

Children's interpretation of Brazilian Portuguese imperfective past tense: Acquiring its habitual reading

Children's interpretation of the progressive meaning of imperfective aspect is acquired later than perfective aspect ([1]). This delay has been related to its intensional nature ([2]), which makes progressive aspect semantically more complex than perfective aspect. Extending the domain of aspect acquisition to another intensional meaning, this study explores how Brazilian Portuguese (BP) learners acquire the habitual reading of *Pretérito Imperfeito*. Only two prior studies have investigated children's acquisition of habitual aspect. Both find that the interpretation of habitual *be* in African American English (*Ana be climbing* 'Ana usually climbs') is acquired late ([3], [4]). Our study investigated the development of the habitual reading of *Imperfeito* in BP.

BP has distinct past tense forms for each of the readings of imperfective aspect. *Imperfeito*, (1), has an exclusive habitual reading (in contrast to other Romance languages, where imperfective aspect forms can also refer to single events in progress) ([5], [6]), thus encoding pluractionality, i.e., plurality in the domain of events ([7]). The progressive, single-event reading is encoded by the periphrastic *Gerundio*, (2). Moreover, perfective aspect is expressed by *Perfeito*, which is unmarked for event number, as illustrated in (3).

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|----------------------|--------------------|-----------|---------------------------------|-------------------------|
| (1) Ana fumava | (2) Ana estava | fumando. | (3) Ana fumou | uma vez / por 20 anos |
| Ana smoke-PAST.IMP | Ana be-PAST.IMP | smoke-GER | Ana smoke-PAST.PFV | one time / for 20 years |
| 'Ana used to smoke.' | 'Ana was smoking.' | | 'Ana smoked once/for 20 years.' | |

We developed two tasks to investigate the interpretation of *Imperfeito*, adjusting [4]'s design to determine individual interpretation patterns. Habituality was operationalized as multiple instances of the same event in the past. 45 children participated (age range 3;2-7;3) in Experiment 1; the older half of these children also participated in Experiment 2 (N = 27, 5;0-7;6). Data collection with BP adults is in progress (currently N = 7). Experiment 1 used Wh-questions in a picture-selection task, testing whether children preferred a plural or single-event reading for *Imperfeito*. Stories showed a character performing a given activity in three ways: once as a child, multiple times as a child and once as an adult (Figure 1). The critical condition, a description with *Imperfeito*, targeted the plural-event reading, as illustrated in (4). Three control conditions with adverbials (*only once*, *always*, *now*) checked understanding of the concepts of (past) single versus plural events and current events.

(4) Critical *Imperfeito*

O que José jogava?

What José play-PAST.IMP

'What did José use to play?

Target answer: *soccer*



Figure 1: Sample item in Experiment 1

The children mostly selected the plural-event reading for *Imperfeito* (74.4%). Mixed effect models showed that children were less accurate than adults, who consistently assigned a habitual reading to *Imperfeito*, $\beta = -2.36$, $p = .017$. Among the children, age had a positive effect on accuracy, $\beta = 0.72$, $p < .001$ (Figure 2). Nevertheless, the individual result patterns revealed that 24/45 children showed mastery of *Imperfeito* (5, 6 out of 6 correct), in contrast to 19/45 children who did not consistently assign a plural-event reading (Figure 2).

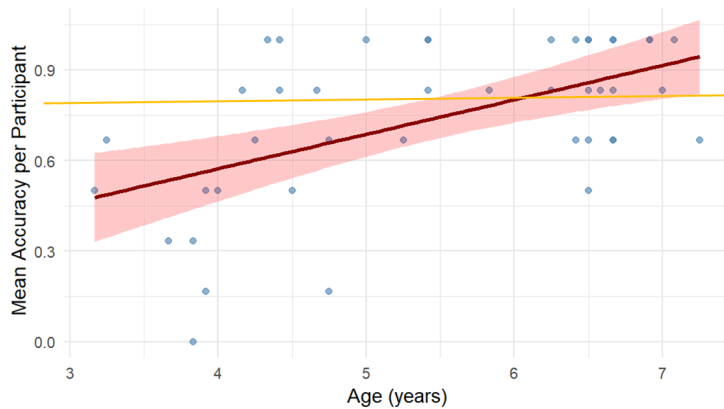


Figure 2: Increasing accuracy on *Imperfeito* with age. Yellow line marks mastery (above 5, 6 out of 6 correct).

Experiment 2 used a forced-choice preference task, with similar stimuli to Experiment 1, varying how often the character performed a particular activity as a child, once or multiple times (Figure 3). In the critical conditions, the single or the plural event was described with two sentences, one with *Imperfeito* and the other with *Perfeito*, spoken by different puppets (Table 2). Participants chose which of the two was best. The children mostly selected *Imperfeito* for plural events (83%) and *Perfeito* for single events (71%). However, the individual patterns showed that only 13/27 children consistently preferred *Imperfeito* for the plural-event reading.



Figure 3: Sample item in Experiment 2

Table 2: Critical conditions with sample items in Experiment 2. Target choices highlighted.

Plural-event	<i>Perfeito</i> Maria correu (PAST.PFV) no parque. 'Maria run at the park.'
	<i>Imperfeito</i> Maria corria (PAST.IMP) no parque. 'Maria used to run at the park.'
Single-event	<i>Perfeito</i> Maria correu (PAST.PFV) na praia. 'Maria run at the beach.'
	<i>Imperfeito</i> Maria corria (PAST.IMP) na praia. 'Maria used to run at the beach.'

The development of the habitual reading of BP *Imperfeito* is late and marked by substantial individual variation, similar to African American English habitual *be* ([3], [4]). We argue that the intensional nature of habituality causes this late acquisition, and will discuss how this compares to the acquisition of the intensional meaning of progressive aspect in previous studies.

Selected references: [1] van Hout, A. (2016). The acquisition of aspect. In J. Lidz, W. Snyder, & J. Pater (Eds.), *The Oxford Handbook of Developmental Linguistics* (pp. 587–610). Oxford: Oxford University Press. [2] Wagner, L. (2002). Understanding completion entailments in the absence of agency cues. *J. Child Lang.* 29, 109–125. [3] Jackson, J., & Green, L. (2005). Tense and aspect *be* in child African American English. In H. Verkuyl, H. de Swart, & A. van Hout (Eds.), *Perspectives on Aspect* (pp. 23–250). Springer. [4] Green, L. J., & Roeper, T. (2007). The acquisition path for aspect: Remote past and habitual in child African American English. *Language Acquisition*, 14(3), 269–313. [5] Comrie, B. (1976). *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge University Press. [6] Ferreira, M. (2016). The semantic ingredients of imperfectivity in progressives, habituales, and counterfactuals. *Natural Language Semantics*, 24(4), 353–397. [7] Cusic, D. D. (1981). *Verbal plurality and aspect*. Doctoral dissertation, Stanford University.