CROSSLINGUISTIC VARIATION IN RELATIVE CLAUSE ATTACHMENT: IMPLICATIONS OF A PROSODIC PERSPECTIVE FOR SECOND LANGUAGE ACQUISITION

Investigation of crosslinguistic variation in second language (L2) acquisition has largely focussed on parametric differences at the syntactic level. We argue that prosodic factors must also be taken into account. We consider crosslinguistic differences in parsing preferences for ambiguous sentences involving relative clauses (RCs), which are well documented. In (1a), the RC can be interpreted as modifying either the first noun (daughter) of the complex NP or the second noun (colonel). Speakers of different languages have distinct default interpretations in such cases (Cuetos & Mitchell 1988; Fodor 2002). Native speakers of English have a preference for low attachment (LA) (the RC modifies the second noun, colonel), while native speakers of Spanish prefer high attachment (HA) (the RC modifies the first noun, hija, as in (1b)).

In the L2 context, the question arises as to whether L2 learners (L2ers) are able to reset their default interpretation for RC attachment when the attachment preferences of the L1 and L2 differ. Previous experimental research has reported mixed results; it has been found that L2ers and bilingual speakers: (i) exhibit no attachment preference in the L2 (e.g., Felser et al. 2003); (ii) prefer the pattern that is associated with their dominant language (e.g., Fernández 2002); or (iii) have the same attachment preference in both of their languages (e.g., Dussias 2003).

We suggest that such inconsistencies are due, in part, to the fact that participants were required to judge written stimuli. There are, though, robust prosodic effects on parsing, which can impact interpretation. Crosslinguistically, a prosodic break after NP2 favours HA, while a break after NP1 favours LA (Fodor 2002; Jun 2003). RC length also plays a role: long RCs favour HA, whereas short RCs favour LA. Fodor (1998) explains the latter by means of the same-size sister constraint (SSSC): sister phrases prefer to be balanced, such that short RCs attach low to balance with NP2, whereas long RCs attach high to balance against the complex NP as a whole.

In this paper, we investigate the effects of prosodic breaks and constituent length on the attachment preferences of Spanish-speaking learners of English. English and Spanish differ not only in their default interpretation but also in the strength of this preference: the HA preference in Spanish is strong while the LA preference in English is weak. Further, LA is less robustly cued than HA across languages. In view of these differences, we examine whether Spanish speakers can attend to the English cues to disambiguation and come to mirror native speaker preferences in their L2. For both groups, we predict stronger attachment preferences when both conditions (prosodic break and SSSC) conspire to suggest the same attachment site and, for the L2ers, a stronger preference for HA overall.

Participants were intermediate and advanced Spanish-speaking learners of English (n=42), as well as native speaker controls (n=18). The experiment involved a judgment task with auditorily-presented stimuli. There were 24 target items (potentially ambiguous) and 42 fillers (not ambiguous). There were four conditions, manipulating lengths of RC, NP1 and NP2, in accordance with the SSSC, and position of the prosodic break; see (2a-d). After listening to each sentence, participants answered a comprehension question, asking which NP the RC referred to.

Figure 1 illustrates the behaviour of both groups for the four conditions under examination. The profile of responses is similar for the native speakers and the L2ers as far as the HH and LL conditions are concerned, with HH yielding the highest rate of HA responses, and LL the lowest rate for both groups. In the case of HL and LH, the proportion of HA responses is higher for the L2ers than for the native speakers, which, we suggest, reflects an L1 bias on the part of the learners: for the English speakers, break cues are better signals to attachment site than length cues, whereas for the learners, any cue to high attachment, whether break cue or length cue, leads to more HA responses.

To summarize, attachment preferences were influenced by the position of the prosodic boundary as well as to the SSSC. While L2ers behaved similarly to the control group when both cues favoured the same attachment site, there is some evidence of L1 transfer when the cues differ. In conclusion, prosodic factors (in addition to syntactic ones) account for the types of interpretations that L2ers and native speakers make.
(1) a. The journalist interviewed the daughter of the colonel who had the accident.
   b. El periodista entrevistó a la hija del coronel que tuvo el accidente.

(2) a. High-high (HH) condition
   Prosodic break after NP2; long NP1, short NP2, long RC
   The bartender served the cheerful outgoing cousin of the actor // that always ordered peanuts with his beer.

b. High-low (HL) condition
   Prosodic break after NP2; short NP1, long NP2, long RC
   The bartender served the cousin of the cheerful outgoing actor // that always ordered peanuts with his beer.

c. Low-high (LH) condition
   Prosodic break after NP1; short NP1, long NP2, short RC
   The bartender served the cousin // of the cheerful outgoing actor that ate peanuts.

d. Low-low (LL) condition
   Prosodic break after NP1; long NP1, short NP2, short RC
   The bartender served the cheerful outgoing cousin // of the actor that ate peanuts.

![Figure 1](image_url)

Figure 1. High attachment responses (in %) across the four conditions

References


Fodor, J. D. (2002). Prosodic disambiguation in silent reading. In M. Hirotani (ed.), *Proceedings of NELS 32* (pp. 113-132). University of Massachusetts, Amherst: GLSA.