# Beyond Principle C: (Not)-at-issueness and plausibility influence acceptability of coconstrual

**Vera Gor & Kristen Syrett**
**Rutgers University**

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**Introduction**: Binding Principle C [1] proposes a syntactic restriction on possible coconstrual relations between a pronoun and a name that follows by stipulating that a name should not have a c-commanding co-indexed antecedent. At the same time, previous theoretical and experimental research has demonstrated that in cases where Principle C rules out certain dependent identity relations, acceptable coconstrual may still be achieved by manipulating pragmatic context [2-3], as in (1), conceptual plausibility and pronominal prominence [4], as in (2), and increased processing load associated with comparing alternatives ([5-6], see also [7-8]), as in (3).

(1) Everyone has finally realized that Oscar is incompetent. Even **he**$_i$ has finally realized that **Oscar**$_i$ is incompetent.
(2) Mr. Mathews allowed **her**$_i$ to resubmit **Emily**$_i$'s paper.
(3) More people wanted her$_i$ to go to Aspen than to Mary$_i$'s hometown.
   …than [d many people wanted her$_i$ to go] to **Mary**$_i$**'s** hometown.

We investigate an additional factor that licenses coconstrual in the face of Principle C violations, **(not-)at-issue status**, and its interaction with **plausibility of coconstrual**. Previous experimental research has shown that not-at-issue (NAI) content is processed independently of at-issue (AI) content, and impedes processing less [9-11]. Building on these findings, we present data from an offline forced choice task that demonstrate that participants accept syntactically-disfavored backwards anaphora more often when the anaphoric dependency is part of a sentence-initial temporal clause adjunct (and therefore presupposed (NAI) content), than when it is in the main clause and AI, <u>and</u> when plausibility of coconstrual is high. The results thus illustrate a broader range of possible coconstrual relations beyond those dictated by Principle C, and provide additional evidence for differential treatment of NAI and AI content.

**Experimental Design.** 48 native speakers of English read sentences with a pronoun and a following gender-matching name (e.g. *her* and *Pamela*), and were asked to choose between a same-gender <u>sentence-internal</u> or <u>sentence-external</u> referent for the pronoun, both of which were introduced with equal prominence during training. A sample target stimulus is presented in Fig. 1. Each target sentence featured a pronoun c-commanding the name embedded in a possessive DP, as shown in (4)-(7), in one of two conditions: backwards anaphora embedded as AI content (matrix clause) or NAI content (adjunct temporal clause) (see Table 1 below). The items further varied in terms of conceptual plausibility of coconstrual (determined via plausibility rankings reported in a norming study in [4]).
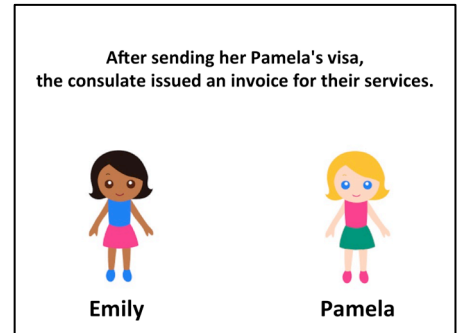
**Figure 1. Sample target stimulus**



After sending her Pamela's visa, the consulate issued an invoice for their services.

Emily          Pamela

**Table 1**. Sample target items with two conditions

| Target Item | Plausibility of Coconstrual | AI Status |
|---|---|---|
| (4) The consulate sent **her**$_{i/j}$ **Pamela**$_i$'s visa. | | at-issue (AI) |
| (5) After sending **her**$_{i/j}$ **Pamela**$_i$'s visa, the consulate issued an invoice for their services. | high | not-at-issue (NAI) |
| (6) Richard gave **her**$_{i/j}$ **Pamela**$_i$'s contact information. | | at-issue (AI) |
| (7) After giving **her**$_{i/j}$ **Pamela**$_i$'s contact information, Richard sent an e-mail to the partners. | low | not-at-issue (NAI) |

**Results** are presented in Table 2**.** As expected by [4], target items with low-ranked potential coconstrual yielded low percentage of sentence-internal referent chosen (0% in AI condition, and 7.79% in NAI condition). On the contrary, backwards anaphora with highly-plausible coconstrual yielded percentages

that were higher than predicted by the c-command relations. The effect was most pronounced in cases where syntactically disfavored backwards anaphora was introduced in a NAI clause (52.61% acceptability in NAI vs. 38.21% AI). This overall trend of increased acceptability of coconstrual in NAI vs. AI content was reflected in all but one of the individual items, as the graph in Fig. 2 below shows. Binomial logistic regression models revealed significant effects of plausibility and AI status (all $p < 0.01$).

**Table 2. % choice of intra-sentential antecedent for control and target sentences**

| | Controls (forwards anaphora) | Target Sentences (backwards anaphora, Principle C effects) | |
|---|---|---|---|
| | | At-Issue | Not-at-issue |
| Implausible coconstrual | 11.66% | 0% | 7.79% |
| Plausible coconstrual | 98.41% | 38.21% | **52.61%** |

**Discussion.** Our findings make two main contributions. First, we demonstrate that backwards anaphora disfavored by syntactic binding constraints can still be deemed acceptable when the conceptual plausibility of coconstrual is high <u>and</u> when the dependency is encoded in presupposed NAI content.

Second, we provide further evidence in line with [10-11] for the differential treatment of NAI vs. AI content, showing that the contribution of NAI information to the interpretation of an entire utterance and to acceptability judgments is distinct from that of AI information. Here, syntactically disfavored coconstrual that is a part of the syntactic form of NAI content exerts less influence on the overall acceptability of an entire sentence than an identically syntactically problematic coconstrual relation introduced as a part of AI proposition. Our results thus lead to the overall conclusion that syntactic constraints are not deterministic in restricting coconstrual relations, but rather interact with non-syntactic factors, including processing, conceptual plausibility in a discourse context, and (not)-at-issue status of the proposition. We argue that pronominal reference resolution is a complex process that requires the processor to evaluate potentially contradictory input, eventually arriving at an interpretation by weighing grammatical structural constraints against other linguistic and extralinguistic factors.

**Figure 2. % choice intra-sentential antecedent given (N)AI status**



input, eventually arriving at an interpretation by weighing grammatical structural constraints against other linguistic and extralinguistic factors.

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