# Morphophonemic Changes in Daai Chin

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#### A. Introduction

## 1. The Daai Chin language

The Daai Chin language belongs to the Southern Branch of the Kukish Section of the Tibeto-Burman language family. It is spoken by approximately 30,000 people, in the townships of Matupi, Mindat, Kampelet, and Paletwa, in the Southern Chin Hills of Burma. Within the Chin language group Daai Chin is most closely related to Mün Chin (also called Mindat Chin), Chin Pon (also called Üt Pū) and Matu Chin.

Not all of the Daai Chin population call themselves "Daai". Only in recent years have young people, especially those with some school education, started to call themselves and their tribe "Daai". Some of the other names that have been used for the Daai Chins or part of the Daai Chins are: K'khyou, Ng'hmo Ye, Ng'xang, Kho Ng'lung, K'khyaang.

The Daai Chin language comprises several dialects, whose boundaries have yet to be determined. This study is based on the dialect spoken in Kampelet township, particularly in Yang M'saai village and its surrounding area.\*

# 2. Outline of phonology

#### 2.1 Initial Consonants

		bilab.	alv.	pal.	vel.	glot.
stop	Vl.	р	t		k	ን
	vl. vl.asp.	рh	th		<b>k</b> h	
	vd.	b	đ			
fric.	Vl.		s		х	h
	vl.asp.		Sh			
nas.	vl.	hm	hn		hŋ	
	vd.	m	n		ŋ	
lat.	Vl.		4			
	vd.		1			
semivowels		W		У	8	

## Consonant modifications:

Palatalization: py, phy, ky, khy, hy, my, ny, ny, wy

Preglottalization (not implosion): can occur with all consonants

Prenasalization: can also occur with all consonants

## 2.2 Final Consonants

p [b5]	t [t?]	k [k?]
m	n	Ŋ
¥		У
ws [wks]		у?

<sup>&</sup>lt;sup>a</sup> The data for this paper was collected in Rangoon over several years time between 1975 and 1981. It is based on the speech of Chaing So, to whom I am greatly indebted, and partially checked against the speech of others from his village.

Dr. David Thomas and Paulette Hopple gave advice in the analysis and writing of the paper.

#### 2.3 Vowels

	front	central	back	
			spread	round
high	1 [i],[r]		u	u [u],[ʊ]
mid	ε	Ð		၁ [၁],[ဎ]
low		a [a],[s]		

#### Vowel modifications:

Length: all vowels may be short or long. Open syllable vowels are a little shorter than the long vowels.

Tone: plain level tone and tense high falling tone. The high tense tone does not occur on short syllables with final stop.

## 2.4. Syllable Structure

The general syllable pattern is  $(C_1)$   $(C_2)$   $(C_3)$   $(C_4)$ , where:

C<sub>1</sub>: ?, m

C2: all initial consonants

С3: У

V: all vowels

C4: all final consonants

Most morphemes in the Daai Chin language are monosyllabic.

# B. Rules for Morphophonemic Changes in Noun-Compounding

In the Daai Chin language, phonologically conditioned changes in the morphemes follow certain rules. Since these rules can be seen most completely in the compound noun, they will be presented first in this paper in the compound nouns. These same rules also apply, though less fully, to other morpheme constructions, e.g. the numeral phrase, the prepositional phrase, and the verb phrase. There are also morphologically conditioned variants of verb stems to which some of these rules apply.

These morphophonemic changes take place at normal conversational speed, but in very slow speech or singing the morphemes retain their basic form without morphophonemic changes. But the verb stem variations of Verb Class II and Verb Class III retain their basic forms at all rates of speed.

# 1. Rule I. Vowel shortening

If the first member of compound is an open syllable, the longer vowel of the open syllable is shortened in compounding.

- 1. kho: mik > khomik earth eye 'sun'
- 2. she: mú: > shěmú: cow fur 'cow's hair'
- 3. lu: shắm > lǔshắm head hair, string 'hair of the head'
- 4. kho: nú: > khonú: foot big 'big toe'
- 5. kho: ?aay > kho?aay spirit chicken 'wild chicken'
- 6. she: ?5ŋ > shě?5ŋ
  cow trading 'cow trading'

## 2. Rule II. Loss of high tense tone

## 2.1 Unconditional loss of high tense tone

Rule IIa: 
$$C\dot{V}$$
: + (?) $CVx > C\overline{V}$ (?) $CVx$ 

If the first member of compound noun is an open syllable with high tense tone and is followed by a simple consonant or preglottalization, it always changes into a plain tone (unmarked in the transcription).

- 1. lí: pšk > lipšk arrow bundle 'gun'
- 2. 15: yŭ? > 15yŭ? throat bone 'Adam's apple'
- 3 mɔ́: shá: > mɔ̃shá:
  jungle meat 'meat of wild animals'

4.	mé: goat	mĭk eye	>	měmík 'goat's eye'
5.	4έ: palm tree	?uum hole, container	>	4ዸ፝?uum 'a palm tree which is empty inside'
6.	mé: goat	²ἔy eat	>	mě?ěy 'goat feed'
7.	nú: mother, big	?рщ́у old	>	nŭk-púίγ 'old woman'
8.	pá: father	?shé: bad, intense	>	păk-sʰéː 'old man'
		.4		=

If the first member of compound noun has a short vowel with a nasal ending and is followed by preglottalization, the high tense tone of the first member always changes into a plain tone. There is always concurrent resyllabification and assimilation (cf. Rule III).

Rule IIb: CVN + ?CVx > CVN?CVx

- 1. ?Ím ?ĭp-si: ?si: 'floor of a house' house floor 2. ŋnắm 7soon nnap-soon > village outside 'outside the village' 3. lắm ?se: lăp-se: road other, different 'the other road' 4. ?s5n ?khéét > ?sšk-khéét left right 'both sides'
- 2.2 Conditional loss of high tense tone

Rule IIc: 
$$C\dot{V}$$
: +  $NC\dot{V}x$  >  $C\overline{V}NC\dot{V}x$ 

If the first member is an open syllable with high tense tone, and if the second member has prenasalization and a high tense tone also, the first member changes to a plain tone. There is always concurrent resyllabification (cf. Rule III).

- 1 sá: npyắn > săn-pyắn child man. male 'son'
- 2. shá: ŋlắy > shǎŋ-lắy
  deer field 'place where deer rest in the field'

If the second member of the compound has a plain tone, the high tone on the first member remains unchanged.

- 3. ná: mpaan > nám-paan fish fork 'name of a fish'
- 4. sá: ŋhnu: > sắŋ-hnu: child woman, female 'daughter'

Rule IId:  $C\acute{Y}Y + C\acute{Y}X > C\ddot{Y}YC\ddot{Y}X$ 

If the first member has a high tense tone and a final semi-vowel and if the second member has a high tense tone also, the first high tense tone changes to a plain tone.

- 1. shếy mếy > shếymếy tobacco fire 'pipe'
- 2. tắy nú: > tǔynú: water big 'river'
- 3. 15w ?úy > 15w?úy field dog 'dog that is kept in the field'
- 4. ?úy shá: > ?úyshá: dog flesh 'flesh of a dog'

If the second member of the compound has a plain tone, the high tense tone of the first member remains unchanged.

- 5. shếy ?ŭy > shếy?ŭy tobacco seed 'tobacco seed'
- 6. tắy ?ĕy > tắy?ĕy water eat 'eating together'

Rule IIe: 
$$C\hat{v}:N + ?C\hat{v}x > C\overline{v}:N?C\hat{v}x$$

If the first member has a long vowel, a high tense tone and a final nasal, and if the second member has preglottalization and a high tense tone, the first high tense tone changes to a plain tone.

1. sóón ?díík > soot-díík spoon small 'little spoon'

If the second member of the compound has a plain tone, the high tense tone of the first member remains unchanged.

- 2. mlííŋ ?thi: > mlíík-thi:
   ant dead 'dead ant'
- 3. Rule III. Consonant resyllabification and assimilation

If the first member has a final nasal and the second member has preglottalization, the nasal becomes a homorganic stop  $(m > p, n > t, \eta > k)$  and the preglottalization disappears. Or we could say that the glottalization is resyllabified into the preceding syllable and merged with the nasal to make a stop.

- 1. ?Ím ?si: > ?ĭp-si: house floor 'floor of a house'
- village outside 'outside the village'
- 3. sốốn rdílk > soot-dílk spoon small 'little spoon'
- 4. mpyšn ?shć: > mpyšk-shć: mouth bad 'evil tongue'
- 5. ?khyaan ?shé: > ?khyaak-shé: man bad 'wicked man'

Rule IIIb: Nasal - prenasal  $CVN^1 + N^2CVx > CVN^2.CVx$ 

If the first member has a final nasal and the second member has prenasalization, the nasal ending of the first word assimilates to the point of articulation of the following nasal, and the prenasalization disappears.

- 1. ŋnắm ŋlɔśw > ŋnắŋ-lɔśw village obvious 'prominent village'
- 2. ?khyaan msí: > ?khyaam-sí: man seed 'only offspring'

Rule IIIc: Open syllable preglottal or prenasal

$$CV + ?CVx > CVk.CVx$$
  
 $CV + NCVx > CVN.CVx$ 

If the first member is an open syllable, and if the second member has preglottalization or prenasalization, the glottal or nasal phoneme joins the first member to close the open syllable. In the process, the glottal changes into a velar stop.

- 1.  $k^h \supset ??\acute{a}: > k^h \supset k^-?\acute{a}:$  earth rain 'rain'
- 2 khya: ?wááy > khyäk-waay moon light, beam 'moonlight'
- 3. ?sha: ŋlŭŋ > ?shāŋ-lŭŋ
  veranda middle 'in the middle of the veranda'
- 4. shε: ŋlǝw > shĕŋ-lǝw cow stray 'a straying cow'
- 5. she: ml5? > shem-l5? cow vomit 'cow vomit'
- 6. yu: mlǔŋ > yǔm-lǔŋ
  rice wine cover 'cover of a rice wine pot'

Rule IIId: Semivowel - Preglottal

CVy + ?CVx > CVy?.CVx or CVyk.CVx CVw + ?CVx > CVwk.CVx or CVk.CVx If the first member ends in a semivowel, and the second starts with a preglottal, generally the glottal stop joins the first syllable. In the process, the semivowel [w] may drop out, and the glottal may change to [k] (always, if the semivowel is [w]).

1.	?ú́y dog	?thëy train	>	?úy?-tʰĕy 'trained dog'
2.	shếy tobacco	??ám container		shěyk-?ắm 'tobacco container'
3.	khaaw rope from bark	?thá: strong	>	khaak-thá: 'strength of a bark rope'
4	l ĺð w field	?sວັກ hut	>	lŏwk-sŏŋ 'hut in the field'

4. Rule IV. Loss of preglottal

$$CVT + ?CVx > CVTCVx$$

If the first member has a final stop, and the second member has preglottalization, the preglottalization disappears.

1. sălaap ?si: sălaap-?si: > resthouse floor 'floor of the resthouse' 2. mĭk ?tĭn mik-tin > eye straight 'one who has a sharp eye in shooting' 3. kŭt <sup>?</sup>tĭn kŭt-tin > hand straight 'one who has a steady hand in shooting'

# C. Combined application of morphophonemic rules

Two or more morphophonemic rules may be applicable to the same compounds or sequences:

- 1. Rule I + Rule II: Vowel shortening and loss of high tense tone
- 1. lí: pok > lipok arrow bundle 'gun'

- 2. mé: mík > měmík goat eye 'goat's eye'
- Rule I + Rule III: Vowel shortening and consonant resyllabification and assimilation
- khya: ?wááy > khyǎk-waay moon light, beam 'moonlight'
- 2. she: ŋlòw > sheŋ-lòw cow stray 'a straying cow'
- Rule II + Rule III: Loss of high tense tone and consonant resyllabification and assimilation
- 1. lắm ?sε: > lắp-sε: road other, different 'the other road'
- 2. rsin right > rsik-khéét both sides
- **4.** Rule I + Rule II + Rule III: Vowel shortening, loss of high tense tone, consonant resyllabification and assimilation
- 1. nú: ?pwy > nuk-pwy mother, big old 'old woman'
- 2. sá: npyắn > săn-pyắn child man, male 'son'

Rule IV does not co-occur with other rules because it requires a final stop in the first member, but Rules I, II, and III do not apply if there is a final stop.

# D. Morphophonemic Changes in Other Nominal Phrases

# 1. Prepositions

Prepositions (actually postpositions) combine with nouns in ways similar to the preceding.

1. Rule I: lu: pěy > lǔpěy
head beside 'beside the head'

2.	Rule	IIa:					ŋnɔ̈pĕy 'beside the field'
3.	Rule	IIb:	?ím house	۶ké: und		>	?ĭp-ké: 'under the house'
4.	Rule	IId:	ŋsééy chimbel			>	ŋsɛɛy?-ké: 'under the chimbel'
5.	Rule	IIe:					yɔ̃msíík-ké: 'under the bamboo'
6.	Rule	IIIa:	?ím house	on	aan	>	?ĭp-khaan 'on the house'
7.	Rule	IIIb:	?ím house	ŋlŭ mide		>	?ໂŋ-lŭŋ 'in the middle of the house'
8.	Rule	IIIc:	msw: pot	on	aan	>	msŭk-khaan 'on the pot'
9.	Rule	IIId:	15°₩ field		uuŋ ldle	>	lɔ̃wk-shuuŋ 'in the middle of the field'
10	Rule	IV:	sălaap resthouse			>	sălaap-?ŭm 'in the resthouse'

All rules except IIc have thus been observed. Rule IIc is lacking because no prepositions have yet been found with the form NCÝx .

# 2. Numbers

Numbers combine with their preceding nouns in similar fashion.

1.	Rule	I:	msw: pot	phya: 100	>	msŭphya: 'hundred pots'
2.	Rule	IIa:	mé: goat	phya: 100	>	měphya: 'hundred goats'
3.	Rule	IIb:	lắm road	?thŭm three	>	lăp-thŭm 'three roads'

4.	Rule	IIc:	sວ໌ວ໌ກ spoon	?kó: nine	>	soot-kó: 'nine spoons'
5.	Rule	IIIa:	?ím house	?thŭm three	>	?ĭp-thŭm 'three houses'
6.	Rule	IIIb:	?ím house	ŋhŋĭ? two	>	?Íŋ-hŋĭ? 'two houses'
7.	Rule	IV:	wăk pig	?phyw: four	>	wŏk-phyw: 'four pigs'

Rule IIc is lacking because no numbers have been found with the form NCVx. The requisite conditions for Rules IId, IIIc, and IIId do occur, but these rules are inoperative for numerals:

1.	Inoperative	Rule	IId:	7йу dog	?kó: nine	>	?ŭy.?kó: 'nine dogs'
2.	Inoperative	Rule	IIIc:	she: cow	?thŭm three	>	shel.?thum 'three cows'
3.	Inoperative	Rule	IIId:	15 <b>w</b> field	Pphyw: four		lốw.?phyw: 'four fields'

# E. Morphophonemic Changes in the Verb Phrase

There are morphophonemic changes of the verb root depending upon the verb class. Verb Class I has only one verb stem, whereas Verb Class II and III each have two stems to which various morphophonemic rules apply, sometimes depending upon the phonological environment, sometimes not. The most frequent changes of the verb root occur before the preglottalized morphemes [?ti:] (verb phrase final marker, present tense) and [?khǎy] (verb phrase final marker, future tense).

## 1. Verb class I

1.1. If the verb root has a final nasal, the nasal changes into a stop, following Rule IIIa.

- 1. shwwm ?ti: > shwwp-ti: 2. shën ?ti: > shët-ti: remember 'remember' red 'red'
- 3.  $k^h ext{dog}$  ?ti: >  $k^h ext{dog} k ti$ : 4.  $k^h ext{dog}$  ? $k^h ext{dog}$  >  $k^h ext{dog} k k^h ext{dog}$  push 'will push'
- 1.2. Contrary to Rule IIIc, if the verb root is an open syllable, there is no change when [?ti:] or  $[?kh\check{a}y]$  follows.
- 1. bú: ?ti: > bú:.?ti: 2. te: ?khǎy > te:.?khǎy cover 'cover' beat 'will beat'
- 1.3. If the verb root has a final semivowel before [?ti:] or [?khăy], it resyllabifies and assimilates, following Rule IIId.
- 1. mốw ?ti: > mốk-ti: 2. ?ãw ?khảy > ?ãk-khảy stare 'stare at smn.' broad 'will be broad'
- 3. mběy ?ti: > mběy?-ti: feed'
- 1.4 If the verb root has a final stop, the preglottalization of [?ti:] and [?kh y] disappears, following Rule IV.
- 1. y55p ?ti: > y55p-ti: 2. b55k ?ti: > b55k-ti: break 'break' white 'white'
- nshut ?khăy > nshut-khăy sit 'will sit'

## 2. Verb class II

There are two stems for verbs of Verb Class II: Stem A and Stem B. Stem A is realized in environment I, Stem B in environment II, occurring only as a bound morpheme. The following lists of environments are not exhaustive, but are indicative of and true to the data thus far analyzed.

#### Environment I

- 1. following personal pronouns
- 2. before [way], purpose marker
- 3. before [?wŋ], durational/conditional marker
- 4. before [ta:], conditional marker

#### Environment II

- before [?ti:], verb phrase final marker, present tense
- 2. before [?khǎy], verb phrase final marker, future tense
- 3. before [lw:], clause co-ordinator
- 4. before [way], hortatory marker

Stem A		Stem B	Stem A	Stem B
péét	'give'	pě-	hmŭ? 'meet, see'	hmŭ-
?śśk	'drink'	?5-	thĭ? 'die'	thi-
tŭk	'fight'	tŭ-	wɛ: 'be, exist'	wĕ-
kyŭk	'fall'	kyŭ-	ti: 'speak'	ti-

2.1. Verb Class II Stem A is not activated by the morphophonemic rules. With open syllables, the requisite condition for Rule I does occur, but Rule I proves to be inoperative.

- 1. we: > we:.ta: 2. ti: ta: ta: > ti:.ta: be 'if (he) is (here)' speak if 'if (he) speaks'
- Since Verb Class II Stem B morphemes all contain short vowels, Rule I cannot operate.

'see'

- 2.3. If Verb Class II Stem B morphemes are followed by [?ti:] or [?khăy], Rule IIIc applies.
- 1. pě- ?ti: > pěk-ti: 2 hmŭ-?ti: > hmŭk-ti: 'give' give see
- 3. tì- Pkhảy > tìk-khảy speak 'will speak'

#### 3. Verb Class III

There are also two stems for verbs of Verb Class III, Stem A and Stem B. They are realized in the same environments listed for verbs of Verb Class II: Stem A in Environment I, and Stem B in Environment II.

Stem A		Stem B	Stem A	Stem B
sĕʔ	ʻgoʻ	sĭt	kă? 'shoot'	kááp

የ፤የ	'sleep'	۲ĭp	kyă?'	'weep'	kyăp
рўу?	'cook'	bɔ́ɔ́y	tīš? ·	get up'	thốw
tă?	'weave'	tăk ¯	°5m °	stay, rest'	?э́т

- 3.1. The morphophonemic rules do not apply to morphemes of Verb Class III Stem A, because Environment I and the syllable structures of the verb stem do not provide the required conditions.
- 3.2. If Stem B has a final nasal, it follows Rule IIb.
- 1. ?Śm ?ti: > ?šp-ti: 2. sww ?khay > swp-khay rest 'rest' hide 'will hide'
- 3.3. If Stem B has a final nasal, it also follows Rule IIIa.
- hním ?ti: > hníp-?ti: 2. dốŋ ?khảy > dốk-khảy kill 'kill' run 'will run'
- mán ?kháy > măt-kháy catch 'will catch'
- 3.4 If Stem B has a final semivowel [w], it follows Rule IIId.
- 1. phy5w ?ti: > phy5wk-ti: kill 'kill'

If Stem B has a final semivowel [y], Rule IIId is ignored.

- 1. b55y ?ti: > b55y.?ti: cook 'cook'
- 3.5. If Stem B has a final stop, it follows Rule IV.
- 1. tăk ?ti: > tăk-ti: 2. kááp ?ti: > kááp-ti: weave 'weave' shoot 'shoot'
- 3. lŭt ?khǎy > lǔt-khǎy enter 'enter'

Rules I. IIa, IIc, IIe, IIIb, and IIIc do not apply, because Stem B has no open syllables or CV:N pattern, and there are no prenasalized particles of Environment II.