

Abstract

Many works on intonation in tonal languages indicate that languages with lexical tones generally avoid complex intonation systems, presumably as lexical tone and intonation both exploit variation in the same primary cue, i.e., fundamental frequency (Gussenhoven, 2004; Yip, 2002; Cruttenden, 1997; Ladd, 1996). This dissertation, entitled *The Phonetics and Phonology of Tone-Intonation Interaction with reference to Sylheti and Chokri*, presents a study on how post-lexical meanings are prosodically conveyed in two tonal languages of North-East India, viz. Sylheti and Chokri. Sylheti is one of the few known Indo-Aryan languages that have undergone tonogenesis, leading to a two-way tonal contrast between High and Low tones (Gope, 2016, 2018). Chokri, on the other hand, belongs to the Tibeto Burman language family, with a rich tonal inventory of five lexical tones (Gope et al., 2024; Tetseo et al., 2021). Although North-East India hosts many tonal languages, research on intonation in these languages is considerably scarce. Our study aims to shed light on the ways in which intonation is realized in two languages from this region with varying degrees of tonal complexity, viz., the two-tone system in Sylheti versus the five-tone system in Chokri. Particularly, this study explores tone-intonation interaction in terms of downtrends, intonationally marked units of prosodic hierarchy, sentence type marking through intonational properties, and prosodic marking of focus in both languages. The findings of this dissertation reveal that modification of pitch register or scaling is a primary strategy for different intonational functions.

One of the significant findings of this work is the presence of pitch accents in Sylheti that seem to be overlaid on lexical tones. While they override lexical tones in IP initial positions, their scaling gets affected by underlying lexical tones of syllables in IP medial positions. Such co-existence of phrasal tones and lexical tones on the same targets perhaps reflects the transitional state of the language in terms of tonogenesis. Chokri, on the other hand, shows a total absence of phrasal tones as it does not have boundary tones or pitch accents. Preserving the lexical tones to avoid obliteration of lexical meaning, it resorts to register modifications to encode post-lexical linguistics information, like distinguishing questions from declaratives. Non-pitch prosodic properties like pause and final lengthening are used abundantly in the language to indicate prosodic domain boundaries. The strategy of register change to mark interrogative utterances was also seen in Sylheti, which restricts boundary tones only for marking edges of prosodic units and does not indicate different sentence types.

Analysis of downtrends, i.e., downward movement of f₀ contour in terms of scaling, reveals how the global trend affects lexical or local pitch accents. Chokri exhibits declination in all like tone sequences (viz., all high and all low tone sequences) despite having a dense syntagmatic placement of lexical tone. However, the final lowering is restricted to only all mid-tone sequences and is absent in others. Linear fit characterizes sentences with all L and all H tone sequences, while an exponential decay fit captures all M tone utterances. In Sylheti, on the other hand, the downtrend affects the scaling of f₀ peaks formed by phrase boundary tones. The downstep of non-final and final peaks in this language is modeled following the *downstep ratio* and *lowering constant* proposed by Liberman and Pierrehumbert in 1984.

An analysis of prosodic features of utterances where objects receive in-situ focus showed that a shared strategy, i.e., pitch lowering, is present in both Sylheti and Chokri. Contrary to the general expectation, focus in these languages does not attract a higher pitch. The focus-induced changes in terms of pitch, intensity, and duration also extend to pre- and post-focal constituents in Sylheti as they mark three types of focus: (i) informational, (ii) contrastive, and (iii) corrective. In Chokri, the entire IP containing the target word undergoes lowering regardless of the focus type.

The chapters of this dissertation discuss these findings in greater detail with experimental and statistical evidence.