

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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Languages

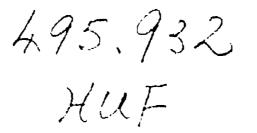
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Library of Congress catalog card number: 78–104614 Standard book number: clothbound, 300–01199–7; paperbound, 300–01314–0

Printed in the United States of America by The Murray Printing Company, Forge Village, Massachusetts. Distributed in Great Britain, Europe, Asia, and Africa by Yale University Press Ltd., London; in Canada by McGill-Queen's University Press, Montreal; and in Mexico by Centro Interamericano de Libros Académicos, Mexico City.

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SEP 1 0 1984

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 <u>Modern Spoken</u> <u>Cambodian</u> (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 <u>Reader</u>, 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.

V

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 <u>Reader</u>; 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, <u>Ethnic Groups</u> of <u>Mainland Southeast Asia</u> (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," <u>Bulletin de l'École Française</u> <u>d'Extrême-Orient</u>, 7 (1907), pp. 213-63.

3

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 /qaqsaa 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-canh 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 Pallawa 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," <u>Sino-Indian</u> Studies, 2 (1956), pp. 77-87.

4. K. A. Nilakanta Sastri, "L'Origine de l'alphabet du Champa," <u>Bulletin de</u> l'École Française d'Extrême-Orient, 35, pp. 233-41.

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

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

Introduction

sented by the symbols -<u>ough</u> in the words <u>rough</u>, <u>cough</u>, <u>bough</u>, <u>slough</u>, and <u>hic-cough</u>. 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 sutdent 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.

	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		-1			
Trilled		r			

Phonetic Key

Voiceless unaspirated bilablial stop. In initial position like the p in pin, but /p/ without the aspiration; or like the \underline{p} in <u>spin</u>. In final position like the \underline{p} in up.

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Phonology

- /t/ Voiceless unaspirated dental stop. Initially like the <u>t</u> in <u>top</u>, but without the aspiration; or like the <u>t</u> in <u>stop</u>. Finally like the <u>t</u> in <u>hot</u>.
- /c/ Voiceless unaspirated palatal stop. Initially like the <u>ch</u> in <u>cheese</u>, 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 <u>k</u> in <u>key</u>, but without the aspiration; or like the <u>k</u> in <u>ski</u>. Finally like the <u>ck</u> in <u>back</u>. After the vowels /ii, ei, ee, or ae/ it is intermediate between $\frac{1}{c}$ and $\frac{1}{k}$; the two never contrast in that position.
- /q/ Voiceless unaspirated glottal stop. Initially like the closure which occurs at the beginning of the word <u>Oh</u>! when pronounced explosively. Finally like the closure which occurs at the end of the first <u>Oh</u> in the exclamation <u>Oh</u>, 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 <u>d</u> in <u>day</u>, but more tense.
- /f/ Voiceless labio-dental spirant. Like the \underline{f} in <u>fool</u>. Occurs only in a few loanwords.
- /s/ Voiceless dental groove spirant. Like the <u>s</u> in <u>sit</u>.
- /h/ Voiceless glottal spirant. Initially like English <u>h</u> in <u>hot</u>. In final position its point of articulation is much fronter, somewhat like the German <u>ch</u> in <u>Ich</u>.
- /m/ Voiced bilabial nasal. Like the <u>m</u> in <u>mom</u>, <u>ham</u>.
- /n/ Voiced dental nasal. Like the <u>n</u> in <u>no</u>, <u>on</u>.
- $/\tilde{n}$ / Voiced palatal nasal. Like <u>ny</u> in <u>canyon</u>, but occurs initially and finally in Cambodian.
- /ŋ/ Voiced velar nasal. Like \underline{ng} in \underline{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 <u>y</u> in you, but more tense.
- /1/ Voiced lateral. Like English <u>l</u> in <u>late</u>, <u>ale</u>.
- /r/ Voiced retroflex. May be slightly trilled initially, but usually pronounced as a single flap, like the Spanish <u>r</u> in <u>pero</u>.

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.

C1								С	2									C ₃	
	p	t	с	k	q	b	d	m	n	ñ	ŋ	w	у	1	r	S	h	th	kh
р		x	x	x	x		x		x	x	x		x	x	x	x	x		
t	x			x	x	х		x	x		x	x	x	x	x		x		
с	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		
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		
1	x			x	x	x		x			x	x					x		x

Chart 2. Initial Consonant Sequences

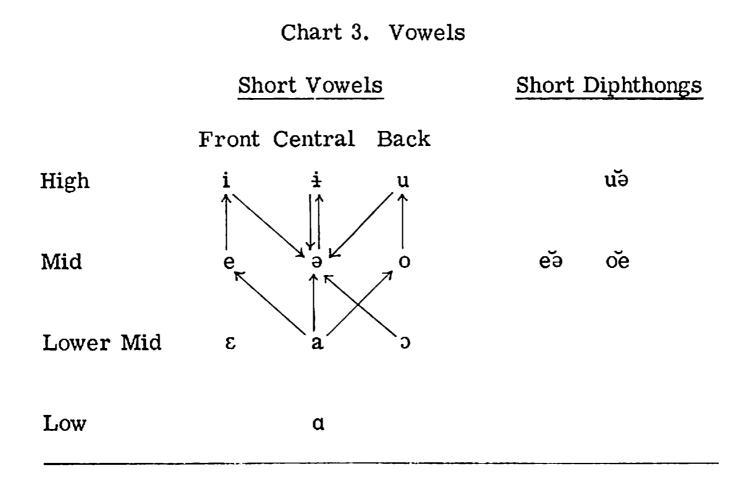
When the stops /p t c k/ occur as the first member of two-place initial consonant sequences /CC-/, they are unaspirated before /r s h/, slightly aspirated before voiceless stops and all continuants other than /r/(except in the homorganic sequence /kŋ-/), and released with slight vocalism before /q b 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 $/\epsilon\epsilon/$ and /30/ 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, εε, ii, əə, aa, aa, uu, oo, ɔɔ/
10 long diphtongs: /iə, iə, uə, ei, əi, ou, ae, aə, ao, ɔə/
8 short vowels: /i, e, i, ə, a, a, u, o/
3 short diphtongs: /eə, uə, oə/
31 vowel nuclei.¹

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



Phonetic Key

Long Vowels and Diphthongs

- as in /ciik/ 'to dig'. High front unrounded vowel like English ee in cheek. /ii/
- as in /biə/ 'playing cards'. Falling diphthong, moving from a high front to /iə/ a mid central position.
- as in /leen/ 'to play'. Higher-mid front unrounded vowel with lax and /ee/ breathy articulation; similar to French ée in année.
- as in /kmeig/ 'to be young'. Tense diphthong starting at a point lower than, /ei/ and ending at a point higher than, /ee/ above.
- $/\epsilon\epsilon/$ as in $/\epsilon\epsilon\eta/$ 'to quit'. Lower-mid front unrounded vowel with lax and breathy articulation; similar to French ai in aide. Occurs long only.
- /ii/ as in /lii/ '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.
- $/i\partial/$ as in $/ci\partial/$ 'to believe'. Falling diphthong, moving from a high central to a mid central position.
- as in /l = 0 'on'. Higher-mid central unrounded vowel with lax and breathy /əə/ articulation; similar to French <u>eu</u> in <u>peu</u>.

- as in /m = in / (10,000). Tense diphthong moving from a position lower than, /əɨ/ and ending at a point higher than, /aa/ 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.

- as in /kmae/ 'Khmer'. Falling diphthong, starting at a point similar to En-/ae/ glish a in sat and moving to a position similar to English e in set.
- /aa/ as in /kaat/ 'be born'. Falling diphthong, moving from the position of /aa/described above, to the position of /aa/ 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.
- /@@/ 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 $/\partial \partial /$ 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.
- /oo/ as in /rook/ 'to seek'. Lower-mid back semi-rounded vowel with lax and breathy articulation. Occurs only long.
- /22 as in /222 'color'. Falling diphthong, moving from the position of /22described above to a position lower and backer than $/\partial \partial /$ above.

Short Vowels and Diphthongs

- /i/ as in /cih/ 'to ride'. High front unrounded short vowel, like English i in sit.
- as in /seh/ 'horse'. Mid front unrounded short vowel, like English e in set. /e/
- /ɨ/ as in /kit/ 'to think'. High central unrounded short vowel; shorter and lower than $/\frac{1}{4}$ described above.
- as in /bət/ 'to close'. Mid central unrounded short vowel, slightly higher /ə/ than u in standard American English but.
- as in /kat/ 'to cut'. Lower-mid front-of-center unrounded short vowel, /a/ similar to French <u>a</u> in <u>patte</u>.

- as in /kat/ 'to jot down'. Low central unrounded short vowel, identical in /a/ quality with its long counterpart /aa/above.
- as in /tuk/ 'to keep'. High back rounded short vowel, lower in quality than /u/ its long counterpart /uu/ described above.
- as in /kon/ 'film'. Mid back rounded short vowel, slightly diphthongized /0/ $[o^{\underline{u}}]$ in some environments.
- as in /neəq/ 'person'. Tense falling diphthong, moving from a position /eə/ lower than /e/above to a mid central position.
- as in /luəq/ 'to sell'. Sometimes falling, sometimes rising, short diphthong, /uə/ 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 $C_1(C_2)(C_3)V_1(V_2)(C_4)$, 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 follow-ing three shapes; the third is rare.

- 1) CVC /bət/ 'to close'
- 2) CCVC /sdap/ 'to hear'
- 3) CCCÝC /sthət/ (\sim /thət/) 'to be located'

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

1) CÝV	/kaa/ 'work'	/puu/ 'uncle'
2) CÝVC	/baan/ 'to have'	/qaoy/ 'to give'
3) CCVV	/chɨɨ/ '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

<u>Minor disyllables</u>² 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 $/\partial/$ in normal speech.

Examples:	CV+Ś	/kakáay \sim kəkáay/ 'to scratch about'
		/prokán \sim prəkán \sim pəkán/'to object'
	CVN+Ś	/baykáət ~ bəykáət ~ pəkáət/ 'to originate'

/kit/ 'to think' /proh/ 'male'

CrVN+Ś /prambśy ~ prembśy ~ pembśy / 'eight'

<u>Major disyllables</u> 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:	/siəwphiw/ (~/səphiw/) '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," <u>Bulletin of the School of Oriental and African Studies</u>, 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:	•	/thòəm+mə+dáa/ 'usually' /pút+tə+sáh+snáa/ 'Buddhism' /ríəc+ròət+tháa+phi+báal/ 'royal government' /wi+cáa+rə+náq+kə+tháa/ 'editorial'
	SIX Synables:	/witcaatrothaqtkothaa/ euitoriai

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.

<u>Phonemes:</u> /š/ in /šaek/ 'check' (Fr. cheque) /z/ in /qaazii/ 'Asia' (Fr. Asie) /g/ in /qaŋglei/ '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 <u>name</u> when pronounced in isolation, and its <u>values</u> before a vowel, when first in a consonantal cluster, and when in final position.

Group	No.	Symbol	Name	values		
				Before Vowel	First in Cluster	Final
VELARS	1	R	kaa	k	k	k
	2	ଚ	khaa	kh	k	k
	3	25	kəə	k	k	k
	4	255	khəə	kh	k	k
	5	23	<u> </u>	ŋ	_	ŋ
PALATALS	6	23	caa	с	с	с
	7	Î	chaa	ch	с	-
	8		600	с	с	с
	9	252	choo	ch	с	-
	10	<u>m</u>	ñəə	ñ	-	ñ

Chart 1

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Group	No.	Symbol	Name		Values	
				Before Vowel	First in Cluster	Final
RETROFLEXES	11	24	daa	d	d	t
	12	छ (स्रू)	thaa	th	t	t
	13	EJ .	dəə	d	-	t
	14	625	thoo	th	-	t
	15	3	naa	n	n	n
DENTALS	16	R	taa	t	t	t
	17	Ê	thaa	th	t	t
	18	જ	təə	t	t	t
	19	Î	thəə	th	t	t
	20	S	nəə	n	-	n
LABIALS	21	25	baa	b	р	p
	22	2	phaa	ph	р	p
	23	67	рээ	р	p	р
	24	R	phoo	ph	p	p
	25	5	məə	m	m	m
MISCELLANEOUS	26	23	уээ	у	-	у
	27	5	rəə	r	-	ø
	28	ល	100	1	1	1

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Group	No.	Symbol	Name	Values		
				Before Vowel	First in Cluster	Final
MISCELLANEOUS (cont.)	29	Ş	พวว	w	-	w
	30	న్	saa	S	s	h
	31	ÊN	haa	h	Ø	-
	32	6	laa	1	-	-
	33	5-5	qaa	q	q	-

B. NOTES ON THE CONSONANT SYMBOLS

1. The Two Series

Notice that the names of some consonant symbols have the vowel /dd/while others have the vowel /oo/. Consonants which are pronounced with an inherent /dd/ vowel are called 55255755: /qakhoosaq/ 'voiceless' in Cambodian, and consonants which are pronounced with an inherent /oo/are called 555755:

/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.

tŋŭən/ 'heavy voice' respectively.

2. Conversion

Those 1st series symbols which lack a counterpart in the 2nd series, namely \mathfrak{L} /bad/, $\mathfrak{K}\mathfrak{f}$ /sad/, $\mathfrak{L}\mathfrak{f}$ /had/, and $\mathfrak{F}\mathfrak{f}$ /qad/ can be "converted" to 2nd series symbols by the addition of the diacritic $\widehat{\mathcal{F}}$ is \mathcal{F} /traysap/ ($\stackrel{\frown}{-}$) to the 1st series symbol, giving $\widehat{\mathfrak{U}}$ /boo/, $\widehat{\mathfrak{K}}$ /soo/, $\widehat{\mathfrak{K}}$ /hoo/, and $\widehat{\mathfrak{K}}$ /qoo/, 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 ~/ŋɔɔ/, m /ñɔɔ/, m /mɔɔ/, m /yɔɔ/, r /rɔɔ/, and r /wɔɔ/, can be con-/raa/, and $\dot{\boldsymbol{s}}''$ /waa/. When a vowel symbol that is written above the consonant symbol occurs with a converted consonant symbol, the /museqkətoʻən/ (-) and /traysap/ ($\stackrel{\frown}{=}$) are replaced by the initial for initial kinetial kinetiali kinetial kinetial kinetial kHowever, the /traysap/ is usually written above a converted t or s despite a superscript vowel, although either form may occur; e.g. $\vec{\mathcal{D}} \overset{\sim}{\mathcal{B}} \sim \vec{\mathcal{D}} \overset{\sim}{\mathcal{B}} / \text{hig} /$ 'a kind of toad'; $\hat{ss} \sim \hat{ss} / qii/$ 'an interjection'. In the dictionary, words spelled with these converted symbols follow words spelled with their counterparts and having the same vowel symbol.

The /museqkətoੱən/ is also used to convert the symbol \mathfrak{L} /baa/ to \mathfrak{L} /paa/, which does not otherwise exist in the 1st series. All words spelled with \mathfrak{L} follow all words spelled with \mathfrak{L} in the dictionary order.

3. The Symbol \mathfrak{L} /baa/

When \mathfrak{U} /b/ is followed by the vowel symbol -7, it has the alternative form \mathfrak{M} to distinguish it from $\mathfrak{U} + \mathfrak{I}$ and from $\mathfrak{L} \mathfrak{I}$; e.g. $\mathfrak{M} \mathfrak{U} \mathfrak{I} \mathfrak{I}$ /baay/ 'cooked rice' $\mathfrak{M} \mathfrak{U} \mathfrak{I} \mathfrak{I}$ /caay/ 'to spend', $\mathfrak{U} \mathfrak{U} \mathfrak{I} \mathfrak{I}$ /hay/ 'horse (lit.)'. The symbol \mathfrak{U} /b/ is pronounced /p/ in the following circumstances:

2. The /traysap/ should be carefully distinguished from the $\mathfrak{H}\mathfrak{K}$ /saq/ (\mathfrak{L}) which occurs as an integral part of the symbols \mathfrak{K} , \mathfrak{K} , \mathfrak{L} , \mathfrak{L} , \mathfrak{K} ,

- a) When it is converted to /p/ by the /museqkətoੱən/: $\tilde{\mathfrak{U}}$ or $\tilde{\mathfrak{U}}$ / $\tilde{\mathfrak{V}}$ /paa/ father $\tilde{\mathfrak{V}}$ /pəy/ flute
- b) When it occurs with a subscript:

$$\mathcal{L}/pd=y/husband$$

Such words follow words spelled with 25' in the dictionary.

c) In some words an initial \mathfrak{U} is pronounced /p/ even though it is written neither with the /museqkətoʻən/ nor a subscript. Such words are listed inconsistently in the dictionary, sometimes occurring among words spelled with an initial \mathfrak{U} , and sometimes among words spelled with initial \mathfrak{U} :

d) In final position:

4. The Symbol \mathcal{F} /taa/

The symbol \mathfrak{N} is normally pronounced /t/ (\mathfrak{N} /taa/ 'old man',

 $\delta / taa / to continue > \delta / damnaa / extension$

 $\widetilde{\mathcal{S}}$ /tlay/ to be valuable > $\widetilde{\mathcal{S}}$ / $\widetilde{\mathcal{S}}$ /damlay/ value Derivatives of bases spelled with $\widetilde{\mathcal{N}}$ /d/ are spelled with $\widetilde{\mathcal{N}}$. $\widetilde{\mathcal{S}}$ /daə/ to walk > $\widetilde{\mathcal{S}}$ $\widetilde{\mathcal{S}}$ $\widetilde{\mathcal{M}}$ /d/ amnaə/ process However, due to the homophony between $\widetilde{\mathcal{N}}$ and $\widetilde{\mathcal{S}}$ 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 $\overset{?}{\Join}$ and $\overset{?}{\ni}$ are used to represent /d/

in the 1st and 2nd series respectively, and the Retroflex nasal Ω is used to represent a 1st series /n/. The symbols Ω /thad/, β /doo/ and Ω /thoo/ are rare, occurring only in a few words of Pali or Sanskrit origin.

6. The Aspirates

Symbols 9 $\mathfrak{W} \mathfrak{K} \mathfrak{K} \mathfrak{K} \mathfrak{K} \mathfrak{K} \mathfrak{K}$, and \mathfrak{K} , 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 -5

Notice that when $\int /r/$ occurs in final position, it is not pronounced (represented \emptyset in the chart); e.g. $\Re \int /kaa/$ 'work', $\int \frac{\partial}{\partial g} \int /kmae/$ 'Cambodian'.

8. Special Combinations

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.

Sound		1st :	Series	2nd Series			
	Symbol	Ex	ample	Symbol	Ex	ample	
k	ĥ	R	/kaa/ neck	Ŕ	R	/kɔɔ/ mute	
kh	Э	อาส์	/khat/ to polish	255	ນກ ສ໌	/khoət/ to prevent	
ŋ	2"	2573	- /ŋaaw/noise- maker	23	2575	- /ŋiəw/ a kind of clam	
с	ប	গ্র	/caa/ to in- scribe	Ŕ	ີ່ ສຳ	/ciə/ be	
ch	\$ `	ទភាអិ	/chaoŋ/ in- terval	<u>055</u>	ะกรา ผ	S/choon/ to react out	
ñ	m	က္ကိ	/ñam/ to eat	గ్సా	က္ကာ	/ñoə̃m/ meat salad	
d	°2 √	ಬ್ರಿಎ	/don/ ele- phant com- mand	ಕ್ರ	3,R	/dun/ alike	
t	87	හ	/taa/ old man	Q.	<i>f</i> ey	/tiə/ duck	
th	ਨੇ	ig i	/thou/ vase	tî	x35	/thuu/ relaxed	
	23	บาล	/thaan/place, site	ms	ຄກາດເ	/thiəl/ a large drum	
n	3	ណាបទ	/naay/ bored	&	នា យ	/niəy/ chief	
	27	252	/nəŋ/ (~ /nɨŋ/) that's right				
b	25	r_{γ}	/bot/ son	ŝ	ម្វិត	/but/ a personal name	
p	25	27	/pəy/ flute	ଣ	r.	/pii/ from	
ph	23	ର୍ଜ୍ଞ ଅଟେ	/phaay/ to run at full speed	87	871 55	/phiəy/ to circulate	
m	5	2 " 5 5-5	/mae/ mother	£-5	555	/mεε/ polite response particle	
	5	บุล์	/mat/ fine, powdered			_	

Chart 2. The Two Series Contrasted

Sound	1st Series				2nd Series			
	Symbol	E	Example Symbol Example		xample			
У	" 155	2557 23	/yaaŋ/ kind; variety	255	ยรา มี	/yiəŋ/ go (royalty)		
r	5	5" 2 U	/rouŋ/ rat- tling noise	5 11	5 2	/ruuŋ/ hole		
1	50 5	8 223	/leiŋ/ a per- sonal name	ល	ណា ដំ	/leeŋ/ to play		
	£??	En 23	/luəŋ/ king					
w	2~ ^ }	EN 23	/way/ to hit	ક	53	/wɨy/ quick, clever		
	IJ	55	/wouŋ/ flock, crowd					
S	ಗ್	สร้	/səy/ wicker ball	ล์รั	กรั	/sii/ to eat		
h	£٦	ยกเรื	/haaŋ/ shop, store	ນົ	ins D	/hiən/ to dare		
q	5-5	55	/qəy/ what	5-5	255 55	/qii/ interjec- tion		
f	25	enn	/fək/ to practice	25	iñ war	/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 \mathfrak{S} , \mathfrak{OSS} , \mathfrak{S}

Although the symbol \mathcal{S} 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.

 \widehat{m} /kaa/ to address (a letter): \widehat{m} /kaa/ work

$$\mathcal{F}_{i}$$
/kuu/ pair: \mathcal{F}_{i} /kuu/ to draw \mathcal{F}_{i} /pii/ from: \mathcal{F}_{i} /pii/ two

^{3.} Words spelled with a final 5 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 Consonant Symbols

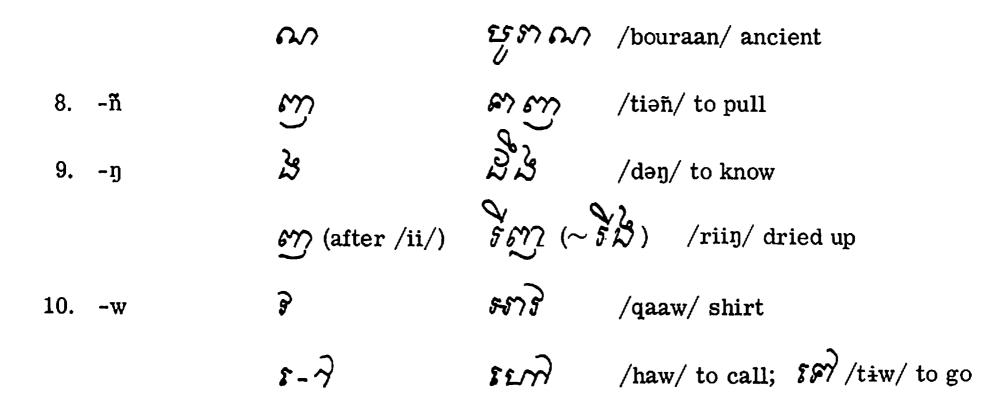
The symbols \Re , ∂ , \Re and 255 represent final /-q/ after the vowels /a, aa, a, aa, a, aa, a, ið, ið, ið, ið, uð/, and final /-k/ elsewhere. A given final consonant may be presented by a variety of symbols. In the chart below the most common, or characteristic, representation is exemplified first.

	inal sonant	Representation	Exam	ple
1.	-p	25	55925	/riəp/ to arrange
		67	P7 87	/phiəp/ aspect
		R	805785	/loop/ greed
2.	-t	R	คาสา	/kat/ to cut
		کل	Lj va	/baat/ polite response used by men
		2 N	ଦ୍ୱୋନ୍ଦର୍	/praakat/ exact
		A C	RR	/qət/ brick
		23	Enes	/baat/ to tell, recite (clergy)
		Ŷ	લ્ટ્ર છે	/krut/ garuda
		2	(29 23) 22	/pramaat/ to scorn, despise
		~	ewsw	/aggunit/ wegnon

Chart 3. Representation of Final Consonants

4. -k (after vowels other than those in 5 below)

Final Consonant	Representation	Exampl	. <u>e</u>
4k	9	<u>१</u> - ४	/muk/ face
	255	: 1-5 1-5 5	/meek/ sky
5q (after	/a, aa, α, αα, eĕ, uĕ,	iə, i ə, uə/)	
	R	<i>P</i> \$> <i>P</i> \$	/kaaq/ refuse, residue
	Ŕ	27 25	/niəq/ dragon
	9	en enso	/pisaaq/ April-May
	25_5	ES7 255	/miəq/ January
	Ø (no cons	sonant) after sh	nort vowels in final position
		355	/wittyuq/ radio
6m	L-S	ಗುಚ	/taam/ to follow
	• _ /	en e	/dom/ piece; 6 /tum/ ripe
	0	ື	/cam/ exact; $\hat{\mathfrak{S}}$ /tum/ to perch
	- °	<u>ເ</u> ກົ	/cam/ remember; $\hat{\Sigma}$? /coəm/ bruised
7n	æ	E 7&	/miən/ to have



bod
pr i y/ forest
ır pardon
ling style;
/teĕah/ to slap

(-° /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, B1, 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 (5). /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 <u>primarily</u> by initial consonant, <u>secondarily</u> by vowel symbol). Each symbol is followed by its name, its 1st series value, and its 2nd series value.

		Val	ues			Val	Values	
Symbol	Name	1st Series	2nd Series	Symbol	Name	1st Series	2nd Series	
1. —	sraq qaa	aa	ວວ	9. -	sraq quə	uə	uə	
27	sraq qaa	aa	iə	10. 5-	sraq qaə	aə	əə	
3	sraq qeq	е	i	11. 5-	sraq q i ə	iə	÷ə	
4. 2	sraq qəy	әу	ii	12. 5-5	sraq qiə	iə	iə	
5.	sraq qəq	Э	÷	13. 8 -	sraq qei	ei	ee	
6	sraq qəi	əi	÷÷	14. 5-	sraq qae	ae	33	
7. –	sraq qoq	0	u	15. š –	sraq qay	ay	÷y	
8//	sraq qou	ou	uu	16. 5-7	sraq qao	ao	00	

Chart 1. The Names of the Vowel Symbols

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		Values				brown	Values	
Symbol	Name	1st 2nd Symbo Series Series		mbol	Name	1st Series	2nd Series	
17. 8-3	sraq qaw	aw	ŧw	20.	رله دره	sraq qam	am	_{oə̃m} 1
$18. \frac{\circ}{\prime}$	sraq qom	om	um	21.	- ° °	sraq qah	ah	eə̃h
19. –	sraq qam	am	um1					

1. When the vowels $\stackrel{\circ}{-}$ and $\stackrel{\circ}{-}$ are recited as part of the Cambodian syllabary, they have the special syllabary pronunciations /qo $\stackrel{\circ}{-}$ m/ and /qe $\stackrel{\circ}{-}$ m/ respectively in the 2nd series. In actual words, however, they have the values shown above; in fact the phonological sequence /-e $\stackrel{\circ}{-}$ m/ occurs only in the 2nd series

syllabary pronunciation of -3

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 <u>configuration</u>. 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 <u>Cambodian Dictionary</u> of the Bud-dhist Institute (Bibliography Item 4), and each configuration is exemplified in both series.

Chart 2. Values of Syllabic Configurations

Symbol	. v		: Series Exemplification	V		Series Exemplification
1 / 2	/aa/ /a/	r rr	/kaa/ neck /kat/ jot down		fore Labia کرکر elsewhere	/kɔɔ/ mute al finals /tup/ to stop up /yuəl/ to under- stand

	l 1st	Series	2nd Series Value and Exemplification /eə/ before Velar finals		
Symbol	Value and E	Exemplification			
ں ع. – –	/a/ 558	/saq/ era			
			ຄະຈິ	/leĕəq/ gum-lac	
			/oj/ elsewhere	e (except below)	
			ମ ୟ	/toə̃p/ army	
4. – 255	/ay/ ASES ers	/samay/ era	/iy/ 2005	/cɨy/ victory	
ు 5. – క			/ 27/ RS	/cɔə/ resin	
6?	/aa/ 87	/taa/ grand- father	/iə/ 🖒	/ciə/ to be	
7> -	/a/ mm	/kat/ to cut	/eĕ/ before Ve	elar finals	
			ma	/teəq/ to trap	
			/oja/ elsewher	e	
6			ສາສ໌	/koət/ he, she, they	
8. –	/eq/ in stressed syllables		/iq/ in stressed syllables		
	ESE	/matteq/ opinion	252	/latthiq/ pre- cept	
ļ 1	/e/ in unstress	ed syllables	/i/ in unstress	sed syllables	
9	975 65.57	/keriyaa/ conduct	202	/nitiən/ story	
	1 1 man	/ a a t / la a a a t			

	1st Series Value and Exemplification			2nd Series Value and Exemplification		
Symbol						
14:	/əh/	ر بی ر با می	/ckəh/ to pry out		0	
15	/əɨ/	ζe ^κ	/dəɨ/ fallow	/±±/	R.	/k ii / as fol- lows
16	/oq/ in	stressed	syllables	/uq/ in stressed syllables		
		88	/wojetthoq/ artifact		355	/wittyuq/ radio
	/o/ in	unstresse	d syllables	/u/ in unstressed syllables		
		PS 2575	/komaa/ child		RIGERI	/kulikaa/ pill
17	/0/	R.S.	/kon/ film	/u/	x	/kun/ merit
18. 7 °	/oh/	2 9 : /	/coh/ to descend	/uh/	€?°	/puh/ boiled
^{19.} 7	/ou/	955 U	/kou/ to stir	/uu/	Я 1	/kuu/ p a ir
20. – Š	/əw/	<u>କ୍ଟ</u> ଚ	/trəw/ correct	/±w/	\$ F	/n i w/ consist- ing of
21. —	/uə/	955 N	/kuə/ pod, ear	/uə/1	855 ~	/kuə/ proper
22. 5 -	/aə/	823	/baə/ if	/əə/	8 055	/chəə/ wood
23. 5 - :	/əh/	द्व र र र र र	/caŋkəh/ chopsticks2		٩.	
24. 5 -	/ɨə/	58	/tɨə/ dwarfed	/±ə/1	દર્જી	/cɨə/ to believe

25.
$$\mathbf{s} - \mathbf{j}$$
 /iə/ $\mathbf{s} \mathbf{s} \mathbf{j} \mathbf{j} \mathbf{t} \mathbf{s}$ /tiəp/ bowl /iə/1 $\mathbf{s} \mathbf{s} \mathbf{j} \mathbf{t} \mathbf{s}$ /tiəp/ nearly
26. $\mathbf{s} -$ /ei/ $\mathbf{s} \mathbf{s} \mathbf{s}$ /kei/ heritage /ee/ $\mathbf{s} \mathbf{s}$ /kee/ he, she, they
27. $\mathbf{s} - \mathbf{t} \mathbf{s}$ /ə/ (before Palatals) /i/ (before Palatals)
 $\mathbf{s} \mathbf{t} \mathbf{s} \mathbf{s} \mathbf{s}$ /məc/ how, why
 $\mathbf{s} \mathbf{t} \mathbf{s} \mathbf{s} \mathbf{s}$ /cəñ/ to leave $\mathbf{s} \mathbf{s} \mathbf{s} \mathbf{s} \mathbf{s}$ /plic/ to forget
 $\mathbf{s} \mathbf{s} \mathbf{s} \mathbf{s} \mathbf{s}$ /cəñ/ to leave /ih/ $\mathbf{s} \mathbf{s} \mathbf{s}$ /nih/ this, here

	1st Series			2nd Series		
Symbol	Value and Exemplification			Value and Exemplification		
29. 5-	/ae/	7 7 3	/kae/ to repair	/22/	ભા	/kεε/ craw (of a fowl)
30. 5-:	/eh/	?**:	/keh/ a kind of goat		٦	
31. 8 -	/ay/	\$ (25	/pray/ salty	/ɨy/	\$ (P)	/prɨy/ forest
32. 8-2	/ao/	8R78	/kao/ to shave	/00/	8R1	/koo/ cow, ox
33. 8-7:	/ah/	887:	/kah/ island	/uĭəh/	8203	/kŭəh/ to strike
34. 8-2	/aw/	र कर	/taw/ bushel	/±w/	रिन्दर	∕t i w∕ to go
35. $\frac{\circ}{/}$	/om/	ی ۲	/dom/ piece, morsel	/um/	690	/tum/ ripe
36. °	/am/	Ê	/cam/ exact	/um/	ي م	/tum/ to perch
37. –?	/am/	ຊຄົ	/cam/ to remember	/ojəm/	_	/coə̃m/ bruised
38 నిసి		ຄຳມີ	/taŋ/ to establish	/eĕəŋ/	శాచ	/teə̃ŋ/ all of
39. - ° 3	/ah/	87:	/tah/ to wiggle	/eĕəh/	૾ૢ૱	/tešh/ to slap

1. The symbols for the diphthongs /uə, i = 0, i = 0,

times spelled \mathfrak{sp} and sometimes \mathfrak{sp} . 2. This word is normally spelled \mathfrak{sp} .

3. The symbol \circ /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 $(f_{\mathcal{F}}, f_{\mathcal{F}}, f_{\mathcal{F}}, f_{\mathcal{F}}) / sraq pin tua/$

'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 of-

ficial dictionary along with other words that are spelled with an initial 55 and the equivalent vowel symbol; e.g. words spelled with the independent initial vowel

 \Re /qə-/ follow words spelled with an initial \Re /qə-/. Symbols 11 and 12 include an initial /r-/, and follow all words spelled with initial \Re ; symbols 13 and 14 include an initial /l-/ and follow all words spelled with an initial Ω .

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 $\frac{2}{3}$ /q=wpuk/ 'father', number 9 in $\frac{2}{3}$ /qaoy/ 'to give', and number 14 in $\frac{2}{3}$ /l=+/ '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.

Sy	mbol	Name	Equivalent	Value	Example
1.	ਲੇ	sraq qeq	8-8	/qə-/	හිත /qət/ not
			55	/q±-/	Ref. /qintuq/ the moon
			5-5	/qəy/	RETS /qəyləw/ now
2.	ຄົງ	sraq qəy	5-5	/qəy/	ດງຄາຂ/qəysaan/ northeast
3.	27	sraq qoq	55	/qo-/	ອອກກາ /qokñaa/ official of ministerial rank
			55	/qu-/	gいが /quppəmaa/ example
			8557	/qao/	こうなん /qaobaasaq/ layman
4.	2,	sraq qou	5-5 11	/qou/	द्रिष्ट्रे /qout/ camel

Chart 3. The Independent Vowel Symbols

Sy	mbol	Name	Equivalent	Value		Example
			5 5 11	/quu/	છે જ	/quun/ deficient (lit.)
5.	<u></u>	sraq qəw	5-5 8	/qəw/	BMA	/qəwpuk/ father
6.	ふ	sraq qae	ۍ ۶ <i>۶</i>	/qae/	\mathfrak{F}	/qae/ at, as for
7.	5	sraq qay	355	/qay/	<i>ตราริ</i> กา	/qayrəwoən/ Erawan
8.	(res)	sraq qao	8557	/qao/	र्वृध	/qaop/ to embrace
9.	ଡ	sraq qao	\$ 5-57	/qao/	Gj	/qaoy/ to give
10.	<i>L</i>	sraq qaw	१ ३-१२	/qaw/	જર્સ	/qawtuəq/ water- plant
11.	29	sraq r i k	%	/rɨ-/	25855	/rɨhsəy/ bamboo
12.	<u>55</u>	sraq r ii	d s	/r ii /	ũ	/r ii / or
13.	Ŋ	sraq l i k	ณ์	/l±-/	కిల్రాన	/rumlik/ to com- memorate
14.	<u></u>	sraq l i i	ส้า	/l±±/	<u>e</u> g	/lɨɨ/ 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 \mathcal{H} is used as a base for 1st series syllables, and \mathcal{H} is used for 2nd series syllables.

Chart 4. Vowel-to-Symbol Concordance

	······································	
Vowel	1st Series	2nd Series
1. /ii/		Ř
2. /ee/		<i>1</i> 2 3
3. /ei/	5 <i>P</i> 5	
4. /εε/		হ ক্ষ
5. /ɨɨ/		x, 25, M 5x
6. /əə/		525
7. /əɨ/	R.	
8. /aa/	An	
9. /uu/		£, 3,
10. /00/		ନେମ
11. /ou/	£, 3,	
12. /၁၁/		RS, RSS
13. /aa/	8 85	

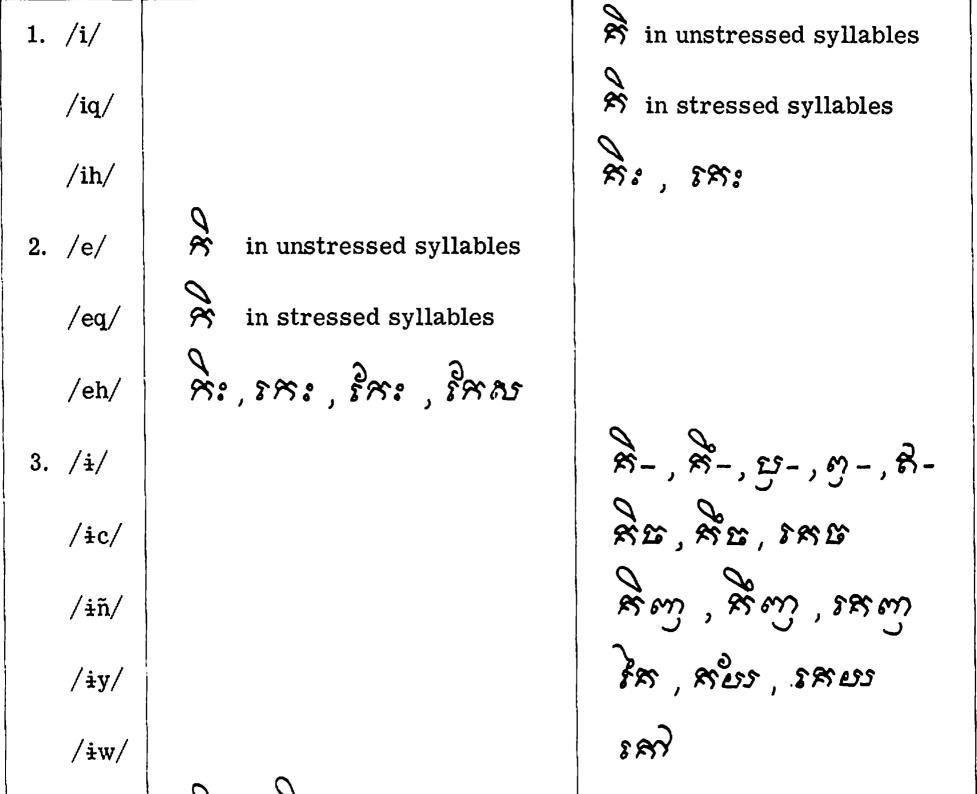
Long Vowels

13. /aa/ R, R5 8993 14. /iə/ 595 15. /ɨə/ M, MS 16. /uə/ 57 57 7 17. /ae/ 18. /aə/

र १९२२ १९९२ १९९२ R, , R, S

Vowel	1st Series	2nd Series
19. /ao/	rm, 3, 6, 9	
20. /ɔə/		หรี, พณิ, พร

Short Vowels



Vowel	1st Series	2nd Series
5. /a/	$m - ', m^2 -$	
/ay/	in, ner, m	
/aw/	र तो , हें	
/am/	m	
/aŋ/	हेरु, रुष्ट्रेड, जु इस्तरे, हु स्ते स्रोरे	
/ah/	ጽ:	
6. /u/		\hat{n} in unstressed syllables,
		\$\$ 7 -,3-
/up/		RE, RE
/um/		र्ल, र्ल, राख, राख
/uq/		🌴 in stressed syllables
7. /o/	$\hat{\gamma}$ in unstressed syllables	
	R-, 3-	
/om/	97-,3- 97	
	\boldsymbol{lpha} in stressed syllables	

before Velar Stops

$$/ oq/$$
 \mathcal{R} in stressed syllables8. $/a/$ $\mathcal{R} - '$ $/am/$ \mathcal{R} , \mathcal{R} \mathcal{I}' $/am/$ \mathcal{R} , \mathcal{R} \mathcal{I}' $/ah/$ $\mathcal{R}\mathcal{R}$:, \mathcal{R} \mathcal{R}' 9. $/ e \exists q/$ $\mathcal{R} \cap \mathcal{I}'$ $/ e \exists q/$ $\mathcal{R} \cap \mathcal{I}'$ $\mathcal{R} \cap \mathcal{I}'$ $\mathcal{R} \cap \mathcal{I}'$

Vowel	1st Series	2nd Series
/eĕəh/		R:, R):
10. /ŭə/		$\mathfrak{K}_{-}^{\prime}$ except before Labials
/uĭəh/		នកា:, កត
11. /oĕ/		🔊 - except before Velars
/ojəm/		ත

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 $(-) \hbar f \pi' / \sin q /$ 'hair' (not to be confused with the /traysap/(-); 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 super-

script forms. These subscripts are called \mathcal{F} \mathcal{F} \mathcal{F} \mathcal{F} /cəəŋ qaqsaa/ 'consonant feet' in Cambodian, and the resulting consonant groups are referred to as \mathcal{F} \mathcal{F} \mathcal{F} \mathcal{F} \mathcal{F} \mathcal{F} /qaqsaa damruət/ 'combined consonants.'

Chart 1. The Subscript Forms



255 222 $\widetilde{\mathbb{C}}$ lev 53 2<u>-</u>5 -6 (s 6555 R55 N5 ~ 5-5 5-5 67

35

B. NOTES ON THE SUBSCRIPTS

1. Shapes of the Subscripts

a) The subscripts $\frac{2}{3}$ /khaa/, $\frac{2}{3}$ /doo/, $\frac{2}{3}$ /naa/, $\frac{2}{3}$ /poo/, $\frac{2}{3}$ /qaa/ are identical in form with their superscript counterparts.

b) The subscripts \hat{n} /kaa/, \hat{n} /koo/, \hat{n} /caa/, \hat{n} /chaa/, \hat{n} /taa/, \hat{n} /phoo/, \hat{n} /phaa/, and \hat{n} /haa/ are identical with their superscript counterparts except that some small embellishment, usually referred to as $\hat{n}\hat{n}$ /saq/ 'hair', is omitted from top of the subscript: $\hat{-}$ in the first six examples, \hat{N} in the case of \hat{N} /phaa/, and $\hat{-}$ in the case of \hat{n} /haa/. c) The subscripts \hat{n} /khoo/, \hat{n} /choo/, \hat{n} /thoo/ are reproduc-

tions 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 $25 \int /baa/, 25 \int /y_{22}/, 55 \int /saa/$ are also charac-

terized 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.

grow, raise'; \mathfrak{LS} /bantoh/'to criticize'. In some words, however, it is also pronounced /d/ when subscript to \mathscr{S} ; e.g., \mathfrak{LS} / sandaoh/'to pity'; \mathfrak{LS} /sandaan/'family, lineage'. Since $\overline{\mathfrak{S}}$ serves as subscript for both \mathscr{P} and \mathfrak{S} , and \mathfrak{S} has no subscript form, there are only thirty-one subscripts, compared with thirty-three consonant symbols.

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3. Special Combinations

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

a)
$$\mathfrak{S}$$
 /laa/ as in \mathfrak{S} /laan/ car
b) \mathfrak{S} /faa/ ~/waa/ as in \mathfrak{S} /fək/ to practice, \mathfrak{S} /woun/ crowd
c) \mathfrak{S} /naa/ as in \mathfrak{S} / \mathfrak{S} /nən/ there, that's it
d) \mathfrak{S} /maa/ as in \mathfrak{S} / \mathfrak{S} / mat/ fine, powdered
e) \mathfrak{S} /laa/ as in \mathfrak{S} / \mathfrak{S} /luən/ 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. $i \not (priy)$ forest, $j \not (priy) \not (priy) \not (priy) \not (priy) \not (priy) / (pr$

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 (9, &, b, b, , 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.:

Unaspirated consonant symbols usually occur as superscripts when the sub-

script is a voiced consonant or /r/; e.g., n/n / kbaal/head', n/n/head', n/n/head',

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, $\frac{3}{2}$? /kmae/ 'Khmer'

is spelled with an aspirated initial, while $\frac{2}{5}$ /kmein/ '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 eightyfive 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: and station', 5.52 $/mnhin/(20) \circ O \circ O \circ / 11 cha on / (dma)$

$$20^{\circ}, 10^{\circ}, 10^{$$

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
$$ec{eta}$$
 , \widecheck{m} , and $arsigma$ (or \varOmega), there are

some limitations on what symbols occur as subscripts.

When the superscript is \mathcal{M} , the subscript will represent one of the consonants /c ch n/ (i.e. will be homorganic): $\mathcal{M}_{\mathcal{A}}^{\mathcal{M}}$ /bancam/ to pledge,

ບາງເຮັ້/bañchoo/ to stand on end, ສາກາ /saññaa/ sign

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 <u>Cambodian Dictionary</u> of the Buddhist Institute, the /niqkəhət/ spelling is usually recommended where two spellings are possible, with two notable excep-

tions: in words spelled with an initial \mathfrak{H} — , and in roughly half the entries

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

តទើង spelled with initial f_{2} - , the conjunct spelling is recommended: $(\sim \Re \Re \vartheta) / damka an / to elevate, <math>\Re \Re (\sim \Re \Re) / damruat / to stack,$ $\Re \Re \vartheta \Re (\sim \Re \vartheta \Re \%) / sampat / confidential, <math>\Re \Re (\sim \kappa \Re) / samlaa /$

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: Ress /kəttəyuəh/fame, Erges /paccay/ contribution, Ergendes /pannaalay/library, Esso

/thoemmedaa/ usual.

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

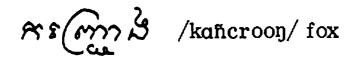
Many medial clusters have an unaspirated stop symbol as superscript with the homorganic aspirated stop symbol of the same series as subscript. Such clusters usually represent the sequence /CCh-/ phonologically, e.g.:

$$ss gamma fish$$
 (elegant) $macchaa/$ fish (elegant) $macchaa/$ woetthog/ artifact

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

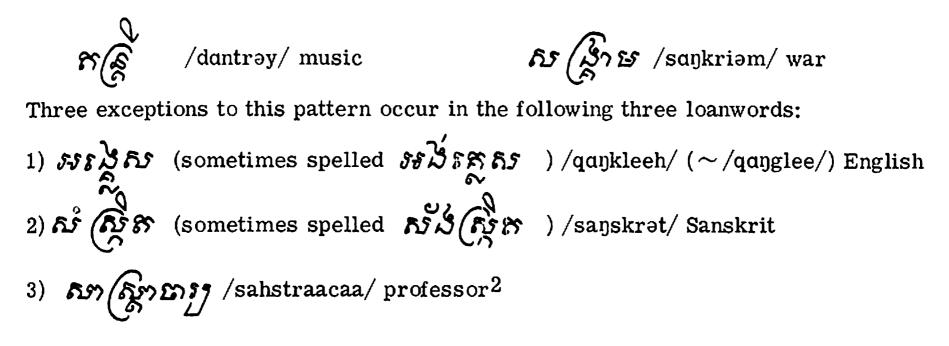
/qaqkəraa/letter ssrcss/qattəbat/article, composition 589587 manyaran /puttesahsnaa/ Buddhism

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-/:



Rice /kantray/ scissors

Subscript Consonant Symbols



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:

ur	/mɨt/ friend	585	/cət/ heart, mind
67 6 1 6	/put/ Buddha	សត្	/sat/ animal
S N N	/roət/ state	85 B 0	/yuĕən/ motor
छरू हरू ह	/mənuh/	សំឫត្រ	/sambot/ letter
(25 M &	/prapuĕn/ wife	ब)हार	/samot/ ocean
marg	/piəq/ word	<u>ြူးနားနဲ့</u>	γ∕preĕhsaŋ∕ priest
รพตร	/pɛɛt/ doctor	325	/wŭəŋ/ group, circle
भुछ	/kam/ karma	જ જ જ જ જ જ	/qaatit/ sun

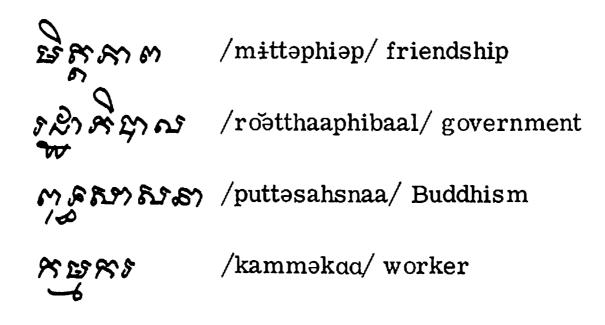
ting /bon/merit **525** or **526** /khaet/province

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

for any /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.



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:

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

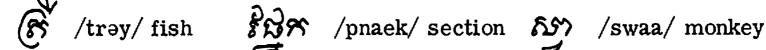
2. If, however, the two consonant symbols belong to different series, the following two rules apply:

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:

Gro	oup I	- D	omin	ant	Gr	oup II	- Pas	ssive
р	t	с	k	q	n	n n	ñ	ŋ
b	d				w	r	1	У
f	S			h				

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:



4 I

Superscript is passive, subscript is dominant:

جع (mhoup/food المعربي /mdaay/mother المعربي /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:

25 % /klian/ be hungry 43

Superscript is passive, subscript is dominant:

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 super-script is 1st series while the subscript is 2nd series, so the vowel has its 2nd series value.

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 prevocalic 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) C_1 is 1st series, so the vowel of both syllables is 1st series:

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

1. It should be understood that this rule as stated is merely a <u>rule of pronunciation</u> which is pedogogically useful for reading Cambodian. Historically, of $\overline{\text{course}}$, 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 $\int /|aa/and | M| /|naa/$, but the information is redundant.

Vowel Consonance

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:

$$\frac{2}{100} \frac{2}{100} \frac{1}{100} \frac{1}$$

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.

$$\mathscr{S}$$
 /tote \mathscr{S} /tote \mathscr{S} /tote flap about \mathscr{S} \mathscr{S} \mathscr{S} /coccek/ to discuss

 $(F_{\mu})^{3}$ /trotuum/ 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.

sessi /robah/ thing

Esp 5/cuendae/ stairs

3. Exceptions to the Rule

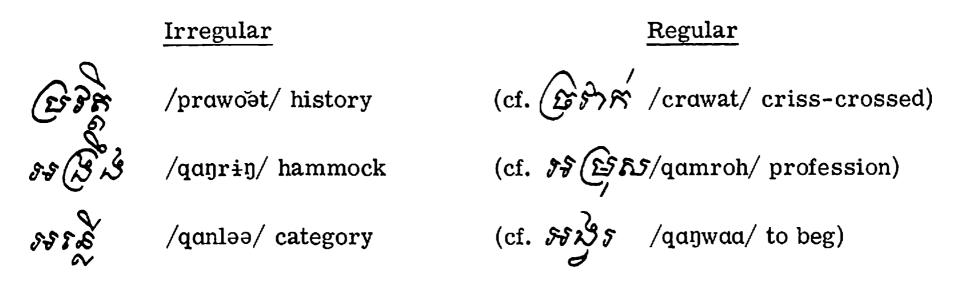
1

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

member / soldier

These words are sometimes written with a converted $\hat{z}\hat{\gamma}$; e.g., $\hat{z}\hat{\gamma}\hat{z}\hat{\gamma}$, thus conforming to the rule. In monosyllables, however, $\mathcal{L}\mathcal{D}$ is always dominant, e.g., M/2 /lhoŋ/'papaya'.

Conversely, in some disyllables (especially in some disyllables with initial $\mathcal{F}\mathcal{T}$), a normally dominant initial consonant in the first syllable fails to impose its series on a following passive consonant:



C. POLYSYLLABLES

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

> 1) SERS / caettanaa/ to like 2) **\$}\$\$** /weettəniə/ miserable

In the first example, the syllable $-\delta$ is pronounced /-naa/ because of a preceding 1st series \Re ; in the second example, - \Re is pronounced /-niə/ because of a preceding 2nd series \mathcal{S} . In the following two examples, however, the first is regular, the second irregular:

- 1) $\delta S S S S / saqkaraac / century$
- 2) $\Im m m \partial /qaekkəriəc/$ independence (rather than the expected */qaekkəraac/).

VII. DIACRITICS AND PUNCTUATION

A. DIACRITICS

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
$$\mathfrak{LSR}/\mathrm{bantaq}/(-)$$

/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. $/\alpha/\alpha$ after a 1st series consonant symbol, and, after a 2nd series consonant symbol, $/u/\alpha$ before a labial consonant and $/u\partial/\alpha$ elsewhere.

225 /cap/ to finish	(cf.	fits /caap/ a hoe)
nses /lup/bird trap	(cf.	សម /loop/ a fish trap)
ns n//lujaq/ to sell	(cf.	ഹ്ന് /look/ 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

/e<code>ě</code>/ before a velar consonant symbol, and /o<code>ě</code>/ elsewhere

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

 Mr K / pešq/ to wear
 (cf. Mr K / pisq/ word)

 Dris / mošn/ chicken
 (cf. Br S / misn/ to have)

 2. USASA S / museqkətošn/ (-)
 "

 The / museqkətošn/ is sometimes referred to as S M M K M dao/ 'rat's teeth'. It has two functions:
 47

a) to convert the 2nd series consonant symbols \mathcal{B} , \mathcal{M} , \mathcal{H}

$$e_{5}$$
 /yaan/kind (cf. e_{5} /yiən/to go (royalty))
 $\hat{f} = \frac{g''}{2}$ /mae/mother (cf. $\hat{f} = \frac{g'}{2}$ /mee/polite response particle)
When the /museqkətoən/co-occurs with a superscript vowel symbol it is re-
placed by the f_{7} / f_{5} / f_{5} / f_{5} /kbiəh kraom/($-\frac{1}{7}$) written below the conso-
nant. $\frac{g''}{2}$ > $\frac{g''}{2}$ /məin/10,000.

b) to convert the 1st series consonant symbol \mathfrak{L} /baa/ to \mathfrak{L}'' /paa/, which doesn't otherwise exist.

$$\frac{2}{3}$$
 /paan/ to cover (cf. $\frac{2}{5}$ /baan/ to have)
 $\frac{2}{5}$ /pay/ flute (cf. $\frac{2}{5}$ /bay/ three)
3. Fright /traysap/ (~)

The /trəysap/ is used to convert the 1st series symbols \mathfrak{V} , \mathfrak{K} , \mathfrak{K} , \mathfrak{L} , and \mathfrak{F} , which have no 2nd series counterparts, to the 2nd series symbols $\widetilde{\mathfrak{V}}$, $\widetilde{\mathfrak{K}}$, $\widetilde{\mathfrak{L}}$, \mathfrak{K} ,

 $\mathcal{L} \mathcal{M} \mathcal{S}$ /hian/ to dare (cf. $\mathcal{L} \mathcal{M} \mathcal{S}$ /haan/ shop)

$$\frac{1}{2} \int \frac{1}{2} \sqrt{\frac{quu}{dry} - dock} \qquad (cf. \frac{1}{2} \int \frac{1}{2} \sqrt{\frac{qou}{exclamation}})$$
When it co-occurs with a superscript vowel, the /traysap/, like the /museqkatoan/
above, is replaced by the /kbiah kraom/ $(\frac{1}{2})$.

$$\frac{1}{2} \int \frac{1}{2} \int \frac{1}{2} \sqrt{\frac{1}{2}} \sqrt{\frac{1}{2}} \int \frac{1}{2} \sqrt{\frac{1}{2}} \sqrt{\frac{1}{$$

Diacritics and Punctuation

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/: $/-\alpha m/$ with a 1st series consonant and /-um/ with a 2nd series consonant.

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

ביל אל /tumŋuən/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 -3, it represents /-am/ after a 1st series consonant symbol and /-oəm/ after a 2nd series consonant symbol.

 $\hat{\omega}^{\circ}$ /cam/ to remember $\hat{\chi}^{\circ}/c\bar{\omega}$ /coem/ bruised

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

d) The /niqkəhət/ is used instead of the /bantaq/ as a vowel shorter in syllab-

les spelled with the vowel -2 + 3. Such syllables are pronounced /-aŋ/ in the 1st series and /-eəŋ/ in the 2nd series.

$$\hat{n}\hat{\lambda}/tan/to establish$$
 $\hat{n}\hat{\lambda}/tean/all$

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

/saŋskrət/ (~/samskrət/) Sanskrit

 $\mathfrak{N}_{\mathcal{Q}}^{\mathfrak{S}}$ /saccaŋ/true $\mathfrak{N}_{\mathcal{Q}}^{\mathfrak{S}}$ /sanyook-saññaa/(~/saŋyook-saññaa/) the symbol $\overset{\checkmark}{-}$. 5. $\mathfrak{N}_{\mathfrak{N}}^{\mathfrak{S}}$ /sanyook-saññaa/($\overset{\smile}{-}$)

a) The /sanyook-saññaa/ is used in certain words of Pali or Sanskrit origin, and usually has the same value as the short written -2. Words spelled with the /sanyook-saññaa/ and a final silent subscript usually have alternative spellings without the /sanyook-saññaa/:

$$\widehat{\mathcal{M}}_{\mathcal{N}}^{\mathcal{N}} (\sim \widehat{\mathcal{M}}_{\mathcal{N}}^{\mathcal{N}}) / \operatorname{saq} / \operatorname{rank}$$
 $\widehat{\mathcal{M}}_{\mathcal{N}}^{\mathcal{N}} (\sim \widehat{\mathcal{M}}_{\mathcal{N}}^{\mathcal{N}}) / \operatorname{sap} / \operatorname{sound}$
 $\widehat{\mathcal{M}}_{\mathcal{N}}^{\mathcal{N}} (\sim \widehat{\mathcal{M}}_{\mathcal{N}}^{\mathcal{N}}) / \operatorname{we} \operatorname{sp} / \operatorname{palace}$

b) The /sanyook-saññaa/ plus a final 25 is pronounced /-ay/ in the 1st series and /-iy/ in the 2nd series.

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

> میں /ñoə/ to tremble $\hat{\mathcal{R}}^{\mathcal{O}}_{\mathcal{S}}$ /coə/ resin sons /tumpoe/ page

The /toondakhiat/ is perhaps more commonly called and / samlap/ 'to kill'. However, since /samlap/ is sometimes used to refer to the /bantaq/ (-), the term /toondokhiot/ is used to avoid ambiguity. It is also frequently called

 \mathfrak{SRS} /patdesaet/ 'to cancel'. The /toondokhiot/ 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 -5, they are both unpronounced. Following are some examples of common words spelled with the /toondakhiat/.

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

$$\mathcal{H}_{\mathcal{F}}$$
 (~ $\mathcal{H}_{\mathcal{F}}$ (~ $\mathcal{H}_{\mathcal{F}}$) /ksat/king $\mathcal{H}_{\mathcal{F}}$ $\mathcal{H}_{\mathcal{F}}$ (~ and sandalwood $\mathcal{H}_{\mathcal{F}}$ (~ $\mathcal{H}_{\mathcal{F}}$ $\mathcal{H}_{\mathcal{F}}$)/leəq/ good manners

Diacritics and Punctuation

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

ເຮຍກິຕຄະ /reepuĕl/army ເພາະມີຊີ່າສີ/mooban/in a rage

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

$$(\mathfrak{Prin}/\mathfrak{prum}/\mathfrak{Brahma})$$
 $(\mathfrak{Prin}/\mathfrak{prin}/\mathfrak{a}/\mathfrak{Brahman})$
7. $\mathfrak{Prin}/\mathfrak{prin}/\mathfrak{prin}/\mathfrak{a}$

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

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

$$\mathfrak{W}$$
 / baribou/ abundant \mathfrak{W} / presh-kaa/ ear (royalty)
An exception is the word \mathfrak{W} / qaat/ 'essence', where the symbol underlying
the /robaat/ is pronounced as a final.

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

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

Most such words are more commonly spelled with $-\mathfrak{I}-$:

$$\mathcal{F}$$
 $(\sim \mathcal{F}\mathcal{F}\mathcal{F}\mathcal{F})$ /tuurəkuət/ destitute
 $\mathcal{F}\mathcal{F}\mathcal{F}\mathcal{F}$ $(\sim \mathcal{F}\mathcal{F}\mathcal{F}\mathcal{F})$ /məərədaq/ heritage

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

/ei/>/e/ + /h/:**fff:** /seh/ horse/ee/>/i/ + /h/:**ff:** /nih/ this/ae/>/e/ + /h/:**ff:** /keh/ wild goat (rare)/ao/>/a/ + /h/:**ff:** /keh/ island/oo/>/ue/ + /h/:**ff:** /kub/ strike/ao/>/e/ + /h/:**ff:** /kub/ strike/ao/>/e/ + /h/:**ff:** /kub/ strike

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

This symbol, commonly called $\beta \delta \delta / \cos \beta / \cos \beta$ / coc pii/ 'two dots', was only recent-

ly 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 /re=hmuk/ - (8 above).

a) It is pronounced /-aq/ after a 1st series consonant and $/-e\ddot{e}q/$ after a 2nd series consonant.

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.

$$EFRER REPRESE (EFREE)/meðqkətheðq-phiðsaa/Pali
 $REFERER (FREE-REE)/qehsðraq-phiðp/freedom$
10. $FREFRE (FREE-REE)/qehsðraq-phiðp/freedom$
10. $FREFRE (FREE-REE)/qehsðraq-phiðp/freedom$
10. $FREE (FREE-REE)/qehsðraq-phiðp/freedom$
10. $FREE (FREE-REE)/qehsðraq-phiðp/freedom$
10. $FREE (FREE)/qehsðraq-phiðp/freedom$
10. $FREE (FREE)/freedom$
10. $FREE (FREE)/qehsðraq-phiðp/freedom$
11. $FREE (FREE)/qehs$
11. $FREE (FREE)/qehs$
11. $FRE$$$

The /wiqriam/ (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:

In a more Cambodianized (and more common) spelling of such words, the /wiqriam/ is replaced by the /sanyook-saññaa/. In the standard Cambodian Dic-

tionary the symbol (-) is used instead of the /wiqriam/ 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).

ser ຄັລ (ser ຄົລັ) /qaatman/ soul 12. $\frac{1}{2}$ $\frac{1}{2}$ a) The /kaaqkəbaat/, also commonly called

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:

m: /caah/ polite response particle used by women

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

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. 2537 /kliə/ space

Cambodian words are not normally separated by spaces in closely knit syntactic phrases or single-clause sentences. The /klia/ '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:

a) between clauses within a sentence

- b) between sentences in a cohesive group of sentences
- c) after preposed adverbial words or phrases, such as "usually," "today," "in that town," etc.
- d) before and after proper names
- e) before and after numbers
- f) before and after the symbols \mathcal{Y} , \mathcal{Y} , \mathcal{Y} , \mathcal{Y} , and \mathcal{Y} is \mathcal{Y} (explained below) plained below)
- g) between coordinate words in lists

Some of the uses of the /klia/ are illustrated in the following sentence: ខ្ញុំននាឆ្កុពន និញត្រួច រស្ថន ខេតិយកនិងអិទីរ៉ង់ ខេត្តិ ះខ្លះខ្លះ M /tŋay-nih()kñom tɨw psaa()tɨñ krouc()qaŋkaa()haəy-nɨŋ qəywan pseiŋ()pseiŋ/ Today()I'm going to the market() to buy oranges() rice() and various things.

Diacritics and Punctuation

2.
$$\mathfrak{G}(\gamma)$$
 /khan/ (γ)

The /khan/, or /lbah/, is the Cambodian full stop. It occurs less fre-

quently 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. Essensonas /baariyaosaan/or ass: /lbah/(9/)

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

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 \mathcal{G} which is also called /baariyaosaan/.

/thaa/ 'saying, as follows' and the copulative $\overset{\frown}{\kappa}$ /k±±/ 'that is'.

A horizontal line is written between the two circles in order to distinguish it easily from the $/re\bar{e}hmuk/($?).

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.

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.

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
$$\vec{k}: \vec{j}$$
 /pte h knom/ 'my house' in the following example:
 $\vec{j}: \vec{j}: \vec{j}$ M $\vec{k}: \vec{j}$ M $\vec{k}: \vec{j}$

/kñom tɨw pteəh kñom; pteəh kñom nɨw cɨt psaa/ I'm going to my house; my house is near the market.

8. YASY /laq/or YES Y /peiyaal/

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

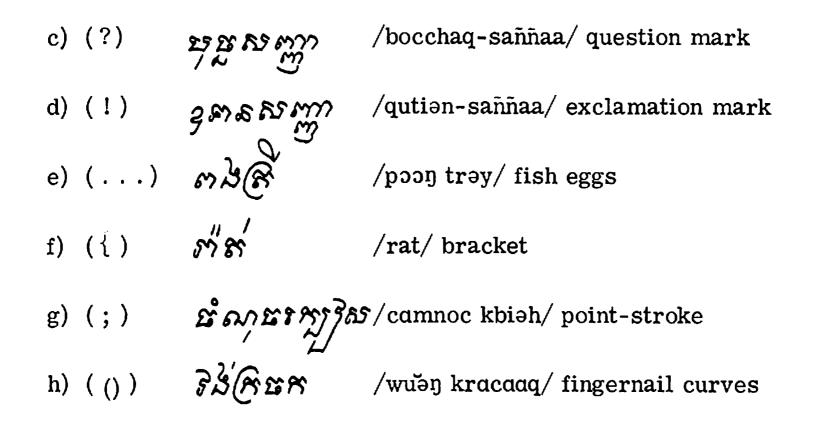
9. โร LA L / sahaq-saññaa/ hyphen (-)

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.

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) (.)
$$\mathcal{F}\mathcal{F}\mathcal{F}\mathcal{F}$$
 /coc muəy/ one point
b) (,) $\mathcal{F}\mathcal{F}\mathcal{F}\mathcal{F}\mathcal{F}$ /kbiəh/ a stroke

Diacritics and Punctuation



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.

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:

9	/muəy/	one	1	Z	/prammuəy/	six	6
کت	/pii/	two	2	3	/prampii~pramp i l/	seven	7
$\hat{\mathbf{m}}$	/bəy/	three	3	\$	/prambəy/	eight	8
ሪ	/buən/	four	4	6	/prambuən/	nine	9
ć	/pram/	five	5	0	/soun/	zero	0

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:

90 /dap/ ten 10
90 /dap-muəy ~ muəy-dandap/ eleven 11

වාධ	/dap-pii ~pii-dandap/	twelve	12
໑ຓ	/dap-bəy ~ bəy-dandap/	thirteen	13
ଚେତ୍ର	/dap-buən ~ buən-dandap/	fourteen	14
୭ଝ	/dap-pram \sim pram-dandap/	fifteen	15
२७	/dap-prammuəy \sim prammuəy-dandap/	sixteen	16
	58		

Numerals and Abbreviations

$$\circ \dot{n} / dap-prampil ~ prampil-dandap/ seventeen 17$$
 $\circ \dot{n} / dap-prambay ~ prambay-dandap/ eighteen 18$
 $\circ \dot{n} / dap-prambuan ~ prambuan-dandap/ nineteen 19$

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.

 90.000
 /muəy-məin/
 one ten-thousand
 10,000

 900.000
 /muəy-saen/
 one hundred-thousand
 100,000

 9.000.000
 /muəy-liən/
 one million
 1,000,000

 90.000.000
 /muəy-kaot/
 one ten-million
 10,000,000

All complex numerals involve combinations of the above:

کے /mphiy-pii/ 22

ຄະ	/saamsəp-prambuən/	39
૦૬૬	/muəy-rəəy haasəp-prambuən/	159
کت در که	/pii-poən prambəy-rəəy 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).

ઽ઼઼઼઼ઃ અદ્દ

/pii-liən, bəy-saen, pram-məin, buən-poən, prampil-rooy, 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., $9\epsilon 62 - 9\epsilon 62$ 1914-1918.

2. In multiplicative compounds whose first element is $\frac{14}{N}$ /muəy/ 'one', /muəy/ is usually shortened in rapid speech to /mə-/.

900 /muəy-rəəy/ ~/mərəəy/ 100

9.000 /muəy-pŏən/~/məpoŏən/ 1,000

This reduced form almost always occurs in $\int /m \partial ph_{iy} \sim mph_{iy} / 20'$ (re-flected in the conjunct spelling), but /mu -ph_{iy} / has been observed in deliberate speech.

3. The ordinal forms of Cambodian numerals are formed by placing the ordinaliz-

ing particle $\overset{\bigcirc}{\mathcal{F}}$ /tii/ in front of the cardinal numerals above, in either their written or symbolic forms.

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.:

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 <u>Cambodian Dictionary</u> 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 <u>ad hoc</u>. 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:

M. ES. = からたうかが /puttesaqkeraac/Buddhist era たたい = おうちょうかが /krihsaqkeraac/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:

/tŋay-put tii-məphɨy-büən mĕəqkəraa krɨhsaqkəraac müəy-pöən prambuən-rəəy 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, <u>Modern Cambodian Writing</u> (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:

B5-0-0232

2. Currency

The Cambodian monetary unit is the s_{f} or /rial/, which is divided into 100

written between the riels and the cents as follows:

22500 /saesəp-pram riəl/ forty-five riels.

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

26900 45 riels

ന്റ്റ്റാ 35 riels

Sometimes both a comma and a superscript \boldsymbol{s} are written:

د د. 45 riels

Sometimes the δ occurs after the cents figure:

3. The Metric System

/milimaet/ millimeter

/saytimaet/ centimeter

E. = IE 87.25. = 87.57325

/maet/ meter

/kiloumaet/ kilometer

/kraam/ gram

/kiloukraam/ kilogram

/liit/ litre

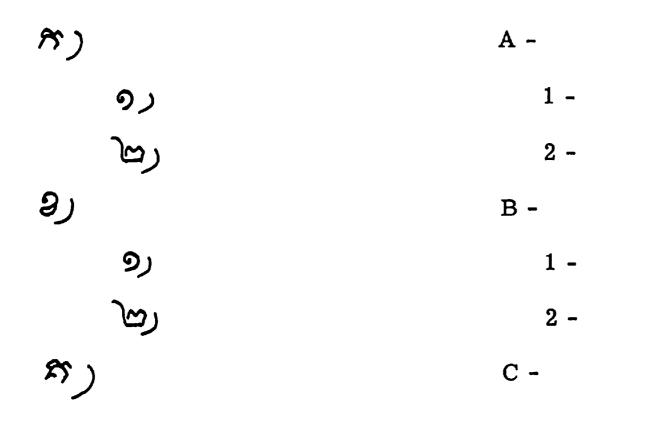
4. Miscellaneous

3 .		हेर्ने	/withəy/	street
E. 5.		umit	/mɔhaa-withəy/	boulevard
5. 5 .	=	इङ्गुडेह	/ruqkhaq-withəy/	avenue
<i>ን</i> ፍ. ፍን.	=	<u>ક્</u> ષૈકભ <i>ણ</i>	/pnum-piñ/	Phnom Penh
 .	=	ខ្វនាមារណ៍	/qutiəhaa/	for example
æ. <i>ø.</i>	=	જ જ રા ર દ સ છે	/nɨŋ datɨy tiət/	and others (rare)
•		ಎಸ್ಕಟ್ಟಾಟ	/qaek-qotdam/	His Excellency
F.S. S. 5-57.	=	RSENSZSSISSIS	/sahaqroĕt-qaameric/	U.S.A.
S F.S. 589	. 2 5 //	•	/see-qaa-tou/ the pronunciation of the tion) S.E.A.T.O.	(transcription of English abbrevia-

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: -9 - , -12 - , -9 - , -12 + 2 - , 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. n, 9, n, 2, 5, 125, 123, 123, 123, etc. These may in turn be followed by subheadings listed by numerals, in the following pat-

tern:



DX. 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/ss/)

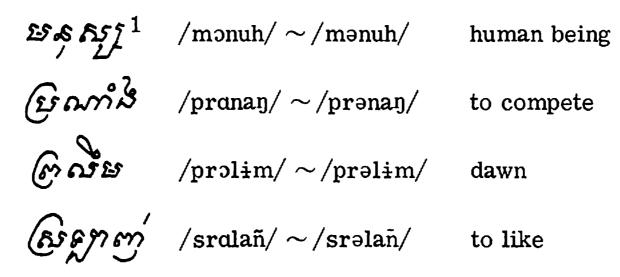
a) Any stressed syllable which is to be pronounced with the long inherent vowel $(/\alpha\alpha/after a 1st series symbol, /oo/after a 2nd series symbol; see Chapter IV, B) is written with the initial consonant symbol alone, with or without a following final consonant.$

8 5	/taa/	to continue	ጵና	/kəə/	dumb
្រះ	/lqaa/	pretty	<u>0555</u>	/chəə/	to stand
£9 89	/caat/	to moor	595	/rəək/	to seek
ERL	5 /prakaap/	to combine	សស	% /lələək/	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 227 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 \mathcal{G} . $\mathcal{M}\mathcal{M}\mathcal{L}\mathcal{S}$ /kakaay/~/kəkaay/ to scratch about $\mathcal{D}\mathcal{D}\mathcal{M}$ /cacək/~/cəcək/ to peck at $\mathcal{M}\mathcal{M}$ /tətuəl/~/tətuəl/ to receive $\mathcal{M}\mathcal{M}$ /rəbah/~/rəbah/ thing 64 Unwritten Sounds



c) In polysyllabic words, when the consonant symbols ff /baa/ and ff /mpp/ occur initially and before a following -f-/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/: ビジジのが /baaribou ~ baribou/ excellent

ビジジング /baariphook ~ bariphook/ to eat

ビジング /baarisot ~ barisot/ pure
/moo/: ビジング /moorphaq ~ morphaq/ to die (eleg)

Eジング /moorphat ~ morphat/ emerald

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

a) Any sequence of two consonants without an intervening vowel symbol, the second of which carries a \mathfrak{LSS}^{\prime} /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.

กรรร /chup/ to stop กรร์ /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 $\underbrace{\mathfrak{s}}_{\mathcal{F}}$, 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:

សាធ	/sam/	proper	arzes /saykum/	society
ลรด	/sap/	corpse	anne /praakat/	exact
ŔS	/cuĭən/	people	ରିନଙ୍କ /ciədaq/	Jataka
કદ	/ruĭət/	car	morn /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 -2^{\prime} ; see section 3-a.) Some common words of this kind are listed below. ຄະດັ່ງ /sap/ every ເລະເນັ່ງ/prešh-saŋ/ priest ອີນັ່ງ /wušŋ/ circle, family ເລັດຊີ /prapušn/ 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 /a/.

สาย	/samrap \sim səmrap/	for
RME	/kañcap ~kəñcap/	parcel
Ramas	/kandaal \sim kəndaal/	center
สะมาต่	/saykat \sim səykat/	section, quarter

 MA
 /kumpii ~ m.

 MA
 /puðnlii ~ penlii/
 light

 MA
 /puðnriik ~ penlii/
 loght

 MA
 /puðnriik ~ penlii/
 to spread, broadcast

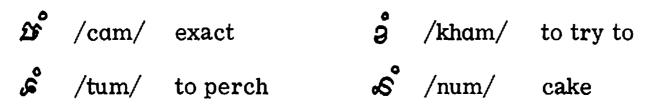
 MA
 /niqkehet/) appears ove
 counced with the

 MA
 /ol and
 loght

 e) Whenever the diacritic - ($\delta \mathfrak{FL} \mathfrak{K}$ /niqkəhət/) appears over a con-

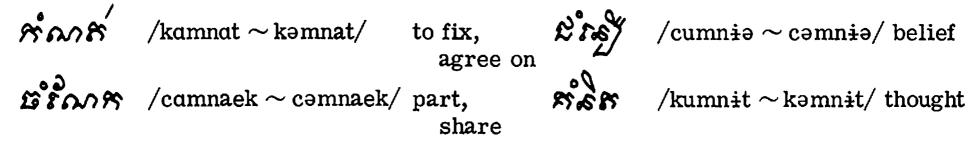
sonant symbol with no written vowel, the syllable is pronounced with the short inherent vowel plus /-m/: /-am/ after a 1st series consonant symbol and /-um/ after a 2nd series consonant symbol.

Unwritten Sounds



The common word \mathfrak{K} /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 /CVm-/ 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.



3. The Short Vowels $/a/e\bar{e}/o\bar{e}/$

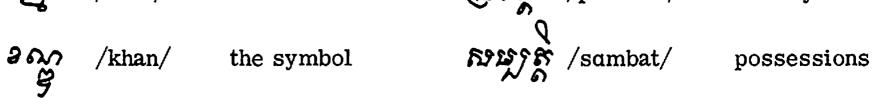
All other syllables involving unwritten vowels are pronounced as if they were

written with the short vowel symbol -2 - ; 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

-2. (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.

as m g	/sap/	sound	25.5 PC	/yeĕəq/	demon
NR	/sat/	animal	(2 mg)	/troĕp/	wealth
ASES	/kam/	fate	(ESSR	/prawojt/	history



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/.

ສາດ /qaqrun ~qərun/ dawn

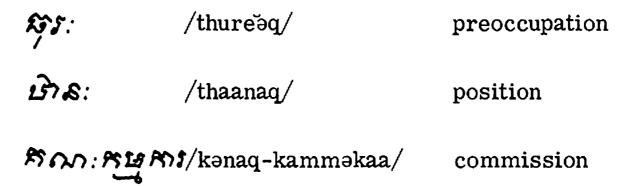
NATA /qanaakuət/ future

:

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

15 21 M SIGS: /pathemaq-puttewaccenaq/ first words of the Buddha

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



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:

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 /oੱə/, depending on the series.

In some words whose second consonant is \mathfrak{D} , an initial 2nd series consonant symbol is pronounced with a 1st series rather than a 2nd series vowel:

/raccənaa/ fine arts, crafts

In some disyllables with a medial double palatal nasal $\stackrel{\ref{main}}{\longrightarrow}$, the first syllable

has the vowel /a/, rather than the short inherent described for disyllables of this kind in section 2-d above.

Unwritten Sounds

ຳຕັ້ງ /kaññaa/ young woman ຄະເພດ /saññaa/ sign, indication

d) The unwritten vowel $/e\bar{e}/$ occurs in one very common word whose spelling is irregular with respect to initial cluster, series, and vowel:

/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 $/a/e\bar{a}/$ (depending on the series) if stressed, and $/\bar{a}/$ if unstressed. (See section A 3 b)

-85-> /-tt-/	រជនានា	/caettənaa/	to like
	ณตริ	/sattrəw/	enemy
- 85 - > /-td-/	8238523	/caetdəy/	stupa
- 26 - > /-cc-/	5 E BI	/raccənaa/	art
$-\hat{\kappa} - > /-cc-/$	กรุษยาย	/riəccəkaa/	civil service
- <i>fs</i> - > /-kk-/	אַמיזאנ	/qaekkəriəc/	independent

2. Unwritten /-q/ after Stressed Short Vowels

a) The unwritten vowels $/a/e\bar{a}/$, when stressed, are followed by a final /-q/, both medially and finally.

Medially:	រទមនុ ស្ស	/qaqmənuh/	inhuman (supernatural)
	75 PS 25	/qaqphiy/	fearless
Finally:	\$\$7 1997 F P	/qaqkhoosaq/	voiceless
	Sess:	/rɔyeĕəq/	interval
b) The sh	ort vowels 🔍	and $\frac{1}{7}$, wh	nen 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:	miann	/kaqruqnaa \sim karunaa \sim kənaa/	mercy
	RS 65.57	/keqriqyaa \sim keriyaa/	conduct
Finally:	226	/latthiq \sim ləthiq/	belief, precept
	887255	/qaayuq \sim qayuq/	age
	สระกะลุ	/siihanuq/	Sihanouk

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

fi /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. $/a/u \bar{e}/instead$ of /aa/22/

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

សម	/sam/	proper	(cf.	សម	/saam/	fork)
ទជិ	/ruĕt/	car	(cf.	58	/rɔɔk/	search for)

2. $/\alpha/u\bar{\nu}/instead$ of $/a/e\bar{\nu}/o\bar{\nu}/i$

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

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.

$$\mathcal{F}(\mathcal{F}, \mathcal{F}, \mathcal{F})$$
 /qaŋrɨŋ/ hammock (cf. $\mathcal{F}(\mathcal{F}, \mathcal{F}, \mathcal{F})$ /qaŋwad/ to beg)
 $\mathcal{F}(\mathcal{F}, \mathcal{F}, \mathcal{F})$ /qaekkəriəc/ independence (cf. $\mathcal{F}(\mathcal{F}, \mathcal{F}, \mathcal{F}, \mathcal{F})$ /saqkəraac/ era)
In some disyllables whose second syllable begins with the normally dominant 1st
series $\mathcal{F}(\mathcal{F})$, the $\mathcal{F}(\mathcal{F})$ is dominated by a preceding 2nd series consonant symbol.

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Cambodian System of Writing

FILME	/tiəhiən/	soldier	(cf.	555	/mhoup/	food)
3ems	/wihiə/	temple	(cf.	U 5EN 85 U	/rɔhout/	until)

4. Silent Final Short Vowel Symbols

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

मुख	/phuum/	village	(cf.	ณร	/ləthiq/	precept)
ณาห	/ciət/	life	(cf.	บส	/matteq/	decision)
me	/ñiət/	relative				
R	/kot/	monk's quarters				
જિશ્વ	/prawoĕt/	history				
SEN ES	/haet/	reason	(cf.	ુક્ષ	/wojethoq/	artifact)
ణ క్ర	/thiət/	cremated remains				

5. $/ae/\epsilon\epsilon/$ instead of /ei/ee/

In some words, the vowel symbol \mathfrak{I} - is pronounced as if it were \mathfrak{I} ; i.e. /ae/ in 1st series and / $\varepsilon\varepsilon$ / in the 2nd. Below are some of the most common of these words:

2868	/khaet/	province
हलङ्	/pest/	doctor

 Image: Caetday/ stupa

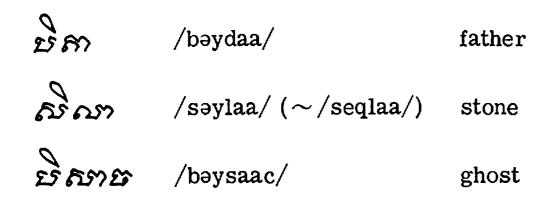
 Image: Caetday/ stupa

 Image: Caetday/ patdesaet/ to cancel, destroy

 Image: Caetdanaa/ to like

 Image: Caetdanaaa/ to like

 Image: Caetdanaaa



7. /a/ instead of /a/

In a few words the constellation 2-22 with a 1st series consonant symbol is pronounced /-ac/ rather than the regular /-əc/:

হ কি হ	/srac/	completely	(cf.	" 5 Es Es	/məc/	why)
សទេច	/samrac/	to finish				
វស្ថាន	/sdac/	King				
សរសេដ	/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 /sq/'hair', such as \simeq , \geq , $\stackrel{\sim}{}_{-}$, are added second. Short horizontal strokes are added last.

a) One stroke

Right to left, lower part first where possible

b) Two strokes

Vowels: \vec{s} -, \vec{s} -, $\vec{-}$, $\vec{-}$ Independent vowels: \vec{s} \vec{s} \vec{s} \vec{s} \vec{s}

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Last vertical element second Consonants: 155 ADS 155 β Vowels: f - 2 f - 3 f - 1Top left hook added second Consonants: 15 AS 17 Lower element second Subscript: $\frac{1}{2}f$ Vowel: $\frac{2}{7}$ Independent vowels: $\frac{2}{9}$ $\frac{$

The vowel symbol \rightarrow or \rightarrow , 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/ (\cong), the /saq/ is extended and attached to a following \neg , as follows:

b) The sequence $\mathfrak{U} + \mathfrak{F}$ is written \mathfrak{F} /baa/ to distinguish it from the

sequence \mathfrak{D} /caa/ (shown above), and from \mathfrak{D} /hod/.

c) -2 is written as a continuation of the preceding consonant symbol in the following sequences:

25.57	khiə	6757	thiə	2557	yiə	597	laa
ເ ຊີ່າ	ciə	ନ୍ଦୀ	tiə	57	riə	5-57	qaa
പ്പാ	chiə	ልን	niə	លា	liə		
ឋា	caa	157	miə	ลรา	saa		

d) -2 is attached to the following consonant symbols:

ନ୍ଧୀ	khaa	Ξŋ	diə	6777	piə	รา	wiə
പ്റ	ŋiə	ណា	naa	ฒา	phaa	ហោ	haa
wn	ñiə	ยิว	thaa				

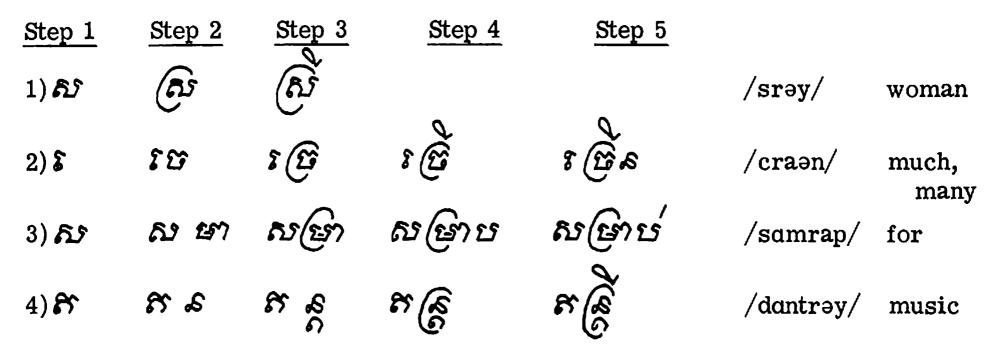
3. Word Composition

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 proceed-

ing to the next "on-the-line" symbol, except for the vowel symbols -3, -3, or 3, which are completed before writing the subscript. The sequence of writing steps is shown in the following examples:

Step 1	Step 2	Step 3	Step 4	Step 5		
1) L	ช ถ	びの			/pdəy/	husband
2) ស្	សា	សា	ណាម	ຄານ ຄ	/sdap/	to hear
3) 25	ยมิ	ยผู้	es ky	ध्रदेख गुरु	/baŋkhouc/	' to ruin
4) £5	258	ยเมื่	ยรมี	មរដ្ឋត	/baŋkaət/	to origi- nate
A /cəa	əŋ rəə/ (is adde	ed after the o	consonant, or co	onsonant +	🕻 , 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 accomodate its later addition, as in the following examples:



However, the $/c = \eta r = 0$ is written before (in time), and usually does not include,

a following subscript vowel symbol or the second part of the composite vowel

symbols	5-) and	a \$ <u>-</u> } :				
Step 1	Step 2	Step 3	Step 4	Step 5		
1) £5	G	(ES	23 23		/proh/	male
2) 💦	(?	Er	(Fr 3		/trəw/	correct
3) \$ 5	R	Ê	(R) R		/truət/	to examine
4) \$	<u> </u>	5 (25	इ छिट्टे	धरियाः	/priəp/	to compare
5) S	885	হ ক্রি	SFS J	र हिंदि द	/kriəŋ/	accessory

B. STYLES OF SCRIPT

There are two basic styles of script in modern Cambodian: $s_s s_j s_s (s_j) ds$ /qaqsaa crian/ 'slanted script', and stript /qaqsaa muul/ '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,

 s_{2} (qaqsaa choo/ '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, /qaqsaa muul/, is more archaic and much more elaborate. While most of the letters are similar in

shape to their slanted counterparts, a few, notably 8 /kaa/, 3 /ŋoo/, & /noo/, and β /too/, 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. /qaqsaa muul/ also

has a variant, \$\$757995 /qaqsaa khaam/ '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.

Cambodian System of Writing

Z

	Slanted Script	Standing Script	Round Script	Cambodian Script
1.	ĥ	r	ŝñ	<u>5</u> 2
2.	P	9	ව	9
3.	お	r î	f î	r
4.	255	155	25	255
5.	23	25	ာ င	છ
6.	. Îr	មិ	హ	Û
7.	. Di	۲ <u>3</u>	\$ ⁵	ŧ
8	. <i>ฉิ</i>	นิ	භි	ହ
9	. 055	೧ 55	ಮ	R 55
10	. 677	ಉ	C C C C C C C C C C C C C C C C C C C	ಪ್ರ
11	. <i>D</i>	26	22 (25)	રુ હો
12	$\cdot \mathcal{L} \left(\begin{array}{c} \mathcal{L} \\ \mathcal{L} \\ \mathcal{W} \end{array} \right)$	년 (월	छे (स्ट	?) 양

Concordance of Script Styles

Z

13.

14.	625	ពរ	ణా	ణా
15.	<i>6</i> .17	ഹ	ຄາ	ຄາ
16.	87	గ	ନ	R
17.	Ĩ.	B	ව	ર
18.	ર	Ş	\$	33
19.	ŹĨ	ĨÌ	ŝ	ដ

IJ

Z

W	'n	it	ir	ıg
---	----	----	----	----

Sla	nted Script	Standing Script	Round Script	Cambodian Script
20.	S	a	£	3
21.	25	15	গ	ध
22.	Û	23	ట	ಟ
23.	67	ទា	5	C 3
24.	<i>9</i> 7	n	57	s
25.	25	ម	হ্য	55
26.	<u>155</u>	យរ	৫৩	৫১
27.	5	5	5	5
28.	N	ស	ee Ee	85
29.	z	ទ	00	S
30.	£5	ស	হ্য	ನ
31.	٤	ហ	సా	ち
32.	est a	\$J	జ్	હિંદ
33.	5-5	5-5	5.5	55

C. SAMPLES OF HANDWRITING STYLES

The style of script used throughout this book, except in Selection 50 of the

<u>Reader</u>, which is typewritten, is that of carefully written 35755233

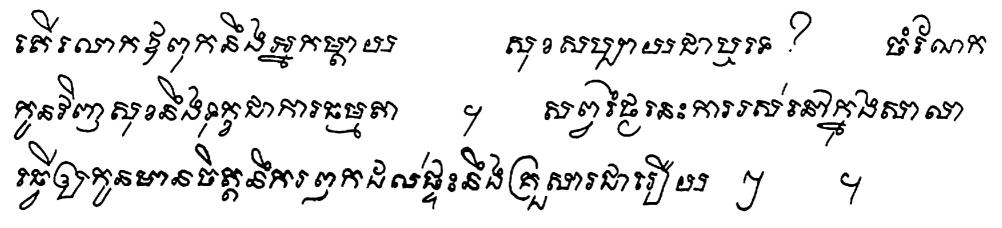
/qaqsaa crian/ 'slanted script.' Following are four samples of handwritten styles: careful and rapid masculine handwriting, and careful and rapid feminine handwriting. The text used in all four samples is taken from Selection 16 of the Reader (Part Three), as follows:

/taə look-qəwpuk niŋ neəq-mdaay sok-sapbaay ciə rii-tee? camnaek koun wiñ, sok nin tuk ciə kaa-thoəmmədaa. sop-tnay-nih, kaa-ruəh-niw knon salaa twəə qaoy koun miən cət nik-rəlik dal pteəh niŋ kruəsaa ciə riəy-riəy/

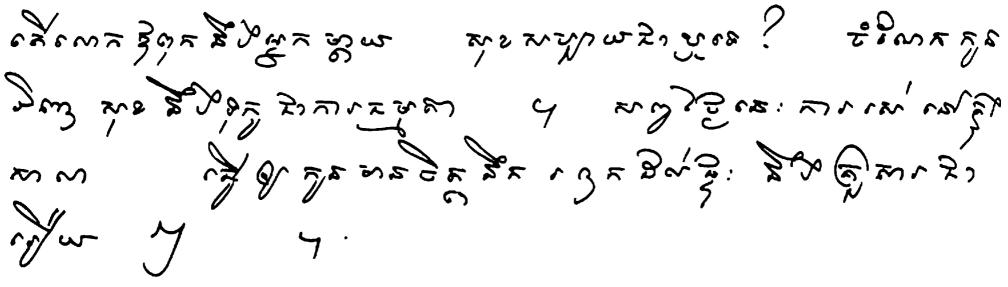
'I hope that you (Father and Mother) are well. As for me, things are going as

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

1. Careful Masculine Style



2. Rapid Masculine Style



3. Careful Feminine Style

រត៍ លោកទី៣ភន៍ វីរក្រមាយ សុខសប្រាយដាឬ ខេ?។ ៥ លោក កុនវិញ សុខន៍ វិទុក ដាការ ឆេម តា។ សភិវិ៥ នេះ ការរស់រនា ក្នុង សាលា និឲ្យកនយន៍ ក្នុងការក្នុងសម្លិះ និង ត្រសាទដា នេទ្របា។

4. Rapid Feminine Style

FRANKSMERSHEREN NY NYTERRY 9 59 01 57 ANT

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-

Writing

mon use; since Cambodian consonant symbols vary greatly in width (e.g. 5 vs.

oss), 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.

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 criaŋ/) 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 <u>Collection of Cambodian Folktales</u> (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 qaoy cee-bañcao kñom-kamdaa. cuən-kaal koun nuh way-dam-cram-theəq phaan haq-douc ciə miən qamnaac nɨŋ twəə-baap neəq-kamsat-tuurəkuət taam cət pipruəh-tae kluən kaət laən 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 meğq-ŋiəy baaw-priew yəəŋ/
 'Let's not mistreat our servants.'
- 8. /ween-yiam daambay bamraa saathiaranaqcuan niw kron pnum-pin/
 'Remaining open to serve the public in Phnom Penh'
- 9. /qampəə-cliən-piən niy kaaŋ-topp.../ 'the army's aggression ...'
- 10. /ciət, sahsnaa, riəc-baalaŋ/ 'Nation Religion Throne'
- 11. /neją ciet niyum/ 'The Nationalist'
- 12. /prešh-sannisət poədamiən/ 'Royal Press Conference'
- 13. /khaet stin-traen/ 'Stung Treng Province'
- 14. /kaa-samŋat/ 'Confidential'
- 15. /baarəteeh/ 'Abroad'

1.

2.

ភិទិតិឃ៍ដែង ១១តា ៤៩

ក ១ គ ឃ័រ ង ០ ១ គ ឃ័រ ខ

許 9 新 255 ව っ 9 の 25 U





3.

Writing

ដុំតុកទ្លាយ ទូ: បណ្តោយកូនតូ២១ ឲ្យដេរបញ្ហោរ ទឹកដរ ៨ នកាលកូននោះ 6. វាយដំប្រណត់ផង ហាត់ដូចជាមានអំណា ចំនឹងធ្វើបាបអ្នកតំសត់ទុំគិតតាមចិត្ ពព្រោះតែទុខកើតឲ្យដ៍មានសម្បត្តិទេព្យ ។ <u>បូរ</u>យើងតំប្រមាបមាត់ងាយ ញវិត្រាវយើង 7. ចេនយាម ដើម្បីចំរើសាធារណេ៥ន នៅត្រខត្តំពេញ 8. នំញើសាទជាទនៃតេទន័ព 9. ปรี กระวา กรับเรื่อ 10. នគេទាំតីទីយេប 11.

12.

ប្រ: សន៍សទ សារពត៍មាន

83

ខេត្តភ្វ័ងច័ត្ង តារសុគ្គន៍

13.

14.

15.



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-tosound 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 <u>Spoken Cambodian</u>, 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		-у		
Lateral		-1			
Trilled		r			
		87			

Vowels

Lo	ng Vo	wels	Long I	Diphth	ongs	Shor	t Vo	wels	Short Dig	ohthongs
ii	÷÷	uu	iə	÷ə	uə	i	÷	u		น้อ
ee	99	00	ei	əi	ou	е	6	0	eə	õð
33	aa	ວວ	ae	aə	ao		a			
	aa			ວອ			۵			
	(10)			(10)			(8)		(3	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 in-

herent 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
 A.
- 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 9. Write, transcribe, and pronounce it.
 - A. 9 khaa

6. The 2nd series symbol for /kh-/ is 255 . Write, transcribe, and pronounce it.

7. All nasal symbols (except $\Omega n / n/$), 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 Ω . Write, transcribe, and pronounce it.

- 8. You have now been introduced to the first five letters of the Cambodian alphabet. They are: \Re 2 \Re 255 \Re . 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 <u>Velars</u>. Within each articulatory group, the order of letters is as follows:
 - 1st series unaspirated consonant symbol (%)
 - 1st series aspirated consonant symbol (9)
 - 2nd series unaspirated consonant symbol (\Re)
 - 2nd series aspirated consonant symbol (255)
 - 2nd series homorganic nasal $(\overset{\flat}{\vartheta})$

Write, transcribe, and pronounce the Velar series above.

A. R kaa, I khaa, R koo, UI khoo, B yoo

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 lat caries values percendices of the percendices of the percendices.

symbols by their 1st series values, regardless of the series of the preceding consonant. The vowel symbol -2 is called /sraq qaa/ 'the vowel qaa'. Its first series value is /aa/. $\cancel{10} + 2$ is written $\cancel{10}$. Write, transcribe, and pronounce it.

- A. 🏫 kaa
- 10. The second series value of -? is /i>/. ℜ + ? is written ℜ .
 Write, transcribe, and pronounce it.
 A. ℜ ki>
- Write, transcribe, and pronounce the following syllables: ジマ ビゴ ビゴ
 A. ジマ khaa, ジブ khiə, ジフ ŋiə

A. 255 khoo

- 12. $\hat{\Omega}$ is the 1st series consonant symbol for /c/. Its 2nd series counterpart is $\hat{\mathcal{R}}$. Write, transcribe, and pronounce the syllables $\hat{\Omega}$ and $\hat{\mathcal{R}}$?. A. $\hat{\Omega}$ caa, $\hat{\mathcal{R}}$? cia
- A. (i) caa, (i) chaa, (i) cia, (155) chia, (ii) ñia
 14. The vowel symbol is called /sraq qay/. Its 1st series value is /au/ and its 2nd series value is /ii/. Write, transcribe, and pronounce the syllables (iii) and (iii).
 A. (ii) kay, (iii) kii

15. You should now be able to read 30 different Cambodian syllables, as follows:

$$\mathcal{F}$$
 \mathcal{S} $\mathcal{S$

Transcribe and pronounce them.

A. kaa, khaa, koo, khoo, yoo, caa, chaa, coo, choo, ñoo, kaa, khaa, kio, khio, yio, caa, chaa, cio, chio, ñio,

kəy, khəy, kii, khii, ŋii, cəy, chəy, cii, chii, ñii

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
$$\mathcal{A}$$
 /daa/, \mathcal{B} /thaa/, \mathcal{B} /doo/, \mathcal{R} /thoo/, \mathcal{N}

/naa/ are referred to as the <u>Retroflexes</u>, 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. \mathcal{G} and \mathcal{G} are rare, occurring in only a few loanwords. \mathcal{G} is the only nasal

symbol which belongs to the 1st series. Transcribe and pronounce the following syllables: 2 is a son

A. dəy, thaa, dii, thiə, naa

- Now write the syllables you have transcribed above in the Cambodian al-18. phabet without referring to the symbols in Exercise 17.
- 19. Notice that $\hat{\mathcal{R}}$ /coo/ and $\hat{\mathcal{A}}$ /daa/ differ only with regard to the top element, referred to as the /saq/ 'hair'. Write, transcribe, and pronounce the following syllables: $\hat{\mathcal{X}} \uparrow \hat{\mathcal{X}} \uparrow \hat{\mathcal{X}} \uparrow \hat{\mathcal{X}} \stackrel{2}{\rightarrow} \hat{\mathcal{X$ The vowel symbol - is called /sraq qou/. Its 1st series value is /ou/ 20. and its 2nd series value is /uu/. Transcribe and pronounce the following

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

😚 taa, 🛱 thaa, 🖨 təə, 🎜 thəə, 🖧 nəə

Transcribe and pronounce the following syllables:

 \checkmark C

dag ନୀ ଜୀ ନିଂ ନେ କ୍ରୀ 85 **A** R \$ **a**

A. taa, tia, thaa, thia, nia, tay, tii, thay, thii, nii, tou, tuu, thou, thuu, nuu

- 23. Write the Cambodian equivalents of the syllables in 22-A above without referring to the exercise.
- Note that there are two representations for 1st series /thad/: the Retro-24.

flex $\vec{2}$ and the Dental $\vec{2}$; and two representations for the 2nd series /thoo/: the Retroflex \mathcal{AS} and the Dental \mathcal{AS} . 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: that, that, they, thou.

- A. ਪੋਛੇ ਖੋਸਰੇਸ ਦੇ ਦੇ ਪ੍ਰੋਦੇ
- 25. Write the following syllables two ways: thoo, thie, thii, thuu
 - A. α β α α β α β β α β β β β
- 26. Note that the 2nd series counterpart of nn /naa/ is R /noo/. Transcribe and pronounce the following syllables:

amer and gan and

A. naa, niə, nəy, nii, nuu, nou, naa, noo

- 27. Now write the syllables in 26-A in Cambodian symbols without referring to the exercise.
- 28. In some printed styles, S /chaa/ and /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), S /chaa/ usually has a distinguishing loop in the lower left corner. Write, transcribe, and pronounce:

29.

and its 2nd series value is /ee/. Transcribe and pronounce the following syllables:

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," -2, -, -, -, -, -, and 5), so that you should now be

Consonants

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

1.	223	21.	m	41.	ક્ર	61.	ទ	81.	S 255
	ref		ഹ്ന		5625		en e	82.	્રે
3.	8 //	23.	ອງ	43.	Ś		ണ്	83.	\mathfrak{V}
4.	125	24.	25	44.	S)	64.	2	84.	ອງ
5.	37		36	45.	R	65.	525	85.	ર્ધર
6.	ษา		కల్స	46.	857	66.	B	86.	23 23
7.	255 //	27.	ES	47.	F \$	67.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	87.	1 2
8.	ണ	28.	A 24	48.	ഹോ	68.	v	88.	(S)
9.	દ્ય	29.	\$ ⊅ ¢	49.	みつ	69.	<i>\$</i> 57	89.	•
10.	R	30.	80	50.	於っ	70.	Ê	90.	స్
11.	(NI)	31.	2°	51.	Sy Sy	71.	R	91.	23
12.	S U	32.	ແນນ	52.	de la	72.	ณร์	92.	13
13.	87	33.	ഹ	53.	11 //	73.	3	93.	R
14.	*	34.	9	54.	25_5	74.	82	94.	2
15.	Ŀ	35.	លទ	55.	द्ध	75.	ीत्म	95.	29
16.	Я ў	36.	es	56.	523	76.	m	96.	8°
17.	857	37.	3	57.	85 11	77.	Pr U	97.	675 U
18.	સ	38.	ษา	58.	х х		<u>155</u> 7		
19.	ar	39.	20	59.	19		រលារ	99.	Ri
20.	3.3	40.	267	60.	Ŵ	80.	9	100.	\$95

Consonants

34. We will now consider the last of the five articulatory groups of consonants in the Cambodian alphabet, the Labials. They are, respectively, 5

/baa/, \hat{N} /phaa/, \hat{N} /poo/, \hat{N} /phoo/, and \hat{U} /moo/. Write, transcribe, and pronounce the following syllables:

- 35. When 25 is followed by the vowel symbol 7, it is written 27 /baa/ to distinguish it from 20 /haa/ (to be discussed later) and from 29 + 7, which is 29 . Write, transcribe, and pronounce the following syllables: 25 27 29 207 297
 A. 25 baa, 27 baa, 27 caa, 207 haa, 29 miə
- 36. Notice that $\hat{\mathbf{S}}$ /phaa/ differs from $\hat{\mathbf{S}}$ /thoo/ only in the uppermost ele ment, or /saq/. Write, transcribe, and pronounce the following syllables:

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	ふ)	
	Unaspirated	Aspirated	Unaspirated	Aspirated	Nasal
Velars	R	9	Ŕ	2 <i>5_5</i>	2
	kaa	khaa	kəə	khəə	ຐວວ
Palatals	Î	Ð	$\hat{\boldsymbol{\kappa}}$	លរ	ಲ್
	caa	chaa	င၁၃	chəə	ñəə
Retroflexes	Ð	B	S S	ณร	ഹ
	daa	thaa	dəə	thoo	naa
Dentals	R	î.	ર	rī	\$
	taa	thaa	təə	thoo	nəə
Labials	£5	r.	ፍን	R	Ŀ
	baa	phaa	poo	phəə	məə

A.
$$\mathcal{LSS}$$
 yiə, \mathcal{S} riə, \mathcal{M} liə, \mathcal{J} wiə, \mathcal{LSS} yii, \mathcal{S} riɨ,
 \mathcal{M} liɨi, \mathcal{J} wii

39. Notice that *L55* differs from *L55* /khoo/ only in that the initial circle is drawn to the right of the first upright rather than to the left. Write, tran-

scribe, and pronounce the following:

Consonants

40. The last four letters of the Cambodian alphabet (nos. 30-33) are 55/saa/, 2/7 /haa/, 55 /laa/, 55 /qaa/. They are all pronounced (when unconverted) with the 1st series inherent vowel. Transcribe and pronounce the following syllables: 557 52/7 557 557 55 2/7

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.
- 43. The 2nd series continuants 3, m, 15, 155, 5, and 7 have no separate counterparts in the 1st series. They can be converted to 1st series by the addition of the /museqkəto>n/ or /tmiñ kandao/ 'rat's teeth'
 (-): 3 / yaa/, m / ñaa/, 15 / maa/, 155 / yaa/, 5 / raa/,
 3 / yaa/. Transcribe and pronounce the following:

A. yaa, yiə, rei, ree, waa, wiə, maa, miə, ŋou, ŋuu, ñaa, ñiə

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

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

- 46. Now reproduce the syllables in 45-A in Cambodian script.
- 47. Whenever a /museqkətošn/ () or /trəysap/ () converter co-occurs with one of the superscript vowel symbols, such as or , it is usually replaced (except in the case of 2); see 45 above) by a short vertical stroke (), called /kbiəh kraom/, at the bottom of the consonant symbol; e.g. by /sii/, by /qii/, although bot and by do occur. Write, transcribe, and pronounce the following:

48. Since \Re' /poo/ has no 1st series counterpart, the /museqkətoʻən/ (-'') is also used to convert 1st series \mathfrak{L}' /baa/ to \mathfrak{L}'' /paa/. Transcribe and pronounce the following: $\mathfrak{L}' \, \mathfrak{L}'' \, \mathfrak{L}''' \, \mathfrak{L}'' \, \mathfrak{L$

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 2^{1} plus the subscript form of 3^{2} : 2^{1} /faa/. It belongs to the 1st series unless converted by use of

the /trəysap/: $\widehat{\mathfrak{W}}$ /foo/. $\widehat{\mathfrak{W}}$ in some words is pronounced like $\widehat{\mathfrak{I}}''$: /waa/. In some words $\widehat{\mathfrak{W}}$ plus the subscript form of \mathfrak{B} ($\widehat{\mathfrak{W}}$ /maa/) occurs instead of $\widehat{\mathfrak{B}}''$ as the 1st series counterpart of $\widehat{\mathfrak{B}}'$; likewise in some words $\widehat{\mathfrak{L}}$ plus the subscript form of \mathscr{L} ($\widehat{\mathfrak{L}}$ /naa/) is used instead of $\widehat{\mathfrak{M}}$ as the 1st series counterpart of \mathscr{L} , and $\widehat{\mathfrak{L}}$ plus the subscript form of $\widehat{\mathfrak{M}}$ ($\widehat{\mathfrak{M}}$ /laa/) occurs instead of \mathscr{H} as the 1st series counterpart of $\widehat{\mathfrak{M}}$. Transcribe and pronounce the following: A. faa, fei, fi>, 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.

		1st Se	eries	2nd Se	eries
Consonant		Symbol	Name	Symbol	Name
1.	k	Pr	kaa	Ŕ	kəə
2.	kh	Э	khaa	255	khəə
3.	ŋ	25	ηαα	ż	ງ ວວ
4.	С	Ê	caa	$\hat{\varkappa}$	coo
5.	ch	r	chaa	กรร	chəə
6.	ñ	m."	ñαα	్రా	ñəə
7.	d	Ŵ	daa	Ş	dəə
8.	t	85	taa	ର୍	təə
9.	th	$ \begin{pmatrix} \vec{v} \\ \vec{v} \\ \vec{v} \end{pmatrix} $ $ \begin{pmatrix} \vec{v} \\ \vec{v} \\ \vec{v} \end{pmatrix} $	thaa	Ŕ	thəə
		$\left(2\overline{S}\right)$	thaa	(ms)	thəə
10.	n	$m(\underline{r})$	naa	æ	nəə
11.	b	25	baa	$\left(\widehat{\mathfrak{L}}\right)$	bəə
12.	р	25	paa	67	pəə
13.	ph	દ્રે	phaa	85	phoo

	1st Ser	ies	2nd Series		
Consonant	Symbol	Name	Symbol	Name	
14. m	$\Sigma = \begin{pmatrix} \Sigma \\ \underline{\Sigma} \end{pmatrix}$	maa	5.5	məə	
15. y	<u></u>	yaa	195	уээ	
16. r	," 5	raa	5	rəə	
17. 1	$ \sum_{n=1}^{\infty} \left(\sum_{n=1}^{n} \right) $	laa	ស	100	
18. w	$\hat{\boldsymbol{s}}^{''}\left(\boldsymbol{z},\boldsymbol{y}\right)$	waa	3	พวว	
19. s	R 5	saa	$\left(\widetilde{\mathfrak{K}}\right)$	ຣວວ	
20. h	٤٦	haa		həə	
21. f	บ	faa	$\begin{pmatrix} \widehat{\mathfrak{L}} \\ \widehat{\mathfrak{ss}} \end{pmatrix}$	fəə	
22. q	3- 5	qaa	$\left(\widetilde{s}\cdot\widetilde{s}\right)$	qəə	

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, \tilde{n} , η , w, y, and 1

53. What consonants never occur finally?

A. b, d, f, s, and r

54. Nevertheless, almost all the consonant symbols <u>are used to represent</u> 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 δ , it is not pronounced. However, it some-

times serves to distinguish orthographically between homonyms (see Part One, III, D). Transcribe and pronounce the following:

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 25 is by far the most common representation of final /-p/. (Consult the chart in Exercise 37.) Transcribe and pronounce the following:

សាម ភាព លាព 825 RUR

A. toop, toop, saap, phiəp, liəp

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

A. caat, baat, koot, baat, kuut, kiet, maat, saat, boot

Any Palatal stop symbol in final position represents final /-c/; only $\hat{2}\hat{s}$ 57. and \mathscr{R} occur. Transcribe and pronounce the following:

A. touc, qaac, riec, kaac, puuc

58. After one of the vowels /a, aa, a, aa, $a, aa, e\bar{a}, u\bar{a}, i\bar{a}, u\bar{a}/any$ Velar stop symbol in final position represents final /-q/. Transcribe and pronounce:

> 57155 ENR ENR 2783 RAR

A. kaaq, niəq, miəq, caaq, saaq

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

A. ciik, riik, meek, leek, rook, mook

61.

Transcribe and pronounce the following syllables: 60.

బ్లా స్లాగ్ స్పోర్ లోగా
$$ess r స్పాగ్ $s r$
A. couk, cuuk, ciaq, paaq, yook, niaq, reek
All the nasal symbols have the same values in final position as in initial
position, except that $r represents /-n/rather than /-n/.$
Transcribe and pronounce:
బాలా నాలా లోగి పోటి నిల్లా లోపి కంపి కేట్లా ని
A. caam, niam, laan, maan, cian, tian, miin, leen, riin, saan$$

62. The continuant symbols \mathfrak{US} , \mathfrak{OS} , and \mathfrak{F} have the same values in final as in initial position. Transcribe and pronounce:

 \hat{U} \hat{U}

63. 55 in final position represents final /-h/. Transcribe and pronounce:

	RIN RI	ES I ES	មត្ថន	សិស	R 65
٨	cach mich	muuh aaal	U		U
A.	saah, miəh	, muun, ceer	i, kuuli		

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
Ø	aa	ວວ
-7	aa	iə
õ	э у	ii
	əi	÷i

- ou uu 5- ei ee

The value of a vowel symbolization can be affected also by the final consonant sym bol, and by various diacritical marks. In fact, it is the total <u>configuration of symbols</u> 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 Vowels

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. n/kaa/, n
/kaa/, n/koo/, n/koo/,

65. When the initial consonant symbol belongs to the 2nd series, the short inherent vowel is /u/ before any Labial consonant symbol ($\mathfrak{U} \stackrel{\sim}{\mathcal{W}} \stackrel{\sim}{\mathcal{N}} \stackrel{\sim}{\mathcal{D}} \mathfrak{U}$). Transcribe and pronounce: $\mathcal{RU} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{D}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{U}} \stackrel{\sim}{\mathcal{U} \stackrel{\sim}{\mathcal{$

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 /uঁə/. Transcribe and pronounce:
- 68. Write the above syllables in Cambodian script.

- 69. Transcribe and pronounce: $\mathcal{R}_{\mathcal{U}}$ $\mathcal{R}_{\mathcal{N}}$ $\mathcal{N}_{\mathcal{U}}$ $\mathcal{N}_{\mathcal{U}}$
 - A. cup, cuəl, lup, luəq, tup, tuən
- 70. Transcribe and pronounce:

A. caap, cap, coop, cup, cuõq, kaaq, kaq, look, luõq

- 71. Write the above syllables in Cambodian script.
- 72. When the final consonant symbol of a syllable spelled with -3 carries

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

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

A. ciaq, ceaq, miaq, meaq, piaq, peaq

- 75. Write the above syllables in Cambodian script.
- 76. Transcribe and pronounce (refer to Exercise 74):

තාහ තාහ් හිත හිත් හැක හැක්

A. kiət, koət, tiən, toən, miən, moən

77. Transcribe and pronounce: ภาส์ ภาส์ ภาส์ ภาส์ มาส์

A. tešq, tošn, pešq, pošn, cešq, cošn

78. Transcribe and pronounce:

กร กร์ กร กร์ กร์ กร์ กร์ กรุการ์ กระบี่มีป่ยบ

- 79. Write the syllables in 78-A in Cambodian script.
- 80. The vowel symbol is called /sraq qeq/. Notice that it differs from 2/3y/ 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:

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

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

Vowels

- represents /e/ in the 1st series and /i/ in the 2nd series. Transcribe and pronounce: $\Re \Re \Re \Re \Re \Re$

A. keriyaa, nitiən

- 83. When _____ precedes a final ______, 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: Resp. Resp.
 A. təy, tii

A. dək, tik, cək, nik, yiit, məin, phək

85. Write the following syllables two ways: cət, cit, həp, min

- A. यह यह रोह रोह रोह रोग रोग यह यह
- 86. The vowel symbol $-\frac{1}{2}$ is called /sraq qoq/. When it occurs in stressed syl-

lables 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' $\sqrt[3]{}/$ /tok/ which is pronounced with a final unwritten /-k/.) Transcribe and pronounce: $\sqrt[3]{}/$ $\sqrt[3]{}/$ $\sqrt[3]{}/$

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:

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.
$$\mathfrak{H}\mathfrak{V}\mathfrak{V}$$
 $\mathfrak{R}\mathfrak{V}$ $\mathfrak{K}\mathfrak{V}$ $\mathfrak{K}\mathfrak{V}\mathfrak{V}$ $\mathfrak{K}\mathfrak{V}\mathfrak{V}$ $\mathfrak{K}\mathfrak{V}\mathfrak{V}$ $\mathfrak{K}\mathfrak{V}\mathfrak{V}\mathfrak{V}$ $\mathfrak{K}\mathfrak{V}\mathfrak{V}\mathfrak{V}$

89. There are three vowel symbols whose values are unaffected by the series

of the initial consonant. They are $-\frac{1}{\omega}/\operatorname{sraq} \operatorname{qual}, \ \mathfrak{F} - \frac{1}{\omega}/\operatorname{sraq} \operatorname{qial}, \ \mathfrak{and}$ $\mathfrak{F} - \frac{1}{\omega}/\operatorname{sraq} \operatorname{qial}.$ Their values are $/\operatorname{ual}, /\frac{1}{2}$, and $/\frac{1}{2}/\operatorname{respectively}$. Transcribe and pronounce:

$$\tilde{\gamma}_{s}$$
 $\tilde{\gamma}_{s}$ $\tilde{\gamma}_{s}$

90. Write each of the following syllables two ways: chuan, khian, cuan

A.
$$\mathfrak{L}_{\mathcal{A}}$$
 $\mathfrak{L}_{\mathcal{A}}$ $\mathfrak{L}_{\mathcal{A}}$

92. In Exercise 29 you learned that the values of \$\$- are /ei/ and /ee/. How-ever, when \$\$- occurs in a syllable whose final consonant symbol is a <u>Palatal</u> symbol (\$\$- occurs in a syllable whose final consonant symbol is a <u>Palatal symbol (\$\$,\$\$,\$\$,\$\$,\$\$,\$\$), \$\$\$,\$\$\$,\$\$\$), its 1st series value is /ə/ and its 2nd series value is /i/. Transcribe and pronounce:</u>

Vowels

94. The vowel symbol $\mathbf{s} \stackrel{\checkmark}{-}$ 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 \hat{s} is called /sraq qae/. Its value is /ae/ in the 1st series and $/\epsilon\epsilon$ / in the 2nd series. Transcribe and pronounce:

A. kae, kee, saen, meen, taen, peen

97. The vowel symbol \hat{s} — is called /sraq qay/. It must be carefully distinguished in both pronunciation and writing from \hat{s} — 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:

son son sond sond sond son son s

A. kao, koo, taon, roon, maon, khao, loop

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

100. The vowel symbol 3-3 is called /sraq qaw/. Its 1st series value is /aw/ and its 2nd series value is /iw/. Like 3 — in 97 above, it already includes a final consonant, so it is never followed by a written final consonant symbol. It is distinguished from 3-3 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 ³/₂ /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: ³/₂ ³/₂ ³/₂ ³/₂ ³/₂ ³/₂ ³/₂ ³/₂
 - A. cam, cum, kham, tum, qam, khum
- 102. Consult Exercise 64, then write the following syllables two ways: cam, qam, kham
 - A. 1919 19 5819 88 919 9
- 103. When $\stackrel{\circ}{-}$ is combined with $\frac{-}{/}$ to form $\stackrel{\circ}{-}$ it is called /sraq qom/. Its 1st series value is /om/ and its 2nd series value is identical with the 2nd series value of $\stackrel{\circ}{-}$ 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.
$$\mathcal{F}$$
 \mathcal{F} \mathcal{F}

105. The symbol -3 is called /sraq qam/. Its 1st series value is /am/ and its 2nd series value is /o=/. Transcribe and pronounce:

106. Consult Exercises 72 and 74, then write the following syllables: cap, cam, coep, coem, ñoep, ñam

107. The configuration -33 is called /sraq qam yoo/. Its 1st series value is /ay/; its 2nd series value is /eəy/. Transcribe and pronounce:

Vowels

A. taŋ, tešŋ, phaŋ, phešŋ

- 108. The symbol ° is called /reੱəhmuk/ or /sraq qah/. When no vowel symbol is written it represents /ah/ after a 1st series consonant symbol and /eੱəh/ after a second series consonant symbol. Transcribe and pronounce:
 ** **
 - A. tah, teəh, pah, pheəh

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

- A. $\mathfrak{W}\mathfrak{N}$ \mathfrak{W} : $\mathfrak{W}\mathfrak{N}$
- 110. After the short vowel symbols -, -, and -, the /reəhmuk/ represents final /-h/ alone. The configurations -, -, -, and -, -, are sometimes referred to as /sraq qeh/, /sraq qəh/, and /sraq qoh/ respectively. Transcribe and pronounce: \hat{D} : \hat{D} :
 - A. ceh, cih, kəh, pih, coh, puh
- 111. After the long vowel symbols \$-, \$-, and \$-, the /rešhmuk/ both shortens and changes the value of the vowel symbol. (An exception is the irregular spelling \$-, 'caah/'polite response particle used by women' which is usually pronounced long in spite of a following /rešhmuk/.) The configuration \$-, is sometimes referred to as /sraq qeh/. It is /eh/ in the 1st series and /ih/ in the 2nd series. Transcribe and pronounce:

កេរៈ នេះ សើះ នើះ

A. seh, nih, pheh, cih

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

A.
$$\tilde{\mathbf{G}}$$
: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}}$: $\tilde{\mathbf{G}$: $\tilde{\mathbf$

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

A. kah, kuěh, bah, puěh, sah, luěh

- 114. Consult Exercises 64 and 67, then write the following syllables two ways: kah, kuəh, sah, puəh
 - A. គេនា៍ គោះ គេនា៍ គោះ សូនភ័ ត្នោះ ៣នា៍ កោះ
- 116. In Exercises 58 and 59 it was pointed out that final Velar stop symbols
 (?,),), ?, , 255) represent final /-q/ after the vowels /a, aa, a, aa, a, aa, eð, uð, ið, ið, ið, ið, uð/, and final /-k/ after all other vowels. Transcribe and pronounce the following syllables:

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

117. The symbol - - - 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 $-2 - \frac{1}{2}$; i.e. $\frac{1}{2}$ in the 1st series and $\frac{1}{2}$ or $\frac{1}{2}$ in the 2nd series (see Exercises 72-78). Tran-

scribe and pronounce: NA SM EN SN SN

A. saq, topp, sap, leoq, san, weon

118. When the /sanyook-saññaa/ occurs in the environment -ess, its value is /a/ in the 1st series and /i/ in the 2nd series. Transcribe and pronounce: Dess dess dess dess
A. phay, phiy, cay, ciy

119. In the environment -5, the /sanyook-saññaa/ represents the diphthong

Vowels

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

A. coə, poə, ñoə, thoə

- 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 <u>vowel symbol</u> is followed by its <u>name</u>. Notice that the name of a symbol or configuration may be different from its actual value in either series.
 - a. Practice reciting the names of the vowel symbols until you can recite them in the proper sequence without referring to the chart.
 - b. Cover the 1st and 2nd series values of the symbols and reproduce the 1st series values by reference only to the symbols.
 - c. 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	ວວ
2		64,65	a	u before Labial finals
		67		uð elsewhere
3	sanyook-saññaa	117	a	eð before Velar finals
		117		oə́ elsewhere (except below)
4 255		118	ay	ŧy
5. <u> </u>		119		ЭƏ
67	sraq qaa	9	aa	iə

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Programmed Reading Exercises

Symbol	Name	Exercise	1st Series Value	2nd Series Value
77-		72, 74	a	eə before Velar finals
		74		ŏə elsewhere
8. 9	sraq qeq	80	eq in stressed syllables	iq in stressed syllables
0		81	e in unstressed syllables	i in unstressed syllables
9. — —		87	Э	i (except before 25)
10 255		83	әу	ii
11:		110	eh	ih
12. —	sraq qəy	14	әу	ii
13. — —	sraq qəq	84	ə	÷
14. –:		110	əh	ih
15. 👱	sraq qə i	33	əi	÷÷
16. $-\frac{1}{7}$	sraq qoq	86	oq in stressed syllables	uq in stressed syllables
		87	o in unstressed syllables	u in unstressed syllables
17. $-$		87	ο	u
18. $\overline{7}$		110	oh	uh
19. – U	sraq qou	20	ou	uu
20. – J ³		120	əw	ŧw
21. ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	sraq quə	89	uə	uə
22. 2-	sraq qaə	94	aə	əə
23. 5-:		115	əh	

Vowels

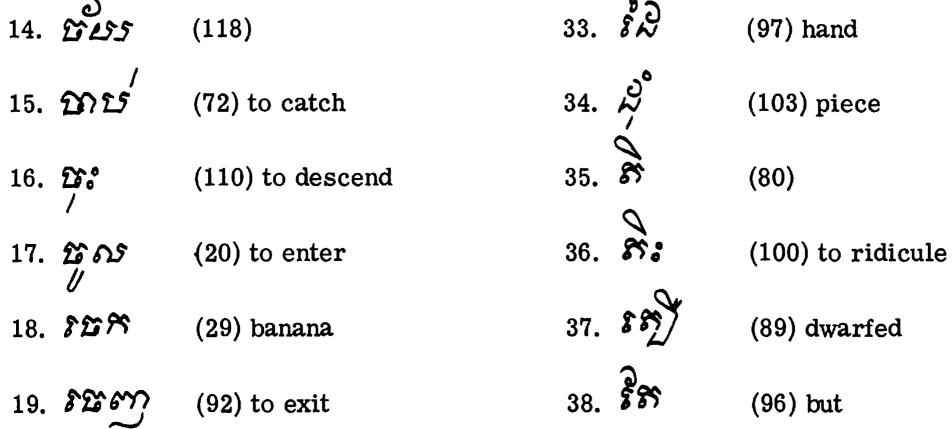
Symbol	Name	Exercise	1st Series Value	2nd Series Value
24. 5 -2)	sraq q i ə	89	ŧә	iə
25. S -2	sraq qiə	89	iə	iə
26. S -	sraq qei	29	ei	ee
27. S-B		92	ə (before Palatals)	i (before Palatals)
28. 5- °		111	eh	ih
29. 5-	sraq qae	96	ae	33
30. 5-:		115	eh	
31. š —	sraq qay	97	ay	ŧу
32. Σ- ⋧	sraq qao	98	ao	00
33. 5-2:		113	ah	uəh
34. 5-7	sraq qaw	100	aw	ŧw
35. $\frac{\circ}{\prime}$	sraq qom	103	om	um
36. °	sraq qam	101	am	um
37. − ?	sraq qam	105	am	ojəm

38>3		107	aŋ	eə̃ŋ
39 . — °	sraq qah	108	ah	eə̃h

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

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.	PM 5	(9) work	20.	ວກໍ	(105) to remember
2.	87.5	(87) movie	21.	ลาย่	(74) attached
3.	899 B	(94) be born	22.	an	(80)
4.	s 79: 0	(115)	23.	22:	(110) to ride
5.	s 75 :	(115) a kind of animal	24.	रेक	(14) to dig
6.	នភា:	(113) island	25.	हेराद	(89) to help
7.	897	(98) trousers	26.	sé	(89) to believe
8.	ອິ	(101) to try (to)	27.	ກ ິ່ງ	(105) bruised
		(98) ox, cow	28.	as	(33) sick
10.	susm	(94) to see	29.	• /	(105) to eat
	286 623		30.	Ress	(83)
12.	26 25	(3) spade		28	(84) to transport
13.	ชย่	(64) to finish	32.	J'az	(33) fallow
	ð			\mathbf{r}	



Vowels

• • • •	010				
39.	ක්ය	(107) to establish	60.	25	(48) flute
40.	Ŷ	(86)	61.	" 29:8	(108) to patch
	6 73 a	(117) army	62.	อ การ	(119) color
42.	rm a	(82) to buy	63.	m	(14) from
43.	R	(84) water	64.	กร	(14) two
44.	<i>ъ</i> Р\$ И	(20) boat	65.	ຄາ ະ	(110) to boil
45.	रिद्ध र	(100) to go	66.	रणमे	(92) jewel
46.	60 / C	(103) ripe	67.	ខេត្តស្មា	(92) full
		(107) all	68.	in B	(96) cup
48.	Ģ	(108) to slap	69.	86778	(113) stomach
49.	, 5795	(74) person	70.	85.655	(118) to fear
50.	හත	(10) dragon	71.	<u>የ</u> ደንይ	(10) to have
51.	æus	(83)	72.	<u>55</u> 2 /	(87) face
		(110) this	73.	825255	(29) sky
53.	ब र्	(97) of	74.	" 81525	(92) why

54.	Eness	(9) rice	75.	2598	(4) to take
	273	(82) to close	76.	15525	(65) evening
56.		(14) three	77.	299	(86)
57.	22	(45)	78.	وجع	(101) to cry
58.	55 D	(89) four	79.	2592	(89) to study
59.	हरुहु	(89) cards	80.	กรห์	(67) to sell

81.	ပ က ခ	(117) gum-lac	85.	នេសាះ	(111) horse
82.	ญห่	(64) hair	86.	raz z	(100) to call
83.	กรั <i>ก</i> 4	(117) word		55:	
84.	555 U	(120)	88.	£\$:	(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 \$\vec{n}\$ is called /sraq qeq pin tua/, 'the independent vowel /qeq/'. In most words it is equivalent to \$\vec{s}\$, although in some words it may be pronounced \$\vec{n}\$ or \$\vec{n}\$ or \$\vec{n}\$. Transcribe and pronounce the following syllables: \$\vec{n}\$ \$\vec{n}\$ (\$\vec{s}\$) , \$\vec{n}\$ \$\vec{s}\$ \$\vec{s}\$

124. The symbol $\int f$ is called /sraq qəy pɨñ tuə/. It occurs in only a few

words, in which it has the same value as $\mathcal{F}\mathcal{F}$. Transcribe and pronounce:

A. qəysou, qəysaan

Independent Vowel Symbols

- 126. The symbol $\hat{\beta}$ /sraq qəw piñ tuə/ is equivalent to $\hat{\beta}$ and occurs in the word $\hat{\beta}$ $\hat{\beta}$ 'father'. Transcribe and pronounce: $\hat{\beta}$ $\hat{\beta}$ $\hat{\beta}$ $\hat{\beta}$ $\hat{\beta}$ $\hat{\beta}$ A. qəw, qəwpuk
- 127. The symbol \hat{g}_{μ} /sraq qou piñ tuə/ usually has the 1st series value $\hat{s}\hat{s}_{\mu}$, but it may also have the 2nd series value $\hat{s}\hat{s}$. Transcribe and pronounce: $\hat{g}_{\mu}\hat{s}$ ($\hat{s}\hat{s}_{\mu}$) $\hat{g}_{\mu}\hat{s}$ ($\hat{s}\hat{s}\hat{p}$) \hat{g}_{μ} ($\hat{s}\hat{s}\hat{s}$) A. qout, quun, qou
- 128. For each of the following independent vowel symbols, write the most common equivalent in Cambodian script: B for 2 3 9
 A. 55 55 55 55 55
- 129. Write the independent vowel symbol for which each of the following is the commonest equivalent: qaw, qay, qa-, qo-, qou

A.
$$\tilde{q}$$
 \tilde{r} \tilde{r} \tilde{r} q q_{μ}

130. Write in Cambodian script two equivalents of each of the following:

A.
$$5\overline{5}$$
 $2\overline{7}$
A. $5\overline{5}$ (or $\overline{5}\overline{5}$), $5\overline{5}$ $5\overline{5}$ (or $5\overline{5}\overline{5}$), $5\overline{5}$ $5\overline{5}$ (or $5\overline{5}\overline{5}$), $5\overline{5}$ $5\overline{5}$

131. The symbol め /sraq qae piñ tuə/ is always equivalent to \$\$\$\$.
Write, transcribe, and pronounce: ひ ひゃ ひひ ひょうう
A. ひ qae, ひゃ qaek, ひひ qaen, ひょううか qaetiət
132. The symbol ひ /sraq qay piñ tuə/ is equivalent to \$\$\$\$. Write, transcribe, and pronounce: か \$60 A. か qay, \$\$\$ \$\$\$ \$\$\$

The two symbols $\widehat{2}$ and $\widehat{3}$ are both called /sraq qao piñ tuə/. They 133. are both equivalent to 3537 . \hat{j} is the more common of the two; \hat{s} occurs in the word $\frac{2}{3}$ /qaoy/ 'to give' ($-\frac{5}{3}$ is the subscript form of cfs; it does not normally represent a final consonant). Write, transcribe, and pronounce: 3 3 35 35 32 A. $(3 \text{ qao}, \hat{\beta})$ qao, $(\hat{\beta})$ qaoy, $\hat{\beta}$ (1 so) qaop, $\hat{\beta}$ $\hat{\beta}$ qaon 134. The symbol $\widetilde{2}$ /sraq qaw piñ tuə/ is equivalent to \mathfrak{srr} . It is extremely rare. Write, transcribe, and pronounce: \tilde{z} \tilde{z} A. $\tilde{2}$ qaw, $\tilde{2}$ β qawlaa Notice that 2 2 3 3 3 3 3 all have the same base 2. 135. A good way to distinguish them is to remember that $\frac{2}{\sqrt{q^{o}}}$ and $\frac{2}{\sqrt{q}}$ /qou/ are "bald"; the "hair" of β /qəw/ attaches at the left, while that of $\frac{1}{2}$ /ao/ and $\frac{1}{2}$ /aw/ attaches at the right. Write each of the following symbols with its commonest equivalent:

A.
$$2(55), 2(55), 3(55), 3(55), 3(55), 3(55), 3(55)$$

136. All of the preceding independent vowel symbols include the initial consonant

/q-/. The symbols $\underbrace{15}_{4}$ /sraq rik/ and $\underbrace{15}_{4}$ /sraq rii/ include initial /r-/, and are equivalent to $\underbrace{5}_{4}$ and $\underbrace{5}_{4}$ respectively. $\underbrace{15}_{4}$ is the spelling for the common conjunction 'or'. $\underbrace{15}_{4}$ 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:

137. The symbols $\beta \gamma$ /sraq lik/ and $\beta \gamma$ /sraq lik/ include an initial /l-/

and are equivalent to \mathcal{N} and \mathcal{N} respectively. \mathcal{M} is the spelling for the common word 'to hear'. Write, transcribe, and pronounce:

	స్పర్ష	<u>m</u>	్ర	r
А.	ŋĦlik,	s J	lɨɨ,	ሰን ዮን lɨɨk "스

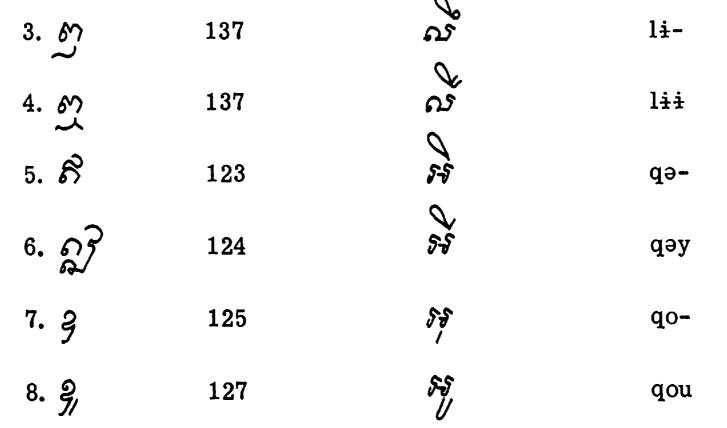
138. Write the equivalent of, and transcribe, each of the following:

 $\underline{\mathcal{U}}^{\mathcal{H}} \, \underline{\mathcal{U}} \, \underline{\mathcal{U}}^{\mathcal{H}} \, \underline{\mathcal{U}}^{\mathcal{$

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 $\mathcal{H} - \mathcal{H}$. Words spelled with \mathcal{L} and \mathcal{L} follow all words spelled with initial $\mathcal{H} - \mathcal{H}$ and words spelled with \mathcal{H} and \mathcal{L} follow and \mathcal{H} and \mathcal{H} follow the initial $\mathcal{H} - \mathcal{H}$ and \mathcal{H} follow and \mathcal{H} and \mathcal{H} follow the initial $\mathcal{H} - \mathcal{H}$ and \mathcal{H} follow and \mathcal{H} follow and \mathcal{H} and \mathcal{H} follow and \mathcal{H} follow and follow and follow follow for the event is a produced its equivalent spelling.

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.

Symbol	Exercise	Equivalent Spelling	Transcription
1. 29	136	35	r i -
~ 2. ۲	136	5	r ii
\sim		0	



Programmed Reading Exercises

Symbol	Exercise	Equivalent Spelling	Transcription
9. Z	126	555	qəw
10.	131	255	qae
11. 67	132	\$ 5-5	qay
12. 3	133	きょう	qao
13. Ĵ	133	8557	qao
14. ž	134	5557	qaw

VII. SOME DISYLLABLES

- - A. niyiəy, phiəsaa, kawqəy, siəwphiw
- 141. Although some presyllables are written with long vowel symbols, they are usually reduced to short vowels in normal speech. Transcribe and pro-

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 /a/ after a 1st series consonant and /ɔ/ after a 2nd series consonant. These vowels are reduced to /ə/ in rapid speech. Tran-

scribe and pronounce the following words: $\mathcal{R}\mathcal{R}\mathcal{S}\mathcal{S}$ to scratch, $\mathcal{R}\mathcal{R}\mathcal{R}\mathcal{R}\mathcal{R}$

to argue,
$$151905$$
 persuade, 15055 human (final - 5 is silent),
 N

A. kakaay, coccek, babuol, monuh, robah, roliin, totuol

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 (-, 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.
(15 with a subscript always has the value /p/.) Transcribe and pronounce:
(15 with a subscript always has the value /p/.) Transcribe and pronounce:
(15 m) s' to reserve, (rapid speech; s- to meet, (rapid spech; to reverse, (rapid speech; s- to meet, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid spech; s- to meet, (rapid spech; s- to reverse, (rapid spech; s- to meet, (rapid s

A. prakan, prolim, pratešh, tralap, tronum, cralam, krawisc, 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 $2 / \sqrt{\frac{1}{2}} / \frac{1}{2}$ which adorns the top of seven consonant symbols (not to be confused with $2 / \frac{1}{2} / \frac{1}{2}$ which converts 1st series symbols to 2nd series). Some subscripts, however, bear no discernible relationship to their

counterparts. Subscript consonants are called /cəəŋ qaqsaa/ 'consonant feet', and the resulting consonant clusters are called /qaqsaa damruət/ 'stacked-up letters'.

144. The subscripts \$\frac{2}{2}\$ \$\frac{1}{2}\$ \$\frac{1}{2}\$

145. The subscripts \bigwedge_{n} \bigotimes_{n} \bigotimes_{n} \bigotimes_{n} \bigotimes_{n} \bigotimes_{n} \bigotimes_{n} \bigotimes_{n} and \bigotimes_{n} differ from their superscript counterparts only in the absence of the /saq/ 'hair': \simeq for the first six examples above, $\overset{\sim}{-}$ for \bigotimes_{n} and $\overset{\sim}{-}$ for

2n . Write each of the above consonants with its subscript, and transcribe and pronounce the names of the subscripts.

A. \bigwedge cəəŋ kaa, \bigwedge cəəŋ kəə, \oiint cəəŋ caa, \bigwedge cəəŋ chaa, \bigwedge cəəŋ taa, \bigwedge cəəŋ phəə, \bigwedge cəəŋ phaa, \bigwedge cəəŋ haa

146. The subscripts 255 355 m_{m} 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. $\underbrace{155}_{U_{2}}$ coord khoo, $\underbrace{055}_{U_{2}}$ coord coord coord coord khoo, $\underbrace{055}_{U_{2}}$ coord coord khoo

147. The subscripts $\underbrace{155}_{W}$ $\underbrace{1555}_{U}$ are also characterized by a righthand vertical stroke which hooks on a line even with the top of the super-

script symbols, but their subscript portions differ in shape from their counterparts. Write each combination, and transcribe and pronounce the names of the subscripts.

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

parts: $\overset{\circ}{\mathcal{O}}$ Note that $(-)^{c = 29 \text{ m} 23 \text{ m}}$ 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.
$$\frac{2}{\sqrt{2}}$$
 coordinates $\frac{2}{\sqrt{2}}$ coor

- 150. Certain special combinations of superscript plus subscript represent single phonological consonants: & /too/ plus _ / (coorder for the coorder for the

$$s g g h n s g g g g g g g g g h g h g g h g g h g g h g h g g h$$

151. Although there are thirty-three consonant symbols, there are only thirty-one different subscripts, since $\bar{\sigma}$ /cəəŋ taa/ serves as subscript for both \Im and $\tilde{\varkappa}$, and $\bar{\varsigma}$ /cəəŋ loo/ serves as subscript for both Ωf and $\tilde{\wp} f$.

In the chart below, write the appropriate subscript for each of the thirty-three consonant symbols (two forms for $/c \ge 3$ $3 \ge 3$):

fs	9	お	255	23	
Î	tî	$\hat{\mathcal{R}}$	กรร	677	677
Э W	B	e S	625	ഹ	
n	Ê	وک	Ŵ	R	
25	r	67	R	25	
L5_5	5	ഹ	5	ಮ	
ಲು	æ j	55			

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 (9 kh, & ch, & th, & ph, etc.) occurs in conjunction with a subscript, it represents an unaspirated stop /k, c, t, or p/ phonologically. For example, in 2 /thae/ 'to care for', 2 represents /th-/, but in /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 2 /kmein/

'child' and 395 /kmae/ 'Cambodian' are identical, although the first is spelled with \mathcal{H} and the second with 9. Transcribe and pronounce the following: $\mathcal{H} \mathcal{H} \mathcal{H} \mathcal{H}$ head, $\mathcal{H} \mathcal{H} \mathcal{H} \mathcal{H}$ together, $\mathcal{H} \mathcal{H}$ space, $\mathcal{H} \mathcal{H} \mathcal{H}'$ clear, $\mathcal{H} \mathcal{H}$ dog, $\mathcal{H} \mathcal{H} \mathcal{H}$ to complain, \mathcal{H} arrow, $\mathcal{H} \mathcal{H} \mathcal{H}$ strange, $\mathcal{H} \mathcal{H}$ fruit. (Remember that \mathcal{H} with a subscript is pronounced /p-/. The vowels of the last two examples have their 1st series values.)

A. kbaal, kbaal, knie, klie, cbah, ckae, tqouñ, tnuu, plaek, plae

Initial Clusters

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:

$$\mathfrak{H}$$

Transcribe and pronounce the above three words ($\delta n_{j} \delta$ is pronounced with a 1st series vowel).

A. sthaanii, mphiy, lkhaon

154. The subscript \overline{n} is always pronounced /-d-/ in initial clusters. Transcribe and pronounce: $\underbrace{\mathfrak{L}}_{n}$ husband, $\underbrace{\mathfrak{N}}_{n}$ hot, $\underbrace{\mathfrak{N}}_{n}$ to listen, $\underbrace{\mathfrak{L}}_{n}$ to originate.

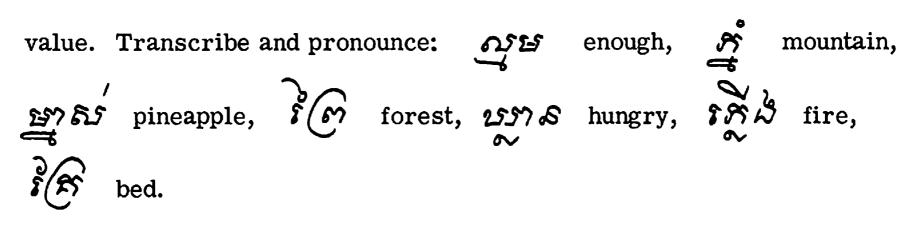
A. pdəy, kdaw, sdap, pdaəm

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:
$$\widetilde{m}$$
 to weave, \widetilde{m} to morrow, \widetilde{m} dif-
ferent, \widetilde{m} board, \widetilde{m} flower, \widetilde{m} sugar, \widetilde{m} to inform,
 \widetilde{m} dog. Transcribe and pronounce these words.

A. tbaañ, sqaek, psein, kdaa, pkaa, skoo, pden, 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



A. lmoom, pnum, mnoöh, priy, klien, pleen, krεε

157. When the initial consonant symbol and its subscript belong to different series, any symbol representing a <u>stop</u> or <u>spirant</u> takes precedence over any <u>continuant</u> 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.

Programmed Reading Exercises

Group 1 - Dominant			G	rou	02-	Pas	sive		
р	t	с	k	q		m	n	ñ	ŋ
b	d					w	r	1	у
f	S			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:

fr fish, \widehat{f} woman, \widehat{f} monkey, \widehat{f} section, \widehat{f} Cambodian, \widehat{f} medicine, \widehat{f} road, \widehat{f} rice.

A. tray, sray, swaa, pnaek, kmae, tnam, plaw, sraw

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:

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

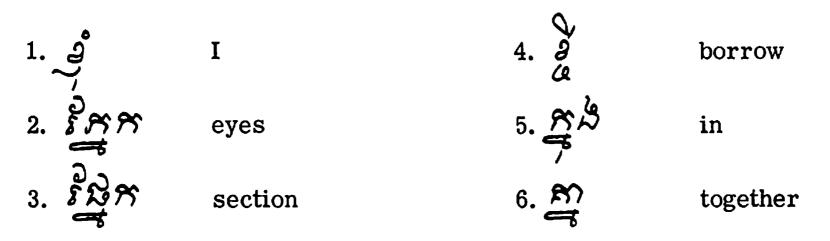
159. When both the initial consonant symbol and its subscript are dominant, the series of the vowel is determined by the subscript. In such words, only 1st series consonants occur as initial consonant symbols, since the series of the vowel is always determined by the subscript. Transcribe and pronounce

the following words:
$$\hat{\mathcal{X}}$$
: house, $\hat{\mathcal{X}}$ high, $\hat{\mathcal{X}}$ to know,
 $\hat{\mathcal{X}}$ bridge, $\hat{\mathcal{X}}$ river, $\hat{\mathcal{X}}$ thin, $\hat{\mathcal{Y}}$ cheek, $\hat{\mathcal{X}}$: to-
ward. $\hat{\mathcal{X}}$ lazy.

عن ا

A. ptěah, kpuah, skoal, spian, stin, skoom, tpoal, cpuah, kcil

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



7. Pgr	Cambolian	28. <i>I</i> y	twonty
	high	29. yu	foud
° 71	te auspend	30. App &	bridge
~	fruit	31. Kmu	te die
11. 108	much	32 tây 5	different
น เติ	محد ما	33. Mr a	place
13. Ju	onion	34. NJ B	river
14. (By no	easy	35. J j#	to cough
15. gf	preity	க ஜி	guest
18. IAu	allor	-	cat
17. വുല	enough	38. Imi	because
18. _ဆ ှက်	to (a)]	39. Y	what
18. 200	head	40. 1375	hungry
20. 15J D	leit-hand	41. 1910	poppor
21. <i>pys</i>	datr	42. P(B7	deep
22 gm	market	13. 3. 2.2.71	na not
23. 1075	drama	4. ഉഷ്	road
24. ស្ថាប	allernoon	45. Pgt	string
25. ju	lazy	40. Pg	dag
க. கூறவ	to know	ന. ഇന്	class
n. y	husband	48. M	sweel

	49.	23 F	road		5 2.	(12) 25 25 (12)	finger	
		နှောင်း	sand		53.	จาก	blind	
	51.	ยา <i>ณ์</i>	pineappl	e	54.	いい い	shade	
А.	1.	kñom	15.	lqaa	29.	mhoup	43.	cmũəh
	2.	pneek	16.	kraoy	30.	spiən	44.	tnal
	3.	pnaek	17.	lməəm	31.	slap	45.	ksae
	4.	kcəy	18.	tlĕəq	32.	pseiŋ	46.	ckae
	5.	knoŋ	19.	kbaal	33.	sthaan	47.	tnaq
	6.	kniə	20.	cweiŋ	34.	stiŋ	48.	pqaem
	7.	kmae	21.	twiə	35.	kqaaq	49.	pləw
	8.	kpŭəh	22.	psaa	36.	pñiəw	50.	ksac
	9.	руцә	23.	lkhaon	37.	cmaa	51.	mnŏəh
	10.	plae	24.	lŋiəc	38.	prŭəh	5 2.	mriəm
	11.	craən	25.	kc i l	39.	qwəy	53.	kwaq
	12.	praə	26.	skoəl	40.	kliən	54.	mlup
	13.	kt i m	27.	pdəy	41.	mteeh		
	14.	sruəl	28.	mph i y	42.	cr i w		

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 <u>dominant</u> 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:
$$\mathfrak{grs}$$
 cigarette, $\mathfrak{srgs}\mathfrak{srgs}$ to hurry,
 $\mathfrak{srs}\mathfrak{srs}$ criss-crossed, $\mathfrak{srs}\mathfrak{srs}$ approximately, $\mathfrak{srs}\mathfrak{srs}\mathfrak{srs}\mathfrak{srs}$ to like,
 $\mathfrak{srss}\mathfrak{srss}\mathfrak{srss}$ ant.

A. baarey, proñap, crowat, promaan, srolañ, sromaoc

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: $(\mathscr{F}, \mathscr{S})^{*}$ a perch, $\mathscr{F}, \mathscr{F}, \mathscr{$

A. tronum, kumnit, prolim, kuulii, proneoq

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 *FS*), and the second syllable maintains its 2nd series value, as in: *FS A* hammock, *FS C* category, *FS C* stroke, *ES FS* history (second syllable pronounced /-wost/). Transcribe and pronounce them. (The first syllable of the first example above is pronounced

pronounce them. (The first syllable of the first example above is pronounced /qan-/, and of the second and third examples, /qan-/.)

A. qaŋrɨŋ, qanləə, qanluuŋ, prawŏət

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 pro-

nounce:
$$\mathcal{RP}\mathcal{M}\mathcal{LS}$$
 to scratch, $\mathcal{D}\mathcal{R}\mathcal{D}\mathcal{L}$ to compare, $\mathcal{D}\mathcal{R}\mathcal{M}\mathcal{L}$ to announce, $\mathcal{RP}\mathcal{M}\mathcal{M}$ 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: \mathfrak{PSRR} country, \mathfrak{PR} to meet, \mathfrak{RR}

A. prateeh, prateeh, traceeq, bamplii, sratum

- 166. In some disyllables an initial 2/? in the second syllable is passive rather than dominant, as in 22/? size, 22/? soldier, 22/? temple.
 These words are sometimes written with a converted 2?; e.g.,
 2/? \$\sigma\$, 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 con-

sonant of the 2nd syllable is written as its subscript; e.g., $\Re \mathfrak{S} \mathfrak{S} / kamlaŋ/$,

'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 \mathfrak{L} and

/ $u\bar{a}$ / before other nasal symbols (see Exercises 64-67). All these presyllable vowels tend to be reduced to /a/ in rapid speech. As with initial clusters, elements of the vowel symbol of the main syllable may be written be-

fore, above, below, and following the entire cluster; e.g., \mathfrak{U}

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

- A. kanlaeŋ, saŋkat, cambaŋ, samrap, baŋkaət, baŋquəc, baŋkham, bañchəə, bantiəy, saŋkhɨm, 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:

- A. camriəq, cumlueh, banlae, puenlii, kancap, cuencun, bayrien, puenrik

in initial clusters. Medially, however, its pronunciation is unpredictable.

As a general rule, when it occurs subscript to β it is pronounced -d-,

and when subscript to s, it is pronounced /-t-/. Following this rule,

transcribe and pronounce the following: AMA middle, ESE a little, MAME tongue, ESE to continue, ASE indifferent, a little, MAME tongue, ESE to continue, ASE indifferent,

A. kandaal, bantəc, qandaat, bantaa, kantaəy, sandaek, bandaoy

170. In some words, however, - is pronounced -d- even when subscript to

ດີ, as in ຄົງລາມ lineage, ຄົງເລາດງ to pity. Transcribe and pronounce them.

A. sandaan, sandaoh

171. When \$\overline\$ occurs as the initial symbol of presyllables of shape /CVN-/, it has the value /d-/. Transcribe and pronounce: \$\overline\$ \overline\$ \overline\$ stacked up, \$\overline\$ \overline\$ \overline\$ to correct, \$\overline\$ \overline\$ \overline\$ weaving, \$\overline\$ \overline\$ to correct, \$\overline\$ \overline\$ \overline\$ weaving, \$\overline\$ \overline\$ value.
A. damruət, damrəw, dambaañ, damlay

172. Disyllables whose 1st syllable has the shape /CVm-/ may be written either with a medial cluster (/qaqsaa damrujet/ 'stacked letters') or with the /niqkehet/ (-), commonly called /sraq qam/. For example, /kamlaŋ/
'strength' may be spelled either in the /qaqsaa damrujet/ form not solve of the /qaqsaa riey/ 'consecutive letters' form not solve of the /niqkehet of the /niqk

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 \Re – , and in roughly half the

entries spelled with initial $\mathfrak{H} - \mathfrak{I}$, the conjunct spelling is recommended.

Write the following words two ways: /damru<code>št/ stacked, /kamsat/ destitute, /samlaa/ stew, /tummušn/ weight, /kampušn/ height, /damloun/ (initial $\breve{\lambda}$) potatoes, /samlañ/ to like.</code>

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 usual-

ly pronounced as if it were written $-\Im'_{-}$, i.e. /a/ in the 1st series and $/\check{e}_{-}$ / or $/\check{o}_{-}$ / in the 2nd series (see Exercises 72-74). Transcribe and pro-

A. kaññaa, saññaa, saccaa, woetthoq, 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:

$$\mathfrak{H}\mathfrak{U}\mathfrak{U}\mathfrak{U}\mathfrak{U}\mathfrak{U}$$
 (1st syllable pronounced $\mathfrak{H}\mathfrak{U}\mathfrak{U}$) happy, $\mathfrak{U}\mathfrak{U}\mathfrak{U}\mathfrak{U}\mathfrak{U}\mathfrak{U}$ (see Exercise 63) bamboo, $\mathfrak{H}\mathfrak{U}\mathfrak{U}\mathfrak{U}\mathfrak{U}$ (1st syllable pronounced $\mathfrak{H}\mathfrak{U}\mathfrak{U}$) proper.

- A. sapbaay, rihsəy, köəpbəy
- 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:

- A. kantray, dantrey, kañcrooy, saykriem
- 176. Exceptions to this pattern occur in the following three loanwords:

so that the cluster actually represents the sequence /-hstr-/ phonologically; initial vowel is reduced to /a/; final -5/ is silent). Transcribe and pronounce them.

- A. qaykleeh (\sim qayglee), sayskrət, sahstraacaa
- 177. As in initial position, medial clusters which have an aspirated consonant as subscript represent the sequence /-CCh-/. Transcribe and pronounce:
 If to hope, Lingto a stop, Mission an interjection, an interjection, artifact.

Written Final Clusters

- A. saykhim, bañchup, putthoo, woetthoq
- 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: シチクシン letter (the 1st syllable is pronounced like シング), シチンシン article, story (the 1st syllable is pronounced like シング , the last like シング), シーシン Buddhism (シンジン is pronounced /sahsnaa/).
 - A. qaqkəraa, 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: $\mathfrak{LF}_{\mathfrak{H}}^{\mathfrak{H}}$ friend, $\mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}}$ Buddha, $\mathfrak{LF}_{\mathfrak{H}}^{\mathfrak{H}} \mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}}$ human, $\mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}}$ word, $\mathfrak{LF}_{\mathfrak{H}}^{\mathfrak{H}}$ merit, $\mathfrak{LF}_{\mathfrak{H}}^{\mathfrak{H}}$ heart, mind, $\mathfrak{LF}_{\mathfrak{H}}^{\mathfrak{H}} \mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}}$ letter, $\mathfrak{LF}_{\mathfrak{H}}^{\mathfrak{H}} \mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}}$ ocean (1st syllable /sə-/), $\mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}} \mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}}$ state (pronounced like $\mathfrak{H}_{\mathfrak{H}}^{\mathfrak{H}}$).

A. mit, put, monuh, pioq, bon, cot, sambot, somot, qaatit, root

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 follow-

ing: Erner friendship, MERSAN Buddhism, RATER

government.

A. mittəphiəp, puttəsahsnaa, röətthaaphibaal

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 roo/, which precedes.

For example, the word $\mathfrak{M} \mathfrak{K} \mathfrak{K}$ is spelled /baa, yoo, coop kaa, sraq qao,

taa/. Transcribe and pronounce the syllables used in spelling the following words: 1. 2722 rice 2. 257 to have 3. 55 woman 4. 525 to

create 5. \mathfrak{m} is to hope 6. \mathfrak{m} strength 7. \mathfrak{m} regular

- 8. (? 5 5.5? 55 \$? Buddhism.
- A. 1. baa, sraq qaa, yoo
 - 2. moo, sraq qaa, noo
 - 3. saa, cəəŋ roo, sraq qəy
 - 4. baa, cəəŋ taa, sraq qaə, moo
 - 5. saa, noo, ceen khoo, sraq qeq, moo
 - 6. kaa, sraq qam, laa, sraq qam, yoo
 - 7. bad, cəəŋ roo, cad, sraq qam
 - 8. poo, sraq qoq, too, coon thoo, saa, sraq qaa, saa, noo, sraq qaa
- 182. When the /rĕəhmuk/ occurs alone after a consonant, it is called /sraq qah/. However, when it follows a vowel symbol, it is called /rĕəhmuk/ 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. Tran-

scribe and pronounce the spelling of the following words: 1. \mathfrak{P} : to slap

2. $\underline{\mathcal{D}}$: to descend 3. $\underline{\mathcal{S}}$ horse 4. $\underline{\mathcal{D}}$ $\underline{\mathcal{S}}$ because 5. $\underline{\mathcal{L}}$ $\underline{\mathcal{D}}$ $\underline{\mathcal{S}}$ to dare 6. $\underline{\mathcal{S}}$ to eat 7. $\underline{\mathcal{E}}$ $\underline{\mathcal{S}}$ kind 8. $\underline{\mathcal{E}}$ $\underline{\mathcal{S}}$ 10,000 9. $\underline{\mathcal{R}}$ $\underline{\mathcal{R}}$ to cut 10. $\underline{\mathcal{R}}$ $\underline{\mathcal{R}}$ he, she.

- A. 1. too, sraq qah
 - 2. caa, sraq qoq, reehmuk
 - 3. saa, sraq qei, rěəhmuk
 - 4. poo, sraq qei, poo, ceen roo, sraq qao, reehmuk
 - 5. haa, treysap, sraq qaa, noo
 - 6. saa, sraq qəy, kbiəh kraom
 - 7. yoo, museqkətosən, sraq qaa, noo
 - 8. moo, sraq qəi, kbiəh kraom, noo
 - 9. kaa, sraq qaa, taa, bantaq

10. koo, sraq qaa, taa, bantaq

183. You have learned that the symbol $\Sigma / baa/$ represents /p/:

a. when written with the /museqkətŏən/ ($\frac{1}{-}$) or its equivalent form

$$(-)$$
 as in $(-)$ /paa/ 'father' and $(-)$ /pay/ 'flute';

b. when it occurs with a subscript, as in $\sum_{\sigma_1}^{\infty}$ /pdəy/ 'husband';

c. and in syllable final position, as in ΩSSS /chup/ 'to stop'.

In some words, an initial \mathfrak{L} is pronounced /p-/ even though it is written neither with the /museqkətŏən/ nor a subscript. Such words are listed inconsistently in the dictionary, sometimes occurring with the 2° 's, sometimes with the 1° 's. Transcribe and pronounce the following words, all of which are pronounced with an initial /pa-/: 1° 1° 1° 1° 1° 1° cause, 1° 1° 1° 1° the present (final syllable pronounced /-ban/), 1° 1° 1° 1° 1° represents /-td-/, final vowel irregularly pronounced as 3° -), 1° 1° intelligence.

A. paccay, paccopbon, patdesaet, paññaa

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.
$$\beta \gamma \beta \gamma'$$
 (64) to jot down

2.	Rt	(65) to	o absorb			8.	છિજ		(143) to	bite othe	each r
3.	もそ	(67) to	o smoke			9.	ตณึ	િક	(143) da	wn	
4.	భాసి	(64) to	o tie			10.	G 8.S)	0	(167) op	enin	g, gap
5.	2598	(64) t	o come				••		(168) qu		el
6.	೮೮ನು ~	(142) p	ersuade			12.	R m	33	(168) wa	.11	
A.	1. kat 2.	. cup	3. cuəq	4.	caaŋ	5.	məək	6.	babuəl	7.	cəcɛɛk

A. I. Kat 2. cup 3. cuəq 4. cadı 5. məək 6. babuəl 7. cəceek 8. prakham 9. prəlim 10. canlah 11. cumluəh 12. cuəñceəy 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 pro-

nounced as if they were written -2^{-1} . Transcribe and pronounce:

- 1. As speech 2. As animal 3. \mathcal{H} fate 4. \mathcal{H} demon 5. $9 \mathcal{N}$ the symbol 6. $(\mathcal{F} \mathcal{N})$ wealth 7. $(\mathcal{F} \mathcal{F})$ history
- 8. 5527 possessions (the final is silent in examples 7 and 8)
- A. 1. sap 2. sat 3. kam 4. yĕəq 5. khan 6. trŏəp 7. prawŏət 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/ ($-\frac{1}{2}$). The following words are of this type; transcribe and pronounce them. As every, shy family, ess motor, (Erms wife, m: Brig priest

A. sap, wüəŋ, yüən, prapüən, prĕəhsaŋ

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. $\mathcal{D}\mathcal{D}\mathcal{D}$ proper 2. $\mathcal{D}\mathcal{D}\mathcal{D}$ corpse 3. $\mathcal{D}\mathcal{S}$ people 4.5 car 5. \mathcal{M} society 6. \mathcal{M} exact 7. \mathcal{M} \mathcal{M} Jataka (\mathcal{M} = d) 8. mar world.

- A. 1. sam 2. sap 3. cuen 4. ruet 5. saykum 6. praakat 7. ciedaq 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 /ea/after a 2ndseries symbol when stressed, both reduced to /a/ when unstressed. In a formal or reading pronunciation such syllables are pronounced with an un-

written final /-q/. For example, SSSM '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 $\stackrel{\sim}{\leftarrow}$, syllables with medium stress are marked $\stackrel{\sim}{\leftarrow}$

and unstressed syllables are unmarked. Transcribe and pronounce them.

- 5. wring the symbol -: 6. Errinner Pali
- A. 1. qarun 2. qanaakuet 3. sehaqroet 4. qaqmenuh 5. yuqkəleəqpintuq 6. meəqkətheəq-phiəsaa

The stressed finals /-aq/or /-eq/are sometimes indicated in the writing 190. system by the use of the /yuqkəlěəqp \pm ntuq/ (-:) when they occur in a final syllable, or preceding an internal juncture within a compound. (This sign must be carefully distinguished from the /rěəhmuk/ -;). Transcribe and pronounce the following: \$5: preoccupation, 237 &: position, 5255: interval, Anni Mission.

- A. thureəq, thaanaq, royeəq, kənaq-kamməkaa
- In some words whose second consonant symbol serves as the final of the 191. first syllable, the first syllable is pronounced /a/ in the 1st series and $/\check{e}\bar{e}/$ or $/\check{o}a/$ in the 2nd series (see Exercises 72–74). Transcribe and pronounce

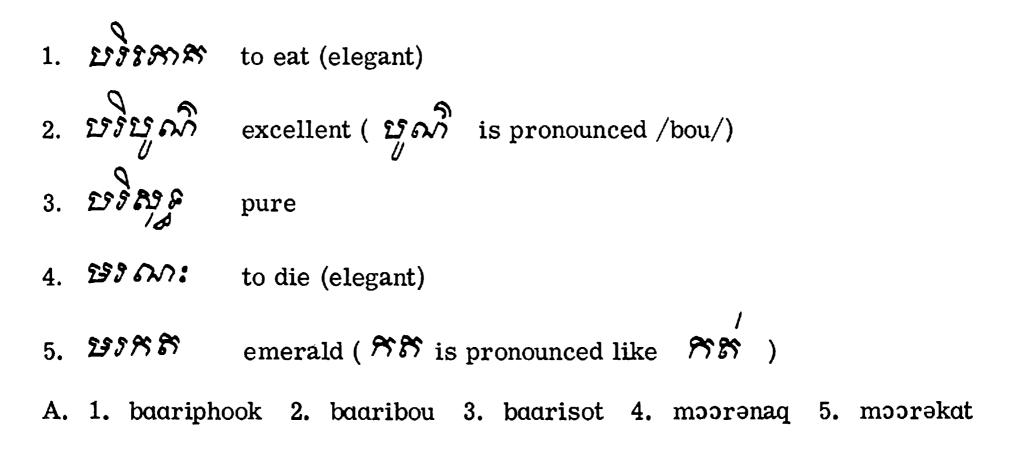
the following: \mathcal{H} is letters, \mathcal{H} is enemy (\mathcal{H} represents the doubled consonant /-tt-/), \mathcal{H} to promise, \mathcal{H} is sign, \mathcal{H} is silent), \mathcal{H} worker, \mathcal{H} worker, \mathcal{H} usually (\mathcal{H} =

- d), 1595 89 January.
- A. qaqsaa, sattrew, saccaa, saññaa, woenneyut, kammekaa, thoemmedaa, mĕəqkəraa

192. In some words whose second consonant symbol is \mathfrak{D} , an initial consonant symbol of the 2nd series is pronounced with the vowel $/a/; \mathfrak{D}$ in such words represents a double consonant /-cc-/. Transcribe and pronounce:

$$5257$$
 handicraft, 32575 β E dictionary ($-\beta$ E = β E).

- A. raccənaa, waccənaanukram
- 193. In polysyllabic words, when the consonant symbols **25** or **25** occur initially and before 5, they are pronounced with their normal inherent vowels rather than with a/ea/oa. 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 /a/. Transcribe and pronounce the following:

1.	82889.207	to like (\$- is irregularly pronounced /ae/)
2.	8238923	stupa (? is irregularly pronounced /ae/; ?? = /-td-/)
3.	ર્શ્વ શ્વ	enemy (first syllable has /-a-/)
4.	855 &7	art (first syllable has /-a-/)
5.	mems	civil service
	•	

- 6. おうかかん era (デ = /-qk-/)
 7. かいうみ citizenry (first syllable pronounced like かいう)
 8. おかかかか religion (first syllable shortened to /-a-/, 2nd お = /-hs-/)
 9. おかんかか professor
 A. 1. caettenaa 2. caetdey 3. sattrew 4. raccenaa 5. rieccekaa
 - 6. saqkəraac 7. püəllərŏət 8. sahsnaa 9. sahstraacaa
- 195. You have learned that the unwritten vowels /a/ and $/ee_{a}/$ in stressed syllables with no written final are pronounced with a final /-q/, both medially

and finally. Transcribe and pronounce: STAR 55 non-human, SPE 25 fearless, STARS: voiceless, SUS: interval.

A. qaqmənuh, qaqphiy, qaqkhoosaq, royeeq

- 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 ?) /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. Transcribe each of the following examples first in a careful pronunciation and then in a more colloquial pronunciation. Associate (second syllable irregularly pronounced with 2nd series value), age (first syllable reverts to 1st series), age (first syllable is /qa-/ in normal speech), and for series vowel).
 - A. kaqruqnaa, karunaa; keqriqyaa, keriyaa; leəqthiq, ləthiq; qaayuq, qayuq; siihaqnuq, siihanuq

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. **SER** to like, **SER** miserable, **SER** era, $\Im RR$

A. caettənaa, weettəniə, saqkəraac, qaekkəriəc

198. In words of more than one syllable, the occurrence of a converted sonorant

symbol
$$(\mathcal{B}', \mathcal{M}', \mathcal{S}', \mathcal{B}', \mathcal{B}', \mathcal{B}', \mathcal{B}', \mathcal{B}')$$
 or \mathcal{M} or

 δ 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: $\widehat{\gamma}$ \widehat

A. kunaanuphiep, nonaa, kiloumaet, ronew, royay

199. In the following words, however, even \widehat{m} and \widehat{p} submit to the governance rule. Transcribe and pronounce: $\widehat{m} \widehat{m} \widehat{k}$ commerce, $\widehat{m} \widehat{p} \widehat{m}$ clock.

A. piənic, niəlikaa

200. A number of words are spelled with an unpronounced final short vowel symbol. Transcribe and pronounce the following examples: $\mathcal{F}_{\mathcal{F}}$ village, $\mathcal{F}_{\mathcal{F}}$ life, $\mathcal{F}_{\mathcal{F}}$ monk's quarters, $\mathcal{F}_{\mathcal{F}}$ reason (\mathcal{F} - is irregularly pronounced /ae/) $(\mathcal{F}_{\mathcal{F}})$ history (final syllable pronounced as if written $\mathcal{F}_{\mathcal{F}}$, $\mathcal{F}_{\mathcal{F}}$ to behave.

A. phuum, ciət, kot, haet, prawoət, praprit

201. In some words, the vowel symbol \$- is pronounced like \$-, i.e. /ae/ in the 1st series and /ɛɛ/ in the 2nd series. Transcribe and pronounce the following: \$£/?? reason, \$?? or \$??? province, \$6??? doctor, fifthers stupa (\$\$ = /-dt-/) £\$???? to cancel (first syllable is pronounced /pat-/) \$2\$??? to like (\$\$ = /-tt-/).

A. haet, khaet, pcct, caetday, patdesaet, caettanaa

202. The vowel symbol
$$-$$
 is pronounced like $-$ in some 1st series initial syllables. Transcribe and pronounce: $\frac{1}{222}$ father ($\frac{22}{22} = /-d-/)$, $\frac{1}{222}$ spirit.

A. bəydaa, səylaa, bəysaac

203. In a few words the configuration 2 - 2 with a 1st series consonant symbol is pronounced /-ac/ rather than the regular /-ac/. Transcribe and

pronounce: $f(\mathfrak{M})$ completely, \mathfrak{M} \mathfrak{M} to complete, \mathfrak{M} flesh, \mathfrak{M} king, \mathfrak{M} a royal title.

A. srac, samrac, sac, sdac, samdac

XVI. SOME ADDITIONAL DIACRITICS

204. The following diacritics have already been introduced: 1. 25 5 / /bantaq/ - (Exercises 64-78) 2. 25 かからた /museqkətŏən/ - , - (Exercises 43 and 48) 3. (アカチン / trəysap/ - , - (Exercise 45) 4. シアナンが /niqkəhət/ - (Exercises 101-107) 5. かかかかかかか / /sanyook-saññaa/ - (Exercises 117-119). Another important diacritic is the Four 2557 が /tŏəndəkhiət/ (-), sometimes referred to as the かたかた / samlap/ 'to kill', or the エアメントン / patdesaet/ 'to cancel'. It is placed over the final consonant

banyan (tree),
$$28727565$$
 example, (2557555) to say (elegant).

A. prayaoc, quhsaa, kei, pisaot, poo, qutiəhaa, prasaah

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. A filles (or A fills) king, a fills of (or fills) king, a fills of (or fills) king, a fills of fills) king, a fills of f

A. ksat, lĕəq, can

- 206. In certain compounds whose first element is written with an unpronounced final consonant symbol, the /toঁəndəkhiət/ may occur internally. Transcribe and pronounce: ເປັນ ຄາມ (archaic; final syllable pronounced as if ຄາດເ') ເປັນກັດກິ່ວ in a rage.
 - A. reepuəl, moobaŋ
- 207. The following two related words are irregular in that the subscript rather than the superscript consonant preceding the /toঁəndəkhiət/ serves as the

final of the syllable. Transcribe and pronounce: \mathfrak{ML} \mathfrak{M} Brahma, \mathfrak{ML} a Brahman.

A. prum, priəm

208. The \mathfrak{N} /robaat/(-) is the reflex of an original /r/ in Sanskrit loanwords. In most words, when it occurs over a final consonant symbol neither the /robaat/ nor the consonant over which it occurs is pronounced. (Because of its functional similarity to the /toondokhiot/ in this position, the two are frequently confused.) An exception is the word \mathfrak{N} \mathfrak{N} /qaat/ 'essence', where the symbol underlying the /robaat/ is pronounced as the final of the syllable. Transcribe and pronounce: \mathfrak{D} \mathfrak{N} abundant (see 193), \mathfrak{N} \mathfrak{N} ear (royal vocabulary).

A. baaribou, preeh-kaa

209. In the following words the effect of the /robaat/ is to change the vowel /33/ to /33/, as well as to cancel the final consonant symbol. This effect is

called $\widehat{\mathfrak{M}} \, \widehat{\mathfrak{M}} \, \widehat{\mathfrak{M}}$

210. When the /rɔbaat/ appears over a medial consonant symbol, it is pronounced as the intruded syllable /-r = -/ preceding the consonant symbol over which

A. kaa, daa

- 211. The $\widehat{\operatorname{sagging}}$ /leik qahsdaa/ 'number eight' (), also called $\widehat{\operatorname{sagging}}$ /leik prambəy/, occurs only in the following two words: $\widehat{\mathscr{R}}$ resultative auxiliary: then; $\widehat{\mathscr{R}}$ relative pronoun: which. It has no effect on the pronunciation. Transcribe and pronounce them.

A. nuh!, caah, naa! \sim 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: $\hat{n_{f}}$ to write (neither \hat{j} is pronounced) \hat{n} \hat{n}

214. The \hat{sass} /leik too/ \mathcal{J} '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

 $(\mathfrak{k}, \mathcal{N})$ /srəy-srəy/ 'women'. Transcribe and pronounce: $(\mathfrak{k}, \mathcal{N})$ / various, $(\mathfrak{k}, \mathcal{N})$ small and numerous, $(\mathfrak{k}, \mathcal{N})$ each in turn.

A. psein-psein, touc-touc, nimuay-nimuay

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 frequent-ly written with the /leik too/. Transcribe and pronounce them.

- A. bantəc mədaaŋ, bantəc mədaaŋ; 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." Tran-

scribe and pronounce:
$$j : \mathcal{F} : j \to \mathcal{F} : \mathcal{F} :$$

A. knom tiw ptejh knom; ptejh knom niw cit 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 /a/. Transcribe both the careful and rapid pronunciations of each of the follow-

ing words:
$$\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$$
 to scratch about, $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ to receive, $\mathcal{M}\mathcal{M}\mathcal{M}$
thing, $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ human, $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ country, $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ to like,
 $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ water buffalo, $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ dawn, $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ to originate,
 $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ voice, $\mathcal{M}\mathcal{M}\mathcal{M}$ to owe, $\mathcal{M}\mathcal{M}\mathcal{M}$ place, $\mathcal{M}\mathcal{M}\mathcal{M}$ to spread,
 $\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$ wall, $\mathcal{M}\mathcal{M}\mathcal{M}$ letter.

A. kakaay, kekaay; totuel, tetuel; robah, rebah; monuh, menuh; prateeh,

prəteeh; sralañ, srəlañ; krabəy, krəbəy; prolim, prəlim; baŋkaət, bəŋkaət; samleiŋ, səmleiŋ; cumpeəq, cəmpeəq; kanlaeŋ, kənlaeŋ; pŭəŋriik, pəŋriik; cumluəh, cəmluəh; cuəñceəŋ, cəñceəŋ; sambot, səmbot.

218. The presyllable of the following two common words is reduced in rapid speech to /ta-/. Transcribe the careful and rapid pronunciations of each.

Rinn same, Assans to write.

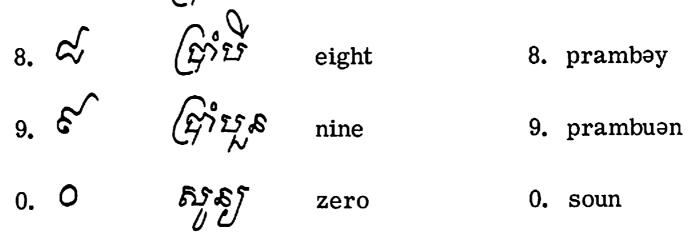
- A. dadael, tədael; sasei, təsei
- 219. Some presyllables that are written with a long vowel may be pronounced long in careful speech, but they are pronounced in normal speech with a short vowel (Exercise 141). Transcribe and pronounce the following words

A. saalaa, salaa; qaayuq, qayuq; puukae, pukae; piiprušh, piprušh; kaafei, kafei; bouraan, boraan; piirušh, pirušh; 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 <u>names</u> 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 /-pil/. Transcribe and pronounce them.

1.	9	ES ES ~	one	Α.	1.	muəy
2.	හ	लंड	two		2.	pii
3.	ണ	Ľ	three		3.	bəy
4.	کړ	25 S N	four		4.	buən
5.	L.	(Eri	five		5.	pram
6.	ર	(27°25 125	six		6.	prammuəy
7.	ଣ	(gri m's	seven		7.	pramp i l



- 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.	୭୦	ਤੋਹਾਂ			ten
11.	୭୭	ຊີ <u>ເ</u> ຊັ່ນ		ฐยรผิญช	eleven
		रेर्छ लेंड		ตั้งผิญกร์	twelve
13.	၈က	Reser	~	ยังลุกษ์	thirteen
14.	১৫	Zurza	~	rgs 2 m	fourteen
15.	૧૯	25 ල	~	สาวิญาย์	fifteen
16.	নি	Reserves	~	(ฏาย พระมีญาย์	sixteen
		ລີ ຍ (ຍາ ຄຳ ສ		(กำตัรผิญาย่	seventeen
18.	ඉස්	Reigies	~	(ยายั ² ญช	eighteen
		ລີຍ ຊາຍ ສ	~	ลายุรมิญช่	nineteen
20.	20	228			twenty

- A. 10. dap
 - 11. dap-muəy \sim muəy-dandap
 - 12. dap-pii \sim pii-dandap
 - 13. dap-bəy \sim bəy-dandap
 - 14. dap-buən \sim buən-dandap

- 15. dap-pram \sim pram-dandap
- 16. dap-prammuəy \sim prammuəy-dandap
- 17. dap-prampil \sim prampil-dandap
- 18. dap-prambəy \sim prambəy-dandap
- 19. dap-prambuən \sim 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.

Numerals

Α.

20	ണം	การกร	+1. i+	٨	
30.	6170		thirty	Α.	saamsəp
40.	20	innu	forty		saesəp
50.	కం	ensie	fifty		haasəp
60.	०९	กุหญช	sixty		hoksəp
70.	ಎಂ	อสสาย	seventy		cətsəp
80.	దం	รียัสณิษ	eighty		paetsəp
90.	కం	s mains	ninety		kawsəp

224. The multiplier /muəy/ 'one' in the following compounds is shortened in normal speech to /mə-/; e.g. /muəy-rɔɔy/ \sim /mərɔɔy/ 'one hundred'. Transcribe and pronounce the following numbers both ways.

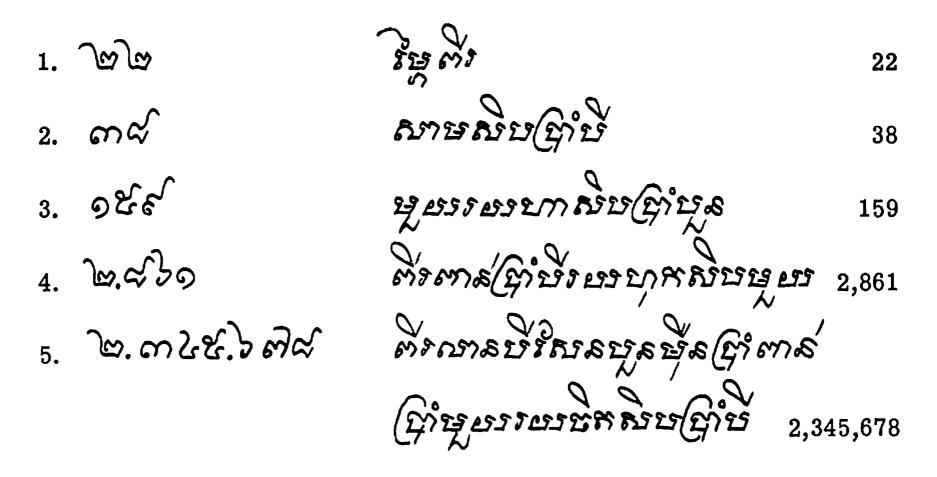
1. 900 EFESSESS one hundred	
2. 0.000 Estrend one thousand	
3. \bigcirc 0.000 $\underbrace{\operatorname{rs}}_{\operatorname{N}}$ one ten-thousand N	and
4. 900.000 Eressins one hundred-t	thousand
5. 9.000.000 95155 6257 one million	
6. 90.000.000 EUSTRIE one ten-millio	on (final -

silent)

1. muəy-rooy \sim mərooy4. muəy-saen \sim məsaen

 \mathcal{N}

- 2. muəy-poən \sim məpoən 5. muəy-liən \sim məliən
- 3. muəy-məin \sim məməin 6. muəy-kaot \sim 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.



- A. 1. mphiy-pii
 - 2. saamsəp-prambəy
 - 3. muəy-rooy, haasəp-prambuən
 - 4. pii-poen, prambey-rooy, hoksep-muey
 - 5. pii-liən, bəy-saen, buən-məɨn, pram-pöən, prammuəy-rəəy, 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 $\mathcal{M}_{\mathcal{A}}$ is $\mathcal{M}_{\mathcal{A}}$ and is abbreviated $\mathcal{M}_{\mathcal{A}}$. The word for Christian Era is $\mathcal{M}_{\mathcal{A}}$ is $\mathcal{M}_{\mathcal{A}}$ is a specific or $\mathcal{M}_{\mathcal{A}}$. 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:

- デジャン シーズ ビデア おお、 のようべ Wednesday, the twenty-eighth of January, A.D. 1968
 デジェン マン マン アデン のふ してつの Monday, the sixteenth of July, B.E. 2511
- A. 1. tŋay-put tii-mphɨy-prambəy mĕəqkəraa krɨhsaqkəraac məpŏən prambuən-rəəy hoksəp-prambəy.
 - 2. tŋay-can tii-dap-prammuəy kaqkədaa puttəsaqkəraac pii-pŏən pram-rəəy 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				Depe <u>Vow</u>	ndent els	èx.	xai	Eg			
ក	X	k	ជ	X	dh	x	xa	۶x٦	xo	Diacri	
Ð	x	kh	සී	ž	n	xx	xax	٤XJ	xau	x, x	x"
គ	X	g	ប	x្ប	р	xx	xáx	x	xam្	x, x	x'
W	х'n	gh	ਖ਼	х ч	ph	xx	xăx	x:	xah	Ŷ	rx
ង	X,	'n	ព	х м	Ъ	xา	xā	x:	xà	s X	x°
ប	X	С	ភ	х С	bh	x ı x	xâx	Indep	endent	± ×	x,
ឆ	X	ch	ਚ	x	m	X	xi	Vow		ជ X	x
ದ	X w	j	ω	xĵ	У	X	xī	ਲ	i	x	\mathbf{x}^{\bullet}
ឈ	x	jh	ฮ	ڗؖx	r	°≈ X	хŷ	ູຄູ	ī	Numera	ls
ຕຸງ	X	ñ	ល	X ລ	1	X	$x\overline{y}$	ଞ	u	9	l
H		ţ	3	X	v	x	xu	3, 9	ū	ଞ	2
ઈ	X	ţh	5 2	X	ś	x,	xū	ឯ	е	ព	3
ଞ୍ଚ	X	đ	UP	х _т М	S.	X w	xua	ព្	ai	ર્શ	4
ព្	xฏ	dħ	ស	х _Ĵ	S	٤X	xoe	9 , 8	0	લ	5
ណ	X	ņ	ហ	х Х	h	۶xð	xýa	હે	au	ଟ	6
ត	Х ө	t	ອີ	-	ļ	۶x۶	xia	U U	ŗ	ต	7
ષ	X	t h	স	Х н	q	٤x	xe	U A	Ţ	ದ	8
9	X q	đ				ťх	xae	ů,]	ල්	9

685

Notes

1. In the consonant columns, \underline{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 $\int ngn^{2} \frac{krakhvák}{k}$.

2. When m occurs as a superscript, the lower element is omitted, as in m $\underline{\tilde{n}j}$. When m occurs as its own subscript, it takes the full form x, as in man kanna. Otherwise, the subscript has the form of the lower element alone, as in g khn. 3. The consonant v, followed by the vowel γ , takes the form \mathfrak{G} . 4. In the vowel columns, \underline{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 \underline{x} in the Khmer column can also represent a final consonant with no vowel following, in which case it is romanized simply as \underline{x} , as in \Im dab. 5. The consonants x 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 \underline{a} , as in \underline{a} , \underline{tum} , \overline{tw} : set. 6. The diacritics \ddot{x} and \ddot{x} 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 x, \tilde{x} , \tilde{x} , and \tilde{x} . When x co-occurs with one of the superscript vowels and with one of the consonants a, m, w, w, *, *, or v, it is romanized as x'', as in v' p''i. When x co-occurs with one of the superscript vowels and with one of the consonants w, m, or H, it is romanized as x; as in $\sqrt[5]{5'i}$. Otherwise x represents the vowel u, as in ve <u>mun</u>.

7. The diacritics x, x, x, and x in the romanization column are placed after the last letter of the word in which they occur, as in $\operatorname{mgr}{\mathfrak{h}} \overset{\circ}{\mathfrak{h}} \underline{\mathrm{ksatriy}}$, $\mathfrak{v}^{+}: \underline{\mathrm{cah}}$, $\overset{\circ}{\mathfrak{h}} \underline{\mathrm{ta}}$, $\operatorname{mgg} \underline{\mathrm{qatman}}$. 8. Conventional signs are:

- m romanized by repeating the preceding word or phrase now romanized as .1.
- vvv romanized as .p.
- romanized by means of the hyphen (-)
- romanized by means of the colon (:)
- 9, 9 romanized by means of the period (.)

The full-stop signs () and () are omitted in romanization.

Appendix B

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 typewritten Khmer: 1) The symbol § should be transliterated o rather than au, as in §w oy. 2) The symbol x does double duty for both x and x; in the two particles n and n destination be transliterated and ta'; in all other occurrences it should be transliterated x, as in jugent prayojan.