

EXHAUSTIVE INTERPRETATION IN ADVERSATIVE COORDINATION

I: In (1) we present the main facts at hand. (1-a) is judged out by most speakers, unlike (1-b,c,d,e). 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]_F, mais Marie [quelques-unes]_F

Jean knocked [all the pins]_F down, but Marie [some of them]_F

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 ¹

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 from 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) and we shouldn't observe a difference in acceptability. As a consequence we hypothesize that the weak quantifier of (1-a) cannot be interpreted exhaustively, *contra* the predictions of the localist approaches to the computation of scalar implicatures.

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*. Usual semantics conditions on coordination (e.g. (Lang,1984)) aren't satisfactory since they suppose that the coordination is symmetric, which 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]_F, but it was [BILL]_F 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.

Applied to the interpretation of (1-a), it amounts to *Jean knocked down some pins* being false. Since it is trivially true given the first conjunct, this explains the agrammaticality of the utterance. However, the same substitution in (1-d) 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

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

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, it is possible to interpret it exhaustively ; therefore we require the presence of scalar elements in both conjuncts. For example, the second conjunct of (3) 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]_F, mais Sandy a lu [quelques romans de Balzac]_F, (tous en fait)

Kim read [the Encyclopaedia]_F, but Sandy read [some of Balzac's novels]_F, (all of them actually)

The data in (1) could suggest a narrower constraint on the conjunct, 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. On the other hand some examples show that 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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