

Acceptable but Ungrammatical in Comparison: Overriding Principle C Violations in Comparatives
Vera Gor, Department of Linguistics, Rutgers University

INTRODUCTION. We report the findings of two complementary experiments illustrating so-called ‘acceptable ungrammaticality’ in English comparatives with a Principle C violation. While object comparatives pattern largely as predicted, given the c-command relation between a pronoun in the matrix clause and R-expression in the standard (especially when prosodic prominence favors disjoint reference), subject comparatives with a Principle C violation often (and unexpectedly) license co-construal – a finding in line with independently-observed grammatical illusions in subject comparatives elsewhere. We argue that such judgments of apparent grammaticality arise because of a combination of factors: the upfront processing load caused by sentence-initial comparative, the conceptually plausible comparison, and the fact that attention is drawn away from syntactic form via introduction of situational alternatives.

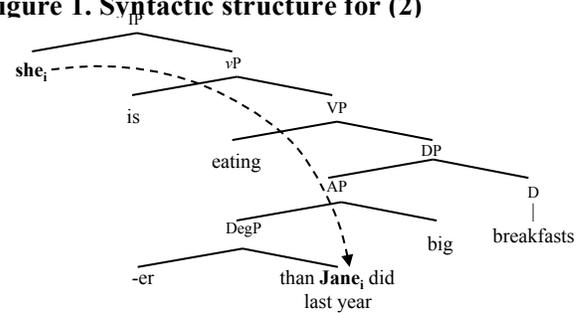
BACKGROUND. Following Lechner (2001, 2004) and Bhatt and Takahashi (2011), a.o., we assume that English phrasal comparatives are underlyingly clausal and require an obligatory syntactic reduction operation in the standard *than*-clause, as in (1).

(1) Mary is taller than Jane [~~is d-tall~~].

P, Q are degree predicates (e.g., *tall*) $-er(P)(Q) \leftrightarrow \exists d [Q(d) \wedge \neg P(d)]$

The degree head (*-er*) and the standard clause (*than...*) form a degree quantifier that is a syntactic specifier of a gradable predicate (e.g., *tall*) (Chomsky 1965; Selkirk 1970; Bresnan 1973, 1975; Kennedy 1997; Heim 2000; Hackl 2000). Accordingly, the standard clause is c-commanded by the linguistic material that c-commands the degree head. This analysis makes specific predictions about binding properties, and therefore grammaticality, as illustrated for the object comparative in (2). See Figure 1.

(2) She_i is eating bigger breakfasts than Jane*_{i/j} did last year.



The situation is more complex with pronominals in the elided material of the standard clause. Assuming that ellipsis requires deletion under identity (Bresnan 1973), (3) is ungrammatical, since *him* c-commands *Peter* in the elided material, just as *him* c-commands the associate *Jo* in the matrix clause. By contrast, (4) is grammatical, since the sequence is reversed (Bhatt and Takahashi 2011).

(3) *More people expect **him**_i to call **Jo** than **Peter**_i's sister.

= *More people expect **him**_i to call **Jo** [_{CP} than ~~d-many people expect~~ [_{IP} **him**_i [_{I'} to call **Peter**_i's sister]]]

(4) More people expect **Jo** to call **him**_i than **Peter**_i's sister.

= More people expect **Jo** to call **him**_i [_{CP} than ~~d-many people expect~~ [_{IP} **Peter**_i's sister [_{I'} to call **him**_i]]]

Despite the fact that c-command and binding principles conspire to make clear predictions about such comparatives, experimental data reported for adult controls in an act-out acquisition study by Gor & Syrett (2015) and casually-elicited native speaker intuitions for such (admittedly complex) examples have not yielded crisp judgments of (un)grammaticality. We therefore carried out two controlled experiments to collect systematic judgments on such examples in order to test for the degree of influence of binding relations in assessments of acceptability of comparative constructions.

EXPERIMENTS. We ran two experiments including both object and subject comparatives as test items.

Experiment 1 was a Forced-Choice task designed as a first-pass assessment to measure preference. Stimuli were delivered via slides. Slide 1 presented a scenario involving two female characters (*Mary* and *Jane*). Slide 2 presented (in visual and auditory form) a target sentence with a pronoun, potentially referring to either female antecedent. Participants (n=45, native speakers of English) were asked to listen to and read the sentence and decide which character it was about. Stimuli included 6 object and 6 subject comparatives (modeled after key examples in Bhatt and Takahashi (2011)), and 2 ACD controls.

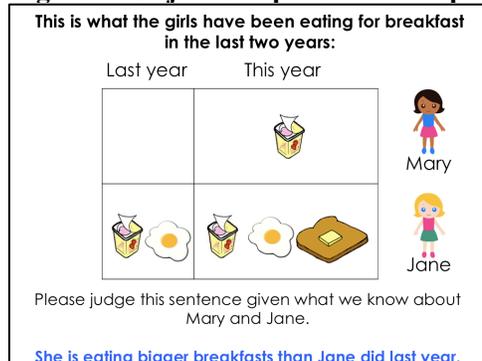
For all object comparatives, the pronoun in the matrix clause c-commanded the DP in the standard, as in (2) and (5), yielding a violation of Principle C, and thereby a prediction of ungrammaticality.

- (5) The manager offered her_i a greater discount than he offered Jane*_{i/j} last year.
 Subject sentences contrasted in terms of the order and c-command between the pronoun and a DP in the elided standard, and therefore in predictions of grammaticality, as shown for sample test items in (6)-(8).
- (6) ECM (proN >>R-exp): *More people wanted her_i to go to Aspen than to Mary*_{i/j}'s hometown.
 ... than ~~d-many people wanted~~ [_{IP} her_i [_{I'} to go to Mary_i's hometown]]
- (7) ECM (R-exp >> proN): More classmates wanted Alec to date her_i than Jane_{i/j}'s next door neighbor.
 ... than ~~d-many classmates wanted~~ [_{IP} Jane_i's next door neighbor [_{I'} to date her_i]]
- (8) PP adj. to VP: More people talked to her_i about politics than about Mary_{i/j}'s new haircut.
 ...than [~~d-many people~~ [[_{VP} talked [_{PP} to her_i]] [_{PP} about Mary_i's new haircut]]]

Participants were randomly assigned to one of two conditions, depending on whether the matrix pronoun received prosodic prominence or not.

Experiment 2 assessed Truth Value judgment. In each trial, the slide presented the relevant quantitative information about the female characters, as in Figure 2 for (2). Participants (n=45, native speakers, separate pool) were asked to review the chart, then click to reveal the target sentence, accompanied by an auditory version. Stimuli included 6 comparatives without pronominal reference, 4 ACD controls with licit and illicit co-construal, 12 object comparatives, and 6 subject comparatives, presented in a pseudo-randomized order. Participants were asked to judge the truth of the sentence and provide justification for their answer. Context favored co-construal, while Principle C may have barred it. As prosody was seen to matter only for object, and not subject, comparatives in Exp. 1, it was not manipulated for subject comparatives in Exp. 2.

Figure 2. Object comparative in Exp. 2



RESULTS and DISCUSSION. Results for both experiments are presented in Table 1 as responses indicating co-construal (dependent measures: Exp. 1 preference of character, Exp. 2 yes/no response).

Table 1. Responses indicating co-construal of pronoun and DP in target sentences, given structure

		Object comparatives (subj proN, obj proN)	Subject comparatives (ECM, 3-place predicate, PP adj. to VP)	
	prosody	Principle C violation	Princ. C viol	Princ. C ok
Exp 1	none	6.7%, 20.0%	11.6%, 31.8%, n/a	57.7%, 23.1%, 46.2%
	prominence	6.7%, 0.0%	15.8%, 26.3%, n/a	47.4%, 26.3%, 42.1%
Exp 2	none	2.2%, 41.9% [‡]	40.0%, 58.1%, n/a	55.8%, 43.6%, 47.2%
	prominence	2.2%, 10.3%	---	---

Responses to object comparatives in Exp. 1 appear to be linked directly to Principle C: participants systematically disallowed co-construal when the pronoun c-commanded the DP (and more so with a prosodically prominent pronoun) However, responses for subject comparatives indicated that while co-construal was dispreferred (Exp. 1), it was judged acceptable (Exp. 2) ([‡]a pattern observed in one object comparative) – and further, that this pattern varied depending on the syntactic structure.

As judgments of sentences with Principle C violations are typically robust (Kazanina et al., 2007), we argue that the explanation for this pattern does not lie in participants *ignoring* c-command relations, but mistakenly perceiving these constructions as grammatical. Just as Frazier (2010) and Grant et al. (2012) appeal to non-actuality implicatures induced by the introduction of alternatives to account for acceptable voice-mismatch in ellipsis, we argue for a similar position with subject comparatives, which also involve ellipsis and the comparison of alternative situations. Indeed, subject comparatives (which front-load the processing of the comparative structure) have been independently shown to induce grammatical illusions (Townsend & Bever 2001; Wellwood et al. 2009, Phillips et al. 2011). The current research thus presents a stark contrast previously unobserved: data from object comparatives generally supporting theoretical claims about c-command predicting grammaticality, and novel empirical data from subject comparatives extending the range of phenomena judged grammatical while violating structural constraints.