Factors Affecting the Acceptability of And and But In Quantifier Conjunction

The conjunction *but* differs from *and* in conveying some element of contrast between its two conjuncts, a feature seen in both its semantic "pure opposition" (*John is tall, but Bill is short*) and pragmatic "counterexpectational" (*John is tall, but he is no good at basketball*) uses (Toosarvandani, 2014). When conjoining two quantifiers of the same monotonicity, *and* is preferred (1), but when the quantifiers contrast in monotonicity *but* is preferred (2) (Horn, 2001).

- (1) Several juniors {and, ?but} a few seniors registered for classes.
- (2) **No** juniors {?and, but} **a few** seniors registered for classes. In addition, when *but* is the connective, there is a preference for the weaker of the two scalar items (here, quantifiers) to appear first in sentences, evoking scalar implicature (Zhong & Collins, 2021).
- (3) Many_w pragmatists, but every_s phonetician attended the keynote.
- (4) #Every_s phonetician, but many_w pragmatists attended the keynote.

However, there are two observations that have received little attention, and for which previous theoretical claims cannot provide an account. First, when a supporting discourse context is provided, acceptability of the questionable versions above appears to improve, as in (5).

(5) Juan is a manager at a pottery shop. His seasoned staff knew that if cups were baked in the kiln with vases, the pottery would break. During the day on Tuesday, a brand new employee loaded the kiln. Afterwards, Juan looked in the kiln and reported the following:

Most of the cups, but **many** of the vases were in the kiln.

Because these sentences are usually considered in isolation, the role of context has been left unexplored.

Second, while a <weak, strong> order of the scalar items is preferred, a <strong, weak> order is not ungrammatical, and is rendered more acceptable when the second item is modified by *only*, as in (6).

(6) The pie is **excellent**_S, but the coffee is ?(only) **okay**_W.

At this point, however, these judgments are impressionistic, and lack systematic verification. We therefore conducted a set of complementary experiments to ask, (1) Can a supporting discourse context influence acceptability of *and* or *but* given variability in monotonicity of scalar elements? And (2) Does the presence of *only* influence acceptability of a <strong, weak> order? This will show the impact of pragmatic factors on conjunction choice in quantifier conjunction sentences, which has little research currently.

Experiments: We administered a web-based survey using Qualtrics in which participants (N=98) were presented with short (3-4-sentence) lead-in contexts, followed by a target sentence. Two experiments were folded into the main session, each surveying as fillers for the other. **Experiment 1** (modeled after items like (5)) featured 12 test items, with *and/but* manipulated between subjects, and monotonicity pairing (same/opposite) and context (supporting/neutral) as within-subject factors. **Experiment 2** (modeled after items like (6)) featured 16 test items, *and/but* manipulated between subjects (covarying with Exp. 1), and scalar order (weak/strong) and modification of the weak term by *only* (present/absent) as within-subject factors. Participants assessed acceptability using a 5-point Likert scale (1: not at all acceptable... 5: perfectly acceptable). We created eight Latin squared lists of fully randomized items. We have begun analyzing the data using a mixed-effects ordinal regression model and expect to be done within the month...

Predicted Results: If the results of Experiment 1 are significant, then use of *and* v. *but* does not depend on semantic factors (such as monotonicity) alone, and pragmatic context carries an influence on acceptability. The semantic oppositional use of *but* is frequently the one thought present in quantifier-conjunction sentences due to monotonicity being a semantic property. However, these data would show that contrast can be shown pragmatically in these types of sentences, which reflects the counter expectational use of *but*. If the results of Experiment 2 are significant, then *only* plays a key role in licensing implicature and scalar sequencing. Thus our results reveal more generally that the appearance of scalar elements is not licensed solely by an interaction of their lexical representation and the semantic contexts in which they appear, but also by the supporting discourse context and modification by *only*. These results would further support moving beyond exclusively interpreting the semantic oppositional use of *but* in these types of sentences. This would also bring the understanding of these sentences closer to the understanding of how *but* functions as a contrastive conjunction.

References:

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