


L2 Use of Subcategorization Frame during Filler-gap Resolution
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Learning a second language (L2) after puberty is generally considered an effortful and conscious process. Recent evidence suggests that even advanced late-learning bilinguals differ as to how they comprehend complex sentences in real time (online) compared to native speakers and early-learning bilinguals. One area in which these differences occur is in the processing of non-local dependencies where constituents are not canonically ordered, such as in sentences containing wh-dependencies:

(1) Mary saw which toy the child pushed ___ while playing.



In (1), *which toy* is the moved *wh*-phrase and it maintains a relationship between itself and the underlying syntactic position from which it moved ‘ ___ ’ (in (1) as the direct object of *pushed*). In sentence processing literature these structures are also referred to as filler-gap dependencies, as the fronted filler must be reconstructed at some stage, the gap, during online processing. These dependencies may cause difficulty for L2 speakers because the non-canonical syntactic constituent, the filler, cannot be integrated when encountered.

Research by Goodluck et al. (1991) suggests that native speakers use the subcategorization frames associated with *put*-type and *push*-type verbs when resolving filler-gap dependencies. In English, a *put*-type verb obligatorily subcategorizes for an NP and a PP argument (*he put the cart), while a *push*-type verb subcategorizes only for an NP argument (he pushed the cart). The current study employs and compares results from two experimental methods, self-paced reading and eye-tracking, to investigate the use of this verbal property by intermediate and advanced Korean L2 speakers of English. To this end, differences in filled-gap effects (increases in reading time at a filled-gap—see example materials below) following *put*-type verbs compared to *push*-type verbs are examined. Proficiency is included as a factor to examine whether L2 speakers of different proficiency levels make use of this verbal property.

Results from the self-paced reading experiment suggest that intermediate and advanced L2 speakers do not utilize a verb’s subcategorization frame when resolving filler-gap dependencies in the same manner as L1 speakers. Self-paced reading times are then compared to reading times from various eye-tracking measures to investigate whether a more naturalistic and sensitive task is better-suited to testing L2 speakers. The comparison of techniques reveals that the two experimental methods yield slightly different results for both L1 and L2 speakers. The results are discussed in terms of task demands and processing resources.

Examples

PP Complements

- | | <u>Critical Words</u> | |
|--|---|--------------------------|
| (A) The babysitter wondered what the little girl | put/ <u>the/toys/under/while/cleaning</u> | her room. |
| (B) The babysitter wondered if the little girl | put/ <u>the/toys/under/her/bed</u> | while cleaning her room. |

PP Adjuncts

- | | | |
|--|--|--------------------------|
| (C) The babysitter wondered what the little girl | pushed/ <u>the/toys/under/while/cleaning</u> | her room. |
| (D) The babysitter wondered if the little girl | pushed/ <u>the/toys/under/her/bed</u> | while cleaning her room. |
- filled-gap
underlined*