spellings differ only with regard to the initial consonant in order to show the influence of each series on the value of a following vowel symbol. The matter is treated fully however, in Chapter IV: The Vowel Symbols.

Chart 2. The Two Series Contrasted

| Sound | 1st Series | | | 2nd Series | | |
|-------|------------|---------|------------------------------|------------|---|--------------------------------|
| | Symbol | Example | Symbol | Example | | |
| k | ກ | ກ | /kaa/ neck | ກ | ກ | /koo/ mute |
| kh | ຂ | ຂ | /khat/ to polish | ຂ | ຂ | /khoet/ to prevent |
| ŋ | ງ | ງ | /ŋaaw/ noise-maker | ງ | ງ | /ŋiəw/ a kind of clam |
| c | ຈ | ຈ | /caa/ to inscribe | ຈ | ຈ | /ciə/ be |
| ch | ຈ | ຈ | /chaŋ/ interval | ຈ | ຈ | /choŋ/ to reach out |
| ñ | ນ | ນ | /ñam/ to eat | ນ | ນ | /ñoem/ meat salad |
| d | ດ | ດ | /don/ elephant command | ດ | ດ | /dun/ alike |
| t | ຕ | ຕ | /taa/ old man | ຕ | ຕ | /tiə/ duck |
| th | ທ | ທ | /thou/ vase | ທ | ທ | /thuu/ relaxed |
| | ທ | ທ | /thaan/ place, site | ທ | ທ | /thiəl/ a large drum |
| n | ນ | ນ | /naay/ bored | ນ | ນ | /niəy/ chief |
| | ນ | ນ | /nəŋ/ (~ /niŋ/) that's right | | | |
| b | ບ | ບ | /bot/ son | ບ | ບ | /but/ a personal name |
| p | ປ | ປ | /pəy/ flute | ປ | ປ | /pii/ from |
| ph | ຜ | ຜ | /phaay/ to run at full speed | ຜ | ຜ | /phiəy/ to circulate |
| m | ມ | ມ | /mae/ mother | ມ | ມ | /mɛɛ/ polite response particle |
| | ມ | ມ | /mat/ fine, powdered | | | |

| Sound | 1st Series | | 2nd Series | | | |
|-------|------------|---------|-----------------------|---------|--------|---------------------|
| | Symbol | Example | Symbol | Example | | |
| y | យ | យោះ | /yaan/ kind; variety | យ | យោះ | /yiən/ go (royalty) |
| r | រ | រ៉ុង | /rouŋ/ rattling noise | រ | រ៉ុង | /ruuŋ/ hole |
| l | ល | លើង | /leŋ/ a personal name | ល | លើង | /leen/ to play |
| | ឡ | ឡើង | /luəŋ/ king | | | |
| w | វ | វ៉ូ | /way/ to hit | វ | វូ | /wiy/ quick, clever |
| | វ | វោង | /woun/ flock, crowd | | | |
| s | ស | សី | /səy/ wicker ball | ស | សី | /sii/ to eat |
| h | ហ | ហាន | /haan/ shop, store | ហ | ហាន | /hiən/ to dare |
| q | ឃ | ឃី | /qəy/ what | ឃ | ឃី | /qii/ interjection |
| f | ឃ | ឃកា | /fək/ to practice | ឃ | ឃិតិកា | /fiizik/ physics |

D. FINAL CONSONANTS

Although only thirteen consonants occur finally in Cambodian syllables (See Chap. II, A), all the consonant symbols in Chart 1 except ន, នី, និ, រ, នា, និ, and និ are used to represent final consonants in Cambodian. Although the symbol រ occurs finally in many words, it is not pronounced, since final /-r/ does not occur in Standard Cambodian.³ However, it sometimes serves to distinguish orthographically between homonyms, e.g.

កា /kaa/ to address (a letter): កាត់ /kaa/ work

គូ /kuu/ pair : គូរ /kuu/ to draw

ពិ /pii/ from : ពិរ /pii/ two

3. Words spelled with a final រ were presumably pronounced with final /-r/ when Cambodian was first written, and in certain dialects of northwestern Cambodian and northeastern Thailand such words are still pronounced with final /-r/.

The symbols ፻ , ፻ , ፻ and ፻ represent final /-q/ after the vowels /a, aa, a, aa, eə, uə, iə, ɿə, uə/, and final /-k/ elsewhere. A given final consonant may be presented by a variety of symbols. In the chart below the most common, or characteristic, representation is exemplified first.

Chart 3. Representation of Final Consonants

| <u>Final Consonant</u> | <u>Representation</u> | <u>Example</u> |
|--|-----------------------|--|
| 1. -p | ፻ | ရှေ့ပ /riəp/ to arrange |
| | ፻ | ဖို့ပ /phiəp/ aspect |
| | ፻ | ချော် /loop/ greed |
| 2. -t | တ | ကာတ /kat/ to cut |
| | တ | /baat/ polite response used by men |
| | တ | ပြာတ /praakat/ exact |
| | တ | ဒဲတ /qət/ brick |
| | တ | /baat/ to tell, recite (clergy) |
| | တ | ကြုတ /krut/ garuda |
| | တ | ပြုတ /pramaat/ to scorn, despise |
| | တ | ဘာတ /qaawut/ weapon |
| | တ | ဂျာတနာတ (~ ဂျာဘာတ) /qaasaat/ June-July |
| | တ | /touc/ small |
| 3. -c | ဋ | ရှေ့ဋ /riəc/ reign |
| | ဋ | /ciik/ to dig |
| | ဋ | ရှေ့ဋ /rook/ disease |
| 4. -k (after vowels other than those in 5 below) | | |

| <u>Final Consonant</u> | <u>Representation</u> | <u>Example</u> |
|--|---|---------------------------------------|
| 4. -k | ក | មុក /muk/ face |
| | កក | មឹកកក /meek/ sky |
| 5. -q (after /a, aa, a, aa, eə, uə, iə, ɿə, uə/) | | |
| | កាត | កាតកាត /kaaq/ refuse, residue |
| | នីត | នីតី /niəq/ dragon |
| | ពិសាត | ពិសាត /pisaaq/ April-May |
| | មិត | មិតិ /miəq/ January |
| | ∅ (no consonant) after short vowels in final position | |
| | វិទ្យ | វិទ្យុ /wittyuq/ radio |
| 6. -m | ាំ | តាំអាំ /taam/ to follow |
| | ាំ | ដាំ /dom/ piece; ាំ /tum/ ripe |
| | ាំ | កាំ /cam/ exact; ាំ /tum/ to perch |
| | -ាំ | កាំ /cam/ remember; ាំ /coəm/ bruised |
| 7. -n | ាំ | មិោន /miən/ to have |
| | បោរា | បោរាន /bouraan/ ancient |
| 8. -ñ | ាំ | ពិោាំ /tiəñ/ to pull |
| 9. -ŋ | ាំ | ដើាំ /dəŋ/ to know |
| | ាំ (after /ii/) | ីាំ (~ ីីាំ) /riiŋ/ dried up |
| 10. -w | ាំ | កាំវាំ /qaaw/ shirt |
| | ាំ-ាំ | ហាំ /haw/ to call; ាំ /tiw/ to go |

| <u>Final Consonant</u> | <u>Representation</u> | <u>Example</u> |
|----------------------------|-----------------------|--|
| 11. -y | ဃ္ဂ | ပာယ် /baay/ cooked rice; food |
| | ဃ- | ကော် /cay/ louse; ပြီး /priy/ forest |
| 12. -l | ဗု | ကာလ /kaal/ time |
| 13. -s | ဗျ | စူမြတ်စူ /soum-toos/ I beg your pardon (ဗျ is pronounced as final /-s/ only in a very formal reading style; in normal speech it is pronounced /-h/.) |
| 14. -h | ဗု | ကာဗု /cah/ old |
| | - ဗု | ပာဗု /pah/ to patch; တော် /teəh/ to slap |
| | | (- ဗု /reəhmuk/ always represents final /-h/, and when no vowel symbol occurs, it represents /-ah/ after a 1st series consonant and /-eəh/ after a 2nd series consonant.) |

IV. THE VOWEL SYMBOLS

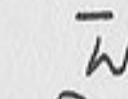
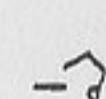
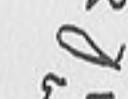
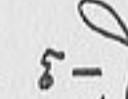
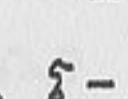
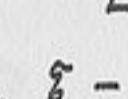
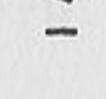
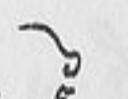
A. NAMES OF THE VOWEL SYMBOLS

Cambodian vowel symbols may consist of one or a combination of elements written before, above, below, or after the initial consonant symbol. The complex symbols should be learned as units, since their values may bear little relation to the values of their individual components. As was pointed out in Chapter III, B 1, the pronunciation of a vowel symbol in Cambodian is determined by the series of the initial consonant that it accompanies. When referring to a given

vowel symbol, Cambodians usually use the word  /sraq/ 'vowel' followed

by the 1st series value of the symbol. These names are preceded phonologically by /q-/ , since every syllable in Cambodian must begin with a consonant. In the chart that follows, the vowel symbols are listed in their dictionary order (in Cambodian dictionaries, words are ordered primarily by initial consonant, secondarily by vowel symbol). Each symbol is followed by its name, its 1st series value, and its 2nd series value.

Chart 1. The Names of the Vowel Symbols

| Symbol | Name | Values | | Symbol | Name | Values | |
|--|----------|------------|------------|---|----------|------------|------------|
| | | 1st Series | 2nd Series | | | 1st Series | 2nd Series |
| 1. - | sraq qaa | aa | ɔɔ | 9. -  | sraq quə | uə | uə |
| 2. -  | sraq qaa | aa | iə | 10.  - | sraq qaə | aə | əə |
| 3. -  | sraq qeq | e | i | 11.  - | sraq qiə | iə | iə |
| 4. -  | sraq qəy | əy | ii | 12.  - | sraq qiə | iə | iə |
| 5. -  | sraq qəq | ə | ɨ | 13.  - | sraq qei | ei | ee |
| 6. -  | sraq qəi | əi | ɨi | 14.  - | sraq qae | ae | ɛɛ |
| 7. -  | sraq qoq | o | u | 15.  - | sraq qay | ay | iy |
| 8. -  | sraq quo | ou | uu | 16.  - | sraq qao | ao | oo |

| Symbol | Name | Values | | Symbol | Name | Values | |
|---------|----------|------------|-----------------|---------|----------|------------|------------------|
| | | 1st Series | 2nd Series | | | 1st Series | 2nd Series |
| 17. ស-ា | sraq qaw | aw | ៥w | 20. -៥ | sraq qam | am | oəm ¹ |
| 18. ៥- | sraq qom | om | ៥m | 21. -៥៥ | sraq qah | ah | eəh |
| 19. ៥- | sraq qam | am | ៥m ¹ | | | | |

1. When the vowels —° and —៥° are recited as part of the Cambodian syllabary, they have the special syllabary pronunciations /qoəm/ and /qeəm/ respectively in the 2nd series. In actual words, however, they have the values shown above; in fact the phonological sequence /-eəm/ occurs only in the 2nd series syllabary pronunciation of —៥° .

B. VALUES OF SYLLABIC CONFIGURATIONS

The value of a given symbol may also depend on its environment; i.e. on the final consonant symbol that follows it in the same syllable, and on stress factors. Vowel sounds are also represented by the absence of a vowel symbol, by certain configurations of consonant symbols, and by various diacritics. It is thus clear that the Cambodian syllable must be read as a configuration. In the following chart, all the configurations by which vowels are regularly represented are listed in the order in which they occur in the official Cambodian Dictionary of the Buddhist Institute (Bibliography Item 4), and each configuration is exemplified in both series.

Chart 2. Values of Syllabic Configurations

| Symbol | 1st Series | | 2nd Series | |
|--------|---------------------------|---------------------------|------------------------------|---------------------------|
| | Value and Exemplification | Value and Exemplification | Value and Exemplification | Value and Exemplification |
| 1. — | /aa/ | /kaa/ neck | /ɔɔ/ | /kɔɔ/ mute |
| 2. — — | /a/ | /kat/ jot down | /u/ before Labial finals | /tup/ to stop up |

/uə/ elsewhere

/yuəl/ to understand

| Symbol | 1st Series | | 2nd Series | |
|------------|---|---------------------------|---|---------------------------|
| | Value and Exemplification | Value and Exemplification | Value and Exemplification | Value and Exemplification |
| 3. - ៩ | /a/ ស៉ាក /saq/ era | | /eə/ before Velar finals ស៉េក /leəq/ gum-lac | |
| | | | /oə/ elsewhere (except below) ស៉ែក /tɔəp/ army | |
| 4. - ៩យ | /ay/ ស៉ាស៉យ /samay/ era | | /i:y/ ីយ៉យ /ciy/ victory | |
| 5. - ៥ | | | /oə/ ី៥ /coə/ resin | |
| 6. - ៩ | /aa/ តាំ /taa/ grandfather | | /iə/ ីតាំ /cie/ to be | |
| 7. - ៩ - / | /a/ កាត់ /kat/ to cut | | /eə/ before Velar finals កាត៉ /teəq/ to trap | |
| | | | /oə/ elsewhere កាត់ /koət/ he, she, they | |
| 8. ៩ | /eq/ in stressed syllables ម៉ាត់ /matteq/ opinion | | /iŋ/ in stressed syllables លាតិឃ /latthiŋ/ precept | |
| | /e/ in unstressed syllables កិរិយា /keriyaa/ conduct | | /i/ in unstressed syllables និតិេន /nitiən/ story | |
| 9. ៩ - | /ə/ ចិត្ត /cət/ heart, mind | | /i:/ (except before ៩យ) ិត្ត /cih/ near | |
| 10. ៩ ៩ | /əy/ ិចត់យ /caetdəy/ stupa | | /ii/ ិចត្តិយ /qəntrii/ power | |
| 11. ៩ : | /eh/ ិោះិគិណ /teh-diəl/ to ridicule | | /ih/ ិធន : /cih/ to ride | |
| 12. ៩ | /əy/ ប៉ោ /bəy/ three | | /ii/ ិូវ /pii/ two | |
| 13. ៩ - | /ə/ ិគុក /dək/ transport | | /i:/ ិក្យ /tik/ water | |

| Symbol | 1st Series | | | 2nd Series | | |
|----------------|---------------------------|-------------------------|----------------------------------|---------------------------|-------------------------|----------------------|
| | Value and Exemplification | | | Value and Exemplification | | |
| 14. ခုံ : | /əh/ | ခုံး | /ckəh/ to pry out | | | |
| 15. ခုံ | /ət̪/ | ခုံ့ | /dət̪/ fallow | /t̪i̪/ | ခိုံ | /k̪i̪/ as follows |
| 16. ဗုံ | /oq/ | in stressed syllables | | /uq/ | in stressed syllables | |
| | | ခုံ့ | /wōt̪thoq/ artifact | ခိုံ့ | /w̪ittyuq/ radio | |
| | /o/ | in unstressed syllables | | /u/ | in unstressed syllables | |
| | | ခုံး | /komaa/ child | ခိုံး | /kulikaa/ pill | |
| 17. ဗုံ - | /o/ | ခုံ | /kon/ film | /u/ | ခိုံ | /kun/ merit |
| 18. ဗုံး | /oh/ | ခုံး | /coh/ to descend | /uh/ | ခုံး | /puh/ boiled |
| 19. ဗုံ | /ou/ | ခုံး | /kou/ to stir | /uu/ | ခုံ | /kuu/ pair |
| 20. ဗုံ | /əw/ | ခုံး | /trəw/ correct | /i̪w/ | ခိုံး | /ni̪w/ consisting of |
| 21. ဗုံ | /uə/ | ခုံး | /kuə/ pod, ear | /uə/ ¹ | ခုံး | /kuə/ proper |
| 22. ဗုံ - | /aə/ | ခုံး | /baə/ if | /əə/ | ခုံး | /chəə/ wood |
| 23. ဗုံး | /əh/ | ခုံးနှံး | /caŋkəh/ chopsticks ² | | | |
| 24. ဗုံး | /i̪ə/ | ခုံး | /ti̪ə/ dwarfed | /i̪ə/ ¹ | ခုံး | /ci̪ə/ to believe |
| 25. ဗုံး | /iə/ | ခုံးပြော | /tiəp/ bowl | /iə/ ¹ | ခုံးပြော | /tiəp/ nearly |
| 26. ဗုံ | /ei/ | ခုံးပြော | /kei/ heritage | /ee/ | ခုံး | /kee/ he, she, they |
| 27. ဗုံ - ဗုံး | /ə/ (before Palatals) | | | /i̪/ (before Palatals) | | |
| | | ခုံးမြော | /məc/ how, why | ခုံးမြော | /pl̪ic/ to forget | |
| | | ခုံးကျော | /cəñ/ to leave | ခုံးကျော | /piñ/ full | |
| 28. ဗုံး | /eh/ | ခုံး | /səh/ horse | /ih/ | ခုံး | /nih/ this, here |

| Symbol | 1st Series | | | 2nd Series | | |
|-----------|------------|---------------------------|----------------------|------------|---------------------------|------------------------|
| | | Value and Exemplification | | | Value and Exemplification | |
| 29. កែ- | /ae/ | កែវ | /kae/ to repair | /ɛɛ/ | កែវ | /kɛɛ/ craw (of a fowl) |
| 30. កេ-៩ | /eh/ | កេវ៉ោ | /keh/ a kind of goat | | | |
| 31. កោ- | /ay/ | កោបុរិ | /pray/ salty | /iy/ | កោបុរិ | /priy/ forest |
| 32. កោ-ឬ | /ao/ | កោឬ | /kao/ to shave | /oo/ | កោឬ | /koo/ cow, ox |
| 33. កោ-ឯោ | /ah/ | កោឯោ | /kah/ island | /uəh/ | កោឯោោ | /kuəh/ to strike |
| 34. កោ-ឬ | /aw/ | កោឬ | /taw/ bushel | /iəw/ | កោឬ | /tiəw/ to go |
| 35. ឬ | /om/ | ឬ | /dom/ piece, morsel | /um/ | ឬ | /tum/ ripe |
| 36. ឬ | /am/ | ឬ | /cam/ exact | /um/ | ឬ | /tum/ to perch |
| 37. -ឬ | /am/ | ឬ | /cam/ to remember | /oəm/ | ឬ | /coəm/ bruised |
| -ឬស | /aŋ/ | ឬស | /taŋ/ to establish | /eəŋ/ | ឬស | /teəŋ/ all of |
| -ឯោ ៣ | /ah/ | ឯោោ | /tah/ to wiggle | /eəh/ | ឯោោ | /teəh/ to slap |

1. The symbols for the diphthongs /uə, iə, iə/ (examples 22, 24, and 25 above) have the same pronunciation with either series of consonants, so that words containing these vowels are sometimes spelled both ways; e.g. /ciən/ 'to fry' is sometimes spelled កិច្ចីន and sometimes កិច្ចិន.

2. This word is normally spelled ឬសោះ.

3. The symbol ោ /reəhmuk/ always represents a final /-h/; when it occurs after long vowel symbols, it both shortens and changes the quality of the vowel, as in examples 23, 28, 30, and 33 above; in example 39 it represents a short vowel + final /-h/.

C. THE INDEPENDENT VOWEL SYMBOLS

The independent vowel symbols are called **ស្រោះពិនពេញត្តរ** /sraq piñ tuə/

'complete vowels' because they incorporate both an initial consonant and a vowel. In the chart below, symbols 1–10 include an initial /q-/ and are listed in the official dictionary along with other words that are spelled with an initial **ស្រ** and the equivalent vowel symbol; e.g. words spelled with the independent initial vowel

ស្រ /qə-/ follow words spelled with an initial **ស្រ** /qə-/. Symbols 11 and 12 include an initial /r-/; and follow all words spelled with initial **ស**; symbols 13 and 14 include an initial /l-/ and follow all words spelled with an initial **ល**.

Since the independent vowel symbols occur in a relatively small number of words, there is a certain amount of inconsistency in their use and pronunciation by Cambodians themselves, especially with examples 1–5 and 8–10 below. Some independent vowels, however, occur in quite common vocabulary items, such as

number 4 in **ទីពុក** /qəwpuk/ 'father', number 9 in **ចូយ** /qaoy/ 'to give', and number 14 in **លិខិ** /lii/ 'to hear'. Symbols 1–5 occur with both 1st and 2nd

series values, but most frequently with 1st series values. In the chart below, the first value given for each symbol is the value that it has in the majority of the words in which it occurs. Less common values are shown in succeeding examples. Each symbol is followed by its equivalent spelling.

Chart 3. The Independent Vowel Symbols

| Symbol | Name | Equivalent | Value | Example |
|----------------|----------|-------------|-------|---|
| 1. ស្រ | sraq qeq | ស្រ | /qə-/ | ឥត /qət/ not |
| | | ស្រិ | /qi-/ | ឥន្ទិ /qintuq/ the moon |
| | | ស្រី | /qəy/ | ឥឡូវ /qəyləw/ now |
| 2. ស្រិ | sraq qey | ស្រិ | /qəy/ | ឥន្ទិសាន /qəysaan/ northeast |
| | | ស្រិ | /qəy/ | |
| 3. ស្រិ | sraq qoq | ស្រិ | /qo-/ | ឧកញ្ញា /qokñaa/ official of ministerial rank |
| | | ស្រិ | /qu-/ | ឧប្បមា /quppəmaa/ example |
| 4. ស្រិ | sraq qui | ស្រិ | /qao/ | ឧបាសាហ /qaobaasaq/ layman |
| | | ស្រិ | /qou/ | ឧដិជ្ជ /qout/ camel |

| Symbol | Name | Equivalent | Value | | Example |
|--------|----------|------------|--------|---------|------------------------------|
| 5. ឃ | sraq qew | ស្រោះ | /quu/ | ឃុន | /quun/ deficient (lit.) |
| 6. ឃ | sraq qae | ស្រោៅ | /qəw/ | ឃុំរុក | /qəwpuk/ father |
| 7. ឃ | sraq qay | ស្រោែ | /qay/ | ឃូរោគេន | /qayrəwoən/ Erawan |
| 8. ឃ | sraq qao | ស្រោែង | /qao/ | ឃូច | /qaop/ to embrace |
| 9. ឃ | sraq qao | ស្រោែង | /qao/ | ឃូរ | /qaoy/ to give |
| 10. ឃ | sraq qaw | ស្រោែវ | /qaw/ | ឃូនុក | /qawtuəq/ water- plant |
| 11. ឃ | sraq rik | ស្រោីក | /ri- / | ឃូនិក | /rihsəy/ bamboo |
| 12. ឃ | sraq riː | ស្រោី៩ | /riː / | ឃូ | /riː / or |
| 13. ឃ | sraq lik | ស្រោិក | /lɪ- / | ឃូលុក | /rumlik/ to com- memorate |
| 14. ឃ | sraq liː | ស្រោិ៩ | /liː / | ឃូ | /liː / to hear |

D. REDUNDANCY

In the preceding sections, it can be seen that the notation of Cambodian vowel sounds is "regular" in the sense that, given sufficient information about the environment of a vowel symbol, its pronunciation can be predicted; in other words, except where the independent vowel symbols are involved, it is seldom necessary to say: "sometimes pronounced —, and sometimes pronounced —." (There are some irregularities, however, which are dealt with in Chapter X.) The Cambodian writing system does depart from the principle of a one-to-one ratio between sound and symbol in that a given vowel sound can be represented in a variety of ways. The following chart takes the vowel sounds as the starting point and shows the various ways in which they may be represented in the writing system. The regular, or typical, spelling is given first, followed by less typical spellings.

The consonant symbol ឃ is used as a base for 1st series syllables, and ឃ is used for 2nd series syllables.

Chart 4. Vowel-to-Symbol Concordance

Long Vowels

| Vowel | 1st Series | 2nd Series |
|----------|------------|---------------|
| 1. /ii/ | | ឃុំ |
| 2. /ee/ | | ឃុំ |
| 3. /ei/ | ឃុំ | |
| 4. /ɛɛ/ | | ឃុំ |
| 5. /ɪɪ/ | | ឃុំ, ឃុំ, ឃុំ |
| 6. /əə/ | | ឃុំ |
| 7. /əɪ/ | ឃុំ | |
| 8. /aa/ | ឃុំ | |
| 9. /uu/ | | ឃុំ, ឃុំ |
| 10. /oo/ | | ឃុំ |
| 11. /ou/ | ឃុំ, ឃុំ | |
| 12. /ɔɔ/ | | ឃុំ, ឃុំ |
| 13. /aa/ | ឃុំ, ឃុំ | |
| 14. /iə/ | ឃុំ | ឃុំ |
| 15. /ɪə/ | ឃុំ | ឃុំ |
| 16. /uə/ | ឃុំ, ឃុំ | ឃុំ, ឃុំ |
| 17. /ae/ | ឃុំ, ឃុំ | |
| 18. /aə/ | ឃុំ | |

| Vowel | 1st Series | 2nd Series |
|----------|----------------|-----------------|
| 19. /ao/ | អោ, ឃុំ, ឃ, ឃ៉ | |
| 20. /əə/ | | និង, និងិ, និង់ |

Short Vowels

| | | | |
|--------|---------------------|-------|-------------------------|
| 1. /i/ | | ី | in unstressed syllables |
| /iə/ | | ីូ | in stressed syllables |
| /ih/ | | ីូ | |
| 2. /e/ | ីូ | ីូ | in unstressed syllables |
| /eq/ | ីូ | ីូ | in stressed syllables |
| /eh/ | ីូ, ីីូ, ីូី, ីូីី | | |
| 3. /ɪ/ | | ី- | ី-, ីូ-, ីូ-, ីូ-, ី- |
| /ɪc/ | | ីូធម៌ | ីូធម៌, ីូធម៌, ីូធម៌ |
| /iñ/ | | ីូឲ្យ | ីូឲ្យ, ីូឲ្យ, ីូឲ្យ |
| /iy/ | | ីូឲ្យ | ីូឲ្យ, ីូឲ្យ, ីូឲ្យ |
| /iw/ | | ីូឲ្យ | |
| 4. /ə/ | ីូ- | ីូ- | |
| /əc/ | ីូធម៌, ីូធម៌, ីូធម៌ | | |
| /əñ/ | ីូឲ្យ, ីូឲ្យ, ីូឲ្យ | | |
| /əy/ | ីូ, ីូ, ីូ | | |
| /əw/ | ីូឲ្យ, ីូឲ្យ | | |
| /əh/ | ីូី, ីូី | | |

| Vowel | 1st Series | 2nd Series |
|----------|---|--|
| 5. /a/ | ଅ' , ଅୟ | |
| /ay/ | ୟାଇ , ଗ୍ରେନ୍ , ପ୍ରେର୍ଣ୍ଣ | |
| /aw/ | ଅଲ୍ଲୀ , ହୁଏ | |
| /am/ | ଅମ୍ | |
| /an/ | ଅନ୍ତ୍ରୀ | |
| /ah/ | ଅଃ | |
| 6. /u/ | | ଅ' in unstressed syllables, ୟାଇ , ହୁଏ |
| /up/ | | ଅପ୍ରେର୍ଣ୍ଣ , ଅପ୍ରେର୍ଣ୍ଣ |
| /um/ | | ଅମ୍ , ଅମ୍ , ଅପ୍ରେର୍ଣ୍ଣ , ଅପ୍ରେର୍ଣ୍ଣ |
| /uq/ | | ଅ' in stressed syllables |
| 7. /o/ | ଅ' in unstressed syllables ୟାଇ , ହୁଏ | |
| /om/ | ଅମ୍ | |
| /oq/ | ଅ' in stressed syllables | |
| 8. /a/ | ଅ' | |
| /am/ | ଅମ୍ , ଅପ୍ରେର୍ଣ୍ଣ | |
| /ah/ | ଅଲ୍ଲାଃ , ଅନ୍ତ୍ରୀ | |
| 9. /eəq/ | | ଅ' before Velar Stops |
| /eəŋ/ | | ଅନ୍ତ୍ରୀ |

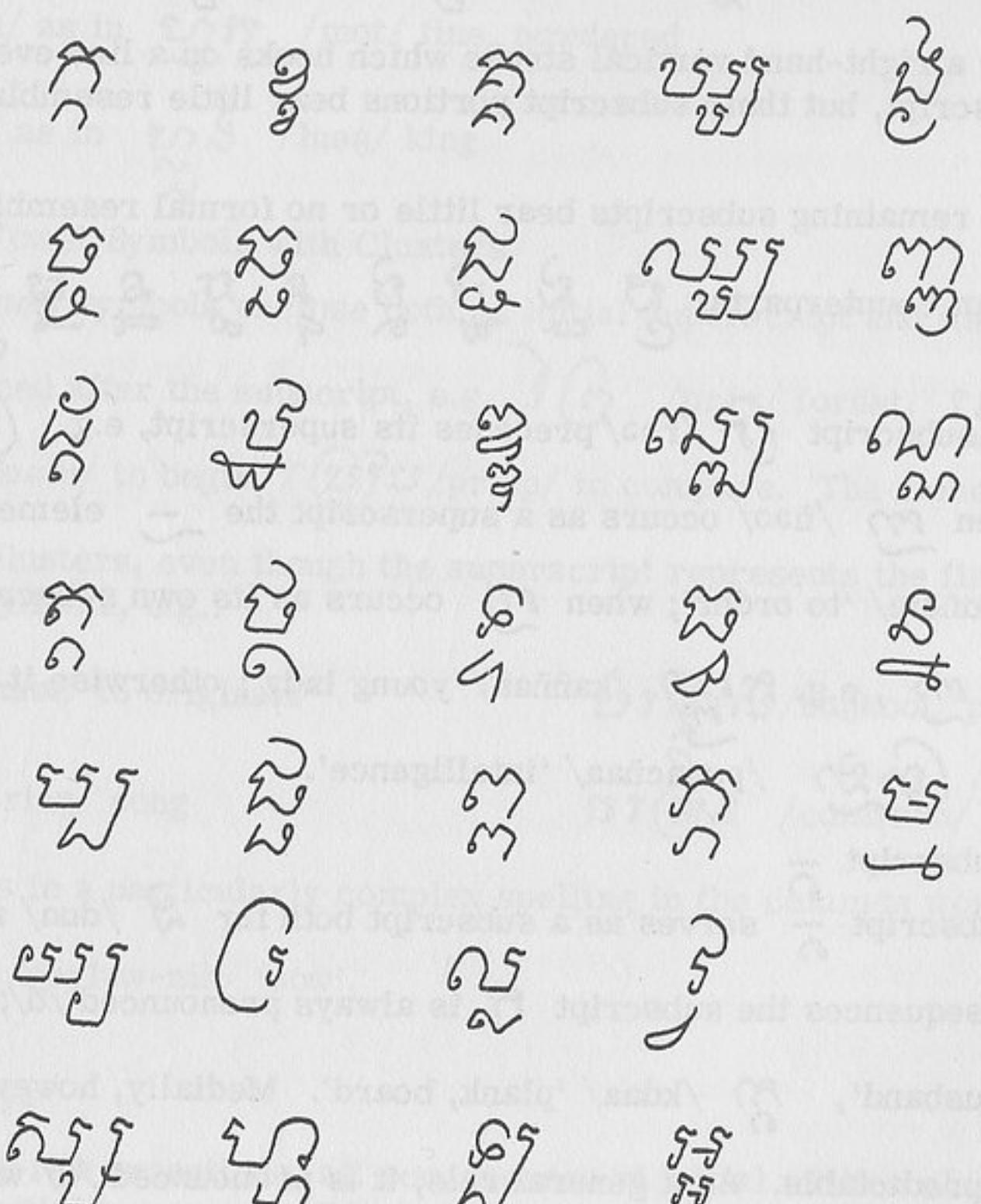
| Vowel | 1st Series | 2nd Series |
|----------|------------|-------------------------------|
| /eəh/ | | ឃោះ, ឃោះ |
| 10. /uə/ | | ឃុំ - / except before Labials |
| /uəh/ | | ឃុោះ, ឃុោះ |
| 11. /oə/ | | ឃុំ - / except before Velars |
| /oəm/ | | ឃុំ៥ |

V. SUBSCRIPT CONSONANT SYMBOLS

A. SUBSCRIPT FORMS

When two consonant symbols are pronounced consecutively (without an intervening vowel) within a word, the second (and sometimes, in medial position, a third) consonant symbol is written in a special subscript form below the first symbol. The form of the subscript is in most cases a smaller version of its superscript counterpart, but without the (^) **សាំ** /saq/ 'hair' (not to be confused with the /trəysap/ (^)); see Chap. II, A 2) which adorns the top of seven consonant symbols. Some subscripts, on the other hand, bear no discernible relationship to their counterparts, and must be learned in addition to the basic superscript forms. These subscripts are called **សោះសាខាំសាំ** /cəəŋ qaqsa/ 'consonant feet' in Cambodian, and the resulting consonantal groups are referred to as **សាខាស្រាគចិត្ត** /qaqsaa damruət/ 'combined consonants.'

Chart 1. The Subscript Forms



B. NOTES ON THE SUBSCRIPTS

1. Shapes of the Subscripts

- a) The subscripts  /khaa/,  /daa/,  /naa/,  /paa/,  /qaa/ are identical in form with their superscript counterparts.
- b) The subscripts  /kaa/,  /koə/,  /caa/,  /chaa/,  /taa/,  /phaa/,  /phaa/, and  /haa/ are identical with their superscript counterparts except that some small embellishment, usually referred to as  /saq/ 'hair', is omitted from top of the subscript:  in the first six examples,  in the case of  /phaa/, and  in the case of  /haa/.
- c) The subscripts  /khoo/,  /choo/,  /thoo/ are reproductions of their superscripts whose final vertical strokes extend upward and end in a "hook" on a line with the hooks of the superscript.
- d) The subscripts  /baa/,  /yoo/,  /saa/ are also characterized by a right-hand vertical stroke which hooks on a line even with the top of the superscript, but their subscript portions bear little resemblance to their counterparts.
- e) The remaining subscripts bear little or no formal resemblance to their superscript counterparts:          
- f) The subscript  /raa/ precedes its superscript, e.g.  /tray/ 'fish'.
- g) When  /niaa/ occurs as a superscript the  element is omitted, e.g.  /bañcia/ 'to order'; when  occurs as its own subscript, it takes the full form , e.g.  /kaññaa/ 'young lady'; otherwise it takes the form , e.g.  /praacñaa/ 'intelligence'.
2. The Subscript 
- The subscript  serves as a subscript both for  /daa/ and  /taa/. In initial sequences the subscript  is always pronounced /d/; e.g.,  /pdøy/ 'husband',  /kdaa/ 'plank, board'. Medially, however, its pronunciation is unpredictable. As a general rule, it is pronounced /d/ when it occurs as a subscript to , and /t/ when subscript to  ; e.g.,  /bandoh/ 'to

grow, raise'; ບັດ /bantoh/ 'to criticize'. In some words, however, it is also pronounced /d/ when subscript to ດ; e.g., ສັດຫາວ /sandaoh/ 'to pity'; ສັດ້ານ /sandaan/ 'family, lineage'. Since ດ serves as subscript for both ດ and ດ, and ດ has no subscript form, there are only thirty-one subscripts, compared with thirty-three consonant symbols.

3. Special Combinations

Certain special combinations of superscript plus subscript represent a single phonological consonant rather than a sequence of consonants. They are:

- a) **ဗာ** /laa/ as in **လာန** /laan/ car

b) **ဗာ** /faa/ ~ /waa/ as in **ဖာန** /fək/ to practice, **ဗာန** /woun/ crowd

c) **ဗာ** /naa/ as in **ဘန** /nəŋ/ there, that's it

d) **ဗာ** /maa/ as in **ဘမ** /mat/ fine, powdered

e) **ဗာ** /laa/ as in **ဘေး** /luəŋ/ king

4. Position of Vowel Symbols with Clusters

Compound vowel symbols enclose both an initial superscript and its subscript, but are pronounced after the subscript, e.g. ပြို /priy/ forest, ခွေ့သီး /cwein/ left, ပေါ်မ /pdaəm/ to begin, ပြုပြု /priəp/ to compare. The same is true with medial written clusters, even though the superscript represents the final consonant of a preceding syllable, e.g.:

ବ୍ୟକ୍ତାତ୍ /baŋkaət/ to originate

ବାଙ୍କୁଲ /bankool/ pillar

କମ୍ରିଆ /camriəŋ/ song

କ୍ରମାନ୍ତିକ ଉପରେ /camraən/ increase

This rule results in a particularly complex spelling in the common word ဂေါ်နှီးနှီး (~ ဂေါ်နှီးနှီးနှီး) /qəyləw-nih/ ‘now’.

5. Initial Clusters

- a) With a very few exceptions, all occurrences of initial written clusters represent two-place initial sequences /CC-/ phonologically. When one of the aspirated

consonant symbols (៩ , ៩ , ៩ , ៩ , etc.) occurs as a superscript, it represents an unaspirated stop phonologically. Aspirated consonant symbols usually occur as superscripts in words where the subscript is a voiceless consonant or a nasal, e.g.:

នេះ /pteəh/ house, កេែវ /kñom/ I, កែវី /ckae/ dog

Unaspirated consonant symbols usually occur as superscripts when the subscript is a voiced consonant or /r/; e.g., ក្បាល /kbaal/ 'head', បុរី /pdəy/ 'husband', គ្រូ /kruu/ 'teacher'. This difference in representing the same initial

consonant can be explained by the phonetic fact that in sequences of the first type, the first consonant is usually pronounced with slight phonetic aspiration, while in sequences of the second type the first consonant is usually unaspirated. These differences are non-contrastive, however, from a phonological point of view; i.e. no two initial consonant sequences ever contrast phonemically with regard to aspiration. The way in which initial consonant sequences are pronounced varies from dialect to dialect, with the result that the phonetic differences are not con-

sistently maintained in the writing system. For example, ក្មោះ /kmae/ 'Khmer' is spelled with an aspirated initial, while ក្មោះសិរី /kmeiŋ/ 'to be young' is spelled with an unaspirated initial, although the sequence /km-/ is phonetically identical in the two words.

Thus while approximately 130 written sequences occur, there are only eighty-five phonologically permissible /CC-/ sequences at the beginning of Cambodian words.

b) When an initial cluster has an aspirated consonant symbol as a subscript, the cluster represents a three-place initial consonant sequence /CCC-/. Only

three such sequences occur in initial position: ស្វាត់សិរី /sthaanii/ 'station', ម៉ោង /mphiy/ '20', តាកោន់ /lkhaon/ 'drama'.

6. Medial Clusters

a) One subscript. An even wider distribution of superscript plus subscript combinations occurs medially than occurs initially. The great majority of medial clusters have only one subscript, although a few have two.

1) Medial clusters with nasal superscripts. The commonest source of medial clusters are disyllables whose initial syllable has the shape /CVN-/ (Consonant-Vowel-Nasal). In such words the final nasal of the first syllable is written as a superscript, and the initial consonant of the following syllable is written as a

subscript. With the superscripts ន , ម , and ល (or នុ), there are some limitations on what symbols occur as subscripts.

When the superscript is $\ddot{\wedge}$, the subscript will represent one of the consonants /k r h w q f kh/, e.g.:

| | |
|----------------------------------|-------------------------------------|
| សង្គភាព /saŋkat/ division | បង្កើតផ្សេង /baŋqaem/ sweets |
| បង្កាត់ /baŋhat/ to train | បង្គាំង /baŋkham/ to enforce |

When the superscript is  , the subscript will represent one of the consonants /c ch ñ/ (i.e. will be homorganic):  /bañcam/ to pledge,

ବାଞ୍ଚିବା /bañchā/ to stand on end, **ଶାନ୍ତି** /saññāa/ sign

When the superscript is ፩ (or ፻), the subscript will represent one of the consonants /d t th l y s/: ବନ୍ତେଚ /bantəc/ 'a little', ସଂଶୟେତ /sansaem/ 'dew', ସନ୍ଦାକ /sandaek/ 'beans', କନ୍ଲାଏନ୍ /kanlaen/ 'place'. However, when the superscript is ፪, there are no limitations on the subscript; e.g.,

ଦମ୍ବାନ୍ /dambaañ/ 'weaving', କମ୍ଦାଁ /kamdaw/ 'heat', କମ୍ଚିଳ୍ /kamcił/ 'laziness', ସମ୍ଯତ /samjat/ 'confidential'.

The following examples are spelled both ways:

កំពុស់ ~ កម្បស់ /kampuəh/ height គំនិត់ ~ គម្លេន់ /tumjuən/ weight
សំខ្សែស៊ុ ~ សិច្ចស៊ុ /damloun/ potatoes កំសាក់ ~ កម្បក់ /kamsat/ sad

The result is that such words are spelled first one way and then another by the literate public. However, the trend seems to be toward more general use of the more efficient /niqkəhət/ spelling at the expense of the conjunct spelling. In the official Cambodian Dictionary of the Buddhist Institute, the /niqkəhət/ spelling is usually recommended where two spellings are possible, with two notable exceptions: in words spelled with an initial ន – , and in roughly half the entries

¹. See Chapter IX, A 2 e for pronunciation of this symbol.

spelled with initial **សា-**, the conjunct spelling is recommended:

សាំន្លែង

(~ **សាំន្លែង**) /damkaəŋ/ to elevate, **សាំឡូត** (~ **សាំន្លែង**) /damruət/ to stack,
សាមឃាត (~ **សាំន្លែង**) /samjat/ confidential, **សាមាត** (~ **សាំន្លែង**) /samlaa/
 stew.

2) Geminate medial clusters. Medial clusters in which the subscript is a repetition of the superscript are quite common. Such written clusters usually

represent doubled consonants phonologically: **កៅត្វូយេស** /kəttəyuəh/ fame,
បច្ចីម /paccay/ contribution, **បណ្តាលីល** /pannaalay/ library, **សុច្បារ**
 /thoəmmədaa/ usual.

When the syllable final value of a consonant symbol differs from its syllable-initial value, such clusters represent two different but closely related consonants phonologically, e.g.:

សាស្រ្យមេយ /sapbaay/ (~ /səbaay/) to be comfortable

ភាគមេខ្លាស៊ី /qaqkeəq-məhaesəy/ 1st royal wife, **បិរិស៊ី** /rihsəy/ bamboo

Many medial clusters have an unaspirated stop symbol as superscript with the homorganic aspirated stop symbol of the same series as subscript. Such clusters usually represent the sequence /CCh-/ phonologically, e.g.:

ភាព្វាស័ប្បាយ /qatthaathibaay/ explanation

ពុទ្ធមេ /putthoo/ heavens!

មេច្នា /macchaa/ fish (elegant)

វួត្វី /woətthoq/ artifact

Aspirated subscripts tend to be pronounced as unaspirated consonants when they begin an unstressed syllable, e.g.:

ភាក់រា /qaqkəraa/ letter **ភុព្វបត** /qattəbat/ article, composition

ពុទ្ធសាស្ត្រា /puttəsahsnaa/ Buddhism

b) Two subscripts. Three consonant symbols are written vertically in medial position in a few words, in which case the first consonant is written as a superscript and the following two are written as subscripts in the order of their pronunciation. Almost all such words contain a medial phonological sequence consisting of a nasal as the final consonant of the first syllable, followed by a syllable whose initial consonant is a stop homorganic with the preceding nasal, plus /-r-/:

កាំគ្រូង /kañcrooŋ/ fox

កាំន្លី /kantray/ scissors

ជា
នា

/dəntrəy/ music

សា
សា

/saŋkriəm/ war

Three exceptions to this pattern occur in the following three loanwords:

- 1) សង្គសា (sometimes spelled សែង្គសា) /qəŋkleeh/ (~ /qəŋglee/) English
- 2) ស៊ា សាស្ត (ស៊ា សាស្ត) /saŋskrət/ Sanskrit
- 3) សោ ស្វាស្រាយ (សោ ស្វាស្រាយ) /sahstraacaa/ professor²

7. Final Clusters

Many loanwords are spelled with an etymological final cluster, the subscripts of which are not pronounced, since only one consonant may occur phonologically at the end of a Cambodian word. Following are some common words spelled with final clusters:

មិត

/mít/ friend

ចេត

/cət/ heart, mind

ពុទ្ធបុ

/put/ Buddha

សាត

/sat/ animal

រៀល

/roət/ state

យេន

/yuən/ motor

មេនុ

/mənuh/

សំបុ

/sambot/ letter

ប្រពុះ

/prapuən/ wife

សាមុ

/samot/ ocean

ពីរុ

/piəq/ word

ព្រះសង្ឃា

/preəhsəŋ/ priest

បេតុ

/pəet/ doctor

វុះ

/wūəŋ/ group, circle

កាំ

/kam/ karma

កាតិតិ

/qaatit/ sun

បុណ្យ

/bon/ merit

ខោតិ

or ខោតិ /khaet/ province

If a final cluster has *ន* as superscript, they are both unpronounced, e.g.:

សាគជាតិ /qaacaa/ 'teacher'.

However, when a word which is spelled with a final cluster occurs as the first element of a compound, the subscript is activated as the initial of a following syllable, e.g.:

2. Examples 2 and 3 actually involve four phonological medial consonants, although only two are written as subscripts.

មិត្តភោះ /mittəphiəp/ friendship

រដ្ឋិត្យបាល /rōətthaaphibaal/ government

ពុទ្ធសាស្ត្រ /puttəsahsnaa/ Buddhism

កម្មការ /kamməkəa/ worker

VI. VOWEL GOVERNANCE

As shown in Chapter III, the pronunciation of a vowel symbol is determined, or "governed," by the series to which the initial consonant symbol belongs. However, in words with more than one initial consonant symbol, and in words of more than one syllable, the governance of the vowel series is more complex.

A. MONOSYLLABLES

1. If both superscript and subscript belong to the same series, there is no problem; e.g.

Both superscript and subscript are Series 1; vowel is Series 1:

ကား /kbaal/ head ချော် /sqaek/ tomorrow ပျော် /pseɪŋ/ different

Both superscript and subscript are Series 2; vowel is Series 2:

မှုံ /lmɔɔm/ sufficient ပြုံ /pcum/ to assemble မြော် /mnəəh/ pineapple

2. If, however, the two consonant symbols belong to different series, the following two rules apply:

1) Any stop or spirant takes precedence over any continuant in determining the series of a following vowel. In other words, symbols representing the consonants of Group I below dominate symbols representing consonants of Group II:

| | |
|-------------------------------|---|
| Group I - Dominant | |
| p t c k q | |
| b d | |
| f s | h |

| | |
|------------------------|--|
| Group II - Passive | |
| m n ñ ŋ | |
| w r l y | |

- a) In the following examples, the dominant consonant belongs to the 1st series, so the vowel has its 1st series value.

Superscript is dominant, subscript is passive:

ဧ /trəy/ fish ပြော် /pnaek/ section ဗျာ /swaa/ monkey

Superscript is passive, subscript is dominant:

မြော် /mhoup/ food မြှော်လှာ /mdaay/ mother လှာ /lqaa/ pretty

- b) In the following examples, the dominant consonant belongs to the 2nd series, so the vowel has its 2nd series value.

Superscript is dominant, subscript is passive:

ဗြော်န /kliən/ be hungry ခြော်နှော် /pnɛɛk/ eyes နှော် /kniə/ together

Superscript is passive, subscript is dominant:

ម៉ាទី /mteeh/ a pepper

ម៉ុល /mcul/ needle

Since both consonant symbols in these examples belong to the same series, there is no problem of governance; they are listed to provide contrast with the 1st series examples in a) above.

2) When both superscript and subscript are dominant, the series of the vowel is determined by the series of subscript. In the following examples, the superscript is 1st series while the subscript is 2nd series, so the vowel has its 2nd series value.

ផោះ /pteəh/ house **ស្វោះ** /skoəl/ to know **ក្បោះ** /kpuəh/ to be high

In such words, only 1st series consonants occur as superscripts, since the series of the vowel is always determined by the subscript.

B. DISYLLABLES

Both of the foregoing can be summarized in a single unified rule, which is valid for all monosyllables, as well as for most disyllables, which contain pre-vocalic consonants of differing series.

RULE: In any syllable which is preceded in the same word by consonants of different series, the series of the vowel will be determined by the last preceding stop or spirant.¹

1. In the following examples involving disyllables, the dominant consonant of the first syllable takes precedence over the passive consonant of the second syllable.

a) C₁ is 1st series, so the vowel of both syllables is 1st series:

ប្រាយត្រូវ /prayat/ to be careful

បារេយ /barəy/ cigarette

ក្រាន់រាត្រា /crawat/ criss-crossed

ស្រាលាន់ /sralañ/ to like

កាន់ឡាយ /kanlaen/ place

កាំនាន់នាំ /kamnaət/ birth

b) C₁ is 2nd series, so the vowel of both syllables is 2nd series:

ព្រោះលីម /prølím/ dawn

ត្រូនុំ /trønum/ a perch

1. It should be understood that this rule as stated is merely a rule of pronunciation which is pedagogically useful for reading Cambodian. Historically, of course, quite the reverse is true: it is the pronunciation of a word which "determines" how it is written.

2. In these examples, the 1st series pronunciation of the second syllable vowel is also indicated by the 1st series symbols **ឥា** /iə/ and **ឥា** /nəə/, but the information is redundant.

კუნით /kumnit/ thought

თუმეუან /tumjuən/ weight

In such words as these, of course, the problem of governance doesn't arise, since the initials of both syllables are 2nd series, with the consequence that the vowels of both syllables are 2nd series. However, these examples do illustrate the principle of "vowel harmony" which operates in disyllables whose second syllable has an initial continuant.

2. In disyllables each of whose syllables begins with a stop or spirant, the vowel series of each syllable is determined independently, consistent with the rule stated above. The great majority of such words have a 1st series vowel in the presyllable, regardless of the series of the 2nd syllable vowel.

a) 1st series vowel in both syllables:

კაკააი /kakaay/ to scratch about

კააფე /kaafei/ coffee

პრაკამ /pracam/ assigned to

ბაიკაეთ /baɪkaet/ to originate

b) 1st series vowel in first syllable, 2nd series vowel in second syllable:

პრატეე /prateeh/ country

ტრაცეე /tracēəq/ cool

სანტუუ /santuuc/ fish hook

ბამპლი /bamplii/ to illumine

In a few words having a 2nd series stop or spirant in the second syllable, vowel harmony is maintained by requiring a 2nd series initial consonant in the first syllable.

თოტე /toteəh/ to flap about

ციცელ /coseek/ to discuss

ტროტუუ /trōtuuŋ/ distance from toes to fingertips

In a few non-harmonic disyllables, however, the typical order is reversed, with a 2nd series vowel in the first syllable and a first series vowel in the second syllable.

რობა /robah/ thing

ცუანდა /cuəndaə/ stairs

3. Exceptions to the Rule

In some disyllables with an initial **თ** in the second syllable, a 2nd series consonant in the first syllable imposes its series on the second syllable; i.e. **თ** functions as a passive consonant.

თუმი /tumhum/ size

თიეჲიან /tiəhiən/ soldier

თიეჲი /wihiə/ temple

These words are sometimes written with a converted $\hat{\text{m}}$; e.g., $\text{ល} \text{អ} \hat{\text{ោ}} \text{ន}$, thus conforming to the rule. In monosyllables, however, ុ is always dominant, e.g., $\text{ូន} \text{ស}$ /lhoŋ/ 'papaya'.

Conversely, in some disyllables (especially in some disyllables with initial រ), a normally dominant initial consonant in the first syllable fails to impose its series on a following passive consonant:

| <u>Irregular</u> | <u>Regular</u> |
|--|--|
| $\text{ក} \text{រ} \text{វ} \text{ត}$ | /prawoət/ history (cf. $\text{ក} \text{រ} \text{វ} \text{ត}$ /crawat/ criss-crossed) |
| $\text{ក} \text{ម} \text{រ} \text{ិ} \text{ង}$ | /qajriŋ/ hammock (cf. $\text{ក} \text{ម} \text{រ} \text{ិ} \text{ង}$ /qamroh/ profession) |
| $\text{ក} \text{ាន} \text{ល}$ | /qanləə/ category (cf. $\text{ក} \text{ឃ} \text{ិ} \text{ច}$ /qajwaa/ to beg) |

C. POLYSYLLABLES

In longer words, the rule applies much less consistently. The following two examples are regular with regard to the rule.

- 1) $\text{ក} \text{ោ} \text{ព} \text{ា} \text{ន} \text{ា}$ /caettənaa/ to like
- 2) $\text{ក} \text{ិ} \text{ត} \text{ា} \text{ន} \text{ា}$ /weettəniə/ miserable

In the first example, the syllable $-នា$ is pronounced /-naa/ because of a preceding 1st series ក ; in the second example, $-នី$ is pronounced /-niə/ because of a preceding 2nd series គ . In the following two examples, however, the first is regular, the second irregular:

- 1) $\text{ស} \text{ក} \text{រ} \text{ោ} \text{ន} \text{ា}$ /saqkəraac/ century
- 2) $\text{ឬ} \text{ក} \text{ក} \text{រ} \text{ិ} \text{ច}$ /qaekkəriəc/ independence (rather than the expected */qaekkəraac/).

VII. DIACRITICS AND PUNCTUATION

A. DIACRITICS

The following special symbols, with the exception of the /sraq qam/ (—) and the /reəhmuk/ (ঃ), are usually treated as diacritics (ធមេន្យយុត្ត /woənnəyut/) in Cambodian textbooks. The /sraq qam/ and /reəhmuk/ are listed as vowel symbols in Cambodian dictionaries (see Chapter IV, A), although in fact they represent combinations of vowel + consonant. These diacritics typically have several designations depending on the level of speech employed. There is furthermore a certain amount of confusion between them among literate Cambodians. Each symbol is listed here by its common pedagogical name, followed by alternative designations. Some of the following have already been encountered, but are included here for completeness.

1. The បាំណាគ /bantaq/ (—)

The /bantaq/ is sometimes called សង្កត /saŋkat/ or រោងសាន្ត /reəhsaññaa/. Its occurrence over the final consonant symbol of a syllable shortens the vowel of that syllable.

a) In a syllable with no written vowel, it signals the short inherent vowel, i.e. /a/ after a 1st series consonant symbol, and, after a 2nd series consonant symbol, /u/ before a labial consonant and /uə/ elsewhere.

ចាប /cap/ to finish (cf. ចាប /caap/ a hoe)

ឈាប /lup/ bird trap (cf. ឈាប /loop/ a fish trap)

លើក /luəq/ to sell (cf. លើក /loɔk/ to channel)

b) The vowel — followed by the /bantaq/ is pronounced /a/ after a 1st series consonant symbol, and, after a 2nd series consonant symbol, is pronounced /eə/ before a velar consonant symbol, and /oə/ elsewhere

ចាប /cap/ to catch (cf. ចាប /caap/ sparrow)

ពើក /peəq/ to wear (cf. ពើក /piəq/ word)

មើន /moən/ chicken (cf. មើន /miən/ to have)

2. មិនកោទេន /museqkətoən/ (—)

The /museqkətoən/ is sometimes referred to as តិចក្រកណ្តារ /tmīñ kandao/ 'rat's teeth'. It has two functions:

a) to convert the 2nd series consonant symbols **យ**, **ឃ**, **ធម៌**, **ឃុំ**, **ឃុំ**, and **ឃុំ**, which have no counterparts in the 1st series, to 1st series symbols, thus indicating a 1st series pronunciation of the vowel symbol. It is usually written over the right-hand portion of the consonant symbol.

យោាំង /yaan/ kind (cf. **យោះនី** /yiəŋ/ to go (royalty))

មៅំ /mae/ mother (cf. **មៅ់** /mæə/ polite response particle)

When the /museqkətoən/ co-occurs with a superscript vowel symbol it is replaced by the **ក្រិះក្រាម** /kbiəh kraom/ (—) written below the consonant. ***មៅ់** > **មៅ់** /məin/ 10,000.

b) to convert the 1st series consonant symbol **ប** /baa/ to **ប៉ា** /paa/, which doesn't otherwise exist.

ប៉ាំន /paan/ to cover (cf. **ប៉ាំន** /baan/ to have)

ប៉ែ /pəy/ flute (cf. **ប៉ែ** /bəy/ three)

3. **ត្រូវសាប** /trəysap/ (^)

The /trəysap/ is used to convert the 1st series symbols **ហ**, **ស**, **ច**, and **សិ**, which have no 2nd series counterparts, to the 2nd series symbols **ហ៊ា**, **ស៊ា**, **ច៊ា**, and **សិ៊ា**, so that a following vowel symbol is pronounced with its 2nd series value.

ហ៊ាំន /hiən/ to dare (cf. **ហោះន** /haaŋ/ shop)

ស៊ូ /quu/ dry-dock (cf. **សូ** /qou/ exclamation)

When it co-occurs with a superscript vowel, the /trəysap/, like the /museqkətoən/ above, is replaced by the /kbiəh kraom/ (—).

***សិ៊ូ** > **សិ៊ូ** /sii/ to eat (cf. **សូ** /səy/ caneball)

However, the /trəysap/ is usually written above a converted **ច** or **សិ**, despite a superscript vowel, although either form may occur; e.g., **ច៊ាង** ~ **ចាំង** /hiŋ/ 'a kind of toad'.

4. නිශ්චභෑත /niqkəhət/ (-)

The /niqkəhət/ (the Sanskrit anusvāra) is frequently referred to as the /sraq qam/, and sometimes as the /damləə/.

- a) When placed over a consonant symbol, it represents the short inherent vowel + /m/: /-am/ with a 1st series consonant and /-um/ with a 2nd series consonant.

මු /cam/ exact,

මු /tum/ to perch

It is also commonly used in writing presyllables of shape /CVm-/ in disyllables:

මුමනෑක /camnaek/ section

මුමුනෑ /tumjuən/ weight

(See Chapter V, 6 a 1 for a discussion of the alternation of this spelling with the conjunct spelling of such disyllables.)

- b) When the /niqkəhət/ co-occurs with the vowel symbol — ග, it represents /-am/ after a 1st series consonant symbol and /-oəm/ after a 2nd series consonant symbol.

මු /cam/ to remember

මු /coəm/ bruised

- c) When the /niqkəhət/ co-occurs with the vowel symbol — /, it represents /-om/ in the 1st series and /-um/ in the 2nd series:

මු /dom/ piece

මු /tum/ to be ripe

- d) The /niqkəhət/ is used instead of the /bantaq/ as a vowel shorter in syllables spelled with the vowel — ග + ම. Such syllables are pronounced /-aŋ/ in the 1st series and /-eəŋ/ in the 2nd series.

මුමු /taŋ/ to establish

මුමු /teəŋ/ all

- e) The /niqkəhət/ represents an /-aŋ/ or /-an/ in some words of Pali or Sanskrit origin.

සාජ්‍යාග /saŋskrət/ (~ /samskrət/) Sanskrit

සාස්‍යාග /saccan/ true

සාජ්‍යාගසානා /sanyook-saññaa/ (~ /saŋyook-saññaa/) the symbol ග .

5. සාජ්‍යාගසානා /sanyook-saññaa/ (ග)

- a) The /sanyook-saññaa/ is used in certain words of Pali or Sanskrit origin,

and usually has the same value as the short written — ග — / . Words spelled with the /sanyook-saññaa/ and a final silent subscript usually have alternative spellings without the /sanyook-saññaa/:

ស៊ាក (~ ស៊ាក) /saq/ rank
 សាល (~ សាល) /sap/ sound

ពេជ្រ /toep/ army
 វេជ្រ (~ វេជ្រ) /weəŋ/ palace

b) The /sanyook-saññaa/ plus a final ឃី is pronounced /-ay/ in the 1st series and /-iy/ in the 2nd series.

សាសាយ /samay/ era

ិយ /ciy/ victory

c) The /sanyook-saññaa/ plus a final -៥ is pronounced with the long diphthong /cə/ after a 2nd series consonant symbol (the combination apparently does not occur after 1st series consonant symbols.)

ធម៌ /cəə/ resin

រោច /nəə/ to tremble

ធម៌ពេះ /tumpəə/ page

6. ទូលាបន្ទាត /toəndəkhiət/ to kill (—)

The /toəndəkhiət/ is perhaps more commonly called សម្រាប /samlap/ ‘to kill’. However, since /samlap/ is sometimes used to refer to the /bantaq/ (—), the term /toəndəkhiət/ is used to avoid ambiguity. It is also frequently called បត់សែនាំ /patdesaet/ ‘to cancel’. The /toəndəkhiət/ is placed over the final consonant symbol of certain etymological spellings to indicate that the consonant symbol is not to be pronounced. Any vowels or subscript consonants which accompany the “canceled” consonant are likewise rendered silent. If the canceled symbol is preceded by -៥, they are both unpronounced. Following are some examples of common words spelled with the /toəndəkhiət/.

ប្រឈមាវិត្យ /prayaoc/ usefulness

កុន្មាប់ /quhsaa/ diligent

កើត្រូវ /kei/ reputation

ពិនិត្យសាត់ /pisaot/ to experiment

បុរាណ /poo/ banyan (tree)

ឧតិះបារណា /qutiəhhaa/ example

In some cases the vowel or subscript that accompanies a preceding consonant symbol is also unpronounced:

ក្បាស៊ិទ្ធិ /ksat/ king

បុណ្ណោត /can/ sandalwood

លោកស្រួល /leəq/ good manners

In certain bound compounds whose first element is written with an unpronounced final consonant symbol, the /toəndəkhiət/ may occur internally.

រោប់ពាណ /reepuəl/ army

រោចកែវប៉ាស /moobaj/ in a rage

The following two related words are irregular in that the subscript, rather than the superscript, preceding the /toəndəkhiət/ serves as the final of the syllable.

ព្រុម /prum/ Brahma

ព្រោម /priəm/ a Brahman

7. **រោបាត** /rəbaat/ ()

The /rəbaat/, more formally known as the /reephəəq/, is the reflex of an original /r/ in Sanskrit words.

- a) In most words, when it occurs over a final consonant symbol, neither the /rəbaat/ nor the symbol over which it occurs is pronounced. (Because of its functional similarity to the /toəndəkhiət/ in this position, the two are frequently confused.)

បារិបូណី /baribou/ abundant

ព្រះរោលី /preəh-kaa/ ear (royalty)

An exception is the word **ភាតិ** /qaat/ ‘essence’, where the symbol underlying the /rəbaat/ is pronounced as a final.

- b) In the following words, the effect of the /rəbaat/ is to change the vowel /ɔə/ to /oə/, as well as to cancel the final consonant symbol.

នងិ /thoə/ law

ពោលិ /poə/ color

និកិ /koə/ pregnant

This effect is called **សំឡើងសិល្បៈ** /samlein n̩oə/ ‘trembling sound’ in Cambodian. Phonologically it is the same sound that occurs in such words as **ដី** /oə/ ‘resin’ and **រៀន** /n̩oə/ ‘to tremble’ in 5 above; in both cases a final written **ន** is involved.

- c) When the /rəbaat/ appears over a medial consonant symbol, it is pronounced as the intruded syllable /-rə-/ preceding the consonant over which it appears.

Most such words are more commonly spelled with -៥- :

ជនិត (~ជននិត) /tuurəkuət/ destitute

ជនិក (~ជននិក) /moɔrədaq/ heritage

8. **វេជ្ជុ** /reəhmuk/ (-េះ)

The /reəhmuk/, also referred to as the **វិសកិះ** /wihsəkeəq/ (Sanskrit visarga) or **វិសាទិុ** /wihsañcənii/, always represents final /-h/ after a short syllable.

- a) When no vowel is written, --° represents /-ah/ after a 1st series consonant symbol and /-eəh/ after a 2nd series consonant symbol.

પાહ /pah/ to patch સ્રાલા /sralah/ clear પ્રતેએ /prateəh/ to meet

- b) After the short vowel symbols -i-, -e-, and -ə-, the /rɛəhmuk/ represents /-h/ alone.

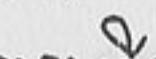
চি: /cih/ to mount, ride কে: /kəh/ to scratch পু: /puh/ to boil

- c) After a long vowel symbol, the /rəhmuk/ shortens, and, except for ፻ + a 1st series consonant symbol, changes the value of the vowel symbol, as follows:

| | |
|--------------------|-------------------------------------|
| /ei/ > /e/ + /h:/ | សេះ /seh/ horse |
| /ee/ > /i/ + /h:/ | នីនាំ /nih/ this |
| /ae/ > /e/ + /h:/ | កេហ៍ /keh/ wild goat (rare) |
| /ao/ > /a/ + /h:/ | កាហ៍ /kah/ island |
| /oo/ > /uě/ + /h:/ | កុេហ៍ /kuěh/ strike |
| /aə/ > /e/ + /h:/ | ចង្គ់ (~ ចង់) /caŋkəh/ chopsticks |

An exception to the above rule is the irregular spelling  /caah/ 'polite response particle used by women' in which the vowel is usually long in spite of a following /reəhmuk/.

9. **ယုက္ခလာပိတ္တ** /yuqkəlēəqp̥intuq ~ yuqkuəlp̥intuq/ (-း)

This symbol, commonly called  /coc pii/ 'two dots', was only recently introduced, and occurs only after consonant symbols that are to be pronounced as stressed syllables either at the end of a word, or preceding an internal juncture in compounds. It must be carefully distinguished from the /reəhmuk/ - : (8 above).

- a) It is pronounced /-aq/ after a 1st series consonant and /-eəq/ after a 2nd series consonant.

ସ୍ରାଗ୍: /sraq/ vowel

-focus: /θureəq/ preoccupation

କେନାରୋତ୍ତମୁନ୍ଟ୍ରେଟ୍/kənaq-roëtmutrəy/ cabinet

b) The /yuqkəleəqpintuq/ is also used as a diacritic in the official Cambodian Dictionary to describe the pronunciation of any consonant symbol which is to be pronounced as an independent syllable, whether stressed or unstressed.

មេះកៅធីសា (មេះកៅធីសា) /mēəqkətheəq-phiəsaa/ Pali

សេស្រាង (សេស្រាង-សេស្រាង) /qehsəraq-phiəp/ freedom

10. **លើកទីប្រាំបី** /leik qahsdaa/ ‘number eight’ (—)

The /leik qahsdaa/, also called **លើកព្រំបាយ** /leik prambay/, occurs only over the consonants **ក** and **គ** when they represent the following words:

កាំ /kaa/ auxiliary: then

ដាំ /daa/ pronoun: which

11. **វិរាម** /wiqriəm/ (—)

The /wiqriəm/ (Sanskrit virāma) is sometimes used in the transcription of Sanskrit words to show that a consonant symbol is pronounced as a final consonant rather than as the initial of a following syllable:

ភាត្វាន /qaatman/ soul

ជិយេវណា /ciyyeəq-warəman/ Jayavarman

In a more Cambodianized (and more common) spelling of such words, the /wiqriəm/ is replaced by the /sanyook-saññaa/. In the standard Cambodian Dictionary the symbol (—) is used instead of the /wiqriəm/ to indicate the pronunciation of such words (in spite of the fact that the pronunciation of such words can be unambiguously specified by the /sanyook-saññaa/; see 5 above).

ភាត្វាន (**ភាត្វាន**) /qaatman/ soul

12. **កាត់បាត**/kaaqkəbaat/ (—)

a) The /kaaqkəbaat/, also commonly called **ចឹងក្រោក** /cəəŋ kqaek/ ‘crow’s foot’, occurs in certain particles that are normally pronounced with a high or rising intonation. Some of the more common words of this kind are listed below:

នូ! /nuh!/ there!

ចាឃ! /caah/ polite response particle used by women

នាំ /naa!/ ~ /nah/ hortatory particle

នៅ /nəh!/ hortatory particle

ហាហ /hah!/ derisive particle

ឃាត /qaa!/ really?

នូចិន /nuh nɔɔ!/ there it is!

b) The /kaaqkəbaat/ is also used to mark the point of insertion of an omitted word or consonant symbol:

សាសីរ (= សាសីរ) /sasei/ to write

បាស់បញ្ជីរ (= បាស់បញ្ជីរ) /haasəp-prambəy riəl/ 58 riels

B. PUNCTUATION

Although the common western punctuation marks, such as . , ; : ! ? . . . , etc. are being used in Cambodian writing with increased frequency, as a result of French influence, there are a number of punctuation signs which are characteristically Cambodian.

1. គ្រែ /kliə/ space

Cambodian words are not normally separated by spaces in closely knit syntactic phrases or single-clause sentences. The /kliə/ ‘space’ is used in a way roughly analogous to the use of the comma in English, but is more comprehensive. There are stylistic differences from one text to another, but space typically occurs in the following situations:

- between clauses within a sentence
- between sentences in a cohesive group of sentences
- after preposed adverbial words or phrases, such as “usually,” “today,” “in that town,” etc.
- before and after proper names
- before and after numbers
- before and after the symbols ៖ , ៖ , ៖ និង ៖ , and ៖ និង ៖ (explained below)
- between coordinate words in lists

Some of the uses of the /kliə/ are illustrated in the following sentence:

ពីរិយានេះ កនុវត្តន៍យោ តិវ បាសា ក្រួច នាមី និងបានដំឡើងនិង ឱ្យ

/t̪jay-nih()kñom t̪i w psaa()tiñ krouc()qajkaa()haəy-niñ qəywan pseij()pseij/
Today()I'm going to the market()to buy oranges()rice()and various things.

2. ៩ ខោ /khan/ (៩)

The /khan/, or ឬបាំ /lbah/, is the Cambodian full stop. It occurs less frequently than the full stop in English (see 1 above). Although usage varies, the /khan/ normally occurs only at the end of a paragraph, i.e. a single sentence or several sentences dealing with a single theme or topic. Thus its occurrence usually signals the start of a new theme or topic in the text that follows.

3. ៩ បារិយាម្មាន /baariyaosaan/ or ឬបាំ /lbah/ (៩//)

The symbol ៩// is a full stop that implies more finality than the /khan/ above. It marks the end of a chapter or an entire text.

4. ឯកាមួត /koo-mout/ ‘cow’s urine’ (ឯកាមួត)

The /koo-mout/ is a full stop symbol that, like the /baariyaosaan/ above, marks the absolute end of a text. It is usually reserved for poetic or religious texts. It sometimes occurs as the second part of the compound symbol ឯកាមួត, which is also called /baariyaosaan/.

5. ព្យក្រម៉ោន /pnæk moən/ ‘cock’s eye’ (ព្យ ម៉ោន)

The /pnæk moən/, also called the កេវតិនក /kokotteneet/, is an embellishment said to represent the trunk of the elephant-god Ganesha, which marks the beginning of literary and religious texts.

6. ចំណុចលាកសិរីសុ /camnoc pii kuuh/ ‘two dots and a slash’ (៖)

The /camnoc pii kuuh/ is used in much the same way as the colon in English. In addition, it characteristically occurs after the quotative particle ថា (ថា៖) /thaa/ ‘saying, as follows’ and the copulative នឹង /kiː/ ‘that is’. A horizontal line is written between the two circles in order to distinguish it easily from the /reəhmuk/ (៖).

7. ៩លើកពី /leik too/ ‘the figure 2’ (៩)

The /leik too/, more formally called សារិយាម្មានសិរីសុ /qaameendit-saññaa/, indicates that the word (or phrase) after which it occurs is to be repeated. The most common use of the /leik too/ is in the writing of reduplicative compounds.

ផ្សែន ៩ /pseɪŋ-pseɪŋ/ various

/touc-touc/ small and numerous

/nimuəy-nimuəy/ each in turn

In some cases a phrase rather than a single word is to be repeated. This can be determined only by the sense of the preceding words.

/bantəc mdaaŋ, bantəc mdaaŋ/ little by little

/daoy laek, daoy laek/ separately

When the words at the beginning of one sentence are a repetition of those at the end of the preceding sentence, they may be represented by the /leek too/, e.g.

the words /pteəh kñom/ 'my house' in the following example:

/kñom tiw pteəh kñom; pteəh kñom niw cít psaa/
I'm going to my house; my house is near the market.

8. /laq/ or /peiyaal/

The /laq/, and less frequently the /peiyaal/, represent 'et cetera', and are both pronounced /laq/ when encountered in a text.

9. /sahaq-saññaa/ hyphen (-)

The /sahaq-saññaa/ is used, as in English, to indicate that a word has been interrupted at the end of a line and is continued in the next. It is also used in verse where the poetic meter requires that a word be divided between two measures. In addition, a hyphen is commonly written between an individual's family name (which is written first in Cambodian) and succeeding names, and sometimes (especially in names of Cambodian Chinese) between all the names.

- /ñok thaem/ Nhok Thêm

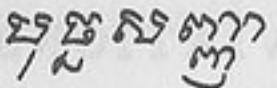
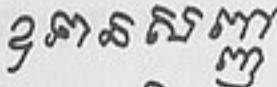
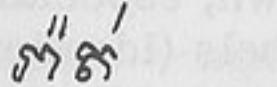
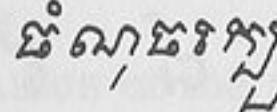
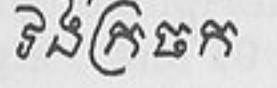
- - /lii thiəm teiŋ/ Li Thiam Teng

- - /seiŋ ɲuən huət/ Seng Nguon Huot

10. The following punctuation marks are used much as in English, and may occur in Cambodian publications interspersed with the more traditional symbols discussed above. Their common Cambodian names are given below.

a) (.) /coc muəy/ one point

b) (,) /kbiəh/ a stroke

- c) (?)  /bocchaq-saññaa/ question mark
- d) (!)  /qutiən-saññaa/ exclamation mark
- e) (. . .)  /pooŋ trəy/ fish eggs
- f) ({)  /rat/ bracket
- g) (;)  /camnoc kbiəh/ point-stroke
- h) (())  /wuəŋ kracaaq/ fingernail curves

VIII. NUMERALS AND ABBREVIATIONS

A. NUMERALS

Cambodian numeral symbols were borrowed from the same Indic source as the alphabet. Although Arabic numerals are well known, especially in urban areas, as a result of French influence, the Indic symbols (identical with those used in Thai) are used almost exclusively in Cambodian publications.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ១ | ២ | ៣ | ៤ | ៥ | ៦ | ៧ | ៨ | ៩ | ០ |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

Although the symbols themselves are based on the decimal system, the names underlying them reveal an older system based on five, as can be seen in the names of the numerals 6 - 9, which are $5+1$, $5+2$, $5+3$, and $5+4$ respectively. The names of the numerals 1 - 9 and zero are as follows:

| | |
|---------------|-----------------------------|
| ១ /muəy/ one | ៦ /prammuəy/ six |
| ២ /pii/ two | ៧ /prampii ~ prampil/ seven |
| ៣ /bəy/ three | ៨ /prambəy/ eight |
| ៤ /buən/ four | ៩ /prambuən/ nine |
| ៥ /pram/ five | ០ /soun/ zero |

For the numeral 7, the pronunciation /prampii/ is used only in a reading pronunciation; in normal speech it is always pronounced /prampil/.

The names of the numerals 10 - 20 are as follows:

| | | |
|-------------------------------------|----------|----|
| ១០ /dap/ | ten | 10 |
| ១១ /dap-muəy ~ muəy-dandap/ | eleven | 11 |
| ១២ /dap-pii ~ pii-dandap/ | twelve | 12 |
| ១៣ /dap-bəy ~ bəy-dandap/ | thirteen | 13 |
| ១៤ /dap-buən ~ buən-dandap/ | fourteen | 14 |
| ១៥ /dap-pram ~ pram-dandap/ | fifteen | 15 |
| ១៦ /dap-prammuəy ~ prammuəy-dandap/ | sixteen | 16 |

| | | | |
|----|----------------------------------|-----------|----|
| ១៧ | /dap-prampıl ~ prampıl-dandap/ | seventeen | 17 |
| ១៨ | /dap-prambey ~ prambey-dandap/ | eighteen | 18 |
| ១៩ | /dap-prambuən ~ prambuən-dandap/ | nineteen | 19 |
| ២០ | /məphiy ~ mphiy/ | twenty | 20 |

For the numerals 11–19, the second form with the use of /-dandap/ ‘teen’ is the more colloquial.

While the names of the numerals 1–10 and 20 seem to be Cambodian in origin, the names for the numerals 30, 40, 50, 60, 70, 80, 90, 100, 1000, 10,000 and 1 million (and perhaps 0 and 10 million) are borrowed from Thai.

| | | | |
|------------|-------------|----------------------|------------|
| ៣០ | /saamsəp/ | thirty | 30 |
| ៤០ | /saesəp/ | forty | 40 |
| ៥០ | /haasəp/ | fifty | 50 |
| ៦០ | /hoksəp/ | sixty | 60 |
| ៧០ | /cətsəp/ | seventy | 70 |
| ៨០ | /paetsəp/ | eighty | 80 |
| ៩០ | /kawsəp/ | ninety | 90 |
| ១០០ | /muəy-rɔoy/ | one hundred | 100 |
| ១.០០០ | /muəy-poən/ | one thousand | 1,000 |
| ១០.០០០ | /muəy-məin/ | one ten-thousand | 10,000 |
| ១០០.០០០ | /muəy-saen/ | one hundred-thousand | 100,000 |
| ១០០០.០០០ | /muəy-liən/ | one million | 1,000,000 |
| ១០០០០០.០០០ | /muəy-kaot/ | one ten-million | 10,000,000 |

All complex numerals involve combinations of the above:

| | | |
|--------------|-------------------------------------|-------|
| ៣៩ | /saamsəp-prambuən/ | 39 |
| ១៥៩ | /muəy-rɔɔy haasəp-prambuən/ | 159 |
| ២.៥៣៧ | /pii-poən prambəy-rɔɔy hoksəp-muəy/ | 2,861 |

B. NOTES ON THE NUMERALS

1. In Cambodian numerals involving four or more symbols, a period is placed after every three symbols, counting from the right to the left (as in French). This system of punctuation has little relevance to the pronunciation of Cambodian numerals, however, since each succeeding numeral is read as a separate denomination, rather than in groups of three. Such additive components, except in numbers smaller than 100, are typically separated by rising intonation (represented by a comma in the transcription). This rising intonation never occurs in compounds separated by close juncture (represented by a hyphen in the transcription).

២.៣៥៤.៥៥៥

/pii-liən, bəy-saen, pram-məin, buən-poən, prampił-rɔɔy, haasəp-pram/
2,000,000 + 300,000 + 50,000 + 4,000 + 700 + 55 (= 2,354,755)

No punctuation is used, however, in writing dates; e.g., **១៩១៤ - ១៩១៨**
1914-1918.

2. In multiplicative compounds whose first element is **៥៥៥** /muəy/ 'one', /muəy/ is usually shortened in rapid speech to /mə-/.
១០០ /muəy-rɔɔy/ ~ /mərɔɔy/ 100

១.០០០ /muəy-poən/ ~ /məpoən/ 1,000

This reduced form almost always occurs in **៥៥៥** /məphiy ~ mphiy/ '20' (reflected in the conjunct spelling), but /muəy-phiy/ has been observed in deliberate speech.

3. The ordinal forms of Cambodian numerals are formed by placing the ordinalizing particle **ពី** /tii/ in front of the cardinal numerals above, in either their written or symbolic forms.

ពី៣៩ (**៣៩**) /tii-muəy/ first

ពី៣៩មាស៊ាំបុះន (**៣៥៤**) /tii-saamsəp-buən/ thirty-fourth

4. In addition to the numeral system outlined above, reflexes of Sanskrit numerals occur in many compounds, with either cardinal or ordinal meaning; e.g.:

ឬក /qaek/ one + **សាក្រោនជិត** /qaqkeəq-riəccətuut/ ambassador =

សាកេកកេដ្ឋានីខ្លះ /qaek-qaqkeəq-riəccətuut/ 'first (highest) ambassador'

លើក /leik/ number + **ពីរ** /too/ two = **លើកពីរ** /leik-too/ the symbol ២

ត្រូវ /trəy/ three + **ការណា** /kaon/ angle = **ត្រូវការណា** /trəy-kaon/ triangle

ចាត់/cattoq/ four + **បាត**/baat/ foot = **ចាត់បាត** /cattobaat/ four-footed

បាំង /pañcaq/ five + **សែល** /səl/ precept = **បាំងសែល** /pañcəsəl/ the five precepts.

C. ABBREVIATIONS¹

The use of abbreviations is not as common in Cambodian as in western languages; e.g., there are no established abbreviations for the names of months. Dictionaries and other technical works tend to coin abbreviations as needed; the official Cambodian Dictionary contains a long list of abbreviations for use in giving information about lexical entries, many of which are found in other dictionaries, and many of which were invented ad hoc. In addition, the following abbreviations are relatively standardized.

1. Dates

In Cambodian dates the Christian era is generally used for most publications. However, the traditional Buddhist era is used in older publications and in religious texts, and in many publications both are used concurrently. The Buddhist era is reckoned from the year of the death of the Buddha, usually considered to be the year 543 B.C. Thus, when confronted with a Buddhist era date, subtract 543 years to obtain the Christian era equivalent, e.g., B.E. 2510 – 543 = A.D. 1967. The two eras are abbreviated as follows:

ន.ស. = **ពុំទេសកៅរាង** /puttəsaqkəraac/ Buddhist era

គ.ស. = **គិខសកៅរាង** /krihsaqkəraac/ Christian era

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:

ពុំទេស ៩ មេរោយ មេរោយ ន.ស. ១៩៦៨

/tnjay-put tii-məphiy-buən məəqkəraa krihsaqkəraac müəy-pōən prambuən-roɔy
hoksəp-prambəy/

Wednesday, the twenty-fourth of January, 1968.

Dates may be numerically abbreviated, however, in which case only the day, month,

1. The author is indebted to Tonkin, Modern Cambodian Writing (Bibliography Item 30), for many of the abbreviations included in this section.

and year are indicated by numerals only, separated by a hyphen. The above date, in its shortest form, would be:

២៤-១-១៩៣៨

2. Currency

The Cambodian monetary unit is the **រឹល** /riəl/, which is divided into 100 **សេន** /sein/ ‘cents’. In accounting, **រឹល** is abbreviated **៥**, which is written between the riels and the cents as follows:

៤៥៥០ /saesəp-pram riəl/ forty-five riels.

In columns of figures, the **៥** may be written only in the top figure and is replaced in succeeding figures by a period or a comma.

៤៥៥០ 45 riels

៣៥,០០ 35 riels

Sometimes both a comma and a superscript **៥** are written:

៤៥៥០ 45 riels

Sometimes the **៥** occurs after the cents figure:

៤៥,០០៥ 45 riels

3. The Metric System

| | | | |
|---------------|---|------------------|------------------------|
| ម.ម. | = | ម៉ែលីម៉ែត | /milimaet/ millimeter |
| ស.ម. | = | ស៉ែនីម៉ែត | /santimaet/ centimeter |
| ម. | = | ម៉ែត | /maet/ meter |
| គ.ម. | = | គូឡូម៉ែត | /kiloumaet/ kilometer |
| ក្រ. | = | ក្រាម | /kraam/ gram |
| គ.ក្រ. | = | គូឡូក្រាម | /kiloukraam/ kilogram |
| ល | = | លិត | /liit/ litre |

4. Miscellaneous

| | | | |
|----------|------------------------|----------------------|---|
| ៥. | = កែវិច្ឆិថេជ្រ | /withəy/ | street |
| ៤.៥. | = មេហាតិច្ឆិថេជ្រ | /məhaa-withəy/ | boulevard |
| ៥.៥. | = រុក្យាតិច្ឆិថេជ្រ | /ruqkhaq-withəy/ | avenue |
| ៥.៦. | = ភ្នំពេញ | /pnum-piñ/ | Phnom Penh |
| ៥. | = ឧតិមានណ៍ | /qutiəhaa/ | for example |
| ៥.៧. | = នឹងសិទ្ធិនូវទីតាំង | /nīŋ datiy tiət/ | and others (rare) |
| ៥.៨. | = លក្ខខ្លួន | /qaek-qotdam/ | His Excellency |
| ៥.៥.៥.៥. | = សាស្រាវសិទ្ធិអាមេរិក | /sahaqroët-qaameric/ | U.S.A. |
| ៥.៥.៥.៥. | | /see-qaa-tou/ | (transcription of the pronunciation of the English abbrevia- tion) S.E.A.T.O. |

D. PAGINATION

The great majority of Cambodian publications use Cambodian numerals for numbering pages in the main body of a book, usually at the top center and set off by dashes: - ១ - , - ២ - , - ៣ - , - ៤៥ - , etc. Arabic numerals are very rarely used for pagination, except in some bilingual publications. For the pagination of material preliminary to the main body of a book, and for listing major headings within a chapter, the consonants of the alphabet are used in their dictionary order, e.g. ន , ៩ , ឬ , ុុ , ុុ , ុុ , ុុ , etc. These may in turn be followed by subheadings listed by numerals, in the following pattern:

| | |
|------------|-----|
| ମୁଦ୍ରା | A - |
| କାନ୍ତିକାଳୀ | 1 - |
| ପାତାଳା | 2 - |
| ବିଜୁଲି | B - |
| କାନ୍ତିକାଳୀ | 1 - |
| ପାତାଳା | 2 - |
| ବିଜୁଲି | C - |

IX. UNWRITTEN SOUNDS

A. UNWRITTEN VOWELS

In the Cambodian writing system certain vowels are indicated by the absence of a vowel symbol in specific environments. Although the following general rules are valid for the great majority of cases, there are some exceptions and ambiguities, especially in learned or unfamiliar vocabulary.

1. The Long Inherent Vowel (/aa/ɔɔ/)

- a) Any stressed syllable which is to be pronounced with the long inherent vowel (/aa/ after a 1st series symbol, /ɔɔ/ after a 2nd series symbol; see Chapter IV, B) is written with the initial consonant symbol alone, with or without a following final consonant.

| | | | | | |
|--------|-----------|-------------|-------|-----------|----------|
| ពាំ | /taa/ | to continue | កូោះ | /kɔɔ/ | dumb |
| លាំ | /lqaa/ | pretty | ចូច | /chɔɔ/ | to stand |
| ឆាំ | /caat/ | to moor | រូក | /roɔk/ | to seek |
| ប្រកាប | /prakaap/ | to combine | លូឡូក | /lolovak/ | dove |

Since individual words are not separated in the Cambodian writing system, it is sometimes impossible to determine from the writing system alone whether a consonant symbol represents the final consonant of the preceding word or a separate

word; for example បាក ឬ កាំ may be read either as /baək/ ‘to open’ or as /baə kaa/ ‘if (the) neck’. Such ambiguities are almost always resolved, however, by context.

- b) In any disyllable whose initial syllable may be pronounced in a reading pronunciation with the long inherent vowel, no vowel symbol is written. Such unstressed presyllables are pronounced in normal speech with the short vowel /a/ or /ɔ/ (depending on the series of the initial consonant symbol), and in rapid speech with the vowel /ə/. Presyllables containing a single initial consonant usually consist of a consonant which is a reduplication of the initial of the stressed second syllable, although the consonants /m r l/ also occur as initials of non-reduplicative presyllables. Presyllables containing two initial consonants consist of the clusters /pr-, tr-, cr-, kr-, or sr-/ (with pr- most common), with /r/ written as a subscript C.

| | | |
|-------|---------------------|------------------|
| កកាំ | /kkaay/ ~ /kəkaay/ | to scratch about |
| ចចេក | /cacək/ ~ /cəcək/ | to peck at |
| តុតុល | /tötuel/ ~ /tətuəl/ | to receive |
| របាប | /rəbah/ ~ /rəbah/ | thing |

ᠮ **ນ** **ህ**¹ /mənuh/ ~ /mənuh/ human being

ፕ **ና** **ነ** **ገ** /prənaj/ ~ /prənaj/ to compete

ፕ **ሮ** **ለ** **ም** /prəlīm/ ~ /prəlīm/ dawn

ስ **ራ** **ል** **አ** /srəlañ/ ~ /srəlañ/ to like

c) In polysyllabic words, when the consonant symbols **ቃ** /baa/ and **መ** /məɔ/ occur initially and before a following -**ኩ**- /r/, they are pronounced with their inherent vowels, long in careful speech and short in colloquial; before other consonants, the short vowels /a/eə/oə/ occur (see 3 below).

/baa/: **ቃ** **ሪ** **ብ** **ዴ** /baaribou~baribou/ excellent

ቃ **ሪ** **ከ** **ሁ** /baariphook~bariphook/ to eat

ቃ **ና** **ሱ** /baarisot~barisot/ pure

/məɔ/: **መ** **ሩ** **ኑ**: /məɔrənaq~mɔrənaq/ to die (eleg)

መ **ሩ** **ካ** /məɔrəkat~mɔrəkat/ emerald

2. The Short Inherent Vowel (/a/u/uə/)

a) Any sequence of two consonants without an intervening vowel symbol, the second of which carries a **ባ** **ን** **ቅ** /bantaq/ (**—**) is pronounced with the short inherent vowel: /a/ after 1st series initial consonant symbols, and, after 2nd series consonant symbols, /u/ before a labial consonant, and /uə/ elsewhere.

ባ **ጥ** /bat/ to turn

ጋ **ጁ** /chup/ to stop

ሉ **ቅ** /luəq/ to sell

b) Some words contain sequences of two consonant symbols which are pronounced with the short inherent vowel even though the second symbol does not carry the /bantaq/. Such words constitute exceptions to rule 1-a above, since

1. This word is sometimes written conjunctively **ሙ** **ኅ**, implying that the

first two consonants are pronounced as a cluster /mnuh/, which may in fact be the case in rapid speech.

such spellings normally indicate the long inherent vowel. Some of the commonest words with this spelling are listed below:

| | | | |
|-------------|--------|------------------|---------|
| សំដាត /sam/ | proper | សង្គម /saŋkum/ | society |
| សោរ /sap/ | corpse | ព្រាកត /praakat/ | exact |
| គុណ /cuən/ | people | ជាពាណ /ciədaq/ | Jataka |
| រថ /ruət/ | car | ពិភុប /piphup/ | world |

c) A few stressed syllables that are spelled with a silent final subscript but no /bantaq/ are pronounced with the short inherent vowel. (Most words that have this spelling, however, are pronounced as if they were written with a short -៦-; see section 3-a.) Some common words of this kind are listed below.

| | | | |
|-------------|----------------|----------------------|--------|
| សោរ /sap/ | every | ព្រះសង្គ /preəh-saŋ/ | priest |
| គុណឃ /wuəŋ/ | circle, family | ប្រពុន /prapuən/ | wife |

d) In all disyllables whose first syllable has no written vowel but ends in a nasal consonant symbol, the first syllable is pronounced with the short inherent vowel (with certain exceptions as shown in section 3-c below) with distribution as described in 2-a above. In such presyllables, as in those described in section 1-b above, the vowel is reduced in rapid speech to /ə/.

| | |
|-----------------------------|----------------------|
| សម្រាប់ /samrap ~ səmráp/ | for |
| កាន់ប់ /kañcap ~ kəñcap/ | parcel |
| កណ្ឌាល /kandaal ~ kəndaal/ | center |
| សង្គភ័យ /saŋkat ~ səŋkat/ | section, quarter |
| កុងឃី /kumpii ~ kəmpii/ | scriptures |
| ពុំលិំ /puənlíi ~ pənlíi/ | light |
| ពុំរិី /puəŋriik ~ pəŋriik/ | to spread, broadcast |

e) Whenever the diacritic ែ (និកេហេត /niqkəhət/) appears over a consonant symbol with no written vowel, the syllable is pronounced with the short inherent vowel plus /-m/: /-am/ after a 1st series consonant symbol and /-um/ after a 2nd series consonant symbol.

| | | |
|----------|-------|----------|
| ຂ | /cam/ | exact |
| ຫ | /tum/ | to perch |

| | | |
|----------|--------|-----------|
| ຂ | /kham/ | to try to |
| ນ | /num/ | cake |

The common word **ຂ** /thom/ ‘to be big’ is an exception. Although it is pronounced /thom/ in most dialects, in some dialects it has the regular pronunciation /thum/.

In disyllables, presyllables of shape /C₁V₁m-/ are commonly written with the /niqkəhət/. In such syllables the vowels /a/ and /u/ are reduced in rapid speech to /ə/ as in 2-d above.

| | | | | | |
|---------------|---------------------|---------------------|--------------|-------------------|---------|
| កំណាត់ | /kamnat ~ kəmnat/ | to fix, agree on | គំនិត | /cumnīə ~ cəmnīə/ | belief |
| ចំនាក់ | /camnaek ~ cəmnaek/ | part, share | កំនិត | /kumnīt ~ kəmnīt/ | thought |

3. The Short Vowels /a/eə/oə/

All other syllables involving unwritten vowels are pronounced as if they were written with the short vowel symbol **-៥-**; i.e. /a/ after a 1st series consonant symbol, and /eə/ or /oə/ after a 2nd series consonant symbol (see Chapter VII, A 1 b for distribution).

a) Stressed syllables that are written with a silent final subscript but no vowel symbol are typically pronounced as if they were written with the vowel symbol

-៥'. (A few such words, however, are pronounced with the short inherent vowel; see section 2-c above.) Some of the more common words of this type are listed below.

| | | | | | |
|------------|--------|------------|-----------------|-----------|-------------|
| សាប | /sap/ | sound | យោះ | /yeəq/ | demon |
| សាត | /sat/ | animal | ទ្រព | /troəp/ | wealth |
| កាំ | /kam/ | fate | ប្រវត្តិ | /prawoət/ | history |
| ខោន | /khan/ | the symbol | សង្គម | /sambat/ | possessions |

b) In words of more than one syllable (other than the types already discussed in sections 1 and 2 above), consonant symbols with no written vowel are pronounced as separate syllables with the vowel /a/ or /eə/ (depending on the series) when stressed, and /ə/ when unstressed. When stressed, such syllables are pronounced with an unwritten final glottal stop /-q/; i.e. /-aq/ and /-eəq/.

| | | |
|-----------------|--------------------|------|
| ឆ្នាំរោង | /qaqrung ~ qərung/ | dawn |
|-----------------|--------------------|------|

| | | |
|----------------|-------------|--------|
| សានាកុះ | /qanaakuət/ | future |
|----------------|-------------|--------|

យុកលេខាំពិនិត្យ /yuqkəleጀqpintuq/ the symbol :

សេចក្តីរដ្ឋ /səhaqrōet/ republic

The following very literary word is an extreme example of a sequence of consonant symbols, each of which is pronounced as an independent syllable:

បាបីមាគុដ្ឋិនាំ /pathəmaq-puttəwaccənaq/ first words of the Buddha

The stressed finals /-aq/ or /-eəq/ are sometimes indicated in the writing system by the use of the /yuqkəleጀqpintuq/ (:) when they occur in a final syllable, or preceding an internal juncture within a compound (see Chapter VII, A 9 b):

សុំរោះ /thureeəq/ preoccupation

ថានាំ /thaanaq/ position

កេណាំ:កាំមេកាំ /kənaq-kamməkaa/ commission

In learned vocabulary borrowed from Sanskrit and Pali, a consonant symbol which is pronounced in learned speech as an independent syllable may be pronounced in more colloquial speech as the final consonant of the preceding syllable:

បាបីម /pathamaq/ ~ /patham/ first

យុកលេខាំពិនិត្យ /yuqkəleጀqpintuq/ ~ /yuqkuጀlpintuq/ the symbol -:

c) In some words whose second consonant symbol serves as the final of the first syllable, the first syllable is pronounced with the short vowel /a/ or /oə/, depending on the series.

សង្កា /saccaa/ to promise **បច្ចបញ្ញា** /paccoban/ the present

សង្កែ /sattrəw/ enemy **វេណាមេន្តា** /woənnəyut/ diacritic

In some words whose second consonant is **ន**, an initial 2nd series consonant symbol is pronounced with a 1st series rather than a 2nd series vowel:

រចនាំ /raccənaa/ fine arts, crafts

វចនានុក្រោ /waccənaanukram/ dictionary

In some disyllables with a medial double palatal nasal **នន**, the first syllable has the vowel /a/, rather than the short inherent described for disyllables of this kind in section 2-d above.

କାନ୍ନା /kaññaa/ young woman

ଶାନ୍ନା /saññaa/ sign, indication

d) The unwritten vowel /eə/ occurs in one very common word whose spelling is irregular with respect to initial cluster, series, and vowel:

ନେହ /neəq/ familiar 2nd person pronoun

B. UNWRITTEN CONSONANTS

1. Internal Doubling

In many words of more than one syllable, a medial consonant symbol serves both as the final consonant of one syllable and the initial consonant of the next; phonologically the consonant is doubled, and the extra syllable, if no vowel is written, is pronounced with the short vowel /a/eə/ (depending on the series) if stressed, and /ə/ if unstressed. (See section A 3 b)

-ତ୍ତ- > /-tt-/ **ଚାତ୍ତନୀନା** /caettənaa/ to like

ଶତ୍ରୋ /sattrəw/ enemy

-ତ୍ତ- > /-td-/ **ଚାତ୍ତଦୟ** /caetdəy/ stupa

-ତ୍ତ- > /-cc-/ **ରାଚ୍ଚନା** /raccənaa/ art

-କ୍ଷ- > /-cc-/ **ରାଜ୍ଜିକା** /riəccəkaa/ civil service

-କ୍ଷ- > /-kk-/ **କାକ୍କରୀଏ** /qaekkəriəc/ independent

-ଲ୍ଲ- > /-ll-/ **ପୁଲ୍ଲରୋତ** /puəlləroət/ citizenry

-ଶ୍ଵ- > /-hs-/ **ଶାଶ୍ଵନା** /saahsənaa ~ sahsnaa/ religion

ଶାଶ୍ଵତ୍ରାକ୍ତା /saahstraacaa/ professor

2. Unwritten /-q/ after Stressed Short Vowels

a) The unwritten vowels /a/eə/, when stressed, are followed by a final /-q/, both medially and finally.

Medially: កាគមេនុខ /qaqmənuh/ inhuman (supernatural)

កាគភិយ /qaqphiy/ fearless

Finally: កាគខូសាំស /qaqkhoosaq/ voiceless

រៀយ៉ែះ /rɔyeəq/ interval

b) The short vowels and , when no final consonant is written, are pronounced, when stressed, with a final /-q/. Medially this final /-q/ tends to occur after all such vowels in a careful or reading pronunciation, but disappears with loss of stress in a more colloquial pronunciation. It always occurs finally.

Medially: កាគរុញ្ញា /kaqrūqnāa ~ karunaa ~ kənāa/ mercy

កេរិយា /keqrīqyā ~ keriyāa/ conduct

Finally: លោតិ៍ /latthiq ~ ləthiq/ belief, precept

តាយុក /qaayuq ~ qayuq/ age

សីហានុ /siihanuq/ Sihanouk

c) There is one example of an unwritten final /-k/.

/tok/ table

X. IRREGULAR SPELLINGS

In the preceding sections we have been dealing primarily with the "regular" aspects of the Cambodian writing system, in the sense that the pronunciation of any symbol or sequence of symbols could be unambiguously predicted, given sufficient information about the environment of the symbol, or about the composition of a constellation of symbols. The purpose of this section is not to provide an exhaustive list of irregularities, such as those found in only one or two words, but rather to point up irregular spellings which occur in enough words to constitute "sub-systems" of the writing system. The first three irregularities below have already been encountered in the preceding chapters, but are included here to provide an inventory of the major sub-systems.

1. /a/uə/ instead of /aa/ɔɔ/

Some syllables spelled with a sequence of two consonant symbols are pronounced with a short vowel /a/ or /uə/, rather than with the expected long /aa/ or /ɔɔ/ (see Chapter IX, A 1 a).

| | | | | | | |
|-----|--------|--------|------|-----|--------|-------------|
| សម | /sam/ | proper | (cf. | សាម | /saam/ | fork) |
| រួត | /ruət/ | car | (cf. | រួក | /rook/ | search for) |

2. /a/uə/ instead of /a/eə/oə/

Some syllables spelled with a sequence of two consonants the second of which has a silent subscript, are pronounced with the short inherent vowel /a/ or /uə/, rather than the usual /a/, /eə/ or /oə/ (see Chapter IX, A 3 b).

| | | | | | | |
|------|--------|-------|------|------|--------|--------|
| សាំព | /sap/ | every | (cf. | សាំព | /sap/ | sound) |
| យោន | /yuən/ | motor | (cf. | យោន | /yəeq/ | demon) |

3. Exceptions to the Governance Rule

As a rule, the pronunciation of a vowel symbol is determined by the series of a preceding dominant consonant symbol (see Chapter VI, B). In some disyllabic and polysyllabic words, however, a passive 2nd series consonant symbol does not yield to a preceding dominant 1st series consonant symbol.

| | | | | | | |
|---------|--------------|--------------|------|---------|-------------|---------|
| សង្កែវ | /qajriŋ/ | hammock | (cf. | សង្កោវ | /qajwaa/ | to beg) |
| ណកកោរីច | /qaekkəriəc/ | independence | (cf. | សកកោរីច | /saqkəraac/ | era) |

In some disyllables whose second syllable begins with the normally dominant 1st series សា , the សា is dominated by a preceding 2nd series consonant symbol.

| | | | | | | |
|--------|-----------|---------|------|-------|----------|--------|
| ពោគរាន | /tiəhiən/ | soldier | (cf. | ម្រួល | /mhoup/ | food) |
| វិហារ | /wihiə/ | temple | (cf. | រេហូត | /rəhout/ | until) |

4. Silent Final Short Vowel Symbols

Some words are spelled with an unpronounced final short vowel symbol:

| | | | | | | |
|-----------|-----------|---------------------|------|--------|-----------|-----------|
| ភូមិ | /phuum/ | village | (cf. | លេធិក | /ləthiq/ | precept) |
| ជីវិត | /ciət/ | life | (cf. | បន្តិច | /matteq/ | decision) |
| ស្ថាប័ន | /ñiət/ | relative | | | | |
| កុដាល | /kot/ | monk's quarters | | | | |
| ប្រវត្តិក | /prawoət/ | history | | | | |
| សង្គម | /haet/ | reason | (cf. | វិធី | /woəthoq/ | artifact) |
| ផ្ទាក់ | /thiət/ | cremated remains | | | | |

5. /ae/ɛɛ/ instead of /ei/ee/

In some words, the vowel symbol **ឃ-** is pronounced as if it were **ឃ-**; i.e. /ae/ in 1st series and /ɛɛ/ in the 2nd. Below are some of the most common of these words:

| | | |
|-------------------|-------------|-----------------------|
| ខេត្ត | /khaet/ | province |
| ខេត្តរោគ | /peət/ | doctor |
| បាយកំពង | /caetdəy/ | stupa |
| បាសិនិសន | /patdesaet/ | to cancel, destroy |
| បានពិនិត្យ | /caettənaa/ | to like |
| (cf. វិនិពិនិត្យ) | | (cf. វិនិពិនិត្យ) |
| សង្គម | /haet/ | reason |

6. /əy/ instead of /e/

The vowel symbol **ឃ-** in some words is pronounced as if it were written when it occurs in a non-final syllable.

ប៊យតា /bəydaa/ father

សេលាត /səylaa/ (~ /seqlaa/) stone

ប៉យសាគ /bəysaac/ ghost

7. /a/ instead of /ə/

In a few words the constellation ត- ច with a 1st series consonant symbol is pronounced /-ac/ rather than the regular /-əc/:

ស្រចច /srac/ completely (cf. **ម៉ចច** /məc/ why)

សាំរចច /samrac/ to finish

សុដចច /sdac/ King

សាំដចច /samdac/ royal title

XI. WRITING

A. HANDWRITING

Cambodians take great pride in their writing system, and penmanship has traditionally been highly valued as a discipline in the schools, and especially in the curriculum of the pagoda schools. The Cambodian script lends itself easily to flourish and embellishment, as is evidenced by the variety of styles in common use, and a carefully written text is aesthetically quite pleasing.

In careful writing, the following conventions are observed:

1. Symbol Composition

Individual symbols are drawn, where possible, in a continuous motion from left to right. Superscript elements, called /saq/ 'hair', such as \hat{m} , $\hat{\omega}$, $\hat{\gamma}_-$, are added second. Short horizontal strokes are added last.

a) One stroke

Left to right

Consonant symbols: ଓ ପ୍ର ଲ୍ଲ ଚ୍ଛ ତ୍ତ ଶ୍ଵର ହ ନ ଗ୍ର ଙ୍ଗ

Subscript symbols: ଶ ଷ ସ ହ ଚ କ ପ ଫ ର ଲ ମ ଯ ନ ତ ଭ ଳ ଣ ଖ

Vowel symbols: -ə, ɪ, ʊ, ɒ, ɔː

Independent vowel symbols: ڦ ڻ

Numerals: ၁ ၃ ၇ ၯ ၅

Bottom to top

Consonants: *s* *t*

Vowels: ε, (ε-), ɔ

Subscripts: \bar{z} $\bar{\rho}$ \bar{m} \bar{e} \bar{v} e

Right to left, lower part first where possible

Subscripts: — — — — — —

Vowel: θ

Numerals: ፩ ፪ ፫ ፬

b) Two strokes

Superscript element added second

Consonants: ଖ ଖୁ ଚ ଚୁ ଗ ଗୁ ଙ ଙୁ

ପ୍ରକାଶକ

Vowels: $\overset{\circ}{e}$ -, $\overset{\circ}{i}$ -, $\overset{\circ}{o}$ -,

Independent vowels: ଏ ଐ ଓ ଔ

Last vertical element second

Consonants: နှ ငှ ဖှ ရှ

Vowels: ဤ-ဦ ဥ-ဦ ဩ-ဦ

Top left hook added second

Consonants: ဗ ဣ ဢ

Lower element second

Subscript: ဗ၍ Vowel: ဤ၍ Independent vowels: ဤ ဥ ဩ ဩ၍

c) Three strokes

Consonants: ဃ မ

Vowels: ဤ၊ ဥ၊ ဩ၊ ဤု၊ ဥု

Independent vowels: ဤ ဥ

d) Four strokes

Vowels: ဤ-ဦ, ဥ-ဦု, ဩ-ဦု Independent vowel: ဤ

2. The Symbol ဦ or ဦ

The vowel symbol ဦ or ဦ, in both written and printed styles, is usually attached to, or written as a continuation of, a preceding consonant symbol.

a) In consonant symbols surmounted by a /saq/ (ဗ), the /saq/ is extended and attached to a following ဦ, as follows:

ဗ ာ a, ဗ ီ ာ i, ဗ ာ ာ a, ဗ ာ ာ ာ a, ဗ ာ ာ ာ ာ a, ဗ ာ ာ ာ ာ ာ a, ဗ ာ ာ ာ ာ ာ ာ a, ဗ ာ ာ ာ ာ ာ ာ ာ a

b) The sequence ဗ + ဦ is written ဗ /baa/ to distinguish it from the sequence ဗ /caa/ (shown above), and from ဗ /haa/.

c) ဦ is written as a continuation of the preceding consonant symbol in the following sequences:

ဗ ာ kaa

ဗ ီ thiə

ဗ ာ ာ yie

ဗ ာ ာ ာ laa

ဗ ာ ciə

ဗ ာ tiə

ဗ ာ ာ riə

ဗ ာ ာ ာ qaa

ဗ ာ chiə

ဗ ာ niə

ဗ ာ ာ liə

ဗ ာ caa

ဗ ာ miə

ဗ ာ ာ saa

d) $\overrightarrow{\wedge}$ is attached to the following consonant symbols:

| | | | | | | | |
|-------------|------|--------------|------|--------------|------|-------------|-----|
| ຂ | khaa | ឌ | diə | ឃ | piə | វ | wiə |
| ឃ | giə | នា | naa | ធម៌ | phaa | ឃា | haa |
| ឃា | niə | ធម៌ | thaa | | | | |

3. Word Composition

In composing words, all “on-the-line” symbols, whether consonants or vowels, are written in a sequence from left to right. In vertical combinations, first all subscript symbols, and then all superscript symbols, are added before proceeding

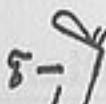
to the next “on-the-line” symbol, except for the vowel symbols $\overrightarrow{\wedge}$, $\overleftarrow{\wedge}$, or $\overline{\wedge}$, which are completed before writing the subscript. The sequence of writing steps is shown in the following examples:

| <u>Step 1</u> | <u>Step 2</u> | <u>Step 3</u> | <u>Step 4</u> | <u>Step 5</u> | | |
|---------------|---------------|---------------|---------------|---------------|------------|--------------|
| 1) ប | ច | ច | | | /pdəy/ | husband |
| 2) ស | ណ | ណ | ណូ | ណូប | /sdap/ | to hear |
| 3) ប | ង | ង | ងុ | ងុច | /banjhouc/ | to ruin |
| 4) ប | ក | ក | កុ | កុជ | /banjkaət/ | to originate |

A /cəəŋ rɔɔ/ — is added after the consonant, or consonant + $\overrightarrow{\wedge}$, to which it is subscript, and before a superscript vowel, and is usually drawn large enough to include a subscript consonant symbol. When it is not the initial element in a word, a small space is left preceding the consonant symbol to which it is subscript to accommodate its later addition, as in the following examples:

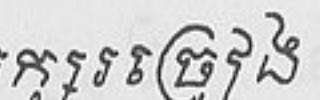
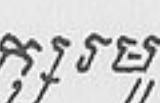
| <u>Step 1</u> | <u>Step 2</u> | <u>Step 3</u> | <u>Step 4</u> | <u>Step 5</u> | | |
|---------------|---------------|---------------|---------------|---------------|-----------|---------------|
| 1) ស | រ | រ | | | /srəy/ | woman |
| 2) ក | រ | រ | រ | រ | /craən/ | much, many |
| 3) ស | ម | ម | ម | ម | /samrap/ | for |
| 4) ក | ន | ន | ន | ន | /dantrəy/ | music |

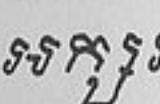
However, the /cəəŋ rɔɔ/ is written before (in time), and usually does not include,

a following subscript vowel symbol or the second part of the composite vowel symbols  and  :

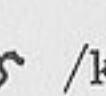
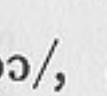
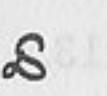
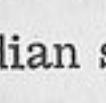
| <u>Step 1</u> | <u>Step 2</u> | <u>Step 3</u> | <u>Step 4</u> | <u>Step 5</u> | |
|---------------|---------------|---------------|---------------|---------------|--------------------|
| 1) ឃ | ឃ | ឃ | ឃន | | /proh/ male |
| 2) ត | ត | ត | តុ | | /trəw/ correct |
| 3) ត | ត | ត | តុត | | /truət/ to examine |
| 4) ស | ស ឃ | ស ឃ | ស ឃុ | ស ឃុន | /priəp/ to compare |
| 5) ស | ស ត | ស ត | ស តុ | ស តុន | /kriəŋ/ accessory |

B. STYLES OF SCRIPT

There are two basic styles of script in modern Cambodian:  /qaqsaacrieng/ ‘slanted script’, and  /qaqsaamuul/ ‘round script’.

The first is by far the more common, and is used for running texts in publications of all kinds, such as novels, textbooks, and newspapers. A variation of this,  /qaqsaachoo/ ‘standing script’ is simply a vertical form of the

slanted script, and is used for chapter headings or subtitles, and in some publications replaces the slanted script entirely. The second style, /qaqsaamuul/, is more archaic and much more elaborate. While most of the letters are similar in

shape to their slanted counterparts, a few, notably , , , and , have entirely different shapes, and must be learned by the student in addition to the basic slanted forms. This elaborate script is used for titles of books, major headings, newspaper headlines, religious texts, proper names, and inscriptions on public monuments and buildings. /qaqsaamuul/ also has a variant,  /qaqsaakhaam/ ‘Cambodian script’, which differs

from /muul/ only slightly, but which seems actually to be in more common use than /muul/, although both forms are commonly referred to as /muul/ by the general public. These four styles of script can be compared in the following concordance.

Concordance of Script Styles

| | <u>Slanted Script</u> | <u>Standing Script</u> | <u>Round Script</u> | <u>Cambodian Script</u> |
|-----|-----------------------|------------------------|---------------------|-------------------------|
| 1. | ក | ក | ក | ក |
| 2. | ខ | ខ | ខ | ខ |
| 3. | ស | ស | ស | ស |
| 4. | ប | ប | ប | ប |
| 5. | ជ | ជ | ជ | ជ |
| 6. | ច | ច | ច | ច |
| 7. | ន | ន | ន | ន |
| 8. | ដ | ដ | ដ | ដ |
| 9. | ល | ល | ល | ល |
| 10. | ព | ព | ព | ព |
| 11. | ធម៌ | ធម៌ | ធម៌ | ធម៌ |
| 12. | ម (អី) | ម (អី) | ម (អី) | ម (អី) |
| 13. | ឃ | ឃ | ឃ | ឃ |
| 14. | ឲ | ឲ | ឲ | ឲ |
| 15. | ុ | ុ | ុ | ុ |
| 16. | ឥ | ឥ | ឥ | ឥ |
| 17. | ិ | ិ | ិ | ិ |
| 18. | ី | ី | ី | ី |
| 19. | ុំ | ុំ | ុំ | ុំ |

| | <u>Slanted Script</u> | <u>Standing Script</u> | <u>Round Script</u> | <u>Cambodian Script</u> |
|-----|-----------------------|------------------------|---------------------|-------------------------|
| 20. | ស | ន | ន | ន |
| 21. | ប | ប | ប | ប |
| 22. | ជ | ជ | ជ | ជ |
| 23. | ៣ | ៣ | ៣ | ៣ |
| 24. | ក | ក | ក | ក |
| 25. | ម | ម | ម | ម |
| 26. | ហ | ហ | ហ | ហ |
| 27. | ឯ | ឯ | ឯ | ឯ |
| 28. | ល | ល | ល | ល |
| 29. | វ | វ | វ | វ |
| 30. | ស | ស | ស | ស |
| 31. | ច | ច | ច | ច |
| 32. | ទិរ | ទិរ | ទិរ | ទិរ |
| 33. | និន | និន | និន | និន |

C. SAMPLES OF HANDWRITING STYLES

The style of script used throughout this book, except in Selection 50 of the Reader, which is typewritten, is that of carefully written សង្គសន្តិសុខ /qaqsaa criəŋ/ ‘slanted script.’ Following are four samples of handwritten styles:

careful and rapid masculine handwriting, and careful and rapid feminine handwriting. The text used in all four samples is taken from Selection 16 of the Reader (Part Three), as follows:

/taə look-qəwpuk nɪŋ neəq-mdaay sok-sapbaay ciə rii-tee? camnaek koun wiñ, sok nɪŋ tuk ciə kaa-thoəmmədaa. sap-tjay-nih, kaa-ruəh-niñ knoŋ salaa twəə qaoj koun miən cət nɪk-rɔlik dal pteəh nɪŋ kruəsaa ciə riəy-riəy/

‘I hope that you (Father and Mother) are well. As for me, things are going as

usual. These days, life in school makes me continually homesick for my home and family.'

1. Careful Masculine Style

នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់
ក្នុងវិញ នូវសំណើការបង្ហាញ
ត្រូវបានបង្ហាញឡើងដីស្ថាប្រាប់
នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់

2. Rapid Masculine Style

នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់
នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់
នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់
នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់

3. Careful Feminine Style

នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់
ក្នុងវិញ នូវសំណើការបង្ហាញ
ត្រូវបានបង្ហាញឡើងដីស្ថាប្រាប់ ? ជំនួយលាក់
នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់

4. Rapid Feminine Style

នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់
នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់
នៅឯណាកទិញកន្លែងដីស្ថាប្រាប់ ? ជំនួយលាក់

D. TYPEWRITTEN STYLE

Cambodian typescript is currently available from only three companies: Adler, Olympia (both of West Germany), and Varitype (U.S.A.). Both Adler and Olympia use the keyboard designed by Mr. Keng Vansak, Dean of the Faculty of Letters in Phnom Penh. This keyboard is less than satisfactory from several points of view: the style is far less pleasing than almost any style of printed Cambodian in com-

mon use; since Cambodian consonant symbols vary greatly in width (e.g. ៥ vs. ៤៥), the necessity of assigning each symbol the same amount of space on the keyboard results in highly artificial spacing; and there are not enough keys on a standard keyboard to accommodate all the different elements of the Cambodian writing system, so that many symbols must be composed of elements which do double or triple duty. The style used by the Varitype machine is more satisfactory from an aesthetic point of view, although the subscript consonants are unnaturally small; the major difficulty is that the Varitype machine is designed to accommodate many different writing systems by installing a different bank of type for each language. The great number of different elements in the Cambodian writing system make it necessary to use two banks, or hemispheres, so that it is necessary to rotate the banks while typing, sometimes in the middle of a word, making it a very cumbersome and time-consuming procedure.

The sample shown below was typed on an Adler machine; the text is the same as that used in the handwritten samples in C above.

| | | |
|-------------------------------------|---------------|--------------------------------|
| នគរបាល កម្ពុជា | សូមច្បាយជាមួយ | ចំណេកក្បែន និង ទំនើក |
| ជាការជម្លាត់ | ៧ | សព្វថ្លៃខេត្ត ការរស់នៅ ភ្នំពេញ |
| និង ក្រឡាកដលើផ្ទះ និង ប្រព័ន្ធដោយ ៣ | ៨ | ដីអ្នក |

E. SAMPLES OF PRINTED STYLES

Cambodian publications use a great variety of attractive and artistic printed styles. Samples 1–5 below illustrate the first five consonant symbols of the Cambodian alphabet in slanted, standing, Cambodian, round, and shaded Cambodian styles respectively. Sample 6 is the standard slanted script (/qaqsaa criəŋ/) which is used for running text in newsprint and most books. Sample 7 illustrates the standing script (/qaqsaa choo/) which is used in subheadings and running text in some books; e.g., Volumes I – IV of the Buddhist Institute's Collection of Cambodian Folktales (Item 5 in the Bibliography) are printed entirely in this standing script. Samples 8 and 9 are in Cambodian style (/qaqsaa khoom/), which is generally used for titles, proper names, and inscriptions on signs and public buildings; although it is technically /qaqsaa khoom/, it would be referred to by the generic term /muul/ by the general public. Samples 8 – 15 were all taken from the weekly publication /neəq ciət niyum/ (The Nationalist), which illustrates the great variety of display styles that may occur in a single publication.

The text of each sample is transcribed and translated below as an aid to the student in reading the unfamiliar styles of script.

- 1–5. (The first five letters of the Cambodian alphabet, with subscripts.)
6. /qəwpuk-mdaay klah bandaoy koun touc-touc qaoys cee-bañcaos kñom-kamdaas.
cuən-kaal koun nuh way-dam-cram-theəq phaaŋ haq-douc ciə miən qamnaacs
niŋ twəə-baap neəq-kamsat-tuurəkuət taam cət pipruəh-tae kluən kaət laəŋ
miən sambat-troəp./

'Some parents allow even quite small children to insult their servants. Sometimes these children even beat and kick their servants, as if they had the right to mistreat poor unfortunates as they wish just because they were born wealthy.'

7. /cou yəəŋ kom pramaat mēəq-ŋiəy baaw-priəw yəəŋ/
‘Let’s not mistreat our servants.’
8. /ween-yiem daembey bamraə saathiərənaqcuen niw kroŋ pnum-piñ/
‘Remaining open to serve the public in Phnom Penh’
9. /qampəə-cliən-piən niy kaan-toep . . . / ‘the army’s aggression . . . ’
10. /ciət, sahsnaa, riəc-baalan/ ‘Nation - Religion - Throne’
11. /neəq ciət niyum/ ‘The Nationalist’
12. /preəh-sannisət pəədamiən/ ‘Royal Press Conference’
13. /khaet stiŋ-traen/ ‘Stung Treng Province’
14. /kaa-samjat/ ‘Confidential’
15. /baarəteeh/ ‘Abroad’

1.

ក ន ា ត យ ុ ង
ក ន ា ត យ ុ ែ

2.

ក ន ា ត យ ុ ង
ក ន ា ត យ ុ ែ

3.

ក ន ុ ន ត ូ ប ុ ំ
ក ន ុ ន ត ូ ប ុ េ

4.

ក ន ុ ន ក ូ ប ុ ំ
ក ន ុ ន ក ូ ប ុ េ

5.

ក ន ុ ន ប ុ ំ

6. ទុកម្មយុទ្ធបាយការយកត្របា ព្រៃដរបាល្អាក់កសារ ដែលការក្នុងនេះ
កយដំប្រើការនឹង ហាក់ដូចជាអាយកំណា និងផ្សេងៗបន្ទុកកំសត្តិអត្ថតាមប័ណ្ណ
ពេញនីត្រូវកៅត់ឡើងនាមសម្បត្តិថ្លោយ ។

7. បុរាយើងកំប្រមិលកំងាយ បានរាយើង

8. និងយុទ្ធផ្សេងៗនៃសាធារណៈនឹង នៅក្នុងនៅពេល

9. និងពីនូវវានិពាណនឹងការណើន

10. ចាតិ សាសនា នាមធម្មជីថ្មី

11. **គ្របាទាសិនិយោបាយ**

12. **ប្រព័ន្ធឌីសិទ្ធិការណ៍**

13. **គេហទ៊ីអ៊ីត្រួត**

14. **ភាពសុខុំ**

15.

បុរាណ

I. INTRODUCTION

Part One of this book presents a formal analysis of the relationship between sound and symbol in modern Cambodian. The purpose of this section is to provide the student with a step-by-step introduction to reading and writing Cambodian words. Each exercise introduces a small amount of new material. The exercises are cumulative, building on and reinforcing points that have already been introduced. Periodic review exercises provide a test of the student's progress, and refer by number to the exercise in which each point was first introduced. The student should go back and review the exercise dealing with any point in the review exercise with which he has difficulty.

Since the primary aim of this section, and indeed, of the entire book, is to develop facility in reading, the great majority of the exercises involve a symbol-to-sound operation. However, some of the exercises involve a sound-to-symbol operation (much less predictable in Cambodian), since it is felt that the most effective way to help the student recognize the sometimes minute differences between symbols is to have him draw them himself.

As in Part One, it is assumed that the student is familiar with the transcription system used in the author's Spoken Cambodian, of which a summary is presented for convenience below.

However, if the student is unfamiliar with the sound system of spoken Cambodian, or if he intends to use this section without the aid of a native speaker, he should read carefully the chapter on Phonology in Part One. To use this section effectively, the student should follow these directions:

- 1) Cover the answer to each exercise (marked A.) with a blank sheet of paper.
- 2) Write the answer called for on the paper, and pronounce it aloud.
- 3) Check your answer against the correct answer which follows each exercise.
- 4) If you have made a mistake, practice the exercise until you can do it correctly from memory.

II. PHONOLOGICAL SUMMARY

Consonants

| | Labial | Dental | Palatal | Velar | Glottal |
|--|--------|--------|---------|-------|---------|
|--|--------|--------|---------|-------|---------|

Stops:

| | | | | | |
|-----------|----|----|----|----|----|
| Voiceless | -p | -t | -c | -k | -q |
| Voiced | b | d | | | |

Spirants:

| | | | | |
|-----------|-----|---|--|----|
| Voiceless | (f) | s | | -h |
|-----------|-----|---|--|----|

Continuants:

| | | | | |
|-------|----|----|----|----|
| Nasal | -m | -n | -ñ | -ŋ |
|-------|----|----|----|----|

| | | | | |
|-------------|----|--|----|--|
| Semivocalic | -w | | -y | |
|-------------|----|--|----|--|

| | | | | |
|---------|--|----|--|--|
| Lateral | | -l | | |
|---------|--|----|--|--|

| | | | | |
|---------|--|---|--|--|
| Trilled | | r | | |
|---------|--|---|--|--|

Vowels

| Long Vowels | | | Long Diphthongs | | | Short Vowels | | | Short Diphthongs | | |
|-------------|---|---|-----------------|----|----|--------------|-----|---|------------------|-----|--|
| i | ɪ | ʊ | ɪə | ɪə | ʊə | ɪ | ɪ | ʊ | ʊə | | |
| e | ə | o | ɛɪ | əɪ | ou | e | ɛ | o | ɛə | əʊ | |
| ɛ | a | ɔ | æ | əə | əʊ | | a | | | | |
| | ɑ | | | ɛə | | | a | | | | |
| (10) | | | (10) | | | | (8) | | | (3) | |

III. CONSONANTS

1. There are 33 consonant symbols in the Cambodian writing system. How many different consonant sounds are there in the Cambodian language (refer to Phonological Summary)?
A. 18
 2. Thus there are about twice as many consonant symbols as are needed to represent the consonant sounds of the language. In fact there are two ways to represent every consonant sound, so that there are actually two series of consonant symbols in the Cambodian writing system. The pronunciation of a vowel symbol is determined by the series to which the preceding consonant symbol belongs. Every vowel symbol then has _____ values or pronunciations.
A. 2
 3. When a consonant symbol is written alone, with no accompanying vowel symbol, it is pronounced with an “inherent” vowel. The inherent vowel with which 1st series consonant symbols are pronounced is /aa/. The first letter of the Cambodian alphabet is . It is a 1st series consonant which represents the sound /k/. Write, transcribe, and pronounce the symbol with its inherent vowel.
A. kaa
 4. When a 2nd series consonant symbol is written with no accompanying vowel symbol, it is pronounced with the “inherent” vowel /oo/. The 2nd series consonant symbol representing /k/ is . Write, transcribe, and pronounce it.
A. koo
 5. The initial consonant sequences /kh-, ch-, th-, ph-/ are represented by unit symbols, although phonologically they are clusters. The 1st series symbol for the cluster /kh-/ is . Write, transcribe, and pronounce it.
A. khaa

6. The 2nd series symbol for /kh-/ is ឃឹ . Write, transcribe, and pronounce it.
- A. ឃឹ khoo
7. All nasal symbols (except ឃុ /n/), when unmodified, are pronounced with the 2nd series inherent vowel, and are classed as 2nd series consonant symbols. (The conversion of nasal symbols to 1st series will be discussed later.) The symbol for the velar nasal /ŋ/ is ឃុ . Write, transcribe, and pronounce it.
- A. ឃុ ŋoo
8. You have now been introduced to the first five letters of the Cambodian alphabet. They are: ក ខ ឌ ឃឹ ឃុ . The Cambodian alphabet is divided into five groups, based on position of articulation, proceeding from the back to the front of the mouth, and one residual group usually labeled miscellaneous. The letters in the group above are all Velars. Within each articulatory group, the order of letters is as follows:

| | |
|---|--------|
| 1st series unaspirated consonant symbol | (ក) |
| 1st series aspirated consonant symbol | (ខ) |
| 2nd series unaspirated consonant symbol | (ឌ) |
| 2nd series aspirated consonant symbol | (ឃឹ) |
| 2nd series homorganic nasal | (ឃុ) |

Write, transcribe, and pronounce the Velar series above.

- A. ក kaa, ខ khaa, ឌ koo, ឃឹ khoo, ឃុ ŋoo
9. Every vowel symbol (with the exception of three, which will be discussed later) has two pronunciations, depending on the series of the initial consonant. In spelling a word aloud, however, Cambodians usually refer to vowel symbols by their 1st series values, regardless of the series of the preceding consonant. The vowel symbol -ោ is called /sraq qaa/ ‘the vowel qaa’. Its first series value is /aa/. ក + ោ is written កា . Write, transcribe, and pronounce it.
- A. កា kaa
10. The second series value of -ោ is /iə/. ឌ + ោ is written ឌី . Write, transcribe, and pronounce it.
- A. ឌី kiə
11. Write, transcribe, and pronounce the following syllables: ឃុ ឃឹ ឃុ
- A. ឃុ khaa, ឃឹ khiə, ឃុ ŋiə

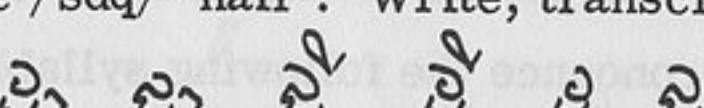
12. is the 1st series consonant symbol for /c/. Its 2nd series counterpart is . Write, transcribe, and pronounce the syllables and .
- A. caa, ciə
13. The second group of consonant symbols in the Cambodian alphabet are the Palatals. They are: /caa/, /chaa/, /coo/, /choo/, and /nchoo/. Write, transcribe, and pronounce each of them in combination with the vowel symbol .
- A. caa, chaa, ciə, chiə, niə
14. The vowel symbol is called /sraq qey/. Its 1st series value is /əy/ and its 2nd series value is /ii/. Write, transcribe, and pronounce the syllables and .
- A. kəy, kii
15. You should now be able to read 30 different Cambodian syllables, as follows:
- | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
- Transcribe and pronounce them.
- A. kaa, khaa, ko, kho, nko, caa, chaa, coo, choo, nchoo,
 kaa, khaa, kiə, khiə, njiə, caa, chaa, ciə, chiə, niə,
 kəy, khəy, kii, khii, nji, cəy, chəy, ci, chii, nii
16. Now take the 30 syllables you have transcribed above and write as many of them as you can using the Cambodian symbols. Refer to the symbols in Exercise 15 only for those symbols you have been unable to remember.
17. The symbols /daa/, /thaa/, /doo/, /thoo/, /naa/ are referred to as the Retroflexes, based on their values in the Indian writing system from which the Cambodian writing system is derived. Their position of articulation is not retroflex, however, but dental. They follow the Palatals and precede the "true" Dentals in the alphabetical order. and are rare, occurring in only a few loanwords. is the only nasal

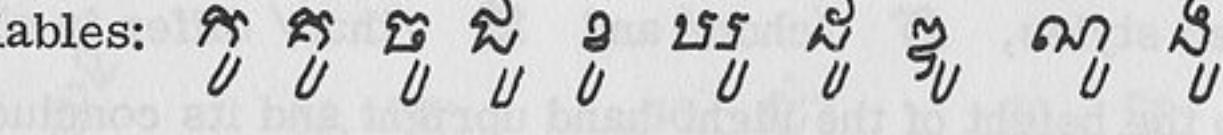
symbol which belongs to the 1st series. Transcribe and pronounce the

following syllables: *କୁଳ* *ହୁ* *ବୁଦ୍ଧ* *ମୁଖୀ* *ମୁଣ୍ଡ*

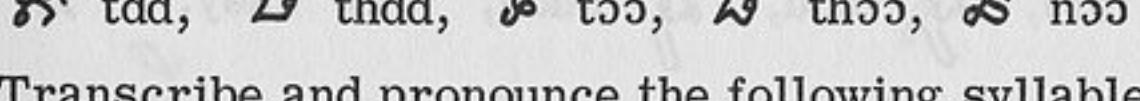
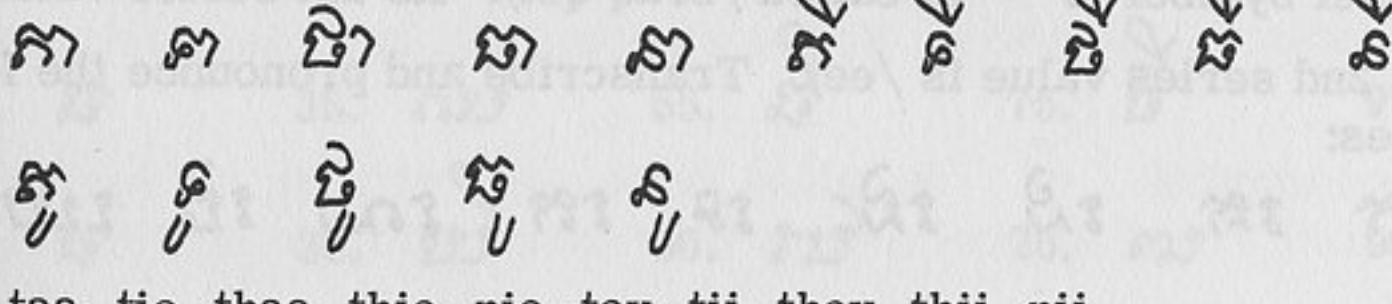
- A. dəy, thaa, dii, thiə, naa

18. Now write the syllables you have transcribed above in the Cambodian alphabet without referring to the symbols in Exercise 17.

19. Notice that  /cəo/ and  /daa/ differ only with regard to the top element, referred to as the /saq/ ‘hair’. Write, transcribe, and pronounce the following syllables: 
A.  daa,  ciə,  cii,  dəy,  daa,  cəo

20. The vowel symbol  is called /sraq quou/. Its 1st series value is /ou/ and its 2nd series value is /uu/. Transcribe and pronounce the following syllables: 
A. kou, kuu, cou, cuu, khou, khuu, dou, duu, nou, nuu

21. Write each of the above transcriptions in the Cambodian alphabet without referring to Exercise 20.

22. The Dentals of the Cambodian alphabet are as follows:

Transcribe and pronounce the following syllables:

A. taa, tiə, thaa, thiə, niə, təy, tii, they, thii, nii, tou, tuu, thou, thuu, nuu

23. Write the Cambodian equivalents of the syllables in 22-A above without referring to the exercise.

24. Note that there are two representations for 1st series /thaa/: the Retroflex  and the Dental  ; and two representations for the 2nd series /thoo/: the Retroflex  and the Dental  . These are the only two

cases of true redundancy among Cambodian consonant symbols. The Dental symbols are far more common in both cases. Write the following syllables two ways: thaa, thaa, they, thou.

A. ពេជ្រ បោជ្រ ចេជ្រ បុជ្រ

25. Write the following syllables two ways: thoo, thiə, thii, thuu

A. នូអា នូវីអា នូអូ នូវូអូ

26. Note that the 2nd series counterpart of នា /naa/ is នូ /nɔə/. Transcribe and pronounce the following syllables:

នាំនា នីនី នីឃី នូូនូ

- A. naa, niə, nəy, nii, nuu, nou, naa, nɔə

27. Now write the syllables in 26-A in Cambodian symbols without referring to the exercise.

28. In some printed styles, ឆា /chaa/ and ឆូ /thoo/ differ in shape only with regard to the height of the right-hand upright and its concluding circle. In written style, however (as below), ឆា /chaa/ usually has a distinguishing loop in the lower left corner. Write, transcribe, and pronounce:

ឆាំនា ឆូីនូ ឆូីឃូ

- A. ឆា chaa, ឆូ thiə, ឆូ thuu, ឆូ chou, ឆូ chəy, ឆូ thii

29. The vowel symbol ឈ— is called /sraq qei/. Its 1st series value is /ei/ and its 2nd series value is /ee/. Transcribe and pronounce the following syllables:

ឈី ឈើ ឈិ ឈិ៍ ឈុ ឈុ៍ ឈុៅ ឈិែ ឈុែ ឈុៅ ឈុែ

- A. kei, kee, dei, cee, tee, tei, nei, thei, khee, chee, nee

30. Now reproduce the syllables in 29-A in Cambodian script without referring to the exercise.

31. You have been introduced to 20 consonant symbols (the Velar, Palatal, Retroflex, and Dental groups of five symbols each) and five vowels (the "inherent," —៥, —៥, —៥, and ឈ—), so that you should now be

ready to begin reading and writing in Cambodian.

able to read 100 different Cambodian syllables. Transcribe and pronounce them.

| | | | | |
|-------|-------|-------|-------|--------|
| 1. ន | 21. ស | 41. ន | 61. ឃ | 81. ន |
| 2. ស | 22. ស | 42. ន | 62. ស | 82. ស |
| 3. ឃ | 23. ន | 43. ន | 63. ស | 83. ស |
| 4. ន | 24. ស | 44. ស | 64. ស | 84. ស |
| 5. ស | 25. ស | 45. ស | 65. ន | 85. ន |
| 6. ស | 26. ន | 46. ន | 66. ស | 86. ស |
| 7. ស | 27. ន | 47. ស | 67. ស | 87. ន |
| 8. ស | 28. ស | 48. ន | 68. ស | 88. ស |
| 9. ន | 29. ស | 49. ស | 69. ស | 89. ស |
| 10. ស | 30. ស | 50. ស | 70. ស | 90. ស |
| 11. ស | 31. ស | 51. ស | 71. ស | 91. ស |
| 12. ស | 32. ស | 52. ស | 72. ស | 92. ស |
| 13. ស | 33. ស | 53. ស | 73. ស | 93. ស |
| 14. ស | 34. ស | 54. ស | 74. ស | 94. ស |
| 15. ស | 35. ស | 55. ស | 75. ស | 95. ស |
| 16. ស | 36. ស | 56. ស | 76. ស | 96. ស |
| 17. ស | 37. ស | 57. ស | 77. ស | 97. ស |
| 18. ស | 38. ស | 58. ស | 78. ស | 98. ស |
| 19. ស | 39. ស | 59. ស | 79. ស | 99. ស |
| 20. ស | 40. ស | 60. ស | 80. ស | 100. ស |

34. We will now consider the last of the five articulatory groups of consonants in the Cambodian alphabet, the Labials. They are, respectively, ប /baa/, ផ /phaa/, ម /poo/, ឃ /phoo/, and ឃុ /moo/. Write, transcribe, and pronounce the following syllables:

A. ប bəy, ផ phaa, ម pii, ឃ phiə, ឃុ miə, ឃុ mii

35. When ប is followed by the vowel symbol -ោ, it is written ហ /baa/ to distinguish it from ហា /haa/ (to be discussed later) and from ប + ោ, which is ឃ. Write, transcribe, and pronounce the following syllables: ប ហ ឃ ហា ឃុ

A. ប baa, ហ baa, ឃ caa, ហា haa, ឃុ miə

36. Notice that ផ /phaa/ differs from ឃ /thoo/ only in the uppermost element, or /saq/. Write, transcribe, and pronounce the following syllables:

A. ផ phaa, ឃ thiə, ឃ thii, ឃ phəy, ឃ chəy, ឃុ phei, ឃុ phee

37. The following grid shows the first 25 consonant symbols of the Cambodian alphabet in the order in which they occur in Cambodian dictionaries and in oral recitation. On a separate sheet of paper draw a similar grid with 25 squares and practice until you can reproduce the chart from memory.

| | 1st Series | | 2nd Series (except ឃោ) | | |
|-------------|-------------|-----------|-------------------------|-----------|-------|
| | Unaspirated | Aspirated | Unaspirated | Aspirated | Nasal |
| Velars | ក | ខ | ក្រ | ខ្រ | ង |
| | kaa | khaa | kco | khco | cco |
| Palatals | ឆ | ឆ | ច | ឆ | ឃ |
| | caa | chaa | cce | chco | ccn |
| Retroflexes | ឋ | ឋ | ឋ | ឋ | ណ |
| | daa | thaa | dco | thco | naa |
| Dentals | ឌ | ឌ | ឌ | ឌ | ឌ |
| | taa | thaa | tco | thco | ccn |
| Labials | ប | ប | ប | ប | ប |
| | baa | phaa | pcd | phco | ccm |

38. The next four letters of the Cambodian alphabet (nos. 26–29 in order) are ឃោ /yco/, ឃ /rco/, ឃោ /lco/, ឃ /wco/. Like the nasals, they represent continuants (i.e. are pronounced with voicing throughout) and belong to the 2nd series. (The conversion of continuants to 1st series will be dealt with later.) Notice that ឃ /wco/ differs from ឃ /rco/ only in having an additional flourish at the top. Write, transcribe, and pronounce the following syllables: ឃោ ឃ ឃោ ឃ ឃោ ឃ ឃោ ឃ

A. ឃោ yiə, ឃ riə, ឃោ liə, ឃ wiə, ឃោ yii, ឃ rii,
 ឃោ lii, ឃ wii

39. Notice that ឃោ differs from ឃ /khco/ only in that the initial circle is drawn to the right of the first upright rather than to the left. Write, transcribe, and pronounce the following:

ឃោ ឃោ ឃោ ឃោ ឃោ ឃោ

A. үү yuu, үү khuu, үү yiə, үү khiə, үү khii, үү yii

40. The last four letters of the Cambodian alphabet (nos. 30–33) are ឃា /saa/, ឃុ /haa/, ឃូ /laa/, ឃុំ /qaa/. They are all pronounced (when unconverted) with the 1st series inherent vowel. Transcribe and pronounce the following syllables: ឃុំ ឃុំ ឃូ ឃូ ឃុំ ឃុំ ឃូ ឃុំ ឃូ ឃុំ

A. saa, hei, laa, qaa, səy, hou, lei, qəy

41. Now write the syllables in 40-A in Cambodian script without reference to the exercise.

42. လာ /laa/ is the 1st series counterpart of ော /nɔɔ/, parallel with နာ /naa/ and ော် /nɔɔ/. Write, transcribe, and pronounce the following syllables: လား ေား ော် ော် လာ် ော်

A. လား laa, လှေး liə, နား naa, နှေး niə, လေး ləy, လှုး lii,
နေး nəy, နှေး nii

43. The 2nd series continuants ፻ , ፻ , ፻ , ፻ , ፻ , and ፻ have no separate counterparts in the 1st series. They can be converted to 1st series by the addition of the /museqkətəōn/ or /tm̥iñ kandao/ ‘rat’s teeth’ (—): ፻ /ŋaa/, ፻ /ñaa/, ፻ /maa/, ፻ /yaa/, ፻ /raa/, ፻ /waa/. Transcribe and pronounce the following:

ଫର୍ମିଂ ଫର୍ମିଂ ଗର୍ମ ଗର୍ମ କାନ୍ଦିଲି କାନ୍ଦିଲି ପାତାର ପାତାର

A. yaa, yiə, rei, ree, waa, wiə, maa, miə, ηou, ηuu, ñaa, ñiə

44. Write the syllables in 43-A in the Cambodian script.

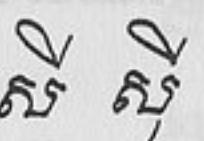
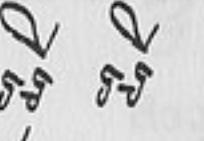
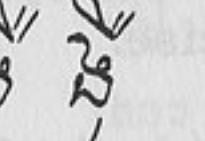
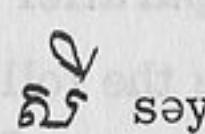
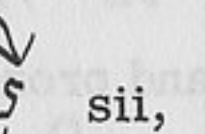
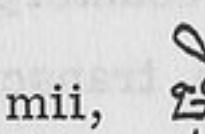
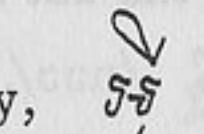
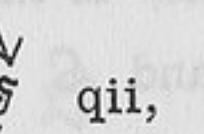
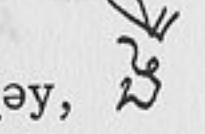
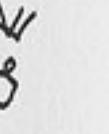
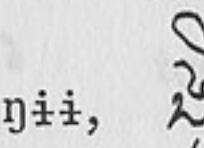
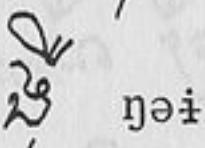
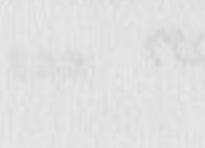
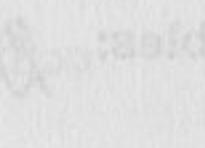
45. The 1st series consonants ଭ୍ୟ , ଶ୍ୟ , ଚ୍ୟ , and ର୍ୟ have no separate counterparts in the 2nd series. They can be converted to the 2nd series by the addition of the /trəysap/ (~): ଭ୍ୟ /bɔɔ/, ଶ୍ୟ /sɔɔ/, ଚ୍ୟ /hɔɔ/, and ର୍ୟ /qɔɔ/. Transcribe and pronounce the following:

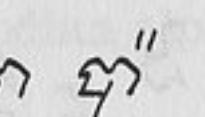
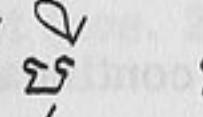
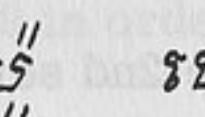
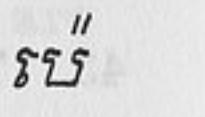
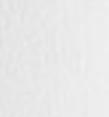
បាន បាន និង និង និង និង បាន

- A. bou, buu, haa, hiə, sei, see, quou, quu, bəy, bii

46. Now reproduce the syllables in 45-A in Cambodian script.

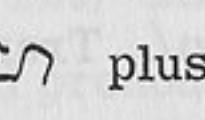
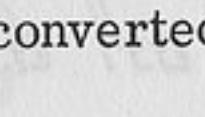
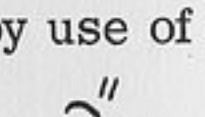
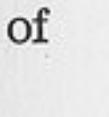
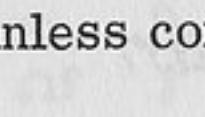
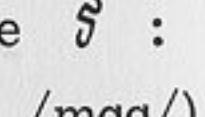
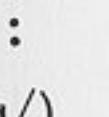
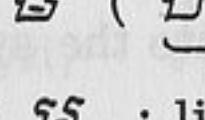
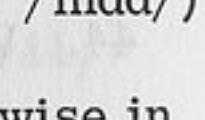
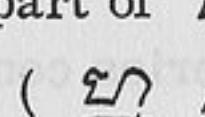
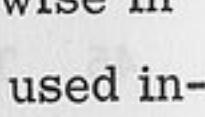
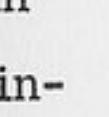
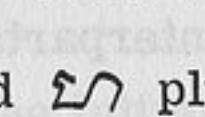
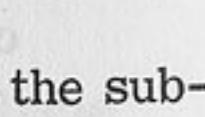
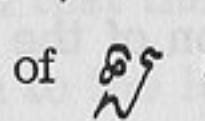
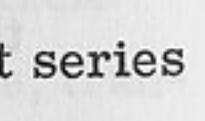
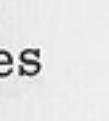
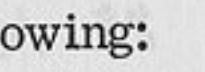
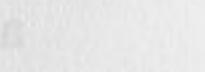
47. Whenever a /museqkətoən/ () or /trəysap/ () converter co-occurs with one of the superscript vowel symbols, such as — or —, it is usually replaced (except in the case of ; see 45 above) by a short vertical stroke (—), called /kbiəh kraom/, at the bottom of the consonant symbol; e.g. /sii/, /qii/, although and do occur. Write, transcribe, and pronounce the following:

| | | | | |
|--|--|---|---|---|
|  |  |  |  | |
| A.  səy,  sii,  mii,  məy,  qii,  qəy,  |  |  |  |  |
| ឃិែ,  |  |  |  |  |

48. Since /pəɑ/ has no 1st series counterpart, the /museqkətoən/ () is also used to convert 1st series /baa/ to /paa/. Transcribe and pronounce the following:     

A. baa, paa, bəy, pəy, bou, pou, bei, pei

49. Now write the above syllables in Cambodian script.

50. The consonant /f/ is represented by the symbol  plus the subscript form of :  /faa/. It belongs to the 1st series unless converted by use of the /trəysap/:  /fəɑ/.  in some words is pronounced like : /waa/. In some words  plus the subscript form of  ( /maa/) occurs instead of  as the 1st series counterpart of  ; likewise in some words  plus the subscript form of  ( /naa/) is used instead of  as the 1st series counterpart of  , and  plus the subscript form of  ( /laa/) occurs instead of  as the 1st series counterpart of  . Transcribe and pronounce the following:

A. faa, fei, fiə, fii, maa, maa, naa, naa, laa, laa

51. The following chart shows both the 1st and 2nd series representations for each of the 18 consonants shown in the Phonological Summary on page 87 as well as for the clusters kh, ch, th, and kh, totaling fifty different consonant representations in Cambodian. Rare symbols are enclosed in parentheses. Study the chart, then cover the 2nd series column with a sheet of paper and supply the 2nd series counterparts of the symbols in the 1st series column. Next cover the 1st series column and reproduce the 1st series counterparts of the symbols in the 2nd series.

| Consonant | 1st Series | | 2nd Series | |
|-----------|------------|------|------------|------|
| | Symbol | Name | Symbol | Name |
| 1. k | ក | kaa | ក | kɔɔ |
| 2. kh | ខ | khaa | ខ | khɔɔ |
| 3. ŋ | ឯ | ŋaa | ឯ | ŋɔɔ |
| 4. c | ច | caa | ច | cɔɔ |
| 5. ch | ឆ | chaa | ឆ | chɔɔ |
| 6. ñ | ឃ | ñaa | ឃ | ñɔɔ |
| 7. d | ធម៌ | daa | ធម៌ | dɔɔ |
| 8. t | ត | taa | ត | tɔɔ |
| 9. th | ធម៌ (ឃិ) | thaa | ធម៌ | thɔɔ |
| | (ឃ) | thaa | (ឃិ) | thɔɔ |
| 10. n | ឃ (ឃិ) | naa | ឃ | nɔɔ |
| 11. b | ឃ | baa | (ឃិ) | bɔɔ |
| 12. p | ឃ | paa | ឃ | pɔɔ |
| 13. ph | ឃ | phaa | ឃ | phɔɔ |

| | | 1st Series | | 2nd Series | |
|-----------|-----------|------------|-------|------------|------|
| Consonant | Symbol | Name | | Symbol | Name |
| 14. m | မှု (မှု) | maa | | မှု | maa |
| 15. y | ယှု | yaa | | ယှု | yaay |
| 16. r | ရှု | raa | | ရှု | raay |
| 17. l | လှု (လှု) | laa | | လှု | laay |
| 18. w | သှု (သှု) | waa | | သှု | waay |
| 19. s | ဆှု | saa | (ဆှု) | (ဆှု) | saay |
| 20. h | ဟှု | haa | (ဟှု) | (ဟှု) | haay |
| 21. f | ဖှု | faa | (ဖှု) | (ဖှု) | faay |
| 22. q | ခှု | qaa | (ခှု) | (ခှု) | qaay |

IV. FINAL CONSONANTS

52. According to the Phonological Summary, what consonants occur in final position in Cambodian syllables?
- A. p, t, c, k, q, h, m, n, ñ, ɳ, w, y, and l
53. What consonants never occur finally?
- A. b, d, f, s, and r
54. Nevertheless, almost all the consonant symbols are used to represent final consonants in Cambodian words, so there is much more redundancy in the representation of final consonants than in initial consonants. Although many words are spelled with a final ရ, it is not pronounced. However, it sometimes serves to distinguish orthographically between homonyms (see Part One, III, D). Transcribe and pronounce the following:

ရှု ရှု

ရှု ရှု

ရှု ရှု

- A. kaa, kaa, kuu, kuu, pii, pii

55. The final stops /p, t, c, k, q/ may each be represented by a variety of symbols. Any Labial stop symbol (nasals are continuants and not stops) occur-

ring in final position represents final /-p/, although ပြု is by far the most common representation of final /-p/. (Consult the chart in Exercise 37.) Transcribe and pronounce the following:

တာပါ တာပေ ဆာပါ ရာတေ ဟာလေ

A. taap, taap, saap, phiəp, liəp

56. Any Retroflex or Dental stop symbol in final position represents final /-t/, although တဲ့ is the most common. Transcribe and pronounce the following:

ဘာတဲ့ ဗာမဲ့ ကာဒဲ့ ဗာဖဲ့ နှူးတဲ့ ရာစဲ့ အာစဲ့ ဗာနဲ့ ဗာတဲ့

A. caat, baat, kaat, baat, kuut, kiət, maat, saat, baat

57. Any Palatal stop symbol in final position represents final /-c/; only ခဲ့ and ခဲ့း occur. Transcribe and pronounce the following:

ခဲ့ဖဲ့ ခဲ့ခဲ့ ရာခဲ့ ရာခဲ့း ဤခဲ့

A. touc, qaac, riəc, kaac, puuc

58. After one of the vowels /a, aa, ɔ, aa, eə, uə, iə, ɪə, uə/ any Velar stop symbol in final position represents final /-q/. Transcribe and pronounce:

ရာဂဲ နာဂဲ ဖာ်ဂဲ ဗာဂဲ ပာဂဲ

A. kaaq, niəq, miəq, caaq, saaq

59. After any other vowel, any Velar stop symbol represents final /-k/. Transcribe and pronounce the following:

ရီးဂဲ ရီးကဲ ဒီးမာ်ဂဲ ဒီးလော် ရီးဂဲ ဒီးကဲ

A. ciik, riik, meek, leek, rɔɔk, mɔɔk

60. Transcribe and pronounce the following syllables:

ဗိုးဂဲ ဗိုးကဲ ပိုးမာ် ဗိုးကဲ့ ဗျာ်ဂဲ ပိုးကဲ ရိုးကဲ

A. couk, cuuk, ciəq, paaq, yɔɔk, ɲiəq, reek

61. All the nasal symbols have the same values in final position as in initial

position, except that ဣ္း after — represents /-ŋ/ rather than /-ñ/. Transcribe and pronounce:

မာ်မား နာ်မား ပိုးမား ဗိုးမား ပိုးမား မာ်မား ပိုးမား ရိုးမား ဗိုးမား

A. caam, niəm, laan, maan, ciəŋ, tiəñ, miŋ, leen, riŋ, saañ

62. The continuant symbols ယ, ဉ်, and ၁ have the same values in final as in initial position. Transcribe and pronounce:

ပြောယ ကာ၏ နံ၁၍ ဆာ၁၍ ဒါ၏၏ ၇၅၁။ ၂၅၁။ ၃၅၁။ ၄၅၁။ ၅၅၁။

- A. baay, kaal, qaaw, niəy, peel, liiw, coul

63. ၏ in final position represents final /-h/. Transcribe and pronounce:

ဂျာ၏ မြာ၏ ဖွှာ၏ ဒီ၏၏ ကု၏၏

- A. saah, miəh, muuh, ceeh, kuuh

V. VOWELS

You have already learned that the value (or pronunciation) of a vowel symbol depends on the series to which the preceding consonant belongs. The following chart shows the 1st and 2nd series values of the six vowel symbolizations (including the lack of a vowel symbol, which indicates the inherent vowel) that you have encountered so far.

| Symbolization | 1st Series Value | 2nd Series Value |
|---------------|------------------|------------------|
| ∅ | aa | oo |
| - | aa | iə |
| ဦ | ey | ii |
| ဤ | əi | ɪi |
| ဥ | ou | uu |
| ဧ | ei | ee |

The value of a vowel symbolization can be affected also by the final consonant symbol, and by various diacritical marks. In fact, it is the total configuration of symbols that determines the pronunciation of a syllable in the Cambodian writing system. Fortunately, there is a finite number of such configurations, and with practice you will learn to recognize them easily. Furthermore, the pronunciation of the configurations is, with few exceptions, regular and predictable. Cambodian is much more regular in this respect than the English spelling system, where a given spelling may represent several pronunciations, as in rough, bough, cough, slough, etc. There is a certain amount of sound-to-symbol redundancy, however, where a given sound may be represented in several different ways, parallel with

the “so, sew, sow,” situation in English. In other words, it is easier to read Cambodian correctly than to write it correctly. In this section, the value of a vowel symbolization when final in the syllable is given first, followed by its values as modified by final consonants and diacritics, if different.

64. You have learned that when a syllable is spelled with a single consonant, or with an initial consonant symbol and an unmodified final consonant symbol, it is pronounced with the inherent vowel; e.g. កា /kaa/, កាត /kaat/, កែ /koo/, កូត /koot/. However, when the final symbol carries a /bantaq/ (—) or ‘shortener’, the syllable is pronounced with its “short inherent” value, which in the 1st series is /a/. Transcribe and pronounce:

កាត កាត' ចាប ចាប' បាន បាន' សាន សាន'

- A. kaat, kat, caap, cap, baan, ban, qah

65. When the initial consonant symbol belongs to the 2nd series, the short inherent vowel is /u/ before any Labial consonant symbol (ច និ ល ន ច). Transcribe and pronounce: គុប គុប' នុច នុច' ូរ ូរ'

- A. coop, cup, toom, tum, loop, lup

66. Now write the above syllables in Cambodian script.

67. When the final consonant symbol is any consonant symbol other than a Labial, the vowel is /uə/. Transcribe and pronounce:

កូត កូត' យុល យុល' ូរ ូរ' (see Exercise 59) ូរិត'

- A. koot, kuət, yuəl, yuəl, look, luəq, puəh

68. Write the above syllables in Cambodian script.

69. Transcribe and pronounce: ធម៌ ធម៌' ុន ុន' ុក ុក' ុន ុន'

- A. cup, cuəl, lup, luəq, tup, tuən

70. Transcribe and pronounce:

ចាប ចាប' ធម៌ ធម៌' ុន ុន' ុក ុក' ុក ុក'

- A. caap, cap, coop, cup, cuəq, kaaq, kaaq, look, luəq

71. Write the above syllables in Cambodian script.

72. When the final consonant symbol of a syllable spelled with —→ carries

the /bantaq/, the 1st series pronunciation is /a/. Transcribe and pronounce: ଗାନ୍ଧୀ ଗାନ୍ଧୀ' ଛାନ୍ଦ ଛାନ୍ଦ' ଧାନ୍ତ ଧାନ୍ତ' ଛାନ୍ତ ଛାନ୍ତ' Is

- A. kaat, kat, caah, cah, baat, bat, caaq, caq

73. Write the syllables in 72-A in Cambodian script.

74. The 2nd series value of -ঁ- is /eə/ before any Velar Stop symbol (ঁ, ং, ঃ, ঁঁ) and /oə/ before any other consonant symbol. (Consult Exercise 59 for the value of Velar stop symbols after /eə/.)

Transcribe and pronounce: සිංහ සිංහ' ස්ලයෝ ස්ලයෝ' මාස් මාස්'

- A. ciəq, ceəq, miəq, meəq, piəq, peəq

75. Write the above syllables in Cambodian script.

76. Transcribe and pronounce (refer to Exercise 74):

ଶୀଘ୍ର ଶୀଘ୍ର' ଫାନ୍ ଫାନ୍' ଫାନ୍ ଫାନ୍'

- A. ki t, ko t, ti n, to n, mi n, mo n

77. Transcribe and pronounce: හැස් ගාන් හැස් ගාන් සිස් සින්

- A. teĕq, toĕn, peĕq, poĕn, ceĕq, coĕn

- 78. Transcribe and pronounce:**

କାଳ କାଳ' ଲାଗ୍ ଲାଗ୍ ଲାନ୍ ଲାନ୍ ଲାଲ୍ ଲାଲ୍ ପାତ୍ ପାତ୍ ପିତ୍ ପିତ୍

- A. kaaq, kaq, piəq, pȇeq, pȏen, phiəp, phȏep, chap, cȏep, cap

79. Write the syllables in 78-A in Cambodian script.

80. The vowel symbol — is called /sraq qeq/. Notice that it differs from

— /əy/ only in the absence of an upright stroke. When it occurs in a stressed syllable with no written final consonant, it represents /-eq/ in the 1st series and /-iq/ in the 2nd series. (A stressed syllable is any syllable in isolation, or any word-final syllable.) Transcribe and pronounce:

କାନ୍ତିର ପାଦର ପାଦର ପାଦର ପାଦର ପାଦର
ପାଦର ପାଦର ପାଦର ପାଦର ପାଦର ପାଦର

- #### A. qəy, qeq, qii, qiq, təy, teq, yii, yiq

81. When it occurs in an unstressed syllable with no written final consonant,

- represents /e/ in the 1st series and /i/ in the 2nd series. Transcribe and pronounce: ကိုယာ နမာ

A. keriyaa, nitiən

82. When - is followed in the same syllable by a written final consonant, its 1st series value is /ə/ and its 2nd series value is /i/. Transcribe and pronounce: ပေါ် ငါး ပေါ် တဲ့ ငါး ပေါ် ပေါ် တဲ့ ငါး ပေါ်

A. cət, cɪt, cən, kɪt, ciik, pɪt, bət, təc, tiñ

83. When - precedes a final -လှုံ, it has the same value as - : /əy/ in the 1st series and /ii/ in the 2nd series (this spelling occurs in only a few words). Transcribe and pronounce: တဲ့လှုံ စိုလှုံ

A. təy, tii

84. The symbol - is called /sraq qəq/. It occurs only in syllables having a written final consonant. Its pronunciation is identical with that of - before a final consonant, i.e. /ə/ in the 1st series and /i/ in the 2nd series. Transcribe and pronounce: ငါး အဲ ပေါ် ငါး ပါး ဖော် ပေါ် ငါး ငါး

A. dək, t̥ik, cək, n̥ik, y̥iit, məin, phək

85. Write the following syllables two ways: cət, cɪt, həp, miñ

A. ပေါ် ပေါ် ငါး ငါး ပါး ပါး ပေါ် ပေါ်

86. The vowel symbol - is called /sraq qoq/. When it occurs in stressed syllables with no written final consonant, it represents /-oq/ in the 1st series and /-uq/ in the 2nd series. (An exception to this is the word for 'table' စီ /tok/ which is pronounced with a final unwritten /-k/.) Transcribe and pronounce: ဗီ ဗီ ဗီ ဗီ

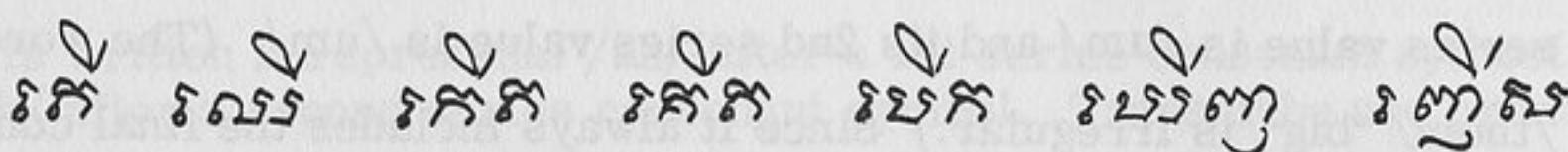
A. coq, tuq, thoq, muq

87. In all other environments - represents /o/ in the 1st series and /u/ in the 2nd series. Transcribe and pronounce:

ရှုံး ရှုံး ရှုံး ရှုံး ရှုံး ရှုံး ရှုံး ရှုံး

- A. kon, kun, phot, thun, qoh, lup, koun, muul
88. You have now met two ways to represent the finals /-up/ and /-um/ (see Exercise 65). Write the following syllables two ways: cup, cum, lup, lum
- A. ကုပ် ကုမ် လုပ် လုမ် လူပ် လူမ်
89. There are three vowel symbols whose values are unaffected by the series of the initial consonant. They are ဗ /sraq quə/, ဃ /sraq qɪə/, and ဃ-္မ /sraq qiə/. Their values are /uə/, /iə/, and /iə/ respectively. Transcribe and pronounce:
- ကူး ကူး ရူး ဗီး ရဲ့န် ရို့န် ရှု့န် ရဲ့န်
- A. kuə, kuə, ciə, ciə, tiən, tiən, riəŋ, biəŋ
90. Write each of the following syllables two ways: chuən, khɪəŋ, cuən
- A. ဗျား လျား ရှုံးန် ရှုံးန် ဗျား ဗိုးန်
91. Notice that the value of ဃ-္မ is the same as the 2nd series value of -္မ. Write the following syllables three ways: tiən, kiət, phiəŋ
- A. ရဲ့န် ရို့န် ရား ရှု့န် ရှု့န် ရား ရှု့န် ရှု့န် ရား
92. In Exercise 29 you learned that the values of ဃ- are /ei/ and /ee/. However, when ဃ- occurs in a syllable whose final consonant symbol is a Palatal symbol (ဗ , ဃ , ဗီ , လျေ , ဗြေ), its 1st series value is /ə/ and its 2nd series value is /i/. Transcribe and pronounce:
- မေ့ဗ် ခေါ်ဗ် ရို့ဗ် ရဲ့ဗ် ရို့ဗ် ရှု့ဗ်
- A. məc, p̥iç, cəñ, piñ, ceik, meek
93. Thus the three vowel symbols ဗ, ဃ, and ဃ- are all pronounced alike before a Palatal final. Write the following syllables three ways: təc, p̥iç, cəñ, piñ
- ရှု့ဗ် ရှု့ဗ် ရှု့ဗ် ရှု့ဗ် ရှု့ဗ် ရှု့ဗ်
 ရှု့ဗ် ရှု့ဗ် ရှု့ဗ် ရှု့ဗ် ရှု့ဗ် ရှု့ဗ်

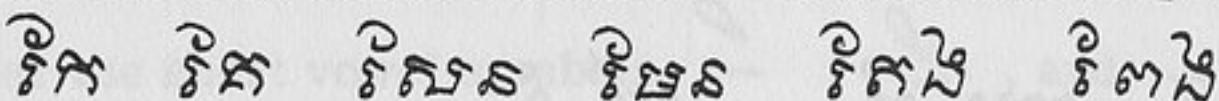
94. The vowel symbol  is called /sraq qaə/. Its value is /aə/ in the 1st series and /əə/ in the 2nd series. Transcribe and pronounce:



- A. taə, chəə, kaət, kəət, baək, khəəñ, ñəəh

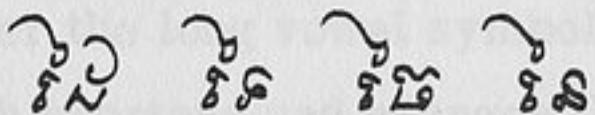
95. Write the above syllables in Cambodian script.

96. The vowel symbol  is called /sraq qae/. Its value is /ae/ in the 1st series and /ɛɛ/ in the 2nd series. Transcribe and pronounce:



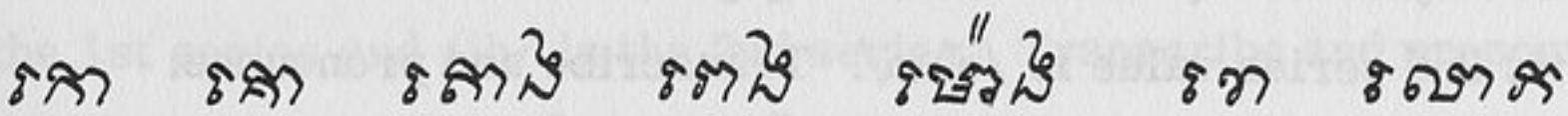
- A. kae, kɛɛ, saen, mɛen, taej, pɛen

97. The vowel symbol  is called /sraq qay/. It must be carefully distinguished in both pronunciation and writing from  above. Its 1st series value is /-ay/, and its 2nd series value is /-iy/. It is never followed in the same syllable by a final consonant symbol since it represents both a vowel and a final consonant /-y/. Transcribe and pronounce:



- A. day, tiy, cay, niy

98. The vowel symbol  is called /sraq qao/. Its values are /ao/ in the 1st series and /oo/ in the 2nd series. Transcribe and pronounce:

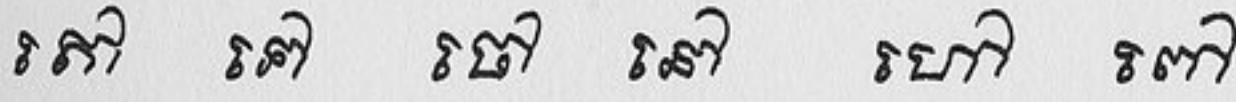


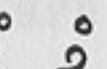
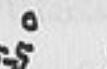
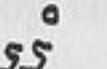
- A. kao, koo, taoj, rooŋ, maoj, khao, loop

99. Write the syllables in 98-A above in Cambodian script.

100. The vowel symbol  is called /sraq qaw/. Its 1st series value is /aw/ and its 2nd series value is /iw/. Like  in 97 above, it already includes a final consonant, so it is never followed by a written final consonant symbol. It is distinguished from  only by an additional stroke at the top right. Transcribe and pronounce:

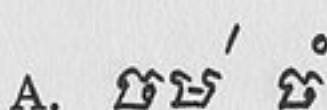
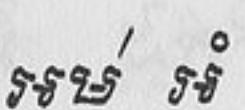
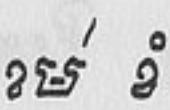
- A. taw, tiw, caw, niw, haw, piw



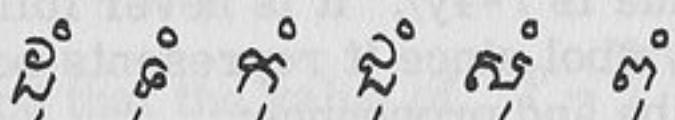
101. The symbol  is a diacritic whose formal name is /niqkəhət/, but which is commonly treated as a vowel symbol with the name /sraq qam/. Its 1st series value is /am/ and its 2nd series value is /um/. (The word  /thom/ 'big' is irregular.) Since it always includes the final consonant /-m/, it is never followed in the same syllable by a written final consonant symbol. Transcribe and pronounce:     

A. cam, cum, kham, tum, qam, khum

102. Consult Exercise 64, then write the following syllables two ways: cam, qam, kham

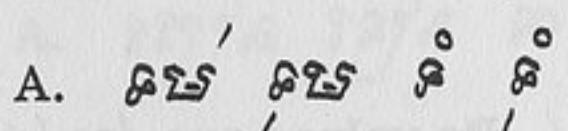
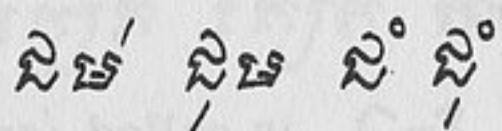
A.   

103. When  is combined with  to form  it is called /sraq qom/. Its 1st series value is /om/ and its 2nd series value is identical with the 2nd series value of  above. Transcribe and pronounce:



A. dom, tum, kom, cum, som, pum

104. Consult Exercise 87, then write the following syllables 4 ways: tum, cum.

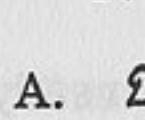
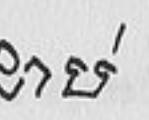
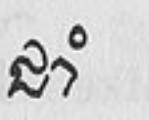
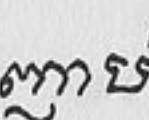
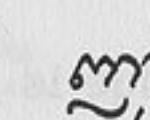
A.  

105. The symbol  is called /sraq qam/. Its 1st series value is /am/ and its 2nd series value is /oəm/. Transcribe and pronounce:

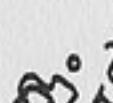
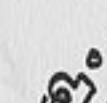
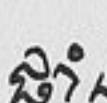
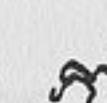


A. cam, coəm, kam, koəm, ñam, ñoəm

106. Consult Exercises 72 and 74, then write the following syllables: cap, cam, coəp, coəm, ñoəp, ñam

A.     

107. The configuration   is called /sraq qam ɪəŋ/. Its 1st series value is /aŋ/; its 2nd series value is /eəŋ/. Transcribe and pronounce:

A. tan, teən, phan, pheən

108. The symbol —^o is called /reəhmuk/ or /sraq qah/. When no vowel symbol is written it represents /ah/ after a 1st series consonant symbol and /eəh/ after a second series consonant symbol. Transcribe and pronounce:

ତାନ୍ ତେନ୍ ଫାନ୍ ଫେନ୍

A. tah, teəh, pah, pheəh

109. Consult Exercise 72, then write the following syllables two ways: cah, sah

A. କାହଁ ଚାହଁ ନାହଁ ନିହଁ

110. After the short vowel symbols —, —, and —, the /reəhmuk/ represents final /-h/ alone. The configurations —^o, —^o, and —^o are sometimes referred to as /sraq qeh/, /sraq qəh/, and /sraq qoh/ respectively. Transcribe and pronounce: ଚେହଁ ଚିହଁ କେହଁ ପିହଁ ତେହଁ ନୀହଁ

A. ceh, cih, kəh, pih, coh, puuh

111. After the long vowel symbols ଶ୍ରୀ- , ଶ୍ରୀ- , and ଶ୍ରୀ- , the /reəhmuk/ both shortens and changes the value of the vowel symbol. (An exception is the irregular spelling କାହଁ⁺ /caah/ ‘polite response particle used by women’ which is usually pronounced long in spite of a following /reəhmuk/.) The configuration ଶ୍ରୀ-^o is sometimes referred to as /sraq qeh/. It is /eh/ in the 1st series and /ih/ in the 2nd series. Transcribe and pronounce:

ଶ୍ରୀନିଃ ଶ୍ରୀନିଃ ଶ୍ରୀନିଃ ଶ୍ରୀନିଃ

A. seh, nih, pheh, cih

112. Consult Exercise 110, then write the following syllables two ways: ceh, cih, neh, nih

A. ଚେହଁ ଚିହଁ ନୀହଁ ନିହଁ ଗୋହଁ ଗିହଁ ତେହଁ ନୀହଁ

113. The configuration ଶ୍ରୀ-ରୁଙ୍ଗୁଃ is sometimes called /sraq qah/. Its 1st series value is /ah/ and its 2nd series value is /uəh/. (An exception is the irregular spelling ଶ୍ରୀନୁହଁ /nuh/ ‘that, there’.) Transcribe and pronounce:

ଶ୍ରୀନାହଁ ଶ୍ରୀନିହଁ ଶ୍ରୀଦୁହଁ ଶ୍ରୀନୁହଁ ଶ୍ରୀନିହଁ

- A. kah, kuəh, bah, puəh, sah, luəh

114. Consult Exercises 64 and 67, then write the following syllables two ways:
kah, kuəh, sah, puəh

A. កេហ៍ កុេហ៍ សេហ៍ លុេហ៍

115. The configurations $\overset{\circ}{\text{g}} - \overset{\circ}{\text{a}}$ and $\overset{\circ}{\text{g}} - \overset{\circ}{\text{e}}$ are sometimes called /sraq qəh/ and /sraq qeh/ respectively. They occur only in the 1st series, and then only rarely. Their 1st series values are /əh/ and /eh/. Write, transcribe, and pronounce: កេហ៍ កុេហ៍

A. កេហ៍ kəh, កុេហ៍ keh

116. In Exercises 58 and 59 it was pointed out that final Velar stop symbols (កុា, កុា, កុា, កុា) represent final /-q/ after the vowels /a, aa, ə, əə, eə, uə, iə, əə, uə/, and final /-k/ after all other vowels. Transcribe and pronounce the following syllables:

ចិក ភិក និក តិក តាក ឆិក ឆាក លុេក លុេក លុេក
នឹក មុេក តុេក តាតុេក លុេក លុេក មុេក តុេក

A. ciik, phiəq, nīk, ceik, caaq, caq, rook, luəq, neəq, bouk, tuuk, kiəq, muəq, ləək, meek, saaq, saq, moək, niəq

117. The symbol $- \overset{\circ}{\text{e}} -$ is called /sanyook-saññaa/ and is treated as a diacritic in Cambodian textbooks, but it functions like a vowel. Its value in most environments is the same as the configuration $- \overset{\circ}{\text{a}} -$; i.e. /a/ in the 1st series and /eə/ or /oə/ in the 2nd series (see Exercises 72–78). Transcribe and pronounce: សិក និក សិក លិក សិក ទិក

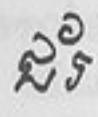
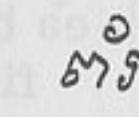
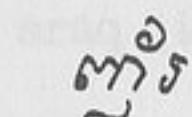
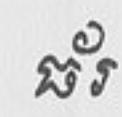
A. saq, toəp, sap, leəq, saŋ, weəŋ

118. When the /sanyook-saññaa/ occurs in the environment $- \overset{\circ}{\text{e}} \text{ff}$, its value is /a/ in the 1st series and /i/ in the 2nd series. Transcribe and pronounce: សិប៉ា និប៉ា ជិប៉ា និប៉ា

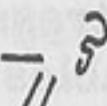
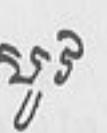
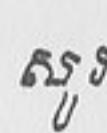
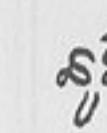
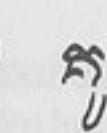
A. phay, phiy, cay, ciy

119. In the environment $- \overset{\circ}{\text{e}} \text{ff}$, the /sanyook-saññaa/ represents the diphthong

/œ/ in the 2nd series. (The combination apparently doesn't occur after 1st series initial consonant symbols.) Transcribe and pronounce:

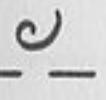
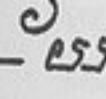
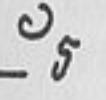
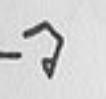
   

A. cœ, œœ, ŋœ, thœ

120. The configuration  is pronounced /əw/ in the 1st series and /iœ/ in the 2nd series. Transcribe and pronounce:    

A. səw, sou, niœ, kuu

121. You have now been introduced to all the configurations by which vowels are represented in the Cambodian writing system. In the following chart, the 1st and 2nd series values of each vowel symbol, as well as each configuration by which vowels are represented, are shown in the sequence in which they occur in the standard Cambodian dictionary. Each vowel symbol is followed by its name. Notice that the name of a symbol or configuration may be different from its actual value in either series.
- Practice reciting the names of the vowel symbols until you can recite them in the proper sequence without referring to the chart.
 - Cover the 1st and 2nd series values of the symbols and reproduce the 1st series values by reference only to the symbols.
 - Cover the 2nd series values of the symbols and reproduce them by reference only to the symbols.

| Symbol | Name | Exercise | 1st Series Value | 2nd Series Value |
|--|----------------|----------|------------------|---|
| 1. — | sraq qaa | 3 | aa | œ |
| 2. — — | | 64, 65 | a | u before Labial finals uœ elsewhere |
| 3. —  | sanyook-saññaa | 117 | a | œœ before Velar finals œœ elsewhere (except below) |
| 4. —  | | 118 | ay | iœ |
| 5. —  | | 119 | | œ |
| 6. —  | sraq qaa | 9 | aa | iœ |

| Symbol | Name | Exercise | 1st Series Value | 2nd Series Value |
|---|----------|----------|---------------------------|--|
| 7.  | | 72, 74 | a | ěə before Velar finals |
| | | 74 | | őə elsewhere |
| 8.  | sraq qeq | 80 | eq in stressed syllables | iq in stressed syllables |
| | | 81 | e in unstressed syllables | i in unstressed syllables |
| 9.  -  | | 87 | ə | ɨ (except before ) |
| 10.  -  | | 83 | əy | ii |
| 11.  :  | | 110 | eh | ih |
| 12.  -  | sraq qəy | 14 | əy | ii |
| 13.  -  | sraq qəq | 84 | ə | ɨ |
| 14.  :  | | 110 | əh | ɨh |
| 15.  : | sraq qəi | 33 | əɨ | ɨi |
| 16.  | sraq qoq | 86 | oq in stressed syllables | uq in stressed syllables |
| | | 87 | o in unstressed syllables | u in unstressed syllables |
| 17.  -  | | 87 | o | u |
| 18.  : | | 110 | oh | uh |
| 19.  | sraq ou | 20 | ou | uu |
| 20.  : | | 120 | əw | ɨw |
| 21.  -  | sraq quə | 89 | uə | uə |
| 22.  -  | sraq qaə | 94 | aə | əə |
| 23.  :  | | 115 | əh | |

| Symbol | Name | Exercise | 1st Series Value | 2nd Series Value |
|--------|----------|----------|---------------------|---------------------|
| 24. | sraq qie | 89 | iə | iə |
| 25. | sraq qie | 89 | iə | iə |
| 26. | sraq qei | 29 | ei | ee |
| 27. | | 92 | e (before Palatals) | i (before Palatals) |
| 28. | | 111 | eh | ih |
| 29. | sraq qae | 96 | ae | ɛɛ |
| 30. | | 115 | eh | |
| 31. | sraq qay | 97 | ay | iy |
| 32. | sraq qao | 98 | ao | oo |
| 33. | | 113 | ah | uəh |
| 34. | sraq qaw | 100 | aw | iw |
| 35. | sraq qom | 103 | om | um |
| 36. | sraq qam | 101 | am | um |
| 37. | sraq qam | 105 | am | oəm |
| 38. | | 107 | aj | eəj |
| 39. | sraq qah | 108 | ah | eəh |

122. If you have successfully mastered the preceding 121 exercises, you are now prepared to read any regular single-initial monosyllabic word in the Cambodian language. The following list includes every configuration by which vowels are regularly represented in the Cambodian writing system. Most of the examples in the list are actual words in the language, and are followed by their definitions as a matter of interest. They are listed in the order in which they would occur in the standard Cambodian dictionary. Each example is followed by the number of the exercise in which that particular vowel representation was presented. Transcribe and pronounce each word. When

When you have completed the list check your answers. Then go back and review the exercises in which the syllables you have transcribed incorrectly were introduced.

- | | | | |
|----------------|------------------------|---------------|-------------------|
| 1. କର୍ମ | (9) work | 20. ଜୀବିତ | (105) to remember |
| 2. ମୁଦ୍ରା | (87) movie | 21. ପାଇଁ | (74) attached |
| 3. ଜଗନ୍ନାଥ | (94) be born | 22. ଚିନ୍ତା | (80) |
| 4. ଶର୍ଷା | (115) | 23. ଚିନ୍ହଃ | (110) to ride |
| 5. ଶର୍ଷାଃ | (115) a kind of animal | 24. ଚିନ୍ତା | (14) to dig |
| 6. ଶର୍ଷାଃ | (113) island | 25. ଚିହ୍ନାତ୍ତ | (89) to help |
| 7. ଶର୍ଷା | (98) trousers | 26. ଚିହ୍ନାତ୍ତ | (89) to believe |
| 8. ଚିତ୍ତ | (101) to try (to) | 27. ଚିତ୍ତିତ୍ତ | (105) bruised |
| 9. ଶର୍ଷା | (98) ox, cow | 28. ଚିତ୍ତ | (33) sick |
| 10. ଶର୍ଷାତ୍ମ୍କ | (94) to see | 29. ଚିତ୍ତିତ୍ତ | (105) to eat |
| 11. ଶର୍ଷାତ୍ମ୍କ | (89) | 30. ଚିହ୍ନାତ୍ତ | (83) |
| 12. ଚାନ୍ଦ | (3) spade | 31. ଚିତ୍ତା | (84) to transport |
| 13. ଚାନ୍ଦା | (64) to finish | 32. ଚିତ୍ତ | (33) fallow |
| 14. ଚାନ୍ଦା | (118) | 33. ଚିତ୍ତି | (97) hand |
| 15. ଚାନ୍ଦା | (72) to catch | 34. ଚିତ୍ତା | (103) piece |
| 16. ଚାନ୍ଦା | (110) to descend | 35. ଚିତ୍ତ | (80) |
| 17. ଚାନ୍ଦା | (20) to enter | 36. ଚାନ୍ଦା | (100) to ridicule |
| 18. ଶର୍ଷା | (29) banana | 37. ଚାନ୍ଦା | (89) dwarfed |
| 19. ଶର୍ଷାତ୍ମ୍କ | (92) to exit | 38. ଚାନ୍ଦା | (96) but |

| | | | | | |
|-----|-------------|--------------------|-----|-------------|----------------|
| 39. | ଶ୍ରୀଷ୍ଟ | (107) to establish | 60. | ଶ୍ରୀ | (48) flute |
| 40. | ଶ୍ରୀ | (86) | 61. | ଶ୍ରୀସ୍ | (108) to patch |
| 41. | ଶ୍ରୀମ୍ | (117) army | 62. | ଶ୍ରୀର୍ଗ | (119) color |
| 42. | ଶ୍ରୀବ୍ରୁଦ୍ଧ | (82) to buy | 63. | ଶ୍ରୀ | (14) from |
| 43. | ଶ୍ରୀଜ୍ଵାର | (84) water | 64. | ଶ୍ରୀଦ୍ଵିତୀୟ | (14) two |
| 44. | ଶ୍ରୀକୃତ୍ତି | (20) boat | 65. | ଶ୍ରୀକୃତ୍ତିଃ | (110) to boil |
| 45. | ଶ୍ରୀକୃତ୍ତିଃ | (100) to go | 66. | ଶ୍ରୀକୃତ୍ତିଃ | (92) jewel |
| 46. | ଶ୍ରୀକୃତ୍ତିଃ | (103) ripe | 67. | ଶ୍ରୀକୃତ୍ତିଃ | (92) full |
| 47. | ଶ୍ରୀକୃତ୍ତିଃ | (107) all | 68. | ଶ୍ରୀକୃତ୍ତିଃ | (96) cup |
| 48. | ଶ୍ରୀକୃତ୍ତିଃ | (108) to slap | 69. | ଶ୍ରୀକୃତ୍ତିଃ | (113) stomach |
| 49. | ଶ୍ରୀକୃତ୍ତିଃ | (74) person | 70. | ଶ୍ରୀକୃତ୍ତିଃ | (118) to fear |
| 50. | ଶ୍ରୀକୃତ୍ତିଃ | (10) dragon | 71. | ଶ୍ରୀକୃତ୍ତିଃ | (10) to have |
| 51. | ଶ୍ରୀକୃତ୍ତିଃ | (83) | 72. | ଶ୍ରୀକୃତ୍ତିଃ | (87) face |
| 52. | ଶ୍ରୀକୃତ୍ତିଃ | (110) this | 73. | ଶ୍ରୀକୃତ୍ତିଃ | (29) sky |
| 53. | ଶ୍ରୀକୃତ୍ତିଃ | (97) of | 74. | ଶ୍ରୀକୃତ୍ତିଃ | (92) why |
| 54. | ଶ୍ରୀକୃତ୍ତିଃ | (9) rice | 75. | ଶ୍ରୀକୃତ୍ତିଃ | (4) to take |
| 55. | ଶ୍ରୀକୃତ୍ତିଃ | (82) to close | 76. | ଶ୍ରୀକୃତ୍ତିଃ | (65) evening |
| 56. | ଶ୍ରୀକୃତ୍ତିଃ | (14) three | 77. | ଶ୍ରୀକୃତ୍ତିଃ | (86) |
| 57. | ଶ୍ରୀକୃତ୍ତିଃ | (45) | 78. | ଶ୍ରୀକୃତ୍ତିଃ | (101) to cry |
| 58. | ଶ୍ରୀକୃତ୍ତିଃ | (89) four | 79. | ଶ୍ରୀକୃତ୍ତିଃ | (89) to study |
| 59. | ଶ୍ରୀକୃତ୍ତିଃ | (89) cards | 80. | ଶ୍ରୀକୃତ୍ତିଃ | (67) to sell |

| | | | | | |
|-----|------------|---------------|-----|---------|---------------|
| 81. | សោច | (117) gum-lac | 85. | ស្រែវេះ | (111) horse |
| 82. | សារ៉ា | (64) hair | 86. | សុញ្ញ | (100) to call |
| 83. | សារ៉ា ៩ | (117) word | 87. | សិះ៖ | (110) |
| 84. | សុទិ | (120) | 88. | សិះៗ | (110) |

VI. THE INDEPENDENT VOWEL SYMBOLS

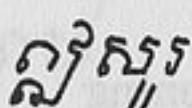
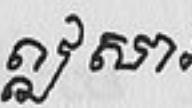
Besides the "dependent" vowel symbols already discussed that always accompany an initial consonant symbol, there are 14 independent vowel symbols called /sraq piñ tuə/ 'self-sufficient vowels', which occur in initial position in some words, and which include an initial consonant, usually /q-/. Since these symbols occur in relatively few words, Cambodians themselves disagree on their use and pronunciation. Some independent vowel symbols, however, occur in very common words, such as 'to give', 'father', and 'bamboo', so it is necessary to learn them for reading even simple materials. The short independent vowel symbols must be followed by a final consonant symbol; the long vowel symbols may stand alone.

123. The symbol  is called /sraq qeq piñ tuə/, 'the independent vowel /qeq/'.

In most words it is equivalent to , although in some words it may be pronounced  or . Transcribe and pronounce the following syllables:  () ,  () ,  () 'now'.

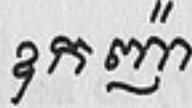
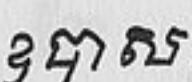
A. qət, qən, qəyləw

124. The symbol  is called /sraq qəy piñ tuə/. It occurs in only a few words, in which it has the same value as . Transcribe and pronounce:

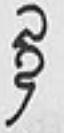
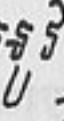
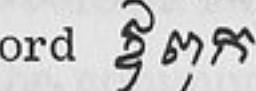
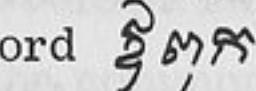
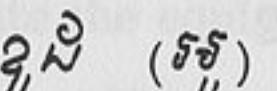
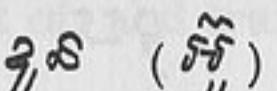
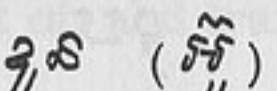
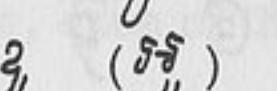
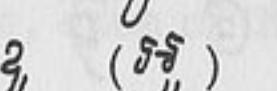
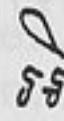
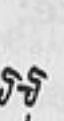
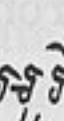
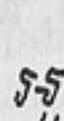
 Siva  Northeast

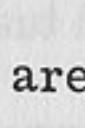
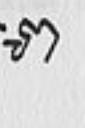
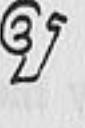
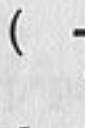
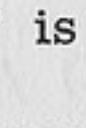
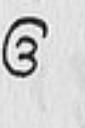
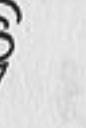
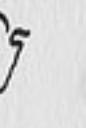
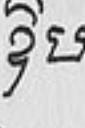
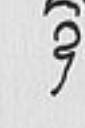
A. qəysou, qəysaan

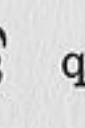
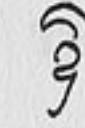
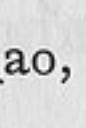
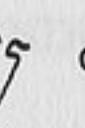
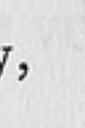
125. The symbol  is called /sraq qoq piñ tuə/. Its value in most words is equivalent to  , although in some words it may be pronounced  or  . Transcribe and pronounce:

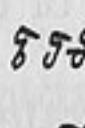
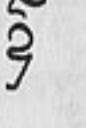
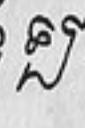
 () ,  () ,  ()

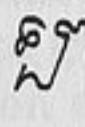
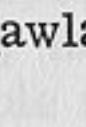
A. qokñaa, qup, qaobaasaq

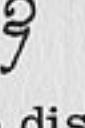
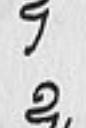
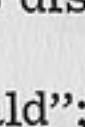
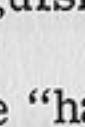
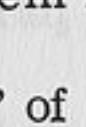
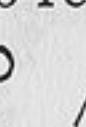
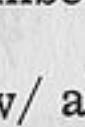
126. The symbol  /sraq qəw piñ tuə/ is equivalent to  and occurs in the word  'father'. Transcribe and pronounce:  
A. qəw, qəwpuk
127. The symbol  /sraq qou piñ tuə/ usually has the 1st series value  , but it may also have the 2nd series value  . Transcribe and pronounce:
 ()  ()  ()
A. qout, quun, qou
128. For each of the following independent vowel symbols, write the most common equivalent in Cambodian script:     
A.     
129. Write the independent vowel symbol for which each of the following is the commonest equivalent: qəw, qəy, qə-, qo-, qou
A.     
130. Write in Cambodian script two equivalents of each of the following:
  
A.   (or ),   (or ),  
131. The symbol  /sraq qae piñ tuə/ is always equivalent to  . Write, transcribe, and pronounce:    
A.  qae,  qae,  qae,  qaeiət
132. The symbol  /sraq qay piñ tuə/ is equivalent to  . Write, transcribe, and pronounce:  
A.  qay,  riiqay

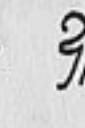
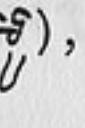
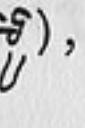
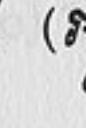
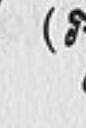
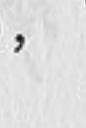
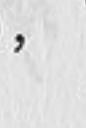
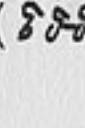
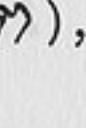
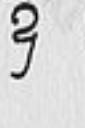
133. The two symbols  and  are both called /sraq qao piñ tuə/. They are both equivalent to  .  is the more common of the two;  occurs in the word  /qao/ ‘to give’ ( is the subscript form of  ; it does not normally represent a final consonant). Write, transcribe, and pronounce:     

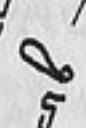
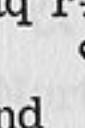
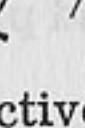
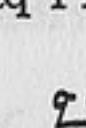
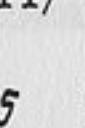
A.  qao,  qao,  qao,  qao,  qao

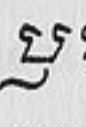
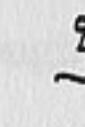
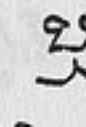
134. The symbol  /sraq qaw piñ tuə/ is equivalent to  . It is extremely rare. Write, transcribe, and pronounce:  

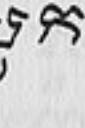
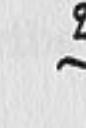
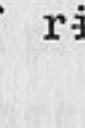
A.  qaw,  qawlaa

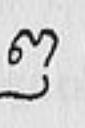
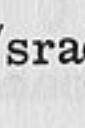
135. Notice that      all have the same base  . A good way to distinguish them is to remember that  /qo-/ and  /qu/ are “bald”; the “hair” of  /qəw/ attaches at the left, while that of  /ao/ and  /aw/ attaches at the right. Write each of the following symbols with its commonest equivalent:

A. () , () , () , () , ()

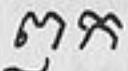
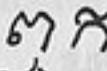
136. All of the preceding independent vowel symbols include the initial consonant /q-/. The symbols  /sraq rik/ and  /sraq riî/ include initial /r-/, and are equivalent to  and  respectively.  is the spelling for the common conjunction ‘or’.  is pronounced with a final (-k) only in its syllabary pronunciation; in actual words it is pronounced with the final consonant which is written. Write, transcribe, and pronounce:

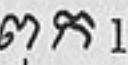
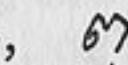
   

A.  rik,  rit,  riî,  riîk

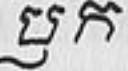
137. The symbols  /sraq lik/ and  /sraq liî/ include an initial /l-/

and are equivalent to  and  respectively.  is the spelling for the common word 'to hear'. Write, transcribe, and pronounce:

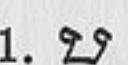
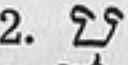
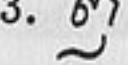
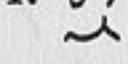
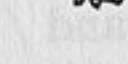
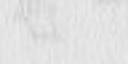
A. lik,  lii,  liik

138. Write the equivalent of, and transcribe, each of the following:

A.  rik,  ri,  riik,  lik,  lii,  liik

139. The following chart lists the independent vowel symbols in their dictionary order. (Words spelled with independent vowel symbols involving initial /q-/ immediately precede words spelled with equivalent vowel symbols under the initial consonant symbol —.) Words spelled with  and  follow all words spelled with initial —, and words spelled with  and  follow all words spelled with initial —.) Each symbol is followed by the number of the exercise in which it was introduced, its equivalent spelling, and its transcription. Cover the equivalent spelling and transcription columns with a sheet of paper and practice until you can write them from memory.

| <u>Symbol</u> | <u>Exercise</u> | <u>Equivalent Spelling</u> | <u>Transcription</u> |
|--|-----------------|---|----------------------|
| 1.  | 136 |  | ri- |
| 2.  | 136 |  | rii |
| 3.  | 137 |  | li- |
| 4.  | 137 |  | lii |
| 5.  | 123 |  | qe- |
| 6.  | 124 |  | qey |
| 7.  | 125 |  | qo- |
| 8.  | 127 |  | ou |

| <u>Symbol</u> | <u>Exercise</u> | <u>Equivalent Spelling</u> | <u>Transcription</u> |
|---------------|-----------------|----------------------------|----------------------|
| 9. ឃ | 126 | ឃេវ | qəw |
| 10. ឈ | 131 | ឈេវ | qae |
| 11. ឃ | 132 | ឃេវ | qay |
| 12. ជ | 133 | ជេវ | qao |
| 13. ជ | 133 | ជេវ | qao |
| 14. ឃ | 134 | ឃេវ | qaw |

VII. SOME DISYLLABLES

140. Disyllables in Cambodian typically consist of an unstressed presyllable followed by a stressed main syllable. In the disyllables in this section, the vowel of each successive syllable is determined by the series of its initial consonant symbol, as in the monosyllables you have met. If the syllable

ឃ (in unstressed position) is pronounced /ni-/ , and the syllable ឃីនឹម (in unstressed position) is pronounced /tiən/ , then ឃីនឹមីនឹម is pronounced /nitiən/. Transcribe and pronounce the following disyllables: ឃាល់លោ to speak, ការសាត់ language, ការិសា chair, នីរីតិនិក book

A. niyiəy, phiəsaa, kawqəy, siəwphiəw

141. Although some presyllables are written with long vowel symbols, they are usually reduced to short vowels in normal speech. Transcribe and pronounce the following disyllables with short presyllable vowels:

ឃុនុ kilo, ការុនុ coffee, លុនុក្រ clever, នុនុលុ age

A. kilou, kafei, pukae, qayuq

142. When a presyllable is represented by a single consonant symbol (frequently a reduplication of the initial consonant of the main syllable) it is pronounced with the unwritten vowel /ə/ after a 1st series consonant and /ɔ/ after a 2nd series consonant. These vowels are reduced to /ə/ in rapid speech. Transcribe and pronounce the following words: ឃុនុលុ to scratch, នីនុនុនុ

to argue, និនុនុ persuades, និនុនុនុ human (final -ុ is silent),

ଶର୍ମିନ୍ଦ୍ର thing, **ଶର୍ମିଷ୍ଠ** smooth, **ଶର୍ମିତ୍ତ** to receive

- A. kakaay, coceek, babuəl, mənuh, rəbah, rəliiŋ, tətuəl

143. Presyllables containing two initial consonant symbols consist of the clusters /pr-, tr-, cr-, kr-, or sr-/ , with /pr-/ the most common. In such clusters, -r- is written in its subscript form **ର**, and the syllable (as in 142 above) is pronounced with the vowel /a/ after a 1st series /p, t, c, or k/ and with the vowel /ɔ/ after a 2nd series /p, t, c, or k/, both being reduced to /ə/ in rapid speech; s- in such presyllables is always 1st series. (**ର** with a subscript always has the value /p/.) Transcribe and pronounce:
- ପ୍ରକାନ୍** to reserve, **ପ୍ରାଳିମ** dawn, **ପ୍ରାତେହ** to meet, **ପ୍ରାତିରୋଧ** to reverse, **ପ୍ରାଚୀ** a perch, **ପ୍ରାଚୀନ୍** confused, **ପ୍ରାଚୀର୍ବିଦ୍ଧ** twisted, **ପ୍ରାଚୀର୍ବାଲ୍** to like
- A. prakan, prəlim, prateəh, tralap, trənum, cralam, krawiəc, sralañ

VIII. SUBSCRIPT CONSONANT SYMBOLS

When two consonants are pronounced consecutively within a word (without an intervening vowel), the second (and sometimes, in medial position, a third) consonant symbol is written in a special subscript form below the first symbol. The subscript always follows the superscript in pronunciation. The form of the subscript is in most cases a smaller version of its superscript counterpart, but without the **ମ** /saq/ 'hair' which adorns the top of seven consonant symbols (not to be confused with **ମ** /trəysap/ which converts 1st series symbols to 2nd series). Some subscripts, however, bear no discernible relationship to their counterparts. Subscript consonants are called /cəəŋ qaqsa/ 'consonant feet', and the resulting consonant clusters are called /qaqsa damruət/ 'stacked-up letters'.

144. The subscripts **କା** **କା** **ନା** **ନା** and **ପା** **ପା** are identical in form with their superscript counterparts. Subscripts are called '/cəəŋ ____/'; e.g., **କା** is called /cəəŋ khaa/ 'subscript /khaa/'. Write each of the above consonants with its subscript, and transcribe and pronounce the name of the subscript.

- A. **କା** cəəŋ khaa, **କା** cəəŋ dɔc, **ନା** cəəŋ naa, **ନା** cəəŋ pɔc, **ପା** cəəŋ qaad

145. The subscripts **ກ** **ຂ** **ຜ** **ສ** **ດ** **ຖ** **ສ** and **ຫ** differ from their superscript counterparts only in the absence of the /saq/ ‘hair’:

ມ for the first six examples above, **ນ** for **ສ** and **ີ** for **ຫ**. Write each of the above consonants with its subscript, and transcribe and pronounce the names of the subscripts.

A. **ກ** cæəŋ kaa, **ຂ** cæəŋ kɔɔ, **ຜ** cæəŋ caa, **ສ** cæəŋ chaa,
ດ cæəŋ taa, **ຖ** cæəŋ phaa, **ສ** cæəŋ phaa, **ຫ** cæəŋ haa

146. The subscripts **ຂໍງ** **ຈໍງ** **ສໍງ** are reproductions of their super-

script counterparts whose final vertical strokes extend upward and end in a “hook” even with the hooks of the superscript symbols. Write each combination, and transcribe and pronounce the subscript name.

A. **ຂໍງ** cæəŋ khoɔ, **ຈໍງ** cæəŋ choɔ, **ສໍງ** cæəŋ thoɔ

147. The subscripts **ຂໍ** **ຈໍ** **ສໍ** are also characterized by a right-

hand vertical stroke which hooks on a line even with the top of the superscript symbols, but their subscript portions differ in shape from their counterparts. Write each combination, and transcribe and pronounce the names of the subscripts.

A. **ຂໍ** cæəŋ baa, **ຈໍ** cæəŋ yɔɔ, **ສໍ** cæəŋ saa

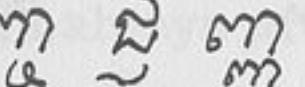
148. The remaining subscripts bear little or no resemblance to their counter-

parts: **ັ** **າ** **ິ** **ຶ** **ື** **ຸ** **ູ** **ົ** **ຼ** Note that

ັ /cæəŋ rɔɔ/ is the only subscript which is written to the left of the

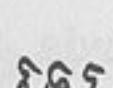
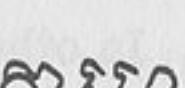
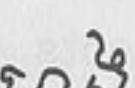
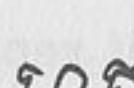
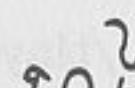
consonant symbols it accompanies. Write each of the above combinations, and transcribe and pronounce the names of the subscripts.

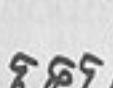
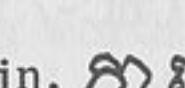
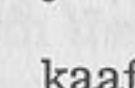
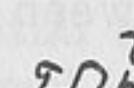
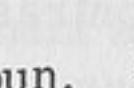
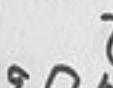
A. **ັ** cæəŋ rɔɔ, **າ** cæəŋ cɔɔ, **ິ** cæəŋ thaα, **ຶ** cæəŋ thaα,
ື cæəŋ tɔɔ, **ື** cæəŋ thoɔ, **ຸ** cæəŋ yɔɔ, **ູ** cæəŋ saa,
ຼ cæəŋ rɔɔ, **ົ** cæəŋ lɔɔ, **ຼ** cæəŋ leea

149. When the symbol  /ñcc/ occurs with any subscript whatever, the element  is omitted; e.g.,  /ñcc cəəj cc/. When  occurs as its own subscripts, it takes the full form  ; e.g.,  /ñcc cəəj ñcc/. When subscript to any other consonant symbol, /cəəj ñcc/ takes the form  ; e.g.,  /cc cəəj ñcc/. Write and transcribe the following combinations: 

A.  ñcc cəəj caa,  cc cəəj cc,  cc cəəj cc

150. Certain special combinations of superscript plus subscript represent single phonological consonants:  /tcc/ plus  /cəəj baa/ equal  /laa/, as in  /laan/ ‘car’;  /haa/ plus  /cəəj maa/ equal  /faa/, as in  /kaafei/ ‘coffee’, and sometimes /waa/, as in  /woun/ ‘crowd’;  plus  /cəəj maa/ equal  /maa/, as in  /mat/ ‘fine’;  plus  /cəəj naa/ equal  /naa/, as in  /nəŋ/ ‘there’;  plus  /cəəj laa/ equal  /laa/ as in  /luəŋ/ ‘king’. Write, transcribe, and pronounce:

A.  lein,  kaafei,  woun,  mat,  nəŋ,
 luəŋ

151. Although there are thirty-three consonant symbols, there are only thirty-one different subscripts, since  /cəəj taa/ serves as subscript for both  and , and  /cəəj lcc/ serves as subscript for both  and .

In the chart below, write the appropriate subscript for each of the thirty-three consonant symbols (two forms for /cəəj ñcc/):

| | | | | |
|-----|-----|---|-----|-----|
| ក | ខ | ឌ | ប្រ | ច្ប |
| ច | ឆ | ឌ | ប្រ | ច្ប |
| ស | ប | ឌ | ប្រ | ច្ប |
| ន | ច | ឌ | ប្រ | ច្ប |
| ប | ច | ឌ | ប្រ | ច្ប |
| ប្រ | ធម៌ | ឌ | ប្រ | ច្ប |
| ប | ច្ប | ឌ | ប្រ | ច្ប |

IX. INITIAL CLUSTERS

152. With a very few exceptions, all occurrences of written initial clusters (initial consonant symbol plus subscript) represent two-place initial sequences /CC-/ phonologically. When one of the aspirated consonant symbols (ខ kh, ឆ ch, ប th, ប្រ ph, etc.) occurs in conjunction with a subscript, it represents an unaspirated stop /k, c, t, or p/ phonologically. For example, in តាខ /thae/ ‘to care for’, ឋ represents /th-/, but in តាម /tlay/ ‘expensive’, it represents /t-/. In other words, there is never an initial contrast between /CC-/ and /ChC-/ in Cambodian. For example, the pronunciations of the initial sequences in កមើន /kmein/ ‘child’ and កម៉ែ /kmae/ ‘Cambodian’ are identical, although the first is spelled with ឋ and the second with ខ. Transcribe and pronounce the following: ក្រោជ head, ក្រោជ, គិត together, ប្រោជ space, ច្បោជ clear, ច្បោជ dog, ច្បោជ to complain, ច្បោជ arrow, ច្បោជ strange, ដ្ឋាន fruit. (Remember that ប with a subscript is pronounced /p-/. The vowels of the last two examples have their 1st series values.)
- A. kbaal, kbaal, kniə, kliə, cbah, ckae, tqouñ, tnuu, plaek, plae

153. When an aspirated consonant symbol occurs as a subscript in a written initial cluster, the cluster represents a three-place initial consonant sequence /CCC-/. Only three such sequences occur in initial position:

နိုးဘေး (-နှဲး = /nii/) station, **ဒီးမွှာ** twenty, **ဂါးလျာန** drama.

Transcribe and pronounce the above three words (**ဂါးလျာ** is pronounced with a 1st series vowel).

- A. sthaanii, mphiy, lkhaon

154. The subscript **-** is always pronounced /-d-/ in initial clusters. Trans-

cribe and pronounce: **ပူး** husband, **ဂုဏ်** hot, **ဂို့ယံ** to listen, **ဂုပ္ပါမ** to originate.

- A. pdəy, kdaw, sdap, pdaəm

155. You have already learned that the value of a vowel symbol is determined by the series of the preceding consonant (Exercise 2). However, in words written with an initial cluster of consonant symbols, the governance of the vowel is more complex. If both the initial consonant symbol and its subscript belong to the same series, there is no problem. In the following words, both consonant and subscript are 1st series, so the vowel has its

1st series value: **တိုက္ခာ** to weave, **ခီးနှေ့က** tomorrow, **ခီးနှေ့နီး** different, **ဂုံးရ** board, **ပိုး** flower, **ပိုးရ** sugar, **ပိုးနီး** to inform, **ခီးနှေ့** dog. Transcribe and pronounce these words.

- A. tbaañ, sqaek, psein, kdaa, pkaa, skaa, pdəñ, ckae

156. In the following words, both the initial consonant symbol and its subscript belong to the 2nd series, so the vowel is pronounced with its 2nd series

value. Transcribe and pronounce: **ညွှဲမွှာ** enough, **နှဲးတွေ့** mountain, **မြွှေ့နှေ့** pineapple, **ခီးကြေး** forest, **ဟွာန** hungry, **ခီးနှေ့နီး** fire, **ခီးနှေ့** bed.

- A. lmoom, pnum, mnoəh, priy, kliən, pleəñ, krəs

157. When the initial consonant symbol and its subscript belong to different series, any symbol representing a stop or spirant takes precedence over any continuant in determining the series of a following vowel symbol. In other words, symbols representing the consonants of Group 1 below dominate symbols representing consonants of Group 2.

Group 1 - Dominant

p t c k q
b d
f s

Group 2 - Passive

m n ñ ŋ
w r l y

h

In the following words, the initial consonant symbol is a dominant 1st series consonant, so the vowel has its 1st series value. Transcribe and pronounce:

ଟ୍ରେଷ୍ଟ୍ fish, **ସ୍ରେମ୍ବାଦ୍ରୀ** woman, **ମୁଣ୍ଡଳୀ** monkey, **କ୍ଷେତ୍ରିକ୍** section, **କ୍ଷେତ୍ରିକ୍** Cambodian, **ମ୍ରୋଦ୍ରୀ** medicine, **ପ୍ରୋଦ୍ରୀ** road, **ରୋହିଲ୍ଲା** rice.

A. trəy, srəy, swaa, pnaek, kmae, tnam, pləw, srəw

158. In the following words, the subscript is a dominant 1st series consonant symbol, so the vowel has its 1st series value. Transcribe and pronounce:

ମ୍ହୁପ food, **ମ୍ହାଯ୍ୟ** mother, **ମ୍ହୁର୍ତ୍ତି** pretty, **ମ୍ହାନ୍ତ୍ରିମ୍ବ୍ରା** flour, **ମ୍ହାର୍ଗ୍ୟାନ୍ତ୍ରିକ୍** game,
ମ୍ହାନ୍ତ୍ରିନ୍ଦ୍ରି papaya.

A. mhoup, mdaay, lqaa, msaw, lbaej, lhon

159. When both the initial consonant symbol and its subscript are dominant, the series of the vowel is determined by the subscript. In such words, only 1st series consonants occur as initial consonant symbols, since the series of the vowel is always determined by the subscript. Transcribe and pronounce

the following words: **ଶ୍ରୋଦ୍ଧା** house, **ଶ୍ରୋଦ୍ଧାର୍ଥ** high, **ଶ୍ରୋଦ୍ଧାଜ୍ଞାନ** to know,
ଶ୍ରୋଦ୍ଧାନ୍ତା bridge, **ଶ୍ରୋଦ୍ଧାନ୍ତା** river, **ଶ୍ରୋଦ୍ଧାନ୍ତା** thin, **ଶ୍ରୋଦ୍ଧାନ୍ତା** cheek, **ଶ୍ରୋଦ୍ଧାନ୍ତା** to-
ward, **ଶ୍ରୋଦ୍ଧାନ୍ତା** lazy.

A. ptəəh, kpəəh, skəəl, spiən, stiŋ, skoom, tpəəl, cpəəh, kcɪl

160. You should now be able to determine the proper vowel series for any mono-syllable spelled with an initial consonant cluster. Transcribe and pronounce the following words. If you have any trouble, refer to Exercises 155-159.

1. **ପ୍ରେତ୍ତୀ** I

4. **ପ୍ରୋବ୍ରାହ୍ମା** borrow

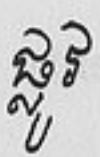
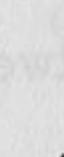
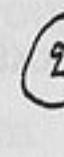
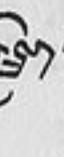
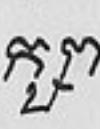
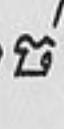
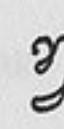
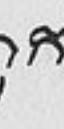
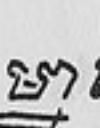
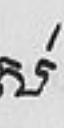
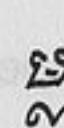
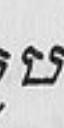
2. **ପ୍ରେତ୍ତାନ୍ତା** eyes

5. **ପ୍ରୋଦ୍ରୀ** in

3. **ପ୍ରେତ୍ତିକ୍** section

6. **ପ୍ରୋତ୍ସାହନ୍ତା** together

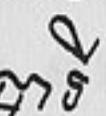
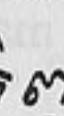
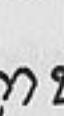
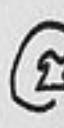
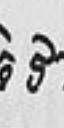
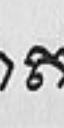
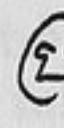
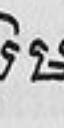
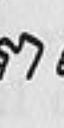
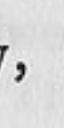
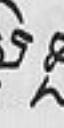
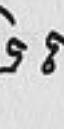
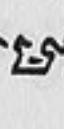
| | | | | | |
|-----|--------|------------|-----|----------|-----------|
| 7. | កំពុស | Cambodian | 28. | តំប់ | twenty |
| 8. | ភ្លូវ | high | 29. | ចោល | food |
| 9. | ចារ៉ា | to suspend | 30. | ស្រីល | bridge |
| 10. | ស្និដ | fruit | 31. | ស្អាត់ | to die |
| 11. | និច្ចន | much | 32. | និងិន | different |
| 12. | និច្ច | to use | 33. | ស្រីល | place |
| 13. | វិជ | onion | 34. | ស្រីស | river |
| 14. | ស្រីល | easy | 35. | ឆិក | to cough |
| 15. | ស្រី | pretty | 36. | និគិទិ | guest |
| 16. | និរាយ | after | 37. | ឆ្វួន | cat |
| 17. | ណុង | enough | 38. | និញ្ញា: | because |
| 18. | ស្អាក់ | to fall | 39. | ស្រី | what |
| 19. | ក្បាហុ | head | 40. | ស្អាខ់ | hungry |
| 20. | និងស | left-hand | 41. | និច្ចន | pepper |
| 21. | ឆ្លី | door | 42. | និច្ចិ | deep |
| 22. | ជិក្សា | market | 43. | និលិន៍ា: | name |
| 23. | និលិន | drama | 44. | និល | road |
| 24. | លិច្ច | afternoon | 45. | និរូប | string |
| 25. | ឈុល | lazy | 46. | និង | dog |
| 26. | និលិន | to know | 47. | ឆ្លីក | class |
| 27. | បី | husband | 48. | និងិម | sweet |

| | | | | | |
|-----|---|-----------|-----|---|--------|
| 49. |   | road | 52. |   | finger |
| 50. |   | sand | 53. |   | blind |
| 51. |   | pineapple | 54. |   | shade |

| | | | | |
|----|-----------|------------|------------|-----------|
| A. | 1. kñom | 15. lqaa | 29. mhoup | 43. cmüəh |
| | 2. pnεek | 16. kraoy | 30. spiən | 44. tnəl |
| | 3. pnaek | 17. lmœom | 31. slap | 45. ksae |
| | 4. kcəy | 18. tlēəq | 32. pseij | 46. ckae |
| | 5. knoŋ | 19. kbaal | 33. sthaan | 47. tnaq |
| | 6. kniə | 20. cweinj | 34. stiŋ | 48. pqaem |
| | 7. kmae | 21. twiə | 35. kqaaq | 49. pləw |
| | 8. kpüəh | 22. psaa | 36. pñiəw | 50. ksac |
| | 9. pyuə | 23. lkhaon | 37. cmaa | 51. mnōəh |
| | 10. plae | 24. lŋiəc | 38. prüəh | 52. mriəm |
| | 11. craən | 25. kcìl | 39. qwəy | 53. kwaq |
| | 12. praə | 26. skoəl | 40. kliən | 54. mlup |
| | 13. ktìm | 27. pdəy | 41. mteeh | |
| | 14. sruəl | 28. mphiy | 42. criw | |

X. GOVERNANCE OF VOWEL SERIES IN WORDS OF MORE THAN ONE SYLLABLE

161. In words of more than one syllable, as in monosyllables, the vowel series in any syllable is governed by the last preceding dominant consonant symbol. In the following words, the dominant initial consonant of the 1st syllable takes precedence over the passive initial consonant of the 2nd syllable.

Transcribe and pronounce:  cigarette,    to hurry,
   criss-crossed,    approximately,    to like,
   ant.

- A. baarəy, prañap, crawat, pramaan, sralañ, sramaoc

162. In the following words, the initial dominant consonant symbol belongs to the 2nd series, and both syllables have 2nd series vowel pronunciations. The problem of governance does not arise here, however, since both syllables

have 2nd series initials. Transcribe and pronounce: **ହିନ୍ଦ** a perch, **କମ୍ବିଳ** thought, **ପାରତ** dawn, **କୁଲି** coolie, **ପାଶକ** to shoulder.

A. trōnum, kumnīt, prolīm, kuulii, prōnēəq

163. In a few words, however, a 2nd syllable initial continuant does not yield to a 1st series dominant initial in the first syllable (especially in some disyllables with an initial **ର୍ତ୍ତ**), and the second syllable maintains its 2nd series value, as in: **ଶବ୍ଦିଙ୍ଗ** hammock, **ଶଚିତ୍ତି** category, **ଶଚିତ୍ତିଷ୍ଠି** stroke, **ଇତିହ୍ସି** history (second syllable pronounced /-wōət/). Transcribe and pronounce them. (The first syllable of the first example above is pronounced /qan-/ , and of the second and third examples, /qan-/.)

A. qanrīŋ, qanlēə, qanluuŋ, prawōət

164. In disyllables each of whose syllables begins with a dominant consonant, the vowel series of each syllable is determined independently, consistent with the rule stated in Exercise 161 above. In the following words each syllable begins with a dominant 1st series consonant. Transcribe and pronounce: **କାକାଏ** to scratch, **ପ୍ରାଦୁର** to compare, **ପ୍ରକାହ** to announce, **ଟ୍ରାକୁଲ** lineage.

A. kakaay, pradouc, prakaah, trakoul

165. In the following words, the 1st syllable begins with a dominant 1st series consonant and the second with a dominant 2nd series consonant. Transcribe and pronounce: **ପ୍ରାନ୍ତିନ୍ଦି** country, **ପ୍ରାତ୍ଯେ** to meet, **ପ୍ରିଜୀଗ** cool, **ବାମ୍ପିଲ୍ଲି** to illumine, **ପ୍ରାତ୍ମି** dark.

A. prateeh, pratēh, tracēəq, bamplii, sratum

166. In some disyllables an initial **ତ୍ତ** in the second syllable is passive rather than dominant, as in **ତ୍ତମ୍ବି** size, **ତ୍ତାନ୍ତାନ** soldier, **ତ୍ତମ୍ଭାର** temple. These words are sometimes written with a converted **ତ୍ତି** ; e.g., **ତ୍ତିମ୍ଭାର** , thus conforming to the rule stated in Exercise 164 above. Transcribe and pronounce them.

A. tumhum, tiəhiən, wihiə

XI. MEDIAL CLUSTERS

167. The commonest type of disyllables in Cambodian are disyllables whose initial syllable has the shape /CVN-/ (Consonant-Vowel-Nasal). In such words the final nasal of the first syllable is written on the line and the initial consonant of the 2nd syllable is written as its subscript; e.g., **កំម៉ាង** /kamlaŋ/, 'strength'. The initial syllable in such words has no written vowel, but is pronounced as if there were a /bantaq/ (—) over the nasal, i.e. /a/ after a 1st series initial, and after a second series initial, /u/ before **ច** and /uə/ before other nasal symbols (see Exercises 64–67). All these presyllable vowels tend to be reduced to /ə/ in rapid speech. As with initial clusters, elements of the vowel symbol of the main syllable may be written before, above, below, and following the entire cluster; e.g.,

បង្កាគ់ /baŋkaət/ 'to originate'. The series of the 2nd syllable vowel is determined by the rule described in Exercise 161. Transcribe and pronounce:

កន្លែង place, **សង្គច់** to press, **ចង្វារំស** battle, **នាំបាទ** for,
បន្តែក់ to originate, **ចង្វាប់** window, **ចង្វិះ** to force, **ចល្អបាច់**
 to up-end, **ចង្ហាយ** fort, **លង្វេច** to hope, **ចនប់** room,
សង្គច society (final syllable pronounced **ចង្វ**).

A. kanlaen, saŋkat, cambaŋ, samrap, baŋkaət, baŋquəc, baŋkham, bañchœ̄, bantiəy, saŋkhim, bantup, saŋkum

168. The following words involve all three of the vowel alternants /a/u/uə/ that occur in initial syllables of shape /CVN-/. Transcribe and pronounce:

ចំប្លែង strip, **សំផែៗ** quarrel, **បន្លែង** vegetable, **ពល់** light,
កញ្ចប់ package, **សញ្ញាណ** to carry, **បន្ដិ៍ជ័យ** to teach, **ពង្រីក** to spread.

A. camriəq, cumlūəh, banlae, pūənlīi, kañcap, cūəñcuun, baŋriən, pūəñriik

169. You learned in Exercise 154 that **តា** /cəəŋ taa/ is always pronounced /-d-/ in initial clusters. Medially, however, its pronunciation is unpredictable. As a general rule, when it occurs subscript to **ណា** it is pronounced -d-, and when subscript to **នា**, it is pronounced /-t-/. Following this rule,

transcribe and pronounce the following: ମଧ୍ୟର ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ
 a little, ମଧ୍ୟର ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ
 ମଧ୍ୟର ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ
 ମଧ୍ୟର ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ ମଧ୍ୟ

- A. kandaal, bantæc, qandaat, bantaa, kantaey, sandaeck, bandaoy

170. In some words, however, ଟ is pronounced -d- even when subscript to ନ, as in ଶନ୍ଦାନ lineage, ଶନ୍ଦାନ୍ଦୀ to pity. Transcribe and pronounce them.

171. When ଦ occurs as the initial symbol of presyllables of shape /CVN-/, it has the value /d-/. Transcribe and pronounce: ଦାମ୍ରୁଏତ୍ stacked up, ଦାମ୍ରେବ୍ to correct, ଦାମ୍ବାନ୍ weaving, ଦାଲ୍ୟୁସ୍ value.

A. damruət, damrəw, dambaañ, damlay

172. Disyllables whose 1st syllable has the shape /CVm-/ may be written either with a medial cluster (*/qaqsaa damruət/* ‘stacked letters’) or with the */niqkəhət/* (—), commonly called */sraq qam/*. For example, */kamlaj/* ‘strength’ may be spelled either in the */qaqsaa damruət/* form កាគ្រោះតាំង, or in the */qaqsaa riəy/* ‘consecutive letters’ form កំពុងតាំង (or កំលាំង), since កំ dominates តាំង, although តាំង in such syllables is more common). The result is that there is disagreement among Cambodians themselves about how such words are spelled. The trend, however, seems to be toward preference of the more efficient */sraq qam/* spelling at the expense of the conjunct spelling. In the official Cambodian dictionary the */sraq qam/* spelling is usually recommended where two spellings are possible, with two exceptions: in words spelled with initial កំ — , and in roughly half the entries spelled with initial តាំង — , the conjunct spelling is recommended.

Write the following words two ways: /damrūət/ stacked, /kamsat/ destitute, /samlāa/ stew, /tumñjūən/ weight, /kampūəh/ height, /damlouŋ/ (initial ڏ) potatoes, /samlañ/ to like.

- A. ក្រុងក្រាម, កំស្តីក្រាម; ក្រឡូក្រាម, កំស្តីក្រាម; និងក្រាម, នៃក្រាម; ទិន្នន័យ, ទិន្នន័យ
ក្រឡូក្រាម, កំស្តីក្រាម; សិទ្ធិក្រាម, សិទ្ធិក្រាម; និងក្រាម, នៃក្រាម.

173. Medial clusters in which the subscript is a repetition of the preceding consonant (geminate clusters) usually represent doubled consonants phonologically. The initial syllable of such words, if it has no written vowel, is usually pronounced as if it were written $- \overset{\circ}{\text{a}} -$, i.e. /a/ in the 1st series and /eə/ or /oə/ in the 2nd series (see Exercises 72–74). Transcribe and pronounce: ကန္တာ girl, စာဏ္ဍာ sign, စာဏ္ဍာ promise, ဒီဆု article, ဗာဏ္ဍာလော် library (ဗ = ဗ ").
- A. kaññaa, saññaa, saccāa, wōətthoq, pannaalay
174. When the syllable-final value of a consonant symbol differs from its syllable-initial value, a geminate cluster represents two different but closely related consonants phonologically. Transcribe and pronounce:
- စာဏ္ဍာရေး (1st syllable pronounced စာဏ္ဍာ) happy, ဗြာဏ္ဍာ (see Exercise 63) bamboo, ကိုဏ္ဍာ (1st syllable pronounced ကိုဏ္ဍာ) proper.
- A. sapbaay, rihseay, kōəpbəy
175. A few words have medial clusters with two subscripts, resulting in three consonant symbols written vertically. Almost all three-symbol clusters consist of a nasal final in the first syllable, followed by a syllable whose initial consonant is a stop of the same articulatory position (homorganic) as the nasal, plus /-r-/. Transcribe and pronounce the following:
- ကန္တာနှံ scissors, စာဏ္ဍာနှံ music, ကိုဏ္ဍာကျော် fox, စာဏ္ဍာနှံ war.
- A. kantray, dantrəy, kañcrooŋ, saṅkriəm
176. Exceptions to this pattern occur in the following three loanwords:
- ဘုရားနိုး English, စာဏ္ဍာနှံ Sanskrit (1st syllable usually pronounced /saŋ-/), စာဏ္ဍာနှံနှံ professor (the second -နှံ- represents /-hs-/, so that the cluster actually represents the sequence /-hstr-/ phonologically; initial vowel is reduced to /a/; final -နှံ- is silent). Transcribe and pronounce them.
- A. qankleeh (~qanblee), saṅskrət, sahstraacaa
177. As in initial position, medial clusters which have an aspirated consonant as subscript represent the sequence /-CCh-/. Transcribe and pronounce:
- စာဏ္ဍာနှံ to hope, ဗြာဏ္ဍာနှံ to bring to a stop, မြို့ဆု an interjection, ဒီဆု artifact.

A. sañkhim, bañchup, putthoo, wōətthoq

178. Aspirated subscripts in medial clusters tend to be pronounced as unaspirated consonants when they begin an unstressed syllable. In the following words, the subscripts begin unstressed syllables which are pronounced with the unwritten vowel /-ə-/. Transcribe and pronounce: ស័រណ៍ letter
(the 1st syllable is pronounced like ស័រណ៍), ស័ណ្ឌបាន article, story
(the 1st syllable is pronounced like ស័ណ្ឌ , the last like បាន),
ពិធីសាសនា Buddhism (សាសនា is pronounced /sahsnaa/).

A. qaqkeraa, qattəbat, puttəsahsnaa

XII. WRITTEN FINAL CLUSTERS

179. Many loanwords are spelled with etymological final clusters, the subscripts of which are not pronounced. Transcribe and pronounce the following words: ប់ក្រ friend, ពូជ Buddha, មនុស្ស human, ពាក្យ word,
បុណ្យ merit, ប់ក្រ heart, mind, សំបុត្រ letter, សមូទ្ធផល ocean
(1st syllable /sə-/), ភ្នោះសិរី sun, ភ្នំពុំ state (pronounced like ភ្នំ).

A. mít, put, mənuh, piəq, bon, cət, sambot, səmot, qaatit, rōət

180. When a word that is spelled with a silent final subscript occurs in the first element of a compound, the subscript is pronounced as the initial of the following, usually unstressed, syllable. Transcribe and pronounce the following: សម្រាប់ friendship, ពិធីសាសនា Buddhism, រដ្ឋបាគ្វិកប្រាប់ government.

A. mittəphiəp, puttəsahsnaa, rōətthaaphibaal

181. In spelling words aloud, Cambodians pronounce consonant symbols with their inherent vowels, regardless of the series of a following vowel. Vowel symbols are referred to by their 1st series values, regardless of their pronunciation in the word being spelled. Subscript consonants are cited after superscript consonants, even in the case of /cəəŋ rōə/, which precedes.

For example, the word បាត់ស្ទះ is spelled /baa, ɪəə, cəəŋ kaa, sraq qaə, taa/. Transcribe and pronounce the syllables used in spelling the following words: 1. បាត់ rice 2. បាត់ to have 3. ស្ទះ woman 4. ស្ទះ to

- create 5. ស្រែច ៖ to hope 6. កំនុង ៖ strength 7. ប្រចាំ ៖ regular
 8. ពិធីសាស្ត្រ ៖ Buddhism.

- A. 1. baa, sraq qaa, yoo
 2. caa, sraq qaa, coo
 3. saa, ceəŋ rəc, sraq qey
 4. baa, ceəŋ taa, sraq qaə, coo
 5. saa, uoo, ceəŋ khoo, sraq qəq, coo
 6. kaa, sraq qam, laa, sraq qam, oo
 7. baa, ceəŋ rəc, caa, sraq qam
 8. pcc, sraq qoq, tcc, ceəŋ tho, saa, sraq qaa, sca, noo, sraq qaa

182. When the /rēəhmuk/ occurs alone after a consonant, it is called /sraq qah/. However, when it follows a vowel symbol, it is called /rēəhmuk/ and follows the name of the vowel symbol. Diacritics are usually named following the consonant to which they apply, except that the /kbiəh kraom/ is named following both the initial consonant symbol and vowel to which it applies. Transcribe and pronounce the spelling of the following words: 1. ឆេះ ៖ to slap

2. ចេះ ៖ to descend 3. ឃើនេះ ៖ horse 4. នៅក្នេះ ៖ because 5. ទំន់
 to dare 6. ស្វែះ ៖ to eat 7. មេរូស ៖ kind 8. ចេន ៖ 10,000 9. កាត់
 to cut 10. នាត់ ៖ he, she.

- A. 1. tcc, sraq qah
 2. caa, sraq qoq, rēəhmuk
 3. saa, sraq qei, rēəhmuk
 4. pcc, sraq qei, pcc, ceəŋ rcc, sraq qao, reəhmuk
 5. haa, trəysap, sraq qaa, noo
 6. sca, sraq qey, kbiəh kraom
 7. yoo, museqkətōen, sraq qaa, uoo
 8. mo, sraq qəi, kbiəh kraom, noo
 9. kaa, sraq qaa, taa, bantaq
 10. ko, sraq qaa, taa, bantaq

183. You have learned that the symbol ប ៖ /baa/ represents /p/:

- a. when written with the /museqkətōen/ (—) or its equivalent form (—) as in បាំ /paa/ ‘father’ and បេះ /pəy/ ‘flute’;
- b. when it occurs with a subscript, as in ប៉ាំ /pdəy/ ‘husband’;
- c. and in syllable final position, as in បុច្ចប៉ាំ /chup/ ‘to stop’.

In some words, an initial ប is pronounced /p-/ even though it is written neither with the /museqkətōen/ nor a subscript. Such words are listed

inconsistently in the dictionary, sometimes occurring with the **္**'s, sometimes with the **ေ**'s. Transcribe and pronounce the following words, all of which are pronounced with an initial /pa-/: ပာန္ဒြေပာန် cause, ပာန္ဒြေပိုန် the present (final syllable pronounced /-ban/), ပာန္ဒြေလျေး to cancel (း represents /-td-/), final vowel irregularly pronounced as ဒ္ဒ-), ပာန္ဒြေမှောင် intelligence.

A. paccay, paccopban, patdesaet, paññaa

184. Transcribe and pronounce the following words with particular attention to the value of ေ : ေ three, ေ flute, ေန sin, ေပါ to use, ပာန္ဒြေမှောင် intelligence, ပာန္ဒြေလျေး persuade, ပာန္ဒြေမြန် country, ပာန္ဒြေလျေးလျေး how much.

A. bəy, pəy, baap, praə, paññaa, babuəl, prateeh, ponmaan

XIII. UNWRITTEN VOWELS

185. The following words summarize all of the spellings so far introduced by which vowels are represented without a written vowel symbol. Transcribe and pronounce them. Each word is followed by the number of the exercise in which that particular unwritten vowel spelling was introduced. If you are in doubt as to what vowel is represented, turn back and review the appropriate exercise.

| | | | |
|----------------------|------------------|-----------------|--------------------------|
| 1. ရာရီ [ံ] | (64) to jot down | 7. စိန္ဒြေရ | (142) to quarrel |
| 2. ရာပါ [ံ] | (65) to absorb | 8. ဇာဗုံ | (143) to bite each other |
| 3. ရာခါ [ံ] | (67) to smoke | 9. ဇားနေ့ | (143) dawn |
| 4. ဇားနေ့ | (64) to tie | 10. ဇားနေ့း | (167) opening, gap |
| 5. ဇား | (64) to come | 11. ဇားနေ့းး | (168) quarrel |
| 6. ဇားလျေး | (142) persuade | 12. ဇားလျေားနှံ | (168) wall |

A. 1. kat 2. cup 3. cüəq 4. caaq 5. məok 6. babuəl 7. cəceək
8. prakham 9. prəlim 10. canlah 11. cumluəh 12. cüəncēəj

186. In addition to the above examples of unwritten vowels, words which are written with a silent final subscript but no vowel symbol are typically pronounced as if they were written -¹. Transcribe and pronounce:

1. សាប speech
2. សាស្ត animal
3. កុង fate
4. លោង demon
5. ទោន្ទ the symbol
6. ទេស្ត wealth
7. ប្រិត្តិ history
8. សង្គម្រោះ possessions (the final - is silent in examples 7 and 8)

- A. 1. sap 2. sat 3. kam 4. yĕəq 5. khan 6. trōəp 7. prawoət
8. sambat

187. A few words which are spelled with a final silent subscript and no written vowel are pronounced with the short inherent vowel as if they carried a final /bantaq/ (-¹). The following words are of this type; transcribe and pronounce them. សិរី every, សំគី family, លោន្ទ motor,
ប្រុន្ទ wife, ព្រះ សិរី priest

- A. sap, wŭəŋ, yŭən, prapuən, preəhsan

188. Some words whose final syllables are spelled with a sequence of consonant symbols, which would normally indicate the long inherent vowel, are pronounced with the short inherent vowel, even though the final consonant does not carry the /bantaq/. Transcribe and pronounce the following words of this type:

1. សិរី proper
2. សិរិ corpse
3. សិរ people
4. សិរ car
5. សិរិស society
6. សិរិស exact
7. សិរិស Jataka (សិរិ =
d) 8. សិរិស world.

- A. 1. sam 2. sap 3. cūen 4. rūet 5. sajkum 6. praakot 7. ciədaq
8. piphup

189. In words of more than one syllable (other than the types discussed above) consonant symbols with no written vowel are pronounced as separate syllables with the vowel /a/ after a 1st series symbol and /eə/ after a 2nd series symbol when stressed, both reduced to /ə/ when unstressed. In a formal or reading pronunciation such syllables are pronounced with an unwritten final /-q/. For example, សៀរុណា 'dawn', is pronounced /qarun/ in normal speech, reduced to /qərun/ in rapid speech; in very formal speech it would be pronounced /qaqrun/. In the following examples, heavily stressed syllables are marked —, syllables with medium stress are marked ~,

and unstressed syllables are unmarked. Transcribe and pronounce them.

1. **ଶ୍ରୀରାତିରାତି** dawn 2. **ଶ୍ରୀନ୍ଦ୍ରିନ୍ଦ୍ରି** future (final syllable is pronounced as if written -**ନ୍ଦ୍ରି**) 3. **ବେହାର୍ଷସି** republic 4. **ଶ୍ରୀପକ୍ଷନ୍ଦ୍ରି** non-human

5. **ଯୁକ୍ତିଚାର୍ତ୍ତିତାନ୍ତ** the symbol -: 6. **ଛ୍ରାନ୍ତିକାନ୍ତା** Pali

- A. 1. qarun 2. qanaakuət 3. səhaqrōət 4. qaqmənuh
5. yuqkəlēəqp̄intuq 6. mēəqkəthēəq-phiəsaa

190. The stressed finals /-aq/ or /-ēeq/ are sometimes indicated in the writing system by the use of the /yuqkəlēəqp̄intuq/ (-:) when they occur in a final syllable, or preceding an internal juncture within a compound. (This sign must be carefully distinguished from the /rēəhmuk/ -). Transcribe and pronounce the following: **ପ୍ରାଣୀ**: preoccupation, **ପ୍ରାଣୀ**: position, **ରେତ୍ତା**: interval, **କୋଳା:ଗ୍ରାମାନୀ**: commission.

- A. thurēəq, thaanaq, røyēəq, kənaq-kamməkaa

191. In some words whose second consonant symbol serves as the final of the first syllable, the first syllable is pronounced /a/ in the 1st series and /ēə/ or /ōə/ in the 2nd series (see Exercises 72-74). Transcribe and pronounce the following: **ଶାନ୍ତିରୀ** letters, **ବାତ୍ରୀ** enemy (ବା represents the doubled consonant /-tt-/), **ବାନ୍ଧୁ** to promise, **ବାଣୀ** sign, **ବିଲା ପ୍ରାଣୀ** diacritic (final - is silent), **ଗ୍ରାମାନୀ** worker, **ଗ୍ରାମାନୀ** usually (ଗ୍ରା = d), **ଜ୍ଞାନୀ** January.

- A. qaqsad, sattrəw, saccaa, saññāa, wōənnəyut, kamməkaa, thōəmmədaa, mēəqkəraa

192. In some words whose second consonant symbol is **କ**, an initial consonant symbol of the 2nd series is pronounced with the vowel /a/; **କ** in such words represents a double consonant /-cc-/. Transcribe and pronounce: **ରଚନା** handicraft, **ଶାନ୍ତାନୁକ୍ରମ** dictionary (-**ନୁକ୍ରମ** = **ନୁକ୍ରମ'**).

- A. raccənaa, waccənaanukram

193. In polysyllabic words, when the consonant symbols **କ** or **ଖ** occur initially and before **ତ**, they are pronounced with their normal inherent vowels rather than with a/ēə/ōə. Transcribe and pronounce (the series of the second syllable in the first three words is irregular):

XIV. UNWRITTEN CONSONANTS

194. In many words of more than one syllable a medial consonant symbol serves both as the final consonant of one syllable and the initial consonant of the next; phonologically the consonant is doubled, and the extra syllable, if no vowel is written, is pronounced with the short vowel /ə/. Transcribe and pronounce the following:

1. ගිජිහා to like (ගි- is irregularly pronounced /ae/)
 2. ගිජ්ංගු stupa (ගි- is irregularly pronounced /ae/; ගි = /-td-/)
 3. ගැලුම් ගිරි enemy (first syllable has /-a-/)
 4. ගිජා art (first syllable has /-a-/)
 5. ගැසිලා ගිව් civil service
 6. ගැජ්ංස් ගිව් era (ගි = /-qk-/)
 7. ශැබ්දියි ගිව් citizenry (first syllable pronounced like ශැබ් /)
 8. ගැජ්ංහිනා religion (first syllable shortened to /-a-/ , 2nd ගිජ්ං = /-hs-/)
 9. ගැජ්ංගිජ්ංහිරි ගිව් professor

- A. 1. caettənaa 2. caetdəy 3. sattrəw 4. raccənaa 5. riæccəkaa
6. saŋkaraac 7. püellərőt 8. sahsnaa 9. sahstraacaa

195. You have learned that the unwritten vowels /a/ and /eə/ in stressed syllables with no written final are pronounced with a final /-g/, both medially

and finally. Transcribe and pronounce: នៅទីនីរឿន្យ non-human, និងខេត្តូវ
fearless, និនិមានិនិ: voiceless, ពិមិះ: interval.

A. qaqmənuh, qaqphiy, qaqqhoosaq, rɔyēəq

196. The short vowels — and —, when no final consonant is written, are always pronounced with a final /-q/ in final syllables. (One exception is the unwritten final /-k/ of ធម៌ /tok/ 'table'.) Medially such vowels are followed by /-q/ in a careful reading pronunciation, but the /-q/ disappears in a more colloquial pronunciation. Transcribe each of the following examples first in a careful pronunciation and then in a more colloquial pronunciation. សុខិត្ត mercy (second syllable irregularly pronounced with 2nd series value), សុខិត្ត conduct (second syllable is irregularly pronounced in the 2nd series, third syllable reverts to 1st series), សុខិត្ត precept, សុខិត្ត age (first syllable is /qa-/ in normal speech), សុខាគ Sihanouk (first syllable irregularly pronounced with 2nd series vowel).

A. kaqrūqnaa, karunaa; keqriqyaa, keriyaa; lēqthiq, ləthiq; qaayuq, qayuq; siihaqnuq, sihanuq

XV. SOME IRREGULAR SPELLINGS

197. The rule that the pronunciation of a vowel symbol is determined by the last preceding dominant consonant symbol in the same word (see Exercises 157 and 161) is without exception in monosyllables, is fairly regular in disyllables (see Exercises 163 and 166 for exceptions), but is less regular in polysyllabic words. Of the following three-syllable words, the first three are regular throughout (with regard to governance of vowel series); the fourth is irregular in the final syllable. Transcribe and pronounce them.

សិក្សា to like, គិត្យា miserable, សាករាង era, សិរិយាង independence.

A. caettənaa, weettəniə, saqkəraac, qaekkəriəc

198. In words of more than one syllable, the occurrence of a converted sonorant symbol (ឃ , ុ , ុុ , ុុុ , ុុុុ , ុុុុុ , ុុុុុុ) or ុុុុ or ុុុុុ converts the vowel of the syllable in which it occurs to 1st series, but has no effect on succeeding syllables. This constitutes an exception to the rule that sonorant symbols are always passive. Transcribe and pronounce

the following words: កុណាខ្លាត់ virtue, នាំណា who?, ភ្នែកិច្ច័ត្តិ kilometer, រប្បៀប់ to pester, រដ្ឋលោយ tattered.

A. kunaanuphiəp, nənaa, kiloumaet, rɔjəw, rɔyay

199. In the following words, however, even នាំ and ឯក submit to the governance rule. Transcribe and pronounce: នាំ លីសិគេ commerce, នាទីកា clock.

A. piənic, niəlikaa

200. A number of words are spelled with an unpronounced final short vowel symbol. Transcribe and pronounce the following examples: ភូមិ village, សោភិលី life, ភីសិមិ monk's quarters, វិលាជិន reason (វិ- is irregularly pronounced /ae/) ប្រព័ន្ធឌី history (final syllable pronounced as if written បាត់), ប្រព័ន្ធឌី to behave.

A. phuum, ciət, kot, haet, prawoət, praprit

201. In some words, the vowel symbol វ- is pronounced like ឬ-, i.e. /ae/ in the 1st series and /ɛɛ/ in the 2nd series. Transcribe and pronounce the following: វិលាជិន reason, វិភិពិលិន or វិភិតិន province, វិថាទិន doctor, វង្វពិលិយប់ stupa (វិ = /-dt-/) បាសិរសជិន to cancel (first syllable is pronounced /pat-/) វិចាទនា to like (វិ = /-tt-/).

A. haet, khaet, peət, caetdəy, patdesaet, caettənaa

202. The vowel symbol ឈ- is pronounced like ឈ- in some 1st series initial syllables. Transcribe and pronounce: បីតា father (ឈី = /-d-/), សីលា stone, បីសិលិច spirit.

A. bəydaa, səylaa, bəysaac

203. In a few words the configuration វ- ឃ with a 1st series consonant symbol is pronounced /-ac/ rather than the regular /-əc/. Transcribe and

pronounce: တိပိဋကဓိ completely, နိဒါနဓိ to complete, နေစား flesh, ရွှေဘုရား king, ဂျီဘုရား a royal title.

A. srac, samrac, sac, sdac, somdac

XVI. SOME ADDITIONAL DIACRITICS

204. The following diacritics have already been introduced: 1. ဗုဏ်ခဲ့ /bantaq/
 - (Exercises 64-78) 2. ဗုဏ်ခဲ့နောင် /museqkətōən/ - , - (Exercises 43 and 48) 3. ဗြိန္တာပဲ /trəysap/ ^ , - (Exercise 45)
 4. နိုင်္တာဘေး /niqkəhət/ - (Exercises 101-107) 5. နိုင်္တာဘေးနှင့်နှောင်း
 /sanyook-saññaa/ - - (Exercises 117-119).

Another important diacritic is the စော်ဘေးနှံ /tōendəkhiət/ (-), sometimes referred to as the နှော်မှု /samlap/ 'to kill', or the ဗုဏ်ပါန် /patdesaet/ 'to cancel'. It is placed over the final consonant symbol of certain etymologically spelled words to indicate that the final consonant symbol is not to be pronounced. Any vowel or subscript consonant symbols which accompany the canceled consonant symbol are likewise unpronounced. If the canceled symbol is preceded by ဤ, they are both unpronounced. Transcribe and pronounce the following words involving the /tōendəkhiət/: ဖြော်လျှော်သံ usefulness, ဗုဏ်ဘေးနှံ diligent (ဘုဏ် = /qu-/), ရှေ့ကြံ heritage, ပြော်လျှော်ဆံ to experiment, ရှေ့ကြံ banyan (tree), ဗုဏ်ဘေးနှံ example, ဖြော်လျှော်ဆံ to say (elegant).

A. prayaoc, quhsaa, kei, pisaot, poo, qutiəhāa, prusaah

205. In some words the vowel or subscript which accompanies a preceding consonant symbol is also unpronounced, as in the following three words. Transcribe and pronounce them. ကိုဒ်ဘေး (or ကိုဒ်) king, လှို့ဘေး (~ လှို့ဘေး) good manners, ဇာန်ဘေး sandalwood.

A. ksat, ləəq, can

206. In certain compounds whose first element is written with an unpronounced final consonant symbol, the /tōəndəkhiət/ may occur internally. Transcribe and pronounce: នៅក្នុងពាណ army (archaic; final syllable pronounced as if ពាណ') នៅក្នុងចារ៉ាស in a rage.
- A. reepūəl, mooban̄
207. The following two related words are irregular in that the subscript rather than the superscript consonant preceding the /tōəndəkhiət/ serves as the final of the syllable. Transcribe and pronounce: ព្រៃន្តោល Brahma, ព្រៃន្តោល a Brahman.
- A. prum, priəm
208. The របាត /rəbaat/ () is the reflex of an original /r/ in Sanskrit loanwords. In most words, when it occurs over a final consonant symbol neither the /rəbaat/ nor the consonant over which it occurs is pronounced. (Because of its functional similarity to the /tōəndəkhiət/ in this position, the two are frequently confused.) An exception is the word ភាព /qaat/ ‘essence’, where the symbol underlying the /rəbaat/ is pronounced as the final of the syllable. Transcribe and pronounce: បារូបាបី abundant (see 193), ព្រះគាលិ ear (royal vocabulary).
- A. baaribou, preəh-kaa
209. In the following words the effect of the /rəbaat/ is to change the vowel /ɔɔ/ to /ɔə/, as well as to cancel the final consonant symbol. This effect is called សំរួលសំឡើរ /samlein̄ ñɔə/ ‘trembling sound’ in Cambodian. It is the same sound that occurs in such words as ដឹក /cɔə/ ‘resin’ and ពួរ /ñɔə/ ‘to tremble’ (Exercise 119); in both cases a final រ symbol is involved. Transcribe and pronounce: ដឹក law, ពាណិក color, សិក pregnant.
- A. thɔə, pɔə, kɔə
210. When the /rəbaat/ appears over a medial consonant symbol, it is pronounced as the intruded syllable /-rə-/ preceding the consonant symbol over which

it occurs. Most such words are more commonly spelled with $\text{--}\mathfrak{f}\text{--}$.

Transcribe and pronounce: ଶ୍ରୀନାଥ (~ ଶ୍ରୀନାଥ) destitute (first syllable pronounced long; final syllable pronounced ନାଥ), ପ୍ରକଳ୍ପ (~ ପ୍ରକଳ୍ପ) legacy (Exercise 193; final syllable pronounced $\text{ଳାଙ୍ଗ}'$).

A. tuurəkuət, mɔɔrədaq

211. The ଲେଇକ ପାହସଦା /leik qahsdaa/ ‘number eight’ (—), also called ଲେଇକ ପ୍ରମ୍ବେୟ /leik prambəy/, occurs only in the following two words: ତୁମ୍ଭେୟ resultative auxiliary: then; କୋଣେୟ relative pronoun: which. It has no effect on the pronunciation. Transcribe and pronounce them.

A. kaa, daa

212. The କାଅକ୍ଷାତ୍ /kaaqkəbaat/ (+) more commonly called /cəəŋ kqaek/ ‘crow’s foot’ occurs in certain particles which are normally pronounced with a high or rising intonation. This intonation can be indicated in the transcription by / ! /. Transcribe and pronounce: ଏହିଁ there!, ମାହିଁ female response particle (— $\mathfrak{h} = /-h/$), ଓହିଁ ~ ଓହିଁ hortatory particle, ହାହିଁ derisive particle (initial /h-/).

A. nuh!, caah, naa! ~ nah!, hah!

213. The /kaaqkəbaat/ is also used to mark the point of insertion of an omitted word or consonant symbol. Rewrite the following words correctly, then

transcribe and pronounce: ଲାଖିଲା to write (neither \mathfrak{f} is pronounced) ହାସେପପ୍ରମ୍ବେୟିଲ 58 riels.

A. ଲାଖିଲା sasei ହାସେପପ୍ରମ୍ବେୟିଲ haasəp-prambəy riəl

214. The ଲେଇକଦୂ /leik too/ ଦୂ ‘figure two’ indicates that the word (or phrase) after which it occurs is to be repeated. The most common use of the /leik too/ is in the writing of reduplicative compounds, as in

ଶ୍ରୀସ୍ରୀ /srəy-srəy/ ‘women’. Transcribe and pronounce: ପ୍ରକଳ୍ପପ୍ରକଳ୍ପ various, ପ୍ରକଳ୍ପପ୍ରକଳ୍ପ small and numerous, $\text{ପ୍ରତିବ୍ୟାପପ୍ରତିବ୍ୟାପ}$ each in turn.

A. pseɪŋ-pseɪŋ, touc-touc, nimuəy-nimuəy

215. In some cases a phrase rather than a single word is to be repeated. This can be determined only by the context. The following phrases are frequently written with the /leik too/. Transcribe and pronounce them.

បន្ទះចាប់ស្តី យូ little by little, **ទណ្ឌិលាក់ខ្លាំង** យូ separately.

- A. bantəc mədaanj, bantəc mədaanj; daoy laek, daoy laek

216. When the word or words at the end of one sentence are to be repeated at the beginning of next, the two sentences may be "telescoped" by the use of the /leik too/. The following two sentences share the words "my house." Trans-

scribe and pronounce: **ខំណួលិតិៗ យូ ទណ្ឌិលិកស្តីរាំ**

I'm going to my house. My house is near the market.

- A. kñom t̄iw pteəh kñom; pteəh kñom n̄iw c̄it psaa.

XVII. VOWEL REDUCTION IN PRESYLLABLES

217. In rapid speech the vowels in presyllables of shape CV- (Exercise 142), CrV- (Exercise 143), and CVN- (Exercise 167), tend to be reduced to /ə/. Transcribe both the careful and rapid pronunciations of each of the follow-

ing words: **កុកាយ** to scratch about, **ទិនិជ** to receive, **សប្តិស** thing, **មនុស្ស** human, **ប្រឹនិស** country, **ឲ្យស្រាវ័យ** to like, **ស្រុច** water buffalo, **ចំណេះ** dawn, **ចាន់ស្តីពី** to originate, **សំឡួរ** voice, **ដំណើរ** to owe, **កន្លឹនិស** place, **កាហ្វិក** to spread, **គិត្យាគ់** quarrel, **គិត្យាកំស៊ែ** wall, **សំបុរិ** letter.

- A. kəkaay, kəkaay; tətuəl, tətuəl; rəbah, rəbah; mənuh, mənuh; prateeh, prəteeh; srəlañ, srəlañ; krəbəy, krəbəy; prəlím, prəlím; bəŋkaət, bəŋkaət; samleij, səmleij; cumpeəq, cəmpəeəq; kanlaej, kənlaej; püəŋriik, pəŋriik; cumlūəh, cəmlūəh; cüəñcēəj, cəñcēəj; səmbot, səmbot.

218. The presyllable of the following two common words is reduced in rapid speech to /tə-/. Transcribe the careful and rapid pronunciations of each.

ស៊ិនិជ same, **សិរិនិស** to write.

- A. dadael, tədael; sasei, təsei

219. Some presyllables that are written with a long vowel may be pronounced long in careful speech, but they are pronounced in normal speech with a short vowel (Exercise 141). Transcribe and pronounce the following words

two ways: තුනානා hall, තුනායි age, හුකිං clever, මැගලා: because, ගාහිප්පා coffee, සුනානා ancient, මැගලා: euphonic, හිනා coolie.

- A. saalaa, salaa; qaayuq, qayuq; puukae, pukae; piipruēh, pipruēh; kaafei, kafei; bouraan, boraan; piiruēh, piruēh; kuulii, kulii

XVIII. NUMERALS

220. Cambodian numeral symbols were borrowed from the same Indic source as the Cambodian alphabet; as with Arabic numerals, there are only ten different symbols. The names of Cambodian numerals, however, come from various sources. The ten symbols are listed below with their Cambodian names. Notice that the names of the symbols 6–9 are based on a system of five. The final syllable of ‘seven’ is pronounced /-pii/ only in a reading pronunciation; otherwise it is /-piə/. Transcribe and pronounce them.

| | | | | | | |
|----|---|----------|-------|----|----|----------|
| 1. | ၁ | မှုသေ | one | A. | 1. | muəy |
| 2. | ၂ | ပါ | two | | 2. | pii |
| 3. | ၃ | ပေါ် | three | | 3. | bəy |
| 4. | ၄ | ပူန | four | | 4. | buən |
| 5. | ၅ | ပရာ | five | | 5. | pram |
| 6. | ၆ | ပရာမှုသေ | six | | 6. | prammuəy |
| 7. | ၇ | ပရာပါ | seven | | 7. | prampił |
| 8. | ၈ | ပရာပေါ် | eight | | 8. | prambəy |
| 9. | ၉ | ပရာပူန | nine | | 9. | prambuən |
| 0. | ၀ | ဆျေသေ | zero | | 0. | soun |

221. Practice the above symbols until you can write them and pronounce them from memory.
 222. Transcribe the names of the numerals 10–20 shown below. The names of the numerals 11–19 have two forms; the second is the more colloquial. Separate the elements of numeral compounds with a hyphen.

| | | | | | |
|-----|----|-----------------|---|---------------------|-----------|
| 10. | ១០ | សិប' | | ten | |
| 11. | ១១ | សិប់ច្បាប់ | ~ | ច្បាប់សិល្ងាប' | eleven |
| 12. | ១២ | សិប់ពេរ | ~ | ពេរសិល្ងាប' | twelve |
| 13. | ១៣ | សិប់ចំ | ~ | ចំសិល្ងាប' | thirteen |
| 14. | ១៤ | សិប់ច្បៃន | ~ | ច្បៃនសិល្ងាប' | fourteen |
| 15. | ១៥ | សិប់ទ្រាំ | ~ | ទ្រាំសិល្ងាប' | fifteen |
| 16. | ១៦ | សិប់ទ្រាំច្បាប់ | ~ | ទ្រាំច្បាប់សិល្ងាប' | sixteen |
| 17. | ១៧ | សិប់ទ្រាំពេរ | ~ | ទ្រាំពេរសិល្ងាប' | seventeen |
| 18. | ១៨ | សិប់ទ្រាំចំ | ~ | ទ្រាំចំសិល្ងាប' | eighteen |
| 19. | ១៩ | សិប់ទ្រាំច្បៃន | ~ | ទ្រាំច្បៃនសិល្ងាប' | nineteen |
| 20. | ២០ | ទីម្ចោ | | | twenty |

A. 10. dap

11. dap-muəy ~ muəy-dandap

12. dap-pii ~ pii-dandap

13. dap-bəy ~ bəy-dandap

14. dap-buən ~ buən-dandap

15. dap-pram ~ pram-dandap

16. dap-prammuəy ~ prammuəy-dandap

17. dap-prampiɬ ~ prampiɬ-dandap

18. dap-prambəy ~ prambəy-dandap

19. dap-prambuən ~ prambuən-dandap

20. mphiy

223. The names of the numerals 30, 40, 50, 60, 70, 80, and 90 are borrowed from Thai and bear no relation to the names of the numerals 3-9. Transcribe and pronounce them.

| | | | | |
|-----|----|-----------|---------|------------|
| 30. | ៣០ | សាមសៅប | thirty | A. saamsəp |
| 40. | ៤០ | សៅសៅប | forty | saesəp |
| 50. | ៥០ | ហាសៅប | fifty | haasəp |
| 60. | ៦០ | ហុកសៅប | sixty | hoksəp |
| 70. | ៧០ | ចៅតសៅប | seventy | cətsəp |
| 80. | ៨០ | ម៉ីប់កសៅប | eighty | paetsəp |
| 90. | ៩០ | កោវិសៅប | ninety | kawsəp |

224. The multiplier /muəy/ ‘one’ in the following compounds is shortened in normal speech to /mə-/; e.g. /muəy-rɔɔy/ ~ /mərɔɔy/ ‘one hundred’. Transcribe and pronounce the following numbers both ways.

| | | | |
|----|------------|----------------|----------------------------------|
| 1. | ១០០ | ម៉ីម៉ែនេល | one hundred |
| 2. | ១.០០០ | ម៉ីម៉ែនោន | one thousand |
| 3. | ១ ០.០០០ | ម៉ីម៉ែនោន | one ten-thousand |
| 4. | ១០០.០០០ | ម៉ីម៉ែនោនិន | one hundred-thousand |
| 5. | ១០០០.០០០ | ម៉ីម៉ែនោន | one million |
| 6. | ១០.០០០.០០០ | ម៉ីម៉ែនោនកាំសិ | one ten-million (final — silent) |

- | | | |
|----|-------------------------|-----------------------|
| A. | 1. muəy-rɔɔy ~ mərɔɔy | 4. muəy-saen ~ məsaen |
| | 2. muəy-poən ~ məpoən | 5. muəy-liən ~ məliən |
| | 3. muəy-məiən ~ məməiən | 6. muəy-kaot ~ məkaot |

225. In Cambodian numerals involving four or more symbols, a period is placed after every three symbols, counting from the right (as in French). This system of punctuation has little relevance to the pronunciation of Cambodian numerals, however, since each succeeding numeral is read as a separate denomination, rather than in groups of three. Transcribe the names of the following numerals, separating each denomination larger than 100 by a comma in the transcription.

| | | | |
|----|--------------------|--|-----------|
| 1. | ម៉ិះ | ពីច្ចាស់ | 22 |
| 2. | កាហ្វេ | សាគមសិបប្លាំង | 38 |
| 3. | ទេដស៊ី | ខ្មែរបាត់បានសិបប្លាំង | 159 |
| 4. | ថ្ងៃលូក | ពេជ្យលោកប្លាំងនឹងយកសារបច្ចុប្បន្ន | 2,861 |
| 5. | ថ្ងៃកាហ្វេខ្លួនឯែង | ពេជ្យលោកប្លាំងនឹងយកសារបច្ចុប្បន្ន ប្លាំងខ្មែរបាត់បានសិបប្លាំង | 2,345,678 |

- A. 1. mphiy-pii
 2. saamsəp-prambəy
 3. muəy-rɔɔy, haasəp-prambuən
 4. pii-pōən, prambəy-rɔɔy, hoksəp-muəy
 5. pii-liən, bəy-saen, buən-məin, pram-pōən, prammuəy-rɔɔy,
 cətsəp-prambəy

226. Both the Buddhist Era and the Christian Era are used in Cambodian, although the latter is more common in secular life. The Buddhist Era date is obtained by adding 543 years to the Christian Era date; e.g. A.D. 1968 +

543 = B.E. 2511. The word for Buddhist Era is ពិភពលោកនាស់

/puttəsaqkəraac/ and is abbreviated ព.ស.. The word for Christian Era

is គ្រឿនសកកាស់/krīhsaqkəraac/ and is abbreviated គ.ស.. 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. Transcribe and pronounce the following two dates:

1. ពិភពលោក ពីថ្ងៃអូ មករា ៩.ស. ១៩៦៨

Wednesday, the twenty-eighth of January, A.D. 1968

2. ពិភពលោក ពីថ្ងៃចន្ទ កញ្ញា ៩.ស ២៥១១

Monday, the sixteenth of July, B.E. 2511

- A. 1. tjay-put tii-mphiy-prambəy məəqkəraa krīhsaqkəraac məpōən
 prambuən-rɔɔy hoksəp-prambəy.
 2. tjay-can tii-dap-prammuəy kaqkədaa puttəsaqkəraac pii-pōən
 pram-rɔɔy dap-muəy.

APPENDIX B

Transliteration System for Khmer Script

This system of transliteration is a modification of that proposed by Lewitz (1969), and was developed by Franklin Huffman of Cornell University and Edwin Bonsack of the U.S. Library of Congress for the use of librarians in cataloguing publications in Khmer. A transliteration system, unlike the transcription system outlined in Appendix A, is not based on pronunciation, but is rather a one-to-one conversion of the symbols of one writing system to those of another writing system. The great disadvantage of this system is that, being based on the original values of the Indic characters in which Khmer was first written, it obscures the pronunciation of modern Khmer; its advantages are its relative simplicity and the fact that it makes possible the etymological reconstruction - although not the current usage - of Pali and Sanskrit loanwords in Khmer.

| Consonants and Subscripts | | | | | | Dependent Vowels | | Xai | | Digit |
|---------------------------|---|----|---|---|----|------------------|-----|-----------------------|-----|-------|
| ກ | ຂ | ກ | ດ | ຂ | ດ | x | xa | ຂ x | xai | ၁ |
| ଡ | ຂ | kh | ဒ | ຂ | n | xx | xax | ຂ x | xo | ၂ |
| ຕ | ຂ | g | ပ | ຂ | p | xx | xáx | ຂ | xau | ၃ |
| မ | ຂ | gh | ຜ | ຂ | ph | xx | xăx | ຂ | xam | ၄ |
| ບ | ຂ | ն | ຕ | ຂ | b | x | xā | x: | xah | ၅ |
| ປ | ຂ | c | ກ | ຂ | bh | x | xâx | x: | xà | ၆ |
| ຜ | ຂ | ch | ມ | ຂ | m | x | xi | Independent Vowels | | ၇ |
| ຈ | ຂ | j | ພ | ຂ | y | x | xī | | | ၈ |
| ယ | ຂ | jh | ရ | ຂ | r | x | xy | ງ | i | ၉ |
| ၁ | ຂ | ñ | ၁ | ຂ | l | x | xy | ဤ | ၁ | ၁ |
| ၂ | တ | t | ၂ | ຂ | v | x | xu | အ | ၂ | ၂ |
| ၃ | ထ | th | ၃ | ຂ | s | x | xū | ခ | ၃ | ၃ |
| ၄ | ဇ | d | ၄ | ຂ | š | x | xua | အ | ၄ | ၄ |
| ၅ | ဇ | dh | ၅ | ຂ | s | x | xoe | အ | ၅ | ၅ |
| ၆ | န | n | ၆ | ຂ | h | x | xya | အ | ၆ | ၆ |
| ၇ | တ | t | ၇ | ၁ | l | x | xia | ၇ | ၇ | ၇ |
| ၈ | ထ | th | ၈ | ၁ | q | x | xe | ၈ | ၈ | ၈ |
| ၉ | ဇ | d | ၉ | ၁ | q | x | xae | ၉ | ၉ | ၉ |

Notes

1. In the consonant columns, x shows the position of the superscript relative to the subscript. A subscript is always romanized after the superscript, without an intervening vowel, as in ក្រឡុក krakhvák.
2. When ñ occurs as a superscript, the lower element is omitted, as in ñj. When ñ occurs as its own subscript, it takes the full form x, as in កាន្តា kaññā. Otherwise, the subscript has the form of the lower element alone, as in khñ.
3. The consonant v, followed by the vowel ŋ, takes the form ŋ.
4. In the vowel columns, x shows the position of the consonant relative to the vowel. This applies both to the Khmer and to the romanization columns. It should be noted that an x in the Khmer column can also represent a final consonant with no vowel following, in which case it is romanized simply as x, as in ດៅ dăb.
5. The consonants ៥ m and x: h are always preceded by a vowel, but, being finals, never themselves bear a vowel. They may, however, be preceded by vowels other than a, as in ៥ tum, ៩៩ seh.
6. The diacritics ᜒ and ᜔ are romanized by x'' and x' immediately following the consonant they modify. They have the alternative form x when they co-occur with one of the superscript vowels ᜒ, ᜔, ᜖, and ᜗. When x co-occurs with one of the superscript vowels ᜒ and with one of the consonants ᜄ, ᜈ, ᜉ, ᜊ, ᜋ, ᜌ, or ᜎ, it is romanized as x'', as in ᜒ p''i. When x co-occurs with one of the superscript vowels ᜔ and with one of the consonants ᜄ, ᜈ, or ᜎ, it is romanized as x', as in ᜔ s'i. Otherwise x represents the vowel u, as in ᜎ mun.
7. The diacritics ᜒ, ᜔, ᜖, and ᜗ in the romanization column are placed after the last letter of the word in which they occur, as in ក្រសាធិយᜒ ksatriyᜒ, ចាំ cah᜔, តាំ ta᜖, ភាព្យ gatman᜗.
8. Conventional signs are:

| | |
|----------|---|
| <u>ᜑ</u> | romanized by repeating the preceding word or phrase |
| <u>ᜐ</u> | romanized as .l. |
| <u>ᜑ</u> | romanized as .p. |
| <u>-</u> | romanized by means of the hyphen (-) |
| <u>:</u> | romanized by means of the colon (:) |
| <u>,</u> | romanized by means of the period (.) |

The full-stop signs ᜑ and ᜐ are omitted in romanization.

9. In Khmer, words are not written separately; spacing occurs only after longer phrases. In romanization, however, the shortest written form which can stand alone as a word is treated as such. This applies also to Pali and Sanskrit loanwords. Other loanwords have the same divisions as in the original language.
10. Two adjustments must be made in the above system for type-written Khmer: 1) The symbol $\ddot{\text{x}}$ should be transliterated o rather than au, as in $\ddot{\text{x}}\text{oy}$. 2) The symbol $\ddot{\text{x}}$ does double duty for both $\ddot{\text{x}}$ and $\ddot{\text{x}}$; in the two particles $\ddot{\text{x}}$ and $\ddot{\text{x}}$, it should be transliterated ka' and ta'; in all other occurrences it should be transliterated $\ddot{\text{x}}$, as in ប្រយោជន៍ prayojan.