It-clefts are IT (Inquiry Terminating) Constructions

We analyze the semantics of a range of constructions which we refer to as Inquiry Terminating (IT) constructions. In English, these include it-clefts and exclusives such as *only, just* and *merely*. Despite their differences, IT constructions have much in common. We claim they are always focus-sensitive, have closely related semantics, and have a uniform discourse function: they always mark utterances that give a complete answer to (what the speaker takes to be) the Current Question (CQ). We give a new account of the meaning of clefts that captures both their similarities and their differences to other IT constructions.

Explananda Surface similarities between it-clefts and exclusive sentences are easy to see. Both “It is X that P” and “Only X P” require an intonational focus somewhere in X, and both are used when X P and nobody else P. But there are significant differences as well. Some are shown in the following minimal pairs, which show changes in acceptability when an exclusive sentence is replaced by a cleft.

(1) a. Not only did LARRY laugh, but MARY laughed too.
    b. #It wasn’t LARRY who laughed, but MARY laughed too.
(2) a. Mary ate pizza and she only ate pizza.
    b. #Mary ate pizza and it was pizza she ate. (cf. Horn 1981)
(3) Alice: Only Larry laughed.
    #Bob: Yes, but Mary laughed too.
(4) Alice: It was Larry who laughed.
    Bob: Yes, but Mary laughed too.

On our account, the similarities are not accidental, but are due to the uniform semantics outlined below. The differences are due to differences in *at isueness* between their semantic components.

The min-max approach to IT-constructions We adopt and extend the approach of Coppock and Beaver (2011), on which the meanings of exclusives are specified in terms of two focus-sensitive operators, $\min_S$ and $\max_S$. ($CQ_S$ indicates the Current Question, modeled per Roberts 1996 as a set of propositions; the relations ($\geq_S$) and ($>_S$) indicate a salient partial ordering of the alternatives in $CQ_S$. Throughout, a subscripted $S$ indexes the current context.)

(5) a. $\min_S(p) = \lambda w. \exists p' \in CQ_S \ [p'(w) \land (p' \geq_S p)]$
    b. $\max_S(p) = \lambda w. \forall p' \in CQ_S \ [(p' >_S p) \rightarrow \neg p'(w)]$

We extend this account by showing that the meanings of all IT-constructions — clefts as well as exclusives — can be captured in these terms, as exemplified in (6a–b).

(6) a. $\text{ONLY}_S(p) = \lambda w : \min_S(p)(w) \cdot \max_S(p)(w)$
    b. $\text{CLEFT}_S(p) = \lambda w : \max_S(p)(w) \cdot \min_S(p)(w)$

One difference between the two operators is apparent: $\text{ONLY}_S(p)$ presupposes what $\text{CLEFT}_S(p)$ asserts, and vice versa. There is one further important difference. ‘Only’ can make salient several different orderings of alternatives (including e.g. ordering in terms of rank or importance); a cleft makes salient one particular ordering, consisting of a boolean lattice among alternatives.

Advantages of this approach There are several advantages to our account of clefts. First, it increases the generality of the min-max approach, and highlights a previously unremarked similarity among what we are calling IT-constructions. But also, it solves several empirical problems with earlier accounts.

The first problem concerns projection. Much evidence suggests that the exhaustivity of a cleft
is presupposed (Halvorson 1978, Delin & Oberlander 1995, Percus 1997). The problem is that it appears not to project — for instance, (7) does not presuppose (7a). Büring (ms.) suggests a solution: a cleverly designed exhaustive presupposition, such as his proposed conditional presupposition (7b), can be allowed to project without running afoul of the data. Our solution to the problem follows Büring but, unlike Büring’s approach, ours also avoids the other problems described below.

(7) It was not Larry who laughed.
   a. Nobody other than Larry laughed.  [Not presupposed]
   b. If Larry laughed, then nobody else did.  [Presupposed on Büring’s proposal]

The second problem concerns the focus sensitivity of clefts — that is, the fact that intonation rather than syntax determines what part of a cleft’s meaning is exhaustified. On most accounts, the entire pivot is exhaustified; these accounts give incorrect predictions on examples like (8), where the focus and pivot are not coextensive.

(8) It’s John’s eldest daughter who was at the party, along with 200 other people.

We show that presupposing \( \text{max}_S(p) \) has all the advantages of the conditional presupposition, with the further advantage of capturing focus sensitivity through its dependence on the Current Question. We prove that when pivot and focus are coextensive, the two presuppositions are equivalent; but when pivot and focus are not coextensive, they differ in their predictions — and \( \text{max}_S(p) \) leads to the correct ones.

The role which we give to focus also lets us solve a third problem, concerning the existential presupposition. Büring has claimed that clefts do not consistently trigger an existential presupposition, based on sentences like Bob’s reply in (9a) — which, as he points out, does not presuppose (9b). But in other examples of clefts, a not-at-issue existential inference of some sort clearly does arise.

(9) a. Alice: I know John and Mary spoke on the phone. But who called whom?
    Bob: It was John that called Mary.
   b. → Someone called Mary.
   c.  → Someone called someone.

We argue that clefts do indeed trigger an existential inference, but that it comes about indirectly and is not always derivable from existential quantification over the coda. The focus structure of the cleft constrains the CQ; furthermore, the rules of discourse require a speaker to reject a CQ that he knows to be trivial; thus, any move that does not reject the CQ will implicate that (as far as the speaker knows) a nontrivial answer to the CQ exists. In the case of (9), the existential inference predicted — once we take prosodic focus into account — is not (9a) but (9b). This prediction is consistent with our intuitions.

References