Returning to Non-entailed Presuppositions Again

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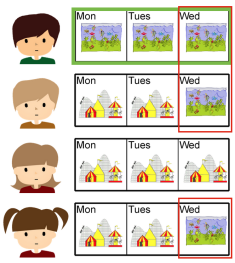
Introduction. A key question in presupposition theory concerns the relationship between presupposed and entailed content. Recent work by Klinedinst (2012) and Sudo (2012) proposes a new perspective on differences between classes of presupposition triggers, with an empirical split roughly mirroring Abusch's hard vs. soft distinction and related notions. They propose that triggers differ in whether or not their presuppositional content simultaneously affect the calculation of the presuppositions and of the entailments of the sentences in which they appear. Sudo shows that conventionally entailed contents can be singled out from exclusively presupposed contents in that only the former scope under non-monotone quantifiers such as *exactly one* (also see Tonhauser et al. (2013)'s notion of obligatory local effects). Recent experimental results by Zehr & Schwarz (2015) are in line with this distinction: the content presupposed by *stop* scopes under *exactly one*, suggesting that it also affects entailment. Crucially, this is not the case for *also*: the presupposed content doesn't scope under the quantifier. Various authors (Zeevat, 1992, Glanzberg, 2005, Domaneschi et al. 2013) advance different proposals sharing a line of thinking, which suggest an *explanation* for this split in triggers' categories. While the verb *stop* cannot be left aside when composing the meaning of the sentence – as it would result in something uninterpretable – leaving aside the additive particle *also* would not affect the good running of the interpretative process. As a result, since *also* exclusively contributes presupposed information, ignoring it results in a viable interpretation where the presupposed content plays no role under the scope of *exactly one*. This strategy is not viable for *stop*, and its content winds up contributing under the scope of the quantifier.

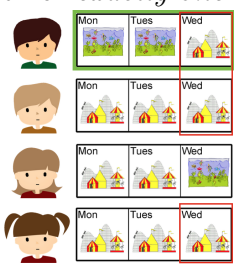
We test this removability/independence (RI) hypothesis experimentally by comparing *return* to *(go) again* (as well as *go back*). These are intuitively equivalent in terms of their overall meaning, but differ precisely with regards to the crucial hypothesized property: ignoring *return* is fatal to the interpretation process, but ignoring *again* or *back* leaves us with perfectly interpretable sentences. In addition, we include *stop* and *also* for additional points of reference and to ensure comparability with Zehr & Schwarz's results. Our results provide clear evidence against the RI hypothesis, as *return* patterns with *again* (as well as *also*), and not with *stop*. At the same time, our data provide further support for Sudo's entailment-contrast proposal.

Design. We employed a picture selection task with a covered box (Huang et al. 2013) using sentences with non-monotonic quantifiers, parallel to Zehr & Schwarz (2015). The design utilized recordings of minimally varied sentences with identical pictures to test whether or not the presupposed information is considered for evaluation of the quantifier *exactly one*.

Exactly one kid { returned / went back / went / also went / stopped going } to the Jackson aquarium {again} on Wednesday.



also/again/back/return

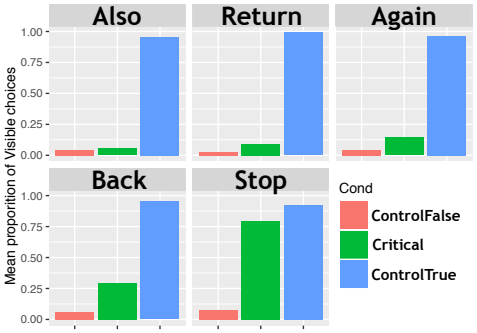


stop

Zehr & Schwarz's (2015) results for *also* (with stress on *Wednesday*) and *stop* provide baseline and ceiling for the role of presupposed content respectively: their subjects generally did not consider the presupposed information of *also* (of going to the aquarium before Wednesday – highlighted in green here) in assessing the *exactly one* claim for *also*, instead using only the entailed information (highlighted in red here), and thus rejected the visible picture. In contrast, the presupposed information of *stop* (highlighted in green here) generally WAS considered for counting-purposes and the picture accepted. Based on the RI hypothesis, we expect *again* and *back* to pattern with *also*, and *return* with *stop*. Though *return* conveys the same overall information as the other two, it cannot be felicitously removed (nor can its prefix *re-*) while it contributes, independently from the presupposition, to the entailed content, unlike in the case of *again* and *back*.

Procedure. 150 participants were recruited via Prolific.ac to participate in a 15 minute study for £1.30. Stimuli were presented via Ibex. Participants saw target pictures and 'covered box' variants where relevant details were occluded, and had to decide which of the two matched the sentence they heard. Trigger-type was a between-participant factor, so that 30 participants saw 12 items per condition for each trigger.

Results and Discussion. The predictions of the RI hypothesis were not borne out. Target acceptance rates for *return*, *back* and *again* were overall much closer to *also* than to *stop*. This suggests that the presuppositions of these triggers generally do not figure in the evaluation of the *exactly one* claim. Interestingly, mixed-effect regression models show that *back*, rather than *return*, stands out as factoring the presupposition into the evaluation of the quantifier more often (though still far less so than *stop*). A tentative explanation relates this result to effects of prosody on at-issueness, along the lines of an influential proposal by Simons, Tonhauser & colleagues, where material becomes presupposed precisely if it is not at-issue in terms of addressing the QUD. Conversely, stressing a presuppositional expression increases the chances of it becoming at-issue (also see Tonhauser et al. (2016)). Post-hoc analyses of mean F0-values in our recordings indeed reveal a higher mean for *back* compared to *again*, but crucially the prosody-based explanation doesn't extend to *return*: it exhibited *higher* mean F0-measurements, but *lower* target-acceptance rates, than *back* and even *stop*.



Ultimately, our results are in line with an entailment contrast *à la Sudo/Klinedinst*, but they leave us without an explanation for why triggers belong to the class they belong. We see two potential lines of explanation worth of investigation. The first (suggested by a reviewer) appeals to non-presuppositional alternatives: while *go* naturally appears as a non-presuppositional alternative to *return*, *go again* and *go back*, it is harder to find one for *stop*. The second draws on Abrusán (2016)'s proposal. It hypothesizes that *stop* introduces a timespan of *going* events as inherently connected to a timepoint of reaching a state of not going, making it impossible for our participants to restrict their attention to that timepoint; the other triggers by contrast introduce multiple *going* events mapped to *isolable* timepoints.

Selected References. Abrusán, M. 2016. Presupposition cancellation. NLS **Domaneschi et al.** 2013. The cognitive load of presupposition triggers. L&CP. **Sudo, Y.** 2012. On the semantics of phi features on pronouns. PhD thesis. **Zehr, J. & Schwarz, F.** 2015. Entailed vs. non-entailed presuppositions. NELS 46.