

CONTRASTIVE REDUNDANCY

The work reported in this paper deals with the property of reinforceability of some (conversational) implicatures. We first show that reinforcing implicatures isn't always possible by the same means: in some cases a reinforcement associated with a contrast is by far **preferred** by speakers (e.g. with 'but'), and in other cases a contrast **can't** be used. We call this phenomenon *Contrastive Redundancy* (now *CR*, see §I). We then provide an explanation for the fact that contrast can't be used in some cases. Our argument relies on a rough formalization of Ducrot's proposal about the contribution of 'but'. We then argue that in the cases where *CR* is observed, a systematic rhetorical opposition always licenses the contrast at hand (cf. [Horn,1991]) (§II). Section III deals with the preference to mark the opposition. We examine the possibility that this obligation might be related to Sauerland's "Maximize redundancy" principle that favours utterances presupposing contents already present in the discourse. In the last part of our talk, we suggest that our work goes in favour of a separation of pragmatic inferences into distinct rhetorical levels.

I: We observe that in some contexts, the utterance of (1) will be preferred to (2) by most speakers. The contexts where (2) is favoured do not interest us here (e.g. (2) would be favoured as a correction of "John read all books by Chomsky"), although they play an important role in the study of contrast.

1. John read some books by Chomsky, but not all
2. John read some books by Chomsky, not all

Other implicatures do not behave similarly, as we show in (3) with conjunction buttressing. There a contrast is generally out (once again for most contexts of insertion, with exceptions to be clarified).

3. Gwen took off her socks and jumped into bed, (#but) in that order

We call the speaker preference observed in (1) *Contrastive Redundancy* (now *CR*) and formulate it as such: if *B* is an utterance implicating *I*, and if we observe that the reinforcement of *I* is **preferred** with a contrast between *B* and *I* (e.g. by saying "*B but I*" rather than "*B,I*"), then *I* is subject to *CR*.

Further observations show that many different types of Horn's *Q*-implicatures are subject to *CR*: *scalar* in (1), *clausal* in (4), related to the manner maxim in (5), based on attitude report verbs in (6).

4. Susan is in the kitchen or in the bedroom, #(but) I don't know which
5. Sam caused Max to die, #(but) he didn't kill him on purpose
6. Sam thinks Mary is pregnant, #(but) she isn't

These data suggest that the presence or absence of *CR* might be related to the distinction between *Q*-implicatures (ex. (1) and (4-6)), and *R*-implicatures (ex. (3)) (for a definition of these classes see [Horn,1989]), a correlation we try to explain in the next section.

II: After Ducrot we consider that a felicitous use of the connector *but* (in the form '*p but q*') implies that the two conjuncts it connects are *argumentatively* opposed: *p* is an argument for a conclusion *r* and *q* for the opposed conclusion $\sim r$. [Merin,1999] considers the notion of *argumentation* as follows:

7. *q* is an argument for *r* iff asserting *q* increases the probability of *r*

Bearing these facts in mind, let's call *B* the base utterance, or mother-utterance, from which an implicature *I* is derived and *E* the total meaning conveyed (the "sum" of the meanings of the implicature and the mother-utterance; what Levinson calls "**implicature**").

[Levinson,2000] notes that *R*-implicatures can't be expressed independently of their mother-utterance. They are enrichments of an utterance related to underspecified aspects of the propositional content (temporal ordering, causal relations etc.) In the *R-based* reinforcement cases one can only express the **implicature E*. Contrasting an *R*-implicature with its mother-utterance then implies contrasting *B* with *E* (rather than *B* with *I*), therefore meaning that one specific interpretation of *B* (in this case: *E*) is argumentatively opposed to *B*. Since *E* entails *B*, contrasting the two would mean that there is an *r* such that *B* argues for *r* and *E* argues for $\sim r$. However, assuming a "transitivity" of the argumentation relation (i.e. that if *A* entails *B* and *B* argues for *C*, then *A* argues for *C*; a fact already noted by Ducrot), this leads to *E* arguing both for $\sim r$ and *r*. A proposition can't argue both for and against the same conclusion, therefore the use of an adversative yields an infelicitous sentence.

8. ***R-based reinforcement:*** '*B but E*' means that *E* argues for and against the same conclusion *r*
=> infelicity

Examples (1) and (4-6) are instances of *Q*-implicatures and thus *metalinguistic*: they are computed from an utterance by comparing it with the set of its relevant alternatives, defined by replacing, in the utterance, items belonging to Horn-scales by stronger ones, or by using different, semantically equivalent, linguistic forms. It is often straightforward to express the content of *Q*-implicatures independently of their mother-utterances. This means that, in the case of reinforcement, the reinforcement clause is *I*, not *E*, and thus is independent of *B*. Therefore contrasting the two propositions won't lead to a systematic infelicity as in the *R*-based case seen above. Interpreting the resulting sentence however implies that the conjuncts are rhetorically opposed. If we consider an argumentative account of implicatures as proposed by Ducrot and Merin we see that in the studied examples the mother-utterance *B* is always an argument for the negation of the implicature *I*. This comes about because the stronger alternatives of *B* are such that *B* argues in the same direction as they do. The implicature *I* is the negation of these alternatives, therefore it argues in the opposite direction. As a result the contrast is always licensed when the implicature is present. This is summed up in (9):

9. **Argumentative scales reinforcement:** *B* but *I* always felicitous because *B* and *I* are systematically argumentatively opposed

III: We now turn to the preference for marking this contrast. Actually, besides contrast, other relations can link the conjuncts. For example, (10) shows that a *concession* relation is also possible.

10. John read some books by Chomsky, although he didn't read them all

Concession and contrast are often interchangeable relations: they both require an argumentative opposition between their arguments. When this relation of argumentative opposition is systematic (as with examples (1,4-6) in most contexts), it appears that it needs to be embodied by a discourse marker that "captures" the relation at hand, whether it is a contrast or a concession marker. This constraint might be a consequence of the "Maximize Redundancy" principle (cf. [Sauerland,2006]):

11. Let \underline{pq} be an item roughly semantically equivalent to *q*, but that presupposes *p* as well. If \underline{pq} and *q* can be uttered felicitously in the same syntactic context A_B (i.e. as connecting elements *A* and *B*), $A \underline{pq} B$ is preferable to $A q B$

The exact nature of the contrastive part of a connector such as *but* (i.e. presupposition or conventional implicature) is debated, but it seems safe to assume that it captures the relation of rhetorical opposition in accordance with the principle in (11) and thus satisfies it better than a simple conjunction. Applied to our examples this means that both (1) and (2) can be uttered felicitously, but since (1) presupposes more than (2) it is preferred because it captures an **already existing relation** between the conjuncts, that wouldn't be expressed otherwise. Another option would be to consider markedness as a property of the discourse relation of *Contrast* that connects the two parts of utterances such as (1).

A last observation deals with utterances like (12) that show that *CR* isn't always obligatory for reinforcing *Q*-implicatures, although it remains at least possible.

12. The flag is red (but / and) not red and white

To account for the non-necessary character of contrast in (12) we argue that the argumentation relation between its mother-utterance and its alternatives is not satisfied (i.e. a red and white flag is not red), contrary to what is usually assumed (for example in [Levinson,2000]) but more in accordance with intuition. Therefore unless the speaker wishes to convey that there is a contrast, he's not compelled by (11) to resort to the use of '*but*' or a similar connector in (12). *CR* thus happens only on some *Q*-implicatures, not on the whole class, although contrast appears *compatible* with all *Q*-implicatures.

IV: The reinforcement of implicatures delimits at least two classes of inferences, which seems to correlate with those defined by Horn. We showed that this correlation wasn't satisfactory to account for *CR*, and we proposed an argumentative approach. Implicatures subject to *CR* have to be treated separately from other inferences. The class of inferences represented by *R*-implicatures argue in the same direction as their mother-utterance and thus can't be contrasted to it. On the other hand some examples of *Q*-implicature exhibit two opposed inferences, as shown by the *CR* constraint: the utterance carries a *Q*-implicature and argues in the opposite direction (we call this an *argumentative inference*). The argumentative inference appears systematically defeated by the implicature, but it is the reason why a contrast is preferred when reinforcing the implicature. Since *Q*-implicatures coexist with contradictory argumentation inferences it seems plausible that they arise from distinct interpretation principles operating at different argumentative levels.

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