

A Note on Superlatives in Intensional Contexts

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This paper accounts for Heycock's (2004) observation that not all intensional predicates support an ambiguity of superlative relative clauses (between a 'high' and a 'low' reading; Bhatt 2002), by suggesting that "head"-reconstruction (which usually results in a 'low' reading) is disallowed whenever the 'low' reading entails the 'high' reading.

The problem. Bhatt (2002) observes that superlative relative clauses such as that in (1) have a 'high' and a 'low' reading. The 'high' reading of (1) reflects our opinion about the length of Anna Karenina; the 'low' reading reflects John's opinion about the length of Anna Karenina.

- (1) The longest book John said Tolstoy had written was Anna Karenina.
Scenario A ('high' reading intuitively true, 'low' reading intuitively false). John says: "Tolstoy wrote Huck Finn, Anna Karenina and Tom Sawyer; Tom Sawyer is the longest of these." AK is actually the longest among those books.
Scenario B ('low' reading intuitively true, 'high' reading intuitively false). John says: "Anna Karenina is the longest book Tolstoy wrote. He also wrote War and Peace and some other shorter books." WP is actually longer than AK.

Bhatt attributes this ambiguity to optional reconstruction of the "head": when *longest book* is interpreted inside the complement of *say*, we get a 'low' reading. In support of his analysis, Bhatt points out that NPI-placement may disambiguate (1). Thus, (2a) has only a 'high' reading, and (2b) has only a 'low' reading. Bhatt claims that this disambiguation is the result of "head"-reconstruction, coupled with the assumption that NPI licensing (by *-est*) is local.

- (2) a. The longest book John ever said Tolstoy had written was War and Peace.
b. The longest book John said Tolstoy had ever written as War and Peace.

But as example (3) shows, not all verbs support a 'low' reading (see Heycock 2004).

- (3) The longest book John knew Tolstoy had written was War and Peace.
Predicted 'high' reading. WP is the unique individual which is longest among {y:y is a book actually written by Tolstoy, and John knows that Tolstoy wrote y}.
Predicted 'low' reading. WP is the unique x such that x is actually the longest book written by Tolstoy, and John knows that x is the longest book written by Tolstoy.
Scenario C (*sentence unacceptable; should be acceptable, at least on its 'low' reading, because WP is indeed the longest of Tolstoy's books*). In his youth, John read all of Tolstoy's books. Recently, he admitted to himself: "The longest book Tolstoy wrote is War and Peace. But I can't remember what else he wrote."

Question: Why is reconstruction possible when the main verb is *say*, but not when it is *know*?

Our proposal: "Head"-reconstruction occurs only when the resulting ('low') reading is independent of the reading obtained without reconstruction ('high' reading). Because *know* presupposes the truth of its complement, the predicted 'low' reading of (3) entails its predicted 'high' reading. Hence, reconstruction is blocked. But why is (3) also unacceptable in Scenario C on its 'high' reading? We suggest that this is due to the fact that only one book is considered, and the superlative operator comes with an implicature that the comparison set contains more than one member. If John could name other (shorter) books written by Tolstoy, (3) would become acceptable in such a scenario (on its 'high' reading). Now consider (1) again. "Head"-reconstruction is allowed here because the predicted 'high' and 'low' readings are completely independent of each other.

Another verb that doesn't support a 'low' reading is *need*. Here too, "head"-reconstruction results in a reading that entails the 'high' reading, as shown below.

- (4) The longest book Mary needs to read is Anna Karenina.

Predicted ‘high’ reading. AK is the unique individual which is longest among $\{y:y \text{ is a book in the actual world, and Mary reads } y \text{ in all the relevant worlds where the requirements imposed on Mary in the actual world are fulfilled}\}$.

Predicted ‘low’ reading. AK is the x s.t. in all relevant worlds where the requirements imposed on Mary in the actual world are fulfilled, x is the longest book she reads.

Scenario D (*sentence unacceptable; should be acceptable, at least on its ‘low’ reading*).

The requirements for passing Comparative Literature are: reading AK and no book that is longer than or as long as AK. Mary will be kicked out if she fails the course.

The predicted ‘low’ reading entails the ‘high’ reading, provided we assume that the modal base consists of worlds where Mary fulfills the requirements imposed on her in the actual world, but otherwise these worlds are just like the actual world. Crucially, the same entities that are books in the actual world are books in those worlds, and the books have the same lengths as they do in the actual world. (4) is unacceptable on its ‘high’ reading in Scenario D because the comparison set is a singleton. (4) becomes acceptable if we add to the requirements at least one more book, shorter than AK. This pattern is attested with all verbs that do not support a ‘low’ reading.

Another verb that supports a ‘low’ reading is *want*. We argue that the modal base of *want* is very different from that of *need*, and consists of worlds that are radically different from the actual world (and consequently, the ‘high’ and ‘low’ readings are completely independent).

Heycock’s generalization. According to Heycock, with the exception of *say*, a verb allows a ‘low’ reading if and only if it is Neg-raising. We observe that Heycock’s generalization is empirically inadequate, since *say* is not the only exception to it: *agree* and *certain* support ‘low’ readings, as (5)-(6) show, but they are not Neg-raising verbs.

(5) The longest book John and Mary agree Tolstoy (ever) wrote is Anna Karenina.

Scenario E (*sentence true on ‘low’ reading*). John and Mary think, independently of each other: “The longest book Tolstoy wrote is AK. He also wrote WP and shorter books.”

(6) The longest book Bill is certain Tolstoy (ever) wrote is Anna Karenina.

Scenario F (*sentence true on ‘low’ reading*). Bill: “I am sure that AK is the longest book Tolstoy wrote. I’m also sure he wrote WP and shorter books.”

Thus, we agree with Heycock that Neg-raising verbs support a ‘low’ reading (and we show that in principle, with those verbs the ‘low’ and ‘high’ readings are completely independent), but we disagree with her claim that non-Neg-raising verbs cannot support a ‘low’ reading.

NPI-licensing. As is well known, NPIs can be licensed across *say* (e.g., *John didn’t say that Bill had ever been to Paris*). So Bhatt’s explanation for the disambiguation effect of *ever* in (2) is not complete (as he admits). We suggest that (2) illustrates the “widening” and “strengthening” effect (Kadmon and Landman 1993) which NPIs sometimes exhibit. *Ever* directly widens the domain of times, and indirectly – the comparison set of *-est* (C in (7)-(8)). *Ever* is acceptable when the resulting expression is stronger, compared to the expression obtained without *ever*.

(7) ‘Low’ reading: WP is the unique x such that John said: “the longest member of C is x ”.

(2b): $C = \{x:x \text{ is a book and there is a time } t \text{ in LIFE(Tolstoy) such that Tolstoy wrote } x \text{ at } t\}$; yields a strengthening effect, NPI OK.

(2a), $C = \{x:x \text{ is a book that Tolstoy wrote}\}$; no strengthening, NPI not OK.

(8) ‘High’ reading: WP is the longest member of C.

(2a): $C = \{x:x \text{ is a book and there is a time } t \text{ in LIFE(John) such that John said at } t \text{ about } x \text{ that Tolstoy wrote it}\}$; yields a strengthening effect, NPI OK.

(2b): $C = \{x:x \text{ is a book that John said T. wrote}\}$; no strengthening, NPI not OK.

Conclusion. We defend Bhatt’s analysis of superlative relative clauses by showing that licensing/blocking of “head”-reconstruction is predictable from the semantics of the main verb.