

## A reconsideration of discourse-related syntactic movement motivated by prosody in Spanish

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This presentation reports on an empirical test of approaches to information structure in Spanish that rely on prosody to motivate discourse-related word order changes, such as *p-movement* (Zubizarreta 1998). It presents the results of two quantitative studies designed to test these approaches, providing new evidence against this common view.

It has been argued that in Spanish syntax plays the primary role in marking information-structural categories, such as topic and focus, while in other languages, like English, intonation plays the most important role (Büring & Gutiérrez-Bravo 2002, Vallduví 1991, Zubizarreta 1998). Though it is often recognized that most languages, including Spanish, have recourse to both strategies, the view that syntax is used to mark discourse status in Romance languages has long dominated the literature, and in fact much of the research on information structure in Romance has focused on how to explain discourse-related syntactic movement.

One fruitful line of research posits that discourse-related movement in Spanish is motivated by the requirements of the prosody. In this view, perhaps best exemplified by Zubizarreta's (1998) influential notion of *p-movement*, focused elements must appear rightmost due to the fact that this is the position of main sentence stress. More specifically, Zubizarreta argues that there is a Focus Prominence Rule (FPR) requiring stress on focused constituents and a Nuclear Stress Rule (NSR) requiring stress on the lowest constituent in the asymmetric c-command ordering. These two rules can sometimes come into conflict, selecting different constituents to stress, as in (1a). This mismatch is corrected by *p-movement*, which moves the given material over the focus, allowing the focus to be in a position where it is stressed by both rules, as in (1b). Under this view, stressing the focus in situ, as in (1c), is not a possible way to resolve the conflict.

- (1) Context: What did Ana hide under the bed? (Object focus)
- a. \* Ana escondió la [muñeca]<sub>FPR</sub> debajo de la [cama]<sub>NSR</sub>.  
Ana hid the doll under the bed
  - b. Ana escondió debajo de la cama [la muñeca]<sub>FPR/NSR</sub>.
  - c. \* Ana escondió la [muñeca]<sub>FPR/NSR</sub> debajo de la cama.

One essential facet of this type of analysis is that it assumes that Spanish has 'non-plastic' (Vallduví 1991) intonation; that is, it assumes that Spanish main sentence stress must always be rightmost (Zubizarreta's NSR), and this requirement is an essential part of any analysis motivating discourse-related movement with prosodic well-formedness.

However, several recent studies (e.g. Gabriel 2010, Hoot 2012, Leal-Méndez & Shea 2012) have posed an empirical problem to this kind of approach, finding that in fact both the word order and prosody of constructions like those in (1) are more variable than they are often thought to be. In particular, it appears that Spanish intonation is more 'plastic' than usually assumed. If these results hold true, they pose a significant problem for analyses like *p-movement*, for which the requirement that Spanish have rightmost stress is necessary.

This study adds to this database and tests the assumptions underlying prosodic approaches to discourse-related movement in Spanish by bringing multiple methods to bear on these questions:

- (2) Research Questions
- a. Must stress in Spanish be rightmost?
  - b. Do Spanish speakers use prosody-only strategies to realize information structure, such as shifting main stress to a focused constituent?

These questions are central to understanding information structure in Spanish and the relationship between prosody and syntax, yet much of the data in the literature comes from authors' intuitions, while quantitative data is comparatively scarce. Further, what quantitative data exists is often limited to a single

paradigm. Here we present the results of two quantitative studies with different methodologies, providing new evidence of both speaker use and speaker intuition.

The first study uses the Otheguy-Zentella corpus of New York Spanish and analyzes the production data of 25 speakers of a variety of Spanish dialects, all of whom are what Otheguy and Zentella (2012) call ‘newcomers,’ having been born and raised in Latin America and having lived for fewer than six years in New York. From the 25 interviews, 233 tokens were extracted of copular constructions with adjectives, like in (3), in several different discourse contexts.

- (3) Juan es feliz.  
Juan is happy

The results showed that these speakers have multiple strategies for realizing information-structural categories. In cases of focus on the adjective, for example, these speakers used word order and prosody together to highlight the focus in 60% of the cases, while in 40% they used prosody alone. Further, speakers used both canonical and non-canonical word orders and stress patterns in all contexts; it was not the case that the focus always appeared finally.

The second study consists of an acceptability judgment experiment in which 56 monolingual speakers of Mexican Spanish judged sentences for felicity in context. Participants saw and heard context stories establishing narrow focus on a particular constituent (subject, object, or modifier) in a simple transitive sentence, and then judged 3-4 such sentences, which presented canonical and non-canonical word orders as well as rightmost and non-rightmost stress patterns.

The results showed that these speakers accept shifting the stress to the focused element in situ, as in (1c) above. In fact, in two of the three contexts, participants rated structures with stress shift significantly higher than those with rightmost focus.

Taken together, these two studies provide evidence from both language use and native speaker intuitions that indicates (i) that stress in Spanish need not be rightmost, and (ii) that prosody-only strategies are indeed used to realize information structure in Spanish (though syntax is also used). These results do not support accounts of focus in Spanish that motivate movement based on prosody, like p-movement. Instead, they add to the growing database that shows that the requirement that Spanish stress be rightmost does not hold, which indicates that prosody-based accounts of discourse-related movement may need to be reconsidered.

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- Büring, D., & Gutiérrez-Bravo, R. 2001. Focus-related constituent order without the NSR: A prosody-based crosslinguistic analysis. In S. Bhloscaidh (Ed.), *Syntax at Santa Cruz* 3 (pp. 41-58). Santa Cruz: University of California.
- Gabriel, C. 2010. On focus, prosody, and word order in Argentinean Spanish: A Minimalist OT account. *ReVEL* 4: 183-222.
- Hoot, B. 2012. Presentational focus in heritage and monolingual Spanish. Ph.D. dissertation. University of Illinois at Chicago.
- Leal-Méndez, T., & Shea, C. 2012. L1 Mexican Spanish and L2 Spanish learners at the syntax-discourse interface: P-movement or in-situ prosody? Paper presented at the 42nd Linguistic Symposium on Romance Languages, Cedar City, UT, April 21, 2012
- Otheguy, R. & Zentella, A.C. 2012. *Spanish in New York: Language contact, dialectal leveling, and structural ambiguity*. New York, NY: Oxford University Press
- Vallduví, E. 1991. The role of plasticity in the association of focus and prominence. In Y. No & M. Libucha (Eds.), *Conference on Linguistics* (pp. 295-306). Columbus, OH: OSU Press.
- Zubizarreta, M. L. 1998. *Prosody, focus, and word order*. Cambridge, MA: MIT Press.