

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.

Not all of the Daai Chin population call themselves "Daai". Only in recent years young people, specially with some school education, have 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: Kkhyou, Nghmo Ye, Ngxang, Kho nglung kkhyang.

Within the Chin language group Daai Chin is most closely related to M̄n Chin (also called Mindat Chin), Chin Pon (also called Üt Pü) and Matu Chin.

The Daai Chin language is composed of several dialects, whose boundaries have yet to be determined. This study is based on the dialect spoken in Kampelet township, particularly in Yang Msaai village and its surrounding area.¹

2. Outline of phonology

2.1 Initial consonants,

		bilab.	alv.	palat.	vel.	glot.
stop	vl.	p	t		k	ʔ
	vl,asp.	p ^h	t ^h		k ^h	
	vd.	b	d			
fric.	vl.		s		x	h
	vl,asp.		s ^h			
nas.	vl.	hm	hn		hŋ	
	vd.	m	n		ŋ	
lat.- fric.	vl.		hl			
	vd.		l			
semi-vowels		w		y	ɣ	

Consonant modifications:

Velarization/palatalization: py, phy, ky, khy, hy, my, ny, qy, wy.

Most commonly velarization, but in some dialects it is palatalization.

Preglottalization (not implosion): can occur with all consonants.

Prenasalization: can also occur with all consonants.

2.2 Final consonants

p[pʔ]	t[tʔ]	k[kʔ]	ʔ
m	n	ŋ	
w		y	
wʔ[wkʔ]		yʔ	

2.3 Vowels

	front	centr.	back	
			spread	round
high	i[i~ɪ]		ɨ	u[u~ʊ]
mid	ɛ	ə		ɔ[ɔ~ʊ]
low		a[a~ʌ]		

Vowel modifications:

Length: all vowels may be contrastively short (v) or long (vv).

Open syllable vowels (v) are a little shorter than the long vowels.

Tone: Plain level tone vs. tense high falling tone. The high tense tone does not occur on short syllables with a final stop.

2.4 Syllable structure

The general syllable pattern is: $\pm C_1 + C_2 \pm C_3 + V \pm C_4$

C_1 : ʔ, m, ŋ (preglottalization, prenasalization)

C_2 : all initial consonants

C_3 : y (velarization/palatalization)

V : all vowels

C_4 : all final consonants

Most morphemes in Daai Chin are monosyllabic.

B. RULES FOR MORPHOPHONEMIC CHANGES IN NOUN COMPOUNDING

Daai Chin has phonologically conditioned changes in some morphemes. The rules for these changes can be seen most completely in compound nouns. These same rules also apply, though less fully, to 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.

1. Rule I. Vowel shortening

$CV. + CVx \rightarrow CVCVx$

If the first member of a compound noun is an open syllable the vowel of the open syllable is shortened.

1. $k^h\text{ɔ.}$ mik \rightarrow $k^h\text{ɔmik}$
 'earth' 'eye' 'sun'
2. $s^h\text{ɛ.}$ mú. \rightarrow $s^h\text{ɛmú.}$
 'cow' 'hair' 'hair of the cow'
3. mdi. $k^h\text{ɔ.}$ \rightarrow $\text{mdik}^h\text{ɔ.}$
 'thatch' 'earth,place' 'place where a lot of thatch
 grass grows'
4. lu. $s^h\text{ám}$ \rightarrow $\text{lus}^h\text{ám}$
 'head' 'hair,string' 'hair of the head'
5. $k^h\text{ɔ.}$ nú. \rightarrow $k^h\text{ɔnú.}$
 'foot' 'big' 'big toe'
6. $k^h\text{ɔ.}$ ʔaay \rightarrow $k^h\text{ɔʔaay}$
 'spirit' 'chicken' 'wild chicken'
7. $s^h\text{ɛ.}$ ʔɔŋ \rightarrow $s^h\text{ɛʔɔŋ}$
 'cow' 'trading' 'cow trading'

2. Rule II. Loss of high tense tone

2.1 Unconditional loss of high tense tone

$$\text{Rule IIa: } \text{CV}^{\text{h}} + \begin{Bmatrix} \text{CVx} \\ \text{?CVx} \end{Bmatrix} \rightarrow \text{CV} \begin{Bmatrix} \text{CVx} \\ \text{?CVx} \end{Bmatrix}$$

If the first member of a compound noun is an open syllable with high tense tone and is followed by simple consonant or preglotalization it always changes into a plain tone.

1. lí. pɔk → lipɔk
 'arrow' 'bundle' 'gun'
2. lɔ́. ɣu? → lɔɣu?
 'throat' 'bone' 'Adam's apple'
3. mɔ́. s^há. → mɔs^há.
 'jungle' 'meat' 'meat of wild animals'
4. mé. mík → memík
 'goat' 'eye' 'eye of goat'
5. hlé. ?uum → hlɛ?uum
 'palm tree' 'container, hole' 'a palm tree which is empty inside'
6. mé. ?ɛy → mɛ?ɛy
 'goat' 'eat' 'food of goats'

7. nú. ?píy → nŭk-píy
 'mother,big' 'old' 'old woman'

8. pá. ?s^hé. → pak-s^hé.
 'father' 'bad,intense' 'old man'

Rule IIb: $\bar{C}\bar{V}N + ?CVx \rightarrow \bar{C}\bar{V}N?CVx$

If the first member of a compound noun has a short vowel with 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 (Rule III).

1. ?ím ?si. → ?ip-si.
 'house' 'floor' 'housefloor'

2. ɣnám ?sɔɔŋ → ɣnap-sɔɔŋ
 'village' 'outside' 'outside the village'

3. lám ?sɛ. → lap-sɛ.
 'road' 'other,different' 'the other road'

4. ?sɔŋ ?k^héét → ?sɔk-k^héét
 'left' 'right' 'both sides'

2.2 Conditional loss of high tense tone

Rule IIc: $CV' + NCVx \rightarrow C\bar{V}NCVx$

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

1. $sá.$ $\eta pyá\eta$ \rightarrow $sa\eta-pyá\eta$

'child' 'man,male' 'son'

2. $s^h á.$ $\eta láy$ \rightarrow $s^h a\eta-láy$

'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.

1. $\eta á.$ $m paan$ \rightarrow $\eta am-paan$

'fish' 'fork' 'name of a fish'

2. $sá.$ $\eta hnu.$ \rightarrow $sá\eta-hnu.$

'child' 'woman,female' 'daughter'

Rule IID: $CVY + CVx \rightarrow C\bar{V}YCVx$

If the first member has a high tense tone and a final semi-vowel, and if the second member has a high tense tone too, the first high tense tone is changed into a plain tone.

1. s^héy méy → s^héyméy
'tobacco' 'fire' 'pipe'
2. túy nú. → tuynú.
'water' 'big' 'river'
3. lów ?úy → low?úy
'field' 'dog' 'dog that is kept in the field'
4. ?úy s^há. → ?uys^há.
'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.

1. s^héy ?uy → s^héy?uy
'tobacco' 'seed' 'tobacco seed'
2. túy ?ey → túy?ey
'water' 'eat' 'eating together'

Rule IIe: CV:N + ?CVx → C⁻V:N?CVx

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 is changed into 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.

1. mliíŋ ?thi. → mliík-t^hi.
 'ant' 'dead' 'dead ant'

3. Rule III. Consonant resyllabification and assimilation

Rule IIIa: Nasal - preglottal

CVN + ?CVx → CVT.CVx

If the first member has a final nasal and the second member has preglottalization, the nasal becomes a homorganic stop (m → p, n → t, ŋ → 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. → ?ip-si.
 'house' 'floor' 'housefloor'
2. ɣnám ?sɔɔŋ → ɣnap-sɔɔŋ
 'village' 'outside' 'outside the village'
3. sɔ́ɔn ?díík → sɔɔt-diik
 'spoon' 'little' 'small spoon'
4. mpyɔŋ ?s^hé. → mpyok-s^hé.
 'mouth' 'bad' 'evil tongue'
5. ?k^hyaan ?s^hé. → ?k^hyaak-s^hé.
 'man' 'bad' 'wicked man'

Rule IIIb : Nasal - prenasal

$CVN_1 + N_2CVx \rightarrow CVN_2.CVx$

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. $\eta n\acute{a}m \quad \eta l\acute{o}w \rightarrow \eta n\acute{a}\eta-l\acute{o}w$
'village' 'obvious' 'prominent village'
2. $?k^h ya\acute{a}\eta \quad ms\acute{i}. \rightarrow ?k^h yaam-s\acute{i}.$
'man' 'seed' 'only offspring'

Rule IIIc : Open syllable - preglottal or prenasal

$CV + \begin{matrix} (?CVx) \\ (NCVx) \end{matrix} \rightarrow \begin{matrix} (CVk.CVx) \\ (CVN.CVx) \end{matrix}$

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. $k^h \text{ } \text{ } \text{ } \quad ??\acute{a}. \rightarrow k^h \text{ } \text{ } \text{ } - ?\acute{a}.$
'earth' 'rain' 'rain'
2. $k^h ya. \quad ?wa\acute{a}y \rightarrow k^h yak-waay$
'moon' 'light,beam' 'moonlight'

- | | | | |
|---------------------------|----------------------------|---------------|--|
| 3. $\text{ʔs}^h\text{a.}$ | $\eta\text{l}\eta\text{ŋ}$ | \rightarrow | $\text{ʔs}^h\text{a}\eta\text{-l}\eta\text{ŋ}$ |
| 'veranda' | 'middle' | | 'place in the middle of the veranda' |
| 4. $\text{s}^h\text{ε.}$ | $\eta\text{l}\text{əw}$ | \rightarrow | $\text{s}^h\text{ε}\eta\text{-l}\text{əw}$ |
| 'cow' | 'stray' | | 'a straying cow' |
| 5. $\text{s}^h\text{ε.}$ | $\text{ml}\text{ɔ}^?$ | \rightarrow | $\text{s}^h\text{ε}\text{m-l}\text{ɔ}^?$ |
| 'cow' | 'vomit' | | 'cow's vomit' |
| 6. $\text{y}\text{u.}$ | $\text{ml}\eta\text{ŋ}$ | \rightarrow | $\text{y}\text{um-l}\eta\text{ŋ}$ |
| 'rice wine' | 'cover' | | 'cover of the rice wine pot' |

Rule IIIId: Semivowel - Preglottal

$\text{CVy} + \text{ʔCVx} \rightarrow \begin{matrix} (\text{CVy}^?.) \\ (\text{CVyk}.) \end{matrix} \text{CVx}$

$\text{CVw} + \text{ʔCVx} \rightarrow \begin{matrix} (\text{CVwk}.) \\ (\text{CVk}.) \end{matrix} \text{CVx}$

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. $\text{ʔ}^h\text{y}$ | $\text{ʔt}^h\text{εy}$ | \rightarrow | $\text{ʔy}\text{ʔ-t}^h\text{εy}$ |
| 'dog' | 'train' | | 'a trained dog' |
| 2. $\text{s}^h\text{εy}$ | $\text{ʔʔ}^h\text{ám}$ | \rightarrow | $\text{s}^h\text{εy}\text{k-ʔ}^h\text{ám}$ |
| 'tobacco' | 'container' | | 'tobacco container' |

3. k^haaw ʔt^há. → k^haak-t^há.
 'rope from bark' 'strong' 'strength of a bark rope'

4. lów ʔsoŋ → lówk-soŋ
 'field' 'hut' 'hut in the field'

4. Rule IV. Loss of preglottal

CVT +ʔCVx → CVTCVx

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

1. salaap ʔsi. → salaap-si.
 'resthouse' 'floor' 'floor of the resthouse'

2. mik ʔtiŋ → mik-tiŋ
 'eye' 'straight' 'one who has a sharp eye in shooting'

3. kut ʔtiŋ → kut-tiŋ
 'hand' 'straight' 'one who has a sure hand in shooting'

C. COMBINATION OF MORPHOPHONEMIC RULES

Two or more of the rules may be applied simultaneously.

1. Rules I + II : Vowel shortening with loss of high tense tone

1. lí. pək → lipək
 'arrow' 'bundle' 'gun'

2. mé. mik → memik
'goat' 'eye' 'eye of a goat'

2. Rules I + III : Vowel shortening with consonant resyllabification and assimilation

1. k^hya. ?wááy → k^hyak-waay
'moon' 'light, beam' 'moonlight'
2. s^hε. ɲlɐw → s^hεɲ-lɐw
'cow' 'stray' 'a straying cow'

3. Rules II + III : Loss of high tense tone with consonant resyllabification and assimilation

1. lám ?sɛ. → lap-sɛ.
'road' 'other, different' 'the other road'
2. ?són ?k^héét → ?sɔk-k^héét
'left' 'right' 'both sides'

4. Rules I + II + III : Vowel shortening, and loss of high tense tone, with consonant resyllabification and assimilation

1. nú. ?píy → nuk-píy
'mother' 'old' 'old woman'
2. sá. ɲpyáɲ → saɲ-pyaɲ
'child' 'man' 'son'

Rule IV does not cooccur 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 (really postpositions) combine with nouns in ways similar to the preceding.

1. Rule I : lu. pey → lupey
 'head' 'beside' 'beside the head'
2. Rule II a: ḡnó. pey → ḡnópey
 'edge of' 'beside' 'beside the field'
 the field'
3. Rule II b: ʔím ʔké. → ʔip-ké.
 'house' 'under' 'under the house'
4. Rule II d: ʔséy ʔké. → ʔséyʔ-ké
 'spear' 'under' 'under the spear'
5. Rule II e: ḡmsíiŋ ʔké. → ḡmsiik-ké.
 'kind of bamboo' 'under' 'under the bamboo'
6. Rule III a: ʔím ʔk^haan → ʔip-k^haan
 'house' 'on' 'on the house'

- E.7. Rule III b: ?ím nluŋ → ?ín-luŋ
'house' 'middle' 'in the middle of the house'
8. Rule III c: msĩ. ?k^haan → msĩk-k^haan
'pot' 'on' 'on the pot'
9. Rule III d: lów ?s^huun → lowk-s^huun
'field' 'middle' 'in the middle of the field'
10. Rule IV : salaap ??um → salaap-?um
'resthouse' 'inside' '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 NCVx.

2. Numbers

Numbers combine with their preceding nouns in similar fashion.

1. Rule I : msĩ. p^hya. → msĩp^hya.
'pot' 'one hundred' 'hundred pots'
2. Rule II a: mé. p^hya. → msp^hya.
'goat' 'one hundred' 'hundred goats'
3. Rule II b: lám ?t^hum → lap-t^hum
'road' 'three' 'three roads'

4. Rule II c: s^hoon ?k^ho. → s^hoot-k^ho.
 'spoon' 'nine' 'nine spoons'
5. Rule IIIa: ?im ?t^hum → ?ip-t^hum
 'house' 'three' 'three houses'
6. Rule IIIb: ?im qhqi? → ?iq-hqi?
 'house' 'two' 'two houses'
7. Rule IV : wək ?p^hyĩ. → wək-p^hyĩ.
 'pig' 'four' 'four pigs'

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

1. Inoperative Rule IIId:

ʔúy	ʔkó.	→	ʔúy ʔkó.
'dog'	'nine'		'nine dogs'

2. Inoperative Rule IIIc:

$s^h \epsilon. \quad ?t^h_{um} \quad \rightarrow \quad s^h \epsilon. \quad ?t^h_{um}$
 'cow' 'three'
 'three cows'

3. Inoperative Rule IIIId:

lów	ʔp ^h yĩ.	→	lów ʔp ^h yĩ.
'field'	'four'		'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, but verb classes 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 ?k^hay (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. s ^h iim | ?ti. | → | s ^h iip-ti. |
| 'remember' | | | 'remember' |
| 2. s ^h en | ?ti. | → | s ^h et-ti. |
| 'red' | | | 'red' |
| 3. k ^h ɔɔŋ | ?ti. | → | k ^h ɔɔk-ti. |
| 'push' | | | 'push' |
| 4. k ^h ɔɔŋ | ?k ^h ay | → | k ^h ɔɔk-k ^h ay |
| 'push' | | | 'will push' |

1.2 Contrary to Rule IIIc, if the verb root is an open syllable

there is no change when followed by ?ti. or ?k^hay

1. bú. ?ti. → bú. ?ti.

'cover' 'cover'

2. tɛ. ?k^hay → tɛ. ?k^hay

'beat' 'will beat'

1.3 If the verb root has a final semivowel before ?ti. or ?k^hay,

it resyllabifies and assimilates, following Rule IIIId.

1. mǎw ?ti. → mək-ti.

'stare at somebody' 'stare at somebody'

2. ?aw ?k^hay → ?ak-k^hay

'broad' 'will be broad'

3. mɛy ?ti. → mɛy?-ti.

'feed' 'feed'

1.4 If the verb root has a final stop, the preglottalization of

?ti. and ?k^hay disappears following Rule IV.

1. ɣóóp ?ti. → ɣóóp-ti.

'break' 'break'

2. bóók ?ti. → bóók-ti

'white' 'white'

3. ns^hut ?k^hay → ns^hut-k^hay

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.² No general statement of environments has as yet been formulatable.

Environment I

1. following personal pronouns
2. before way 'purpose'
3. before ?iŋ 'temporal duration, conditional'
4. before ta. 'conditional'

Environment II

1. before ?ti., verb phrase final marker, present tense
2. before ?k^hay, verb phrase final marker, future tense
3. before li. 'clause coordinator'
4. before way 'hortatory'

Stem A

péét

?óók

tuk

kyuk

hmu?

t^hi?

'give'

'drink'

'fight'

'fall'

'meet, see'

'die'

Stem B

pε-

?ɔ-

tu-

kyu-

hmu-

t^hi-

Stem A

Stem B

wε. 'to be, exist'

wε-

ti. 'speak'

ti-

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

- | | | | |
|---------|------|---|---------------------|
| 1. wε. | ta. | → | wε.-ta. |
| 'to be' | 'if' | | 'if (he) is (here)' |
| 2. ti. | ta. | → | ti.-ta. |
| 'speak' | 'if' | | 'if (he) speak (s)' |

2.2 Since stem B morphemes all contain short vowels Rule I cannot operate on them.

2.3 If stem B morphemes are followed by ?ti. or ?k^hay Rule IIIc applies.

- | | | | |
|---------|--------------------|---|-----------------------|
| 1. pε- | ?ti. | → | pek-ti. |
| 'give' | | | 'give' |
| 2. hmu- | ?ti. | → | hmuk-ti. |
| 'see' | | | 'see' |
| 3. ti- | ?k ^h ay | → | tik-k ^h ay |
| 'speak' | | | 'will speak' |

3.3 If stem B has a final nasal it also follows Rule IIIa.

1. hním ?ti. → hníp-ti.

'kill' 'kill'

2. dón ?k^hay → dök-k^hay

'run' 'will run'

3. mán ?k^hay → mat-k^hay

'catch' 'will catch'

3.4 If stem B has a final semivowel w it follows Rule IIId.

1. p^hyów ?ti. → p^hyowk-ti.

'plough' 'plough'

If stem B has a final semivowel y, Rule IIId is ignored.

1. bóóy ?ti. → bóóy ?ti.

'cook' 'cook'

3.5 If stem B has a final stop it follows Rule IV.

1. tak ?ti. → tak-ti.

'weave' 'weave'

2. kaáp ?ti. → kaáp-ti.

'shoot' 'shoot'

3. lut ?k^hay → lut-k^hay

'enter' 'will enter'

Rules I, IIa, IIc, IIe, IIIb and IIIc do not apply because stem B has no open syllables or CV:N patterns, and there are no prenasalized particles in environment II.

Footnotes

1. The data for this paper was collected in Rangoon 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.

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2. For some related Chin languages the "B" forms have been posited as basic and the "A" forms as derived, but for Daai Chin the direction of derivation is not yet clear. In Class II "A" looks phonologically basic but in Class III "B" looks basic.