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David I. Beaver & Brady Clark, *Sense and sensitivity: How focus determines meaning* (Explorations in Semantics). Oxford: Blackwell, 2008. Pp. xiv + 307.

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Judging from the title, Sense and sensitivity: How focus determines meaning, this monograph might seem to offer a general theory of focus; however, as a matter of fact, it constitutes a theory of FOCUS SENSITIVITY, also known as ASSOCIATION WITH FOCUS, which is one of the most studied and debated phenomena at the semantics-pragmatics interface. Sense and sensitivity develops a novel approach to focus sensitivity in distinguishing three degrees of association with focus. These different types of association with focus have a common semantic core, but they are claimed to be conceptually, grammatically and technically distinct phenomena. Most importantly, the authors argue that only one type of association with focus is indeed conventional, i.e. grammatically coded. This conventional association is mediated by a common discourse–pragmatic function shared by focus and the lexical meaning of a class of particles such as only, even, too, etc. Other expressions that exhibit typical semantic effects of association with focus achieve these by different semantic machineries not involving any specific grammatical connection between their lexical meaning and the notion of focus. These expressions are, for example, negation and quantificational adverbs (usually, always). For a number of reasons to be discussed in the following, we think that this book will become a standard starting point for any discussion of focus sensitivity in the next few years.

A theory of focus sensitivity requires a theory of focus, a theory of focus sensitivity proper and a detailed case study that shows the empirical, conceptual and technical merits of the new theory. This is precisely what this monograph offers:

(i) Chapter 2, 'Intonation and meaning', develops a theory of focus which incorporates important insights from Schwarzschild (1999), Rooth (1985, 1992) and, most importantly, Roberts (1996). In Chapters 4, 'Compositional analysis of focus', and 5, 'Pragmatic explanations of focus', the theory of focus is developed in greater detail and defended with respect to a number of classical issues discussed in the literature.

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- (ii) Chapter 3, 'Three degrees of association: Quasi, free, and conventional', introduces a theory of association with focus. This theory is empirically grounded in the data presented in Chapters 6 ('Soft focus: Association with reduced material'), 7 ('Lacking focus: Extraction and ellipsis') and 8 ('Monotonicity and presupposition').
- (iii) Finally, Chapters 9, 'Exclusives: Facts and history', and 10, 'Exclusives: A discourse account', apply the new approach to exclusives.

In the following, we will discuss the first two thematically coherent parts of the book in some detail, outlining their merits and potential problems. We will not discuss the analysis of exclusives in this review, for reasons of space limitations and because we consider the formal analysis of exclusives offered to be a convincing but predictable implementation of the book's general theory.

Essential to a theory of focus sensitivity is a theory of focus itself, which must include a theory of focus and intonation, and a theory of focus interpretation. Beaver & Clark assume that focus is an abstract informationstructural category, which is often marked by some phonological, syntactic or other grammatical means, as, for example, by a pitch accent in English. Building on Schwarzschild (1999), they go on to develop a theory of accent placement in English centered on the notion of insufficient activation in discourse. A constituent is insufficiently activated if it is not given in the discourse or if the speaker wishes to evoke alternatives to it. Insufficiently activated constituents must carry a f(ocus)-marking. If some f-marked constituent is not dominated by another f-marked constituent in the syntactic structure, this constituent becomes FOC-marked and, hence, receives a pitch accent according to further phonological rules. In addition, there is a constraint to avoid f-marking as far as possible. Beaver & Clark's proposal constitutes an improvement on Schwarzschild's (1999) approach in terms of givenness, in that it can account for repeated material in echoic negations being accented although it is discourse-given.

The theory of focus interpretation assumed in the book is a version of Rooth's (1992) Alternative Semantics. The general idea is that a focused constituent gives rise to a set of alternatives which is computed compositionally at a distinct level of focal or alternative meaning. Accordingly, a sentence has an ordinary meaning, which is a proposition, and a focal meaning, which is a set of propositions; the latter differs from the ordinary meaning in that the focused expression is replaced by alternatives of the same semantic type.

Beaver & Clark furthermore assume a discourse model based on the question hierarchies stipulated in Roberts (1996). In this framework, the ultimate goal of a discourse is to determine which world out of the infinitude of possible worlds is the real one, or, to answer the question 'What is the way

things are?' (33). Interlocutors employ particular strategies in achieving this. Such strategies involve a number of hierarchically related sub-questions; hence every utterance in some discourse will answer some particular sub-question of the ultimate superordinate question. Given these assumptions, any point in discourse involves a number of stacked open questions and a current question, which is answered by the current utterance. Under these assumptions, the actual discourse function of focus can be given by the focus principle, as in (1).

(I) Focus principle

Some part of a declarative utterance should evoke a set of alternatives containing all the Rooth-Hamblin alternatives of the C[urrent] Q[uestion]. (37)

While we cannot discuss the focus principle in great detail here, it shows focus to be directly related to the current question in two ways: if the current question is known and directly answered by some utterance, the focused constituent will correspond to the *wh*-word of the question; in an out-of-the-blue utterance, on the other hand, focus heavily constrains the set of possible questions that the utterance may be answering.

Most parts of the focus theory presented in this book are not new, but there are a number of considerable improvements as compared to previous approaches. In addition, the book provides a relatively clear picture of what the authors understand to be focus and what they assume that focus signals in the discourse. However, one particularly frustrating issue is left unresolved: the incompatibility between the triggers for insufficient activation and the assumption that the discourse function of focus is to provide a set of alternatives relating to the current question. The authors either need to assume that constituents that carry a pitch accent because they are not given in the discourse are not foci (which would mean that there is no one-to-one correlation between focus marking and focus), or they need to assume that being discourse-new always involves being related to alternatives (which would yield a single condition for insufficient activation). We believe that Beaver & Clark implicitly adopt the first possibility, but this is something that would have been worth spelling out.

In Chapters 4 and 5, the authors give an overview of different theories of focus interpretation and defend their version of Alternative Semantics against objections that have been made in the literature. While this part of the book is highly instructive and contains a large number of new and interesting arguments relevant to the discussion about semantic and pragmatic frameworks of focus interpretation, it is largely irrelevant with respect to the main claims of the book. For this reason we will not go into any detail here. It is worth mentioning, however, that these parts constitute a great textbook for anyone interested in the current discussion of focus interpretation. One particularly nice feature is that the authors provide different solutions to

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particular problems which confront Alternative Semantics (e.g. movement accounts vs. accounts based on Dynamic Semantics), thereby integrating increasingly isolated frameworks in semantics.

Chapter 3 is clearly the core chapter of the book and deserves the main attention. As suggested by the chapter title, the authors distinguish three different kinds of association with focus, out of which only one is grammatical.

Quasi association involves no direct interaction between focus and the focus-sensitive operator. The effect that is induced by varying the focused element is derived by combining the discourse effect of focus with the semantic effect of the operator, most prominently negation. The strategy involved in deriving focus inferences is to consider what questions a sentence involving negation might answer, without violating the Focus Principle. Once this is determined, inferences can be derived from the relation of the propositional content of the utterance to the alternatives present in the question. It is worth mentioning that the analysis presented in Section 3.2 is particularly elegant.

Free association involves association by means of binding a free variable. Typically this kind of association includes quantificational adverbs, generics, superlatives, 'because'-sentences and so on. Quantificational adverbs like 'always' involve a restrictor set that is either specified by previous discourse or left free and hence subject to binding by some pragmatic device. Here, focus plays an important role because focus signals an implicit question which the utterance is meant to answer, but this implicit question cannot be accommodated at any discourse level dominating the operator 'always', since it contains an event variable bound by 'always'. However, when the question in the domain of 'always' is locally accommodated, it will be felicitous only in particular contexts in which particular types of events are salient. This ultimately leads to a pragmatic binding of the restrictor variable of 'always' as if it were directly associated with focus, although the machinery does not involve any semantic connection between the meaning of 'always' and focus. Chapters 6-8 present a wide range of cross-linguistic evidence (especially from Romance and Germanic) showing that the association between 'always' and focus is not grammatical.

Finally, conventional association with focus is restricted to a number of discourse particles, such as exclusives, additives, scalar additives, downtoners. The conventional association arises because these particles associate with the current question by virtue of their lexical meaning. This is most clearly demonstrated for exclusives:

We claim that the function of exclusives is to comment on the overly strong expectation regarding the answer to the Current Question, and to say that the strongest true answer is the prejacent. (69)

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Thus, conventional focus sensitivity reduces to a particular property of the expression under discussion, leading to the following generalization:

Since we take focus to mark which part of a clause answers the Current Question, a particle which comments on alternative answers to the Current Question is necessarily focus sensitive. If an expression is not focus sensitive then that expression does not comment on the Current Question. (70)

The assumption that exclusives are indeed conventionally connected to focus is supported by a wide array of (partly new) cross-linguistic data and some experimental evidence given in Chapters 6–10. Moreover, following an extensive discussion of previous approaches in Chapter 9, Chapter 10 provides a formally respectable account of English *only*, which might quite possibly become the new standard analysis for exclusives in formal pragmatics.

The book provides a very clear and readable exposition (although the discussion is sometimes too condensed), and the authors keep the style fresh, original and engaging. In conclusion, this book offers a completely new perspective on focus sensitivity, which has long been regarded as a challenge in formal semantics and pragmatics. The novel perspective of this book is that there are different mechanisms by which effects formerly known as association with focus can be derived. Only one of them involves a conventional association with focus. Conventional association is not an accidental matter but, rather, a direct consequence of the discourse function of the expressions which do conventionally associate with focus. Besides giving a comprehensive and insightful theory of focus sensitivity, the book also considers the broader question of what is meaning in discourse and what it means for an expression to have a lexically coded discourse function, thereby advancing linguistic theory more generally.

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