

# Lhaovo(Maru) Tonal Alternations as Grammatical Markers

(Revised Version)

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Lhaovo(Maru), a Burmish language spoken in northern Myanmar(Burma), has the phenomena of tonal alternation. The phenomena are conditioned not phonologically, but grammatically.

In Lhaovo, tonal alternations occur

1. in positive Realis (Informative) sentences,
2. in attributive elements, including Realis attributive clauses and some attributive phrases,
3. in verb strings, and
4. before instrumental case-marker.

This presentation focuses on the first two cases and argues that the tonal alternations in these cases function as (grammatical) markers.

## 1 Introduction

### Lhaovo people and their language

- Lhaovo(Maru)<sup>1</sup> is the name of an ethnic group living in Kachin State and northern Shan State in the Union of Myanmar (formerly Burma), and *Déhóng* Dai-Jingpo Autonomous Prefecture in Yunnan Province, the People's Republic of China. The population of Lhaovo is about 100,000 in Myanmar and 3,500 in China. (Bradley 1997)
- Lhaovo is a member of larger ethno-cultural group called 'Kachin', together with neighbouring Jinghpaw, Lacid(Lashi), Zaiva(Atsi) etc.
- Linguistically, Lhaovo belongs to 'Maruic', a sub-group of 'Burmish' languages of the Lolo-Burmese branch of the Tibeto-Burman family, together with such languages as Lacid, Zaiva, Bola. (Nishi 1999 p.70)

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<sup>1</sup>'Lhaovo' is the ethnonym, and 'Maru' is the name of this language in Jinghpaw and Burmese. Hereafter I will use only 'Lhaovo'. Lhaovo has an orthography invented in 1968, and the name of the language itself is spelt 'Lhaovo'. In the phonemic transcription used here, it is transcribed *lɔŋFvoF*.

## Phonology (Sawada1999)

### Consonants

		LABIAL	DENTAL	ALVEOLAR	PALATAL	VELAR	GLOTTAL
NASAL		m		n	ɲ	ŋ	
STOP/	<i>unasp.</i>	p	ts	t	c	k	ʔ
AFFRICATE	<i>aspirated</i>	ph	tsh	th	ch	kh	
FRICATIVE		f,v	s		š	x,ɣ	ɦ
LATERAL				l			
FLAP				r			
APPROXIMANT					y		

### Vowels

	FRONT	CENTRAL	BACK
CLOSE	i		u
MID	e	ø	o
OPEN		a	au

### Creakiness Feature of Vowel

[−Creaky](V)	Lax, sometimes breathy sound.	with all initials
[+Creaky](V)	Tense, Creaky sound.	only with /m,n,ɲ,ŋ,p,t,ts,c,k,ɣ,l,r,y/

**Tones** Falling(F)21; Low(L)22-33; High(H)44

### Syllable weakening

- Some syllables in Lhaovo are ‘weak’ ones, that is, syllables without inherent tone. Some weak syllables are inherently weak, but some are ‘weakened’ by syllable reduction.
- ‘Weakened’ syllables are often found in noun compounding and sequences of particles.

### Previous studies on the phenomena

- Okell (1988) gives a concise but comprehensive description of the phenomena occurring in Lhaovo verbs. Our observation of the phenomena is virtually the same as Okell’s.

He regards tonal alternation of Lhaovo as “... conditioned neither by phonology, nor (in the usual sense) by grammar, but simply by a subsequent morpheme: a word bears one tone when followed by morpheme X, and another when followed by morpheme Y” (p.109), and gives the list of ‘raisers’ (morphemes inducing tonal alternation) and ‘non-raisers’. It is partly incorrect.<sup>2</sup>

<sup>2</sup>Dai & Xu (1983) lists seventeen patterns of tonal alternation and give several examples for each pattern, but they does not mention the ‘grammatically conditioned’ tonal alternations discussed here.



Above examples illustrate tonal alternations occurring on main verbs of Realis positive Informative sentences.

- (3)  $F \rightarrow L$ ;  $L \rightarrow H$ ;  $H \rightarrow H$ (vacuous)

### Auxiliaries

- (4) Auxiliary members and their relative order:

1	2	3
-šiL ‘still, yet’	-vaH ‘REALIZATION’	-kəH ‘PLURAL SUBJECT’ (in Realis)
-loL ‘now, (not) anymore’	(only in Realis)	-keʔF ‘PLURAL SUBJECT’ (in others)

When a verb is followed by an auxiliary, it is not the verb but the auxiliary that undergoes tonal alternation (including the case of vacuous application as in (5)).

- (5) -kəH (in Realis) / -keʔF (in others) ‘PLURAL SUBJECT’      (6) -šiL ‘still, yet’

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### Speech-act attitude indicators

- (7) -laʔF ‘DUBITATIVE’ (with Informative) ‘PRECATORY’ (with Imperative)  
 -ʔiH ‘QUESTION’ (with Informative);  
 ‘REQUESTING ADDRESSEE’S RESPONSE’ (with Hortative, Imperative)  
 -reF ‘EMPHASIS’  
 -fiH ‘EXCLAMATION’  
 -leH ‘APPEALING TO ONE’S ATTENTION’  
 -moŋH ‘of course’

SAA indicators never induce tonal alternation in the immediately preceding syllable, nor do they weaken the auxiliary preceding it, unlike sentence markers and auxiliaries.

- (8) -laʔF ‘DUBITATIVE ; PRECATORY’

Real.pos.	naL (-raH)	-laʔF	(DUBITATIVE)
Real.neg.	mǎ-naF	-laʔF	(DUBITATIVE)
Irr.	(mǎ-)naF -nejH	-laʔF	(DUBITATIVE)
Imp.pos.	naF	-laʔF	(PRECATORY)
Imp.neg.	tǎ-naF	-laʔF	(PRECATORY)

### Tonal Alternation as Realis positive sentence marker

- *-raH* is not a sentence marker because it is not indispensable.

(9) *?ǎkyoLtsol ɲinH-loF-vaH(-raH)*  
 fairly cold-come.HOME-REALIZATION(-RA)  
 ‘It became fairly cold.’

(10) *chukHmoH-tǎ-yaukL yamF-meŋF liH-thaŋL(-raH)-kaH*  
 widow-one-CLF house-LOC come-stop(-RA)-HEARSAY  
 ‘He came and stopped at the house of a widow’s.’

In addition, *-raH* does not weaken the immediately preceding auxiliary unlike a genuine sentence marker *-neŋH*, *-šoŋL* and *-laŋL*.

- On the other hand, the occurrence of tonal alternation is indispensable to Realis positive sentence. Therefore, we assume the existence of the abstract element inducing tonal alternation and functioning as the marker of Realis positive sentence.

(11) Structures of core units in verb sentences: (TA = abstract element inducing tonal alternation.)

	Verb	AUX-Marker complex	?	Speech-Act Attitude Indicator
Real.pos.	V	(-AUXs) <b>-TA</b>	( <i>-raH</i> )	(-SAAIs)
Real.neg.	<i>mǎ-V</i>	(-AUXs) <i>-φ<sub>neg</sub></i>		(-SAAIs)
Irrealis	( <i>mǎ-V</i> )	(-AUXs) <i>-neŋH</i>		(-SAAIs)
Optative	( <i>mǎ-V</i> )	(-AUXs) <i>-šoŋL</i>		(-SAAIs)
Hortative	V	(-AUXs) <i>-laŋL</i>		(-SAAIs)
Imp.pos.	V	(-AUXs) <i>-φ<sub>imp</sub></i>		(-SAAIs)
Imp.neg.	<i>tǎ-V</i>	(-AUXs) <i>-φ<sub>imp</sub></i>		(-SAAIs)

### 3 Tonal Alternation in Attributive Phrases/Clauses

(3) also applies to the case of attributive phrases and clauses.

#### Attributive phrases

(12) a. *chukHmoH-tǎ-yaukF*  
 widow-one-CLF  
 ‘a widow’  
 b. *chukHmoH-tǎ-yaukL(-noL) yamF*  
 widow-one-CLF:TA(-of) house  
 ‘the house of a widow’s’

(13) a. *chě-ruL katH-fia?F*  
 this-like do-DIRECTION  
 ‘Please do like this!’  
 b. *chě-ruH pinL-caL*  
 this-like:TA fabric-kind  
 ‘such kind of fabric.’

### Attributive clauses

(14) Paradigms of attributive clauses:

a. *taH* ‘to speak’

Real. pos.	<i>taH -raH</i>	pyuF	‘the person who spoke’
neg.	<i>mǎ-taH -raH</i>	pyuF	‘the person who did not speak’
Irreal. pos.	<i>taH -neŋH</i>	pyuF	‘the person who will speak’
neg.	<i>mǎ-taH -neŋH</i>	pyuF	‘the person who will not speak’

b. *naF* ‘to stay’

c. *tsoL* ‘to eat’

Real. pos.	<i>naL -raH</i>	pyuF	<i>tsoH -raH</i>	pyuF
neg.	<i>mǎ-naL -raH</i>	pyuF	<i>mǎ-tsoH -raH</i>	pyuF
Irreal. pos.	<i>naF -neŋH</i>	pyuF	<i>tsoL -neŋH</i>	pyuF
neg.	<i>mǎ-naF -neŋH</i>	pyuF	<i>mǎ-tsoL -neŋH</i>	pyuF

### Tonal Alternation as attributive marker

- In attributive clauses, tonal alternations occur not only in Realis positive but also in Realis negative.
- Keeping parallelism with the case of attributive phrases (12) and (13), we analyze that an attributive clause is the combination of an Informative verb sentence and TA as the marker of attributive element. Note that a TA only affects the immediately preceding segmental element.

(15) Structures of core units in attributive clauses:

	Verb	AUX-Marker complex			Overt linker
Real.pos.	V	(-AUXs)	-TA	-TA	(-raH)
Real.neg.	<i>mǎ-V</i>	(-AUXs)	<i>-φ<sub>neg</sub></i>	-TA	(-raH)
Irreal.	( <i>mǎ-</i> )V	(-AUXs)	<i>-neŋH</i>	-TA	

### The status of *-raH*

- *-raH* in an attributive clause is the overt linker introduced to support non-segmental marker (i.e. TA) morphologically. (The same thing is also applied to *-noL* in (12).) When a sentence has an overt sentence marker like Irrealis *-neŋH*, no overt linker is needed, nor allowed.
- The occurrence of *-raH* in Realis positive sentences is the result of analogy to attributive clauses, mediated by the existence of TA.

## 4 Comparison with Burmese

	Lhaovo	Rajakumar Inscription(AD1112)	Modern Written Burmese	Modern Colloquial Burmese
Realis positive sentence marker	TA	-ဧအိ —	-ဧါ /-ʔiC/ -သည့် /-tiL/	(-ရဲ /-yɛC/ -တယ် /-tɛL/
attributive phrase marker	TA	-ဧအိ -အိ (indicating TA)	-ဧါ /-ʔiC/ TA**	-ရဲ /-yɛC/ TA**
attributive clause marker (Realis)	TA-TA	-သော —	-သော /-tɔH/ -သည့် /-tiC/***	— -တဲ့ /-tɛC/***
(Irrealis)	-neŋH-TA	—	-မည့် /-miC/***	-!မယ့် /-mɛC/***

\* Burmese tones: C=Creaky, L=Level, H=Heavy (Okell 1968)

\*\* Burmese tonal alternations: C,L,H → C (indicated by the addition of tone mark ˩)

\*\*\* Burmese attributive clause markers -သည့်/-မည့်/-တဲ့/-မယ့် can be analyzed as the combination of sentence markers -သည့်/-tiL/ | -မည့်/-miL/ | -တယ်/-tɛL/ | -မယ်/-mɛL/ and TA, respectively.

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