

Journal of Child Language

Volume 39, Issue 2

March 2012, pp. 221-257

Is prosodic development correlated with grammatical and lexical development? Evidence from emerging intonation in Catalan and Spanish*

PILAR PRIETO ^(a1), ANA ESTRELLA ^(a2), JILL THORSON ^(a3) and MARIA DEL MAR VANRELL ^(a4)

DOI: <http://dx.doi.org/10.1017/S030500091100002X>

Published online: 21 June 2011

Abstract

This investigation focuses on the development of intonation patterns in four Catalan-speaking children and two Spanish-speaking children between 0 ; 11 and 2 ; 4. Pitch contours were prosodically analyzed within the Autosegmental Metrical framework in all meaningful utterances, for a total of 6558 utterances. The pragmatic meaning and communicative function were also assessed. Three main conclusions arise from the results. First, the study shows that the Autosegmental Metrical model can be successfully used to transcribe early intonation contours. Second, results reveal that children's emerging intonation is largely independent of grammatical development, and generally it develops well before the appearance of two-word combinations. As for the relationship between lexical and intonational development, the data show that the emergence of intonational grammar is related to the onset of speech and the presence of a small lexicon. Finally, we discuss the implications of these results for the biological hypothesis of intonational production.

Copyright

COPYRIGHT: © Cambridge University Press 2011

Corresponding author

Address for correspondence: ICREA-Universitat Pompeu Fabra – Departament de Traducció i Ciències del Llenguatge, Edifici Roc Boronat Roc Boronat 138, Barcelona, Barcelona 08018, Spain. tel: 93 2254899; e-mail: pilar.prieto@upf.edu

Footnotes

[Hide All](#)

[*]

The work reported in this article was presented at the International Congress for the Study of Child Language (IASCL), Edinburgh, 1–4 August, 2008, and at the XVIth International Congress of Phonetic Sciences (IcPhS), Saarbrücken, 6–10 August 2007. The authors would like to thank the audience of these conferences for their helpful comments and discussion of some of the topics dealt with in this article, and especially LI. Astruc, A. Chen, L. D'Odorico, P. Fikkert, S. Frota, C. Lleó and K. Demuth for very helpful comments. We are grateful to the action editor and two anonymous reviewers for their valuable comments on an earlier version, which have lead to a significant improvement of the article. We are particularly indebted to M. Serra, S. López-Ornat and A. Ojea and M. Llinàs for generously sharing their Catalan and Spanish databases in CHILDES and granting us access to the original videotapes. We would also like to thank Y. Rose and B. MacWhinney for their help during the early stages of transcription with the *Phon* program and for developing an automatic transcription tool for Catalan and Spanish within *Phon*. We are also grateful to our colleagues A. Bonafonte and A. Moreno at the Universitat Politècnica de Catalunya for granting us access to a huge electronic dictionary containing phonetic transcriptions for Catalan and Spanish, which was the basis for the automatic transcription tool. Finally, thanks to Yoonsook Mo and Tae-Jin Yoon for help and advice on statistical measures to rate intertranscriber reliability. This research was supported by grants FFI2009-07648/FILO and CONSOLIDER-INGENIO 2010 'Bilingüismo y Neurociencia Cognitiva CSD2007-00012' awarded by the Spanish Ministry of Science and Innovation and by project 2009 SGR 701 awarded by the Generalitat de Catalunya.

Footnotes

Linked references

[Hide All](#)

This list contains references from the content that can be linked to their source. For a full set of references and notes please see the PDF or HTML where available.

L. M. Chen & R. Kent (2009). Development of prosodic patterns in Mandarin-learning infants. *Journal of Child Language* 36, 73–84.

A. Christophe , M. T. Guasti , M. Nespore , E. Dupoux & B. van Ooyen (1997). Reflections on prosodic bootstrapping: Its role for lexical and syntactic acquisition. *Language and Cognitive Processes* 12, 585–612.

L. D'Odorico & S. Carubbi (2003). Prosodic characteristics of early multi-word utterances in Italian Children. *First Language* 23(1), 97–116.

P. W. Jusczyk , A. Cutler & N. J. Redanz (1993). Infants' preference for the predominant stress pattern of English words. *Child Development* 64, 675–87.

M. Kehoe & C. Stoel-Gammon (1997). Truncation patterns in English-speaking children's word productions. *Journal of Speech, Language, and Hearing Research* 40, 526–41.