L2 acquisition of Grammatical Aspect in simple vs. complex sentences

Background. Research on the L2 acquisition of Grammatical Aspect has traditionally been concerned with temporal interpretation in simple (i.e. one-clause) sentences (1-4) [1]. However, complex sentences with a main and an embedded clause (5-8) provide an explicit testing ground for the core ordering function of Aspect [2]. Imperfective (IPFV), but not perfective (PFV), aspect determines an overlapping relation among temporal intervals, yielding an 'Ongoing' reading in (1-2) but not (3-4), and a 'Simultaneous' (SIM) reading in (5-6) but not (7-8) [3-5].
Present Study. This study examines learners' ability to apply knowledge of Aspect across syntactic structures by assessing temporal interpretation in tandem for simple and complex sentences. This approach offers deeper insights into the degree of Aspect acquisition, enabling us to test how learners move from the notion of unfolding of an eventuality in simple sentences to one of temporal ordering between the intervals of a main and an embedded clause. Following the Feature Reassembly Hypothesis (FRH) [6], the acquisitional task is conceptualised as the reassembly of aspect features in L1 English-L2 Spanish learners. This is linked to the aspectual form-meaning mismatches requiring re-mapping in this language pair [1-2].
Methods. Spanish learners (N = 84) and controls (N = 84) completed two interpretation tasks and a proficiency test. The 'Context-Stories Task' presented a context in English sketching a certain reading (e.g. Ongoing), followed by two Spanish simple sentences with PFV or IPFV aspect (Fig. 1). The 'Timelines Task' presented a timeline depicting a given reading (e.g. SIM), followed by a complex sentence varying aspect in the embedded clause (Fig. 2). Items involved eventive predicates with *Pretérito Indefinido* (PFV) vs. Progressive Periphrasis (IPFV) and stative predicates with the former PFV form vs. *Pretérito Imperfecto* (IPFV) as in (1-8).
Predictions. Learners were expected to consistently apply knowledge of Aspect across simple and complex sentences, as both Ongoing and SIM depend on the temporal overlap mechanism of IPFV aspect. This would be the case provided that learners have fully reassembled aspect features. The FRH predicts greater difficulty for L1-L2 form-meaning mismatches compared to matching mappings. Specifically, learners were anticipated to correctly accept IPFV with events due to the one-to-one mapping between (a) *Pretérito Indefinido* and English Simple Past for PFV and between (b) Progressive Periphrasis and English Past Progressive for IPFV (Scenario 1), but struggle to reject PFV with states given the one-to-many mapping between (c) Simple Past and both *Pretérito Indefinido* and *Pretérito Imperfecto* (Scenario 2). Advanced learners were expected to overcome these difficulties after full feature reassembly.
Results. (Fig. 3) Mixed-effects logistic regression models for Ongoing and SIM examined the relationship between a binary response (accept/reject) and three predictors: Grammatical Aspect (PFV, IPFV), Event Type (events, states), and Proficiency Level (beginners, intermediate, advanced). For Ongoing, post-hoc pairwise comparisons indicated that, with events (Scenario 1), learners correctly accepted IPFV over PFV at all proficiency levels (all ps $< .001$); with states (Scenario 2), only advanced learners did so ($p < .001$), while beginner and intermediate learners performed at chance (both ps $> .05$). For SIM, and with events (Scenario 1), learners correctly accepted IPFV over PFV at intermediate and advanced levels (both ps $< .001$) but not at beginner level ($p > .05$); with states (Scenario 2), none of the learner subgroups distinguished aspect forms (all ps $> .05$). Spanish controls consistently accepted IPFV over PFV across event types for both readings (all ps $< .001$).
Discussion. These findings revealed an asymmetry in advanced learners' ability to apply Aspect knowledge across simple and complex sentences, highlighting protracted challenges and incomplete reassembly. In general, the FRH was supported as indicated by greater difficulty with mismatching cases. We will discuss theoretical (When are features fully reassembled?), experimental (What are appropriate testing grounds for Aspect?), and pedagogical (How can generative L2 research inform teaching practices?) implications of these results.

Events	States
Simple Sentences	
(1) *Juan est-aba haciendo pan.* John be-PST.IPFV.3SG making bread 'John was making bread.' (3) *Juan hizo pan.* John make-PST.PFV.3SG bread 'John made bread.'	(2) *Juan est-aba enfermo.* John be-PST.IPFV.3SG sick 'John was sick.' (4) *Juan est-uvo enfermo.* John be-PST.PFV.3SG sick 'John was sick.'
Complex Sentences	
(5) *María dijo que Juan est-aba haciendo pan.* Mary said that John be-PST.IPFV.3SG making bread 'Mary said that John was making bread.' (7) *María dijo que Juan hizo pan.* Mary said that John make-PST.PFV.3SG bread 'Mary said that John made bread.'	(6) *María dijo que Juan est-aba enfermo.* Mary said that John be-PST.IPFV.3SG sick 'Mary said that John was sick.' (8) *María dijo que Juan est-uvo enfermo.* Mary said that John be-PST.PFV.3SG sick 'Mary said that John was sick.'
Grammatical Aspect: IPFV, PFV	

Figure 1. Sample trial for the Context-Stories Task presenting an Ongoing reading

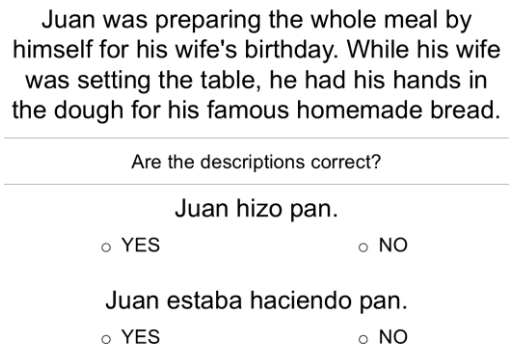


Figure 2. Sample trial for the Timelines Task depicting a SIM reading

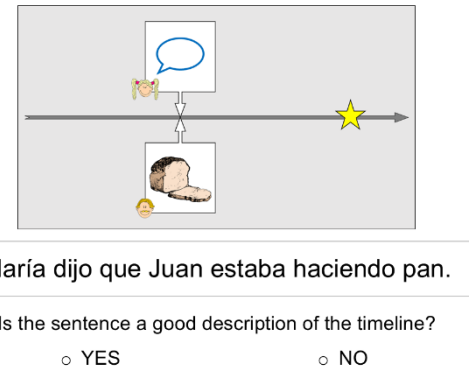
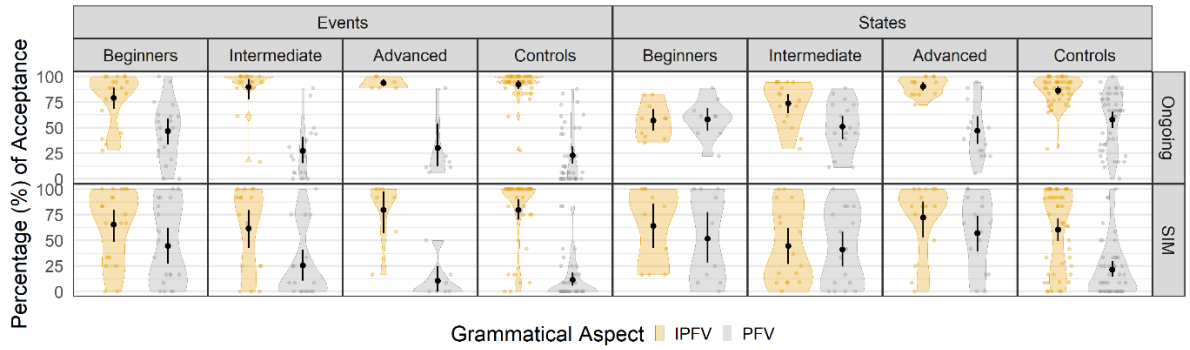


Figure 3. Mean percentage of acceptance for each aspect form (black dots) with 95% CI (black lines), individual participants' score (coloured dots), and distribution of the data (violins) for Ongoing and SIM (by event type and participant group).



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