

Prosodic deviations of French Learners of L2 English

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1. Introduction

Many studies focus on L2 acquisition of segmental and suprasegmental features but intonation is still considered as “the last stronghold of a foreign accent in speaking any L2”, Cruz-Ferreira (1989:24). This applies to French learners of English who are easily identified through the prosodic specificities of their interlanguage, Horgues (2013). Several studies on second language acquisition have shown evidence that some intonation features like final rises characterise French learners’ production of English L2. The aim of the current pilot study is to investigate and collect empirical evidence of prosodic cues (melodic movements) occurring at the end of non-final intonational Phrases (IPs) in French learners’ productions. The study consists of a cross-comparison between native and non-native productions. The empirical analysis provides an overview of similarities and differences in pitch movement in non-final IPs. Acoustic analysis concentrates on two acoustic parameters: F0 and duration of the last syllable of non-final IPS.

2. Method

2.1. Corpus

We extracted data from a multi task oral corpus, including a reading task (The Rainbow passage taken from Grant Fairbanks’), reading of a set of sentences and a semi-guided interview.

2.2. Participants

Eight speakers were recorded, 4 native speakers (British ERASMUS students) and 4 French learners (university students with an advanced level in English, according to the Common European Framework of Reference for Languages). The recording took place in a sound-proof room.

2.3. Procedure

Non-final IPs were classified according to prosody-syntax parameters, non-final IPs produced in clause chaining produced at the right edge of a non-final root clause. Utterances containing non-final IPs in L2 were extracted from the corpus and investigated in comparison with final intonation phrases and with native speakers’ productions.

2.4 Prosodic analysis

The melodic movements at the end of final and non-final IPs were analysed. The analysis is being carried out using Praat and applying the Autosegmental-Metrical (AM) approach to intonation, including two distinguished phonetic parameters: alignment and scaling. Alignment refers to the speaker’s High H and Low L targets with reference to segmental and syllabic landmarks. Scaling relates to the relative height of H and L targets in the speaker’s pitch range at that target point. Vowel duration was measured from the beginning of the last pitch accent until the end of the final and non-final IPs in order to control for variability in final vowel duration due to differences in speech rate across tokens.

3. Results and perspectives

This study has investigated whether French L2’ productions of non-final IPs show a clear distinction or similarity with final rising contours usually produced by French learners.

Preliminary results (only for the reading text in this study) show a clear tendency of higher F0 and duration values in the last syllable of non-final IPs French L2 productions. Pitch values in French L2 productions present higher F0 values. The rising tonal pattern which occurs at the end of non-final IPs, is frequently used by L2 French but not systematically and can be described as slightly different from final intonation phrases in duration although similar in contour shape. The limited scope of this study does not allow us to confirm these results at this stage of the analysis. A larger corpus and statistical analysis are needed to confirm these results.

References

- Arvaniti, A. Ladd, D. R. and Mennen, I. 2006. Phonetic effects of focus and ‘tonal crowding’ in intonation: Evidence from Greek polar questions”, *Speech Communication*, 48, pp.667–96,
- Cruz-Ferreira, Madelena. 1989. A test for non-native comprehension of intonation in English. *International Review of Applied Linguistics* 17(1): pp. 23-39.
- Cruttenden, A. 1997. *Intonation*, Cambridge: Cambridge University Press.
- Delattre, P. 1966. Les dix intonations de base du français. *French Review*, 40 (1), pp.1-14.
- Delattre, P. 1965. Comparing the Phonetic Features of English, French, German and Spanish: an Interim Report, Heidelberg: Julius Groos.
- Flege, James. 1987. The production of “new” and “similar” phones in a foreign Evidence for the effect of equivalence classification. *Journal of Phonetics* 15, pp. 47-65.
- Grover, C., Jamienson, D.G., Dobrovolsky, M.B. 1987. Intonation in English, French and German: perception and production. *Language and Speech* 30, pp. 277–296.
- Grant Fairbanks. 1960. *Voice and Articulation Drillbook*. New York: Harper & Row, 2nd edition. P; 127
- Grover, C., Jamieson D. and M. Dobrovolski. 1987. Intonation in English, French and German: Perception and Production, *Language and Speech*, 30 (3), pp.277-295.
- Gussenhoven, C. 2002. *Intonation and interpretation: phonetics and phonology*. *Speech Prosody*.
- Hirst, D. J. and Di Cristo A. 1998. *Intonation Systems: a Survey of Twenty Languages*, Cambridge: Cambridge University Press.
- Horgues, C. 2013. French learners of L2 English: Intonation boundaries and the making of lexical stress. *Research in Language*, 2013, vol. 11 (1): pp. 41-56
- Ladd, L. *Intonational phonology*. Cambridge, CUP
- Léon, M. et Léon P. 1997. *La prononciation du français*, Armand Colin.
- Léon P, 1992. *Phonétisme et prononciations du français*, Nathan, Paris.
- Pierrehumbert J. B., 1980. *The phonetics and phonology of English intonation*, PhD thesis, MIT.
- Post, B. 2000. *Tonal and phrasal structures in French intonation*. Hague: Holland Academic Graphics
- Santiago, F. & E. Delais-Roussarie E. 2015. What motivates extra-rising patterns in L2 French: Acquisition factors or L1 Transfer? In *Proceedings of ICPHS 2015*. Glasgow, August 2015.
- Santiago, F., Delais-Roussarie, E. 2015. The Acquisition of Question Intonation by Mexican Spanish Learners of French. In: Delais-Roussarie, E., Avanzi, M., Herment, S. (eds), *Prosody and Language in Contact: L2 Acquisition, Attrition and Language in Multilingual Situations*. Berlin: Springer, 243–270.