The Problem

Gajewski (2005, 2007) proposes that the NR reading (1c) arises as an entailment of the negative assertion (1a) and the excluded middle (EM) presupposition (1b).

1a. John doesn’t believe that it’s raining.
1b. belφ ◦ bel¬φ
1c. John believes it’s not raining.

The EM is hard to cancel in a basic negation case like (1a), however, non-NR paraphrases emerge only if the negative auxiliary or the NR is stressed.

(2a) John DOESN’T believe that it’s raining.
(2b) John doesn’t BELIEVE that it’s raining.

I argue for a feature-based account to explain the cancellation effects triggered by focus. This account integrates Rooth’s (1985) Alternative Semantics for focus into the grammatical view of scalar implicatures (SIs) (Chierchia 2004 a.o.).

My Analysis: a Feature-based Account

Non-NR Readings are from double or local exhaustification:

(8) EXH [John believes¬q it’s raining] (1a)
(9) EXH ¬q EXH [John believes¬q it’s raining], he isn’t sure.

My Explanations:

EMs are SIs, computed via exhaustifications. The

Romoli (2012, to appear): EMs are SIs, computed via exhaustifications. The

In (2a), the negated EM alternative is not activated, because it is irrelevant.

Definition: Relevant assertions mustn’t discriminate between the cell-mates of current questions. (Heim 2011)

In (2b), EXH and can only take scope under negation, so as to avoid a contradiction with the following EM suspension.

(6) a. John doesn’t BELIEVE that it’s raining, he isn’t sure.
6b.EXH [bel¬q bel¬φ] ◦ bel¬φ
6c. EXH [¬φ] = bel¬φ

This assumption suggests that a sentence can freely take local exhaustification even the EM is suspended. It thus can’t explain the markedness of EM cancellation in a basic negation case like (1a).

Selected References


Eliminating Alternative EXH-structures

For (1a), local EXH results in a reading that is equivalent to the assertion.

For (2a), single local EXH has an unconnected feature [+F]; single global EXH has to negate both positive and negative EMs, giving rise to a self-contradiction.

Principles of EXH-insertion

P1: avoid an unchecked feature or a syntactically vacuous EXH (Chierchia 2013).
(11) a. *[-some]EXH[...some...]
   b. *EXH[...some...]

P2: avoid self-contradiction (in the spirit of Chierchia 2006).
P2 achieves a similar result to Fox (2007), in which EXH only negates the set of Inno-
cently Excludable (IE) alternatives. These alternatives can be excluded consistently, irrespective of which other alternatives have been excluded. However, an assumption that attributes semantic requirement to the LF instead of to the lexicon of EXH is more compatible with Chierchia’s analyses on NPs: an NPI has to be licensed in a DE context because excluding its obligatorily activated alternatives in a UC context leads to a semantic contradiction.

P3: avoid an empty δclcy set. viz. at least one focus-triggered alternative is excludable (cf. AvoidIF in Schwarzschild 1999).
P4: Maximise Strength, i.e., don’t exhaustify S in... there... if the resulted reading is weaker than or equivalent to S’ (Chierchia, Fox and Spector in press a.o.).

Acknowledgements: I thank Gennaro Chierchia, Kai von Fintel, Jim Huang, Manfred Krifka, Uli Sauerland for helpful discussions and criticism.