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At-issue status affects coreference via clause type and position

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The literature on coreference identifies a number of factors that influence the interpretation of ambiguous pronouns, particularly factors related to the syntactic structure or surface packaging of the clause that contains a potential antecedent. For example, syntactic salience and grammatical role (Crawley et al. 1990; Frederiksen 1981) and the position of an antecedent (Gernsbacher et al. 1989) are all shown to influence its accessibility. Here, we investigate how at-issueness influences pronoun interpretation in constructions with more than one clause. At-issueness concerns itself with what the main point of an utterance is (Potts, 2005; Koev, 2018) and consequently, what is felicitously available to be picked up in subsequent discourse (Hunter & Asher, 2016; Jasinskaja, 2016). We focus on structural relations that are posited to contribute to at-issue status: clause type (matrix /subordinate) and clause position (sentence-early/sentence-final). Consider (1) and follow-up sentences (2a-b):

- (1) My sister, who was cooking dinner for her roommate, had just been out for a run.
(2) a. It was a 90 minute interval training.
b. # It was a very elaborate recipe.

When the antecedent of the pronoun *it* appears in a sentence-final matrix clause (2a), interpreting *it* is straightforward. However, when the antecedent is located in a sentence-early subordinate clause (here, an appositive relative clause, ARC), retrieval may be more difficult (2b).

While there is ample evidence that matrix clauses and sentence-final clauses are more likely to be at-issue (Jasinskaja, 2016; Syrett & Koev, 2015), previous experimental research has used offline measures. We have taken an online approach and carried out six self-paced reading experiments where English-speaking participants encountered an ambiguous pronoun *it* with possible antecedents in clauses that vary in type (matrix/subordinate) and position (sentence-early/sentence-final). The subordinating structures consisted of ARCs and adverbial clauses. We measured participants' processing when *it* was disambiguated to either a referent from a matrix clause (3a, 4a) or a subordinate clause (3b, 4b, 4c). We measured reading times at the disambiguation region (*a very expensive bottle* in (3)), assuming participants read faster if disambiguating information is in line with the content that is (more) at-issue:

- (3) **Adverbial clause sample item:** [Context] My mom made us a fancy dinner.
a. After she brought out the caviar, she served us champagne. It was...
b. After she served us champagne, she brought out the caviar. It was...
[Disambiguation] ...a very expensive bottle. [Spillover] Best champagne I ever had.
- (4) **Appositive relative clause sample item:**
a. My brother, who went to a club with his classmate, wore a pinstripe suit. It was...
b. My brother, who wore a pinstripe suit, went to a club with his classmate. It was...
c. My brother went to a club with his classmate, who wore a pinstripe suit. It was...
[Disambiguation] ...a custom tailored three piece suit. [Spillover] It looked very chic.

We designed three different experiments for both adverbial clauses and ARCs. Data was analysed using R (R Core Team 2019). We analysed the difference between residual reading times of the disambiguation region in the different conditions using a linear mixed-effects model (Baayen et al. 2008). For adverbial clauses, we find effects of both clause position (Figure 1) and type (Figure 2). However, for ARCs, only clause position impacted reading times (Figure 3). This difference may reflect ARCs' similarity to matrix clauses — e.g., their ability to express an independent speech act (Potts, 2005). Our findings suggest that the at-issue potential of individual clauses is dependent on their position, but that this is further influenced by their clause type when it concerns adverbial clauses.

Figure 1: adverbial clauses

disambiguation region picks up on sentence-final matrix clause or sentence-early adverbial clause

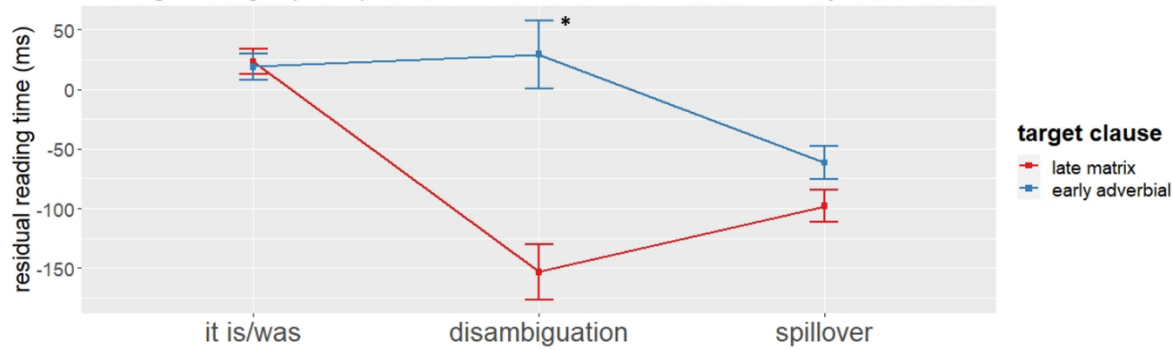


Figure 2: adverbial clauses

disambiguation region picks up on sentence-early matrix clause or sentence-early adverbial clause

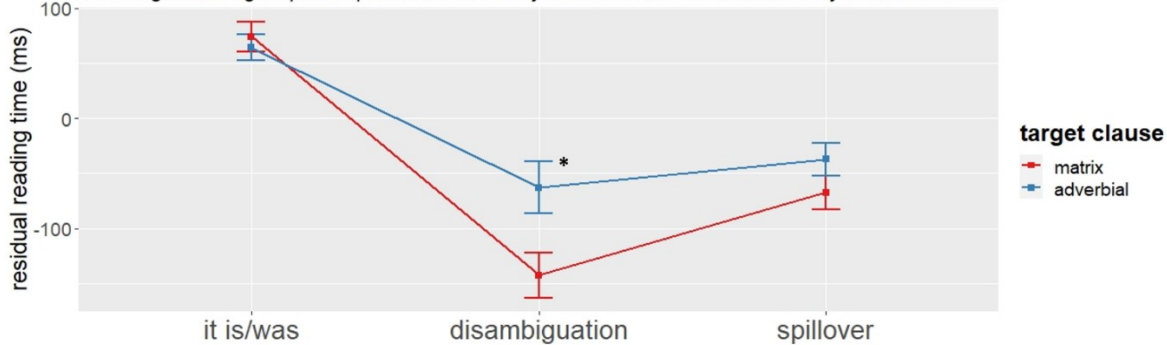
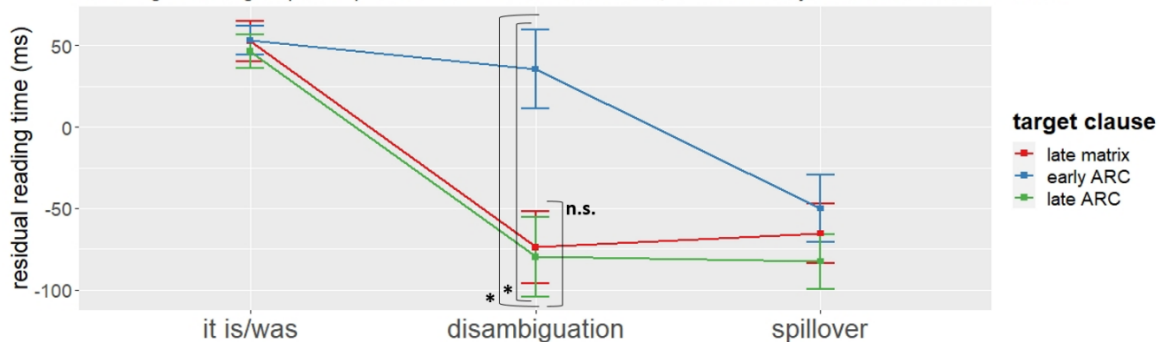


Figure 3: appositive relative clauses

disambiguation region picks up on sentence-final matrix clause, sentence-early ARC or sentence-final ARC



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