The Interactive Atlas of the Prosody of Portuguese: Two questions on prosodic transcription

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Prosodic transcription: two issues for discussion

Text-tune accommodation: Accommodation of the segmental string to the tonal string (and not of the tune to the text, as described for both compression and truncation languages – see Ladd 1995/2008)

European Portuguese (EP) is neither a truncation nor a compression language when the tune is not complex, for the segmental string is extended to cope with realisation (Frota 2000, 2002, 2009/in press).

3 main strategies previously found in yes-no questions (H+L* LH) and calling contours (H’H’H’-

- epenthesis
- vowel lengthening

- [Jas] or [Jas]?
- [Valéria] or [Valéria]?
- [João] or [João]?

Tonal marking of specific prosodic phrases:
Not every prosodic edge of a given type always gets a boundary tone.

Usually, a given prosodic level (International Phrase – IP, intermediate phrase – iPh or Phonological Phrase – PP) is marked as intonatorially relevant by the presence of an initial and/or final edge tone.

Previous work on Standard European Portuguese (SEP) showed that, unlike in English, Italian, French or Bengali, only IPs are signalised by edge tones (Frota 2000).

In Alé (variety from the Interior Centre and South), the left edge of the last PP of the IP is signalized by a low edge tone (Cruz & Frota 2010), across sentence types (only neutral sentences) and speech styles, whether the IP is internal or final (Brazilian Portuguese). L marks the right edge of a localized phrase – Fernandes-Guimarães 2007.

Methodology and data analysed so far

Varieties: 4 varieties of EP – (i) Northern variety – SEP (Litoral Centre), Alé and Alg (both from the Interior Centre and South) – and 4 southern varieties of BP (only in the discourse completion task), applying for President?

Speakers:
2 female speakers per variety, aged between 20-45 years old, all in loco.

Tasks and Materials

- Discourse completion

Survey of situations (adapted from the questionnaire built for Catalan studies on international variation – Prunés & Cabre 2007) only presented by the interviewer; sometimes supported by images. Speakers are indirectly conducted by the interviewer to produce a specific utterance.

1) Interviewer: Sabes o que é o teu rapaz e a sua rapariga?
Speaker: Clearam.
Interviewer: You know what happened to this boy and this girl?
Speaker: Married (They got married).

- 12 sentences selected per variety (confirmation-seeking and imperative yes-no questions).

Analysis:
On the basis of the inspection of the F0 curve and of perception, tonal events are labeled using the proposals for Portuguese in Frota (2008/in press). All utterances were analysed for (i) nuclear pitch accents; (ii) boundary tone types and their association with specific prosodic edges and (iii) the occurrence of epenthesis, vowel lengthening or vowel split as a strategy to cope with tonal realisation.

Results

Epenthesis
Across EP varieties, speech styles and sentence types.

Text-tune accommodation
Across EP varieties, only in calling contours (greeting and pleasant).

Vowel split
Across EP varieties, mainly in calling contours (greeting and insistent).

Table 1: Discourse completion strategies per sentence type, across varieties and speech styles.

Table 2: Tonal marking strategies per sentence type, across varieties and speech styles.

Selected references


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Main goals:
- Provide a detailed description of prosodic variation in European, Brazilian and African Portuguese
- Proodic phrasing, intonation (main nuclear contours and tonal density), and rhythm;
- Compare Portuguese varieties with other Romance languages/varieties

Develop resources and applications in this domain (see Figure 1), within a program of international scope that proposes a system for prosodic analysis of speech corpora, together with a set of methodological procedures that enable cross-linguistic work on prosodic variation in language (Romance Tool Workshop, Frota & Prato in progress).

Speech database being collected:
- Female speakers for (technical reasons); for Portugal – urban and rural areas in 20 locations (240 speakers);
- 2 age groups (20-45 years-old and 60+ years-old);
- 4 types of task: reading task (corpora carefully designed for detailed and comparable analysis of prosodic phrasing, intonation per sentence type and rhythm), discourse completion (set of situations eliciting different sentence types and pragmatic meanings), map task designed to obtain intersite comparisons with specific pragmatic meanings) and conversation.

Figure 1: Demo version of the iAPlPh website, available at http://www.lfl.ulisboa.pt/IAPhoto//dialog/index.html. Maps illustrating the distribution of the most frequent nuclear contour for declaratives with narrow focus.

For discussion (sum up)

- Text-tune accommodation: tonal and/or segmental string adjustments as a RELEVANT dimension of variation in EP, which strategy is implemented in a given language/variety (especially in the case of speech databases for prosodic variation surveys)?

- Tonal marking of specific prosodic phrases: prosodic edges and tonal boundary marking is dissociated by prosodic labeling systems (in order to account for prosodic variation within and across languages [tetra-1-mapping]). Since there are # distributional properties between L- and pl- and since they do not overlap within varieties, should the same label be used (same label, # properties)?

Figure 2: Imperative sentence in reading task: ‘Call me!’

Figure 3: Calling contour (produced in reading task).

Declaratives in map task: epenthesis seems to be triggered by the continuation rise.

Figure 4: Calling contour (produced in reading task).

Figure 5: Imperative sentence in map task. ‘Can you shut your mouth?’

BP: no epenthesis

Interrogatives and calling contours mainly affected (confirming previous work).
Across speech styles and varieties with a high incidence (H+L* LH), LH+H*H, (L+H)*H, (L+H)*L).

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Figure 6: Declarative in reading task. The Spanish girl mensagem remembered differently.

- left edge of the last PP of the internal IP (or both prosodic positions)

- across sentence types
- across varieties
- across focalized contexts

across speech styles.

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