

The use of prosodic focalization in acting

Rémi Godement-Berline

Laboratoire de Linguistique Formelle, Université Paris Diderot

<remi.godement@linguist.univ-paris-diderot.fr>



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PARIS 7

Question

- “interpreted speech”: oralization of a memorized text
- shows a **high percentage of prominent syllables** (comparison of our sample with the speaking styles of the C-PROM corpus, cf [2] and [12])
- Are the functions of these prominences the same as in spontaneous speech?

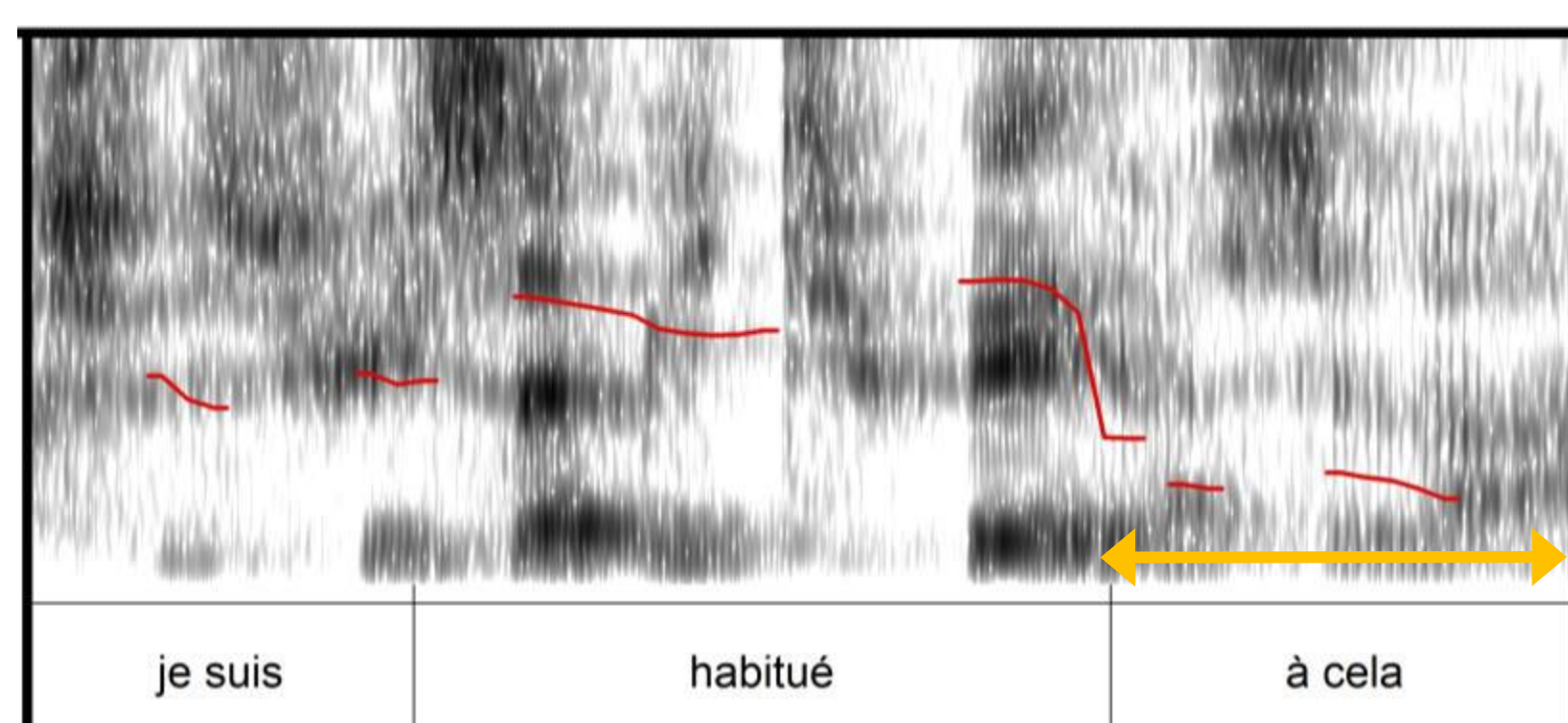
Results

- extraction of occurrences and classification:
 - low agreement rate between the experts
 - choice of “insisting” and “expressivity” for functions other than constituency/focus marking
- phonetic analysis:

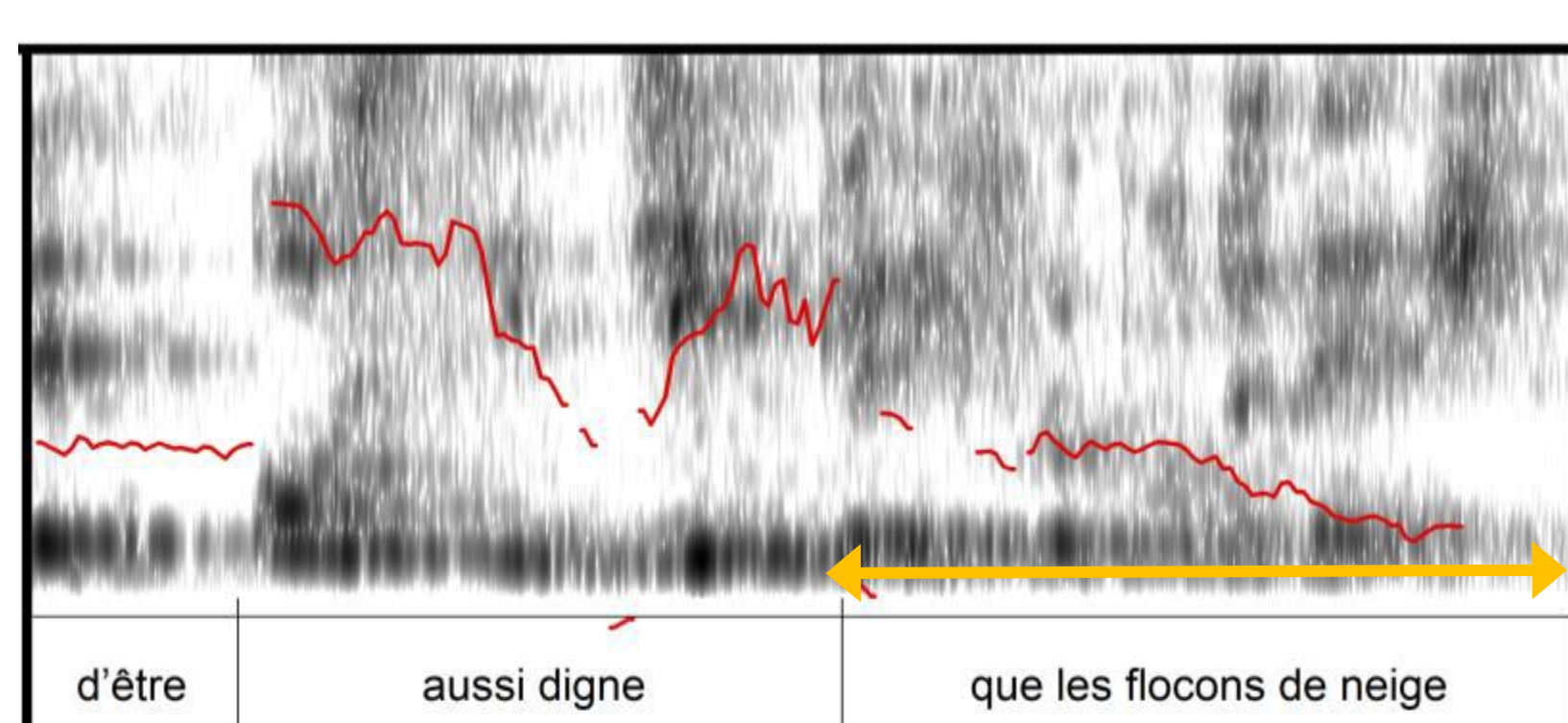
phonetic feature \ function of prominence	pitch compression	terminal contour	initial prominence	other initial features
constituency				
information focus	X	X		X
contrastive focus		X	X	X
insisting	X	X	X	X
expressivity		X		X

X = significant proportion (using a 95% confidence interval)
 ■ = predicted by literature ; ■ = not predicted ; ■ = ?
 Cf [3] [5] [6] [10] [11]

2 examples:



ASK TO HEAR!



Method

- speech sample: 12 min from 2 theater plays in French (1 amateur and 1 professional)
 - creation of a corpus by 3 experts (+ ANALOR [1]):
 - extraction of all occurrences of **prosodic highlighting** (= accenting + possible deaccenting)
 - **pragmatic classification** : 1. constituency marking, 2. focus marking, 3. any other (left to the experts' judgment)
 - **phonetic analysis*** to determine the presence of:
 - **pitch range compression**
 - **terminal contour**
 - initial prominence
 - other initial features (lengthening, ?, pause ...)
- * auditory + Praat [4], WinPitch [8], EasyAlign [7] and Prosogram [9]

Discussion

- low agreement rate: is there no one-to-one function/feature(s) correspondence?
- “insisting” and “expressivity”: how to distinguish them phonetically and pragmatically?

➤ Main result: features of prosodic focalization (especially deaccenting) are used for a function other than narrow focus marking (here, “insisting”)

If confirmed, this could mean that:

- focalization can fulfill several types of functions
- or they are all part of a more generic strategy
- is each function marked by special features?

Also, is this result:

- specific to “interpreted speech”, i.e. acting?
- or just used less often in spontaneous speech?

References

- [1] Avanzi M., A. Lacheret-Dujour & B. Victorri (2008). ANALOR. A tool for semi-automatic annotation of french prosodic structure. In P.A. Barbosa, S. Madureira & C. Reis (éds.), *Proceedings of Speech Prosody '08* (Campinas, Brésil, mai 2008), 119-122.
- [2] Avanzi M., A.-C. Simon, J.-P. Goldman & A. Auchlin (2010). C-PROM. Un corpus de français parlé annoté pour l'étude des préminences. *Actes des 28èmes Journées d'Etude sur la Parole* (Mons, Belgique, mai 2010), 73-76.
- [3] Beysseide C., B. Hemforth, J.-M. Marandin & C. Portes (2009). Prosodic Markings of Information Focus in French. In H.-Y. Yoo & E. Delais-Roussarie (éds.), *Actes d'IDP 2009* (Paris, France, septembre 2009), 109-122.
- [4] Boersma, Paul & Weenink, David (2014). Praat: doing phonetics by computer [Computer program]. Version 5.3.83, retrieved 16 August 2014 from <http://www.praat.org/>
- [5] De Looze, C. (2010). *Analyse et interprétation de l'Empan Temporel des Variations Prosodiques en Français et en Anglais*. Thèse de Doctorat. Université de Provence – Aix-Marseille 1.
- [6] Doherty M. & H. Loevenbruck (2004). Pre-Focal Rephrasing, Focal Enhancement and Postfocal Deaccentuation in French. *Proceedings of the 8th International Conference on Spoken Language Processing* (Jeju, Corée du Sud), 785-788.
- [7] Goldman, J.-Ph. (2011). EasyAlign: an automatic phonetic alignment tool under Praat. In P. Cosi, R. De Mori, G. Di Fabbrizio & R. Pieraccini (éds.), *Proceedings of InterSpeech 2011* (Florence, Italie, août 2011), 3233-3236.
- [8] Martin, Ph. (1996). WinPitch: Un logiciel d'analyse temps réel de la fréquence fondamentale fonctionnant sous Windows. *Actes des 21èmes Journées d'Etude sur la Parole* (Avignon, France, juin 1996), 224-227.
- [9] Mertens, P. (2004). The Prosogram: Semi-Automatic Transcription of Prosody based on a Tonal Perception Model. In B. Bel & I. Marlien (éds.), *Proceedings of Speech Prosody '04* (Nara, Japon, mars 2004), 23-26.
- [10] Portes C., L. Lancia & J.-M. Marandin (2011). Information Focus marking in French. Acoustic predictors of postfocal deaccentuation. *Proceedings of AMLaP 2011* (Paris, France, septembre 2011), poster.
- [11] Séguinot, A. (1976). L'accent d'insistance en français standard. In F. Carton, D. Hirst, A. Marchal et A. Séguinot (éds.), *L'Accent d'insistance*, *Studia Phonetica* 12. Paris, Montréal: Didier, 1-58.
- [12] Simon A.-C., M. Avanzi & J.-Ph. Goldman (2008). La détection des préminences syllabiques. Un aller-retour entre l'annotation manuelle et le traitement automatique. *Actes du 1er Congrès Mondial de Linguistique Française* (Paris, France juillet 2008), 1673-1686.