

Lund conference **HUMANITIES OF THE LESSER-KNOWN**

New directions in the description, documentation and typology of endangered languages and musics.

Describing the prosody of Jaminjung with the PENTA model

Prosodic research may have received scant attention in the past, but in recent years many researchers have shown interest in documenting and describing intonational phenomena in lesser-known or endangered languages. In this talk, we will present the findings from a quantitative study of intonation in Jaminjung, a language of Australia, still spoken by a few dozens elderly people in the Northern Territory. We will highlight specific issues associated with the prosodic documentation and description of an endangered language, both at the methodological and theoretical levels.

The research presented here is based on the following question: How do humans transmit meaning by speech for communicative functions in the languages of the world? By positing this question, a central place is given to communication and assumes that the prosody of each language is unique. This approach is well served by the PENTA model, which is used to describe the intonation of Jaminjung.

This model is a recent development that places communicative functions and articulatory constraints at the core of prosody, thus providing a clear explanation of prosodic phenomena, linking phonetics to semantics. It is a powerful descriptive tool, particularly useful in the context of an as yet undescribed prosodic system, such as that of Jaminjung, by anchoring the description of prosodic phenomena to communicative functions. Briefly, it states that communicative functions are transmitted in parallel through encoding schemes that are either language specific or universal, via a limited number of parameters that may be considered as the phonetic primitives (local pitch targets, pitch range, articulatory strength and duration). The model does not stipulate the properties of the encoding schemes; it only provides a mechanistic framework for the encoding schemes to be implementable. Indeed it is the goal of the investigation to define these schemes.

The methodology suggested by the model is as follows: i) identify a communicative function, ii) rigorously select illustrative language tokens of this function, iii) posit hypotheses, iv) make measurements of the phonetic primitives and analyse the results, and finally v) validate the starting hypotheses.

Considerations regarding the selection of a suitable dataset, whether read or spontaneous, and how it can be collected in field-based contexts, will also be discussed.

Results of the analysis of the prosody of Jaminjung using this methodology will be presented. It is based on three well-recognized functions of intonation:

- that of demarcating or organizing a string of words (or rather syllables) into chunks, often conventionally associated with rhythm or prosodic structure;
- that of marking information structural categories, notably topics and foci; and
- that of distinguishing sentence types, in this case patterns associated with declaratives, interrogatives and imperatives.

In Jaminjung, prosodic words, formed of content words and their affixes, are indicated by a pitch expansion on the first syllable. Phrases, Intonation Units are marked by an increasing degree of pitch reset on their initial syllables and lengthening in their final syllable. A succession of semantically related IUs form prosodic sentences, which are marked by a high pitch reset at the left edge and very low pitch at the right edge, often resulting in creaky phonation in the final syllable.

Speakers move elements they wish to emphasize in IU-initial position making it the favored locus of the highlighting function, a finding which is congruent with observations made in other Australian languages. The first syllable of the initial word in various focus domains receives a falling pitch target when monosyllabic, or a succession of a high and a fall when multi-syllabic.

The three main sentence types, declaratives, interrogatives, and imperatives display gently falling contours. They are not differentiated by the shape of the contour, but rather by the use of different keys: declaratives are uttered with lower pitch, interrogatives slightly higher, and imperatives with an even higher overall pitch. This finding highlights the descriptive strength of the PENTA model, which makes it possible to describe such variation.

We will argue that both prosodic research and grammatical descriptions undeniably stand to benefit from the findings of the intonational phenomena of lesser-known languages.

References

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From:

Candide Simard
University of Manchester
candide.simard@hotmail.com

Yi Xu
University College London
yi.xu@ucl.ac.uk