Intonational phonology of Meiteilol.

The paper is a theoretical and descriptive analysis of the intonational phonology of Meitei. Meitei (mni), under ISO 639-3 is a Tibeto-Burman langage spoke in Manipur, a Northeastern state of India. Meitei is a tonal language which has a two way tonal contrast in isolation . The paper aims at mapping the neutral declarative contours of the language. The main hypothesis that the paper proposes is that intensity is as strong a prosodic cue as pitch is in Meiteilol. The method used in the current study is the Autosegmental-Metrical (AM) method of Intonation or Intonational Phonology[1][5],[6]. The data used for the study comprises of the 'citation form', i.e., the whole sentences considered is understood to be new. Question-answer pairs which produces neutral answers to the questions like "What is in the picture?" aided by picture sequences or at times with small video clips. Dry runs of the experimental set up were an ideal primer but time constraints were taken into account and ample precaution was taken so that the speaker did not tire out and fatigue did not set in.

The intonational contour is divided into two parts [3]: Nucleus: The main stressed syllable and everything after that; and Head: Everything before the main stressed syllable. The division of the intonational contour into the Head and the Nucleus serves as a useful descriptive tool [4]. In a simple neutral declarative sentence, the general rule for the text-to- tune association in Meitei is %L H- H* L%. The Nucleus in Meitei declarative sentences have the H* Pitch Accent on the most prominent syllable which also happens to be the metrically stressed position as in sentence1: the stress is on 'qol' which is the right edge of the compound 'sə.qol'. In Meitei compound words, the metrical stress is on the right edge and hence is End-rule Final. The low IP boundary tone (L%) marks the right edge of declarative sentences. It is realized as falling pitch interpolated from the IP final pitch accent, typically followed by an extreme drop in pitch on the final syllable which in this case(sentence1) is the copula -ni. The Head of the sentence1 has a %L boundary tone and has a p-phrase boundary H-. An interesting observation that I would like to bring forth is the Intensity curve. For intonational study the main phonetic cue or parameter which is considered is the pitch or the f0 contour, but in Meitei an interesting phenomenon is observed; the intensity curve also mirrors the prominent relations. In simple declarative sentences it is observed that the intensity curve peaks at the site where the Pitch Accent of the sentence is marked. The alignment of the text-to-tune of the Nucleus which is the most prominent metrical position in Meitei declarative sentences and their physical phonetic manifestation as evidenced from the above discussion can be provided by not just by the fundamental frequency or f0 curve but also the intensity curve which overlaps with each other at the Nucleus position.

mə.si sə.gol əmə ni

this horse one COP

This is a Horse

The metrical grid representation of the sentence is given below:

| (| | | X | | |) Utterence |
|-----------|-----------|-----------|-----------|------|----|------------------------|
| (| | | X | | |)Intonational Phrase |
| (| X) | (| X) | (| X) |)i Phonological Phrase |
| ([mə. | X) si] | ([sə. | X) gol | em.e | X) |)Phonological word ni] |

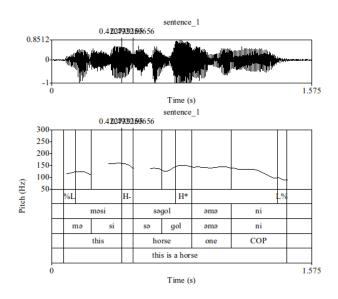


Figure 1. Waveform and pitch contour of the sentence1 ma.si sa.gol ama.ni 'This is a horse'

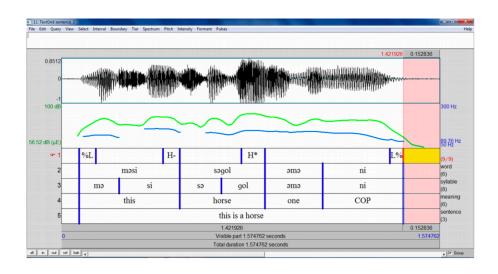


Figure 2: PRAAT picture of the sentence1 ma.si sa.gol ama.ni where the blue line is the f0 contour and the green line is the Intensity contour

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