When accenting does not introduce alternatives: Discourse coherence and pronoun resolution

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Accented pronouns are usually assumed to receive a different interpretation than unaccented equivalents [1], favoring an antecedent that is less preferred for unaccented pronouns [2]. However, recent work suggests that pronoun resolution is part of a global process of establishing discourse coherence, rather than local interpretation [3]. Indeed, coherence relations modulate the degree to which accented pronouns receive an alternative interpretation [4]. The current study shows that (i) not all accented pronouns are assigned an alternative interpretation, and (ii) the availability of an alterative depends on whether it can be used to establish discourse coherence.

In three experiments, participants listened to discourses containing a linguistically ambiguous object pronoun, and answered a written question probing its referent. The (unaccented or accented) pronoun appeared in the third sentence. Coherence relations were manipulated by changing the first or second sentence. The critical measure was the likelihood of choosing the previous subject as the referent (logit transformed before ANOVA). Experiment 1 crossed ACCENT (unaccented vs. accented) with COHERENCE (Parallel (A) vs. Result (B)). For unaccented pronouns, participants preferred the previous object for parallel relations [cf. 5] and the previous subject for result relations. Crucially, while the preference changes for accented pronouns in the parallel cases (34% vs. 63%, $p<.05$), the pattern for result remained unchanged (87% vs. 83%, $p>.05$). This indicates that alternatives are not introduced by the accented pronoun itself. We propose that in the result case the potential alternative interpretation is not pursued because it would not allow establishing coherence, but both referents allow a coherent discourse in the parallel case.

These results are also consistent with the possibility that an alternative interpretation is not available when the bias to the default referent is strong. Experiment 2 crossed ACCENT with PARALLEL (Strong (C) vs. Weak (A)). However, while we observed a stronger bias for the previous object when the pronoun was unaccented (17% vs. 34%, $p<.05$), the preferred interpretation changed in both cases with accented pronoun (60% and 57%, $p>.05$). This suggests that the strength of the bias in the result case of Experiment 1 is not responsible for the lack of coherent alternatives. We also considered whether the results of Experiment 1 are due to the different syntactic position of the unmarked antecedent, which was object in Parallel and subject in Result. Experiment 3 manipulated the syntactic position of the referent with result relations, crossing ACCENT with RESULT (Subject (B) vs. Object (D)). While the interpretation of unaccented pronouns was to subjects and objects respectively, the antecedent preferences did not change for either with accented pronouns (83% vs. 77% and 31% vs. 40% respectively, p's$<.05$). This demonstrates that result coherence relations maintain world knowledge restrictions independent of whether the bias is towards the previous subject or object.

These experiments show that accent itself does not introduce alternative interpretations for a pronoun. Instead, we conclude that the availability of an alternative interpretation depends on whether it can be used to establish discourse coherence, and accent operates on alternatives only when they are available.

(A) Parallel	(i) The animals were afraid to crash into each other on the dance floor.
(Exp 1,2)	(ii) Elephant stayed away from Bear during the cha-cha.
	(iii) Then, Cat avoided him/HIM during the waltz. (34% vs. 63%; 34% vs. 57%)
(B) Result-S	(i) The animals were afraid to crash into each other on the dance floor.
(Exp1,3)	(ii) Elephant confessed to Bear about being clumsy.
	(iii) Then, Cat avoided him/HIM during the waltz. (87% vs. 83%; 83% vs. 77%)
(C) Parallel	(i) The animals were afraid to crash into their clumsy friend on the dance floor.
(Exp 2)	(ii) Elephant stayed away from Bear during the cha-cha.
	(iii) Then, Cat avoided him/HIM during the waltz. (17% vs. 60%)
(D) Result-O	(i) The animals were afraid to crash into each other on the dance floor.
(Exp 3)	(ii) Elephant asked Bear to stop stepping on his feet.
	(iii) Then, Cat avoided him/HIM during the waltz. (31% vs. 40%)
Q	Who did Cat avoid?

[1] Akmajian, & Jackendoff (1970). *LI*. [2] Kameyama, (1999). *In Focus: Linguistic, Cognitive, and Computational Perspectives* [3] Kehler et al. (2008). *J Semantics* [4] Venditti et al. (2003). CUNY. [5] Chambers & Smyth (1998). *JML*