Descriptive and phonetic aspects of pitch accent in Karitiana (Tupi family, Brazil)

Luciana Storto* and *Didier Demolin*°
***Universidade de Sao Paulo/CNPq & °Phonology Laboratory/ULB**

Introduction

Karitiana is a Tupi language spoken by 340 people in Rondônia, Brazil. Some Tupi Languages have been described as tonal and others as pitch accent systems (Moore 1999). In this poster we give the first description of a Tupi pitch accent language. Storto (1999) shows that both stress and tone are predictable and that tone realizations depend on stress patterns. Waveforms and fundamental frequency curves are presented as phonetic evidence supporting the description.

Stress in Karitiana

The language assigns primary stress to the rightmost heavy syllable in a root or, in the absence of heavy syllables, to the rightmost syllable. Every root has stress, but only some affixes are inherently stressed. In **bikipa**, **okɨpa** and **kookotopa**, for instance, the suffix **-pa** (nominalizer) has inherent stress, but in **ʔednã** the suffix **-nã** (adjectivizer) does not have stress. When more than one stress occurs in a word, the rightmost stressed syllable has primary stress (as in **pɨpɨp**, **bikipa**, **okɨpa**, **kookotopa**). Epenthetic vowels (marked below in red font in **bikipa**, **kɨrɨk** and **kookotopa**) are never stressed. The phonetic correlates of stress in Karitiana are duration and intensity.

gijo	saara	pɨpɨp	soʔoot
/giño/	/saara/	/pɨpɨp/	/soʔoot/
corn	*alligator*	*owl*	*to see*

boroja	bikipa	okɨpa	ʔednã
/boroña/	/bik+pa/	/oky+pa/	/ʔet+nã/
snake	*bench*	*instr. to kill*	*pregnant*

kɨrɨk	kookotopa	atara	atatɨ
/kɨrk/	/kookt+pa/	/a+tat+a/	/a+tat+ɨ/
gnat	*bridge*	*go*	*do not go*
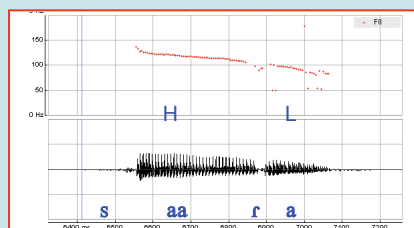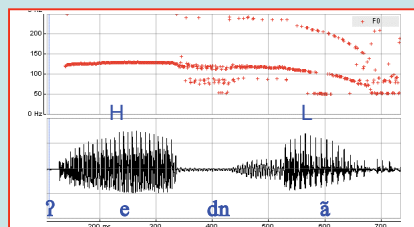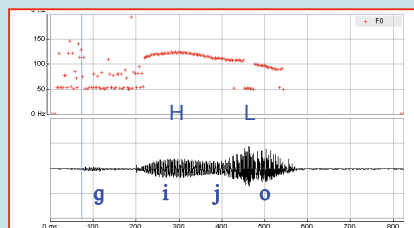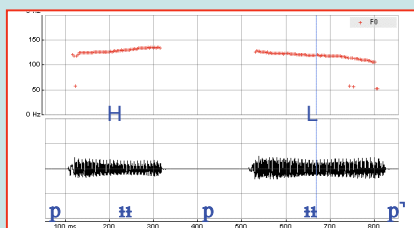
### References

Moore, D. (1999). Tonal System of the Gavião Language of Rondônia, Brazil, in Tupian Perspective. S. Kaji (ed.). Cross-Linguistic Studies of Tonal Phenomena: Tonogenesis, Typology and Related Topics. Tokyo, ILCAA.

Storto, L. (1999). Aspects of a Karitiana Grammar. Ph.D. Dissertation. Massachusetts Institute of Technology. Manuscript.
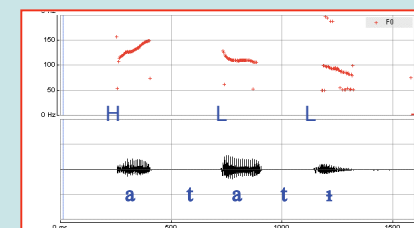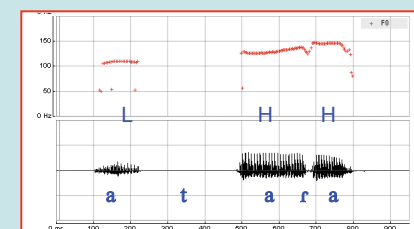
Tone in Karitiana

Tone in isolated words

(1) Disyllabic words are always **HL** regardless of the stress pattern. (2) Monomorphemic trisyllabic words are always **HHL** and stress final (**boroja**). (3) Polymorphemic words can have different tone patterns according to stress. In **bikipa**, for instance, the monosyllabic root and the suffix are stressed, creating two tone domains bound on the left by the stressed syllables. The epenthetic vowel occurring between the two morphemes in **bikipa** cannot have the same tone as the syllable to its right, because tone cannot spread from an accented syllable. In **okɨpa**, the last syllable of the disyllabic root and the suffix are stressed, creating three tone domains.
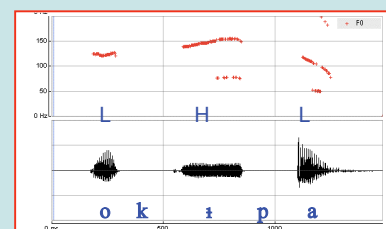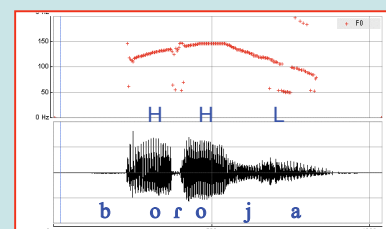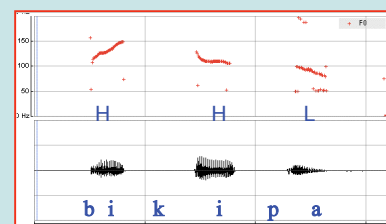
Tone in sentences

High and low tones are associated to syllables based on stress patterns. A **L** tone is always assigned to the end of any utterance (as in the sentence **atatɨ** "do not go" below), including words pronounced in isolation. Affirmative imperatives (AI) are the only sentential types in which a **H** tone appears at the end of an utterance (see the sentence **atara** "go" below). The sentential final **L** (or H in AI) tone attaches to the last syllable of the utterance and spreads to the left until it reaches a stressed syllable. The next syllable to the left of that stressed syllable will be assigned a **H** tone (or L in AI). This tone will spread until it reaches a stressed syllable. To the left of this **H** (or L in AI) tone domain there will be a **L** (or H in AI) tone domain, and so on, until the end of the word.

Conclusion

In Karitiana, disyllabic words are always **HL**. Tone domains of trisyllabic or longer words are bound on the left by a stressed syllable. Utterances have a **L** tone at the end, with the exception of affirmative imperatives, which end in a **H** tone. High and low tone domains alternate from right to left, always bound to the left edge by a stressed syllable.