

Exhaustive interpretation in adversative coordination

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I. Introduction

Goals:

- Account for the infelicity of examples such as (1)a
 - Motivate an information-structure based account of the adversative *mais/but*
 - Give arguments for the non-sensitivity of *mais/but* to pragmatic enrichments
 - Link information-structure based accounts of *mais/but* to *argumentativity*
- (1) À combien de questions ont respectivement répondu Lemmy et Ozzie?
How many questions did Lemmy and Ozzie answer each?
- a. # [Lemmy]_{CT} a répondu [à toutes les questions]_F, mais [Ozzie]_{CT} [à quelques-unes]_F
 # [Lemmy]_{CT} answered [all the questions]_F, but [Ozzie]_{CT} [some of them]_F

I.A. Minimal pairs

In the same context, the utterance becomes felicitous if:

- The **conjunction** is changed to *et/and*:
 (2) Lemmy a répondu à toutes les questions, et Ozzie à quelques-unes
Lemmy answered all the questions, and Ozzie some of them
- A **restriction** is made explicit on the weak quantifier of the second conjunct:
 (3) Lemmy a répondu à toutes les questions, mais Ozzie seulement à quelques-unes
Lemmy answered all the questions, but Ozzie only some of them

I.B. Outlook of the talk

- (1)a vs. (2) and (3) suggests that the absence of restriction on the weak quantifier *quelques/some* is incompatible with the adversative *mais/but*: **Sec. II.**
- The non restricted interpretation may come from:
 - a. A **suspension** of the exhaustive interpretation of the quantifier in the second conjunct: **Sec. III.A**
 - b. A **non-sensitivity** of *mais/but* to pragmatic contents: **Sec. III.B**

II. Semantics for ‘*mais/but*’

- Without an overt restriction *quelques/some* appears incompatible with *mais/but* in (1)a
- Forcing an *at least* interpretation of the quantifier is also infelicitous:
 (4) # Lemmy a répondu à toutes les questions, mais Ozzie au moins à quelques-unes
 # *Lemmy answered all the questions, but Ozzie at least some of them*
- **Hypothesis:** in (1)a *mais/but* takes into account the raw semantic meaning of *quelques/some*, i.e. *some and possibly all*

II.A. Informational Structure

- In (1)a the scalar elements are narrow-focused
- In all focus utterances, the result is felicitous:
 (5) Qui est fan de Ritchie Blackmore?
Who's a fan of Ritchie Blackmore?
 - a. [Lemmy possède tous ses albums]_F, mais [Ozzie en possède #(aussi) plusieurs]_F
Lemmy owns all his albums, but Ozzie owns several #(too)
- **Hypothesis:** the effect of *aussi/too* is independently motivated and accounted for (e.g. « *Maximize Presupposition* » (Sauerland, 2008), *Antipresupposition* (Percus, 2006), *Obligatory presupposition* (Amsili & Beyssade, to appear))
- Adding *aussi/too* has no effect on the felicitousness of (1)a:
 (6) À combien de questions ont respectivement répondu Lemmy et Ozzie?
How many questions did Lemmy and Ozzie answer each?
 - a. # Lemmy a répondu à toutes les questions, mais Ozzie aussi à quelques-unes
 # *Lemmy answered all the questions, but Ozzie some of them too*
- Switching the foci changes the felicitousness:
 (7) Dis-moi qui a répondu à toutes les questions et qui à quelques-unes?
Tell me who answered all the questions and who answered some of them?
 - a. [Lemmy]_F a répondu [à toutes les questions]_{CT}, mais [Ozzie]_F [à quelques-unes]_{CT}
 [Lemmy]_F answered [all the questions]_{CT}, but [Ozzie]_F [some of them]_{CT}

II.B. Asymmetry Constraint

- **Asymmetrical** semantics for *mais/but* are necessary:
 - Reverting the **order** of the conjuncts of (1)a yields an acceptable sentence:
- (8) Lemmy a répondu à quelques questions, mais Ozzie à toutes les questions
Lemmy answered to some of the questions, but Ozzie to all of them

II.C. Sketch of proposal

- We use the analysis of (Umbach, 2005) as a starting point
 - *Mais/But* is sensitive to the informational structure of an utterance
 - A *but*-sentence yields an exclusive meaning, in the fashion of *only*
 - The considered alternatives are given by the foci of each conjunct
- The meaning of $\langle\langle CT_1, R_1 \rangle_{=BG_1}, F_1 \rangle$ *but* $\langle\langle CT_2, R_2 \rangle_{=BG_2}, F_2 \rangle$ is as follows:
 - it asserts $BG_1(F_1)$ and $BG_2(F_2)$
 - $ALT(CT_2) = \{CT_1, CT_2\}$
 - it yields the inference (the nature of which is left unspecified) :
 $\forall x \in ALT(CT_2) : ((R_2x)F_2) \rightarrow x=CT_2 \Leftrightarrow \neg((R_2CT_1)F_2)$ is true

II.D. Application

- Applying the semantics to (1)a:

(9) # [Lemmy]_{CT} a répondu [à toutes les questions]_F, mais [Ozzie]_{CT} [à quelques-unes]_F
Lemmy answered all the questions, but Ozzie some of them

a. $\rightarrow \neg$ (Lemmy answered some of the questions) = Lemmy answered no questions
- Applying the semantics to (3):

(10) [Lemmy]_{CT} a répondu [à toutes les questions]_F, mais [Ozzie]_{CT} [seulement à quelques-unes]_F
Lemmy answered all the questions, but Ozzie only some of them

a. $\rightarrow \neg$ (Lemmy answered only some of the questions)
- Applying the semantics to (7)a:

(11) [Lemmy]_F a répondu [à toutes les questions]_{CT}, mais [Ozzie]_F [à quelques-unes]_{CT}
Lemmy answered all the questions, but Ozzie some of them

a. $\rightarrow \neg$ (Ozzie answered all the questions) = Ozzie didn't answer all the questions

III. Non-restricted interpretation

- *Quelques/some* enters the semantics of *mais/but* as *at least some*
- Two options:
 - a. *mais/but* takes pragmatic enrichments into account, but the second conjunct is not exhausted in the particular context of (1)a
 - b. *mais/but* only takes semantic information into account, pragmatic effects are derived on a different level

III.A. Blocking of the non-exhaustive interpretation

- **Hypothesis A:** *mais/but* is sensitive to pragmatic content
 - a. *Consequence:* the second conjunct of (1)a is not exhausted, the quantity implicature is suspended (and localist theories of implicature have to account for this)
- **Supporting Argument:**
 - Some examples show a sensitivity to pragmatic content:

(12) Lemmy aime conduire et boire, mais pas boire et conduire
Lemmy loves driving and drinking, but not drinking and driving

(13) Est-ce que Kevin s'est bien comporté chez grand-mère et a mangé ses horribles sablés ?
Did Kevin behave well at Granny's and ate her terrible cookies ?
 - a. Il en a mangé quelques-uns, mais en fait il les a tous mangés et elle l'a trouvé mal élevé
He ate some of them, but in fact he ate all of them, and she said he has bad manners

III.B. Purely Semantic Feeding of 'mais/but'

- **Hypothesis B:** *mais/but* is not sensitive to pragmatic content
 - a. *Consequence:* exhaustification of the second conjunct of (1)a can apply
- **Supporting Arguments:**
 - In many cases *mais/but* appears insensitive to exhaustification

(14) Ronnie a chanté certaines chansons de Rainbow, mais il ne les a pas toutes chantées
Ronnie sang some songs by Rainbow, but he didn't sing them all
 - Even with a meaning equivalent to exhaustification some examples are still infelicitous:

(15) # Lemmy a chanté dix chansons mais Ozzie (exactement) trois
Lemmy sang ten songs, but Ozzie (exactly) three

(16) Lemmy a chanté dix chansons mais Ozzie seulement trois
Lemmy sang ten songs, but Ozzie only three
 - Overt restriction is mandatory in other contexts (example due to B. Geurts)

(17) Hier, il y a eu un accident d'avion
Yesterday, there was a plane crash

 - a. Heureusement, #(seulement) certains passagers sont morts
Fortunately, #(only) some passengers died

III.C. Conclusion

- We favor Hypothesis B: *mais/but* is insensitive to pragmatics

IV. Solutions and Openings

IV.A. Remaining puzzles

- In (12), the pragmatic content is an *R-based* implicature (Horn, 1989), or an *explicature* (Carston, 2005), i.e. an *enrichment* of a logical form occurring before the computation of other conversational implicatures
- In (13)a *some* appears opposed to *all*, seemingly requiring its exhaustification
 - In this context « *Kevin ate some of the cookies* » is **argumentatively opposed** to « *Kevin ate all the cookies* » (Anscombe and Ducrot, 1983)
 - The description of *mais/but* given in II.C does not, but *can*, include argumentativity

IV.B. *Nature of the inference*

- Based on (Merin,1999) *Decision Theoretic Semantics*
 - $r_H(p)$ stands for the *relevance* of p to H
 - a proposition p argues for H iff $r_H(p) > 0$
- **Proposition:** The inference derived in I.I.C is an *Argumentative Parallel (AP)* to the left conjunct
 - Given an utterance p but q , the inference s derived as in I.I.C is such that
 - $sign(r_H(s)) = sign(r_H(p))$, i.e. p and s must both be arguments for the (contextually given) conversation goal H
- **Consequence:** an *AP* can contradict any conjunct, cf. a proposition can argue for something it explicitly denies:

(18) Lemmy a bu presque toute la bière
Lemmy drank almost all the beer

 - a. \rightarrow argues for *Lemmy drank all the beer*
 - This is the case for all utterances without Contrastive Topics

IV.C. *Application*

- (1)a: predicted *AP* = "Lemmy didn't answer some of the questions"
 - in this context *answering some of the questions* and *answering all the questions* have parallel argumentative properties
 - negation reverses argumentativity
 - hence: the *AP* can not be parallel to the left conjunct
- (13)a: predicted *AP* = "Kevin didn't eat all the cookies"
- Argumentation might also explain example (17)a

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