

That’s not quite it:
An experimental investigation of (non-)exhaustivity in *it*-clefts

Introduction We present an empirical study directly comparing the exhaustivity inference in *it*-clefts to exhaustivity inferences in definite pseudoclefts, exclusives, and plain focus constructions in German. Our study uses a novel mouse-driven picture-verification task in which the incremental updating of the context allows one to determine at which point participants take exhaustivity into consideration. This method allows us to assess the parallelism, robustness, and systematicity of exhaustivity in the four sentence types. Our results are compatible with a parallel analysis of clefts and pseudoclefts (see, e.g., Percus 1997, Büring & Križ 2013), albeit one in which exhaustivity is a non-conventionally coded pragmatic inference in both constructions, contra those proposals.

Background Although *it*-CLEFT (1a) exhaustivity is argued to be not-at-issue (Destruel et al. 2015; cf. Atlas & Levinson 1981), the literature is divided on whether it is semantic (conventionally coded in the cleft structure; Percus 1997, Velleman et al. 2012, Büring & Križ 2013) or pragmatic (an implicature; Horn 1981, 2014, DeVeugh-Geiss et al. 2015). By comparison, the uniqueness inference of definite descriptions has been claimed to be not-at-issue and semantic (i.e., presuppositional; but see Heim 1982, Szabó 2000, Ludlow & Segal 2004, among others, for pragmatic approaches to uniqueness)—note that in our experiment we used DEFINITE PSEUDOCLEFTS (1b) containing the German compound definite *derjenige*, comprised of the definite article *der-* plus the anaphoric expression *-jenige*, meaning ‘that one (over there)’. Exhaustivity in FOCUS (1c), however, is typically analyzed as not-at-issue and pragmatic (i.e., a conversational implicature). By contrast, EXCLUSIVES (1d) assert exhaustivity, making it at-issue and semantic (Beaver & Clark 2008). Each of these sentence types provides a relevant point of comparison for investigating *it*-cleft exhaustivity. (All examples translated from German.)

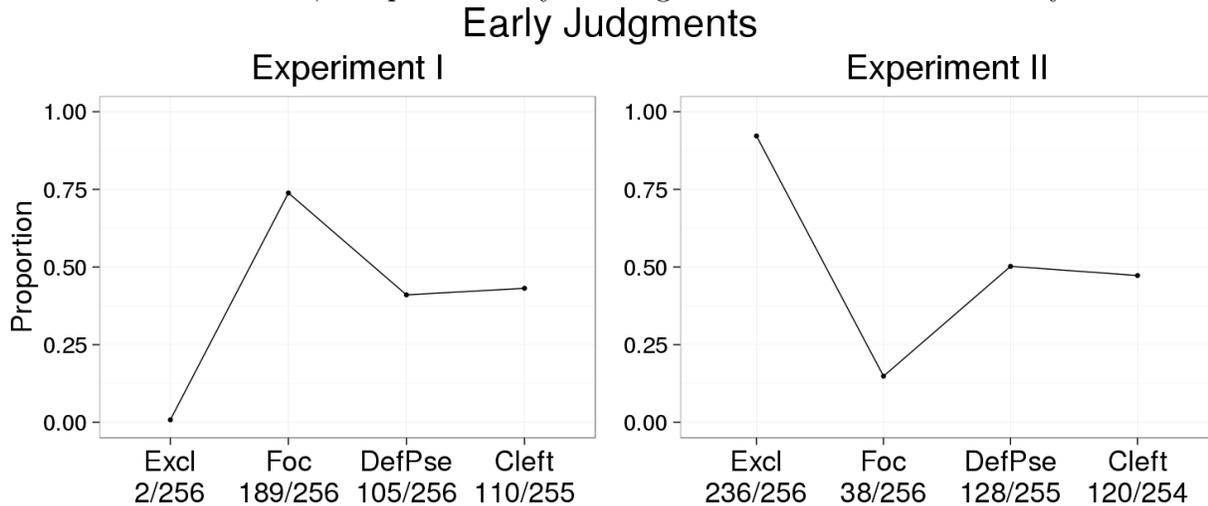
- (1) a. **CLEFT** It is Max who mixed a cocktail. c. **FOCUS MAX** mixed a cocktail.
 b. **DEF.** The one who mixed a cocktail is Max. d. **EXCL.** Only Max mixed a cocktail.

Methods & Design In two joint experiments, participants provided a truth-value judgment with respect to one of the above sentence types (CLEFTS, DEFINITE PSEUDOCLEFTS, FOCUS, and EXCLUSIVES) relative to a context of four roommates. Participants heard one of the sentence types in (1), after which they uncovered boxes with their mouse. Each box contained one roommate making a statement. As the boxes were revealed, participants were asked either (i) to judge the target sentence as true or false according to the information in the box or (ii) to continue uncovering the remaining boxes. An example trial is provided for Experiment I below; auditory stimulus was one of the sentences in (1).

BOX 1: Tom ‘*I fetched a straw.*’ BOX 3: Jens ‘*I opened a bottle.*’
BOX 2: **Max** ‘*I mixed a cocktail.*’ BOX 4: Ben ‘*I provided a schnaps.*’

The second box was critical: Experiment I verified the canonical meaning or prejacent of the target sentences in Box 2, as shown in the example trial above. If exhaustivity is part of the truth-conditions, we predict that after revealing the second box participants must continue uncovering Box 3 and Box 4 in order to check that exhaustivity holds. Experiment II falsified exhaustivity in Box 2. We predict that if exhaustivity is semantic (asserted or presupposed), falsifying exhaustivity should be enough to judge the target sentence as false; by contrast, if it is pragmatic the exhaustivity implicature is defeasible and thus participants can continue to uncover Box 3 and Box 4 in order to check the as-yet-unverified prejacent.

Results In Exp. I (left graph), only exclusives required further uncovering of Boxes 3 and 4, as predicted, seen in the very low number of early judgments made upon revealing Box 2 (1%; all judgments were *true*). Also as predicted, focus elicited *true* early judgments at Box 2 a majority of the time (74%), while definite pseudoclefts and clefts behaved on a par in eliciting *true* early judgments close to half the time (41% and 43%, respectively). In Exp. II (right graph), only exclusives elicited *false* early judgments in nearly all trials (92%), in contrast to the focus condition in which participants continued uncovering in most trials (15% judgments), both as predicted. Again definite pseudoclefts and clefts patterned together, eliciting further uncovering about half the time (50% and 47% judgments, respectively; all early judgments were *false*). In a post hoc analysis, moreover, clefts and definite pseudoclefts patterned with focus for about half the participants in both experiments, and with exclusives for about the other half, not predicted by existing theories of cleft exhaustivity.



Conclusion Although compatible with a parallel approach to clefts and definite pseudoclefts, these results are not in line with a presuppositional analysis. The exhaustivity inference in clefts and pseudoclefts is more pronounced than with plain focus, while being less systematic and less robust than with exclusive particles. In Exp. II, we assume that if exhaustivity is presuppositional it must be contextually entailed, and once participants encounter an exhaustivity violation they will mostly judge the sentence as false; see studies such as Romoli & Schwarz (2015) and Szendrői & Abrusán (2013), in which presupposition failures were largely rejected or judged false. We claim that both clefts and definite pseudoclefts encode an anaphoric existence presupposition from which exhaustivity is derived pragmatically. By choosing a singular-marked cleft the speaker implicates uniqueness. This is further supported by a systematic contrast in the marking of semantic singular and plural in German. We deviate from existing theories in assuming that pseudoclefts are not run of the mill definite descriptions, and derive exhaustivity independently of the uniqueness presupposition triggered by the definite article. Crucially, our pragmatic account does not rely on the exclusion of focus alternatives, in contrast to previous pragmatic accounts of cleft exhaustivity.

Selected References • Büring, D. & Križ, M. (2013). *It's that, and that's it! Exhaustivity and homogeneity presupposition in clefts (and definites)*. Semantics & Pragmatics. • Heim, I. (1982). *The Semantics of Definite and Indefinite Noun Phrases*. PhD Thesis. • Ludlow, P. & Segal G. (2004). "On a Unitary Semantical Analysis for Definite and Indefinite Descriptions". OUP. • Percus, O. (1997). *Prying open the cleft*. NELS.