

Adopting the Romance Way: Syntax, Prosody and Meaning in Elementary Spanish Learners

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In Romance languages, the focused constituent in narrow-focus structures typically occurs sentence-final, e.g., sentences 3 and 4 (Cruschina). However, in Germanic languages, equivalent meanings are expressed via *in-situ* focus, phonetically represented by an increase in the duration, intensity and pitch range of the focused element, and therefore, making this constituent perceptually salient (sentences 1 and 2). In a similar fashion, the expression of the thematic-categorical contrast is also expressed via word-order in Romance languages and intonation in Germanic languages (Zubizarreta and Nava 655). Second language research shows that English speakers transfer *in-situ* focus when learning Spanish (Hertel 293, Nava) and struggle to produce subject-verb inversions as in (3) even in advanced levels of proficiency (Zubizarreta and Nava 666).

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| (1) | Who's eating?
The GIRL's eating. | (3) | ¿Quién come?
Come la NIÑA. |
| (2) | What's the girl doing?
The girl's EATING. | (4) | ¿Qué hace la niña?
La niña COME. |

The present study explores the effects of direct instruction to elementary Spanish learners on the use of word inversion as a means of expressing subject-verb focus and thematic-categorical contrasts. Specifically, we investigate whether the acquisition of word order inversion leads to the adoption of Spanish intonation, and consequently, to the reduction of *in-situ* prominences by native speakers of English.

Thirty English learners of Spanish (experimental $N=20$; control $N=10$) took pre- and post-tests in which they answered contextualized questions eliciting subject-verb focus and thematic-categorical meanings. Participants were asked to utter complete sentences, consisting of subjects and verbs. To obtain a native Spanish reference, the test was administered to an additional group of 3 monolingual Chilean-Spanish speakers. The experimental group received 9 training sessions between the tests. Audio recordings of the pre- and post-test consisted of a total of 2520 sentences (40 test sentences * 2 tests * 30 participants + 120 Spanish natives = 2520 sentences) containing at least two lexical items, a noun and a verb. The tonic and post-tonic syllables of each noun and verb were manually annotated using Praat. A script returned the duration, intensity and F0 peak values for the labelled syllables, which were normalized for speech rate and gender differences. Logistic regressions with accuracy as the dependent variable, group (experimental, control), test (pre- and post), and meaning (focus and thematic) as fixed factors, and participants and items as random effects were used to analyse the learning of subject inversion. Mixed effect models with duration, intensity, and pitch measures as the dependent variables,

group (experimental, control) and test (pre- and post) as the fixed factors, and participants and items as random factors assessed the transfer of the acoustic properties of focus-in-situ. As for subject inversion, results showed that accuracy improved by 40% in focus statements and by 20% in thematic-categorical sentences in the experimental group. Conversely, the control group did not produce syntactic inversion, confirming that the observed learning of subject inversion stems from explicit instruction and not from regular, classroom-language exposure. With regard to the transfer of the acoustic correlates to *in-situ* focus, results indicated that students from the experimental and control groups used duration, intensity, and pitch to mark *in-situ* focus. This result is expected as all the control group participants and most of the experimental group students failed to use subject inversion, resorting to *in-situ* focus. More interesting results arose from the analysis of correct answers by the experimental group, which showed a relationship between acoustic correlates to intonation (duration, intensity and F0) and the number of Intonation Phrases (IP) uttered. This suggests that teaching how to express focus and thematic-categorical sentences with subject inversion is conducive to an initial learning of Spanish sentence melody. Results are discussed in the context of the phonetics and phonology of focus structures in L2 speech.

Keywords: prosody, syntax, nuclear stress, focus, second language acquisition, explicit teaching

References

- Cruschina, Silvio. 'Focus and Focus Structures in the Romance Languages'. *Oxford Research Encyclopedias: Linguistics*, edited by M. Aronoff, Oxford University Press, 2022.
- Hertel, Tammy Jandrey. 'Lexical and Discourse Factors in the Second Language Acquisition of Spanish Word Order'. *Second Language Research*, vol. 19, no. 4, SAGE Publications, Oct. 2003, pp. 273–304, <https://doi.org/10.1191/0267658303sr224oa>.
- Nava, Emily. *Managing Flexible Resources: L2 Acquisition of Word Order and Phrasal Prominence in Spanish*. Going Romance, Universiteit van Amsterdam, Amsterdam, Netherlands. 2007.
- Zubizarreta, Maria Luisa, and Emily Nava. 'Encoding Discourse-Based Meaning: Prosody vs. Syntax. Implications for Second Language Acquisition'. *Lingua. International Review of General Linguistics. Revue Internationale de Linguistique Generale*, vol. 121, no. 4, Elsevier BV, Mar. 2011, pp. 652–669, <https://doi.org/10.1016/j.lingua.2010.06.013>.