

Meaning change from an experimental perspective: two self-paced reading studies on the Spanish Imperfective domain

Variation within the Imperfective domain in Modern Spanish responds to the dynamics of the well-attested *Progressive-to-Imperfective* shift (Bybee et al. 1994). Spanish used to have one general imperfective marker (the Simple Present (PRES)) that expressed both *habitual* and *event-in-progress* readings. Around the 13th century, Spanish developed a Present Progressive marker, PROG: [*estar* + Verb-*ndo*], to express the *event-in-progress* reading (**emergence**). Over time, these two markers became restricted to mutually exclusive reading domains (**categoricalization**), reaching the current period: PRES is said to express only the *habitual* reading while PROG is said to convey only the *event-in-progress* reading. This stage is expected to last until the new marker PROG gets reanalyzed as a general marker of imperfectivity (**generalization**), and becomes the only available marker to express both readings (Deo 2015).

However, acceptability judgment tasks across different Spanish dialects showed that these stages are not that clear cut. Spanish has been shown to be between the **categoricalization** and the **generalization** stages, with *specific contexts of use* that allow the old marker (PRES) to still express an *event-in-progress* reading (Fuchs et al. 2020), and other *specific contexts of use* that allow the new marker (PROG) to already express a *habitual* reading (Fuchs & Piñango 2019). Specifically, the use of PRES to convey an *event-in-progress* reading is restricted to contexts in which speaker and hearer **share perceptual access** to the event at issue (Fuchs et al. 2020). As for the use of PROG to convey a *habitual* reading, the context constraints respond to the lexicalized presuppositional content independently related to *estar*, the auxiliary verb in PROG. This presupposition restricts the predicate to a specific circumstance of evaluation, thus triggering the construal of alternative situations at which the embedded proposition does not hold (e.g. Sánchez-Alonso et al. 2016). For a *habitual* reading to arise when using PROG, contextual support that supports the **construal of alternatives** is needed (Fuchs & Piñango 2019).

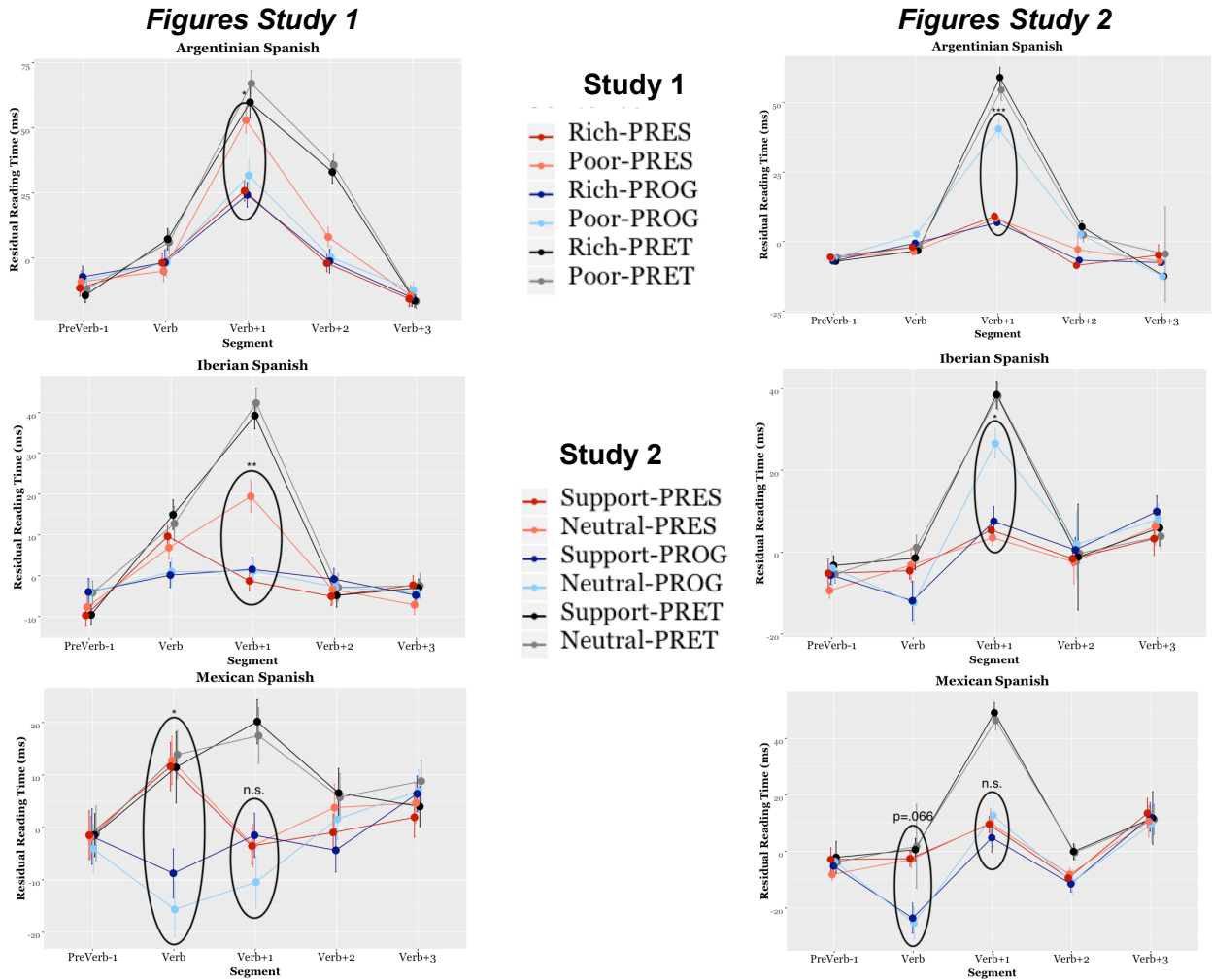
Here, we test the hypothesis that these contextual modulations are observable and at play during **real-time comprehension**, ultimately producing the observable patterns of diachronic change. We report two Self-Paced Reading studies that test the effects of supporting vs. non-supporting contexts for the comprehension of PRES and PROG when alternatively conveying the *event-in-progress* and the *habitual* reading.

Study 1 tested the *event-in-progress* reading with 144 sentences (+ 180 fillers) containing PRES, PROG or an unacceptable Simple Present marker (PRET) used as a baseline condition, preceded by contexts with shared perceptual access (RICH) or without it (POOR) in three dialectal varieties: Iberian, Argentinian, and Mexican Spanish. 180 subjects (60 per variety) completed the task. Results revealed: **a)** longer RTs for PRET over PRES/PROG, confirming that participants were attending at the intended *event-in-progress* reading, **b)** a significant Context*Marker interaction one word after the verb in Argentinian ($p < .05$) and in Iberian Spanish ($p < .005$), due to longer RTs in the POOR context condition for PRES. No such effect was observed in Mexican Spanish, but **c)** a main effect of Marker was found at the verb, favoring PROG over PRES/ PRET ($p < .05$). (see Figures Study 1).

Study 2 tested the *habitual* reading with 180 sentences (+ 90 fillers) containing the same three markers (PRES/PROG/PRET), but this time preceded by contexts that supported the construal of alternative situations at which the proposition did not hold (**Support**) or contexts that did not support that construal of alternative situations (**Neutral**). 120 subjects (40 per variety) completed the task. Results showed: **a)** longer RTs for PRET over PRES/PROG across all varieties in both context types, evidencing that participants were understanding the intended *habitual* reading; **b)** A Context*Marker interaction one word after the verb for Argentinian ($p < .001$) and Iberian ($p < .05$), due to a significant effect favoring Supporting Contexts only for PROG. No such effect was found in the case of Mexican, but **c)** a marginally significant main effect of Marker was found at the verb, favoring PROG over PRES/ PRET ($p = .066$). (See Figures Study 2).

Results from Study 1 show that when shared perceptual access is independently provided by the context, processing of PRES is facilitated in Argentinian and Iberian Spanish. By contrast, the Mexican Spanish pattern reveals that shared perceptual access is no longer playing a role in

improving PRES comprehension in that dialect, and the only available marker is PROG. This suggests that this dialect is further along the diachronic path of *Progressive-to-Imperfective* shift. As for Study 2, when contextual information satisfies the presuppositional demands of *estar*, PROG comprehension is facilitated in Argentinian and Iberian. Mexican does not show this facilitating effect, indicating that in that variety PROG is no longer dependent on context support, and might be even preferred over PRES. This pattern is consistent with a *generalization* process already underway in the three varieties, with the Mexican variety appearing further along the grammaticalization path again. Altogether the patterns observed across dialects are consistent with a model of semantic variation and change embedded in a communicative system, **visible during real-time comprehension**, and shown to be subject to identifiable contextual factors.



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