

## EXHAUSTIVE INTERPRETATION IN ADVERSATIVE COORDINATION

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**I:** This work deals with the interpretation of scalar terms such as *quelques/some* in conjuncts introduced by the adversative *mais/but*. Our main facts are presented in (1). We indicate the informational focus of (1-a) in square brackets.

1. Comment était la soirée Bowling de Jean et Marie ? / *How was Jean and Mary's bowling night?*

a. # Jean a renversé [toutes les quilles]<sub>F</sub>, mais Marie [quelques-unes]<sub>F</sub>

# *Jean knocked [all the pins]<sub>F</sub> down, but Marie [some of them]<sub>F</sub>*

b. Jean a renversé toutes les quilles et Marie quelques-unes

*Jean knocked all the pins down, and Marie some of them*

c. Jean a renversé toutes les quilles, mais Marie seulement quelques-unes

*Jean knocked all the pins down, but Marie only some of them*

d. Jean a renversé quelques quilles, mais Marie les a toutes renversées <sup>1</sup>

*Jean knocked some of the pins down, but Marie knocked all of them down*

e. Jean a renversé quelques quilles, et Marie les a toutes renversées

*Jean knocked some of the pins down, but Marie knocked all of them down*

The most striking features about the paradigm in (1) are the following:

- (1-b) and (1-d) taken together indicate that the introduction of the weak quantifier *quelques/some* by the conjunction *mais/but* seems to be the reason for which (1-a) is out: the use of another conjunction (i.e. *et/and*) and the shift of *quelques* to the first conjunct are both acceptable. (1-e) shows that the shift is also acceptable with the conjunction *et* (i.e. *et* is symmetric here, unlike *mais*)
- (1-c) includes the overt restriction adverb *seulement/only*, taken to yield the same meaning as the mechanism used to derive quantity implicatures in (Chierchia et al., to appear). This mechanism *exhaustifies* the interpretation of the utterance by excluding stronger alternatives of the considered proposition from the interpreted meaning. If the second conjunct of (1-a) could be interpreted exhaustively, it would thus have the same interpretation as that in (1-c) (*minus* the presuppositions specific to *only*) and we shouldn't observe a difference in acceptability. As a consequence, one hypothesis that might follow is that the weak quantifier of (1-a) cannot be interpreted exhaustively, *contra* the predictions of the localist approaches to the computation of scalar implicatures, and that might be one of the reasons for the infelicitous nature of the utterance.

We will deal with the two following questions:

- Why is a non-exhaustive interpretation of this conjunct incompatible with the semantics of *but*? (§II)
- Which are the conditions for the non-exhaustive interpretation of a *but*-introduced conjunct? (§III)

We will conclude by examining how the data accounts for the sensitivity of adversatives to pragmatic content and the distinction between *contrastive* and *concessive* uses of *but* (§IV).

**II:** If we assume that one of the problems with (1-a) is that the interpretation of *quelques-unes/some* is purely semantic, i.e. amounts to *at least some*, we then have to explain why this interpretation is incompatible with the contribution of *but*. Note that this interpretation could be due to the impossibility of exhaustifying the interpretation as we hypothesized, but it could also be due to a non-sensitivity of *but* to pragmatically enriched content. This will have no bearing in this section.

Usual semantics conditions on coordination (e.g. (Lang, 1984)) aren't satisfactory to account for our data, since they suppose that the coordination is symmetric. This means that an explanation based on those conditions would, wrongly, reject (1-d) as well. Furthermore, it can't be due to the coordination alone since (1-b) is both a coordination and acceptable. (Umbach 2005) proposes an account of the semantics of *but* that predicts the badness of (1-a). Given her semantics, interpreting (1-a) implies substituting the focus of the second conjunct in the first and then negating the whole proposition. For example (2-a) is interpreted as answering (2-b) as in (2-c).

2. a. **John** [cleaned up the ROOM]<sub>F</sub>, but it was [BILL]<sub>F</sub> who did the **dishes**

b. "What did John do?, and did he wash the dishes, too? and if not, who did?"

c. [yes] John cleaned up the room, but [no, John did not do the dishes]; the dishes were washed by Bill.

<sup>1</sup> We don't resort to gapping because the quantifier *toutes/all* alone would be ungrammatical on syntactic ground.

Applied to the interpretation of (1-a), it amounts to *Jean knocked down some pins* being false. Since this is trivially true given the first conjunct, the agrammaticality of the utterance is correctly predicted. The same substitution in (1-d) then amounts to deny that *Jean knocked all the pins over*, which is perfectly consistent with the first conjunct. Umbach's account succeeds because it is intrinsically asymmetric, even though it is not presented as such. Nevertheless, it is a crucial aspect of coordination in general.

**III:** We now turn to the problem of the (non)-exhaustive interpretation of the second conjunct of (1-a), and the conditions under which it appears. As mentioned above, we hypothesize that this interpretation is blocked by the adversative introducing the conjunct (cf. the comparison with (1-b) and (1-d)). The generalization we want to advocate for relies on the notion of pragmatic scale (see (Horn, 1989) for a presentation). Our claim is that if two segments coordinated by *but* are such that their foci contain elements of the same pragmatic scale, then the stronger element must be in the second conjunct, otherwise the sentence is agrammatical.

If a weak scalar element is present in the *but*-introduced conjunct but has no counterpart in the first conjunct, the resulting utterance is appropriate in some contexts. For example, (3) is acceptable in the given context and its second conjunct can be understood exhaustively, as shown by the continuation in parenthesis, which explicitly cancels the exhaustive reading.

3. Qu'ont lu Kim et Sandy durant l'été? / *What did Kim and Sandy read over the summer?*

a. Kim a lu [l'encyclopédie]<sub>F</sub>, mais Sandy a lu [quelques romans de Balzac]<sub>F</sub>, (tous en fait)

*Kim read [the Encyclopaedia]<sub>F</sub>, but Sandy read [some of Balzac's novels]<sub>F</sub>, (all of them actually)*

In other contexts (3-a) is agrammatical on similar grounds as (1-a): if it is known that it was expected of Kim and Sandy to read the Encyclopedia or all of Balzac's novels, then an overt restriction on the quantifier in the right conjunct appears desirable. While we acknowledge this fact, we restrict our analysis to cases with scalar elements in both conjuncts, which surely trigger the infelicitous conditions we're studying. Having no match for the weak scalar element appears a necessary, but not a sufficient condition, to access a felicitous reading of the sentence.

The data in (1) also suggests a narrower constraint on the conjuncts, namely that the strong focus must entail the weaker one (i.e. in (1) *knocking down all pins* entails *knocking down some pins* whereas in (3) nothing similar happens). But this proves too strong in the light of (4) which has independent foci and is again unacceptable, presumably on the same grounds as (1).

4. Qui a fait grève hier? / *Who went on strike yesterday?*

a. # Tous les professeurs mais quelques étudiants / # *All the teachers, but some students*

Lastly, we can check that our constraint is also valid for non-lexical or entailment based scales, cf. (5):

5. Que penses-tu des idées politiques de Kim et Sandy? / *What about Kim and Sandy political stances?*

a. ?Kim est comme Hitler mais Sandy comme Mussolini / *Kim is like Hitler but Sandy like Mussolini*

b. Kim est comme Mussolini mais Sandy comme Hitler / *Kim is like Mussolini but Sandy like Hitler*

**IV:** In §II we've seen that (1-a) can be explained if we assume that the raw semantic meaning of the second conjunct is taken as argument by *but*. This could be seen as a hint that the pragmatic meaning of the conjuncts *never* enters the semantics of the adversative, rather than having no exhaustification occurring. On the other hand, in some examples the first conjunct needs to be pragmatically interpreted in order to establish contrast: see (6).

6. Est-ce que Kevin s'est bien comporté chez Mamie? A-t-il mangé ses horribles sablés ?

*Did Kevin behave well at Granny's? Did he manage to eat her terrible cookies?*

a. Il a mangé quelques sablés, mais en fait il les a tous mangés et Mamie l'a traité de vilain glouton.

*He ate some of her cookies, but in fact he ate all of them, and Granny said he was greedy.*

We want to show that this can be the basis for a distinction between two uses of *but*: a contrastive *but* and concessive *but*, in the same vein as the analysis in (Lakoff, 1971). The former *but* would be working on pure semantic content (as in (1)), whereas the second one would operate on a more metalinguistic level and take pragmatic content (implicatures, argumentative content...) into account, as in (6). Umbach's account, like many others (e.g. (Anscombe and Ducrot, 1977)), seeks to unify the contrastive use of *but* and its concessive use. We claim that these two uses are not unified by this analysis in a satisfactory manner. On her account a negation seems to be required in the second conjunct of (6). Therefore, what she predicts is that the very frequent "*some but not all*" coordination is the only one acceptable. The presence of a covert negation is also required in concessive examples such as (7) (in the manner of the treatment of (2) shown in §II). Not only does this appear as very ad-

hoc and non-intuitive for (7), but also it would mean that *but* accesses a pragmatically enriched interpretation of the second conjunct, which is not in line with the analysis presented in §II.

7. *Cet anneau est magnifique, mais cher. / This ring is beautiful but expensive.*

Thus, Umbach's account seems appropriate only for the contrastive uses of *but*. Concessive uses need another description, for example in the vein of the argumentative approach advocated by Ducrot.

As a last remark on this subject, cross-linguistic data show that in Russian, these uses of *but* are lexicalized differently (as *no* and *a*, see (Jasinskaja and Zeevat, 2008)), which strengthens further the hypothesis of two distinct uses of the connector *mais/but* in French and English.

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