

Focus and intonation in Dimasa

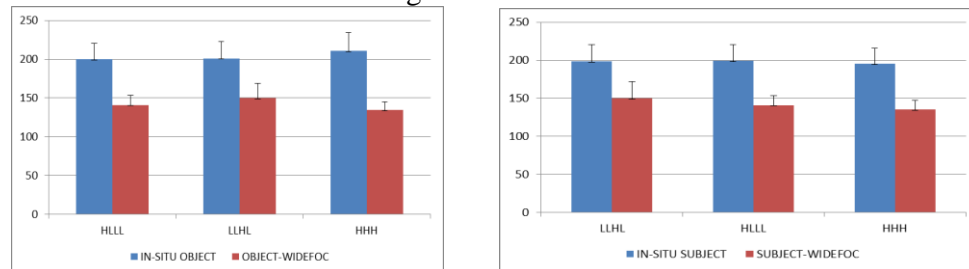
This paper discusses the properties of tone and intonation in Dimasa, a Tibeto-Burman tone language of the Boro-Garo sub-family spoken by about 1 million people in Assam, India. In Dimasa words may be distinguished minimally by three tones as below:

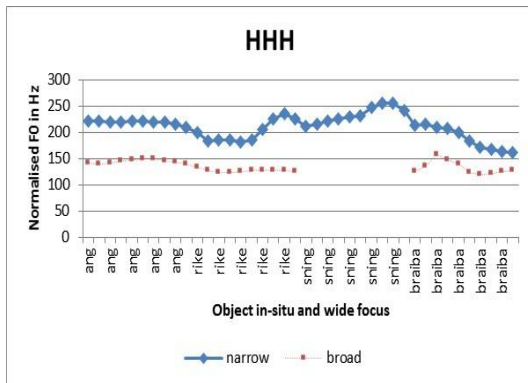
(1)	High	thi	‘speak’	lai	page	maithai	year
	Mid	thi	to tie	lai	easy	maithai	crop
	Low	thi	blood	lai	wish	maithai	source

The Mid tone varies from the High tone as the latter rises and forms a contour in its latter part, whereas the Mid tone remains a level tone; this distinction between all three tones is essentially realized in the latter part of the syllable in case of a monosyllabic word, and in the second syllable in a disyllabic one (Sarmah, 2009). This difference however does not surface in sentential patterns where the mid tone can be both level or contour and behaves like a High tone. In Dimasa, the lexical tones are preserved in non-final contexts but succumbs to intonation at the IP boundary of declarative sentences. This abstract reports data collected from 9 speakers from a corpus of about 80 sentences with multiple iterations using a Tascam DR MKII 100 recorder and Shure microphones. We report the results from two different experiments. In one experiment, prosodic expressions of focus in broad focus sentences vis-à-vis narrow focus sentences bearing a morphological focus marker were compared. Target constituents were measured by segmenting individual sound files into phonemes, syllables and words and ten pitch points (at regular intervals) were taken for each word in the sentence. Normalized pitch range of the narrow focus sentence was compared with that of the corresponding broad focus sentence. Narrow focus is expressed by morphological focus marker /sniŋ/) and compared with their corresponding sentences with no focus. The pitch tracks show visible differences in the pitch contour between narrow and broad focus sentences. No difference among the focus and post focus parts could be found. Irrespective of the difference in tonal sequences in the sentences, pitch contours for the narrow focus sentences are always found to carry an overall higher pitch as compared to that of the corresponding broad focus contour. Pitch contour variation between the broad focus and narrow focus sentences are found to be the only cue for identification of this type of sentence pattern in Dimasa. Morphological focus suffix/-sniŋ/ generally emphasizes subject, object and verb and it follows the argument while marking the prominence of subject or object.

- (2) a. dziŋ **bu-ke-sniŋ** do-ba
we 3P-DAT-FOC beat-PST we beat him only
- (2) b. aŋ **-sniŋ** oraha-niprang khai-lang-ba
I-FOC there-ABL run-EMP-PST (**Only I** ran away from there)
- (2) c. aŋ **wai-ke-sniŋ su-ku-ma**
I fire-DAT-FOC blow-EMP-FUT (I will blow **the fire only**)

The diagrams show pitch range variation results of 9 speakers for broad and narrow focus sentences in 3 different tonal sequences namely, HHH, HLLL and LLHL. Tonal movements remain the same yet pitch range is significantly more enhanced in narrow focus sentences. The results are given below:



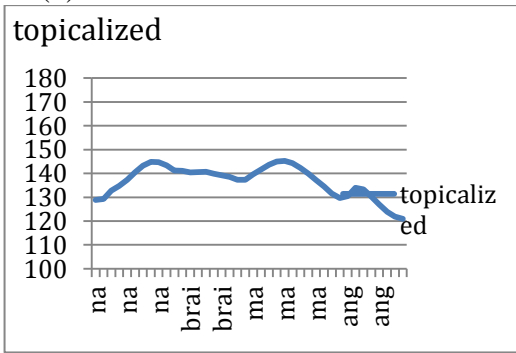
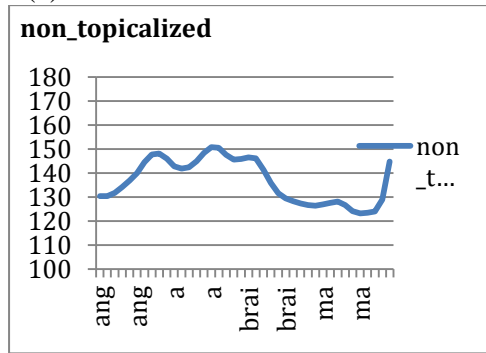


We also conducted a similar experiment on topicalised and non-topicalised sentences. When topicalised and non-topicalised sentences were compared, they showed different results from focus sentences. Topicalisation induces significant changes to the tonal contour of the sentence. It also shows that F0 of lexically high tones are lowered in topicalised target words (/na/ in the sentences below). The diagrams from 4(a) – 4(d) also show that final rises are not allowed or delimited in topicalized sentences and alignment of H tones are preferred to be closer to the left edges of phrasal boundaries. Sample sentences are given below:

- 3a. ang na brai-ma (HHH) 3b. **na** brai-ma ang (HHH)
 1P fish buy-FUT **fish** buy-FUT 1P
 I will buy a fish it was a **fish** that I bought
- 3c. aŋ na ji-du (HHL) 3d. **na** ji-du aŋ (HLH)
 1P fish eat-PRES **fish** eat-PRES 1P
 I eat fish It's fish that I eat

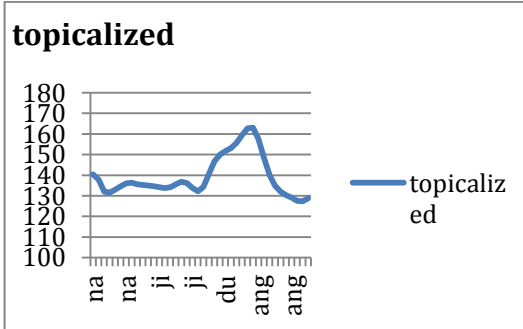
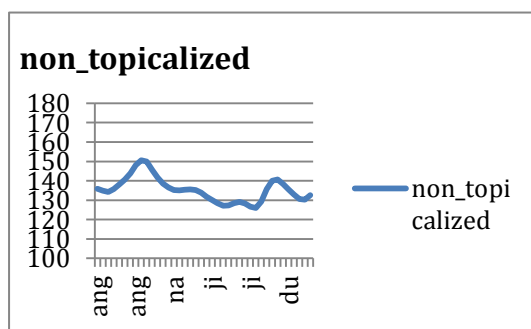
4(a) HHH

4(b) HHH



4(c) HHL

4(d) HLH



The results show that Dimasa employs different means to express emphasis in narrow focus vis-à-vis topicalized sentences. In narrow focus domains, the entire IP is raised whereas topicalized sentences show various other intonational effects along with reduction of F0 of the high tone.

References:

Sarmah, Priyankoo (2009) Tone Systems Of Dimasa And Rabha: A Phonetic And Phonological Study, PhD Dissertation, University of Florida.